

TEZPUR UNIVERSITY

A Central University



ANNUAL REPORT

2018–19






VISION

To develop human excellence and inculcate leadership through hard work and creativity.

MISSION

To render Tezpur University one of the most preferred destinations of students, faculty and scholars and employees. To be in the Top 50 Universities of the world...



TEZPUR UNIVERSITY

A Central University



ANNUAL REPORT 2018–19

**Approved by
The Board of Management vide Resolution
No. B.94/2019/3/5.2, dt 25.09.2019**



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Professor V. K. Jain
Vice-Chancellor



Tezpur University
(A Central University)
Tezpur-784028
Assam, India

Professor V. K. Jain,
D. Phil (UK)
Vice-Chancellor

Phone: 03712-267003 (O)
Fax: 03712-267006 (O)
E-mail: vc@tezu.ernet.in

Visitor's Best University Award - 2016
NIRF India Rankings 2016 : 05
Accredited with 'A' Grade by NAAC
THE Asia Rankings 2018 : 100
THE World Best Small Univ. 2018 - 20th
QS Ranking 2019 : IND - 36, BRICS - 146

It is my privilege to present Tezpur University's Annual Report for the year 2018-19. The University established 25 years ago, as a result of historic Assam Accord, has fulfilled aspirations of all stakeholders to a great extent having evolved as an institution of high-quality teaching, outstanding research and innovation. Today, the University has emerged as a preferred destination for students, scholars, faculty and administrative staff.

In January 2019, the University completed 25 glorious years of its momentous journey towards excellence in education and research. However, we must guard against any complacency and continue to strive towards becoming a world class university.

I am happy to mention some key points regarding our performance and achievements for the year 2018-19.

UGC has sanctioned 03 new departments, viz, Department of Foreign Languages, Department of Assamese and Department of Design. PG and UG Programmes under these departments will commence from Academic session 2020-21. During the period of this report, our faculty members have published research papers in peer-reviewed journals, national and international level books and have contributed book chapters in reputed books. A good number of journal papers (600+) have been published during the period and h-index of the University has reached 71 (Scopus).

The University conducted National Level Entrance Examination (Tezpur University Entrance Examinations) for admission to almost all the programmes of study (except for MBA and B.Tech) at the 26 designated centers across the country. All the processes of admission were carried out online except the written entrance examination, which was OMR based. The number of candidates admitted to various programmes of study during the period was 1359 of which ~44.4% were female students. The number of foreign students on the campus has increased to 19 in the year 2018-19.

During the financial year, the University has done well on R&D front as well. The University forwarded several research proposals for consideration of approval to various funding agencies. During the year reported, 58 news research proposals were sanctioned. At present a total of 250 externally funded research projects are ongoing with a financial outlay of ₹8266.01 lakhs. In addition to generating newer findings & knowledge through research, they considerably augmented the research skill and capacities of the research project staff as trained manpower in various disciplines for the larger benefit



of society. The University has generated revenue totaling ~₹17.32 lakh through consultancy projects during 2018-2019. This amount was earned as consultancy fee by individual faculty members as well as by departments and centres.

During the year under report, the University through its Teaching Learning Centre (TLC) under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) has conducted a number of programmes and has trained 465 college and university teachers and prospective teachers. Through these programmes, TLC has been providing assistance and support for promoting best practices in teaching learning environment among higher education community not only in the region but across the country.

The University in order to tap mutually beneficial opportunities for collaborative research and building capacities of human resource signed 13 MoUs, during the period, with institutions abroad and in India including National Research Development Corporation (NRDC).

Under the Govt. of India policy on infrastructure development of HEIs, the university has obtained approval of nine building projects under HEFA with financial sanction ₹153.71 cr in window-3.

The University undertook Academic and Administrative Audits during 29-31 October 2018.

The University has installed 1000 kWp Rooftop Grid connected Solar Photovoltaic Power Plant on its campus. The University on an average generates ~22% its electricity requirement by the solar power plant. It is a matter of pride for us that Tezpur University is the first Academic Institution to install MW-scale Solar Power Plant in entire North Eastern Region

I thank the Annual Report committee for preparing this important document in both English and Hindi.

Date: 14 November, 2019

Place: Tezpur


(V. K. Jain)
Vice-Chancellor



Tezpur University

Annual Report 2018-19

A Gist

UNIVERSITY PROFILE

Name of the University	:	Tezpur University
State	:	Assam
Address	:	Napaam, Tezpur - 784028 Sonitpur District, Assam
Year of Establishment	:	1994
Type of University	:	Central and Unitary

HIGHLIGHTS OF THE YEAR 2018-19

Vice-Chancellor	:	Professor Vinod Kumar Jain
Pro Vice-Chancellor	:	Professor Dilip Kumar Saikia
Registrar	:	Dr. Biren Das

TOTAL NUMBER OF

Academic Departments	:	22
Academic Centers	:	5
Academic Programmes	:	68
Students	:	4007
Female Students	:	1699
Male Students	:	2308
International Students	:	19
Female Students	:	10
Male Students	:	9
Teachers	:	246
Female Teachers	:	66
Male Teachers	:	180



Teachers (General)	:	133
Teachers (SC/ST/OBC)	:	113 (SC-34, ST-21, OBC-58)
Non-Teaching Employees	:	273
Female Employees	:	30
Male Employees	:	243
Non-teaching Employees (General)	:	106
Non-teaching Employees (SC/ST/OBC)	:	167 (SC-47, ST-23, OBC-97)
Total Departments under UGC-SAP DRS I	:	3
Total Departments under UGC-SAP DRS II	:	8
Total Departments under DST-FIST	:	11
Departments under Centre of Excellence	:	1
Sponsored Ongoing Projects	:	250
New Projects Sanctioned	:	58
International Collaborative Research Projects (Ongoing)	:	17
Total Amount Earned through Consultancy Projects	:	~17.32 lakh
Journal Paper Published	:	600+
H-index		71 (Scopus)
Books/ Book Chapters Authored		26/104
Global Initiative of Academic Networks (GIAN) Courses	:	1
Seminar/Workshops Organized by Various Departments/ Centres	:	86
Total Number of Students Qualified NET, SLET, GATE (Indicative)	:	288



Tezpur University: An Overview

The year 2018-19 was significant for the University as the University, which was established on January 21, 1994 by an Act of Parliament of India completed 25 glorious years on January 21, 2019. The University celebrated the momentous occasion by organizing a three-day (19-21 January) event. Prof. D.N. Buragohain, former Director, IIT Guwahati, Prof. V.S. Chauhan, noted scientist and Executive Chairman of National Assessment and Accreditation Council (NAAC), Mr. S. K. Barua, Managing Director of Numaligarh Refinery Limited, Dr. N. C. Borah, Chairman-cum-Managing Director, GNRC Guwahati, Dr. Tushar Rane, Head, UNICEF, Assam were some of the prominent dignitaries graced the occasion. A number of activities, including alumni meet, Industry-academia interaction on R&D, felicitation of the retired employees of the University and various cultural programmes were organised on the occasion.

The University is currently offering 68 Academic programmes of study at the Under-Graduate (Degree/Diploma/Certificate), Integrated, Post-Graduate (Degree/Diploma) and Doctor of Philosophy levels in four schools, viz. School of Engineering, School of Humanities & Social Sciences, School of Sciences and School of Management Sciences. Total departments under these schools of studies are 22. In addition to these 22 departments, UGC has sanctioned 3 new departments, viz. Department of Foreign Languages, Department of Assamese and Department of Design to the University. The University is also offering 07 programmes under ODL mode.

During the year reported, our faculty members have brought laurels to the University. The University for the second consecutive year bagged the prestigious Visitor's Award in research category. Prof. Ashis K. Mukherjee of Dept. of Molecular Biology & Biotechnology bagged the award for his research leading to clarity on the molecular complexity and toxicity of the components of the snake venom from different locales of India. Prof. Mukherjee during the period also received Tata Innovation fellowship of the Department of Bio-Technology, Govt. of India and INSA Teacher Award. Among other notable achievements, FRSC was awarded to Prof. Niranjana Karak of Dept. of Chemical Sciences; Dr. Bhabesh Deka of Department of Electronics & Communication Engineering was elevated to the grade of senior member of IEEE, Dr. Manashita Borah of Department of Electrical Engineering was conferred Young Engineer's Award by the

Senior Engineers Forum, Institution of Engineers (India), Assam State Centre, Guwahati, Dr. Pankaj Barah of Dept. of Molecular Biology & Biotechnology was awarded "Ramalingaswami Re-entry Fellowship" by the Department of Biotechnology.

Our students during the period performed well in Academic, Co-curricular and Extension activities. A good number of students cleared NET/ GATE/SET/ SLET and others. The University received the prestigious Gandhian Young Technological Innovation (GYTI) Awards for the third consecutive year. Students trio of Mr. Saurav Jyoti Sarma, Mr. Abhijit Nath and Mr. Chandeeep S. Gogoi of Dept. of Mechanical Engineering bagged the award. Besides the GYTI award, the students displayed



their talents at various Zonal/State and National level tournaments/competitions. The University maintained a healthy male/female ratio of 57:43 and student-teacher ratio of 14:1. The University has proposed for additional teaching positions for existing departments. The student-teacher ratio is expected to improve to 12:1 once, additional positions are approved by UGC. In case of students diversity, 15% students are from other than NE states and 19 foreign students joined the University during the year under report. The present sanctioned strength of teaching positions is 312 while that for non-teaching position is 287.

Our faculty members received a number of project grants from various national and international agencies including UGC, DST, DBT, AICTE, DAE, DRDO, DRL, ICMR, MoES, ICSSR, UNICEF. The amount of research grants (Extra-mural funding) during the period was Rs 12.41 Crore. The faculty members of the University have regularly published research papers in peer-reviewed journals and authored books and book chapters. H-index of the University during the period was 71 (Scopus). A good number of papers (600+) were published in UGC listed journals during the period. A good number of faculty members were invited to foreign universities to deliver talks. During the year, our faculty members have filed four patents and one patent was granted to Prof. Ashok Kumar of Dept. of Physics. The IPR Cell of the University consistently encouraged and guided researchers in filing of patents. Number of teachers were on study leave with fellowship from various agencies such as Fulbright, DBT overseas fellowship, SERB Overseas Postdoctoral Fellowship etc.

In the global rankings, the University featured in the 601-800 position in Times Higher Education (THE) University Rankings. The University ranked 99th In THE BRICS & Emerging Economies University Rankings 2018. The University ranked 146 in the QS BRICS University Rankings 2018. In the same ranking, in India it ranked 46. In MHRD NIRF Ranking, Tezpur University ranked 46th in overall list of Higher Educational Institutions and 29th amongst the universities.

The Annual Report 2018-19 tries to give a fair idea about the university in sections.



Finance and Accounts

The Annual Accounts of the University are maintained in five parts: **Part-I** deals with **Recurring and Salary Funds**, **Part-II** for transactions related to Funds under **Non-Recurring and Other Schemes**, **Part-III** for **Earmarked Funds** and **Extra Mural Research Projects**, **Part-IV** for transactions related to **Debts and Deposits** Account and **Part-V** for maintenance of **Provident Funds**. The accounts for the year 2018-19 have been prepared in such formats as prescribed by the Ministry of HRD, Govt. of India, on double entry book-keeping system on accrual basis and related Accounting Standards.

Opening balance at the beginning of the year 2018-19 was **Rs. 3606.96 lakh**. During the year 2018-19, the University received a total amount of **Rs. 11256.76 lakh** under all the schemes, viz., Recurring, Salary, Creation of Capital Assets and Research Projects. The University also generated an amount of **Rs. 1922.76 lakh** as Internal Receipts/ Revenue forming part of Grants-in- Aid : Recurring. Thus, the total fund available during the year was **Rs. 16786.48 lakh**. Against the same, an amount of **Rs. 13104.99 lakh** was spent during the year 2018-19, leaving an unspent balance of **Rs. 3681.49 lakh as on 31.03.2019**.

The following statement presents the Receipts and Expenditure for the year **2018-19** at a glance.

(Rupees in lakh)

RECEIPTS			EXPENDITURE		
Particulars	Amount	Total Amount	Particulars	Amount	Total Amount
A) Opening Balance	3606.96	3606.96	A) Expenditure		
B) Grants Received			I. Recurring Expenditure	3474.65	
I. Grants-in-Aid (Recurring)	345.60		II. Salary Expenditure	6664.47	
II. Grants-in-Aid (Salary)	6827.70		III. Expenditure for Creation of Capital Assets	866.62	
III. Grants-in-Aid (Creation of Capital Assets)	1050.00		IV. Expenditure on Research Projects	2099.25	13104.99
IV. Grants for Research Projects	3033.46	11256.76			
C) Internal Receipts	1922.76	1922.76	Closing Balance	3681.49	3681.49
Grand Total		16786.48	Grand Total		16786.48



Academic Profile

The office of the Controller of Examinations deals with the academic matters related to admission of students, examinations, declaration of results and issue of grade cards, transcripts and certificates. Besides, this office deals with some welfare matters of the students such as, online as well as offline verification and forwarding of applications for scholarships and fellowships to various funding agencies, issue of required documents to the students for the bank loan, etc.

The University offered 68 different programmes of study for admission starting from Certificate level to Ph.D level in the academic year 2018-19. The programmes were:

Ph.D Programmes: Physics, Chemical Sciences, Mathematical Sciences, Molecular Biology & Biotechnology, Environmental Science, English & Foreign Languages, Cultural Studies, Mass Communication & Journalism, Sociology, Hindi, Education, Business Administration, Computer Science & Engineering, Electronics & Communication Engineering, Food Engineering & Technology, Mechanical Engineering, Civil Engineering, Energy.

M.Tech. Programmes: Polymer Science & Technology, Information Technology, Electronics Design & Technology, Bioelectronics, Food Engineering & Technology, Mechanical Engineering, Civil Engineering, Energy Technology.

M.Sc. Programmes: Physics, Chemistry, Mathematics, Molecular Biology & Biotechnology, Environmental Science.

M.A. Programmes: English, Linguistics & Endangered Languages, Linguistics & Language Technology, Cultural Studies, Mass Communication & Journalism, Sociology, Hindi, Social Work, Education, Communication for Development.

5 year Integrated M.Sc.: Physics, Chemistry, Mathematics and Bioscience & Bioinformatics

5 year Integrated M. Com Programme

5 year Integrated M.A.: English programme

4 year Integrated B.Sc.B.Ed. Programme: Major in Physics, Chemistry, Mathematics

4 Year Integrated B.A.B.Ed. Programme: Major in English

Other Programmes: (i) PG: Master of Business Administration (MBA), Master of Computer Application (MCA), Master of Tourism and Travel Management (MTTM), LL.M and Master of Commerce (M.Com) programmes **(ii) UG:** B.Ed programme

B.Tech. Programmes: Computer Science & Engineering, Electronics & Communication Engineering, Electrical Engineering, Mechanical Engineering, Civil Engineering, Food Engineering & Technology.



Diploma Programmes: P.G. Diploma in Translation (Hindi), P.G. Diploma in Women's Studies, Diploma in Paralegal Practice, P.G. Diploma in Child Rights and Governance.

Certificate Programmes: Chinese and NSE Certified Capital Market Professional (NCCMP)-Part Time.

The University conducted national level entrance examination (TUEE: Tezpur University Entrance Examinations) for admission to almost all the programmes of study (except for MBA and B.Tech) during 8th, 9th and 10th June, 2018 at the 26 designated centers across the country. All the processes of admission was on line except the entrance examination which was OMR based. Candidates were admitted to B.Tech programme based on CRL of JEE (main). 60% of the seats were admitted from the candidates of North Eastern states through TU counselling and remaining 40% from Central counselling through JOSAA.

During the year 2018-19, a total of 26281 online applications were received through TUEE for various programmes of study. The number of candidates admitted to various programmes of study was 1359 of of which 44.4% were female. The University reserved seats for the OBC (NCL), SC, ST, EWS and PWD categories as per the Govt. of India rules. Four students were admitted under Defense Quota as per Govt of India policy and 11 foreign students were admitted through ICCR.

As on September 2019 the total strength of the students on the campus was 4007, out of which 42.4% were female students. The percentage of students of reserved categories on the campus were 24.55% (OBC-NCL), 12.6% (SC), 8.01% (ST) and 1.19% (PWD). The number of foreign students on the campus during the report period is 19.

The University tried to provide hostel accommodation on the campus to almost all the students. However, some students could not be accommodated due to shortage of vacant seats.

Although 85 % of the students were from the state of Assam, 15% students represented 28 states of the country.

The University followed Continuous Evaluation system. The Semester End Examinations of the Spring Semester, 2018 were conducted, as per the Academic Calendar, during the period from 17.05.2018 to 30.05.2018 and the Examinations of the Autumn Semester,2018 were conducted during 03.12.2018 to 11.12.2018. Results of the Spring Semester End Examinations of all the programmes were declared on 15th June, 2018 for the outgoing batches of students and on 29th June, 2018 for continuing batches of students. The Autumn Semester Result was declared on 9th January 2019.

The 16th Convocation was held on 27.12.2018 and 1132 students, who passed out in the examinations conducted in May 2018 along with some students of earlier batches who completed the programme in December 2017, were awarded their degrees/diplomas in the Convocation by His Excellency, Prof. Jagdish Mukhi, Governor of Assam & Chancellor of the University.

Mr. Debashis Bharali (Roll No. MEB14027) of B. Tech. in Mechanical Engineering and Mr. Pranjal Kakoti (Roll No. CSI16018) of M. Tech. in Information Technology were awarded Best Graduate, 2018 and Best Postgraduate, 2018 based on their academic as well as co-curricular activities. In addition to this, 41 toppers of both UG and PG programmes were awarded Gold medals in the Convocation.



Officers and staff of this office

1. Dr. Lakhi Boral, Controller of Examinations
2. Ms. Anamika Pegu, Assistant Registrar
3. Mr. Sobhan Mahanta, Section Officer
4. Mr. Biren Sharma, Assistant
5. Mr. Ajanta Pathak, Assistant
6. Mr. Dwipendra Ch. Das, Assistant
7. Mr. Kalyan Koch, Steno (Gr. II)
8. Mr. Arunjyoti Das, Steno (Gr. III)
9. Mr. Jagat Bhuyan, MTS
10. Mr. Debojit Saikia, MTS
11. Mr. Bholā Sarmah, MTS



Research and Development Profile

The office of the Dean, R&D facilitates the implementation and smooth creation of extramural research projects funded by the various Government and non-Government funding agencies like UGC, MHRD, DST, DBT, DeitY, AICTE, DAE, DRDO, DRL, ISRO, ICMR, ICAR, CSIR, INSA, UNICEF, Ministry of Earth Science, Ministry of Food Processing Industries, MNRE, ONGC and others. This office takes the responsibility of advertisement and appointment of project staff; permits conduct of field trips/visits as required by the project staff and PIs and/or Co-PIs; grants permission to attend workshops/seminars/symposiums/ conferences as well as to visit different research laboratories by using the project grant. In addition to management of extramural research projects sanction to individual PI, this office also manages the Departmental and institutional research projects such as UGC-SAP, UGC-BSR start up grants, DST-FIST and DBT funded schemes such as Establishment of Institutional Level Biotech Hub. Dean R&D also conducts the Tezpur University Ethical Committee, Tezpur University Animal Ethical Committee, Tezpur University Biosafety Committee, and Bioinformatics Infrastructure Facility meetings. This office has also been involved in implementation of projects approved by ONGC-CPBT, an example of Academy-Industry collaboration at Tezpur University.

It may be mentioned that the Dean R&D keeps the account of R&D activities of the University, liaisons between the researchers of the University and the funding agencies, facilitates R&D activities and also contributes towards creating a conducive atmosphere for research activities. During the year 2018-2019 this office has forwarded several research proposals for consideration of approval to the funding agencies. At present a total of 250 externally funded research projects are ongoing with a financial outlay of Rs. 8266.01 lakhs. During the year 2018-19, 58 new projects were sanctioned. The ongoing research projects include 17 international collaborative projects of which 3 projects are under Indo-UK, 1 with Indo-Finland, 2 with Indo-Russian, 1 with Indo-Brazil, 2 with Nottingham University, 2 with Indo-Japan, 1 with CEFIPRA (Indo-French), 1 with Indo-German, 1 with Indo-Hungary, 1 with Indo-ASEAN, 1 with Indo-Sweden and 1 with Indo-Greece-Italy. During this period, eleven departments were funded under UGC-SAP of which 3 departments are supported by DRS-I and 8 departments are supported by DRS-II. The faculty members have published several research papers in peer-reviewed national and international journals. Further, these projects have augmented the research skills of the project staff and have created trained manpower to cater to the need of the society.

The office also facilitates consultancy projects of faculty as per the TU guidelines. Total amount earned through consultancy projects during 2018-2019 was approximately INR 17.32 lakh. This amount was earned as consultancy fee by individual faculty as well as by the departments of various Schools.

In addition, the office also deals with various fellowship matters such as UGC-NET JRF, NFOBC, NFST, RGNFST, MANF, DS Kothari, SVSGC, CSIR-JRF/SRF, DST-INSPIRE, DBT-JRF etc. Different fellowships received during 2018-19 are as under.



1. Dr. D.S. Kothari	:	02
2. UGC-NET (JRF)	:	14
3. NFST	:	06
4. CSIR-JRF	:	04
5. CSIR-SRF	:	08

THE PERSONNEL OF THE OFFICE OF THE DEAN

❖ **Dean, Research & Development**

A.K. Mukherjee

PhD (Burdwan)

Professor, Dept. of Molecular Biology and Biotechnology

E-mail: akm@tezu.ernet.in

❖ **Office Staff**

H. Das

Section Officer

E-mail: himdas@tezu.ernet.in

S. Kakati

Section Officer

E-mail: sk@tezu.ernet.in



Students' Activity Centre

The office of the Dean Students' Welfare makes every efforts for providing all possible opportunities and facilities for the all-round development of personality and leadership qualities as well as sports/games among the students. The University has a student community which are talented in multiple fields and are actively involved in sports, cultural, literary and other extra-curricular activities. Highlights of some major events during April 2018 - March 2019 are as follows :

OFFICE STRUCTURE

The office of the Dean Students' Welfare consists of the following members:

Dean and Associate Deans

1. Professor D. Deka --- Dean, Students' Welfare
2. Professor M. Mandal --- Associate Dean, Students' Welfare (Sports)
3. Dr. (Mrs) Juri Gogoi Konwer --- Associate Dean, Students' Welfare (Culture)

Officers and Staff

1. Mr. R.R Singh --- Assistant Director of Physical Education
2. Mr. Partha S. Baruah --- Assistant Registrar
3. Dr. Bhupali Kashyap --- Cultural Officer
4. Mr. Saurav Jyoti Bora --- Office Assistant (Outsourced)
5. Mr. Uddhab Bharali --- Multi-Tasking Staff (MTS)
6. Mr. Jiban Damai --- Multi-Tasking Staff (MTS)
7. Mr. Dudu Tamuli --- Multi-Tasking Staff (MTS)
8. Mr. Sahed Ali --- Multi-Tasking Staff (MTS) (Outsourced)

In the period of report, Mr. Ramit Pal was engaged as Cricket Coach (Contractual), Mr. Urmil Deep Kakati as Basketball Coach (Contractual).

STUDENTS' DISCIPLINE

The office of the Dean, Students' Welfare has been looking after the matters of students' discipline. Like the previous years, the Anti-Ragging committees, Anti Ragging squads continued their constant vigil to keep the University Ragging Free. We are quite pleased to inform that in this period of report too, the University has no incidence of disruption of academic activities due to students' unrest involving the



administration and faculty members. This was made possible because of active and highly dedicated grievance redressal mechanism which is in place and available both online as well as offline.

Students' Activities

Student community of the University is quite proactive in pursuing sports, cultural, literary and other extra-curricular activities. Sports and cultural events are organized regularly in the campus wherein we can see spontaneous participations of large number of students. A brief note on the cultural and sports activities are as follows:

Cultural section of the University is quite resourceful and proactive to nurture the talents of the students by providing best facilities. Music Practice Room is available at the Students' Activity Centre. Kalaguru Bishnu Prasad Rabha Auditorium, Community Hall, Chandra Prabha Saikiani Bhawan are some of the facilities for practice and performance. Different instruments like Guitar, Drum Set, Synthesizer, Dhol, Bor Dhol, Kobi Dhol, Madol, Doba, Pepa, Bahi, Gogona, Kham, Khol etc. are available for the use of the interested students.

Sports Activities:

In order to encourage the students to take up sports and games along with their studies, the University has created impressive facilities and support system. Some of the major facilities which are in place are as follows :

- Football ground with floodlights facility
- One 400 meter track cum cricket field with floodlights facility
- Two Basketball courts with floodlights facility
- Two Volleyball courts with floodlights facility
- One Tennis court with floodlights facility
- One Indoor Stadium (Badminton Court with YY Yonex Synthetic Mat)
- A gymnasium with world class Weider product, USA and Afton product
- One Swimming Pool

Achievements of Tezpur University Students In Inter University Youth Festivals April, 2018 – March, 2019

34th INTER UNIVERSITY EAST-ZONE YOUTH FESTIVAL 2019

Lalit Narayn Mithila University, Darbhanga, Bihar, January 3–7, 2019

- Quiz : 1st Position
- Folk Orchestra : 1st Position
- Cultural Procession : 2nd Position
- Elocution : 2nd Position



- Western Vocal Solo : 2nd Position
- Western Instrumental Solo : 2nd Position
- Clay Modeling : 3rd Position

In-House Cultural Programmes

Dates	Events	Invited Guests
April 22, 2018	Spring Fest 2018-Basantar Lahare Lahare	Performances by students
May 7, 2018	Celebration of Birth Anniversary of Kaviguru Rabindranath Tagore	Performances by students
June 20, 2018	Celebration of Rabha Divas	Ms. Sangeeta Kakati, Renowned Singer
August 7, 2018	Death anniversary of Kaviguru Rabindranath Tagore	Performances by students
August 15, 2018	Celebration of Independence Day	Performance by Students
August 18, 2018	General Fresher's	Performances by students
September 3, 2018	Tithi of Srimanta Sankardeva	Mr. Kanak Sen Deka, Noted Scholar, Eminent Journalist & Former President, Assam Sahitya Sabha
November 5, 2018	Tribute to Dr. Bhupen Hazarika	Dr. Lakhi Goswami, Noted Citizen of Tezpur and Dr. Sankar Patowary, Scholar and Renowned Singer
January 17, 2019	Shilpi Divas Celebration	Dr. Charu Saharia Nath, Former Principal, Tezpur College
January 21, 2019	Foundation Day Cultural Programme	Performance by students
January 26, 2019	Republic Day Celebration	Performance by students
February 22-24, 2019	Annual Meet	Performance by the Nalayak Band from Chandigarh



ANNUAL MEET 2018-2019

The Annual Meet 2018-2019 of Tezpur University is organized by the Students Council during 22nd February, 2019 to 24th February, 2019. There were both group and individual competitions. The group competitions are either Inter-Departmental or Inter-Hostel. Some of the major competitions events are Dances, Drama, Song, Literary, Debate, Photography, Fine Arts, Wall Magazine, Cultural procession etc.

BEST PERFORMERS ANNUAL MEET 2018-2019

Cultural/Literary/Visual Arts

Event	Position	Names of Winners
MUSIC	Best Singer	PRIYANKA BORGHAIN
SKIT	Best Actor	BOHNIMAN BARUAH
	Best Actress	MOUSHUMI PATHAK
ONE ACT PLAY	Best Comedian	AKSHIT GOSWAMI
	Best Script Writer	KMH
	Best Supporting Actor	CHINMOY BARUAH
	Best Supporting Actress	JAHNOBI GOGOI
	Best Director	BISHAL BARUAH
	Best Actor	ABHIJIT DAS
	Best Actress	SUMPEE BORAH

Sports

Sl. No.	Games	Best Player Name
1	Football (M)	NABAJYOTI KULI, NMH
2	Cricket (M)	ANURAG TALUKDAR, KMH
3	Volleyball (M)	NIYAR JYOTI BHARALI, PMH
4	Volleyball (W)	JURI CHETIA, PMCWH
5	Basketball (W)	DIPTI GORH, PMCWH
6	Best Athlete (Man)	RAKTIM RANJAN SAIKIA, NMH



Sl. No.	Games	Best Player Name
7	Best Athlete (Woman)	JURI CHETIA, PMCWH
8	Best Archer (women)	NASMI JAJIBA HUSSAIN, KWH
9	Best Archer (Men)	BIKASH GHOSH, CMH
10	Yoga Champion 2018-19	TRISHTI PANGING, PMCWH
11	Champion of the Champion 2018-19 MEN	MRIDU PAVAN DUTTA, NMH
12	Champion of the Champion 2018-19 Women	NAZIFA SHAHIN, TWH-II
13	Strong Man, 2018-19	KIRTI KAMAL MILI, SCVRMH
14	Strong Women, 2018-19	BABLY KHATUN, PMCWH
15	Best Lifter(Men), 2018-19	MRINAL JYOTI BARUAH, NMH
16	Best Lifter(Women), 2018-19	NIMISHA MEDHI, PMCWH
17	Mr. Tezpur University 2018-19	MRINAL JYOTI BARUAH, NMH
18	Best Commander Men (March Past)	ANKUR NATH, SCVRMH
19	Best Commander Women (March Past)	SRISHTI SONOWAL, SWH
20	Central Commander (Men)	KUL DAVID BARMAN, CMH
21	Central Commander (Women)	JUGAMI BRAHMA

SPORTS ACTIVITY

The 22nd Annual Meet, 2018-19 of Tezpur University was started in the month of August, 2018 with Football, Cricket, Archery, Volleyball, Basketball, Badminton, Table Tennis, Chess, Kho Kho, Kabaddi, Carrom, Lawn Tennis Competitions. Finally the concluding session was held from 22nd February, 2019 to 24th February, 2019 with Track & Field events, Weightlifting, Powerlifting, Best Physique, Arm Wrestling, Tug of War, Cycling and Half Marathon along with March Past Competitions.

Vice Chancellor, Prof. Vinod Kumar Jain lighted the main lamp followed by hoisting of the University flag. Earlier the Assistant Director of Physical Education, Mr. R.R Singh handed over the torch to Professor Jain, which was carried by the Assistant Director of Physical Education (ADPE) along with the captains of the winning teams, Outdoor and Indoor Games Secretary.

Mr. Durga Boro, International Football Player, Guwahati graced the occasion as Chief Guest and he was felicitated by the University fraternity in this occasion. Mr. Narsingh Pawar Deputy Commissioner, Sonitpur District attended the ceremony as Guest of Honour.



Prof. Vinod Kumar Jain took salute of the march past contingent , where teams from all hostels of the University participated. The oath was administered by Professor D. Deka, Dean, Students Welfare', Tezpur University.

TU team also participated in the various events, which are as follows:

Year	Date	Event	Venue	AIU/Others	Achievement
2018	18th October, 2018 to 21st October, 2018	AIU East Zone Basketball Tournament (Men)	KIT University, Bhubaneswar	AIU	Participated
2018	27th October, 2018 to 29th October, 2018	AIU East Zone Badminton Tournament (Men/ Women)	Gauhati University	AIU	Participated
2018	9th December, 2018 to 16th December, 2018	35th Sonitpur District Iron Games	Tezpur	Sonitpur District Sports Association, Tezpur	Won 3 Gold Medals, 4 Silver Medals and 7 Bronze Medals
2018	25 th December, 2018 to 29th December, 2018	AIU All India Archery Tournament (Men/ Women)	KIT University, Bhubaneswar	AIU	Participated
2018	26th December, 2018 to 28th December, 2018	6th All Assam Power Lifting Championship	Tinsukia	Tinsukia District Power Lifting Association	Participated
2018	28th December, 2018 to 30th December, 2018	46th All Assam Weight Lifting Championship	Tezpur	All Assam Weight Lifting Association	Won one Gold and One Silver Medal
2019	5th January, 2019	AIU East Zone Cricket Tournament	Bihar	Ravenshaw University, Bihar	Participated
2019	6th February, 2019 to 15 th February, 2019	40 th NTPC Junior (Recurve Compound & Indian Round) National (Men & Women) Archery Championship	Bhopal	NTPC	Participated





Training and Placement Activities

A: ENGINEERING

During the year under report, the students of the School of Engineering participated in the final placement process of 39 organizations held on-campus as well as off-campus (pool campus events). Some of the prominent brands where our students were placed are Oil India Limited, Cummins India Limited, Intel India Ltd., Numaligarh Refinery Ltd., OYO Rooms, Zaloni Technologies, Wipro Ltd., Concepts Educations, Cognizant Technologies Solution, Internshala, Bewakoof, Regalix India Pvt. Ltd., Qua Qua Experience Pvt. Ltd., Inuture, Dabur India Ltd., DRDO, TCS, Synopsys India Pvt. Ltd., Rocketium.com Technologies Pvt. Ltd., Socialcops, Wesmarty Infotech, Addverb Technology Pvt. Ltd., Neosalpha, Spectrum Eduventure, Infosys, Sanmar Group, Prakshep Pvt. Ltd., Emami Agrotech Ltd., Mikuni India Pvt. Ltd., Vivekananda Kendra Vidyalaya, Square Coaching Institute, Bureau Veritas, Director of Food Processing Meghalaya, Agriculture and Processes Food Product Export Development Authority, Aveva Solutions, Educative, etc.

Pre-Placement Grooming Programmes

- An Interactive session programme for the school of Engineering students by Eminent R& D scientist from Hindustan Unilever Ltd. Dr. Amitava Pramanik & Mr. Sanjoy Sikdar, Programme Director cloud platform Services at IBM Software Lab held on 26 April 2018.
- An Interactive Session by Global Manager of Google Ms. Rasika Saikia for all Engineering and non-engineering student held on 08 August 2018.
- A two-day training programme was delivered by Mr. Jayavardhan Reddy on “Introduction to VLSI industry and Basic kick start of HDL” for B-Tech ECE and M-Tech ECE student held on 5th and 6th sept. 2018.
- An interactive training session by Mrs. Meenakshi Davar, Director (Human Resources) POWER SYSTEM OPERATION CORPORATION LIMITED (PSU) topic on “Grooming Students for Leadership” for all Engineering student held on 6th Sept. 2018.
- An interactive motivational training session by Mr. Ashit Das GM-HR and Mr. Jayanta Baruah Chief Manager HR of Brahmaputra Cracker and Polymar Limited for all School of Engineering student held on 12 Sept. 2018.
- An interactive session by Mr. Prasanta Kr Das, Vice President of Dassault Systemes for all Tezpur University student held on 18 Sept 2018.
- A Preparatory training on “How to face SSB (Service Selection Board) “ held on 30th September 2018 by our Esteemed Guest Lt. Col Amit Mohan Sharma, Adm Offr, 5 ASSAM BN NCC, Tezpur



- A Preparatory training on “How to face SSB (Service Selection Board) “ held on 10 October 2018 by our Esteemed Guest Lt. Col Amit Mohan Sharma, Adm Offr, 5 ASSAM BN NCC, Tezpur
- A sixteen-day training programme on “Sap2000” was delivered by Mr Alakunta Surendra from 15nd to 30th Dec 2018.
- A sixteen-day training programme on “Catia” was delivered by Mr Kota Santosh from 15nd to 30th Dec 2018.
- An eight-day training programme on “Machine Learning with R” was delivered by Mr. B R Shashi Kumar from 15th to 22th Dec 2018.
- An eight-day training programme on “Machine Learning with Python” was delivered by Mr. B R Shashi Kumar from 23th to 30th Dec 2018.
- An eight-day training programme on “C” was delivered by Dr. Ram Charan Baishya from 15th to 22th Dec 2018.
- An eight-day training programme on “Java” was delivered by Dr. Ram Charan Baishya from 23th to 30th Dec 2018.
- An eight-day training programme on “Matlab” was delivered by Mr. Kaushtav Bhattacharaya from 23th to 30th Dec 2018.
- A three-day training programme on “Verilog” was delivered by Mr. Jayavardhan Reddy and Mr. Santosh Kr. Debby from 22th to 24th Dec 2018.

NOTABLE PLACEMENT

Sl. No	Organization Name	No of Offers	Discipline
1	Oil India Limited	03	B-Tech ME
2	Intel India Limited	01	M-Tech ELDT
3	Numaligarh Refinery Limited	01	B-Tech Civil Engg.
4	Wipro Limited	13	B-Tech CSE & ECE
5	Cummins India Limited	06	M-Tech Mech. Engg. & ELDT
6	Dabur India Limited	01	B-Tech Mech. Engg.
7	Concept Education	04	B-Tech Civil & Mech. Engg.
8	DRDO	02	M-Tech Mech. & M-Tech FET
9	TCS	08	B-Tech CSE, ECE, EE
10	Synopsys India Pvt. Ltd.	03	B-Tech CSE, ECE
11	Qua Qua Experience Pvt. Ltd.	03	B-Tech CSE, ECE



Sl. No	Organization Name	No of Offers	Discipline
12	Regalix India Pvt. Ltd.	02	B-Tech ECE, CSE
13	Zaloni Technologies India Pvt. Ltd.	02	B-Tech CSE
14	Rocketium.com Technologies Pvt. Ltd.	01	B-Tech ECE
15	Socialcops	01	B-Tech CSE
16	INurture	07	M-Tech IT, PhD
17	GE HealthCare	02	M-Tech IT
18	Genworks	06	B-Tech ECE & EE
19	Wesmarty Infotech	01	B-Tech CSE
20	Addverb Technology Pvt. Ltd.	02	B-Tech CSE, ECE
21	Neosalpha	08	B-Tech CSE, ECE
22	Spectrum Eduventure	03	All UG, PG
23	Infosys	09	B-Tech CSE, ECE
24	Internshala	01	B-Tech ECE
25	Sanmar Group	01	B-Tech ME
26	Prakshep Private Limited	01	B-Tech CSE
27	Bewakoof.com	01	B-Tech ECE
28	Emami Agrotech Ltd.	02	B-Tech FET
29	Mikuni India Pvt. Ltd.	02	B-Tech ME
30	Vivekananda Kendra Vidyalaya, AP	08	B-Tech CSE & ECE
31	Cognizant Technologies Solution	04	B-Tech CSE & M-Tech
32	Oyo rooms	03	B-Tech Civil Engg.
33	UNICEF(Sponsored Project)	01	M-Tech ELDT, Bioelectronics
34	Square Coaching Institute	01	B-Tech ECE
35	Director of Food Processing, Meghalaya	01	M-Tech FET
36	Agriculture and Processed Food Product Export Development Authority	01	M-Tech FET
37	Bureau Veritas	01	B-Tech EE
38	Aveva Solution India LLP	01	B-Tech CSE
39	Educative	01	B-Tech FET



DISTINGUISHED VISITORS

1. Mrs. Meenakshi Davar, Director-HR, POSOCO
2. Mr. Ashit Das, GM-HR, Brahmaputra Cracker and Polymer Limited
3. Mr. Jayanta Baruah, Chief Manager HR, Brahmaputra Cracker and Polymer Limited
4. Ms. Rashika Saikia, Global Manager, Google
5. Mr. Prasanta Kumar Das, Vice-President, Dassault Systemes

❖ Personnel of the Cell

S.C. Deka

PhD (HAU)

Prof-in-Charge, Training and Placement Cell (SoE)

Professor, Dept of Food Engineering and Technology

E-mail: sankar@tezu.ernet.in

P.C. Das

PhD (Gauhati)

Deputy Director, Training & Placement

E-mail: pijush@tezu.ernet.in

Dipak Kr. Deka

LDC

E-mail: dkdeka@tezu.ernet.in

Nayan Jyoti Kalita

Multi Tasking Staff

E-mail: nayank@tezu.ernet.in





B: NON-ENGINEERING

Training & Placement Cell (non – Engineering) of Tezpur University has had another fruitful year of placements in the year 2018-19, more than 35 organisations conducted recruitment drives for our students. Each year, we invite and host companies on campus to hold recruitments for our students, and in spite of the job market looking bleak this time round, we saw many leading corporates recruited students from our campus. We invited companies from various fields in order to make opportunities available to all stream of non-engineering students. The placement cell maintains a constant contact with students through Emails and WhatsApp groups and notify them about the companies that would be visiting. This year also we placed more than 90% of our Management students on campus. Several regular as well as new organisations visited the University for Placements for this academic session. Some of our alumni have also taken initiative to bring their organisations for campus placement. Companies offering regular jobs as well as paid and unpaid internships were in bountiful this year. Students have been placed through on-campus and off-campus interviews across various departments with an annual CTC ranging from Rs. 2 lakh to 11.5 lakhs.

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE CELL

Title	Date/ Period, year
Pre-placement Grooming Programme on Resume Writing and How to approach the personal Interview? By Dr.Nitin More, Former Head – L&D, Facebook Beneficiaries: All the final year students of Commerce Dept.	22nd August 2018
Workshop on Presentation Skills – Holding the Stage Effectively and Effective Time Planning Strategies by Dr.Nitin More, Former Head – L&D, Facebook Beneficiaries: All PhD Scholars	23rd August 2018
Pre-placement Grooming Programme on Resume Writing and How to approach the personal Interview? By Dr.Nitin More, Former Head – L&D, Facebook Beneficiaries: All the final year students	23rd August 2018
Pre-placement Workshop for Management students on Resume writing, Group Discussion, Case studies and also some good etiquette to be followed while attending interviews along with some mock interviews. Beneficiaries: All the final year MBA & MTTM students	24th & 25th August 2018
EducationUSA and Tezpur university jointly present Information Seminars on Higher Studies in the USA. Beneficiaries: SOE,SOH&SS,SOM,SOS	26th October 2018
OYO Rooms Official Visit for interaction with MBA and MTTM Students Beneficiaries: MBA and MTTM students	4th December 2018
Seminars on “Career opportunities in the development sector” Resource Person: Wing Commander Ms.Pooja Thakur, Programme Director, Piramal Foundation of Education Leadership. Beneficiaries: For all students of the University	26th February 2019
Interaction with MBA students by HR Manager of Britannia Beneficiaries: MBA2nd Semester students	19th March 2019



DISTINGUISHED VISITORS

Dr. Nitin More, Former Head – L&D, Facebook

Wing Commander Ms.Pooja Thakur, Programme Director, Piramal Foundation of Education Leadership.

Ms. Renee Priyadarsh Kashyap, HR Manager, Britannia Industries Ltd.

Mr. Sudarshan Saha, Advising Coordinator, United States – India Educational Foundation (USIEF)

NOTABLE PLACEMENT

Name of the Organisations	Designation Offered	Number of Students Placed	Discipline
Drishti, NGO, Ahmedabad	Programme Executive	1	MA – C4D
POSOCO	Asst. Officer Trainee (PR)	1	MA-MCJ
Satin Creditcare Network Ltd.	Management Trainee	1	MBA
Azimpremji Foundation	Associate	1	MA/M.SC
Gumbi Software	Subject Matter Expert	10	MA/M.SC
ASOMI Finance Pvt Ltd	Senior Executive	4	MBA
Uflex Ltd	Postgraduate Engineer Trainee	1	M.SC/ M.Tech
Oil India Ltd	Senior officer on Probation	2	M.Sc Chemistry
Havells (CRI)	Executive	3	M.Sc MBBT
BCPL	Executive Trainee	2	MBA
ITC	Sales Trainee	2	MBA
HDFC	Personal Banker	3	MBA
OYO Rooms	Sales Associate	1	MBA
SBI Life	Assistant Manager	2	MBA
AMUL	Territory Sales In charge	2	MBA
Colgate Palmolive	Customer Development Officer	2	MBA
Kotak Life	Management Trainee	3	MBA
Federal Bank	Junior Management Grade I	3	MBA/ M.Com
ICICI Bank	Deputy Manager Grade-1	5	MBA
Mahindra Finance	Management Trainee	3	MBA
Axis Bank	Relationship Manager - CSO	2	MBA
Cholamandalam Investment and Finance Company Ltd	Management Trainee	4	MBA
Bandhan Bank	Area Manager (MT)	3	MBA
VKVAPT	Teacher-English- HS	6	MA/M.Sc/B.Ed/M.Tech



Spectrum Eduventures	faculty	2	M.Sc/M.Tech
TCS	Management Trainee	1	MBA
Qua Qua Experiences Pvt Ltd	Analyst – Product	1	MBA/MTTM
UTI AMC Ltd	Management Trainee	1	MBA
Gandhi Fellowship-Piramal Foundation	Fellow	16	All PG/ UG
TCS Research & Innovation Unit	Executive R&D	1	M.Sc MBBT
Concept Education	Faculty	2	MA/M.Sc /M. Tech
Svatantra Microfin Pvt. Ltd.	Management Trainee	5	MBA
Berger Paints	Officer-Trainee	2	M.Sc Chemistry
Schoogle	Executive- R&D	1	All PG/ UG
Crompton Greaves Electrical Pvt Ltd	Sales Trainee	1	MBA
Army public School	PGT Chemistry	1	MA/M.Sc/B.Ed
KV NO-1, Solmara	Teacher	2	MA/M.Sc/B.Ed
Sesta	Executive Trainee	6	MA/M.Sc/M.Com
Lima Aier Higher Secondary School	HS-English Teacher	1	MA
Darpan-NGO	Project Manager	1	MA
Brahmaputra College	Teacher –Physics	1	M.Sc
Indian Meteorological Department	Scientific Assistant	1	M.Sc

❖ Personnel of the Cell

Prof. Papor Baruah

Ph.D-TU

Email: papori@tezu.ernet.in

Professor-in-Charge–T&P (Non-Engineering)

Ms. Deena Davy

MA-CU

Email: deena@tezu.ernet.in

❖ Training & Placement Officer

Mr. Bitopan Mazumdar

M.Com-GU

Email: b2pan94@tezu.ernet.in

❖ Office Assistant

Mr. Mohan Saikia

Multi Tasking Staff (MTS)



The Board of Management

(01-04-2018 to 31-03-2019)

Vice-Chancellor	Chairman
Pro Vice Chancellor	Member
Dr. A. Nath Assistant Professor, Dept. of Chemistry GC College, Silchar, Assam	Member
Dr. T. David Singh Assistant Professor, Dept. of Chemistry Dept. of Basic Science and Humanities, NIT Manipur, Imphal	Member
Shri O.R. Shallam Associate Professor & Head (Retd.), Dept. of History KNG College, Jowai, Meghalaya	Member
Dr. B.S. Nanda Associate Professor, Dept. of Political Science Charuchandra College, Kolkata, West Bengal	Member
Ms. Geeta Upadhyay Chandmari, Tezpur-784001	Member
Prof. Charu Lata Mahanta Dean, School of Engineering	Member (Till 20.01.2019)
Prof. Chandana Goswami Dean, School of Management Sciences	Member (w.e.f. 21.01.2019)
Prof. Nashreen S. Islam Department of Chemical Science	Member
Dr. G.A. Ahmed Department of Physics	Member
Shri S.I. Singh Department of Computer Science and Engineering	Member (Till 05.01.2019)



Dr. Heera Barpujary

Department of Business Administration

Finance Officer

Controller of Examinations

Alumni Representatives

Dr. H. Deka, CIPET, Guwahati, Assam

Dr. Mousumi Barthakur, GNRC, Six Mile, Guwahati

Student Representatives

M. Hazarika, Research Scholar

C. Borah, B.Tech Student

Rakhee Saikia, Research Scholar

Tirtharaj Gohain, PG Student

Registrar

Member

(w.e.f. 06.01.2019)

Permanent Invitee

Permanent Invitee

Special Invitee

Special Invitee

Special Invitee (till 19.10.2018)

Special Invitee (till 19.10.2018)

Special Invitee (w.e.f. 04.12.2018)

Special Invitee (w.e.f. 04.12.2018)

Ex Officio Secretary



The Planning Board

(01-04-2018 to 31-03-2019)

Vice-Chancellor

Pro Vice Chancellor

Dean, School of Humanities and Social Sciences

Dean, School of Sciences

Dean, School of Management Sciences

Dean, School of Engineering

Dean, Students' Welfare

Dean, Research and Development

Dean, Planning & Development

Dean, Academic Affairs

Ex-Officio Chairman

Ex-Officio Member

Ex-Officio Member

Ex-Officio Member

Ex-Officio Member

Ex-Officio Member

Ex-Officio Member

Special Invitee

Special Invitee

Special Invitee

Six Teachers Nominated by the Academic Council

Prof M.M. Sarmah

Department of English and Foreign Languages

Member

Prof R.C. Deka

Department of Chemical Sciences

Member

Dr. R.R. Haque

Department of Environmental Sciences

Member

Dr. G.A. Ahmed

Department of Physics

Member

Dr. D. Datta

Department of Mechanical Engineering

Member

Dr. Heera Barpujari

Department of Business Administration

Member

One Representative of MHRD

Joint Secretary (Central University)
Ministry of Human Resource Development
Department of Higher Education, New Delhi

Member

One Representative of UGC

Prof. (Mrs.) Paula Banerjee

Department of South and South Asian Studies
Calcutta University, Kolkata-700027

Member



One Representative of NEC

Director (HRD & E)
NEC, Nongrim Hill,
Shillong-793003

Member

One Representative of State Govt. of Assam

Commissioner and Secretary
Department of Higher Education, Govt. of Assam
Dispur, Guwahati-781006

Member

Two Nominees by the Board of Management

Prof. Suranjan Das
Vice-Chancellor
Jadavpur University
Kolkata, West Bengal, Midnapore-700032

Member

Sri V.K. Verma
Executive Director (HR&A)
Oil India Limited (OIL)
Duliajan-786602, Assam

Member

Controller of Examinations

Permanent Invitee

Finance Officer

Permanent Invitee

Librarian

Permanent Invitee

Registrar

Ex-officio Secretary



The Academic Council

(01-04-2018 to 31-03-2019)

Vice Chancellor

E-officio Chairman

Pro Vice Chancellor

Ex-officio Member

Deans of Schools

Dean, School of Management Sciences

Ex officio Member

Dean, School of Humanities and Social Sciences

Ex officio Member

Dean, School of Engineering

Ex officio Member

Dean, School of Sciences

Ex officio Member

Dean, Students' Welfare

Ex officio Member

Dean, Research and Development

Special Invitee

Dean, Academic Affairs

Special Invitee

Two Professors Nominated by the Vice Chancellor

Prof. M.K. Sarmah

Department of Business Administration

Member
(till 29.06.2018)

Prof. Nashreen S Islam

Department of Chemical Sciences

Member
(till 29.06.2018)

Prof. Tarun K Maji

Department of Chemical Sciences

Member
(w.e.f. 30.06.2018)

Prof. B.K. Danta

Department of English & Foreign Languages

Member
(w.e.f. 30.06.2018)

All Heads of Departments/ Centres

Head, Department of English and Foreign Languages

Ex officio Member

Head, Department of Cultural Studies

Ex officio Member

Head, Department of Sociology

Ex officio Member

Head, Department of Mass Communication and Journalism

Ex officio Member

Head, Department of Education

Ex officio Member

Head, Department of Social Work

Ex officio Member

Head, Department of Hindi

Ex officio Member

Head, Department of Business Administration

Ex officio Member

Head, Department of Mathematical Sciences

Ex officio Member



Head, Department of Physics	Ex officio Member
Head, Department of Chemical Sciences	Ex officio Member
Head, Department of Molecular Biology and Bio Technology	Ex officio Member
Head, Department of Environmental Science	Ex officio Member
Head, Department of Computer Science and Engineering	Ex officio Member
Head, Department of Electronics & Communication Engineering	Ex officio Member
Head, Department of Food Engineering & Technology	Ex officio Member
Head, Department of Energy	Ex officio Member
Head, Department of Civil Engineering	Ex officio Member
Head, Department of Electrical Engineering	Ex officio Member
Head, Department of Commerce	Ex officio Member
Head, Department of Law	Ex officio Member
Head, Computer Centre	Ex officio Member
Head, Centre for Disaster Management	Ex officio Member
Head, Centre for Women Studies	Ex officio Member
Head, Centre for Assamese Studies	Ex officio Member
Head, Centre for Open and Distance Learning	Ex officio Member
Head, Centre for Inclusive Development	Ex officio Member

Two Associate Professors Nominated by the Vice Chancellor

Dr. S. Saharia Department of Computer Science and Engineering	Member (till 12.10.2018)
Dr. M.K. Hazarika Department of Food Engineering and Technology	Member (w.e.f. 13.10.2018)
Dr. T.R. Sarma Department of Business Administration Two Assistant Professors Nominated by the Vice Chancellor	Member
Dr. Ng K. Francis Department of Physics	Member
Dr. Rathijit Chakraborty Department of English and Foreign Languages Three Nominees of the Board of Management	Member
Prof. I.B.S. Passi , Professor (Emeritus) INSA Senior Scientist and Honorary Professor, IISER Mohali Punjab University, Chandigarh-160014	Member (till 09.08.2018)



Prof. B. Boruah , Professor (Philosophy) School of Humanities and Social Sciences MS 611, IIT, Delhi Hauz Khas, New Delhi-110016	Member (till 09.08.2018)
Prof. D.J. Saikia TIFR Pune Pune University Campus, Pune 411 007 Maharashtra	Member
Prof. Desmond L. Kharmawphlang Department of Culture & Creative Studies North-Eastern Hill University (NEHU) Umshing Mawkyroh Shillong 793022, Meghalaya	Member (w.e.f. 29.10.2018)
Prof. Anup Kumar Gogoi Department of Electronics and Electrical Engineering (EEE) IIT Guwahati Guwahati-781039, Assam	Member (w.e.f. 29.10.2018)
One Representative of UGC	
Dr. (Ms.) Santosh Satya Professor, Center for Rural Development and Technology New Delhi-110016	Member
One Representative of MHRD	
Prof. Harish K Sharma Director, NIT, Agartala, Tripura (W), 799 046	Member
One Representative of NEC Director (HRD & E) North Eastern Council (NEC) Shillong-793003	Member
One Representative of State Govt. of Assam Commissioner & Secretary/ Principal Secretary In-charge Department of Higher Education Govt. of Assam, Guwahati-781006	Ex-officio member
Controller of Examinations	Ex-officio Member
Librarian	Ex-officio Member
Registrar	Ex-officio Secretary



The Finance Committee

(01-04-2018 to 31-03-2019)

Vice Chancellor	Chairman
Pro Vice-Chancellor	Member
Joint Secretary and Financial Advisor, MHRD or his/her nominee from Finance Bureau of MHRD Not below the rank of Deputy Secretary	Member
Joint Secretary (CU&L) of MHRD or his/her nominee not below the rank of Joint Secretary to the Govt. of India	Member
Joint Secretary (CU), UGC or any other Joint Secretary level nominated by the Chairman, UGC	Member officer
Mr. S. Vasum, IAAS Director (Finance) NEEPCO Ltd., Shillong-793003	Member
Sri D.K. Barthakur Vice President, SITA, Assam Assam Secretariat, Dispur, Guwahati, Assam	Member (till 22.01.2019)
Shri B. Paul Muktiah Chairman and Managing Director North Eastern Development Finance Corporation Ltd. NEDFi House, Dispur, Guwahati – 781 006	Member (w.e.f. 23.01.2019)
Prof. Charu Lata Mahanta Dean, School of Engineering	Member (till 20.01.2019)
Prof. N.S. Islam Department of Chemical Sciences Tezpur University	Member (w.e.f. 21.01.2019)
Finance Officer	Ex officio Secretary



The Building Committee

(01-04-2018 to 31-03-2019)

Vice Chancellor	Ex officio Chairman
Pro Vice Chancellor	Member
Prof. Chandana Goswami Dean, School of Management Sciences A representative of the User Department	Member
Prof. D K Bhattacharyya Dean, Academic Affairs	Member
Prof. M Bhuyan Department of Electronics and Communication Engineering	Member
Finance Officer Tezpur University	Ex officio Member
Head, Department of Civil Engineering Tezpur University	Ex officio Member
Chief Engineer, PWD (Bld), Assam Or his/her nominee who is not below the rank of Supdt. Engineer	Ex officio Member
Sri B.K. Das Secretary (Retd), PWD (Blds & NHW) Assam	Member
Superintendent Engineer (Electric) PWD (Elect), Guwahati Electric Division Guwahati, Assam	Ex officio Member
Superintendent Engineer (PHE) Tezpur Circle, Assam	Ex officio Member
Executive Engineer Tezpur University	Ex officio Member



Smti Parmita Kakati

Head, Dept. of Architecture
PCPS Girls Polytechnic College
Guwahati, Assam

Member

Mr. D. Saikia

Sr. Architect, PWD, Assam

Member

Assistant Horticulturist

Tezpur University

Ex officio Member

Registrar

Tezpur University

Ex officio Member Secretary



ACADEMIC DEPARTMENTS AND CENTRES

- ❖ **Dean, School of Engineering**
- ❖ **School of Humanities and Social Sciences**
- ❖ **School of Management Sciences**
- ❖ **School of Sciences**
- ❖ **Centre for Open and Distance Learning**
- ❖ **Teaching Learning Centre**
- ❖ **Community College**



SCHOOL OF ENGINEERING

- ❖ Department of Civil Engineering
- ❖ Department of Computer Science and Engineering
- ❖ Department of Electrical Engineering
- ❖ Department of Electronics and Communication Engineering
- ❖ Department of Energy
- ❖ Department of Food Engineering and Technology
- ❖ Department of Mechanical Engineering



School of Engineering

The School of Engineering (SoE) of Tezpur University was established in the year 2006 with the introduction of B. Tech. programmes in three disciplines. The seven constituents Departments (Departments of Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Electrical Engineering, Energy, Food Engineering and Technology, and Mechanical Engineering) of the School are now offering B. Tech programmes in six disciplines, viz., Computer Science and Engineering, Electronics and Communication Engineering, Mechanical Engineering, Food Engineering and Technology, Civil Engineering, and Electrical Engineering. Six Master of Technology programmes and a MCA programme are also being offered by the Departments under the School. Except the Department of Electrical Engineering, all other departments also offer PhD programmes. This school strives to produce skilled professionals at UG, PG as well as Doctoral levels. The Departments are actively pursuing externally funded research projects and both faculty and students are engaged in developing innovative technologies.

The School has been proactive in strengthening the teaching learning experience of the students in order to enhance the knowledge and employability of its graduates. The School has judiciously used the fund received from AICTE-NEQIP grant in developing and augmenting class room and laboratory facilities and enhancing faculty quality so that the overall learning process is able to keep pace with the changing global scenario of technical education.

During the period, several significant works were performed and important events were organized in the School as mentioned below in brief:

- Submission of application to AICTE for extension of approval of existing courses and approval of new courses of Engineering, MBA and MCA.

The AICTE approved existing courses are:

- M.Tech in Bioelectronics, Electronics Design and Technology, Energy Technology, Food Engineering and Technology, Information Technology, Mechanical Engineering and Civil Engineering.
- B.Tech in Civil Engineering, Computer Science and Engineering, Electrical Engineering, Electronics and Communication Engineering, Food Engineering and Technology, Mechanical Engineering, and MCA.
- New course approved by AICTE: M.Tech in Computer Science and Engineering (to be implemented from 2019-20).
- Upgradation of common facilities and Smart class rooms with a sitting capacity of 180 students in Lecture Hall 1 & 2, Dean's building.



- Creation of independent Language Lab and upgradation of labs for non engineering first year courses enhancement of Books in Central Library of common requirements of first year students.
- Provisional 03 year NBA Accreditation for B. Tech programmes is extended up to 2021. Preparation for permanent accreditation of M. Tech by NBA is underway.
- AICTE GATE link Scholarship 81 M. Tech (I and II year) students received AICTE GATE linked Scholarship.
- 03 QIP scholars selected for carrying out pre-registration visit for the academic year 2018-19 for formal joining in the academic year 2019-20.
- AQIS Proposals submitted under SoE 2018-19

04 MODROBS submitted:	01 for CSE
	01 for ECE
	01 for ME
	01 for FET
05 RPS submitted:	01 for ECE
	01 for ME
	01 for Energy
	01 for FET
	01 for CSE
10 RPS-NER submitted:	03 for ECE
	01 for ME
	01 for Energy
	03 for FET
	01 for CSE
	01 for Civil

THE PERSONNEL OF THE OFFICE OF THE DEAN

Dean, School of Engineering

Prof. Smriti Kumar Sinha, PhD

Professor, Dept. of Computer Science and Engineering

E-mail: deansoe@tezu.ernet.in



❖ Office Staff

J.C. Das

Diploma (SCTE, Assam)

Sr Technical Assistant

E-mail: djibon@tezu.ernet.in

Uttam Roy

MA (Tezpur University)

UDC

E-mail: uttamroy@tezu.ernet.in

D. Mahanta

MTS



SCHOOL OF ENGINEERING

Department of Civil Engineering

The Department of Civil Engineering of Tezpur University was established in the year 2009 under the School of Engineering for offering B. Tech. Degree. Ph.D. Programme was initiated in spring, 2011 and the M. Tech. programme of the department was started from Autumn, 2018. The Department aims to provide quality education, research and professional experiences that enable its graduates to become leaders in their professional careers, to pursue excellence in research and to serve the profession, community and nation, and to be competitive in the international scene.

Academic Programmes and Student Intake:

Programme	Intake
B. TECH	52
M. TECH	9
PhD	Variable (3 in 2018-2019)

Major facilities and equipment available

THE DEPARTMENT HAS THE FOLLOWING LABORATORY FACILITIES

Computational Laboratory

- o MatLab and Simulink R2011b
- o Civil FEM for Ansys,
- o version 12.1Plaxis 2D
- o ETABS Version 9
- o AutoCAD
- o SAP 2000, v-20

Core Departmental Laboratories

- Geotechnical Engg. Laboratory-I
 - o Consolidation Apparatus
 - o Triaxial Apparatus



- Pore Pressure Apparatus
- Laboratory Vane Shear Apparatus
- In-Situ Vane Shear Apparatus
- Swell Test Apparatus
- Electronic Balance
- Laboratory Permeability Apparatus
- Relative Density Apparatus
- Drying Oven
- Shrinkage Limit Testing Apparatus
- Moisture Meter
- Consolidation Apparatus (with three gang)
- Motorized Sieve Shaker
- Standard Penetration Test Set up
- Environmental Engg. Laboratory-I
 - pH Meter
 - Conductivity Meter
 - Turbidity Meter
 - Spectrophotometer Flame Photometer
 - Jar Test Apparatus
 - COD Reactor
 - BOD Incubator
 - Magnetic Stirrer with Hot Plate
 - Drying Oven
 - High Sensitivity Balance
 - Refrigerator
 - Muffle Furnace
- Water Resources Laboratory
 - Hydraulics Bench



- Cavitation Apparatus
- Laminar Flow Table
- Darcy's Law Apparatus
- Reynolds's Apparatus
- Orifice & Mouthpiece
- Structural Engg. & NDT Laboratory
 - Compression Testing Machine
 - Sieve Shaker
 - Vicat Apparatus
 - Compaction Factor Apparatus
 - Desiccators
 - Slump Test Apparatus
 - Le Chatelier Apparatus
 - Specific Gravity Bottle
- Transportation Engg. Laboratory
 - CBR Machine
 - Ring & Ball Apparatus
 - Aggregate Crushing Value Apparatus
 - Hot Plate
 - Ductility Testing Machine
 - Los Angeles Abrasion Testing Machine
 - Impact Testing Machine
- Surveying Laboratory
 - Total Station
 - Electronic Theodolite
 - Vernier Theodolite
 - Autolevel
 - Digital Planimeter
 - Plane Table and accessories
 - Prismatic compass
 - Measuring chain



- o Measuring Tape
- o Ranging rod
- o Cross staff
- Geotechnical Engg. Laboratory-II
 - o Direct Shear Apparatus
 - o Unconfined Compression Apparatus
- Environmental Engg. Laboratory-II
 - o Atomic Absorption Spectrophotometer
 - o UV-Visible Spectrophotometer

MAJOR RESEARCH FINDINGS/ RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
Utpal Kumar Das	Foamed concrete is one of the viable light weight concrete that can be produced without using any specialized equipment. Density as low as 0.8 gm/cc of foamed concrete is achievable in laboratory and field condition. With the increase in density of foamed concrete the compressive strength also increases. Use of 5% sand in the preparation of the foamed concrete increases both density and compressive strength by about 40%. The bamboo weaved in the form of connected cells when used as reinforcement in foamed concrete enhancement in the ductile property of the Foamed Concrete slabs were observed.

RESEARCH PROJECTS, ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Development of Eutrophication Model for Rural water Bodies of Assam, India	DST-SERB	Rs. 2426710	3 years (2017-2020)	Kamal Uddin Ahamad
A Study on Application of Bamboo as Reinforcement in Construction of Low Cost Building Wall	AICTE-UBA	Rs. 500000	2 years (2016-2018)	Utpal Kumar Das

PUBLICATIONS

Journal Publications

- [1] Ahamad K.U., Singh R., Baruah I., Choudhury H. & Sharma M.R. Equilibrium and kinetics modeling of fluoride adsorption onto activated alumina, alum and brick powder. Groundwater for Sustainable Development. 7 (2018)
- [2] Bhaowati B. & Ahamad K.U. A review on lake eutrophication dynamics and recent developments in lake modeling. Ecohydrology & Hydrobiology. 19(1) (2019)



- [3] Hussain I., Bora A.J., Sarma D., Ahamad K.U. & Nath P. Design of a Smartphone Platform Compact Optical System Operational Both in Visible and Near Infrared Spectral Regime. IEEE Sensors Journal. 18(12) (2018)
- [4] Narzary B.K. & Ahamad K.U. Estimating elastic modulus of California bearing ratio test sample using finite element model. Construction and Building Materials. 175 (2018)

Book Chapters

- [1] Ahamad K.U., Mahanta A. & Ahmed S. Removal of Fluoride from Groundwater by Adsorption onto Brick Powder-Alum-Calcium-Infused Adsorbent. Advances in Waste Management, pp. 231-242, Springer, Singapore. 2019.
- [2] Ahamad K.U., Raj P., Barhuiya N.H. & Deep A. Surface Water Quality Modeling by Regression Analysis and Artificial Neural Network. Advances in Waste Management, pp. 215-230, Springer, Singapore. 2019.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/ Institute/Venue
Arunav Chakraborty	International Conference on Infrastructure Development	Jorhat Engineering College jointly with Malnad College of Engineering	December, 21-22, 2018	Jorhat Engineering College, Jorhat, Assam
Karabi Bharadwaj	2nd International conference on Civil Engineering for Sustainable Development- Opportunities and challenges	Dept of Civil Engineering, Assam Engineering College, Guwahati	18-19 December 2018	Assam Engineering College, Guwahati
	GIAN course on Advanced Structural Dynamics	Dept of Civil Engineering College of Engineering Pune	24 th -28 th Dec 2018	College of Engineering Pune

NUMBER OF STUDENTS QULIFIED NET-JRF/GATE/SLET

Gate: 19

NOTABLE PLACEMENT

Name	Designation	Organization
Tushar Ranjan	Graduate Engineer Trainee	Numaligarh Refinery Ltd.
AbhinabSharmah		OYO Rooms
Robert ObertShanpru		OYO Rooms
Souvik Paul		OYO Rooms
Metashree Borah	Instructor/faculty	Concept Education Pvt. Ltd.



THE FACULTY MEMBERS OF THE DEPARTMENT

❖ Professor

Utpal Kumar Das

PhD (Gauhati University)

Geotechnical Engineering

E-mail: ukrdas@tezu.ernet.in

Professor, Head of the Department and Dean Planning & Development

❖ Assistant Professors

Ankurjyoti Saikia

PhD (Tezpur University)

Geotechnical Engineering

E-mail: asaikia@tezu.ernet.in

Kamal Uddin Ahamad

PhD (IIT Guwahati)

Environmental Engineering

E-mail: kahamad@tezu.ernet.in

Binanda Khungur Narzary

M.Tech (IIT Guwahati)

Transportation Engineering

E-mail: binanda@tezu.ernet.in

Debaraj Bailung Sonowal

M.Tech (IIT Roorkee)

Structural Engineering

E-mail: bailung@tezu.ernet.in

Shailen Deka

PhD (IIT Guwahati)

Geotechnical Engineering

Email: seka.s@tezu.ernet.in

Jayanta Deori Bharali

M. Tech (IIT Guwahati)

Transportation Engineering

Email: jdb@tezu.ernet.in

Rituraj Buragohain

M. Tech (IIT Guwahati)

Water Resources Engineering

Email: rbgn@tezu.ernet.in

Karabi Bharadwaj

M.E. (NIT Silchar)

Structural Engineering

Email: karabi@tezu.ernet.in



Arunav Chakraborty

PhD (Gauhati University)
Geotechnical Engineering
E-mail: aru243@tezu.ernet.in

❖ **Technical Staff**

Hirajyoti Doley

M.Tech (IIT Guwahati)
E-Mail: chirajd@tezu.ernet.in

❖ **Technical Officer**

Iseng Thawmung

Diploma in Civil Engineering
E-Mail: iseng@tezu.ernet.in
Technical Assistant

Puspa Jyoti Kalita

Diploma in Civil Engineering
E-mail: pjk@tezu.ernet.in
Technical Assistant

Jahnu Baruah

Diploma in Civil Engineering
E-Mail: jahnu@tezu.ernet.in
Technical Assistant

❖ **Office Staff**

Parama Nanda Chauhan

Email: chauhan@tezu.ernet.in
Lower Division Clerk

Lohit Bhuyan

E-mail: lohit@tezu.ernet.in
MTS



School of Engineering

Department of Computer Science & Engineering

THE DEPARTMENT

The vision of the Department is to be a dedicated centre of learning and research in computer science and engineering. It is committed to create competent professionals capable of taking leading roles in industry, academia and application areas of the field. A High Performance Computing Centre was established in the Department in June 2015 in order to provide high end computing facilities to the scientific researchers from the North-East region. The Department has been recently recognized as a Centre of Excellence in Machine Learning and Big Data Analytics by MHRD, Government of India under FAST. The Department is also recognized by UGC under Special Assistance Programme (SAP DRS Phase II). During 2005-2009 and 2018-2023 the Department received support from the Department of Science and Technology (DST), Govt. of India under its FIST- programme. The Department has also been recognized as ISEA member, MeitY, GoI and BRICS-NU Member. The B. Tech programme of the Department in Computer Science & Engineering is accredited by National Board of Accreditation. The thrust areas of research for the Department have been the following:

- Computer and Network Security
- Biomimetic & Cognitive Robotics
- Bioinformatics
- Machine learning and Soft computing
- Big Data Analytics
- Mobile and Wireless Networking
- Image Processing & Pattern Recognition,
- Information Retrieval Systems
- Natural Language Processing
- Speech Processing



- Workflow analysis
- Computer Vision
- Algorithms and Optimization Techniques
- Software Defined Networking and Cloud Computing

Academic Programmes and Student Intake

Programme	Intake
M.Tech (IT)	28
M.Tech (CSE)	18
MCA	45
B.Tech	60
PhD	Variable (11 in 2018-2019)

Major Facilities and Equipment Available

- High Performance Computing Center (Super Computer “Param Shavak”)
- Cluster Computing Facility With Storage
- Embedded System Trainer Lab (8085 & Arm) Processor Based (2 Nos)
- Bench Mark Lan Trainer/I-Security
- Ibm X3550 M3 Server

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings (in Short Bullet Points)
D.K. Bhattacharyya	Developed a robust method for finding functionally similar gene-gene network modules for breast cancer data. The method is published by Scientific Reports of Nature Publishing Group.
S.S. Satapathy	Web portal lunched for R. Solanacearum F1C1 genome.



RESEARCH PROJECTS, ONGOING AND NEW

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
DST-FIST	DST, Govt of India	44.0 Lakhs	2018-2023	N. Sarma
e-Varaha: Information System for Safe Pork Production in North Eastern India	Media Lab Asia, ITRA, MeitY, Govt of India	26.1 Lakhs	2016-2019	N. Sarma
Integrating Genome scale metabolic analysis of model plant pathogen <i>Ralstoniasolanacearum</i> with RNAseq and fluxomics	DBT, Govt. of India	30.78 Lakhs	2016-2019	S.S. Satapathy S.K. Masakapalli (IIT Mandi)
Information Security Education and Awareness. MoU signed between TU and President of India to execute "Information Security Education and Awareness" project.	DeitY	65 Lakhs	2015-2020	D. K. Bhattacharyya
Center of Excellence on Machine Learning and Big Data Analysis	MHRD	400 Lakhs	2014-2020	D. K. Bhattacharyya
High Performance Computing Centre (By installing Super Computer "Param Shevak")	DeitY	120 Lakhs	2015-2020	D. K. Bhattacharyya Mr. Ashish Ranjan, C-DAC, Pune
Big Data Analytics- Bioinformatics, Network Security and Robotics.	UGC SAP (DRS-II)	77 Lakhs	2015-2020	D. K. Bhattacharyya

PUBLICATIONS

Journal Publications

- [1] Barman B. & Patra S.A. novel technique to detect a suboptimal threshold of neighborhood rough sets for hyperspectral band selection, *Soft Computing*. (2019)
- [2] Barman B. & Patra S. An Empirical Study of Neighborhood Rough Sets based Band Selection Techniques for Classification of Hyperspectral Images. *IET Image Processing*. 13(8) (2019)
- [3] Bhardwaj K. & Patra S. An unsupervised technique for optimal feature selection in attribute profiles for spectral-spatial classification of hyperspectral images. *ISPRS Journal of photogrammetry and remote sensing*. 38 (2018)



- [4] Borah S. & Borah B. Watermarking Techniques for Three Dimensional (3D) Mesh Authentication in Spatial Domain. *3D Research*. 9 (3) (2018)
- [5] Chowdhury H.A., Bhattacharyya D.K. & Kalita J.K. Differential Expression Analysis of RNA-seq Reads: Overview, Taxonomy and Tools. *IEEE/ACM Transaction on Computational Biology and Bioinformatics (IEEE Trans)*. (2018)
- [6] Chowdhury H.A., Bhattacharyya D.K. & Kalita, J.K. (Differential) Co-Expression Analysis of Gene Expression: A Survey of Best Practices. *IEEE/ACM transactions on computational biology and bioinformatics (IEEE Tran)*. (2019)
- [7] Das D. & Bhattacharyya D.K. Defeating Cyber Attacks Due to Script Injection. *International Journal of Network Security*. 20(2) (2018)
- [8] Das D., Sharma U. & Bhattacharyya D.K. Defeating SQL injection attack in authentication security: an experimental study. *International Journal of Information Security*. 18(1) (2019)
- [9] Deb S., Mahanta P., Bhattacharyya D.K. & Dutta M. Subspace module extraction from MI-based co-expression network. *International Journal of Bioinformatics Research and Applications*. 14(3) (2018)
- [10] Deka R.K., Bhattacharyya D.K. & Kalita, J.K. Granger Causality in TCP Flooding Attack. *Int'l Journal of Network Security*. 21(1) (2019)
- [11] Haque M., Sarmah R. & Bhattacharyya D.K. A common neighbor based technique to detect protein complexes in PPI networks. *Journal of Genetic Engineering and Biotechnology*. 16(1) (2018)
- [12] Jaiswal B., Kumar U. & Bhattacharyya D.K. PNME-A gene-gene parallel network module extraction method. *Journal of Genetic Engineering and Biotechnology*. 16(2) (2018)
- [13] Kakoty T., Ahmed H.A., Bhattacharyya D.K. & Kalita J. THD-Tricluster: A Robust Triclustering Technique and Its Application in Condition Specific Change Analysis in HIV-1 Progression Data. *Journal of Computational Biology and Chemistry*. 75 (2018)
- [14] Kalita S., Karmakar A. & Hazarika S.M. Efficient extraction of spatial relations for extended objects vis-à-vis human activity recognition in video. *Journal of Applied Intelligence*. 48(1) (2018)
- [15] Mandal K., Sharma R. & Bhattacharyya D.K. Biomarker Identification for Cancer Disease Using Bicustering Approach: An Empirical Study. *IEEE/ACM Transactions on Computational Biology and Bioinformatics (IEEE Trans)*. 16(2) (2018)
- [16] Nath S., Borah N., Gohain A. & Sharma U. VoiCon: A Matlab GUIbased tool for Voice Conversion applications. *International Journal of Computer Applications in Technology, Inderscience*. 61(3) (2019)
- [17] Roy S., Sharma P., Nath K., Bhattacharyya D.K & Kalita J.K. Pre-Processing: A Data Preparation Step. *Encyclopedia of Bioinformatics and Computational Biology: ABC of Bioinformatics*. (2018)
- [18] Roychoudhury P., Roychoudhury B. & Saikia D.K. Provably Secure Group Authentication and Key Agreement for Machine Type Communication Using Chebyshev's Polynomial. *Computer Communications*. 127 (2018)
- [19] Sarmah U., Bhattacharyya D.K. & Kalita J.K. A Survey of Detection Methods for XSS Attacks. *Journal of Network and Computer Applications*. 118 (2018)
- [20] Sharma P., Bhattacharyya D.K. & Kalita J.K. Detecting protein complexes based on a combination of topological and biological properties in protein-protein interaction network. *Journal of Genetic Engineering and Biotechnology*. 16(1) (2018)
- [21] Thokchom S. & Saikia, D. K. Privacy Preserving and Public Auditable Integrity Checking on Dynamic Cloud Data. *International Journal of Network Security*. 21(2) (2019)

Conference Proceedings

- [1] Ahmed S.A., Nath B., Talukdar A. SbFP-Growth: A Step to Remove the Bottleneck of FP-Tree, Recent Developments in Machine Learning and Data Analytics, 285-296, India. 2018.
- [2] Begum A., Askari S.M.S. & Sharma, U., Text-to-Speech Synthesis System for Mymensinghiya Dialect of Bangla Language, Progress in Advanced Computing and Intelligent Engineering, Singapore. 2019.
- [3] Bhuyan B., Sarma H. K. D. & Sarma N. A Delay Sensitive Cluster Based Routing Protocol for Wireless Sensor Networks, accepted for publication in proc. of 2nd IEEE Intl Conference on Signal Processing and Communication (ICSPC 2019), March 29-30, 2019, Coimbatore, India. 2019.
- [4] Bhuyan B.P., Karmakar A. & Hazarika S.M. Bounding Stability in Formal Concept Analysis, Advanced Computational and Communication Paradigms, India. 2018.
- [5] Borah A. & Nath B. Performance Analysis of Tree-Based Approaches for Pattern Mining, Computational Intelligence in Data Mining 435-448, India. 2018.



- [6] Borah S. & Borah B. Achieving Robustness of Mesh Watermarking Techniques Toward Mesh Geometry and Topology-Invariant Operations. In , Satapathy S., Bhateja V. &, Das S. (eds) Smart Intelligent Computing and Applications. Smart Innovation, Systems and Technologies, vol 104. , India. 2018.
- [7] Chatterjee B.C., Sarma N., Mitra, A., Srivastava, A., Stol, N. & Oki, E., Performance of Dispersion-Reduced Wavelength Assignment in Wavelength-Routed Optical Networks, 20th International Conference on Transparent Optical Networks (ICTON), 1-4, Romania. 2018.
- [8] Das A., Bhardwaj K. & Patra, S. A spectral-spatial multi-criteria active learning technique for hyperspectral image classification, 4th International Conference on Recent Advances in Information Technology (RAIT 2018), India. 2018.
- [9] Devi M., Sarma N. & Deka S. K. A General Framework for Spectrum Assignment in Cognitive Radio Networks, in proc. of the 11th International Conference on Advanced computing & Communication Technology (ICACCT 2018). Panipat, India, February 17-18., 2018.
- [10] Hijam D. & Saharia S. Convolutional Neural Network Based Meitei Mayek Handwritten Character Recognition, International Conference on Intelligent Human Computer Interaction, India. 2018
- [11] Muchahari M.K. & Sinha, S.K. Game-Theoretic Method for Selection of Trustworthy Cloud Service Providers, Proceedings of First International Conference on Smart System, Innovations and Computing, India. 2018
- [12] Muchahari M.K. & Sinha, S.K. Reputation-Based Trust for Selection of Trustworthy Cloud Service Providers. In, Mandal J., Saha G., Kandar D., Maji A. (eds) Proceedings of the International Conference on Computing and Communication Systems. Lecture Notes in Networks and Systems, vol 24., India. 2018.
- [13] Saikia M., Hoque N. & Bhattacharyya D.K. MANADAC: An Effective Alert Correlation Method, in the Proc of IC3-2018, Springer, Sikkim, India. 2018
- [14] Sharma M., Chauhan P & Sarma N. Probability of Detection Analysis in Fading and Nonfading Scenario Using Cooperative Sensing Technique, Proc. of the Int'l Conference on Computing and Communication Systems, Lecture Notes in Networks and Systems, India. 2018
- [15] Sharma M., Chauhan, P. & Sarma, N. Probability of Detection Analysis in Fading and Nonfading Scenario Using Cooperative Sensing Technique, in proc. of the Int'l Conference on Computing and Communication Systems, Lecture Notes in Networks and Systems, vol 24, pp.197-205, Springer, Singapore. March 2018.
- [16] Sharma P. & Bhattacharyya D.K. DCRS: A Multi-objective Protein Complex Finding Method. Proceedings of the International Conference on Computing and Communication Systems. Springer, Singapore., 2018.
- [17] Thokchom S. & Saikia, D.K. Efficient scheme for dynamic Cloud data shared within a static group with privacy preserving auditing and traceability, International Conference on Cloud Computing and Internet of Things, Singapore. 2018

Books

- [1] Bhattacharyya D.K. & Gogoi M. Biometric Promanekoron, Published by Tezpur University and printed by Bhabanee Printers, April, 2018.
- [2] Bhattacharyya D K. & Borah P. Korkot Rugor Chikitsa and Prottyahban. Published by Tezpur University and printed by Bhabanee Printers, April, 2018 [ISBN:978-81-937452-0-5].

Book Chapters

- [1] Begum A., Askari S.Md.S. & Sharma U. Text-to-Speech Synthesis System for Mymensinghiya Dialect of Bangla Language, Progress in Advanced Computing and Intelligent Engineering, Pages: 291-303, Publisher Springer, Singapore. 2019
- [2] Chakraborty S., Sinha A. & Nath S. A Bengali-Sylheti Rule-Based Dialect Translation System: Proposal and Preliminary System, In Proceedings of the International Conference on Computing and Communication Systems (pp. 451-460). Springer, Singapore. (Book Chapter, Scopus). 2018
- [3] Chauhan P., Sharma M., Deka S.K. & Sarma N. Utility Aware Cooperative Spectrum Sensing Using Coalitional Game Theory, In Proc of the Int'l Conference on Computing and Communication Systems, Lecture Notes in Networks and Systems, Springer, Singapore. Vol 24, pp. 167-175, 2018.
- [4] Devi M., Sarma N. & Deka S. A General Framework for Spectrum Assignment in Cognitive Radio Networks, Advanced Computing and Communication Technologies, Publisher Springer, Singapore. Pages: 163-172, 2019.



- [5] Mandal K. & Sarmah R. A density based clustering for gene expression data using gene ontology, Lecture Notes in Networks and Systems, Springer. Vol 24, 2018.
- [6] Muchahari, M.K. & Sinha, S.K. Reputation-Based Trust for Selection of Trustworthy Cloud Service Providers, Mandal J., Saha G., Kandar D., Maji A. (eds) Proceedings of the International Conference on Computing and Communication Systems. Lecture Notes in Networks and Systems, India. Vol 24, 2018
- [7] Sharma, M., Chauhan P. & Sarma N. Probability of Detection Analysis in Fading and Nonfading Scenario Using Cooperative Sensing Technique, In Proc of the Int'l Conference on Computing and Communication Systems, Lecture Notes in Networks and Systems, Springer, Singapore. Vol 24, pp.197-205, 2018.
- [8] Tariang E. & Medhi N. Data Center Traffic Engineering: Multipath Routing with QoS Guarantee. In: Advances in Communication, Devices and Networking. Lecture Notes in Electrical Engineering (Eds. Bera R., Sarkar S., Chakraborty S.) Springer, Singapore. Vol 462, 2018. ISBN 978-981-10-7900-9.

SEMINARS/ CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
A. Karmakar	5 Day National Workshop on Machine Learning in R & Python (MLRP)	Department of CSE, Tezpur University	28th January to 1st February 2019	Tezpur University
D. Boro	5 Day National Workshop on Machine Learning in R & Python (MLRP)	Department of CSE, Tezpur University	28th January to 1st February 2019	Tezpur University
M. Devi	5 Day National Workshop on Machine Learning in R & Python (MLRP)	Department of CSE, Tezpur University	28th January to 1st February 2019	Tezpur University
N. Medh	5 Day National Workshop on Machine Learning in R & Python (MLRP)	Department of CSE, Tezpur University	28th January to 1st February 2019	Tezpur University
N. Medh	Induction training for Faculty	TLC, Tezpur University	7th June to 6th July 2018	Tezpur University
N. Medh	7th European Communication Conference	Lugano, Switzerland	31st October to 3rd November 2018	Lugano, Switzerland
R. Sarmah	5 Day National Workshop on Machine Learning in R & Python (MLRP)	Department of CSE, Tezpur University	28th January to 1st February 2019	Tezpur University
S. Deka	5 Day National Workshop on Machine Learning in R & Python (MLRP)	Department of CSE, Tezpur University	28th January to 1st February 2019	Tezpur University



Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
S. I. Singh	Induction training for Faculty	TLC, Tezpur University	7th June to 6th July 2018	Tezpur University
S. Kalita	5 Day National Workshop on Machine Learning in R & Python (MLRP)	Department of CSE, Tezpur University	28th January to 1st February 2019	Tezpur University
S. Nath	5 Day National Workshop on Machine Learning in R & Python (MLRP)	Department of CSE, Tezpur University	28th January to 1st February 2019	Tezpur University
S. Kalita	Induction training for Faculty	TLC, Tezpur University	7th June to 6th July 2018	Tezpur University
S. Kalita	Indian Conference on Computer Vision and Image Processing	IIIT Hyderabad	18th Dec to 22nd Dec 2018	IIIT Hyderabad
S. Kalita	TEQIP III STC on Fundamentals of Robotics and Artificial Intelligence	IIT Guwahati	4th February to 8th February 2019.	IIT Guwahati
S. Kalita	International Conference on Advanced Computational and Communication Paradigms	Sikkim Manipal Institute of Technology	25th Feb to 28th Feb 2019	Sikkim Manipal Institute of Technology

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
B. Nath	STTP on Big Data, Cloud Computing and Hands on Python	28 th March 2019	Institute of Engineering and Technology, Dibrugarh University
D.K. Bhattacharyya	National Workshop on recent trends and technologies in Computer Science	14 th March 2019	Department of Computer Science, Gauhati University
D.K. Bhattacharyya	National Workshop on Big Data Analytics and Malware Defence Using Machine Learning Approaches	26 th September 2018	Department of Computer Science, Gauhati University
N. Sarma	Short term training programme on Innovation and Rejuvenation of teaching in Higher Education	11 th February 2019	Namrup College, Dibrugarh
N. Sarma	National Workshop on Quality Assurance and Assessment in the light of revised Accreditation framework by NAAC	1 st February 2019	IQAC, Chaiduar College, Gohpur



Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
N. Sarma	Short term course on Innovation and Rejuvenation of teaching in Higher Education, under TLC Tezpur University	29 th January 2019	Swahid Peoli Phukan College, Namti
S. Saharia	Short term programme on Innovation and Rejuvenation of teaching in Higher Education, under TLC Tezpur University	19 th February 2019	North Lakhimpur College (Autonomous)
S. Saharia	Short term programme on ICT based Teaching Learning & Evaluation, under TLC Tezpur University	17 th January 2019	Dera Natung Government College, Itanagar, Arunachal Pradesh
U. Sharma	Induction Training of Faculty of Universities / Colleges / Institutes organised by TLC Tezpur University	22 nd June 2018	TLC Tezpur University
U. Sharma	Orientation Programme for newly admitted students of the Department of Computer Science and Electronics of USTM	18 th Aug, 2018	University of Science and Technology, Meghalaya
U. Sharma	Workshop on Students' Evaluation - Question Paper Preparation and Answer Script Evaluation	5 th Nov 2018	North Lakhimpur College (Autonomous)
U. Sharma	National Academic Governance- UGC, NAAC & NIRF, in the Induction Training of Faculty of Universities / Colleges / Institutes	13 th Dec 2018	TLC Tezpur University
U. Sharma	National Workshop on Quality Assurance and Assessment in the Light of Revised Accreditation Framework by NAAC	1 st February 2019	IQAC, Chaiduar College, Gohpur
U. Sharma	Quality in Higher Education- Essence and Assurance in the Awareness and Sensitization Programme	15 th March 2019	IQAC, Tyagbir Hem Baruah College, Jamugurihat
U. Sharma	Education and Assessment and Accreditation by NAAC, in the Awareness and Sensitization Programme	15 th March 2019	IQAC, Tyagbir Hem Baruah College, Jamugurihat

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/Period, Year
5 Day National Workshop on Machine Learning in R & Python (MLRP)	28 th January to 1 st February, 2019
A lecture on Geometric Reasoning about distance & angles with String & pins, by Prof. Prof. Christian Freksa, Bremen Spatial Cognition Center, University of Bremen	15 th October, 2018
A lecture on Text Analysis for event Detection, by Prof. Jugal Kalita, University of Colorado, Colorado Springs, USA	18 th January, 2019
A lecture on Decomposition based approach towards the control of Boolean Networks, by Dr. Soumya Paul, Research Associate, University of Luxembourg	14 th August 2018



DISTINGUISHED VISITORS TO THE DEPARTMENT

- Mr. Akash Agarwal, Manager, GE Health Care
- Dr. Christian Freksa, Professor, Bremen Spatial Cognition Center, University of Bremen
- Mr. Joydeep Roy Choudhury, Director Techno Media Software Solutions Pvt. Ltd, Kolkata
- Dr. Jugal Kalita, Professor, University of Colorado, Colorado Springs, USA
- Mr. Pranab Das, Manager, GE Health Care.
- Ms. Rasika Saikia, Manager, Learning & Development, Google.
- Mr. Sanjay Sikdar, Manager, IBM Technologies.
- Dr. Soumya Paul, Research Associate, University of Luxembourg
- Dr. Sugata Sanyal, Professor, TIFR
- Mr. Tapan Borah, Manager, Learning & Development, Google.

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/ STUDENTS

- D.K. Bhattacharyya, Nominated as a Task Force Member for State Higher Education.
- D.K. Bhattacharyya, Elected as a Fellow of IEI
- D.K. Bhattacharyya, Research article titled “Network anomaly detection: methods, systems and tools” is recognized as one of top most popular and frequently accessed articles of IEEE CST (IF 17.188).
- D.K. Bhattacharyya, Research article titled “Disease biomarker identification from gene network modules for metastasized breast cancer” is published in Scientific Reports 7(1072) of Nature Publishing Group.
- D.K. Bhattacharyya, Research article titled “Biomarker Identification for Cancer Disease Using Biclustering Approach: An Empirical Study” has been published in the IEEE TCBB.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

- Department of Computer Science and Engineering is selected for DST-FIST-II for the period 2018-2023
- Department of Computer Science and Engineering is selected for setting up MHRD’s Center of Excellence based on Machine Learning and Big Data Analysis, for the period 2014-2020.
- Department of Computer Science and Engineering is selected for UGC SAP DRS-II in the area of Big Data Analytics- Bioinformatics, Network Security and Robotics for the period 2015-2020.
- The Department is nominated by UGC as a Participant of BRICS Network University.
- Tezpur University is selected as a Participating Institute under Ministry of IT’s Information Security Education and Awareness (ISEA) Project for the period 2015-20.



The Department have High Performance Computing Center (Super Computer “Param Shevak”) to carry out collaborative research.

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE

GATE: 24

NET: 05

GRE: 01

IELTS: 01

NOTABLE PLACEMENT

Name	Designation	Organization
Jyotirmoy Poddar	Zaloni Technologies	Software Engineer
Debojyoti Paul	Wipro India ltd	Project Engineer
Tanna Choudhury	Wipro India ltd	Project Engineer
Prakash Kumar Gupta	The Boston Consulting Group	Junior Analyst/Big Data Engineer
Gautam Baruah	Trip Born (A subsidiary of Kovid Labs)	Full stack Executive
Pallab Borah	Teach for India	Teaching Assistant
Jyotimoy Kakoty	Wipro India ltd	Project Engineer
Bicky Kumar Jaiswal	Sensforth AI Research Pvt Ltd	Software Engineer
Bhaskar Sarkar	Karmaa Lab Private Limited	Junior System Architect
Prateek Kumar	Concept Education	Teaching Assistant
Ashish Kumar Verma	Mera Spectra Info Pvt Ltd	Software Engineer
Nikhil Dixit	Digital Impact Square	Innovator
Shravan Kumar	Zwayam digital Pvt Ltd	Software Developer
Gaurav Agarwal	Wipro India ltd	Project Engineer
Nirmal Borah	Software AG	Consultant R&D
Jeevan Jyoti Timsina	Software AG	Consultant R&D
Sumana Sinha	Software AG	Consultant R&D
Anirudh Jaiswal	Software AG	Consultant R&D
Ringki Das	iNurture	Faculty-IT Grade 2
Pranjal Kakati	Zaloni Technologies	Software Engineer
Alok Nath	Zaloni Technologies	Software Engineer
N Rana Singha	iNurture	Faculty-IT Grade 2
Ruben Bhattacharya	Zaloni Technologies	Software Engineer



THE FACULTY OF THE DEPARTMENT

❖ Professors

Dilip Kumar Saikia

PhD (IIT Kharagpur)

Pro Vice-Chancellor

Specialization/Areas of interest: Mobile Computing, Computer Networks

E-mail: dks@tezu.ernet.in

Dhruba Kumar Bhattacharyya

PhD (Tezpur University)

Dean, Academic Affairs

Specialization/Areas of interest: Machine Learning, Network Security and Bioinformatics

E-mail: dkb@tezu.ernet.in

Smriti Kumar Sinha

PhD (Tezpur University)

Dean, School of Engineering

Specialization/Areas of interest: Workflow Automation, Semi-structured Databases, Web Technology

E-mail: smriti@tezu.ernet.in

Utpal Sharma

PhD (Tezpur University)

Specialization/Areas of interest: Natural Language Processing

E-mail: utpal@tezu.ernet.in

Nityananda Sarma

PhD (IIT Guwahati)

Head of the Department

Specialization/Areas of interest: Mobile Networks, Networks Security

E-mail: nitya@tezu.ernet.in

Bhogeswar Borah

PhD (Tezpur University)

Specialization/Areas of interest: Data Mining, Image Processing

E-mail: bgb@tezu.ernet.in

❖ Associate Professors

Sarat Saharia

PhD (Tezpur University)

Specialization/Areas of interest: Image processing, Pattern Recognition

E-mail: sarat@tezu.ernet.in



Bhabesh Nath

PhD (Tezpur University)

Specialization/Areas of interest: Data Mining, Artificial Neural Network

E-mail: bnath@tezu.ernet.in

Siddhartha Sankar Satapathy

PhD (Tezpur University)

Specialization/Areas of interest: Networking, Bioinformatics

E-mail: ssankar@tezu.ernet.in

❖ **Assistant Professors**

S. Ibotombi Singh

PhD (Tezpur University)

Specialization/Areas of interest: Data Mining

E-mail: sis@tezu.ernet.in

Sajib Kumar Deka

PhD (Tezpur University)

Specialization/Areas of interest: Computer Networks

E-mail: skdeka@tezu.ernet.in

Rosy Sarmah

PhD (Tezpur University)

Specialization/Areas of interest: Data Mining

E-mail: rosy8@tezu.ernet.in

L Basantakumar Singh

MTech (Tezpur University)

Specialization/Areas of interest: Pattern Recognition

E-mail: lbsingh@tezu.ernet.in

Debojit Boro

PhD (Tezpur University)

Specialization//Areas of interest: Mobile Computing

E-mail: deb0001@tezu.ernet.in.

Arindam Karmakar

PhD (ISI, Kolkata)

Specialization/Areas of interest: Computational geometry

E-mail: arindam@tezu.ernet.in

Sanghamitra Nath

PhD (Tezpur University)

Specialization/Areas of interest: Data Mining

E-mail: snath@tezu.ernet.in



Swarnajyoti Patra

PhD (Jadavpur)

Specialization/Areas of interest: Pattern Recognition, Evolutionary Computing, Neural Networks

E-mail: swpatra@tezu.ernet.in

Shobhanjana Kalita

PhD (Tezpur University)

Specialization/Areas of interest: Knowledge Representation & Reasoning

E-mail: kalitas@tezu.ernet.in

Nabajyoti Medhi

Ph.D. (NIT Meghalaya)

Specialization/Areas of interest: Knowledge Representation & Reasoning

E-mail: nmedhi@tezu.ernet.in

Monisha Devi

M.Tech (Tezpur University)

Specialization/Areas of interest: Cognitive Radio Networks

E-mail: magna@tezu.ernet.in

Nazrul Hoque

PhD (Tezpur University)

Specialization/Areas of interest: Data Mining, Network Security

E-mail nazrul@tezu.ernet.in

❖ **Adjunct Faculty (Professor)**

Jugal Kalita

MS & PhD (University of Pennsylvania, Pennsylvania, USA)

Artificial Intelligence, Bioinformatics, Information Retrieval, Computer Security

E-mail: jkalita@uccs.edu

Bhabani P. Sinha

PhD (University of Calcutta)

Microprogramming, Computer Arithmetic, Fault Diagnosis, Graph Algorithms, Parallel Architectures and Algorithms, Wireless Networks & Mobile Computing

E-mail: bhabani@isical.ac.in

❖ **Non-Teaching Staff**

Pranabjyoti Dutta

PhD (Tezpur University)

System Analyst

E-mail: pjd@tezu.ernet.in

Rajib Goswami

PhD (Tezpur University)

System Analyst

E-mail: rgos@tezu.ernet.in



Debasish Das

PhD (Tezpur University)
System Analyst
E-mail: ddas@tezu.ernet.in

Gautam Kumar Das

BE (JEC)
Technical Officer
E-mail: gautamd@tezu.ernet.in

Ajay Kumar Sharma

MTech (Tezpur University)
Technical Assistant
E-mail: ajay@tezu.ernet.in

Arun Chetri

MCA (IGNOU)
Laboratory Assistant
E-mail: arunch@tezu.ernet.in

Arup Kumar Sarkar

JE (Silchar)
Laboratory Assistant
E-mail: arupks@tezu.ernet.in

❖ **Office Staff**

Pranati Boro

BA
Assistant
E-mail: pranati@tezu.ernet.in

Golap Baruah

MTS
E-mail: golapb@tezu.ernet.in





School of Engineering

Department of Electrical Engineering

THE DEPARTMENT

The Electrical Engineering department started in 2014 under the School of Engineering with the B.TECH program. The prime motive of the department is to impart quality education, training and research at the undergraduate level in forefront areas of Electrical Engineering and its allied technologies with an aim of producing engineers with sound basic and applied knowledge in electrical engineering.

The key areas of faculty expertise of the department include Electrical Energy: Power System Engineering, Electrical Machines, Control and Instrumentation. The faculties of the department also have a special interest in areas like Power Electronics, Nonlinear Analysis-Theory, Methods & Applications, Fractional Order Chaotic Systems, Converter and Inverter Topologies, Sensor Technologies, Renewable Energy Management, Bio-electronics and Neuro Engineering.

Academic Programmes and Student Intake

Programme	Intake
B.Tech in Electrical Engineering	30

Major Facilities and Equipment Available

Electrical Engineering Department, Tezpur University has a Power System Laboratory and Electrical Machines Laboratory (sponsored under AICTE NEQIP). Complete experimental setup for studying of Control of Electrical Machines is available where; experiments on speed control of DC machine, Transformer tests, and synchronous machine tests can be performed.

The power system laboratory is equipped with experimental setups on Transformer Oil Testing, Differential Relay Protection scheme, Transmission Line Parameter Estimation, Ring and Radial Distribution System testing, Phase sequence testing and parameter evaluation of zero sequence, positive sequence and negative sequence can be performed

Research Projects, Ongoing and New

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
"Investigation of chaos in fractional order models of some communicable and hereditary diseases and design of controllers to stabilise chaotic dynamics in them"	Research and Innovation Grant, Tezpur University	45,000	1 year	Manashita Borah



PUBLICATIONS

Journal Publications

- [1] Borah M. On Coexistence of Fractional-order Hidden attractors. Journal of Computational and Nonlinear Dynamics. 13 (2018)
- [2] Borah M., Roy P. & Roy B.K. Enhanced Performance in Trajectory Tracking of a Ball and Plate System using Fractional Order Controller. IETE Journal of Research. 64(1) (2018)
- [3] Manas M., Sinha A., Sharma S. & Mahboob M.R. A Novel approach for IoT based Wearable Health Monitoring and Messaging System. Journal of Ambient Intelligence and Humanized Computing. 10(7) (2018)
- [4] Rajbongshi R. & Saikia L.C. Coordinated Performance of Interline Power Flow Controller and Superconducting Magnetic Energy Storage in Combined ALFC and AVR System under Deregulated Environment. Journal of Renewable and Sustainable Energy. 10(4) (2018)
- [5] Saharia B.J., Brahma H. & Sarmah N. A review of algorithms for control and optimization for energy management of hybrid renewable energy systems. Journal of Renewable and Sustainable Energy. 10(5) (2018)

Conference Proceedings

- [1] Borah M. & Roy B.K. A Novel Multi-wing Fractional-order Chaotic System, its Synchronization Control and Application in Secure Communication. IEEE International Conference on Energy, Power and Environment (ICEPE), NIT Meghalaya, India, 1st -2nd June, pp. 1-6, 2018.
- [2] Rajbongshi R., Saikia L.C., Tasnin W., Saha A. & Saha D. Performance Analysis of Combined ALFC and AVR System incorporating Power System Stabilizer. 2018 2nd International Conference on Power, Energy and Environment: Towards Smart Technology (ICEPE), Shillong, India, 2018.
- [3] Rajbongshi R., Saikia L.C., Saha D. & Saha A. Combined Voltage and Frequency Control of Multi-area Multi-source System Incorporating HVDC link and Redox Flow Battery. 2018 Biennial International Conference on Power and Energy Systems: Towards Sustainable Energy (PESTSE), Bengaluru, 2019.

Book Chapters

- [1] Rajbongshi R., Saikia L.C., Saha A., Tasnin W. & Saha D. Impact of Power System Stabilizer on Combined ALFC and AVR System. In: Deb D., Balas V., Dey R. (eds) Innovations in Infrastructure. Advances in Intelligent Systems and Computing, Springer, Singapore. Vol. 757, 2019.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
Manashita Borah	International Conference on Energy, Power and Environment (ICEPE)	IEEE	pp. 1-6, 1st -2nd June, 2018	NIT Meghalaya, India

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Md. R. Mahboob	Advances in Control and Its Application in Power Technology (ACAPT)	4th to 28th September, 2018,	Integral University, Lucknow.
Md. R. Mahboob	Advancement and Application of Soft Computing in Electrical System	13th to 17th July 2018,	BIT Mesra



AWARDS & HONOURS/ NOTABLE RESEARCH ACHIEVEMENTS OF FACULTY/ RESEARCH SCHOLARS/STUDENTS/STAFF

Faculty Members

Dr. Manashita Borah received Young Scientist Award, 2019, by Department of Science and Technology (DST), Government of Assam, and presented by the Honourable Chief Minister of Assam, with a citation and cash prize, on 5th March, 2019.

Dr. Manashita Borah received Young Engineer's Award, 2018, Senior Engineers Forum, Institution of Engineers (IEI), Assam State Centre, presented by Padmashree awardee Dr. Uddhab Bharali, on 20th Feb, 2019.

Dr. Manashita Borah was awarded the international Best Paper award in IEEE International Conference on Energy, Power and Environment (ICEPE), NIT Meghalaya, June, 2018, for designing an improved secure communication system.

THE FACULTY OF THE DEPARTMENT

❖ Professors

J.C. Dutta

PhD (IIT-Jadavpur University)

Specialization/Areas of Interest: Biosensors and Bioelectronics

Head

E-mail: jitend@tezu.ernet.in

❖ Assistant Professors

Manashita Borah

PhD, National Institute of Technology (NIT), Silchar

Specialization/Areas of Interest: Fractional-order systems, control systems, Nonlinear dynamics and chaos, circuit design and analyses

Email: manabor@tezu.ernet.in

Md. R. Mahboob

PhD, Aligarh Muslim University

Specialization/Areas of Interest: Sensors and Sensing Technology; Electronics Instrumentation; Wireless Sensor

Email: rahat@tezu.ernet.in

B.J. Saharia

M.Tech (Power Electronics and Drives), National Institute of Technology(NIT), Agartala

Specialization/Areas of Interest: Power Electronic converters for Renewable Energy Applications, Hybrid PV-Wind Energy System Modeling and Optimization

Email: bjsece@tezu.ernet.in



Rumi Rajbongshi

PhD, National Institute of Technology(NIT), Silchar

Specialization/Areas of Interest: Load frequency control, voltage control, power system operation and control, solar photovoltaic, techno economic assessment of hybrid system for rural electrification

Email: rumi.nits90@gmail.com, rumi90@tezu.ernet.in

C. Adhikary

M. Tech (Power Systems), National Institute of Technology, Calicut

Specialization/Areas of Interest: Micro grid and smart grid protection, control systems, Electrical Machines, Power Systems, Power Electronics and Analog Electronics

Email: make1career@gmail.com



School of Engineering

Department of Electronics and Communication Engineering

THE DEPARTMENT

Established in 1997, the Department of Electronics and Communication Engineering is one of the oldest departments in the University. Starting with an M.Tech. programme in Electronics Design and Technology, the department has subsequently introduced another M.Tech. programme in Bioelectronics under the Teaching and Research in Interdisciplinary and Emerging Areas scheme of the University Grants Commission. The Department expanded its academic activities to undergraduate programmes, first with a B.Tech. programme in Electronics and Communication Engineering in 2006 followed by another B.Tech. programme in Electrical Engineering in 2014 (which, since September 2016, is being offered under the newly formed Department of Electrical Engineering). In addition, the department offers Ph.D. programme in different areas including Signal & Image Processing, Bioelectronics, Biosensors, Microwave Engineering, Communication Engineering and Microelectronics. At present, the department has a student strength of about 310.

Academic Programmes and Student Intake

Programme	Intake
M.Tech in Electronics Design and Technology	28
M.Tech in Bioelectronics	15
B.Tech in Electronics and Communication Engineering	56
Ph.D in Electronics and Communication Engineering	Variable (08 in 2018-19)

Major Facilities and Equipment Available

Microfabrication facility

National MEMS Design Centre



MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
Bhabesh Deka	Wavelet Tree Support Detection for Compressed Sensing MRI Reconstruction
P. P. Sahu	Design and development of sensor for Meat/ Fish quality monitoring
P. P. Sahu	Design and development of compact Quantum entanglement device
P. P. Sahu & Santanu Maity	Si-ZnO photo detector with growth of densely packed and aligned hexagonal nano-rods,
Santanu Maity	Circularly polarized microstrip patch antenna at ISM band with miniature structure using fractal geometry for biomedical application

Research Projects, Ongoing and New

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Development of Parallel Processing Embedded Hardware for Super-resolution of Diffusion weighted and Spectroscopic Magnetic Resonance Images	AICTE (RPS)	16.47 Lakhs	3 Years (2017 - 2020)	Bhabesh Deka
Development of a Real-time Image Super-resolution System using Parallel Processing Hardware for Remote Sensing Applications	ISRO (RESPOND)	25.79 Lakhs	3 Years (2017-2020)	Bhabesh Deka
Visvesvaraya Young Faculty Research Grant	Visvesvaraya Ph.D. Scheme, MeitY-GoI	25 Lakhs	5 Years (2018 - 2023)	Bhabesh Deka
Study for label free optical detection of snake venom protein using Surface Plasmon Resonance technique	Science and Engineering Research Board, DST, Govt. of India	47.52 Lakhs	3 Years 2018-2021	Biplob Mandal
Fabrication, characterization and modeling of CNT-C-ENFET	AICTE	25.00 Lakhs	3 Years 2019-2022	Jiten Ch. Dutta
VISVESVARAYA PhD Scheme	DeitY, MCIT, Govt. of India	272.9Lakhs	5 years 2015 2020	Jiten Ch. Dutta
Integrated Biorefinery Approach towards Production of sustainable fuel and chemicals from Algal biobased System	DBT, Govt. of India	244.17751 Lakhs	2016-2020	N. M. Kakoty (Co PI)
Si/ZnO/ZnMgO/PEDOT: PSS/P3HT:PC61 BM hybrid bulk heterojunction (BHJ) architecture based organic solar cell: efficiency enhancement approach through the optical structure modification	DST-SERB	19 Lakhs	3years	Santanu Maity
Implementation of optical biosensor using nano TiO ₂ material,	AICTE RPS	21 Lakhs	2 years 2019-21	Santanu Maity
Design and Implementation of Low Cost Hybrid Aquaponics System	AICTE RPS	21.86 Lakhs	3 years 2019-2022	Soumik Roy



PUBLICATIONS

Journal Publications

- [1] Bhattacharjee S., Maity S., Mitra M. & Chaudhuri S.R.B. A Compact Dual Band Dual Polarized Omnidirectional Antenna for ON Body Applications. *IEEE Transactions on Antennas and Propagation*. 67 (2019)
- [2] Borgohain R., Das R., Mondal B., Yordsri V., Thanachayanont C. & Baruah S. ZnO/ZnS core-shell nanostructures for low concentration NO₂ sensing at room temperature. *IEEE Sensors Journal*, 18, 2018.
- [3] Boruah A., Kakoty N. M. & Ali T. Object Recognition based on Surface Detection - A Review. *Procedia Computer Science*. 133 (2018)
- [4] Boruah K. & Dutta J.C. An improved generalized DNA computing model to simulate logic functions and combinational circuits *International Journal of Information Technology*. 10(3) (2018)
- [5] Choudhary P.S., Bujarbaruah S.M. & Roy S. ECG Denoising using modified non local means algorithm. *International Journal of Engineering Science and Technology*. 10 (2018)
- [6] Choudhury S.N., Konwar B., Kaur S., Doley R. & Mondal B. Study on Snake Venom Protein-Antibody Interaction by Surface Plasmon Resonance Spectroscopy. *Photonic Sens.* 8 (2018)
- [7] Das B., Bujarbaruah S. M. & Roy S. Modeling of propagation of action potential and decremental conduction in neuron. *International Journal of Engineering Science and Technology*. 10 (2018)
- [8] Das H. & Sahu P.P. Electro-physiology of coupling model and its impact on Naja kaouthiavenom treated sciatic nerves of toad. *IEEE transaction on Neural Systems & Rehabilitation Engineering*. 26 (2018)
- [9] Das R.R., Maity S., Choudhury A., Chakraborty A., Bhunia C.T., & Sahu P.P. *Temperature-dependent short-channel parameters of FinFETs*. *Journal of Computational Electronics*. 17(3) (2018)
- [10] Datta S. & Deka B. An Efficient Interpolated Compressed Sensing Reconstruction Scheme for 3D MRI. *IET Image Processing*. 12 (2018)
- [11] Deka B. Sparse representations and compressive sensing in multi-dimensional signal processing. *CSI Transactions on ICT*. 7(3)(2019)
- [12] Deka B., Datta S. & Handique S. Wavelet Tree Support Detection for Compressed Sensing MRI Reconstruction. *IEEE Signal Processing Letters*. 25 (2018)
- [13] Deka R. & Dutta J.C. Modelling of a circuit using ISFET (Ion Sensitive FET) for Obtaining Neuronal Signals *Journal of Engineering research*. 6(3) (2018)
- [14] Dutta J.C. & Sharma P.K. Fabrication, characterization and electrochemical modeling of CNT based enzyme field effect acetylcholine biosensor *IEEE Sensors Journal*. 18(8) (2018)
- [15] Dutta J.C. & Thakur H.R. High performance Dual-Gate Carbon Nanotube Ion-Sensitive Field Effect Transistor with high- κ top gate and low- κ bottom gate dielectrics. *IEEE Sensors Journal*. 19(14) (2019)
- [16] Dutta L., Hazarika A. & Bhuyan M. Nonlinearity compensation of DIC-based multi-sensor measurement. *Measurement*. 126 (2018)
- [17] Gogoi N. & Sahu P.P. All-optical tunable power splitter based on a surface plasmonic two-mode interference waveguide. *Applied Optics*. 57(10) (2018)
- [18] Hazarika A., Barthakur M., Dutta L. & Bhuyan M. F-SVD based algorithm for variability and stability measurement of bio-signals, feature extraction and fusion for pattern recognition. *Biomedical Signal Processing and Control*. 47 (2019)
- [19] Hazarika A., Dutta L., Barthakur M. & Bhuyan M. A Multiview Discriminant Feature Fusion-Based Nonlinear Process Assessment and Diagnosis: Application to Medical Diagnosis. *IEEE Transactions on Instrumentation and Measurement*. 68 (2018)
- [20] Hazarika A., Dutta L., Boro M., Barthakur M. & Bhuyan M. An automatic feature extraction and fusion model: application to electromyogram (EMG) signal classification. *International Journal of Multimedia Information Retrieval*. 7 (2018)
- [21] Hazarika C., Sarma D., Neroula S., Das K., Medhi T. & Sharma S. Characterization of a Schottky ISFET as Hg-MOSFET and as Cytochrome P450-ENFET. *International Journal of Electronics*. 105 (2018)
- [22] Hazarika C., Sarma D., Puzari P., Medhi T. & Sharma S. Use of Cytochrome P450 enzyme isolated from *Bacillus streptospericus* sp. as recognition element in designing Schottky based ISFET Biosensor for hydrocarbon detection. *IEEE Sensor Journal*. 18 (2018)



- [23] Kakoty N.M. & Sharma M. D. Recognition of Sign Language Alphabets and Numbers based on Hand Kinematics using A Data Glove. *Procedia Computer Science*. 133 (2018)
- [24] Kakoty P., Bhuyan M. & Karen D. Performance of Pd Doped SnO₂ as Sensing Material for Tea Aromatic Chemicals, *IEEE Sensors Journal*. 18 (2018)
- [25] Maity N.P., Maity R. & Maity S. Quantum FinFET and Trigate FinFET: A Comparative Analysis through Modeling and Simulation. *Journal of Computational Electronics*. (2019)
- [26] Maity N.P., Maity R., Maity S. & Baishya S. A New Surface Potential and Drain Current Model of Dual Material Gate Short Channel MOSFET in Sub-threshold Regime: Application to High- κ Material HfO₂. *Journal of Nanoelectronics and Optoelectronics*. 14 (2019)
- [27] Maity S. & Sahu P.P. Efficient Si-ZnO-ZnMgO heterojunction Solar cell with alignment of grown hexagonal nanopillar. *Thin Solid Films*. 674 (2019)
- [28] Maity S. & Thomas T. Hole collecting treated graphene layer and PTB7:PC71BM based bulk-heterojunction OPV with improved carrier collection and photovoltaic efficiency. *IEEE Transactions on Electron Devices*. 65 (2018)
- [29] Maity S. & Thomas T. Hybrid-organic-photodetector containing chemically-treated ZnMgO layer with promising and reliable detectivity, responsivity and low dark current. *IEEE Transactions on Device and Materials Reliability*. 19 (2019)
- [30] Maity S., Chaudhuri S.R.B. & Mitra M. A Metamaterial inspired wideband biocompatible antenna for implantable applications, Shankar Bhattacharjee. *IET Microwaves, Antennas & Propagation* (accepted).
- [31] Maity S., Sahu P.P. & Bhunia C.T. High photo sensing performance with electro-optically efficient silicon based ZnO/ZnMgO heterojunction structure. *IEEE Sensor Journal*. 18 (2018).
- [32] Muchahary D., Metya S.K. & Maity S. Modelling and analysis of Si-ZnO heterojunction thin film solar cell. *IET Micro & Nano Letters*. (2019)
- [33] Sahu P.P. A Compact Surface Plasmonics Polariton Quantum Entanglement Device. *Plasmonics*. (2019)
- [34] Sahu P.P. Thermooptic Two Mode interference device for reconfigurable Quantum optic circuits. *Quantum information processing*. 17 (2018)
- [35] Saikia A., Kakoty N.M., Phukan N., Balakrishnan M., Sahai N., Paul S. & Bhatia D. Combination of EMG Features and Stability Index for Finger Movements Recognition. *Procedia Computer Science*. 133 (2018)
- [36] Sharma A. & Sharma S. Review of Power Electronics in Vehicle-to-Grid Systems. *Journal of Energy Storage*. 21 (2019)
- [37] Sharma S. & Sarma K.C.D. An Analytical Approach for Drain Current Modelling of A Symmetric Double Gate Junctionless Transistor. *Journal of Nanoelectronics and Optoelectronics*. 13 (2018)
- [38] Thakur H.R. & Dutta J.C. Modeling of Carbon nanotube ISFETs with high- κ Gate dielectrics for biosensing applications. *Wiley International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*. 32(6), 2019

Conference Proceedings

- [1] Baruah S.M.B., Gogoi P. & Roy S. From Cable Equation to Active and Passive Nerve Membrane Model. *IEEE Second International Conference on Advanced Computational and Communication Paradigms (ICACCP-2019)*, SMIT, Sikkim. 2019.
- [2] Baruah S.M.B., Nandi D. & Roy S. Modeling Signal Transmission in Passive Dendritic Fiber Using Discretized Cable Equation. *IEEE 2nd international conference on innovations in electronics, signal processing and communication (IESC) 2019*, NIT, Meghalaya. 2019.
- [3] Bonjyotsna A. & Bhuyan M. Singer Identification using Time-series Auto-regressive Moving Average. *International Conference on Photonics, Signal Processing and Communication Technologies*, Bangalore, Springer. 2018.
- [4] Das B., Baruah S.M.B & Roy S. Velocity Profile of Alpha Type and Gamma Type Motor Neuron and Type III and Type IV Sensory Neuron. *IEEE Second International Conference on Advanced Computational and Communication Paradigms (ICACCP-2019)*, SMIT, Sikkim. 2019.
- [5] Datta S. & Deka B. Interpolated Compressed Sensing for Calibrationless Parallel MRI Reconstruction in 25th National Conference on Communications (NCC) 2019, Bangalore, India.
- [6] Gogoi P. & Roy S. Modeling a H-H Neuron based Spiking Neural Network incorporating Multiple Pre-synaptic Inputs. *IEEE 2nd international conference on innovations in electronics, signal processing and communication (IESC) 2019*, NIT, Meghalaya, BEST PAPER AWARD. 2019.



- [7] Gogoi P., Bujarbaruah S.M. & Roy S. Modeling a Bioinspired Neuron: An Extension to the H-H Model. *Advanced Computational and Communication Paradigms*. In Eds. Bhattacharyya, S., Gandhi, T., Sharma, Kashyap R., Chakraborty S., Swarnikar S., Humbert G., Zeng S. & Mondal B. FWHM and Sensitivity Study of Bimetallic SPR Sensor Chip, 2019 Third IEEE International conference on electrical, computer and communication technologies, held at SVS college of Engineering, Coimbatore, Tamil Nadu, India, during 20-22 Feb, 2019.
- [8] Keshwani G., Thakur H.R. & Dutta J.C. Characterization of thin zirconia films deposited by ECD on ITO coated glass for biosensing applications *IEEE International Conference on Signal Processing and Integrated Networks (SPIN-2019)*, pp. 776-779, 2019.
- [9] Mullah H.U. & Deka B. Parallel Multispectral Image Super-resolution Based on Sparse Representations in 2nd International Conference on Innovations in Electronics, Signal Processing and Communication (IESC) 2019, Shillong, India, 2019.
- [10] Nath S., Doley K., Kashyap R. & Mondal B. Syringe based automated fluid infusion system for surface plasmon resonance microfluidic application. 8th International Conference on Pattern Recognition and Machine Intelligence (PReMI 2019) held at Tezpur University, Tezpur, Assam during December 17-20, 2019.
- [11] Thakur H.R., Keshwani G. & Dutta J.C. Physical model for drift in carbon nanotube based ZrO_2 gate dielectric ion sensitive field effect transistor. *IEEE International Conference on Innovations in Electronics, Signal Processing and Communication (IESC' 2019)*. 2019.

Books and Book Chapters

- [1] Datta S. & Deka B. Calibrationless Parallel Compressed Sensing Reconstruction for Rapid Magnetic Resonance Imaging. *Compressed Sensing in Healthcare*, Elsevier, 2019.
- [2] Datta S. & Deka B. Group-sparsity based Compressed Sensing Reconstruction for Fast Parallel MRI. 8th International Conference on Pattern Recognition and Machine Intelligence (PReMI) 2019, Lecture Notes in Computer Science, 2019.
- [3] Deka B. & Datta S. Compressed Sensing Magnetic Resonance Image Reconstruction Algorithms - A Convex Optimization Approach. *Springer Series on Bio- and Neurosystems*, Springer Singapore, 2019.
- [4] Deka B., Mullah H.U., Datta S., Lakshmi V. & Ganesan R. Single-Image Super-Resolution of Diffusion and Spectroscopic MR Images using Sparse Representations. 8th International Conference on Pattern Recognition and Machine Intelligence (PReMI) 2019, Lecture Notes in Computer Science. 2019.
- [5] Kumar S. & Deka B. Multi-channel ECG Reconstruction based on Joint Compressed Sensing for Healthcare Applications”, *Compressed Sensing in Healthcare*, Elsevier, 2019.
- [6] Kumar S., Deka B. & Datta S. Block-sparsity based Compressed Sensing for Multichannel ECG Reconstruction,” in 8th International Conference on Pattern Recognition and Machine Intelligence (PReMI) 2019, Lecture Notes in Computer Science, 2019.
- [7] Mullah H.U., Deka B., Barman T. & Prasad A.V.V. Sparsity Regularization based Super-resolution of Multispectral Imagery,” in 8th International Conference on Pattern Recognition and Machine Intelligence (PReMI) 2019, Lecture Notes in Computer Science. 2019.

Patent

P. P. Sahu

Patent No. 201831009528

Title “A portable Optical fiber instrument for instant petrol purity detection”

TALKS BY THE FACULTY ABROAD AND IN INDIA

Dr. Santanu Sharma, National Conference on Applied Sciences, Sustainable and Evolving Technology” Central Institute of Technology (CIT), Kokrajhar, 9-11 March, 2018.



AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/ STUDENTS

Dr. B. Deka: Elevated to IEEE Senior Member Grade by IEEE USA

Dr. B. Deka: Elevated to IETE Fellow by IETE India

Best Paper Award: Gogoi P. & Roy S.: Modeling a H-H Neuron based Spiking Neural Network incorporating Multiple Pre-synaptic Inputs; IEEE 2nd international conference on innovations in electronics, signal processing and communication (IESC) 2019, NIT, Meghalaya (Accepted)

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE

GATE: 2

NOTABLE PLACEMENT

Tata Consultancy Services Limited: 03

Cummins India Limited: 03

Genworks Health Private Limited: 04

Infosys: 02

Synopsys (India) Pvt. Ltd.: 03

Neosalpha: 01

QuaQua: 01

Internshala: 01

Rocketium.com: 01

Regalix India Pvt Ltd: 01

Wipro Limited: 02

Bewakoof: 01

Unicef: 01

Perfect VIPs: 03

Freshworks: 01

THE FACULTY OF THE DEPARTMENT

❖ Professors

M. Bhuyan

PhD (Gauhati University)

Specialization/Areas of Interest: Instrumentation Engineering

E-mail: manab@tezu.ernet.in



P.P. Sahu

PhD (Jadavpur University)

Specialization/Areas of Interest: Optical Network, Clinical Instrumentation

E-mail: pps@tezu.ernet.in

J.C. Dutta

PhD (Jadavpur University)

Specialization/Areas of Interest: Biosensors and Bioelectronics

E-mail: jitend@tezu.ernet.in

S. Bhattacharyya

PhD (Delhi University)

Specialization/Areas of Interest: Microwave Antennas, Absorbers and Materials

E-mail: sb@tezu.ernet.in

❖ **Associate Professors**

S. Sharma

PhD (Tezpur University)

Specialization/Areas of Interest: Device (Bioelectronics), Vehicular power electronics

E-mail: sss@tezu.ernet.in

S. Roy

PhD (Tezpur University)

Specialization/Areas of Interest: Neuro Engineering

E-mail: xoumik@tezu.ernet.in

B. Deka

PhD (IIT Guwahati)

Specialization/Areas of Interest: Image processing, Computer Vision

E-mail: bdeka@tezu.ernet.in

V.K. Nath

PhD (IIT Guwahati)

Specialization/Areas of Interest: Image and Video processing

E-mail: vkn@tezu.ernet.in

N.M. Kakoty

PhD (Tezpur University)

Specialization/Areas of Interest: Rehabilitation Robotics

E-mail: nkakoty@tezu.ernet.in

❖ **Assistant Professors**

Deepika Hazarika

M.Tech (IIT Guwahati)

Specialization/Areas of Interest: Image processing

E-mail: deepika@tezu.ernet.in



R. Chutia

PhD (Tezpur University)

Specialization/Areas of Interest: Instrumentation, Machine Olfaction and Embedded System

E-mail: riku@tezu.ernet.in

R.K. Baruah

PhD (IIT Guwahati)

Specialization/Areas of Interest: Nanoelectronics

E-mail: ratulkr@tezu.ernet.in

B. Mondal

PhD (Jadavpur University)

Specialization/Areas of Interest: Microsensors and Micro fabrications

E-mail: biplobm@tezu.ernet.in

D. Sonowal

PhD (Tezpur University)

Specialization/Areas of Interest: FPGA based system, ANN: Hardware Implementation

E-mail: dsn@tezu.ernet.in

Ananya Bonjyotsna

M.Tech (Tezpur University)

Specialization/Areas of Interest: Audio Processing

E-mail: ananyab@tezu.ernet.in

Priyanka Kakoty

M.Tech (Tezpur)

Specialization/Areas of Interest: MOS Gas sensor fabrication

E-mail: priyankak@tezu.ernet.in

S. Maity

PhD (NIT Yupia)

Specialization/Areas of Interest: Semiconductor devices, RF-MEMS & Ckt

E-mail: smaity@tezu.ernet.in

❖ **Technical Staff**

A.C. Baishya

M.Tech (Tezpur University)

Technical Officer

E-mail: anukul@tezu.ernet.in

K. Sharma

B.E.

Technical Assistant

E-mail: kulen@tezu.ernet.in

**J.C. Boro**

Diploma in ETE
Technical Assistant
E-mail: j_boro@tezu.ernet.in

K. Gogoi

B.Tech
Technical Assistant
E-mail: khageng@tezu.ernet.in

S.P. Saikia

ITI, Electrical
Technician
E-mail: satyap@tezu.ernet.in

R. Sharma

ITI, Electronic Mechanic
Lab Assistant
E-mail: rupak@tezu.ernet.in

N.K. Roy

ITI, Electronic Mechanic
Lab Assistant
E-mail: navanit@tezu.ernet.in

B. Das

ITI, Machinist
Machine Operator
E-mail: bipulda@tezu.ernet.in

❖ Office Staff**Raj Kumar Das**

BA
Assistant
E-mail: raj@tezu.ernet.in

Dibakar Nath

MTS
E-mail: dibakar@tezu.ernet.in



School of Engineering

Department of Energy

Department of Energy started in 1996, with an aim to produce manpower pool in the field of energy, develop new and efficient energy conversion technologies, R & D and extension activities in diverse areas of energy. The Department offers a two-year (four semesters) AICTE approved M Tech programme in Energy Technology, PhD in energy, B Voc (Renewable Energy Management), Post Graduate Diploma in Renewable Energy and Energy Management (Distance mode). The thrust areas of research are Biomass energy, Solarenergy, Fuel Cell, Hydrogen Technology, Energy-Environment interaction and Energy Conservation and Management. Apart from the teaching and research, Department organizes training programmes, workshops and seminars in the relevant areas of energy.

Academic Programmes and Student Intake

Programme	Intake
M. Tech. in Energy Technology	28
PhD	Variable (04 in 2018-2019)

Major Facilities and Equipment Available

- Solar Photo Voltaic Plants including 1 MW rooftop plant
- Automatic Bomb Calorimeter
- Biodiesel production unit
- Biomass Gasifier (Model CTC-150, 5kW)
- Cloud and Pour Point Apparatus suitable for biodiesel samples
- Computerized Diesel Engine Test Rig
- Duel fuel engine test rig
- Exhaust Gas Analyser
- Electrochemical Analyser
- Laboratory Heat Exchanger for parallel and counter flow
- Micro Hydro Power Generating Equipment
- NI Virtual Bench



- Oxidation Stability Apparatus
- PEM Fuel Cell Kit
- Petrol Engine Test Rig
- Semi-Automatic Flash & Fire Point Apparatus
- Smoke Point Apparatus
- Solar PV Grid Tied Training System
- Solar Thermal Training System
- Spin coating unit
- Vertical tubular furnace
- Anaerobic Digester
- GC unit
- GIS laboratory
- Simulation laboratory with MATLAB, PV Syst, ANSYS, Design Expert

MAJOR RESEARCH FINDINGS/ RESEARCH AND DEVELOPMENT ACTIVITIES

Name	Salient Research Findings
B.K. Kakati	<p>Biomass derived graphene cathode catalyst for Polymer Electrolyte Fuel Cells.</p> <ul style="list-style-type: none"> ● One pot synthesis of nitrogen and sulphur co-doped biomass derived graphene based cathode catalyst for polymer electrolyte fuel cells. <p>Oxygen reduction reaction catalyst for potential application in polymer electrolyte fuel cells</p> <ul style="list-style-type: none"> ● Synthesis of novel dual doped 'biomass derived graphene' based oxygen reduction catalyst ● Potential application in polymer electrolyte fuel cells.
D.C. Baruah	<p>Assessment of Bioenergy By-Products (Anaerobic Digestate and Biochar) as Potential Crop Production Inputs</p> <ul style="list-style-type: none"> ● Know-how to process bioenergy by-products (Anaerobic digestate and Biochar) for potential crop production inputs ● Comprehensive assessment of characterization of anaerobic digestate and biochar ● Effect of application of different phases of bioenergy by-products on soil properties is known <p>Semi-empirical model for performance assessment of solar air heater</p> <ul style="list-style-type: none"> ● A user friendly performance assessment model of solar air heater is developed as a decision making tool with an aim to promote solar air heater <p>Rural hybrid Energy Enterprise System is developed based on</p> <ul style="list-style-type: none"> ● Mapping of energy resource in rural sectors and existing energy consumption pattern and future projected energy demand ● Characterization of 50 different biomass feedstock. <p>Fuel efficient all-purpose biomass stove is developed and technology transferred</p>



Name	Salient Research Findings
D. Deka	<ul style="list-style-type: none"> Biodiesel production from locally available oil seeds. Development of heterogeneous renewable catalysts for biodiesel production and valorisation of wastes. Micro emulsion based hybrid Biofuel using locally available vegetable oil. Catalytic Transformation of microalgae into fuel and chemicals. Development of low cost Photo bioreactor for algal production
N. Sarmah	<ul style="list-style-type: none"> Design of light weight Bi PV modules Design and development of Dust Simulation
P. K. Choudhury	<p>Development of a test set-up for solar thermal collector as working fluid and design a microcontroller based mechanism for controlling the collector output</p> <ul style="list-style-type: none"> A test solar thermal collector with air as medium has been constructed. The collector output is measured and controlled using a microcontroller based mechanism.
R. Katak	<p>Biochar application for sustainable soil management and mitigation of GHG emission</p> <ul style="list-style-type: none"> Biochar application is found to improve crop yield with an overall improvement in the soil physico-chemical characteristics. Biochar has been found to be effective in heavy metal removal.
S. Mahapatra	<p>Biomass Gasification</p> <ul style="list-style-type: none"> The work focuses on the experiments and mathematical modeling towards establishing the effect of air mass flux on the propagation rate, bed temperature, gas composition and related aspects under the sub-stoichiometric operating conditions in downdraft packed bed configuration. <p>Climate Responsive Buildings and Thermal comfort</p> <ul style="list-style-type: none"> Climatic classification of entire northeast region into three bioclimatic zones (warm and humid, cool and humid and cold and cloudy), thermal performance analysis of the vernacular buildings of the region. The study also focused to develop adaptive thermal comfort models and energy performance analysis the buildings of different climatic zones. <p>Decentralized Energy Systems</p> <ul style="list-style-type: none"> Decentralized power system is also relevant to North-Eastern States of India, particularly for isolated sites that are located far off from the existing grid supply. The agro-residue and bamboo based biomass gasification technology systems can be replicable and sustainable model for generation of electricity from locally available resources at the village level.
V. Verma	<p>Performance analysis of a solar PV/T system for waste heat recovery</p> <ul style="list-style-type: none"> Optimize, fabricate and performance analysis of the experimental set-up. Validation of the experimental set-up. <p>Study of Desiccant Coated Heat Exchanger</p> <ul style="list-style-type: none"> Optimize the influence factor by Taguchi Method. Absorption and Regeneration rate of desiccant material.



Research Projects, Ongoing and New

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
One-pot synthesis of Nitrogen and Sulphur co-doped biomass derived graphenebased cathode catalyst for Polymer Electrolyte Fuel Cells	SERB-DST	36.0 Lakhs	2016 -2019	B. K. Kakati
Synthesis of novel dual doped biomass derived graphene based Oxygen Reduction Reaction catalyst for potential application in Polymer Electrolyte Fuel Cells	UGC	6.00 Lakhs	2016 - 2018	B. K. Kakati
Rural Hybrid Energy Enterprise Systems	DST- RCUK	198 Lakhs	2013-2018	D. C. Baruah
Bioenergy from waste: exploring the multiplier benefits to poor communities of medium-scale technology innervations	HEFCE Newton fund	30.65 Lakhs	2017 - 2018	D. C. Baruah
Enhancing Food Security in Rural India	EPSRC	3.00 Lakhs	2017 - 2018	D.C. Baruah
Strengthening education, research and innovation for climate smart crops in India AdaptNET	Erasmus and Capacity Building in Higher Education	83.64 Lakhs	2018-2021	D. C. Baruah
Design and development of an all-purpose smart biogas reactor for household applications	AICTE	11 Lakhs	2019-2022	D. C. Baruah
Indo-Brazil International Collaborative Research Project Integrated Biorefinery Approach towards production of sustainable fuel and chemicals from Algal biobased systems	DBT	100.46 Lakhs	2016 -2019	D. Deka
Indo-Hungary International Collaborative Research Project Biochemicals and biofuels from lignocellulosic biomass by Green catalytic processes	DST	34.42 Lakh	2016 - 2019	D. Deka
Up gradation of lab and library facilities of the Department of Energy	MNRE	50 Lakhs	2017 -2018	D. Deka
INDIA-UK Center for education and Research in clean energy (IUCERCE)	DST	74.50 Lakhs	2017 -2018	N. Sarmah
Women empowerment and skill development through technological intervention in cooking stove	DSIR	9.70 Lakhs	2019-2020	R. Kataki

PUBLICATIONS

Journal Publications

- [1] Baruah B., Kataki R., Thakur P & Tiwari P. Detailed physicochemical and thermochemical investigation of Upper Assam oil shale. *Journal of Thermal Analysis and Calorimetry*. (2019)
- [2] Baruah D.C. & Enweremadu, C.C. Prospects of decentralized renewable energy to improve energy access: A resource-inventory-based analysis of South Africa. *Renewable and Sustainable Energy Reviews*. 103 (2019)



- [3] Baruah J., Nath B.K., Sharma R., Kumar S., Deka R.C., Baruah D.C. & Kalita E. Recent trends in the pretreatment of lignocellulosic biomass for value-added products. *Frontiers in Energy Research*. 6 (2018)
- [4] Borah M.J., Das A., Das V., Bhuyan N. & Deka D. Transesterification of waste cooking oil for biodiesel production catalyzed by Zn substituted waste egg shell derived CaO nanocatalyst. *Fuel*. 242 (2019)
- [5] Borah M.J., Devi A., Borah R. & Deka D. Synthesis and application of Co doped ZnO as heterogeneous nanocatalyst for biodiesel production from non-edible oil. *Renewable Energy*. 133 (2019)
- [6] Borah M.J., Devi A., Saikia R.A. & Deka D. Biodiesel production from waste cooking oil catalyzed by in-situ decorated TiO₂ on reduced graphene oxide nanocomposite. *Energy*. 158 (2018)
- [7] Das K., Hiloidhari M., Baruah D.C & Nonhebel S. Impact of Time Expenditure on Household Preferences for Cooking Fuels. *Energy*. 151 (2018)
- [8] Das S., Sarkar P.K. & Mahapatra S. Thermodynamic optimization of coal-biomass co-gasification process by using non-stoichiometric equilibrium modeling. *Materials Today: Proceedings*. 5 (2018)
- [9] Devi A., Das V.K. & Deka D. Evaluation of the effectiveness of potato peel extract as a natural antioxidant on biodiesel oxidation stability. *Industrial Crops & Products*. 123 (2018)
- [10] Devi A., Das V.K., Das V. & Deka D. Fuel Quality Assessment of Biodiesels Produced through Alcoholysis from *Pongamiaglabra*, *Mesuaferrea* and their blend: A novel yet cinch approach. *Materials Today: Proceedings*. 5 (2018)
- [11] Devi A., Das V.K., Das V. and Deka D. A green approach for enhancing oxidation stability including long storage periods of biodiesel via *Thujaoreantalis L.* as an antioxidant additive. *Fuel*. 253 (2019)
- [12] Gopal P., Nadimpalli G., Saikia R., Sankari H., Ratnam R., Gogoi N. & Garg A. Optimization of pyrolyzer design to produce maximum bio-oil from *Saccharumravannae L.*: An integrated approach using experimental data and artificial intelligence. *Biomass Conversion and Biorefinery*. (2019)
- [13] Hiloidhari M., Araújo K., Kumari S., Baruah D.C., Ramachandra T.V., Kataki R. & Thakur I.S. Bioelectricity from sugarcane bagasse co-generation in India– An assessment of resource potential, policies and market mobilization opportunity for the case of Uttar Pradesh. *Journal of Cleaner Production*. 182 (2018)
- [14] Hiloidhari M., Baruah D.C., Kumari M., Kumari S. & Thakur I.S. Prospect and potential of biomass power to mitigate climate change: A case study in India. *Journal of Cleaner Production*. 220 (2019)
- [15] Kataki S., Hazarika S. & Baruah D.C. By-products of bioenergy systems (anaerobic digestion and gasification) as sources of plant nutrients: scope of processed application and effect on soil and crop. *Journal of Material Cycles and Waste Management*. 21 (2018)
- [16] Kataki S., Hazarika S. & Baruah D.C. Recycling of Bioenergy By-Products as Crop Nutrient: Application in Different Phases for Improvement of Soil and Crop. *Environmental Progress & Sustainable Energy*. 38 (2018)
- [17] Konwar L.J., Boro J. & Deka D. Activated Carbon Supported CaO from Waste Shells as a Catalyst for Biodiesel Production. *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*. 40 (2018)
- [18] Nath B.K., Chaliha C., Bhuyan B., Kalita E., Baruah D.C. & Bhagabati A.K. GIS mapping-based impact assessment of groundwater contamination by arsenic and other heavy metal contaminants in the Brahmaputra River valley: A water quality assessment study. *Journal of Cleaner Production*. 201 (2018)
- [19] Novodárszki G., Solt H.E., Valyon J., Lónyi F., Hancsók J., Deka D., Tuba R. & Mihályi M.R. Selective hydroconversion of levulinic acid to γ -valerolactone or 2-methyltetrahydrofuran over silica-supported cobalt catalysts. *Catalysis Science and Technology*. 9 (2019)
- [20] Novodárszki G., Valyon J., Illés Á., Dóbbé S., Deka D., Hancsók J. & Mihályi M.R. Heterogeneous hydroconversion of levulinic acid over silica-supported Ni catalyst. *Reaction Kinetics, Mechanisms and Catalysis*. 126 (2019)
- [21] Patowary D. & Baruah D.C. Effect of combined chemical and thermal pretreatments on biogas production from lignocellulosic biomasses. *Industrial Crops & Products*. 124 (2018)
- [22] Patowary R. & Baruah D.C. Thermoelectric conversion of waste heat from IC engine driven vehicles: A review of its application, issues and solutions. *International Journal of Energy Research*. 42 (2018)
- [23] Saharia B.J., Brahma H. & Sarmah N. A review of algorithms for control and optimization for energy management of hybrid renewable energy systems. *Journal of Renewable and Sustainable Energy*. 10 (2018)
- [24] Singh M.K., Ooka R., Rijal H.B., Kumar S., Kumar A. & Mahapatra S. Progress in thermal comfort studies in classrooms over last 50 years and way forward. *Energy and Buildings*. (2019)
- [25] Verma V. & Murugesan K. Experimental study of solar assisted ground source heat pump system for short term space heating operation from morning to evening. *Journal of Mechanical Science and technology*. 32 (2018)

**Conference Proceedings**

- [1] Brahma H., Baruah L. & Sarmah N. Electrical and Thermal Modelling to Evaluate Photovoltaic Module Performance in Varying Outdoor Condition. Proceeding of the International Conference on Power, Energy and Environment: Towards Smart Technology (ICEPE) IEEE. 2018. ISBN: 978-1-5386-4769-1
- [2] Christopher E.C., Barua D.C., Mahapatra S., Kataki S., Patowary D. & Sarma G. Addressing Economic and Energy Poverty through Locally Available Sustainable Biomass Resources: Investigation of the Issues Concerning India and South Africa. Proceeding of the Power & Energy Conference and Exhibition, Florida USA. 2018.
- [3] Gohain M. & Deka D. Water hyacinth derived mixed-oxide heterogeneous catalyst for biodiesel production. Proceeding of the International Conference on Power, Energy and Environment: Towards Smart Technology (ICEPE) IEEE. 2018. ISBN: 978-1-5386-4769-1
- [4] Kataki S., Hazarika S. & Barua D.C. Recycling of by-products of anaerobic digestion: Feedstock related variability and scope of processed application for improved management. Proceeding of the International conference & Expo on Recycling, Amsterdam Netherlands. 2018.

Book Chapters

- [1] Buragohain S., Patowary D., Kataki S., Brahma B., Sarma G.D., Patowary R., West H., Clarke M. & Baruah D.C. Feasibility Study on Implementing Kitchen Waste-Based Biogas Plant at Tezpur University, Assam. Utilization and Management of Bioresources, Springer, Singapore. 2018.
- [2] Kataki S. & Baruah D.C. Prospects and Issues of Phosphorus Recovery as Struvite from Waste Streams. Handbook of Environmental Materials Management, Springer. 2018.
- [3] Kataki S., Sarma G.D., Patowary D. & Baruah D.C. Prospects of Utilization of Liquid Fraction of Biogas Digestate as Substrate Supplement for Mushroom Cultivation. Advances in Waste Management. 445-465, 2019.
- [4] Kataki S., West H., Clarke M. & Baruah D.C. Utilization and Management of Bioresources. Springer, Singapore. 2018.
- [5] Saikia K., Roy P., Patowary D., Kataki S., Medhi H., Das P., West H., Clarke M. & Baruah D.C. By-Products of Bioenergy Systems (Anaerobic Digestion and Gasification): Generation and Prospects of Utilization. Utilization and Management of Bioresources, Springer, Singapore. 2018

Other Publications

- [1] Dhiman B., Chaudhury M. K., Mahapatra S. & Chakrabarti D. Socially Constructed Design in Context of Small-Scale Solar Photovoltaic Home System. In Chakrabarti A. (eds) Research into Design for a Connected World. Smart Innovation, Systems and Technologies. 134, 391-401, 2019.
- [2] Sakia K., Boro B., Kakati B.K. & Verma A. Current advances and applications of fuel cell technologies. In PK Sarangi, S Nanda, P Mohanty, (eds.) Recent Advancements in Biofuels and Bioenergy Utilization. Springer, Singapore. pp. 303-337, 2018. ISBN: 978-981-13-1306-6, 978-981-13-1307-3

Patent

- [1] A smokeless multifunctional and multipot solid fuel stove (Biswajit Gogoi and Debendra Chandra Baruah) (Application No.:01831009091)

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, year	Place/Institute/Venue
Biraj Kumar Kakati	International Conference on Sustainable Energy and Green Technology 2018	University of Malaya	11-14 December 2018	Kuala Lumpur, Malaysia
Biraj Kumar Kakati	2 nd International Conference on Sustainable Energy and Environmental Challenges	IISc Bangalore	31 December 2017 – 3 January 2018	Bengaluru, India



Name of the Faculty Member	Title	Organized by	Date/Period, year	Place/Institute/Venue
D. C. Baruah	Erasmus+ Capacity Building in Higher Education	Brussels, Belgium	28-30, January, 2019	Brussels, Belgium
D. C. Baruah	Leadership for Academician Programme (LEAP)	NIT Tiruchirappalli, IIT, Sri City and Nanyang Technological University, Singapore	4-23 February, 2019	Tiruchirappalli (India), Sri City (India) and Singapore
D. C. Baruah	Kick-off meeting of Erasmus+ Capacity Building in Higher Education funded project entitled <i>Strengthening Education, Research and innovation for Climate Smart Crops in India, AdaptNET</i>	Athens Agricultural University, Greece	7-8 March, 2019	Greece
D. Deka	Induction Training of Faculty Member as resource person	Teaching Learning Centre, Tezpur University	29-11-2018	Tezpur University
D. Deka	Induction Training of Faculty Member as resource person	Namrup College, Namrup	10-02-2019	Namrup, Assam
P. K. Choudhury	DST sponsored Training programme on Entrepreneurship Development and Management for Scientists and Technologists working in Govt. Sector	Entrepreneurship Development Institute of India	3-14 December 2018	Entrepreneurship Development Institute of India, Gandhinagar, Gujarat
P. K. Choudhury	Induction Training of Faculty under PMMNMTT Scheme of Ministry of Human Resource Development	Teaching Learning Centre, Tezpur University	6 June – 5 July, 2018	Tezpur University, Tezpur
Vikas Verma	International Conference on Sustainable Energy and Green Technology 2018	University of Malaya	11-14 December 2018	Kuala Lumpur, Malaysia

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, year	Place/Institute/Venue
Biraj Kumar Kakati	International Conference on Sustainable Energy and Green Technology 2018	11-14 December 2018	Kuala Lumpur, Malaysia
D.C. Baruah	Assessment of fuelwood consumption in Assam, organized by GIZ and TERI in partnership with Assam Forest Department	30th November, 2018	Guwahati



D.C. Baruah	GIS based planning of Renewable Energy Generation in the TEQIP=III sponsored Faculty development programme on “Integration of smart grid and renewable energy sources”	26-30 November, 2018	Assam Engineering College, Guwahati
D.C. Baruah	27th National Conference of Soil Conservation Society of India (SCSI)	25-27 October 2018	Assam Agricultural University, Jorhat, Assam
D.C. Baruah	Faculty Development Programme on Recent Trends in Energy sector (with special emphasis on North-East)	18-23 June, 2018	Royal Global University, Guwahati, Assam
D.C. Baruah	National Conference on Clean Energy: Emerging Technologies organized by ICRC-NISTADS Northeast India Energy Conclave	6-7 June, 2018	Cotton University, Guwahati, Assam
D.C. Baruah	Smart Cities Workshop on Sustainable Urban Development	27 April, 2018	Heidelberg University, Mizoram
D. Deka	As visiting scientist	25-06-2018	Federal University of Rio De Janeiro, Brazil
Sadhan Mahapatra	National Conference on Emerging Trends in Energy and Electrical Systems 2019 (ETEES - 19)	29 March, 2019	Assam Engineering College, Guwahati
Sadhan Mahapatra	International Conference on Advanced materials for Energy Science and Technology	26 February, 2019	North Eastern Hill University, Shillong
Sadhan Mahapatra	Research Methodology and Technical Writing	2 February, 2019	Teaching Learning Center and Department of Environmental Science, Tezpur University
Sadhan Mahapatra	National Seminar on Solar Photovoltaic Power Plant and Reactive Power Management	4 December, 2018	National Power Training Institute, Guwahati
Sadhan Mahapatra	Faculty Development Program on Improvement of Classroom Teaching	20 June, 2018	GIMT Tezpur
Vikas Verma	International Conference on Sustainable Energy and Green Technology 2018	11-14 December 2018	Kuala Lumpur, Malaysia

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/Period, year
FDP on Advances in Renewable Energy Technologies and Systems (in collaboration with TLC)	19-24 February, 2018



DISTINGUISHED VISITORS TO THE DEPARTMENT

Dr. Robert Barthos, PhD, Research Scientist, Department of Environmental Chemistry and catalysis, Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, Hungary Academy of Science, Budapest, Hungary.

Dr. Agnes Szegedi, Research Scientist, Department of Environmental Chemistry and catalysis, Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, Hungary Academy of Science, Budapest, Hungary, Date of Visit: December 18-22, 2018.

Prof. Takaaki Oiwa, Faculty of Economics, Yamaguchi University, Japan.

Prof. Sanjay K Bhardwaj, School of International Studies, Jawaharlal Nehru University, New Delhi.

Dr. Saurabh, School of International Studies, Jawaharlal Nehru University, New Delhi.

Dr. Vivek Soni, Bharati Vidhya Bhawan, New Delhi.

Prof. Rajeev Thottappillil, from Royal Institute of Technology (KTH), Sweden.

Dr. Anders Malmquist, from Royal Institute of Technology (KTH), Sweden.

Dr. Ebrahim Shayesteh, from Royal Institute of Technology (KTH), Sweden.

AWARDS & HONOURS/ NOTABLE RESEARCH ACHIEVEMENTS OF FACULTY/ RESEARCH SCHOLARS/ STUDENTS/ STAFF

Faculty Members

International Travel Support 2018, B. K. Kakati, awarded by DST to attend International Conference on Sustainable Energy and Green Technology.

International Travel Support 2018, VikasVerma, awarded by DST to attend International Conference on Sustainable Energy and Green Technology.

Dr. Vikas Verma has been selected by DST for 3rd BRICS Young Scientist Forum.

D. C. Baruah was invited to attend Grant-holders' meeting for the project entitled, "Strengthening Education, Research and innovation for Climate Smart Crops in IndiaAdaptNET" at Brussels, Belgium as a partner coordinator representing Tezpur University in theErasmus+ Capacity Building in Higher Education, during 28-30, January, 2019 and also attended the kick-off meeting at Athens Agricultural University, Greece for the same project during 7-8 March, 2019.

D. C. Baruah was selected for Leadership for Academician Programme (LEAP), a National Initiative for Leadership Development in HEIs by MHRD, Govt. of India organized at NIT Tiruchirappalli, IIIT, Sri City and Nanyang Technological University, Singapore, during 4-23 February, 2019

Research Scholar/ Student

Research and Innovation Grant, Lakhanlal and Syeda Mafruja Zahan, awarded by Tezpur University.



Lakhanlal and Syeda Mafruja Zahan by Tezpur University under the Research and Innovation Grant (sanction number: DoRD/RIG/10-73/1362-A; duration: February to June 2019; sanctioned amount ₹ 57 Thousands).

Valentina Das (a PhD student) is awarded Nehru-Fullbright Fellowship at University of Oklahoma, USA, 2018-19.

Borkotoki B., Gogoi N.K., Saikia P., Kataki R., Narzari R. & Gogoi N. got a best poster award to present a paper, Characterization of Ipomoea carnea biochar and its soil application, in the 27th National Conference of Soil Conservation Society of India on Sustainable Management of Soil and Water Resources for Doubling Farmers' income, AAU, Jorhat, October 25-27, 2018.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

Department of Energy is involved in outreach activities through demonstration of bioenergy based technologies in Jhawani village in Bihaguri Development Block, Sonitpur District.

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET: 10

NOTABLE PLACEMENT

Name	Designation	Organization
Imon Kalyan Goswami	Thermal and Fluid Science Engineer	Cummins India Limited
Poonam Das	Engineer	Cummins India Limited
Labanya Baruah	Engineer	Cummins India Limited

THE FACULTY MEMBERS OF THE DEPARTMENT

❖ Professors

Debendra Chandra Baruah

PhD (PAU, Punjab)

Director, IQAC

Specialization/Areas of Interest: Renewable Energy, Energy Planning and Thermal Energy Management, Rural Energy Access

E-mail: baruahd@tezu.ernet.in

Dhanapati Deka

PhD (Tezpur University)

Dean, Students' Welfare

Specialization/Areas of Interest: Biofuel and Bioenergy systems, Development of Renewable catalyst,

E-mail: dhanapati@tezu.ernet.in



Rupam Kataki

PhD (Tezpur University)

Head of the Department

Specialization/Areas of Interest: Biomass and Biofuel, Energy Environment interaction

E-mail: rupam@tezu.ernet.in

❖ **Associate Professors**

Sadhan Mahapatra

PhD (IISc)

Specialization/Areas of Interest: Biomass Gasification, Climate responsive buildings, Decentralized Energy Options, Energy conservation

E-mail: sadhan@tezu.ernet.in

❖ **Assistant Professors**

Pradyumna Kumar Choudhury

PhD (Tezpur University)

Specialization/Areas of Interest: Solar Energy, Hybrid Energy System, Energy Conservation, Instrumentation & Control

E-mail: pkc@tezu.ernet.in

Biraj Kumar Kakati

PhD (IIT, Guwahati)

Specialization/Areas of Interest: Fuel cells and hydrogen technology, Electrochemical energy systems, Graphene nanotechnology, Chemical recovery of precious metal catalysts

E-mail: bkakati@tezu.ernet.in

Nabin Sarmah

PhD (Heriot-Watt, Edinburgh)

Specialization/Areas of Interest: Solar Energy, Photovoltaic, Energy Systems

E-mail: nabin@tezu.ernet.in

Vikas Verma

PhD (IIT, Roorkee)

Specialization/Areas of Interest: Thermal Engineering, Solar Thermal Energy, Heat Transfer

E-mail: vikas@tezu.ernet.in

Debanand Singdeo

PhD (IIT, Bombay)

DST INSPIRE Faculty

Specialization/Areas of Interest: High Temperature Fuel Cell, Modeling of Electrochemical Processes, Transport Phenomena

E-mail: singdeo@tezu.ernet.in

Bibha Boro

M. Tech. (Tezpur University)

B. Voc. in Renewable Energy Programme Faculty

Specialization/Areas of Interest: Solar cell

E-mail: bibha@tezu.ernet.in



❖ Technical Staff

Biswajit Gogoi

M. Tech (Tezpur University)

Technical Officer

E-mail: biswa27@tezu.ernet.in

Tapanjit Borah

Diploma in Mechanical Engineering

Technical Assistant

E-mail: tapanji@tezu.ernet.in

Trilokya Lahon

B.Sc. (Botany)

Laboratory Assistant

E-mail: tlahon@tezu.ernet.in

Office Staff

Late C. Gogoi

UDC





School of Engineering

Department of Food Engineering and Technology

THE DEPARTMENT

The Department of Food Engineering and Technology at Tezpur University is one of the six constituent departments under the School of Engineering. The vision of the Department is to create skilled human resources well versed in engineering aspects of food processing to cater the needs of the rapidly growing food processing sector. Therefore, the department is serving to provide knowledge and skills for better preservation, processing and value addition to agro-products; also to promote research and development for product and process and assurance of high level of hygiene and safety of processed food through food safety laws and regulations for supporting a competitive, modern and safe food market for the consumers. This department earlier known as Department of Food Processing Technology started in 2006 with the two-year MSc programme in Food Processing Technology. The department is currently offering BTech, BVoc, MTech and PhD programmes. The Department has been supported by

DST-FIST, UGC-SAP and by Ministry of Food Processing Industries (MoFPI), Government of India for running various programmes. Also with the support of MoFPI, New Delhi, the department is running Food Quality Control Laboratory for testing food and tea samples. The Department is having several ongoing projects sponsored by various funding agencies like UGC, MoFPI, DST, DBT, DRDO, ICAR, AICTE, MSME, ASTEC etc. The main objectives of the scientific research and development works of the department are to contribute to the national food industry, its engineering and technology development.

Academic Programmes and Student Intake

Programme	Intake
BTech in in Food Engineering & Technology	38
MTech in Food Engineering & Technology	18
BVoc in Food Processing	50
PhD In Food Engineering & Technology	Variable (8 in 2018-19)



Major Facilities and Equipment Available

Name of the Equipment

Milk Pasteuriser Unit (GOMA Engineering)
Hunter Color Spectrophotometer (Hunter Lab, USA)
Texture Analyser (Newport, Australia)
Rapid Viscosity Analyser (Stable Micro System)
Freeze Dryer (Labtech &Lyolab)
Falling Number Apparatus (Perten, Australia)
Automatic Solvent Extraction System (Pelican)
Automatic Fibre Extraction System (Pelican)
FTIR (Perkin Elmer)
HPLC (Waters)
Modified atmospheric packaging unit (Vacstar)
DSC-TGA (Netzsch)
Encapsulator (Buchi)
Gas pycnometer (Porous Materials Inc.)
Fermenter (Sartorius)
Atomic absorption spectrophotometer (Thermo Scientific)
Soxhlet apparatus (Pelican Equipments)
Kjeldahl apparatus (Pelican Equipments)
GC – MS system (Perkin Elmer)
Supercritical fluid extraction system (Waters)
Rheometer (Anton Paar)
PCR (Eppendorf)

Research Projects: Ongoing and New

Title of the Project	Funding Agency	Amount (in lakhs)	Duration	Principal Investigator
Electric field based novel techniques for pilot scale processing of juice and pulp from potential fruits of NE region	ICAR	128.4262	2018-2011	B. Srivastava
In vivo hypocholesterolemic effect of bioconjugates of starch nanoparticles with gamma-oryzanol and tocotrienols extracted from rice bran.	DBT	79.60	2016-18	C. L. Mahanta
Development of functional carambola juice incorporated with anthocyanins from bran of pigments rice varieties of Assam	ASTEC	2.65	2016-2018	C. L. Mahanta



Title of the Project	Funding Agency	Amount (in lakhs)	Duration	Principal Investigator
Evaluation of tree tomatoes (tamarillo) of Nagaland utilizing the pulp, peel and seeds for its commercialization	MoFPI	33.03489	2018-2020	C. L. Mahanta
Development of ready to reconstitute freeze dried mistidahi powder	SERB-DST	5.00	2016-2018	D. Seth
Development of active packaging film from food processing wastes	ICAR	31.00	2016-2018	L. S. Badwaik
Effect of pre-treatments on drying characteristics and oleoresin content of Bhut Jolokia (<i>Capsicum chinensis</i>)	UGC	10.00	2018-2020	N. S. Hulle
Development of Enzyme based biosensor through sol-gel techniques for debittering of grapefruit and mosambi juice	SERB-DST	26.62	2017-2020	P. Mishra
Usability of smart phone to evaluate the efficiency of polyaniline based sensor for indication of freshness of fish fillets during chemical spoilage	LSRB-DRDO	22.53842	2018-2021	P. Mishra
Designing bioactive peptides from whey liquid waste of the dairy industry: Functionality and health benefit in Obesity, Obesity associated disorders with exploration of molecular mechanism	DBT	32.74	2016-2019	R. K. Duary
Establishment and evaluation of probiotics potentiality of isolated lactobacilli strains and comparative analysis of their gene expression profile during transit in a simulated gastrointestinal tract conditions	DST SERB	11.00	2016-2018	R. K. Duary
Value addition of banana flower using green technologies to develop combat food	DRDO, New Delhi	22.73557	2018-2020	S. C. Deka
Development of a probiotic vegetable drink based upon bottle gourd with blends of other vegetables and utilization of its wastes for making value added products	DBT	59.35	2016-2019	S. C. Deka
Ultrasound assisted rapid immobilization of pectinase on solid support for juice clarification	AICTE, New Delhi	21.10	2019-2022	N. Sit

PUBLICATIONS

Journal Publications

- [1] Baite T. N. & Das A. B. Extraction of glycyrrhizin from licorice using single screw extruder: Process kinetics and stimulus response modeling. *Separation Science and Technology*, 53(3), 449-457, (2018)
- [2] Barooah N., Das P., Barooah M.S., Seth D. & Dutta P. Storage Studies on Spray Dried Ripe Banana Powder Produced by Response Surface Methodology. *Int. J. Curr. Microbiol. App. Sci.* 7 (6), 1922-1933, (2018)



- [3] Begum Y. A. & Deka S. C. Chemical profiling and functional properties of dietary fibre rich inner and outer bracts of culinary banana flower. *Journal of Food Science and Technology* (2019)
- [4] Bora A., & Mishra P. Casein and Ag nanoparticles: Synthesis, characterization, and their application in biopolymer-based bilayer film. *Journal of Food Processing and Preservation*, e14062. (2019)
- [5] Borah P.K., Sarkar A., Duary R.K. Water-soluble vitamins for controlling starch digestion: Conformational scrambling and inhibition mechanism of human pancreatic α -amylase by ascorbic acid and folic acid. *Food Chemistry*, (2019)
- [6] Borah P. K., Rappolt M., Duary R. K., & Sarkar A. Effects of folic acid esterification on the hierarchical structure of amylopectin corn starch. *Food Hydrocolloids*, 86, 162-171, (2019)
- [7] Borah P.K., Rappolt M., Duary R.K. & Sarkar A. Structurally induced modulation of in vitro digestibility of amylopectin corn starch upon esterification with folic acid. *International Journal of Biological Macromolecules*, 129, 361-369, 2019.
- [8] Chen W., Wang W., Ma X., Lv R., Watharkar R. B., Ding T., & Liu D. Effect of pH-shifting treatment on structural and functional properties of whey protein isolate and its interaction with (-)-epigallocatechin-3-gallate. *Food Chemistry*, 274, 234-241, 2019.
- [9] Das A. B., Goud V. V., & Das C. Microencapsulation of anthocyanin extract from purple rice bran using modified rice starch and its effect on rice dough rheology. *International journal of biological macromolecules*, 124, 573-581, (2019).
- [10] Das A. B., & Bhattacharya S. Characterization of the batter and gluten-free cake from extruded red rice flour. *LWT*, 102, 197-204, (2019).
- [11] Das A. B., Goud V. V., & Das C. Extraction and characterization of phenolic content from purple and black rice (*Oryza sativa* L) bran and its antioxidant activity. *Journal of Food Measurement and Characterization*, 12(1), 332-345, (2018)
- [12] Das A. B., Goud V. V., & Das C. Adsorption/desorption, diffusion, and thermodynamic properties of anthocyanin from purple rice bran extract on various adsorbents. *Journal of Food Process Engineering*, e12834, (2018)
- [13] Das A.J., Miyaji T., & Deka S.C. Bioflavonoids from *Artocarpusheterophyllus* lam. and *Cyclosorus sextensus* (blume) H. Itô as preservatives for increased storage stability of rice beer. *Natural Product Research*
- Das A. J., Das M. J., Miyaji T., & Deka S. C. Growth and metabolic characterization of four lactic acid bacteria species isolated from rice beer prepared in Assam, India. *Access Microbiology*, (2019).
- [14] Das P., Borah P. P., & Badwaik L. S. Transformation of Chicken Feather Keratin and Pomelo Peel Pectin into Biodegradable Composite Film. *Journal of Polymers and the Environment*, 26(5), 2120-2129, (2018).
- [15] Dash K. K., Balasubramaniam V.M. & Kamat S.. High pressure assisted osmotic dehydrated ginger slices. *Journal of Food Engineering*, 247, 19-29, (2019).
- [16] Dash K. K., Ali N. A., Das D., & Mohanta D. Thorough evaluation of sweet potato starch and lemon-waste pectin based-edible films with nano-titania inclusions for food packaging applications. *International Journal of Biological Macromolecules*. (2019).
- [17] Sharma M., & Dash K. K. Effect of ultrasonic vacuum pretreatment on mass transfer kinetics during osmotic dehydration of Black jamun fruit. *Ultrasonics Sonochemistry*, 104693. (2019).
- [18] Devi L. M., Lalnunthari C., & Badwaik L. S. Direct Transformation of Muskmelon Seeds Meal into Biodegradable Films and Their Characterization. *Journal of Polymers and the Environment* . (2019).
- [19] Devi R. & Sit N. Effect of single and dual steps annealing in combination with hydroxypropylation on physicochemical, functional and rheological properties of barley starch. *International Journal of Biological Macromolecules*, 129, 1006-1014, (2019).
- [20] Fan L., Hou F., Muhammad A. I., Ruiling L. V., Watharkar R. B., Guo M. & Liu D. Synergistic inactivation and mechanism of thermal and ultrasound treatments against *Bacillus subtilis* spores. *Food Research International*, (2018)
- [21] Gogoi P., Chutia P., Singh P., Mahanta C. L. Effect of Optimized Ultrasound-Assisted Aqueous and Ethanolic Extraction of *Pleurotus citrinopileatus* Mushroom on Total Phenol, Flavonoids and Antioxidant Properties. *Journal of Food Process Engineering* (Accepted), (2019).
- [22] Makroo H.A., Prabhakar P.K., Rastogi N.K. & Srivastava B. Characterization of mango puree based on total soluble solids and acid content: Effect on physico-chemical, rheological, thermal and ohmic heating behaviour. *LWT* 103, 316-324, (2019).



- [23] Jha P., Das A. J. & Deka S. C. Optimisation of fermentation process for production of black rice wine and evaluation of its phenolic and volatile compounds. *Journal of the Institute of Brewing*, 2018.
- [24] Kalita D., Saikia S., Gautam G., Mukhopadhyay R. & Mahanta C. L. Characteristics of synbiotic spray dried powder of litchi juice with *Lactobacillus plantarum* and different carrier materials. *LWT-Food Science and Technology*, 87, 351-360, (2018)
- [25] Kalita D., Bhattacharya S. & Srivastava B. Predicting enzymatic starch hydrolysis mechanism during paddy malting by vibrational spectroscopy and multivariate calibration analysis. *Food chemistry*, 259, 89-98, (2018)
- [26] Mahnot N. K., Mahanta C. L., Keener K. M., & Misra N. N. Strategy to achieve a 5-log *Salmonella* inactivation in tender coconut water using high voltage atmospheric cold plasma (HVACP). *Food Chemistry*, 284, 303-311, (2019).
- [27] Mahnot N.K., Gupta K. & Mahanta C.L. Shelf life enhancement and associated quality and sensory changes on refrigerated storage of tender coconut water subjected to non-thermal microfiltration and added with additives *Journal of Food Science and Technology*, 56 (7), 3408-3421, (2019).
- [28] Chutia H., Kalita D., Mahanta C.L., Ojha N. & Choudhry A.J. Kinetics of inactivation of peroxidase and polyphenol oxidase in tender coconut water by dielectric barrier discharge plasma. *LWT- Food Science and Technology*, 101, 625-629, (2019).
- [29] Mahnot N.K., Saikia S. & Mahanta C.L. Quality characterization and effect of sonication time on bioactive properties of honey from North East India. *Journal of Food Science and Technology*, 56 (2), 724-736, (2019).
- [30] Raju S. & Deka S. C. Influence of thermosonication treatments on bioactive compounds and sensory quality of fruit (*Haematocarpus validus*) juice. *Journal of Food Processing and Preservation*, 42(8), e13701, (2018)
- [31] Saikia M. & Badwaik L. S. Characterization and Antimicrobial Property of Casein, Gelatin and Pectin Based Active Composite Films. *Journal of Packaging Technology and Research*, 2(3), 233-242. (2018)
- [32] Saxena J., Makroo H. A., Bhattacharya S. & Srivastava B. Kinetics of the inactivation of polyphenol oxidase and formation of reducing sugars in sugarcane juice during Ohmic and conventional heating. *Journal of Food Process Engineering*, 41(3), e12671, (2018)
- [33] Sarma L., Chakraborty S., & Duary R. K. Solvent-based microwave-assisted extraction and identification of bioactive compounds from *Sesamum indicum* leaves using particle swarm optimization-integrated response surface methodology. *Pharmacognosy Magazine*, 14(57), 275, (2018)
- [34] Seth D., Dash K. K., Mishra H. N. & Deka S. C. Thermodynamics of sorption isotherms and storage stability of spray dried sweetened yoghurt powder. *Journal of food science and technology*, 55(10), 4139-4147, (2018).
- [35] Seth D., Mishra H. N. & Deka S. C. Effect of hydrocolloids on the physico-chemical and rheological properties of reconstituted sweetened yoghurt powder. *Journal of the Science of Food and Agriculture*, 98(5), 1696-1702. (2018)
- [36] Samyot D., Deka S. C. & Das A. B. Effect of extrusion conditions on the physicochemical and phytochemical properties of red rice and passion fruit powder based extrudates. *Journal of Food Science and Technology*, 1-11, 2018.
- [37] Sarma L., Chakraborty S., Das M.J. & Duary R.K. Optimization of ultrasound-assisted extraction of phenolic compounds from *Sesamum indicum*. *Natural Product Research*, doi.org/10.1080/14786419.2018.1564294, (2019).
- [38] Wahengbam E. D., Green B.D. & Hazarika M. K. Characterization of a novel folic acid-fortified ready-to-eat (RTE) parboiled rice. *Cereal Chemistry*, <https://doi.org/10.1002/jsfa.9561>, (2019).
- [39] Wahengbam E. D., & Hazarika M. K. Quality of ready-to-eat komal chawal produced by brown rice parboiling method. *Journal of Food Science and Technology*, 56(1), 187-199, (2019).
- [40] Wahengbam E.D., Das A.J., Green B.D., Shooter J. & Hazarika M.K. Effect of iron and folic acid fortification on in-vitro bioavailability and starch hydrolysis in ready-to-eat parboiled rice. *Food Chemistry*, 292: 36-49, (2019).
- [41] Wahengbam E.D., Das A.J., Green B.D. & Hazarika M.K. Studies on in vitro bioavailability and starch hydrolysis in zinc fortified ready-to-eat parboiled rice (komal chawal). *Journal of Food Science and Technology*. (2019).
- [42] Watharkar R. B., Chakraborty S., Hazarika M.K. & Srivastava B. Mathematical modeling of drying kinetic of Bhimkol (*Musa balbisiana*) pulp using MATLAB. *Agricultural Engineering International: CIGR Journal*, 20(2): 183-189, (2018)
- [43] Wahengbam E. D. & Hazarika M. K. Quality of ready-to-eat komal chawal produced by brown rice parboiling method. *Journal of Food Science and Technology*. (2018)



- [44] Wahengbam E. D. & Hazarika M. K. Fortification of zinc in a parboiled low amylose rice: Effects of milling and cooking *Journal of the Science of Food and Agriculture*. (2018)
- [45] Handique J., Bora S. J. & Sit N. Optimization of banana juice extraction using combination of enzymes. *Journal of Food Science and Technology*, 56 (8):3732-3743, (2018)

Books

- [1] Ali Pourhashemi, Sankar Chandra Deka and A. K. Haghi. *Research Methods and Applications in Chemical and Biological Engineering*. Apple Academic Press, 2019.
- [2] Deka S.C., Seth D. and Hulle, N.R.S. *Food Bioactives-Functionality and applications in human health*. Apple Academic Press, Ontario Canada, 2019
- [3] Deka S.C., Seth D. and Hulle, N.R.S. *Technologies for Value Addition in Food Products and Processes*. Apple Academic Press, Ontario Canada, 2019.
- [4] Sit N., Badwaik L.S., and Das A.B. *Innovations In Food Processing Technology*. New India Publishing Agency, New Delhi, India, 2019.

Book Chapters

- [1] Anupama Bora, Poonam Mishra. Casein and Casein-Ag Conjugated Nanoparticles: Synthesis, Characterization and Application as an Active Ingredient in Edible Bilayer Film. In: *Innovations In Food Processing Technology*. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [2] Beauty Brahma, Nandan Sit. Formulation of Soup Mix Using Okara and Resistant Starch. In: *Innovations In Food Processing Technology*. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [3] Choudhury, M., Dash, K.K., Badwaik, L.S. Mass Transfer Kinetics of osmotic dehydration of Bamboo shoot (2018) In: Sit, N., Badwaik, L.S., and Das, A.B. *Innovations in Food Processing Technology*, New India Publishing Agency, New Delhi, India, pp 1-9.
- [4] Dipsikha Kalita and Brijesh Srivastava. Evaluation of Starch Modification by Vibrational Spectroscopy: A Case Study for Malted Rice Flour. In: *Innovations In Food Processing Technology*. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [5] Dui Samy, Sankar Chandra Deka, Amit Baran Das. Effect Of Passion Fruit Powder on Rheological Properties of Gluten Free Dough. In: *Innovations In Food Processing Technology*. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [6] Hemanta Chutia, Rishab Dhar, Manuj Kumar Hazarika. Study of Swelling Kinetics of Chhana Ball During Cooking in Hot Water and Model Development. In: *Innovations In Food Processing Technology*. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [7] Hilal A Makroo and Brijesh Srivastava. Effects of Ohmic Heating on Different Liquid Food Materials. In: *Innovations In Food Processing Technology*. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [8] Kironmoyee Dihingia and Sankar Chandra Deka. Effect of Acetylation on the Physicochemical Properties of Culinary Banana (Musa ABB) Starch. In: *Innovations In Food Processing Technology*. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [9] Maibam Baby Devi, Pushpa Shukla and S. C. Deka. Quality Characteristics of Jackfruit (*Artocarpus heterophyllus*) Seed Flour and Its Suitability for The Preparation of Dumplings. In: *Innovations In Food Processing Technology*. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [10] Nishant R Swami Hulle. Application of Cold Plasma Technology in Food Processing. In: *Innovations In Food Processing Technology*. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [11] Parul, Amit Baran Das. Rheological Properties of Extrudate Pineapple Fruit Leather. In: *Innovations In Food Processing Technology*. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [12] Pranjal Pratim Das, Preetisagar Talukdar, Sourav Chakraborty and Manuj Kumar Hazarika. Effect of Non-conventional Drying Techniques of Food Products. In: *Innovations In Food Processing Technology*. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.



- [13] Prarthana Dutta, Laxmikant S. Badwaik. Application of Ultrasound and High-pressure Homogenization in Development of Biopolymer Based Packaging Material. In: Innovations In Food Processing Technology. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [14] Raj Kumar Duary and FalguniPatra. Bioactive Peptides from Milk: Functionality and Health Benefit in Disease Management. In: Innovations In Food Processing Technology. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [15] Sangeeta Gope, A.B. Das, M.K. Hazarika, D.C. Baruah, H.K. Lahkar. Post-harvest Handling and Solar Drying of Banana for Rural Area of Assam. In: Innovations In Food Processing Technology. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [16] Sasikumar, R and Sankar Chandra Deka. Effect of Ultrasound-Assisted Treatment on Postharvest Quality of Khoonphal (*Haematocarpusvalidus*) of Meghalaya North-East India. In: Innovations In Food Processing Technology. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [17] SingamayumKhurshida, Sankar Chandra Deka. Studies on Some Characteristics of Cassava Cultivar of Manipur, India. In: Innovations In Food Processing Technology. Ed: Sit, N., Badwaik, L.S., and Das, A.B. New India Publishing Agency, New Delhi, India, 2019.
- [18] Seth, D., Mishra, H.N., and Deka, S.C. (2018). Process Technology of Sweetened Yoghurt Powder. In: Applied Food Science and Engineering with Industrial Applications, AAP Press, Ontario, Canada, 2018.
- [19] Shiby, V.K., Seth, D., Routray, W. and Mishra H.N. (2018). Dahi (Curd) Powder and Dahi Powder based Energy and Health Drink Mixes. In: Food Product and Process Innovations, NIPA publ., New Delhi, 2018.

PATENT

A Continuous Jaggery Making Machine	Filed	TEMP/E-1/12742/2019- KOL	27.03.2019
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SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, year	Place/Institute/Venue
All faculty members	International Conference on Technological Innovations for Integration of Food and Health (TiiFH 2019): A focus on North-Eastern India	FET, TU	February 14-16, 2019	TU
All faculty members	National symposium on “Probiotics and Functional Foods on Health Management” in association with the Probiotic Association of India (PAi),	PAi& FET, TU	04 – 05 March, 2019	TU

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Charu Lata Mahanta	8 th International Food Convention on Holistic Approaches for Start-ups, Human Resource Training for Agriculture and Food Industry Gemmation	12-15 December 2018	Central Food Technological Research Institute, Mysore
Charu Lata Mahanta	Indo-Japan Bilateral Symposium on Future Perspective of Bioresource Utilization	1-4 February 2018	IIT Guwahati



SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/Period, year
Skill Development Program on “Bakery and Bakery Product” organized by Adani Wilmar Limited (AWL)	9th to 12th May, 2018.
International Conference on Technological Innovations for Integration of Food and Health (TiiFH 2019): A focus on North-Eastern India	February 14-16, 2019
National symposium on “Probiotics and Functional Foods on Health Management” in association with the Probiotic Association of India (PAi),	04 – 05 March, 2019
Two-day workshop on ISO/IEC 17025:2017 (General requirements for the competence of testing and calibration laboratories)	8th to 9th May, 2019

DISTINGUISHED VISITORS TO THE DEPARTMENT

- H.K. Sharma, Professor, NIT, Agartala
P.P. Srivastava, Associate Professor, IIT Kharagpur
P.S. Rao, Professor, IIT, Kharagpur
S.N. Jha, Professor, IARI, New Delhi
D.D. Wadikar, Hon. Secretary, AFSTI, India
V. Baskaran, President, AFSTI, India

AWARDS & HONOURS/ NOTABLE RESEARCH ACHIEVEMENTS OF FACULTY/ RESEARCH SCHOLARS/STUDENTS/STAFF

Faculty Members

- Prof. Charu Lata Mahanta selected as member of the scientific panel on Spices and Culinary Herbs constituted by the Food Safety and Standards Authority of India.
- Prof. Charu Lata Mahanta awarded citation of appreciation by Tezpur University at the Foundation Day function on 21 January 2018.

Research Scholar/ Student

- Ms. Preeti Sarkar (PhD Scholar, Supervisor: Dr. RK Duary) selected for Indo-US Fellowship for Women in STEMM, 2018 and visited Collage of Agriculture and Life Sciences, North Carolina State University in October, 2018.
- Mr. Srigada Manoj and Ms Urbi Pathak (B. Tech stuents) selected for two years Master of Science program (Food Science) in Graduate School of Agriculture and Bio-engineering. ISA, France



OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

The Food Quality Control Laboratory was accorded continuation of accreditation by National Accreditation Board for Testing and Calibration Laboratories (NABL) on 25.06.2019.

NUMBER OF STUDENTS QULIFIED NET-JRF/ GATE/ SLET

NET: 01

GATE: 05

NOTABLE PLACEMENT

Name	Designation	Organization
Juhi Choudhuri	Trainee	Emami Limited, India
Maitrayee Das	Trainee	Emami Limited, India

THE FACULTY MEMBERS OF THE DEPARTMENT

❖ Professors

Charu Lata Mahanta

PhD (CFTRI, Mysore)

Specialization/Areas of Interest: Rice Science and Technology, Product Development and Product Quality

E-mail: charu@tezu.ernet.in

Sankar Chandra Deka

PhD (HAU, Hissar)

Proctor Specialization/Areas of Interest: Food Biochemistry, Food Quality, Fermented Foods

E-mail: sankar@tezu.ernet.in

❖ Associate Professors

Manuj Kumar Hazarika

PhD (IIT-Kharagpur)

Head of the Department

Specialization/Areas of Interest: Dairy & Food Engineering, Transport Processes, Process Modeling

E-mail: mkhazarika@tezu.ernet.in

Brijesh Srivastava

PhD (IIT-Kharagpur)

Specialization/Areas of Interest: Process & Food Engineering, Fruits & Vegetable Processing and Machineries, Drying & Dehydration, Unit Operations in Food Engineering.

E-mail: brijesh@tezu.ernet.in



Nandan Sit

PhD (Tezpur)

Specialization/Areas of Interest: Food Engineering, Biochemical Engineering, Oils and Fats

E-mail: nandan@tezu.ernet.in

Poonam Mishra

PhD (Tezpur)

Specialization/Areas of Interest: Food Technology

E-mail: Poonam@tezu.ernet.in

Laxmikant Shivnath Badwaik

PhD (Tezpur)

Specialization/Areas of Interest: Food Engg. & Tech., Food Quality and Laws, Food Packaging

E-mail: badwaik@tezu.ernet.in

❖ **Assistant Professors**

Dibyakanta Seth

PhD (Tezpur)

Specialization/Areas of Interest: Dairy & Food Engineering, Dairy Technology, Transport Processes

E-mail: dibya05@tezu.ernet.in

Raj Kumar Duary

PhD (NDRI, Karnal)

Specialization/Areas of Interest: Dairy Technology, Dairy Microbiology, Functional and Nutraceutical Foods

E-mail: duary@tezu.ernet.in

Kshirod Kumar Dash

PhD (IIT- Kharagpur),

Specialization/Areas of Interest: Food process Modeling, Dairy and Food Engineering, Unit Operations in Food Engineering

E-mail: kshirod@tezu.ernet.in

Amit Baran Das

MS (IIT- Kharagpur)

Specialization/Areas of Interest: Food Processing, Food Engineering

E-mail: amittu@tezu.ernet.in

Nishant Rachayya Swami Hulle

PhD (IIT-Kharagpur)

Specialization/Areas of Interest: Food process technology, non-thermal processing, product development

E-mail: nishant@tezu.ernet.in

Sourav Chakraborty

MTech (Tezpur University)

Specialization/Areas of Interest: Food Engineering

E-mail: souravc@tezu.ernet.in



❖ **Adjunct Faculty**

Suvendu Bhattacharya

PhD (IIT-Kharagpur)

Specialization/Areas of Interest: Food engineering, modeling

E-mail: subendu1111@yahoo.co.in

❖ **Technical Staff**

Dipankar Kalita

PhD (Tezpur University)

Technical Officer

E-mail: dkalita@tezu.ernet.in

Arup Jyoti Das

PhD (Tezpur University)

Senior Technical Assistant

E-mail: arupdas@tezu.ernet.in

Labadeep Kalita

Diploma (SCTE, Assam)

Technician

E-mail: labadeep@tezu.ernet.in

Swdwmsri Mushahary

(Tezpur University)

Laboratory Assistant

E-mail: swdwm26@tezu.ernet.in

❖ **Office Staff**

Suren Baruah

Assistant

Anjan Keot

MTS



Department of Mechanical Engineering

THE DEPARTMENT

The Mechanical Engineering (ME) department at Tezpur University was established in 2006. The department aims at producing skilled human resources with a strong foundation in ME for the heavy engineering and manufacturing industry. Another mission of the department is to train scholars in handling ME as well as interdisciplinary problems exploiting their domain knowledge and using latest technologies. There are 16 regular faculty members and 01 guest faculty member with various specializations and 11 technical staff members in the department. Presently the department is offering BTech, MTech (Specialization: Machine Design and Thermal and Fluids Engineering) and PhD programmes in Mechanical Engineering. The department has various laboratories with state of the art facilities and one central workshop with all kinds of machineries. Both the BTech and MTech programmes offered in the department are AICTE approved. The BTech programme in Mechanical Engineering is provisionally accredited by NBA with effective from 2019-2021. The department has the vision to emerge as a centre of excellence producing quality engineers and conducting cutting-edge research.

Academic programmes and Student intake:

Programme	Intake
BTech in Mechanical Engineering	60
MTech in Mechanical Engineering (Specialization: Machine Design, Thermal and Fluids Engineering)	18
PhD	Variable (02 in 2018-19)

Major facilities and equipment available:

Central Workshop

- All Geared Precision Lathe
- CNC Lathe Machine
- CNC Milling Machine
- Universal Milling Machine
- HMT High Speed Precision Lathe



Fluid Mechanics Lab

- Bernoulli's theorem demo module
- Pelton turbine
- Propeller turbine

Turbo-machinery Lab

- Pelton turbine
- Propeller turbine

Strength of Material Lab

- Universal testing machine
- Inverted metallurgical microscope with accessories and interface software

Theory of Machine Lab

- Static and Dynamic balancing
- Sound level meter with sound level calibrator

Vibration Lab

- Universal vibration apparatus
- Sound level meter with sound level calibrator

CAD Lab

- ANSYS academic teaching
- Pro-E software

Metrology Lab

IC Engine and Automobile Lab

- Diesel Engine test set up VCR
- AVL Smoke meter with accessories
- Variable compression ratio petrol engine
- Computerised single cylinder petrol engine test rig

Thermal and Heat Transfer Lab

- Vapour compression refrigeration test rig
- Air conditioning test rig
- Vapour absorption refrigeration test rig
- Cooling tower test rig
- Stefan Boltzmann apparatus



- Heat pipe demonstration
- Concentric tube heat exchanger apparatus
- Double pipe heat exchanger
- Dropwise and filmwise condensation apparatus
- Emissivity measurement apparatus
- Critical heat flux apparatus
- Heat transfer in natural convection apparatus
- Shell and tube heat exchanger apparatus
- VCR petrol engine

PUBLICATIONS

Journal Publications

- [1] Bhadra R., Pankaj P., Biswas P. & Dixit U. S. Thermo-Mechanical Analysis of CO₂ Laser Butt Welding on AISI 304 Steel Thin Plates. *International Journal of Steel Structures*.19. (2019).
- [2] Datta D. Comments on “Multi-objective optimization of double effect series and parallel flow water-lithium chloride and water-lithium bromide absorption refrigeration systems” by Konwar et al. [*Energy Convers. Manage.* 180 (2019) 425-441]. *Energy Conversion and Management*. 185. (2019).
- [3] Deka A. & Datta D. Multi-objective optimization of annular fin array subject to thermal load. *Journal of Thermophysics and Heat Transfer*. 33. (2019).
- [4] Dutta PP², Kalita K. & Dixit U.S. Electromagnetic-force-assisted bending and Straightening of AH36 steel strip by laser irradiation. *Laser in Manufacturing and Material Processing* 5. (2018).
- [5] Kalita Z. & Datta D. A constrained single-row facility layout problem. *International Journal of Advanced Manufacturing Technology*.98. (2018).
- [6] Kalita Z., Datta D. & Palubeckis G. Bi-objective corridor allocation problem using a permutation-based genetic algorithm hybridized with a local search technique. *Soft Computing*.23. (2019).
- [7] Kamal S.M. Analysis of Residual Stress in the Rotational Autofrettage of Thick-Walled Disks. *ASME Journal of Pressure Vessel Technology*.140. (2018).
- [8] Kashyap S. & Datta D. Evaluation of stearic acid modified industrial lime sludge waste as filler in high density polyethylene composites. *Journal of Polymer Engineering*.38. (2018).
- [9] Kirtania S. & Chakraborty D. Determination of thermoelastic properties of carbon nanotube/epoxy composites using finite element method. *Journal of Material Engineering and Performance*.27(2018).
- [10] Konwar D., Gogoi T.K. & Das A.J. Multi-objective optimization of double effect series and parallel flow water–lithium chloride and water–lithium bromide absorption refrigeration systems. *Energy Conversion and Management*.180. (2019).
- [11] Konwar D., Gogoi T.K. & Das A.J. Reply to Comment on Multi-objective optimization of double effect series and parallel flow water-lithium chloride and water-lithium bromide absorption refrigeration systems. *Energy Conversion and Management*.185. (2019).
- [12] Konwar D. & Gogoi T.K. Performance of double effect H₂O–LiCl absorption refrigeration systems and comparison with H₂O–LiBr systems, Part 1: Energy Analysis. *Thermal Science & Engg. Progress*.8. (2018).
- [13] Konwar D. & Gogoi T.K. Performance of double effect H₂O–LiCl absorption refrigeration systems and comparison with H₂O–LiBr systems, Part 2: Exergy Analysis. *Thermal Science & Engg. Progress*.8(2018).
- [14] Pankaj P., Tiwari A., Bhadra R. & Biswas P. Experimental investigation on CO₂ laser butt welding of AISI 304 stainless steel and mild steel thin sheets. *Optics & Laser Technology* 119. (2019).
- [15] Sharma A. & Dutta PP¹. Scientific and technological aspects of tea drying and withering: a review. *Agricultural Engineering International: CIGR Journal*. 20. (2018).



Conference Proceedings

- [1] Banerjee S., Bhadra R., Dutta R. S. & Gogoi S. Investigating Weldability in Microalloyed Al Alloys. Proceedings of International Conference on Recent Innovations and Developments in Mechanical Engineering (IC-RIDME 2018), NIT Meghalaya, Shillong. 2018.
- [2] BarpatraGohain R.J. & Dutta P.P¹. Modelling thermal performance of an improved biomass cook stove for rural area. Proceeding of 2nd International Conference in New Frontiers in Engineering Science and Technology, NIT Kurushetra. (2019).
- [3] Das A., & Bhuyan S. Performance analysis of mixed convection in T-shaped geometry for entropy generation using La ttiice Boltzmann method. Proceedings of International Conference on Recent Innovations and Developments in Mechanical Engineering, NIT Meghalaya, Shillong, India. 2018.
- [4] Bhuyan S., Moran D., Dutta B. & Neerat S. Experimental investigation of low cost designed solar water heater with V-trough system in Assam, India- A thermal analysis. Proceedings of 7th International and 45th National Conference on Fluid Mechanics and Fluid Power (FMFP), IIT Bombay, Mumbai, India. 2018.
- [5] Goswami P. & Dutta P.P¹. Thermal performance study of a perforated plate and a double pass flat plate solar air heater using CFD. Proceeding of 2nd International Conference in New Frontiers in Engineering Science and Technology, NIT Kurushetra. (2019).
- [6] Haloi P. & Gogoi T. K. Performance Analysis of a Coal-fired Open cycle MHD Plant with Variation in Nozzle Area-Ratio. Proceedings of the International Conference on Recent Innovations and Developments in Mechanical Engineering (IC-RIDME-2018), NIT Meghalaya, Shillong. 2018.
- [7] Kamal S.M. & Kulsum R. Parametric Study of Axisymmetric Circular Disk Subjected to Rotational Autofretage. Proceedings of the 2nd International Conference on Computational Methods in Manufacturing (ICMM2019), IIT Guwahati, India. March 8-9, (2019).

Book Chapters

- [1] D. Deka & D. Datta. Evolutionary algorithms for scheduling of crude oil preheating process under linear fouling. In: Bioinspired Optimization Methods and their Applications (BIOMA-2018), Lectures Notes in Computer Science (LNCS), 10835:113-125, ISBN: 978-3-642-25724-7, Springer, 2018.
- [2] M. Bardalai, D. K. Mahanta & B. Das. Production and Characterisation of teak tree saw dust and rice husk biochar. In: Agarwal, R.A., Agarwal, A.K., Gupta, T and Sharma, N. (eds). Pollutants from Energy Sources: Characterization and Control, pp. 291-306, ISBN: 978-981-13-3281-4, Springer, 2018.
- [3] S. Kashyap & D. Datta. Development of various industrial lime sludge waste-filled hybrid polymeric composites for environmental sustainability. In: Futuristic Composites, pp. 197-221, ISBN: 978-981-13-2416-1, Springer, 2018.
- [4] A. Sharma, M.K. Bora, A.K. Dutta & P.P. Dutta¹. Study of energy management in a tea processing industry in Assam, India. AIP Conference Proceeding. 2019. <https://doi.org/10.1063/1.5096503>
- [5] P. Dutta, P.P. Dutta¹ & P. Kalita. Thermohydraulic investigation of different channel height on a corrugated heat exchanger. AIP Conference Proceeding. 2019. <https://doi.org/10.1063/1.5096502>

Patent

- [1] D Datta, ASaikia, Z Kalita and S Saikia. A saddle system for female bicycles adapted to counter forward slip of rider on saddle surface during sudden braking. Indian Patent Application No. 201831045154 (Complete Specification) 2018.
- [2] D Datta, S Saikia, Z Kalita and ASaikia. System for enhancing stability of bicycle by steering back handlebar automatically. Indian Patent Application No. 201831045155 (Complete Specification) 2018.
- [3] SJSarma, ANath, CSGogoi and PP Dutta². Intregated and automated setup for preparation and vending of panipuri. (Application No. 201831009678)



SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/ Period, Year	Place/ Institute/ Venue
M. Bardalai	1 st National Conference on Advances in Mechanical Engineering (NCAME-2019)	NIT Delhi	16 th March, 2019	NIT Delhi, India.
P. Haloi	International Conference on Recent Innovations and Developments in Mechanical Engineering(IC-RIDME 2018)	NIT Meghalaya	08-10 November, 2019	NIT Meghalaya, Shillong, India
S. Banerjee	International Conference on Recent Innovations and Developments in Mechanical Engineering (IC-RIDME 2018)	NIT Meghalaya	8-10 Nov, 2018	NIT Meghalaya, Shillong, India
Shikha Bhuyan	One week FDP on Refrigeration and Air conditioning	Department of Mechanical Engineering, IIT Guwahati	2-6 July, 2018	IIT Guwahati
Shikha Bhuyan	MHRD Sponsored Induction Training of Faculty	Teaching-Learning Centre, Tezpur University	26 th Nov – 26 th Dec 2018	Tezpur University
Shikha Bhuyan	International Conference on Recent Innovations and Developments in Mechanical Engineering	Department of Mechanical Engineering, NIT Meghalaya	8 – 10 November, 2018	NIT Meghalaya
Shikha Bhuyan	7th International and 45th National Conference on Fluid Mechanics and Fluid Power (FMFP)	Department of Mechanical Engineering, IIT Bombay	10-12 December, 2018	IIT Bombay
S. Kirtania	International Conference on New Frontiers in Engineering, Science, Law, Management, Humanities and Social Science.	Gauhati University	23-24February, 2019.	Gauhati University, India.
S. Kirtania	One day international seminar on “Emerging Trends in Insurance-role of Micro-insurance & Government Insurance Schemes in Proving Social Security”.	Department of Business Administration, Tezpur University in Associated with Guwahati Insurance Institute.	February 1, 2019.	Tezpur University, India.
S. Kirtania	One-month long induction training programme on “Induction Training of Faculty” under the aegis of PanditMadan Mohan Malaviya National Mission for Teachers and Teaching (PMMMNTT) scheme of ministry of human resource development (MHRD), GOI.	Teaching Learning Centre, Tezpur University	26 th Nov– 26 th Dec 2018	Tezpur University, India.
T.K. Gogoi	ISHRAE-AICTE fiveday Refresher course on Refrigeration and air conditioning	IIT Guwahati	2-6 th July, 2018	IIT Guwahati
Zahnpriya Kalita	Faculty Induction Program	Teaching Learning Centre, Tezpur University	26 th Nov--26 th Dec 2018	Tezpur University



TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/ Period, Year	Place/ Institute/ Venue
D. Datta	Computational Modeling and Simulation for Bioengineering Applications	Jun. 09, 2018	IIT Guwahati
D. Datta	National Workshop on Computational Technologies	Aug. 17, 2018	NIT Silchar
D. Datta	Workshop on Recent Trends on Optimization Techniques in Science and Engineering	Aug. 18, 2018	NIT Silchar
T.K. Gogoi	International Conference on Renewable & Alternate Energy (ICRAE-2018)	4-6 th December, 2018	Assam Science and Technology University, Guwahati
T.K. Gogoi	Faculty development program on "Classroom teaching"	18-22 nd June, 2018	GirjanandaChowdhury Instituteof Management and Technology, Tezpur
T.K. Gogoi	Faculty Development Program on Emerging Trends in Mechanical Engineering	22-26 th May, 2018	DUIET, Dibrugarh
T.K. Gogoi	Frontiers in Solar Technologies (FST-2018)	24-28 September, 2018	NIT Silchar

DISTINGUISHED VISITORS TO THE DEPARTMENT

Ashit Das, General Manger (HR), BCPL Dibrugarh, India

B. Kundu, Professor, Jadavpur University, India

Jayanta Baruah, Chief Manager (HR), BCPL Dibrugarh, India

K.M. Pandey, Professor, NIT Silchar, India

M.P. Maiya, Professor, IIT Madras, India

Sanjay, Professor, NIT Jamshedpur, India

Shyamanta M. Hazarika, Professor, IIT Guwahati, India



NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

Gate:10

Notable Placement

Name	Designation	Organization
Bitupan Hazarika	--	Oil India Limited
Pompy Medhi	--	Oil India Limited
Manish Kumar	--	Oil India Limited
Pallab Medhi	--	Dabur
Devanga Borah	--	Mikuni India Pvt Ltd
Kul David Barman	--	Mikuni India Pvt Ltd
Kartik Saha	--	Sanmar group
Ritwik Kumar	--	Concept Educations
Nayanita Kalita	--	Concept Educations
Saurabh Pandey	--	Concept Educations
Archita Kotoky	--	Cummins
Prandeep Borah	--	Cummins
Rumiya Kulsum	--	Cummins

THE FACULTY MEMBERS OF THE DEPARTMENT

❖ Professors

Dilip Datta

PhD (IIT Kanpur)

Specialization: Optimization/Design

E-Mail: ddatta@tezu.ernet.in

Tapan Kumar Gogoi, PhD (Tezpur University)

Specialization/Areas of interest: Thermal Energy and Environment Engineering

E-mail: tapan_g@tezu.ernet.in

❖ Associate Professor

Partha Pratim Dutta

PhD (Tezpur University)

Head of the Department

Specialization/Areas of interest: Energy Technology

E-mail: ppdutta@tezu.ernet.in



❖ Assistant Professors

Barnali Choudhury

ME (Gauhati University)

Specialization/Areas of interest: Thermal Engineering.

E-mail: barnali@tezu.ernet.in

Monoj Bardalai

PhD (Gauhati University)

Specialization/Areas of interest: Bioenergy, Heat Transfer

E-mail: monojb@tezu.ernet.in

Paragmoni Kalita

PhD (IIT Guwahati)

Specialization/Areas of interest: Heat Power Engineering

E-mail: paragmk@tezu.ernet.in

Polash Pratim Dutta

PhD (IIT Guwahati)

Specialization/Areas of interest: CAD/CAM

E-mail: polashd@tezu.ernet.in

Prabin Haloi

ME (Gauhati University)

Specialization/Areas of interest: Fluid and Thermal Engineering, Energy.

E-mail: haloi_p@tezu.ernet.in

Rakesh Bhadra

ME (IEST)

Specialization/Areas of interest: Manufacturing / Production Engineering.

E-mail: r.bhadr@tezu.ernet.in

Sanjib Banerjee

PhD (IIT Guwahati)

Specialization/Areas of interest: Materials and Manufacturing

E-mail: sanjibb@tezu.ernet.in

Shikha Bhuyan

MTech (NIT Silchar)

Specialization/Areas of interest: Thermal Engineering.

E-mail: sikha5@tezu.ernet.in

Satadru Kashyap

PhD (University of Alberta, Canada)

Specialization/Areas of interest:

Material Science, Mechanical Metallurgy, Characterization Techniques, Bioceramics

E-mail: satadru@tezu.ernet.in



Sushen Kirtania

PhD (IIT Guwahati)
Specialization/Areas of interest: Machine Design
E-mail: sushen@tezu.ernet.in

Seikh Mustafa Kamal

PhD (IIT Guwahati)
Specialization/Areas of interest: Plasticity, Autofrettage, Stress/Strain Analysis
E-mail: smkmech@tezu.ernet.in

Vivek Kumar Mehta

PhD (IIT Kanpur)
Specialization/Areas of interest: Robotics, Optimization.
E-mail: vkmehta@tezu.ernet.in

Zahnupriya Kalita

MEngg (AIT, Thailand)
Specialization/Areas of interest: Mechatronics
E-mail: zk@tezu.ernet.in

❖ **Guest Faculty**

Kalpajyoti Borah

PhD (IIT Guwahati)
Specialization/Areas of interest:
Computational Magnetohydrodynamics and computational gasdynamics
E-mail: kalpa@tezu.ernet.in

❖ **Technical officer**

Prabin Kumar Bora

B.Tech
E-mail: pkbora@tezu.ernet.in

❖ **Senior Technical Assistant**

Heman Malakar

B.Tech
E-mail: heman@tezu.ernet.in

❖ **Technical Assistants**

Anupjyoti Nath

Diploma
E-mail: anupn@tezu.ernet.in

Guna Kanat Borah

Diploma
E-mail: gunakt@tezu.ernet.in



❖ Technicians

Dipak Gogoi

ITI

E-mail: gunakt@tezu.ernet.in

Mitharam Handique

ITI

E-mail: mitharam@tezu.ernet.in

Khargeswar Rangpi

ITI

E-mail: rangpi@tezu.ernet.in

Poalsh Rabha

ITI

E-mail: prabha@tezu.ernet.in

Sasthendra Kumar Nath

ITI

E-mail: sknath@tezu.ernet.in

❖ Draftsmen

Bhaskar Baruah

Diploma

E-mail: bbaruah@tezu.ernet.in

Uttam Kumar Nath

Diploma

E-mail: uttam@tezu.ernet.in

❖ Office Staff

Bijoy Kumar Mech

BA, UDC

E-mail: bijoy@tezu.ernet.in

Maniram Bania

MTS



SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

- ❖ **Dean, School of Humanities and Social Sciences**
- ❖ **Department of Cultural Studies**
- ❖ **Department of Education**
- ❖ **Department of English and Foreign Languages**
- ❖ **Department of Hindi**
- ❖ **Department of Law**
- ❖ **Department of Mass Communication and Journalism**
- ❖ **Department of Social Work**
- ❖ **Department of Sociology**
- ❖ **Centre for Assamese Studies**
- ❖ **Centre for Endangered Languages**
- ❖ **Chandraprabha Saikiani Centre for Women Studies**
- ❖ **Dr. Ambedkar Chair**



School of Humanities and Social Sciences

The School of Humanities and Social Sciences is one of the four Schools of Tezpur University. The School consists of the Department of English and Foreign Languages, the Department of Cultural Studies, the Department of Mass Communication and Journalism, the Department of Sociology, the Department of Hindi, the Department of Education, the Department of Law (this is a temporary arrangement till a School of Law is established), the Centre for Assamese Studies, the Centre for Inclusive Development, the Centre for Women's Studies, and the Centre for Endangered Languages. There is also the Centre for Potential for Excellence in Particular Areas in which the Departments of Cultural Studies has a crucial role, with Department of English and Foreign Languages and the Centre for Assamese Studies as partners. The research activities of the Departments of English and Foreign Languages, Cultural Studies, and Sociology are funded by UGC's SAP.

The School is committed to the objectives of a liberal education. Our best students learn to think imaginatively and critically while also respecting the views and experiences of others. Our ideal is to update and impart the soft skills and knowledge traditionally associated with a liberal arts education. Such skills have not lost their importance even in a milieu favours that technological knowledge over others.

In the School, there is a vibrant culture of organizing talks, seminars and workshops. On May 3, the Dean's office, in collaboration with the university's IQAC, organized a workshop for faculty of the School on NAAC Accreditation Framework. In May, "Arnaswat", an Art and Literary Festival was organized with support from the Students' Council. Apart from the seminars and workshops organized by the various Departments and Centres, the Dean's office occasionally holds talks of an interdisciplinary nature. On October 25, a public talk, "Global Evidence on Policy Research and How it Supports Government to Better Design Programmes", was given by Dr Nikola Balvin, Knowledge Management specialist, UNICEF, Delhi. On January 22, another public lecture, "The 'Big Picture', India: Adapting Visual Methods to Enhance Local Approaches to Understanding Youth Substance Abuse in India", was delivered by Professor Anna Madill, Leeds University, UK. The next day, Professor Madill held a qualitative research methodology workshop for research scholars on the 'Photo Elicitation Method'.

Among other activities, the Dean made presentation on the School of Humanities and Social Sciences to the AAA team on October 29 and acted as Coordinator during team's visit to the School of HSS on same day. While Departments offer academic courses and programmes, the Dean also runs a course (with guest faculty as instructors) on Public Administration as part of the university's CBCS.



A primary responsibility of the School, explicitly mentioned in the university's statutes, is the promotion and preservation of the culture of Assam and the northeast. Thus, during the year under report, the Department of Cultural Studies acquired the paintings of the well-known artist, Neel Pawan Baruah.

We continue to take student support seriously. Students are allotted faculty mentors and students' feedback is given due importance. Incorporation of MOOCs in the teaching curricular remains a priority. Faculty members have made some progress in creating online resources with support from the Teaching and Learning Centre.

THE PERSONNEL OF THE OFFICE OF THE DEAN

❖ **Dean, School of Humanities and Social Sciences**

P.K. Das

PhD (Gauhati)

Professor, Dept. of English and Foreign Languages

E-mail: prsntdas@tezu.ernet.in

❖ **Office Staff**

A. Bharali

E-mail: amar@tezu.ernet.in



School of Humanities & Social Sciences

Department of Cultural Studies

THE DEPARTMENT

The Department of Cultural Studies, Tezpur University, is one of the earliest Departments fully devoted to the pursuit of Cultural Studies in India. 'Culture', as understood in the context of academic engagement of this department, is the repository of ideas and values, life-ways, modes of communication and ways of making sense of the 'self'. Today, culture is perceived as a premise from within which identities are being authenticated as a rapidly transforming world grapples with ethnicity, notions of nation, radical revision of history and space.

Founded in 1995, the Department of Cultural Studies is a vibrant academic entity that engages with cultural products, practices and forms in all its dimensions, with a special focus on North East India. Students and faculty in the Department engage in exciting, interdisciplinary approaches to traditional fields of study where the aim is to explore new cultural and cross-cultural phenomena from multiple points of view. Further, the Department undertakes social intervention using folklore and culture as media. Researchers and faculty, drawn from various disciplines like Anthropology, Performance Studies, Literatures, Folklore, Media and Film Studies, Gender Studies are actively engaged in exploring subjects like ethnicity, religious institutions, folklore and culture, local and national media, cultural theory, transformation and transaction in translated literatures and formation of nationalities

Academic Programmes and Student Intake

Programme	Intake
MA in Cultural Studies	46
PhD	Variable, (03 in 2018 - 19)

Major Facilities and Equipment Available

Facilities

- Cultural Interpretation Centre
- *Wall of Heroes*: A photo gallery of Indian freedom fighters
- Departmental Library
- Audio-Visual cum Seminar Hall



- Full-fledged multimedia editing studio
- Repository for digitized cultural assets (Digital Archive)
- Classrooms with multi-media projection system

Equipment Available

- Rack Server with console
- Professional workstations for management of multimedia contents
- NAS Storage
- Multimedia Projector installed in the classrooms
- Standing Multi Touch Kiosk installed in the CIC
- Digital Camcorder
- Digital Signage

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
D.P. Nath	1. Documenting different performing art traditions of North-East India 2. Documentation of marriage rituals of indigenous communities of North-East India 3. Documentation of traditional markets of North East India
P. Dutta	1. Documenting eco-cultural heritage of Majuli island through digital archiving

Research Projects, Ongoing and New

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator (Note: in alphabetic order without any prefix)
Centre with Potential for Excellence in Particular Area working on Cultural Memory in North East India: A Research and Documentation Programme on Visual and Textual Narratives	UGC	230 lakh	(2016-21)	D.P Nath
SAP-DRS II: Sacred Spaces on the Banks of the River Brahmaputra	UGC	76 lakh	(2018- 23)	D P Nath
Using Folklore for Community Messaging: Adolescents as Agents for Social Change and Empowerment	UNICEF	21.53 lakh	2018	J V Das
Border Trade at Pangsau: Transcending Boundaries between India – Myanmar	MAKAIAS	3.10 lakh	2018	J G Konwar
Commissioning Tasks Pertaining to Preservation and Conservation of Manuscript for National Mission for Manuscripts	NNM (under Ministry of Culture)	7.00 lakh	2019	S. Devi



PUBLICATIONS

Journal Publications

- [1] Borah T and Konwar J G. Indian Food Advertisements through a Gendered Lens. *Literary Insight*. 9(1), (2018)
- [2] Choudhury N and Borah T. Gender Representation and Media Censorship: Understanding Legal and Socio-cultural Perspectives. *International Journal of Legal Research and Governance*.4(2 &3), (2018)
- [3] Dowerah S and Nath D P. Exploring Selfhood through Performance in The Danish Girl. *Journal of Creative Communications*. 13(3), (2018)
- [4] Das J V. Arguing for a Media Law: the Relevance of Cable Channels in Creation of 'Local' in Assam. *IJCMS*. 8(3) (2018)
- [5] Das J V. Media Reaches the Periphery: Studying Media Habits of Ethnic Societies in Assam. *Review of Research* 7(11) (2018)
- [6] Das, J V. Discrimination and Group Formation by Papon Fans on Social Media: Do Fans Make Celebrities?. *Contemporary Discourse*. 9(1) (2018)
- [7] Goswami K J. Heritagisation and Commodification of Mask-Making Tradition of Natun-Chamaguri Sattra of Majuli. *Literary Insight*. 9(2) (2018)
- [8] Hazarika P and Nath D P. Manifestation of Nationalist Consciousness in the Plays of Jyotiprasad Agarwala. *Research Review International Journal of Multidisciplinary*. 3(7) (2018)
- [9] Hazarika P and Nath D P. The Rise of Assamese Nationalism: An Overview of the Times of Jyotiprasad Agarwala. *International Journal of Research in Social Sciences*. (2018)
- [10] Hazarika P and Nath D P. Reflection of Nationalist and Social Consciousness in Literature: A Study on Select Plays of Bishnuprasad Rabha. In the *International Journal of Innovative Studies in Sociology and Humanities*.3(7) (2018)
- [11] Konwar J G and Borah T. Indian Food Advertisements through a Gendered Lens. *Literary Insight* 9. (2018)
- [12] Konwar J G and Konwar B K. Love Neurotransmission Effect of Hormones. *Dream* 20(7), (2018)
- [13] Kandali M. The Patkai Tales: An interpenetration of folk/tribal/avant-garde art. *The Chitrallekha Journal of Art and Design*, (2018)

Conference Proceedings

- [1] Devi S. Community Participation in Documenting Traditional Knowledge: A Case Study in Tezpur, Assam, India. In the preprint of 2018 International Forum: Unlocking the Potential of Tertiary Education for Intangible Cultural Heritage Safeguarding. Seoul, Korea, 2018

Books

- [1] Dutta P. A Catalogue of Traditional Craft Objects of North East India (ed). Tezpur University Publication, 2019.
- [2] Nath, D P, Sarma, M. M, and Borah G. K. The Call of the Pherengadao: Translation of Select Writings of Bishnuprasad-Rava. Katha Publications, 2019.
- [3] Goswami, M. The Northeast Indian Women: Issues of Displacement, Violence, Media and Law. Olympia Prakashan, 2018.

Book Chapters

- [1] Goswami M. Staging of Rituals: Role of a Ritual Priestess. In *The Northeast Indian Women: Issues of Displacement, Violence, Media and Law*. Olympia Prakashan, 2018



SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
Hashik N K	National Seminar on 'Connecting Panthalayini: From Local to the Transoceanic	Department of Collegiate Education, Government of Kerala and SARBTM Government College Koyilandy, Koyilandy	4-5 January 2018	Koyilandy
Subhra Devi	International Forum and 1st Meeting of Asia-Pacific Tertiary Education Network for Intangible Cultural Heritage	ICHCAP, UNESCO Bangkok Office and Korea National University of Cultural Heritage	17-19 July 2018	Seoul and Buyeo, Republic of Korea.

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Debarshi Prasad Nath	Induction Training of Faculty of Universities/Colleges/ Institutes	29 June 2018	Teaching Learning Centre, Tezpur University (formed under the MHRD, Government of India initiative of Madan Mohan Malaviya National Mission on Teachers and Teaching).
Debarshi Prasad Nath	An ICSSR sponsored National Level 10 days Research Methodology Workshop, organized by Dr Ambedkar Chair	18-27 March 2018	Dr-Ambedkar Chair, Tezpur University
Debarshi Prasad Nath	UGC-HRDC Refresher Course in Comparative Literature	7 -8 April 2018	Department of English, NEHU, Shillong
Moushumi-Kandali	A training program for the higher secondary teachers on 'Introducing Cultural Inputs in Curriculum Teaching' organised by CCRT	19 - 23 Jan 2018	New Delhi
Moushumi Kandali	International Brahmaputra Literary Festival organised by National Book Trust of India, New Delhi	9 - 11 Feb 2018	Srimanta Sankardeva Kalakhetra, Guwahati



SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/Period, Year
Dr. S.N. Al Farid, Assam University was invited as a visiting faculty for delivering a series of lectures	22 – 25 October 2018
Dr. Sanghamitra Basu, Head, Department of Research and Publication, National Mission for Manuscripts was invited to grace the inaugural session of the 'MRC & MCC Review Meeting and Training Programme for North East Zone 2018-19'	13 August 2018
A Panel discussion on 'Preparing a Roadmap for Preservation of Heritage of Assam' was organized by the department to celebrate the World Heritage Day.	18-20 April 2018
A series of lectures, film show and interactive session was organized by the department on event of International Museum Day	18 May 2018
A Workshop on Videography and Editing-A workshop on 'Videography and Editing' organized by CPEPA, Department of Cultural Studies	19 – 25 March 2019
A series of lecture delivered by Mr Tarun Bharatiya, a national award winning film-maker, for acquiring essential skills on documentary editing, particularly on cultural themes.	19 – 25 March 2019
A workshop on 'Drama, Scripting, Designing, Acting and Music' as a part of "Kartik Hazarika National Theatre Festival 2019", in the Chandraprabha-Saikiani-Bhawan, Tezpur University.	6-8 January 2019

DISTINGUISHED VISITORS TO THE DEPARTMENT

- Ms. Alison East, Senior Fellow Teacher (Retd.), University of Otago
- Dr. Anil Bodo, Guahati University
- Mr. Ashesh Malla, Renowed Theatre Activist, Nepal
- Prof. A. K. Singh, Director, Bharat Kala Bhawan, BHU
- A group of students from Thailand
- Dr. Barbara Snook, University of Aukland, New Zealand.
- Mr. Brindaban Goswami, MLA Tezpur
- Mrs. Deepi Rekha Kouli, Director, Directorate of Archaeology, Assam
- Mr. HHS Biswanathan
- Mr. Keshab Mahanta, Minister of State, Assam
- Prof. Mamora Koketsu, Gifu University, Japan
- Mrs. Meenakshi Bhuyan, Social Activist, Tezpur
- Mr. Ranjan Bezbaruah, Singer
- Mr. Surya Hazarika, President, Sankardev Kalakshetra
- Mr. V. K. Srivastava, DG, Anthropological Survey of India, New Delhi
- Mr. Y.S. Wunglenton, Director, Directorate of Museums, Assam
- Mr. Tarun Bhartiya, national award-winning filmmaker
- Mr. Siddartha Shrestha, Country Chief, C4D, UNICEF



OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

The Department in collaboration with the Directorate of Archaeology, Govt. of Assam organized an Awareness Programme on Heritage Preservation on 18th September 2018. Alongside this programme A photographic exhibition was also organized from 18-20 September 2018.

The Department observed the International Museum Day on 18 May 2018 followed by lecture, film show and interactive session.

Activities under UGC's Centre with Potential for Excellence in Particular Areas in the Department

A Memorandum of Understanding was signed between Tezpur University and the University of Auckland, New Zealand on 18 March 2019 with an initiative to foster academic exchange between the Department of Cultural Studies, Tezpur University and the Faculty of Creative Arts and Industries, University of Auckland.

The Department of Cultural Studies, Tezpur University has signed a Memorandum of Understanding with National Mission for Manuscripts during the inaugural session of the 'MRC & MCC Review Meeting and Training Programme for North East Zone 2018-19' held on 13 August 2018, in the Seminar Hall of the Department of Cultural Studies, Tezpur University.

A Manuscript Conservation Centre of National Mission for Manuscript under the Ministry of Culture, Government of India has been established in the Department of Cultural Studies, Tezpur University during 2018.

The Centre with Potential for Excellence in Particular Areas (CPEPA) under the department has also developed an Online Repository Management of Digitized Cultural Assets (Digital Archive) for management of digital archive of rare cultural artefacts. The system became operational on 20 December 2018.

The Department has incorporated the installation of 'Wall of Heroes' - A 'Wall of Heroes' on freedom fighters who fought against the British and lesser known in our history which inaugurated by Professor Vinod Kumar Jain, Honorable Vice-Chancellor, Tezpur University on 30th of January 2019.

A four-day trip to Guwahati was scheduled under the documentation work on 'Archiving of Visual Art (Phase-I): Modern Art' during the period from 16 – 19 February 2019.

A four-day trip to Dibrugarh has been done during 21- 24 February 2018 for both the documentation works, viz., 'Archeological Excavation Sites of Assam' and 'Archiving of Visual Art (Phase-I): Modern Art'.

Activities under UNICEF Project

Three-day ToT (training of trainers and folk artists) was held in Kokrajhar with Bodo and Santhal community groups during 30 March – 01 April 2018



Five-day training was held in Kokrajhar district with Bodo community adolescents. Venue: Gwjen Dera complex, Chandrapara, Kokrajhar during 15 May – 19 May 2018

Second 5-day training programme was conducted in Kokrajhar district with Santhal community adolescents. Venue: Gwjen Dera Complex, Chandrapara, Kokrajhar during 26 – 29 June 2018

Third 5-day training programme was conducted in Kokrajhar with Santhal community adolescents. Venue: Gwjen Dera Complex, Chandrapara, Kokrajhar during 26 – 30 July 2018

Two 5-day training programme was conducted in Balipara block of Sonitpur district with 4 groups of Tea community adolescents. Venue: Amiya Bhawan, Balipara during 31 Aug – 10 Sept 2018

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

NET: 04

NET-JRF: 03

NOTABLE PLACEMENT

Name	Designation	Organization
Ms. Shyamoshree Bora	Assistant Anthropologist	Anthropological Survey of India
Ms. Franki Sarania	Gandhi Fellow	Gandhi Fellowship
Ms. Indusmita Saikia	Project Fellow	IGNCA, Delhi
Dimpi Sonowal	Resource Person	MAKAIAS
Deepti Deka	Gandhi Fellow	Gandhi Fellowship
Puja Borthakur	Conservator	National Mission for Manuscripts, MCC, Tezpur University
Dikshita Bora	Assistant	Specialized Adoption Agency
Chirantana Talukdar	Assistant Conservator	National Mission for Manuscripts, MCC Tezpur University
Ms. Smriti Mishra	Technical Assistant	National Mission for Manuscripts, MCC Tezpur University

THE FACULTY MEMBERS OF THE DEPARTMENT

❖ Professor

Debarshi Prasad Nath

PhD (RGU)

Specialization/Areas of interest: Cultural and Literary Theory, Comparative Literature and Translation, Cultural History

E-mail: dpnath@tezu.ernet.in

❖ Associate Professor

Madhurima Goswami

PhD (Tezpur)

Specialization/Areas of interest: Indian poetics, Performing studies, Women's studies

E-mail: mgs@tezu.ernet.in



❖ Assistant Professors

Parasmoni Dutta

PhD (Tezpur)

Specialization/Areas of interest: Heritage Studies, Popular Culture

E-mail: paras@tezu.ernet.in

Juri Gogoi Konwar

PhD (Dibrugarh)

Specialization/Areas of interest: Anthropology of Textile, Anthropology of Food Ethnicity,

Medical Anthropology

Email: jgkon@tezu.ernet.in

Jayanta Vishnu Das

PhD (Tezpur)

Specialization/Areas of interest: Media and Culture, Television Studies, Media and Globalization

E-mail: jvdas@tezu.ernet.in

Mandakini Baruah

PhD (Tezpur)

Specialization/Areas of interest: Gender Studies, Folklore Studies, Paremiology

E-mail: mb@tezu.ernet.in

N K Hashik

PhD (Hyderabad)

Specialization/Areas of interest: Performance Studies, Community Studies

E-mail: hashikk@tezu.ernet.in

Moushumi Kandali

PhD (Baroda)

Specialization/Areas of interest: Visual & Literary Culture, Contemporary Art & Culture of North-East India.

E-mail: moushumi@tezu.ernet.in

❖ Office Staff

Subhra Devi

PhD (National Museum Institute, Delhi)

Specialization/Areas of interests: Heritology and Heritage Studies, Museum Education, Preventive Conservation

E-mail: sd@tezu.ernet.in

Ashish Dutta

B.Com

Upper Division Clerk

E-mail: ashish@tezu.ernet.in

Dipak Deka

Multi-Tasking Staff

E-mail: dipak@tezu.ernet.in





School of Humanities & Social Sciences

Department of Education

THE DEPARTMENT

The Department of Education, Tezpur University was established in the year 2014 with an aim to prepare learner for meaningful careers in the field of education. Teacher Education Program assists students in developing knowledge, skills, and dispositions necessary to become effective and caring teachers in an ever-changing society. At present the department of education is running four programs. The first is MA in Education programme which provides learners wider and more comprehensive understanding of education as a field of knowledge. Second is Two Year B.Ed. programme which prepares students for work as a teacher in schools. And the third one is Ph.D. which provides doctorate degree awarded by university which qualifies the holder to teach at the university level in the degree's field, or to work in a specific profession.

Academic Programmes and Student Intake

Programme	Intake
MA in Education	35
B.Ed	48
PhD	Variable (09 in 3018-19)

Major Facilities and Equipment Available

- Psychology Resource Centre
- Art and Craft Resource Centre
- Curriculum Lab
- ICT Lab
- Conference Room



PUBLICATIONS

International and National Journal Publications

- [1] Chetri, G & Padmavathy, R.D. Effect of Gender and Locality on different Dimensions of Multiple-Intelligence among the College Students. Excellence International Journal of Education and Research, 5(4), (2018).
- [2] Das, Pranjal & Roy, Nil Ratan Emergence of Activity-Based Approach, International Journal of Innovative Knowledge Concepts, Sonhira Publication, 7 (5), (2019).
- [3] Das, Swapna Shikha & Roy, Nil Ratan Sustainable Women Empowerment among the tea garden Women Workers in Assam: A Stepping Stone for Holistic Development, Research Guru-Online Journal of multidisciplinary Subjects, 13(1), (2019).
- [4] Dey, Antara & Roy, Nil Ratan Confluence of ICT Based Education and Teacher Preparation: Need of the Hour, IJRAR-International Journal of Research and Analytical Reviews, 6 (1), (2019).
- [5] Paul, Rajkumar & Roy, Nil Ratan Development and implementation of Competency based Curriculum in Higher Education Level-A Utopia?.IJRAR-International Journal of Research and Analytical Reviews, 6, (2), (2019)
- [6] Paul, Rajkumar & Roy, Nil Ratan Heutagogy: A Channel for Transformation of Adult Learners into Lifelong learners through Self-Determined Practices. International journal of Applied Social Sciences, 6(5), (2019).
- [7] Paul, Rajkumar & Roy, Nil Ratan Hitting the Bull's Eye: Designing the Process of Implementation of Heutagogy to Empower the Adult Learners. SURAJ PUNJ journal for Multidisciplinary Research, 9 (5), (2019).
- [8] Roy, Nil Ratan & Das Chetan Chandra. Scheduled Caste and Scheduled Tribe Students in Higher Education in Bodoland Territorial Areas Districts of Assam. Journal of Education and Development, 9 (17), (2019).
- [9] Singh, R. A study of human rights awareness among college students in relation to their gender and family type. International Journal of Advance and Innovative Research, 5, 4(V), (2018).
- [10] Singh, R. A study on environmental awareness among higher secondary students in relation to their institution type and academic stream. Utopia of Global Education, 4(2)(2018).
- [11] Singh, R. Attitude towards co-curricular activities among higher secondary students, Journal of Contemporary Educational Research and Innovations 8(2) (2018).

Books

- [1] Padmavathy, R.D.. First Step from home to Empower Women: A reality or Myth?. New Delhi Publishers, 2018
- [2] Padmavathy, R.D..Pre service Teachers Perception Towards LMS Specific to GNOMIO: An investigation. APH Publishing Corporation, 2018
- [3] Singh, R. Teacher Education and Beyond. Purbayon Publication, 2019.

Book Chapters

- [1] Das, Swapna Shikha & Roy, Nil Ratan. A Study of Attitude of Pupil Teacher towards Inclusive Education in Quality Teacher Education. Dimapur Publishing Company, ISBN No: 978-93-5279-473-7, (2019).
- [2] Das, Pranjal & Roy, Nil Ratan.Activity-based Approach: A strategy for Improving soft skills in Quality Teacher Education. Dimapur Publishing Company, ISBN No: 978-93-5279-473-7, (2019).
- [3] Saikia, Happy & Roy, Nil Ratan. Relevance of Arts and Drama Education in B.Ed Curriculum in Quality Teacher Education. Dimapur Publishing Company, ISBN No: 978-93-5279-473-7, (2019).



SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
Nil Ratan Roy	International Seminar on Globalizations and Paradigm Shift in Teacher Education	Rajendra Academy for Teachers' Education, West Bengal	31 st March, 2019	Rajendra Academy for Teachers' Education, West Bengal
Pratima Pallai	Consultative Meet of North Eastern States on Emerging Issues and Challenges of Teacher Education at Secondary Stage	Department of Teacher Education, NIE, NCERT, New Delhi	4 th to 6 th December, 2018	NERIE, Shillong
Pratima Pallai	International Seminar on Peace, Well-being & Education: A Pedagogical Discourse	Department of Education, Jadavpur University	28 th and 29 th December, 2018	Department of Education, Jadavpur University
Pratima Pallai	One Week Faculty Development Program NaiTalim, Work Education, Experiential Learning and Community Engagement	MGNCRE, MHRD & Department of Education, Tezpur University	29 th October-2 nd November, 2018	Department of Education, Tezpur University
Rajinder Singh	"English In India : Curricular, Cultural and Critical Shifts" under titled paper "English Language Teaching in India : Modern Trends" organized	Department of English and Foreign Languages, Tezpur University	28 th -29 th March, 2019	Tezpur University
Rajinder Singh	"Issues in North East India & the Role of ODL and OER in Higher Education" under titled paper "A Study of Empowerment among Adolescent Girls in Muslim Community in relation to Locality"	Gauhati University Institute of Distance and Open Learning	19 th -20 th March, 2019.	Gauhati University
Sashapra Chakrawarty	Summer School in Social Science"	UGC-HRDC organized by Ranchi University, Ranchi	05 th to 25 th February 2019.	Ranchi University, Ranchi



Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
Sashapra Chakrawarty	Children with Special Needs: Good Parenting	School of Education NetajiSubhas Open University,	3 rd January, 2019.	NetajiSubhas Open University
Sashapra Chakrawarty,	Attended and presented paper on Mental Health and Academic Achievement: Pathway to Peace and Well-being of Student Mind	Department of Education, Jadavpur University,	28 th and 29 th December, 2018.	Jadavpur University,
Sashapra Chakrawarty	Consultative Meet of North Eastern States on Emerging Issues and Challenges of Teacher Education at Secondary Stage	Department of Teacher Education organised by NIE, NCERT New Delhi	4 th to 6 th December, 2018.	NIE, NCERT New Delhi
Sashapra Chakrawarty	One Week Faculty Development Program, NaiTalim, Work Education, Experiential Learning and Community Engagement	MGNCRE, MHRD & Department of Education, Tezpur University	29 th October-2 nd November, 2018	Tezpur University
Sradhanjali Pradhan	One week faculty development programme on "NaiTalim, Work Education, Experiential Learning And Community Engagement".	MGNCRE, MHRD and Dept. of Education, Tezpur university	29 th October- 2 nd November 2018	Tezpur University

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Nil Ratan Roy	International Seminar on Globalizations and Paradigm Shift in Teacher Education	31 st March, 2019	Rajendra Academy for Teachers' Education, West Bengal
Pratima Pallai	Workshop for module development on Action Research	18 th to 22 th Feb 2019	CIET, NCERT, New Delhi
Sashapra. Chakrawarty	Double Discrimination: Inclusion of Girl Child with special Needs	7 July, 2018	UGC- HRDC, Ranchi University, Jharkhand,



SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/Period, Year
One week faculty development programme on “NaiTalim, Work Education, Experiential Learning And Community Engagement”.	29 th October- 2 nd November 2018
Three days TIE workshop on “acting for Creativity” in collaboration of National School of Drama, TIE Wing, Tripura	4 th February to 6 th February 2019
Three days TIE workshop on “acting for Creativity” in collaboration of National School of Drama, TIE Wing, Tripura	7 th February to 9 th February 2019

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET: 05

NOTABLE PLACEMENT

Name	Designation	Organization
Nayandita Dutta	Assistant Teacher	VKV, Tezpur, Assam
Supriya Biswakarma	School Psychologist	VKV, Tafragan, Assam
Rumpa Sutradhar	Assistant Teacher	VKV, Arunachal Pradesh
Anjan Jyoti Hazarika	Teacher (English)	VKV, Arunachal Pradesh
Aashyiana Aazmin Hussain	Research Associate	Scroogle, Ahmedabad
Nirjumoni Bora	Teacher (English)	VKV, Nirjuli, Arunachal Pradesh

THE FACULTY MEMBERS OF THE DEPARTMENT

❖ Associate Professors

N.R. Roy

PhD (Assam University)

Specialization/Areas of Interest: Measurement and Evaluation in Education, Research Methodology, Educational Planning and Management, Curriculum Development

E-mail: niledn@tezu.ernet.in

❖ Assistant Professors

Yeasmin Sultana

PhD (Assam University)

Specialization/Areas of Interest: Language Education, Sociology of Education

E-mail: yeasmin@tezu.ernet.in

R.D. Padmavathy

PhD (Pondicherry)

Specialization/Areas of Interest: Mathematics Education and Cognitive Science, e-Content Development, Blended Learning.

E-mail: padma@tezu.ernet.in



H. Sharma

PhD (DAVV, Indore)

Specialization/Areas of Interest: Educational Research, Educational Psychology, ICT in Education, Educational Administration, Guidance and Counseling, Early Childhood Education, Method of Teaching Physical Science and Biological Science

E-mail: hitesh@tezu.ernet.in

Sashapra Chakrawarty

PhD (BHU)

Specialization/Areas of Interest: Educational Psychology, Educational Research, Special Needs Education, Method of Teaching in Biological Science/Elementary Education.

E-mail: sashapra@tezu.ernet.in

Pratima Pallai

PhD (Lucknow)

Specialization/Areas of Interest: ICT in Education, pedagogy of teaching social science, Educational Measurement and Evaluation, Teacher Education

E-mail: pratima@tezu.ernet.in

Md. Asif

Specialization/Areas of Interest: Contemporary Indian Education, Teacher Education, Educational Technology, Pedagogy of Social Science

E-mail: mdasif@tezu.ernet.in

Sradhanjali Pradhan

PhD (Utkal)

Specialization/Areas of Interest: Pedagogy of Physical Science, Educational Technology and ICT in Education, Measurement and Evaluation

E-mail: sradha@tezu.ernet.in

R. Singh

PhD (Panjab)

Specialization/Areas of Interest: Educational Technology, Educational Research, Special Education, ICT in Education, Language Education, Environmental Education.

E-mail: badotra@tezu.ernet.in

❖ **Office Staff**

P. Saikia

Office Assistant

E-mail: tinku23@tezu.ernet.in

N. Bauri

MTS



School of Humanities and Social Sciences

Department of English and Foreign Languages

THE DEPARTMENT

The Department of English and Foreign Languages was established in 1994. It aims to give instruction and carry out research in English Literature, Women's Writing in English, American Literature, Indian Writing in English, and English Language Teaching. In August 2012 and August 2015 an M.A. programme in Linguistics and Language Technology and an MA programme in Linguistics and Endangered Languages were introduced respectively. These programmes aim to give instruction and carry out research in Core Linguistics, Linguistics Theories, Field Linguistics, Computational Linguistics, Documentation and Archiving. Other academic programmes include Integrated MA in English (Introduced in August, 2011), Integrated BA BEd (Introduced in August 2011, now discontinued), and Certificate Course in Chinese.

Academic Programmes and Student Intake

Academic Programme	Student Intake
MA English	50
MA Linguistics and Language Technology	20
MA Linguistics and Endangered Languages	20
Integrated M.A in English	20
Integrated BA,BEd.	10 (discontinued w.e.f. Autumn 2019)
Certificate in Chinese	39
PhD	Variable (15 in 2018-19)

Major Facilities and Equipment Available

The Department has a digital multimedia multi-purpose language laboratory with fifteen booths but currently out of order. The new 20 booths language laboratory is under process. Students can improve on their language skills, especially the skills of listening and speaking, in English, Chinese, and French by utilizing the software and other facilities available in the laboratory. The Department also has two smart classrooms and a computer laboratory for the use of students and research scholars.



Major Research Findings/Research and Development Activities

Principal Investigator	Salient Research Findings
P.K. Das	Specific studies are adding to our evolving understanding of Colonial Indian modernity. An alternative paradigm of modernity is also emerging

Research Projects, Ongoing and New

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
SAP- DRS-II	UGC	98 lakh	2015-20	P K Das Coordinator
Women And The Making Of The Public Sphere in Contemporary Assam: An Oral history Digital Archive	ICSSR	10 lakh	2018-2020	H M Medhi
A Stimulus-Appraisal based Study on Motivation Affect in L2 Learning at the Tertiary Level with reference to Engineering Students Learning English as an L2 in Assam	DST	28.4 lakh	2019-2021	S K Doley

PUBLICATIONS

Journal Publications

- [1] Barbora M., Daimari S.K, Goyal V. & Singh U. Development of Part of Speech Tagger for Assamese Using HMM. International Journal of Synthetic Emotions. 9(1). 2018.
- [2] Doley S K. Discourse Patterns in English as an L2 Classroom in India. International Journal of Instruction. 12(1). (2019)
- [3] Khoja B, Mohapatra D. & Madan M. Sarma. Writing in EFL: Exploring students' perspectives in Syrian high school and university contexts. International Journal of Foreign Language Teaching & Research. 6(22). (2018)
- [4] Lanamai, Daveirou. 'Parallels and Contrasts in the Popular Folklore of the Chinese and the Nagas'. Journal of Northeast Indian Cultures. 4(1) (2018).
- [5] Madan M. S. Migration, Memory and Identity: Reading Fictional and Non-fictional Texts. Margins. 6. (2019)
- [6] Mahanta S. & Gope A. Tonal polarity in Sylheti in the context of noun faithfulness. Language Sciences.69 (2018).
- [7] Mohamad M. S., Madan M. & Mohapatra, D. Test impact and test design: insights from the Syrian National Baccalaureate Examination of English. The ELT Practitioner. 5(2). (2018).
- [8] Mohamad, Mai, Madan M. Sarma and D.Mohapatra. Teaching English in ESL and EFL Contexts: a Comparative Study in Syrian and Indian Public Schools. Journal of English Language and Literature. 5(1). (2018).
- [9] Pallavi. 'Consent' in Streekaal. (2018)
- [10] Pallavi. 'Yaun Hinso Ke Sandarbh Mein Lajjit Karne Ki Ranneeti' in Streekaal. (2018)
- [11] Pallavi. 'MeToo: Naye Shabdon Ke Chashme se Kaise Dikhti Hain Yaun Utpidan Ki Purani Bahas' in Streekaal. Nr.32 (2018).

Books

- [1] Biswas, Shravani. R. K. Narayan's Malgudi Milieu: A Sensitive World of Grotesque Realism by Cambridge Scholars Publishing, UK, 2018.
- [2] Borah G.K., What is language? In G. K. Borah (Ed). Aspects of Language. A Tezpur University CODOL Publication. 2018.
- [3] Borah, G.K. Aspects of Language. [Ed]. A Tezpur University CODOL Publication. 2018.
- [4] Danta, Bijay K, S. Deepika, & Tyagraj Thakur, eds. The Unbilled Hour: Essays on Literature, Culture, Society. Kitab Bhavan. 2018.



Book Chapters

- [1] Danta, Bijay K. "In Lieu of a Preface." *The Unbilled Hour: Essays on Literature, Culture, Theory*. Eds. Bijay K Danta, Tyagraj Thakur, and S. Deepika. Kitab Bhavan, 2018.
- [2] Danta, Bijay K. "A Problem of Perspective: Joyce's Orwell's Dickens." *The Unbilled Hour: Essays on Literature, Culture, Theory*. Eds. Bijay K Danta, Tyagraj Thakur, and S. Deepika. Kitab Bhavan, 2018.
- [3] Danta, Bijay K. "Unsung at Home, Celebrated Abroad: Ananta Charan Sukla, Professor and Comparatist." *Ananta Sukla: As We Know Him*. Eds. B C Dash and Bandana Mishra. Cool Grove, 2019.
- [4] Danta, Farheena. "Protocols of Colonial Hunting: Surveillance, Transgression, and the Allegory of Empire in F. T. Pollok's Wild Sports of Burma And Assam." in *Narrative Cultures and Textual Traditions of North-East India* Ed. Dhurijati Sharma, Arzuman Ara and Bhaskar Gogoi. Purbayon Publishers, 2019.
- [5] Danta, Farheena. "Lakshminath Bezbaroa's Mor Jiwan Suworon: Points for Comparison with Phakirmohan Senapati's Atmcharita." In *The Unbilled Hour: Essays on Literature, Culture and Theory*. Eds. Bijay K Danta, S Deepika and Tyagraj Thakur. Kitab Bhavan. 2018.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organised by	Date/Period, Year	Place/Institute/Venue
Bijay K. Danta	Revisiting Cosmopolitanism	Forum on Contemporary Theory, Baroda	17-21 December 2018	The Chariot Resort, Puri, Odisha
Bijay K. Danta	Literature of Trauma: Narrative, Memory, Theory	Department of English, BJB (Autonomous) College, Bhubaneswar	23 December 2018	Bhuwaneswar
Bijay K. Danta	Understanding the Sacred	Department of Cultural Studies, Tezpur University	25-26 February 2019	Tezpur University, Assam
Bijay K. Danta	Genre Studies: Fiction	Department of English, University of Burdwan	6-7 March 2019	BURDWAN, WB
Bijay K. Danta	Cultural Self-Fashioning in North East India	Department of MIL and Literary Studies and MAKAIAS,	22-23 March 2019.	Gauhati
Bijay K. Danta	English in India: Curricular, Cultural, Critical Shifts	Department of EFL, Tezpur University	28-29 March 2019	Tezpur University, Assam
Bijay K. Danta	Re-Reading Fakirmohan Senapati from a Postcolonial Perspective	Gangadhar Meher University, Sambalpur,	29-30 May, 2019	Sambalpur
Bijay K. Danta	Annual Shakespeare Birthday Celebrations Seminar	Shakespeare Society of Eastern India, Kolkata, and ICCR Kolkata	28 April 2018	Kolkata
Bijay K. Danta	The Assamese Critical Tradition: Re-inventing Continuities," at the National Seminar on "Critical Traditions in India"	AURO University, Surat, in collaboration with Sahitya Akademi, New Delhi	16-17 March 2019.	New Delhi
Madhumita Barbora	Endangered Languages of India (with special focus on North-East India)	National Law University, Delhi	8 May 2018.	New Delhi



Name of the Faculty Member	Title	Organised by	Date/Period, Year	Place/Institute/Venue
Madhumita Barbora	CFEL cluster meeting and socio linguistics workshop	at RGU	11 Apr 2018	Itanagar
Shravani Biswas	Civilizational and Cultural Traditions of Northeast India: Exploring the Links	MAKAIAS in collaboration with the Dept. of English, Assam University	18-19 April, 2018	Gauhati
Shravani Biswas	Film and Accountability: Ritwik Ghatak's 'Image Discourse' on Bengal's Partition	Annual Conference of RMMLA	2018	Cheyenne, Wyoming, USA,
Sanjib Sahoo	XVI Theory/Praxis Course held at Centre for Contemporary Theory, Vadodara	Forum on Contemporary Theory, Vadodara and Dept. of Political Science, Maharaja Sayajirao University of Baroda	9 July 2018 – 4 August 2018	Vadodara
Bipasha Patgiri	Mising, 34th South Asian Languages Analysis Roundtable (SALA-34)	Department of Linguistics, University of Konstanz, Germany	19 - 21 June, 2018.	Germany
Bipasha Patgiri	Endangered languages of Delhi-NCR:	National Law University, New Delhi	8 May, 2018	New Dehi
Bipasha Patgiri	Prosody of South Asian languages	Department of Linguistics, University of Konstanz, Germany	June 18, 2018	Germany

DISTINGUISHED VISITORS TO THE DEPARTMENT

Dr. Debapriya Basu, IIT Guwahati
 Dr. Niladri Sekhar Das, Associate Professor, ISI, Kolkata
 Dr. Shakuntala Mahanta, Associate Professor, IIT Guwahati
 Prof. P. Madhubala, Manipur University
 Prof. Anand Mahanand, EFLU, Hyderabad
 Prof. Asima Ranjan Parhi, Utkal University, Bhubaneswar
 Prof. Esther Syiem, NEHU, Shillong
 Prof. Himadri Lahiri, Prof. (Retd.), University of Burdwan
 Prof. Jyotirmoy Prodhani, NEHU, Shillong
 Prof. Subir Kumar Dhar, Kolkata

Number of Students who Passed NET-JRF/GATE

JRF-05, NET-LS- 25, SET-03



NOTABLE PLACEMENT

Sarat Gogoi, Land and Revenue Service Officer, Assam

Vipasha Bharadwaj, Assistant Professor, Pub Kamrup College, Assam

THE FACULTY OF THE DEPARTMENT

❖ Professors

M.M. Sarma

PhD (Dibrugarh) [Superannuated w.e.f. 31 March 2019]

Specialization/Areas of interest: Literature in English, Critical Theory, Fiction, ELT (Syllabus Design and Materials Production) and Linguistics

E-mail: mms@tezu.ernet.in

B.K. Danta

PhD (Utkal)

Head of the Department (w.e.f., 08.10.2018)

Specialization/Areas of interest: American Literature, Critical Theory, Postcolonial Studies

E-mail: bkdanta@tezu.ernet.in

Farheena Danta

PhD (Dibrugarh)

Specialization/Areas of interest: American Literature, Modernist Poetics, Cultural Studies

E-mail: fdefl@tezu.ernet.in

P.K. Das

PhD (Gauhati)

Dean, School of Humanities and Social Sciences

Specialization/Areas of interest: Indian Writing in English, American Literature

E-mail: prsntdas@tezu.ernet.in

Madhumita Barbora

PhD (Tezpur)

Head of the Department (till 07.10.2018)

Specialization/Areas of interest: Linguistics (Morphology, Syntax, Language Acquisition), Language Documentation, Field Linguistics

E-mail: mmb@tezu.ernet.in

G.K. Borah

PhD (NTNU, Norway)

Specialization/Areas of interest: Philosophy of Language, General and Cognitive Linguistics, English Literature, Applied Linguistics

E-mail: gkb@tezu.ernet.in



❖ Associate Professors

D. Mohapatra

PhD (EFLU, Hyderabad)

Specialization/Areas of interest: Curriculum Development, Materials Production, Language Policy

E-mail: deva@tezu.ernet.in

Sravani Biswas

PhD (NEHU)

Specialization/Areas of interest: Critical Theory, Indian Writing in English

E-mail: sravani@tezu.ernet.in

Hemjyoti Medhi

PhD(Delhi)

Specialization/Areas of interest: Gender Studies, Women's Studies

E-mail: hjyoti@tezu.ernet.in

S. Sahoo

PhD (Tezpur)

Specialization/Areas of interest: Indian Writing in English, Ecocriticism, Travel Writing

E-mail: ssahoo1@tezu.ernet.in

❖ Assistant Professors

R. Chakraborty

MPhil (JNU)

Specialization/Areas of interest: Chinese Language & Literature

E-mail: rathijit@tezu.ernet.in

Reetamoni Narzari

MA (NEHU)

Specialization/Areas of interest: Women's Writing, Commonwealth Literature, Indian Writing in English

E-mail: reita@tezu.ernet.in

Pallavi Jha

PhD(Hyderabad)

Specialization/Areas of interest: Children's Literature, Popular Culture and Literature, Postcolonial Writing

E-mail: pjefl@tezu.ernet.in

Bashabi Gogoi

PhD (Gauhati)

Specialization/Areas of interest: Indian Writing in English, Adaptation Theory

E-mail: b_gogoi@tezu.ernet.in



A.K. Nath

PhD (JNU)

Specialization/Areas of interest: Language Typology, Morphology, Language Endangerment, Multilingualism, Sociolinguistics

E-mail: akn@tezu.ernet.in

Bipasha Patgiri

MPhil (JNU)

Specialization/Areas of interest: Phonology (Prosody, Dialectology, Language Typology and Syntax)

E-mail: bipasha@tezu.ernet.in

Esther Daimari

MPhil (Gauhati)

Specialization/Areas of interest: South Asian Literature

E-mail: esther@tezu.ernet.in

A. Gope

MA (Hyderabad)

Specialization/Areas of interest: Acoustic Phonetics with special interest in Tone, Psychoacoustics, Computational Linguistics, International Phonology and Language Documentation

E-mail: amaleshgope5sept@gmail.com

S.K. Doley

PhD (EFLU, Shillong)

Specialization/Areas of interest: English Language Education

E-mail: dolesar@tezu.ernet.in

❖ **Assistant Professors (Contractual)**

Daveirou Lanamai

MA (JNU)

Specialization/Areas of interest: Chinese Language

E-mail: davei@tezu.ernet.in

Pallavi

MPhil (JNU)

Specialization/Areas of interest: German Language

E-mail: manjari23@tezu.ernet.in

❖ **Visiting Fellow**

S.U. Ahmed

Diplôme de deuxième cycle (Université de Paris I. Panthéon-Sorbonne Paris, France)

Specialization/Areas of interest: French Language

E-mail: saif@tezu.ernet.in



T.K. Mazumdar

MA Russian (Part-I Completed) (Calcutta), Diploma in German (Ramkrishna Mission Institute of Culture, Kolkata)

Specialization/Areas of interest: German Language

❖ **Technical Staff**

H. Das

MSc IT (Gauhati)

Technical Assistant

E-mail: hemen@tezu.ernet.in

❖ **Office Staff**

B. Bhattarai

MA (IGNOU)

UDC

E-mail: bhattarai@tezu.ernet.in

P.K. Borah

MTS

E-mail: pkborah@tezu.ernet.in



School of Humanities & Social Sciences

Department of Hindi

THE DEPARTMENT

The Department of Hindi was established in January 2010 and it started an MA programme in Hindi from 2013. At present the Department also runs the following programmes: Post Graduate Diploma Programme in Translation (Hindi), Hindi as a Modern Indian Language (MIL); PhD in Hindi literature/language). Apart from these programmes, the Department also runs a Certificate Course in Official Hindi (Level-1), which is mean for the employees of the University.

Academic Programmes and Students Intake

Programmes	Student Intake
Certificate Course	10
PG Diploma in Translation	23
MA in Hindi	25
PhD	Variable (10 in 2018-19)

PUBLICATIONS

Journals Publications

- [1] Anju Lata. Sarat Chandra Chattopadhyaya Krit Dehati Samaaj me Kisan Jivan. Vidhayawarta, 4 (30), (2019)
- [2] Anju Lata. Madhyaavarg ke Doh're Mulyo Tatha Mohbhang Ki Vyakhya: Kashinath Singh ki Kahaaniya. JNU Parisar. 6(11) (2019)
- [3] Anushabda, Asamiya Aatmkatha ka Atit. Bhasha. 277, (2018)
- [4] Tripathi S. Pandit Vidyanivas Mishra ke Vyangya Nibandhon mein Visheshan-Vidhan. Vyangya Yatra (A quarterly refereed research journal). 58(59),(2019)

Books

- [1] Anju Lata. Sathotri Kahaani aur Yatharthvad. Anada Prakashan, 2018

Book Chapters

- [1] Anju Lata. Aadhunika ke Daur mein Vyakti ki Samajikta ka Aakhyan (Samay Sargam- Krishna Sobati) in Upanyas ka Vartman. Prakashan Sansthan, 2018



- [2] Anushabda. Takniki Shabdawali: Awadhrna ewam Mahatva. In Use of Technical Terminology in Higher Education, Nandlal Borgohain City College Publication, 2018

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
Anushabda	Seemawarti Kshetron ke Vikas ke liye Vigyan ka Yogdaan	Defence Research Laboratory, Tezpur, Assam	28th Jan. 2019	Tezpur
Anushabda	Guru Ravidas, Sant Kabir Das aur Dr. Ambedkar ka Samajik, Sanskritik ewam Sahityik Yogdaan	Department of Hindi, Shyama Prasad Mukherji Women's College, University of Delhi in collaboration with Dr. Ambedkar Pratishthan, Samajik Nyay aur Adhikarita Mantralaya, Government of India, New Delhi	2019	New Delhi
Anushabda	Chhayawad: Sandarbh Sapekshata	Naw Unnnayan Sahityik Society in collaboration with Vishwavidyalay Pradhyapak-Shodharthi Vimarsh Sansthan, New Delhi	16th March, 2019	New Delhi
Tripathi, Suryakant	Mahila Shasktikaran: Stri-purush Samanta ki Taraf Ek Kadam	Hindustani Prachar Sabha, Mumbai & Hindi Sahitya Sammelan, Tezpur.	23-24 Feb.2019	Tezpur.
Tripathi, Suryakant	Bhashik Sandarbh mein Hindi ke Vikas ki Dishayen aur Chunautiyan	Dept. of Hindi, Gauhati University, Gauhati & Hindi Shikshan Adhigam Kendra, MGAHV, Wardh	27-28 Feb.2019	Gauhati

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Anushabda	International seminar on "Waishwik Kala, Sanskriti aur Ram"	19 th -20 th April, 2018	Shyama Prasad Mukherji Women's College, University of Delhi, Delhi in association with Ayodhya Research Institute, Ayodhya, Department of Culture, Govt. of UP
Anushabda	'National Seminar on 'Takneeki Shabdawali: Satta ewam Mahatwa'	29 th -30 th . October, 2018.	Commission for Scientific and Technical Terminology, MHRD, Delhi at S.P.M. College, Delhi
Anushabda	Hindi Diwas	15 th September 2018	Pragjyotish College, Guwahati, Assam
Anushabda	Hindi Diwas	14 th September 2018.	Rangapara College, Rangapara, Assam



Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Anushabda	Two day National seminar on “Sanskrit Wangmay main Shastriy Parampara aur Lok Jeewan”	11 th -12 th January 2019.	Shyama Prasad Mukherji Women’s College, University of Delhi, Delhi
Anushabda	Prayagraj	20 th January 2019.	Ayodhya Research Institute, Ayodhya Department of Culture, Govt. of UP
Anushabda	Kumbh 2019,	21 st January 2019.	Prayagraj organized by Ayodhya Research Institute, Ayodhya, Department of Culture, Govt. of UP
Anushabda	Kumbh 2019,	22 nd January 2019.	Prayagraj organized by Ayodhya Research Institute, Ayodhya, Department of Culture, Govt. of UP .
Anushabda	National workshop	24 th February 2019	Organized by Hindi Sahitya Sammelan Tezpur in collaboration with Hindustani Prachar Sabha, Mumbai at Tezpur, Assam.
Anushabda	National Seminar on “Use of Scientific and Technical Terminology in Social Sciences”,	23 rd February, 2019.	Organized by Commission for Scientific and Technical Terminology MHRD, Delhi at Karmashree Hiteswar Saikia College, Guwahati, Assam.
Anushabda	International Seminar on “Sahitya Lekhan mein Yuvaon ki Bhumika”	12 th May 2018.	Poorwottar Hindi Sahitya Academy, Tezpur, Assam.
Anushabda	Hindi workshop.	19 th June 2018.	Bharatiya Seema Police Bal, Regional Office, Tezpur Tezpur, Assam.

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE [2018-2019]

NET- 3, SLET – 01

THE FACULTY OF THE DEPARTMENT

❖ Associate Professor

S K Tripathi

Ph.D. (BHU)

Specialization/Areas of Interest: Applied Linguistics, Indian Poetics, Folkloristics

E-mail: sktripathi@tezu.ernet.in

❖ Assistant Professor

Anjulata

Ph.D (Tezpur)

Specialization/Areas of Interest: Medieval Poetry, Fiction

E-mail: anju@tezu.ernet.in



❖ Assistant Professor

Anushabda

Ph.D (Delhi)

Specialization/Areas of Interest: Linguistics, Media, Poetry, Indian and Western Poetics.

E-mail: anush@tezu.ernet.in

THE STAFF OF THE DEPARTMENT

S. Ingti

BA (Gauhati)

Assistant

Email :ingti@tezu.ernet.in

Ajoy Kr. Nath

MTS



School of Social Sciences and Humanities

Department of Law

THE DEPARTMENT

The Department of Law was established to be a vibrant centre of legal education particularly in the North-East India. It completes its existence progressively for the 3rd year with the advent of the 2nd batch of students in the Two-Year LL.M. programme from the Autumn Semester of 2019. The programme has been designed in a way that the students are exposed not only to the theoretical but also to pedagogical and research aspects of socio-legal relevance.

Academic Programmes and Student Intake

Programme	Student Intake
LL.M.	20 (+2)

PUBLICATIONS

Books and Book Chapters

- [1] Ms. Angel H. Syiem: Gender Preference in Matrilineal Society: Myth or Reality, The Northeast Indian Women: Issues of Displacement, Violence, Media and Law; Chandraprabha Saikiani Centre for Women Studies, Tezpur University, Tezpur; ISBN: 978-93-87935-23-2 (2018).
- [2] Ms. Madhumita Acharjee: Legal Provisions for the Elderly Women, The Northeast Indian Women: Issues of Displacement, Violence, Media and Law; Chandraprabha Saikiani Centre for Women Studies, Tezpur University, Tezpur; ISBN: 978-93-87935-23-2 (2018).

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
Angel H. Syiem	2nd Dr Gurjeet Singh National Moot Court, 2018	National Law University and Judicial Academy, Assam	20-22 April 2018	Guwahati, Assam
Angel H. Syiem	Lecture for the 'Diploma Course in Child Rights'	Centre for Child Rights, National Law University and Judicial Academy, Assam	22 September 2018	Guwahati, Assam



Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
Debajit Kr. Sarmah	Child Labour Prohibition (Amendment) Act, 2016 At two-days Capacity Building Workshop for Community leaders on Child Rights	Department of Social Work, TU	25 June 2018	Department of Social Work, TU
Debajit Kr. Sarmah	Understanding Tea Plantation Act from Child Rights perspective during a three-days capacity building workshop for Community leaders on Child Rights	Department of Social Work, TU	01 September 2018	Department of Social Work, TU
Madhumita Acharjee with Trisha Sabhapandit	Statelessness-A Supra Legal Perspective	Ramaiah Public Policy Center	22 December 2018.	Bengaluru
Madhumita Acharjee with Trisha Sabhapandit	A Critical Analysis on Citizenship Amendment Bill, 2016 and its Impact on Assam	Indian Journal of Law and Public Policy	02 February 2019	New Delhi

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Angel H. Syiem	Spoke on Complaints and Redressal of Sexual Harassment of Women at Workplace at the Orientation Programme for newly admitted TU Students.	26-27 July 2018	Tezpur University
Angel H. Syiem	Sensitization Programme on Sexual Harassment of Women at Workplace	20-21 February 2019	Department of Energy Tezpur University
Debajit Kr. Sarmah	Resource person to speak on Human Rights for Silver Jubilee Outreach Programme of Tezpur University as a part of Meet with students programme	1 September 2018.	THB College, Jamuguri Hat
Debajit Kr. Sarmah	Resource person to speak on Cultural Rights as Human Rights in the 11 session of Shastrartha	25 September 2018.	Dept. of Cultural Studies, TU
Debajit Kr. Sarmah	Spoke on Peace Nobel Prize, 2018 as part of Lecture series on the works of Nobel Laureates 2018	15 November 2018.	Tezpur University
Madhumita Acharjee	Awareness on Child marriage and school dropouts organized by students of Department of Social Work, Tezpur University	30 November 2018	Aganwadi center in the 'B' division at Amolopam village, Tezpur



THE FACULTY OF THE DEPARTMENT

❖ Professor

B.K. Chakravarty

PhD (GU)

Specialization/Areas of Interest: Constitutional Law

E-mail: bkcy@tezu.ernet.in

Resigned on 31/12/18

❖ Assistant Professors

Angel Habamon Syiem

LL.M (SLS)

Specialization/Areas of Interest: Human rights, International Law and Tribal issues.

Email: angelsy@tezu.ernet.in

D.K. Sarmah

M.A, (TISS), LL.M (IPU)

Specialization/Areas of Interest: Criminology, Criminal Law.

Email: dksarmah@tezu.ernet.in

Madhumita Acharjee

LL.M (AUS)

Specialization/Areas of Interest: Criminology, Juvenile Justice, Rights of elderly persons.

Email: madhuap@tezu.ernet.in

❖ Office Staff

Ms. Bidisha Baishya

Office Assistant: Mr. Chand Md. Ali



School of Humanities and Social Sciences

Department of Mass Communication and Journalism

THE DEPARTMENT

The Department was established in 2001 primarily for teaching and training in Media and Communication profession. Over the years it has grown as a nodal centre for teaching, training and research in Media Studies with national and international collaborations. An important feather in the cap of the Department is that it has achieved the top position among Indian universities in the Times Higher Education Asia University Ranking 2018 declared in February, 2018 in the Communication & Media Studies category. It is based on an assessment of 13 performance indicators.

The Department, while focusing on the comprehensive MA in Mass Communication and Journalism (MCJ) programme, has also launched a specialized programme – MA in Communication for Development since 2016. The thrust areas of the Department are Community Communication and Mass Communication with a mission to impart quality training through innovative mix of classroom and field-based pedagogy. Students of the Department regularly produce laboratory journals, audio programmes, web designs, corporate videos, TV news bulletins, and documentary films. They also develop alternative and community media productions like puppet shows and street plays as part of their academic curriculum.

Further, the Ministry of Human Resource Development of Government of India has recognized the Department as the National Resource Centre for offering online Refresher Courses for teachers of the media and communication disciplines in the country which is a major recognition of the Department's potential.

Academic Programmes and Student Intake

Programme	Intake
MA MCJ	39
MA C4D	12
PhD	Variable (5 in 2018-2019)



Major Facilities and Equipment Available

The Department has a spacious exclusive three-story building and is endowed with specialized equipment for print, TV, radio and web journalism. These include industry grade HD digital video cameras, linear and nonlinear editing suites, all in broadcast quality. Students get hands-on training in multi-camera production in the well-equipped studio. An exclusive multimedia lab with latest software enables students to gather expertise in the nuances of different media productions.

Infrastructure Facilities:

- Laboratories (Print, New Media, Audio, NLE)
- Studio (Audio-Video)
- Well-equipped Screening Hall (Capacity 105)
- Conference Hall Mac Systems With FCP Software
- PCS With Quark Xpress
- PCS With Sound Forge Software
- TV Production Studio Set-Up
- Audio-Mixing (Console) System With Pro Tools Software
- IC Recorders
- P2 Cameras
- PD 177 Cameras
- DSR 570
- DSLRS

MAJOR RESEARCH FINDINGS/ RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
Joya Chakraborty	Identified the communication and development needs of school students in Napaam village of Assam and developed strategies for realization of child rights through communication interventions

Research Projects: Ongoing and New

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator (Note: in alphabetic order without any prefix)
A Study on the Acculturation Process of the Mising Tribe of Assam and Arunachal Pradesh,	ICSSR, New Delhi	4 Lakhs	2017-2019	Uttam Kumar Pegu
Advancing Communication for Development as a strategy for social change in Assam and Northeast region	UNICEF	11 lakhs	2018-19	Joya Chakraborty



PUBLICATIONS

Journal Publications

- [1] Behera S.K. Community strategy for social change and human development: Importance and challenges. *Communication Today*.23(10)
- [2] Pegu U.K. Framing Women as Witches: Prevalence and the Law. *Mahila Pratistha*. 4 (3). 2019
- [3] Pegu U.K. Acculturation and Cultural Revivalism of the Mising Tribe of Assam. *International Journal of Advance and Innovative Research*. 6 (1) (2019).
- [4] Pegu U.K. Trafficking in Women and Children in India: Media Campaign and Strategies for Prevention. *Mahila Pratistha*. 4. (2018)
- [5] Pegu U.K. & Sharma H. Villages and Rural Life in Contemporary Hindi Films on the Verge of extinction. *International Journal of Economics, Commerce and Business Management*. 5 (1). (2018)

Book Chapters

- [1] Behera S.K. Sociology and Technology of PR and Social Media. In *Jansampark: Badalte Aayam*. Indra Publishing House and PRSI Bhopal. 2019.
- [2] Bora A. Reviewing literature for C4D. A Dutta, B. Bharali, and A.L Goswami (Eds). *Decoding Communication for Development in India's Northeast*, Guwahati: Dept. of Communication and Journalism Gauhati University in association with Communication for Development Section, UNICEF, Assam, India. 2019
- [3] Bora, A. Media literacy : Issues in relevance. *Media in India : Parallels and Paradoxes*. KV Nagaraj, TD Baruah, J Hazarika (Eds). Bhupen Hazarika School of Mass Communication, KKH State Open University. 2019
- [4] Borah, A. Balaknama – Empowering Children's Voices. In Nagaraj. K.V., Baruah, T.D and Hazarika, J (ed.), *Media in India: Parallels and Paradoxes*, KKHSOU, Guwahati. 2019.
- [5] Chakraborty, J. Communication for social change: Course, Curriculum and Development. A Dutta, B. Bharali, and A.L Goswami (Eds). *Decoding Communication for Development in India's Northeast*, Guwahati: Dept. of Communication and Journalism Gauhati University in association with Communication for Development Section, UNICEF, Assam, India. 2019

SEMINARS/ CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
Anbarasan, P	National Seminar on Caste and Communication	Centre for Culture, Media and Governance, Jamia Millia Islamia, New Delhi	March 27-28, 2019	Jamia Millia Islamia, New Delhi
Anbarasan, P	Marginality and Indian Constitution in the Context of Northeast India	Ambedkar Chair, Tezpur University	November 26, 2018	Tezpur University
Anbarasan, P	National Seminar on "Marginalization and Marginality in India with a focus on North Eastern Region	Ambedkar Chair, Tezpur University in collaboration with RGNIYD, Chennai	March 15-16, 2019	OKDISCD, Guwahati
Anjuman Borah	A month long Induction Training of Faculty	Teaching Learning Centre, Tezpur University	June 6 to July 5, 2018	Tezpur University, Assam.



Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
Junali Deka	MHRD-sponsored One-week workshop on Decoding Social Media, Dynamics, Uses and Abuses	Department of Mass Communication and Journalism, Tezpur University, Assam	February 11-17, 2019,	Department of Mass Communication and Journalism, Tezpur University
Junali Deka	Induction Training of faculty	Teaching Learning Centre, Tezpur University, under PMMMNMTT scheme of MHRD.	November 26-December 26, 2018	Teaching Learning Centre, Tezpur University
Manoj Deori	MHRD-sponsored One-week workshop on Decoding Social Media, Dynamics, Uses and Abuses	Department of Mass Communication and Journalism, Tezpur University, Assam	February 11-17, 2019	
Manoj Deori	Online ARPIT (Annual Refresher Programme in Teaching) under MHRD	SWAYAM, in collaboration MHRD, GoI	December 2018-March 2019.	SWAYAM (online)
Perosh Jimmy Daimary	Online ARPIT (Annual Refresher Programme in Teaching)	SWAYAM, in collaboration MHRD, GoI	December 2018-March 2019.	Online ARPIT (Annual Refresher Programme in Teaching) under MHRD
Perosh Jimmy Daimary	MHRD-sponsored One-week workshop on Decoding Social Media, Dynamics, Uses and Abuses	Department of Mass Communication and Journalism, Tezpur University, Assam	February 11-17, 2019	Department of Mass Communication and Journalism, Tezpur University

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Abhijit Bora	National seminar on the theme "Folk media at the intersection of Culture and Technology"	28 February -1March, 2019	Dept. of Journalism and Mass Communication, North-Eastern Hill University (NEHU), Shillong, Meghalaya,
Abhijit Bora	National-level one-week Faculty Enrichment programme on "Decoding social media Dynamics, uses, abuses"	11 - 17 February, 2019	TLC (PMMMNMTT) and Dept. of Mass Communication & Journalism of Tezpur University,
Abhijit Bora	Orientation programme organized by Teaching Learning Centre (TLC) under PMMMNMTT)	22 December 2018	Teaching Learning Centre (TLC) under PMMMNMTT



Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Abhijit Bora	State-level function on National Press Day, .	16 November 2018	Department of Information and Public Relations, Government of Assam Sivasagar, Assam
Anbarasan, P	ARPIT programme of SWAYAM programme,	21 December 2018	e-content
Anjuman Borah	Workshop on 'Soft Skill Development'	4 May 2018	Department of Education, Koliabor College, Assam

SEMINAR/ WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/Period, Year
5 day Workshop on Strategic Creative Thinking for Accelerating Social Change and Development for students of MA MCJ and MA C4D programmes.	9-13 October 2018
A Seminar and Workshop on Gandhian Philosophy and Peace Journalism in Collaboration with Gandhi Smriti and Darshan Samiti, New Delhi.	21-22 February 2018.
MHRD-sponsored One-week workshop on <i>Decoding Social Media, Dynamics, Uses and Abuses.</i>	11-17 February, 2019

AWARDS & HONOURS/ NOTABLE RESEARCH ACHIEVEMENTS OF FACULTY/ RESEARCH SCHOLARS/ STUDENTS/STAFF

Faculty Member

- [1] Dr. Sunil Kanta Behera, Professor of eminence in the Department of MCJ, Tezpur University was honored with the Best Media Educator Award in Media Education Summit in India International Centre, New Delhi on 22nd November, 2018.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ ACHIEVEMENTS OF THE FACULTY

Online Refresher Course (ARPIT), SWAYAM on "Media Education at Crossroads" National Resource Centre for Mass Communication & Journalism (MHRD), Govt. of India)

In an feat the department was assigned and successfully completed the online Refresher Course titled 'Media Education at Crossroads' as the National Resource Centre (NRC) for Mass Communication and Journalism from the Ministry of Human Resource Development by 2019. This is a special programme by which 75 institutions of higher education including IITs, Technical Teachers Training Institutes, universities each selected for a specific discipline for imparting online refresher courses in those subjects. Since being commissioned in May, 2018, this NRC has completed 40 video lecture modules each supported by adequate number of videos, graphics, scripts for enhancing the teaching-learning experience. The Centre was allocated to this department by the MHRD amidst stiff competition



Prof. Abhijit Bora as Coordinator and Prof. SK Behera, Professor of Eminence as Deputy Coordinator managed execution of the programme.

The modules included an inter-disciplinary selection of subjects and topics covering inputs of experts from pedagogy, law, culture in addition to the original domain of Mass communication.

This course was designed to accord the participants an exposure to a wide range of themes under the domain of Mass Communication. Therefore the programme approaches with lectures and videos covering related areas like regional journalism, fake news, theoretical studies, reading of films, corporate image and communication, innovative pedagogy among others. Mass Communication being an interdisciplinary domain experts and scholars were drawn from different related disciplines. Eminent scholars of the discipline with a pan-Indian perspective from institutions like universities of Hyderabad, Benaras, Madras, IIMC, Delhi were invited in addition to in-house faculty.

A few of the eminent scholars who delivered video lecture modules included – Prof. BP Sanjay of Hyderabad Central University, Prof. Sisir Basu from BHU and Prof. Ravindran from University of Madras.

The course has been successful in reaching out to a wide variety of participants from institutions and practicing professionals from across the country.

NUMBER OF STUDENTS QUALIFIED NET-JRF/ GATE/ SLET: 04

NOTABLE PLACEMENT

One major highlight of the department is that the campus placement scenario is looking up with 18 offers for the two batches of different M.A. Programmes passed out in 2018. Notable Recruiters include reputed ETV Bharat, POSOCO (PSU in power sector), Drishti, Pradan among others.

Name	Designation	Organization
Rimiana Baruah (MCJ)	Accounts Executive	Qua Qua Experiences (Travel- solution enterprise), Hyderabad
Sneha Kumari (MCJ)	Accounts Executive	Qua Qua Experiences (Travel- solution enterprise), Hyderabad
Kuwoli Hazarika (MCJ)	Assistant Officer Trainee (PR)	Power Systems Operation Corporation of India
Priyadarshini Saikia (MCJ)	Trainee Content Editor	ETV, Hyderabad (Eenadu TV)
Mridusmita Chakraborty (MCJ)	Trainee Content Editor	ETV, Hyderabad (Eenadu TV)
Rinkumoni Pathak (MCJ)	Trainee Content Editor	ETV, Hyderabad (Eenadu TV)
Arindam Goswami (MCJ)	Trainee Content Editor	ETV, Hyderabad (Eenadu TV)
Saibal Krishna Sarma (MCJ)	Trainee Content Editor	ETV, Hyderabad (Eenadu TV)
Debashis Pratim Sarma (MCJ)	Programme Executive	Pradan, NGO



Name	Designation	Organization
Abhilekh Gogoi (MCJ)	Programme Executive	Pradan, NGO
Polash Patangia (MCJ)	Grassroots Fellows	Gandhi Fellowship, Delhi
Sujit Muktan (C4D)	Programme Executive	Drishti, NGO, Ahmedabad
Junaid Ali Ahmed (C4D)	Grassroots Fellows	Gandhi Fellowship, Delhi
Punam Talukdar (C4D)	Grassroots Fellows	Gandhi Fellowship, Delhi
Amlan Jyoti Das(MCJ)	EastMojo	Content Writer
Tirtharaj Gohain(MCJ)	SeSTA	Executive Trainee
Rajat Hazarika(C4D)	SeSTA	Executive Trainee
Bishal Sharma(MCJ)	Teach for India	Fellow
Khusbu Bin(MCJ)	Bluberry Digital Labs	Content Writer
Nibirjyoti Mriduta(MCJ)	Bluberry Digital Labs	Content Writer
Shreejana Rai(MCJ)	Bluberry Digital Labs	Content Writer
Abhilasha Pathak(MCJ)	Yes Foundation	Fellow
Ankita Dutta (C4D)	Bangla Natak UNICEF	Consultant Trainee Intern
Anamika Mazumdar (C4D)	Bangla Natak UNICEF	Consultant Trainee Intern
Arnab Jyoti Arya (C4D)	Gandhi Fellowship	Fellow
Indrani Choudhury (MCJ)	Gandhi Fellowship	Fellow
Komal Doley (MCJ)	Gandhi Fellowship	Fellow
Anindita Kashyap (MCJ)	Gandhi Fellowship	Fellow
Anurupa Sonowal (MCJ)	Gandhi Fellowship	Fellow
Pranamee Chutia (C4D)	Gandhi Fellowship	Fellow
Abhishree Borah (C4D)	Gandhi Fellowship	Fellow
Partha Pratim Das (MCJ)	Gandhi Fellowship	Fellow
Shaheed Alomgir (C4D)	UNICEF	Intern
Bhaswati Saharia (C4D)	UNICEF	Intern
Sujit Bhattacharya (C4D)	UNICEF	Intern



THE FACULTY MEMBERS OF THE DEPARTMENT

❖ Professors

S.K. Behera

Professor of Eminence

Area of Interest: Communication Theory and Research, Gender and Media

E-mail: sunilkb@tezu.ernet.in

A. Bora

PhD (Gauhati)

Area of Interest: Radio, Development Communication

E-mail: abhijitb@tezu.ernet.in / abhijitbora71@rediffmail.com

❖ Associate Professors

P. Anbarasan

PhD (JNU)

Area of Interest: Media Studies, Cultural and Subaltern Studies, Film studies

E-mail: anbu@tezu.ernet.in

Joya Chakravarty

PhD (Hyderabad)

Head of the Department

Area of Interest: ICT for Development, Development Communication, Women and Media; Traditional Media.

E-mail: jc@tezu.ernet.in

U K Pegu

PhD (JMI)

Area of Interest: ICT Implications on Society, Science Communication, Film Studies, and Media Analysis.

E-mail: uttamkp@tezu.ernet.in

❖ Assistant Professors

P.J. Daimari

PhD (Tezpur)

Area of Interest: Film Studies, Photography

E-mail: daimari@tezu.ernet.in

Anjuman Borah

PhD (Tezpur)

Area of Interest: Media and Children, Children's Participation, Participatory Communication

E-mail: anjuman.borah@gmail.com

Kapou Malakar

PhD (Tezpur)

Area of Interest: New Media for development, Multimedia Journalism, Online Journalism, Media Studies

E-mail: kapou@tezu.ernet.in



Junali Deka

PhD (Assam)

Area of Interest: Cultural Studies, New Media and Society, Visual Communication, Documentary Filmmaking

E-mail: junalid@tezu.ernet.in

M. Deori

MA (Tezpur)

Area of Interest: New Media Journalism, Multimedia Production, Media and Disaster Management

E-mail: manojdeori@tezu.ernet.in

❖ **Technical Staff**

R.C. Nath

PhD (Tezpur)

Technical Officer

E-mail: ratul@tezu.ernet.in

Chanchal Sinha

Senior Technical Assistant

E-mail: chansan@tezu.ernet.in

❖ **Office Staff**

Dipanjali Sinha

LDC

E-mail: dsinha@tezu.ernet.in

Bubul Das

MTS

E-mail: bubuld@tezu.ernet.in



School of Humanities and Social Sciences

Department of Social Work

THE DEPARTMENT

The Department of Social Work, Tezpur University was established in 2014 to respond to the dearth of good Social Work schools and trained social work professionals in the North East Region (NER) of India. The Department follows a rigorous theoretical and field-based pedagogy with special focus on the issues of the NER. For now the Department offers a Master's degree programme and follows a credit-based continuous evaluation system. Students from multi-disciplinary backgrounds are trained in the core values and skills of the social work profession. The curriculum is designed to train students with the generic approach of social work, which leads to the conduct of research in emerging areas of social work profession and issues related to the NER. Through the fieldwork practicum (a crucial and integral part of social work training), the students are exposed to different economic, socio-cultural and political realities of the region. Additionally, the students are exposed to various social welfare programmes implemented at the grassroots level through the community, NGOs and government settings. The students are also encouraged to carry out internship and volunteering activities during the semester breaks in profit and non-profit sectors and other various government departments. Graduates from the department are envisaged to be placed in various positions in social welfare organisations, in non-profit and private sectors, and in academics.

Academic Programmes and Student Intake

Programme	Student Intake
MA in Social Work	18

Research Projects: Ongoing and New

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Assessment of Nutrition Counselling cum Management Centres in Assam	UNICEF, Assam	19,08,700	3 months 15 August -15 November, 2018	Chandan K Sharma
Programme Cooperation Agreement Title: Development of design and structure for course on the interdisciplinary approaches to nutrition, at Tezpur University	UNICEF, Assam	8,37,000	2 months 01 November - 31 December 2018	Rajesh Kalarivayil
An Assessment of Conflict as A Social Determinant of Health in The North-East Region of India	Indian Council of Medical Research, New Delhi	18.75 lakhs	Two Years	Veda Yumnam



PUBLICATIONS

Journal Publications

- [1] Banik P. Floods in Assam: A post- Disaster Impact on Women and Livelihood. Journal of Exclusion Studies. 8(1) (2018)

Book Chapters

- [1] Sharma, C.K. State Water Policy of Assam 2007: Conflict over Commercializing Water. Water Conflicts in Northeast India. Eds. K. J. Joy, et al. pp. 92-102, Routledge. 2018.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
C. K. Sharma	National Seminar on Tea Plantation Economy in India: Issues of Value Chain and Decent Work	Tata Institute of Social Science, Guwahati	7-8 December, 2018.	Tata Institute of Social Science, Guwahati
C. K. Sharma	Colonial Law Making in Northeast India and its Legacy	Nehru Memorial Museum and Library, New Delhi	29-30 November, 2018.	Nehru Memorial Museum and Library, New Delhi
Namami Sharma	Understanding the Sacred	Department of Cultural Studies, Tezpur University	25-26, February 2019	Tezpur University, Tezpur

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
C.K. Sharma	Special Lecture: "Vernacularisation of Sociology"	28 March, 2019	Vidyasagar University, West Bengal
C.K. Sharma	Golden Jubilee Special Lecture of Dept. of Sociology : "Sociology and its relevance in the study of societies of Northeast India",	14 March, 2019	Jorhat College, Jorhat, Assam
C.K. Sharma	Induction Training of Faculty: "Challenges Ahead of Social Sciences"	12 December, 2018	Teaching Learning Centre, Tezpur University
C.K. Sharma	Urban Action School: "The Making of 'Northeast India': Understanding the Colonial and Post-colonial Policies"	31 July, 2018	ActionAid Association, New Delhi& Dept. of Sociology, Tezpur University
C.K. Sharma	Induction Training of Faculty: "Promoting Social Entrepreneurship"	20 June, 2018	Teaching Learning Centre, Tezpur University
Namami Sharma	World Social Work Day	22 March, 2019	LGBRIMH, Tezpur
Veda Yumnam	DHR-ICMR sponsored workshop on Principles of Training Social Workers in Oncology.	16 February, 2019	Emil Grubbe Auditorium, North East Cancer Hospital and Research Institute (NECHRI) 11th Mile, Amerigog, Jorabat, Assam, India.

**SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT**

Title	Date/Period, Year
Skill Development workshop focused on PRA tools, Project development and Counselling	26 – 27 March, 2019
Rural Camp Orientation Workshop	16 March, 2019
Womens Day celebration	08 March, 2019
A Consultative workshop on 'Optimal Models of Course on Nutrition.'; organized by the Department of Social Work, Tezpur University at Guwahati University	22 December, 2019
Workshop on Child Rights	22-25 August, 2018
Workshop on Child Rights	25-28 June, 2018

DISTINGUISHED VISITORS TO THE DEPARTMENT

Enakshi Dutta, Director IDeA (An initiative of the ANT)

Sunil Kaul, Executive Director, The Ant

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

The Department of Social Work participated at the 3rd edition of the regional level Social Work meet 'Ekayan' organized by Dibrugarh University in September 2018. The team consisting of ten members participated in various activities and brought accolades back to the department. The following are the details of the awards received by the team.

Street play (*BatoBarta*): First position

Best Actress: Sumpi Bora

Debate (*Jukti Ban*): Adipriya Baruah secured 2nd Position

Project development (*Yuva Mot*): Team consisting of Shyamal Dutta and Adipriya Baruah secured 2nd position

The team of Department of Social Work, Tezpur University also received the *Best Team Award*.

Community Outreach

The Department of Social Work, organized a Rural Camp for the students of Masters in Social Work from March 17th – 22nd, 2019. The location of the rural camp was Chengelimari Garo gaon in Chariduwar Panchayat, Sonitpur District. The students lived with the people in the village and participated in their daily activities. Based on the initial need assessment exercises, they strategized certain interventions at the community. In one of the discussions the villagers had lamented at their eroding traditional values and cultural systems and this led to the suggestion of having a community



based small museum to showcase their culture. The process of building this museum included documentation of history, oral traditions, art efacts and collecting locally available resources for the structure. The process involved participation of the young and the old in the community which also made the young aware of several customs and traditions which they were earlier ignorant of. The outcome of this exercise was a structure which they lovingly named 'Chingni Rasong'. It meant 'Our Pride' in the Garo dialect. The students also developed an in depth understanding of the human-forest relationship, social capital, the diversifying livelihood systems etc during their stay.

As a part of the concurrent field work, the students have carried out several interventions at the communities around the University. The interventions range from building institutions like Women farmers cooperatives, holding medical camps, conducting adult literacy programmes, organizing awareness programmes on various social issues like domestic violence, child marriage, child sexual abuse, etc., mobilizing campaigns on issues related to governance, and steering workshops for teachers on inclusive education, POCSO, disability, etc.

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET: 01

THE FACULTY OF THE DEPARTMENT

❖ Professors

C.K. Sharma

PhD (Delhi)

Specialization/Research area: Research Interest: Development; Environment; Urbanisation; Agrarian Structure; Social Movements; Ethnicity; Migration; Northeastern India

E-mail: chandan@tezu.ernet.in,

❖ Assistant Professors

A. Saha

PhD (NIMHANS, Bangalore)

Specialization/Research area: Social Work & Mental Health, Psychosocial Care in Disaster Management, Street Children, and Application of Social Work Methods.

E-mail: apurbasaha@tezu.ernet.in,

Veda Yumnam

M Phil (JNU)

Specialization/Research area: Social Determinants of Health, Disaster Management, Nutrition, Social Epidemiology of HIV/AIDS, Health Systems Research.

E-mail: vedamsw@ tezu.ernet.in,

R. Kalarivayil

PhD (JNU)

Specialization/Research area: Innovation Studies, Science and Technology in Rural Development.

E-mail: rajeshk@tezu.ernet.in,



Namami Sharma

M Phil (DU)

Specialization/Research area: Environment and Ecology, Tribal Studies

E-mail: namamis@tezu.ernet.in

Prerana Banik

M Phil (TISS, Mumbai)

Specialization/Research area: Food security, Gender and livelihood, Labour rights, Inclusive policies and development, Marginalised group and social development

E-mail: banikpb[AT]tezu.ernet.in

❖ **Office Staff**

Kiran Mahalia

Assistant

Email: kiran@tezu.ernet.in

G. Borah

MTS

Email: guna@tezu.ernet.in





School of Humanities and Social Sciences

Department of Sociology

THE DEPARTMENT

The Department of Sociology at Tezpur University was established in 2006 with a Master's Programme. Subsequently the PhD programme was launched in 2008. The Department is a recipient of UGC Special Assistance Programme, DRS-I (2016-2021) having thrust areas such as Migration and Politics of Identity; Sociology of Northeast India; Tribal Studies/Studies on Health and Education. By virtue of innovative pedagogy and research, the Department has emerged as one of the important centers of learning and research in sociology in India within a short span of its existence. The faculty members of the Department have a wide range of interests and expertise and are currently engaged in research in areas such as Development, Education, Environment, Ethnic Conflicts, Urbanisation, Governance, Health, Migration, Social Movements and Science Studies. This diversity is reflected in their publication, completed and ongoing research projects, seminars and conferences, as well as in the teaching and learning efforts in the department. The Department has been organizing significant events such as All India Sociological Conference (2016), International seminar on 'Identity Politics Reconsidered' (2018), International Conference on "Locating Northeast India: Human Mobility, Resource Flows, and Spatial Linkages" (2018), etc.

The Department is dedicated toward creating competent and socially sensitive graduates through rigorous teaching programmes and extension activities. Within a short period of time the students have been able to make a mark at national level which is attested by the fact that around 83 graduates have cleared UGC NET/JRF exams. The alumni of the Department are employed in various capacities in different sectors. These include faculty positions in Universities, colleges and research positions within government institutions and at various national and international development organizations.

ACADEMIC PROGRAMMES AND STUDENT INTAKE

Academic Programmes	Student Intake
MA	38
PhD	Variable (06 in 2018-19)

**RESEARCH PROJECTS, ONGOING AND NEW**

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
'Inequality and inclusion in Primary Health Care System in India: Comparative analysis of Kerala and Assam'.	Indian Council of Medical Research, New Delhi.	36.4 Lakh	2 years	Sumesh SS
Vulnerability Analysis of Marginalised Communities in Riverine Islands of Assam	UNICEF, Guwahati.	5.15 lakhs	6 months	Amiya Kr. Das
Evaluation and Process Monitoring of PMMVY	UNICEF, Guwahati.	5.5 lakhs	1 year	Amiya Kr. Das
Process Evaluation of Capacity Building Programme of State Institute of Panchayat and Rural Development	UNICEF, Guwahati.	14.91 Lakhs	8 months	Amiya Kr. Das

PUBLICATIONS**Journal Publications**

- [1] Das S. From Agriculture to Non-Farm: Agrarian Change among the Scheduled Castes of Central Assam. Social Change and Development: Journal of OKD Institute of Social Change and Development. 15(2) (2018)
- [2] Sharma, C.K. Dams, 'Development' and Popular Resistance in Northeast India. Sociological Bulletin. 67 (3), (2018)

Book Chapters

- [1] Das, Amiya Kr. The Magic called Elections: Polls, Performance and Citizenship" in Dev Nath Pathak and Sasanka Perera (Ed) Performative Communication: Culture and Politics in South Asia. Routledge, 2018.
- [2] Das, S. Interrogating Caste: Locating the Scheduled Castes in a Multicaste Assamese Village. in C.J. Thomas and P. Katoky (eds.) Towards Social Justice. ICSSR, NESRC and Pentagon Press, 2018.
- [3] Deka, R. Political Economy of Population Control and Women's Reproductive Health in J.P. Saikia (Ed.) Gender and Health: A Sociological Insight. Concept Publishing Company, 2019.
- [4] Goswami N & Gayan, Gargi. Sociologising the Studies on Education. In Saikia, J.P & Borah P.P. (Ed.) Sociology in Northeast India. DVS Publishers, 2018.

OTHER PUBLICATIONS**Book Reviews**

- [1] Das, Amiya Kr. Deepak K. Mishra: Internal Migration in Contemporary India. Delhi: Sage, 2016 in Indian Journal of Human Development, 12 (1), 2018.
- [2] Das, Amiya Kr. Mihir Shah and P. S. Vijayshankar (eds.): *Water: Growing understanding, emerging perspectives*, Hyderabad, Orient Blackswan, 2016 in Sociological Bulletin. 67 (3), 2018.
- [3] Das, Amiya Kr., Sanjoy Hazarika: *Strangers No More: New Narratives from India's Northeast*, New Delhi, Aleph Book Company, 2018 in The Book Review, 42-(7), 2018.
- [4] Das, S.. Sujit Kumar Chattopadhyay Gender Socialization and the Making of Gender in the Indian Context. In Sociological Bulletin, 67(3), 2018.



Learning Materials

- [1] Das, Amiya K.. Sociology of Development: MSO 203, Self-Learning Material, Centre for Open and Distance Learning (CODL), Tezpur University, 2019.
- [2] Das, Amiya K. , 'Module IV, UNIT-XIV: Nation and Nation Building' in MSO-103 Sociology of India. MA in Sociology, Centre for Open and Distance Learning, Tezpur University, 2019.
- [3] Kikhi, K. Sociology of Development: MSO 203, Self-Learning Material, Centre for Open and Distance Learning (CODL), Tezpur University, 2019.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
A K Das	ICSSR-NERC First Annual Social Science Congress on "Citizenship, Ethnicity and Nation State in North-East India"	ICSSR-NERC in collaboration with Department of Sociology, Tezpur University	24-26, March, 2019	Tezpur University
A K Das	National seminar on 'Marginalization and Marginality in India with a focus on North Eastern Region: Multiple Contexts for State Intervention'	Organized By Dr. Ambedkar Chair, Tezpur University in Collaboration with OKDISCD, Guwahati	15 th -16 th March, 2019	OKDISCD, Guwahati
A K Das	International Seminar on "Identity Politics Reconsidered"	under UGC-SAP (DRS-I), Department of Sociology, Tezpur University	5 th -6 th December, 2018	Tezpur University
A K Das	18 th IUAES World Congress " World of Encounters: The Past, Present and Future of Anthropological Knowledge	International Union of Anthropological and Ethnological Sciences (IUAES) and Associação Brasileira de Antropologia (ABA)	16-20 July, 2018	Federal University of Santa Catarina, Florianopolis, Brazil
A K Das	A Panel Discussion in 18 th IUAES World Congress " World of Encounters: The Past, Present and Future of Anthropological Knowledge	International Union of Anthropological and Ethnological Sciences (IUAES) and Associação Brasileira de Antropologia (ABA)	16-20 July, 2018	Federal University of Santa Catarina, Florianopolis, Brazil
A.S. Shimreiwung	Workshop on Self Learning Materials for Open and Distance Mode of Learning	Centre for Open and Distance Learning, TU and Teaching and Learning Centre, Tezpur University	6 th and 7 th March, 2018	Tezpur University



Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
C K Sharma	Seminar on Tea Plantation Economy in India: Issues of Value Chain and Decent Work	Tata Institute of Social Science, Guwahati	7-8 December, 2018	Guwahati
C K Sharma	seminar on Colonial Law Making in Northeast India	Nehru Memorial Museum and Library, New Delhi	29-30, November, 2018.	New Delhi
N. Goswami	A panel discussion in a seminar titled Multiple Dimensions of Inclusion: The Context of North East India	Dr. Ambedkar Chair, Tezpur University	November 26, 2018	Tezpur University
P. Hagjer	National Seminar on Marginalization and Marginality in India with a focus on North Eastern Region: Multiple Contexts for State Intervention	Dr. Ambedkar Chair, Tezpur University & OKDISCD, Guwahati	15th & 16 th March, 2019	OKDISCD, Guwahati
P. Hagjer	International Workshop on Ethnography	Roots to Bridges Collective, Guwahati	14-15th December, 2018	Guwahati
S. Ray	National Seminar, Contemporary Debates in Science, Technology and Nationalism in India	IIT Guwahati	30 th October-2nd November 2018	IIT, Guwahati
S. Ray	Asia in Motion: Geographies and Genealogies	AAS-in-Asia Conference, 2018	7th July 2018	New Delhi
Sumesh S S	44 th All India Sociological Conference of Indian Sociological Society	Indian Sociological Society	27 th December, 2018	Philomena's College (Autonomous), Mysuru
Sumesh S S	National Seminar on 'Understanding the Sacred'	Organised by Dept. of Cultural Studies, Tezpur University	25 th February, 2019.	Tezpur University, Assam
Sumesh S S	National Seminar on Marginalization and Marginality in India with a focus on North Eastern Region: Multiple Contexts for State Intervention.	Organized By Dr. Ambedkar Chair, Tezpur University in Collaboration with OKDISCD, Guwahati	15 th March, 2019.	OKDISCD, Guwahati



TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
C K Sharma	Urban Action School Action Aid Association, New Delhi & Dept. of Sociology, Tezpur University, Assam	31 July, 2018	Tezpur University
C K Sharma	Induction Training of Faculty, Teaching Learning Centre, Tezpur University	12 December, 2018	Teaching Learning Centre, Tezpur University
C K Sharma	Golden Jubilee Special Lecture of Dept. of Sociology Jorhat College, Jorhat, Assam	14 March, 2019	Jorhat College, Jorhat, Assam
C K Sharma	Special Lecture on: "Vernacularisation of Sociology",	28 March, 2019	Vidyasagar University, West Bengal
K. Kikhi	Today's Youth: Challenges and Opportunities in NE India	6-7, April 2018.	Mahapurusha Srimanta Sankaradeva Viswavidyalaya, Nagaon
K. Kikhi	National Seminar on Verrier Elwin: Field Work Tradition and Indian Anthropology	21-22, May 2018.	Anthropological Survey of India, Ministry of Culture, Government of India, NERC, Shillong
K. Kikhi	National Workshop on Research Methodology in Social Sciences for the Research Scholars and Faculty Members	4-11, September 2018	ICSSR-NERC, Shillong
K. Kikhi	Conceptualising and Understanding NE India: Challenges and Research Priorities"	16, November 2018	Department of Sociology, Tripura University
K. Kikhi	Induction Training of Faculty of Universities/Colleges/Institutes. Organised by Training Learning Centre,	7, December 2018.	Training Learning Centre, Tezpur University
K. Kikhi	ICSSR sponsored National Seminar on Writing Quality Research Papers: Preparation, Presentation and Production	22, February 2019	Fazl Ali College, Mokokchung, Nagaland
K. Kikhi.	12th National Conference on Northeast India: Changing Contexts, Shifting Meanings & Transformations of Traditions	16-18 November, 2018	Holy Cross College, Agartala, in collaboration with Sanskriti, Guwahati, Tribal Research & Cultural Institute, Tripura, and Department of History, Tripura and Martin Luther Christian University, Shillong
R. Deka	Keynote Address on National Seminar on Today's Youth : Challenges and Opportunities in Northeast India	6-7, April 2018.	Mahapurusha Srimanta Sankaradeva Viswavidyalaya, Nagaon
R. Deka	National Seminar on Equity with Special Emphasis on North Eastern Region organized by Dr. Ambedkar Chair, Tezpur University & ICSSR NERC, Shillong	21-22, June 2018.	Tezpur University, Tezpur
Sumesh S S	National Workshop on Research Methodology	12 January, 2019	Dept. of History, Sree Sankaracharya University of Sanskrit, Kalady
Sumesh S S	Invited Lecture on: "Intersections of Emerging Feminisms and Sociologies"	11 January, 2019.	C.M.S. College, Kottayam, Kerala



SEMINAR/ WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/Period, Year
'Citizenship, Ethnicity and Nation State in North-East India', ICSSR-NERC Annual Social Science Congress	24-26 March, 2019
'Identity Politics Reconsidered', UGC-SAP (DRS-I), Department of Sociology, Tezpur University	5-6 December, 2018.
'Our Urban Futures', Northeast India Urban Action School (UAS) 2018: Advanced Course for Urban Policy Practitioners, Sponsored by ActionAid Association & European Commission.	29 July-05 August, 2018.

DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof. Samir K. Das, Dean of Arts & Professor, Department of Political Science, University of Calcutta, Calcutta.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ ACHIEVEMENTS OF THE FACULTY

Awarded UGC-SAP DRS-I for the period 2016-2021 with financial assistance of 40 lakhs

Outreach programme organized at Kaziranga by the students of the department under the banner Ammar Samaj

NUMBER OF STUDENTS WHO PASSED NET-JRF/ GATE

JRF: 1

UGC NET: 8

THE FACULTY OF THE DEPARTMENT

❖ Professors

C.K. Sharma

PhD (Delhi)

Area of Interest: Development, Environment, Social Movements, Urbanisation, Ethnicity, Migration, Society and Politics of North-eastern India.

E-mail: chandan@tezu.ernet.in

K. Kikhi

PhD (NEHU)

Area of Interest: Research Methodology, Gender and Society, Sociology of Northeast India

E-mail: kedi@tezu.ernet.in

kedithejakikhi@yahoo.co.in



❖ Associate Professors

R. Deka

PhD (Dibrugarh)

Area of Interest: Sociological Theories, Sociology of Movement, Agrarian Sociology.

E-mail: rdeka@tezu.ernet.in

❖ Assistant Professors

A.K. Das

PhD (Tezpur)

Area of Interest: Sociology of Development, Research Methodology in Social Sciences, Sociology of Health and Illness, Sociology of Governance, Sociology of Religion

E-mail: amiyadas@tezu.ernet.in/ amiyadas@gmail.com

S.S. Sumesh

PhD (Kerala)

Area of Interest: Research Methods, Social Stigma, Social Exclusion, Environment and Movements

E-mail: sumesh@tezu.ernet.in/ sumeshss@gmail.com

Nirmali Goswami

PhD (IIT Kanpur)

Area of Interest: Sociology of Education, Education Policy of India, Identity Politics, Multiculturalism, Sociology of Language

E-mail: nirmalig@tezu.ernet.in/ nirmalig@gmail.com

Sarmistha Das

PhD (Tezpur)

Area of Interest: Agrarian Studies, Sociology of Family, Marriage and Kinship

E-mail: sarmistha@tezu.ernet.in

Subhadepta Ray

PhD (Delhi)

Area of Interest: Sociology of Science, Sociology of India, Sociological Theory, Sociology of Literature

E-mail: sray@tezu.ernet.in

A.S. Shimreiwung

PhD (JNU)

Area of Interest: Sociology of Religion, Culture and Art, Tribal Studies, Orality and Colonial Photography

E-mail: shim@tezu.ernet.in

shimreiwung@gmail.com

Pamidi Hagjer

MA (JNU)

Area of Interest: Ritual Studies, Kinship, Sociological Theories

E-mail: pamidi@tezu.ernet.in/ pamihagjer@gmail.com

THE STAFF OF THE DEPARTMENT

A.J. Bharali

UDC

Jogen Das

MTS



School of Humanities and Social Sciences

Centre for Assamese Studies

The Centre for Assamese Studies of Tezpur University completed eight years on 7 June 2019. The prime aim of the Centre is to undertake and foster intensive and innovative study and research in Assamese Language, Literature and Culture in their varied dimensions adopting a wide perspective and an all-encompassing worldview.

Academic Programmes and Student Intake

Programme	Student Intake
PhD Dr. (Bhupen Hazarika Fellowship)	Variable (02 in 2018-2019)

Academic Activities

At present one Inter-disciplinary (CBCT) course of 3 credits is conducted at the Centre i.e. Communicative Assamese. Along with this course, MIL (Assamese) courses of 2 and 3 credits respectively (for Integrated MA, Integrated BA, B.Ed) are also being conducted by the Centre.

PUBLICATIONS

Journal Publications

- [1] Dutta, J. Re-(visiting) the past through Narrative: Reading Rita Choudhury's *Ai Samay Xei Samay* (These Times Those Times, 2017) *Language in India*. 19(2) (2019)
- [2] Dutta, J. Aranya, Manav adhikar aru Bikashor Dharonare Narayanor Kocharethi: araya narir Ek Adhyayan (Forest, Human Rights and Development: A Study with Reference to Narayan's Kocharethi: araya woman). *Manavayatan (The Humanosphere)* 4 (2018)

Book

- [1] Dutta, J. Kocharethi: Araya Nari (Trans. Kocharethi: araya woman). Kasturi Prakaxaan, 2018.

Book Chapters

- [1] Dutta, Juri. "Asomat Stree Siksha aru Ghar-Jeuti (Female Education in Assam and Ghar-Jeuti)" In *Role of Women in Socio-Economic Aspect of Assam*. K.C.Das Commerce College, (2018)



Publication (Translations)

- [1] Bishnu Prasad Rava. 'Destiny' (Translation) in an edited volume titled The Call of the Pherengadao: Select Writings of Bishnu Prasad Rava, (eds) MadanSarma, Gautam Kumar Bora and Debarshi Prasad Nath ,Kotha:, 2019
- [2] Bishnu Prasad Rava. 'The Pythan Princes' (Translation) in an edited volume titled The Call of the Pherengadao: Select Writings of Bishnu Prasad Rava, (eds) MadanSarma, Gautam Kumar Bora and Debarshi Prasad Nath ,Kotha: Guwahati, 2019
- [3] Bishnu Prasad Rava. 'Whistling Rustling, Rustling-Whistling' (Translation) in an edited volume titled The Call of the Pherengadao: Select Writings of Bishnu Prasad Rava, (eds) MadanSarma, Gautam Kumar Bora and Debarshi Prasad Nath , Kotha: Guwahati, 2019

Other Articles Publication

- [1] Dutta, J. 'Utsabar Mohan Sangya: Kartik Hazarika Rastriya Nat Mohotsabar Abhigyata (Great Definition of Festival: Experiences from the Kartik Hazarika National Theatre Festival)' Satsari, 14, (9), (2019).
- [2] Dutta, J. "Ane (Ane)" Satsari. 14(5), (2018).

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
Juri Dutta	National Seminar on Cultural Heritage of Arunachal Pradesh	Rajiv Gandhi University, Arunachal Pradesh in collaboration with Indira Gandhi Rastriya Manab Sangrahalaya, Bhopal	11 and 12 February, 2019	Rajiv Gandhi University, Arunachal Pradesh
Juri Dutta	UGC sponsored National Seminar on Revisiting Colonial Assam	Department of History, Dibrugarh University	29 and 30 March, 2018	Department of History, Dibrugarh University
Juri Dutta	Teaching Methodology and Technical Writing	Department of Environmental Sciences in Collaboration with Teaching Learning Centre	28 January- 3 rd February, 2019	Tezpur University, Tezpur.

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Juri Dutta	Tribal Literature: Contribution & Concernsin the Tribal Literary Festival 2018	14 to 16 December, 2018	Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal
Juri Dutta	Self, Nation and Narration in Colonial Life Writings of Assamese	29 November, 2018	At Tezpur University and organized by Sahitya Akademi in collaboration with Tezpur University
Juri Dutta	Comparative Literature and Comparative Studies	31 October, 2018	At Ban Theatre Hall, Tezpur, Assam and organized by Sahitya Akademi in collaboration with Sadou Asom Lekhika Samaroh Samiti
Juri Dutta	Communicative English and Communicative Assamese	17--18 March, 2018	At Tezpur University in collaboration with the Assam Sahitya Sabha



SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE CENTRE

Title	Date/Period, Year
Foundation Day Celebration of Centre for Assamese Studies	7 June, 2018.
A Creative Writing Workshop as part of the Seventh Foundation Day of the Centre for Assamese Studies	1-5 June, 2018

DISTINGUISHED VISITORS TO THE CENTRE

- Dr. Dhruvajyoti Bora, Eminent Writer and Former President of Assam Sahitya Sabha
- Dr. Arupa Patangia Kalita, Eminent Writer
- Prof. Govinda Prasad Sharma, Eminent Critic
- Prof. Tilottama Mishra, Eminent Critic
- Mr. Pranjal Saikia, Theatre and Film Artiste
- Mr. Nuruddin Ahmed, Sangeet Natak Academi Awardee

THE FACULTY MEMBERS OF THE CENTRE

❖ Professor

P K Das

Specialization/Areas of Interest: Indian Writing in English, American Literature
E-mail: prsntdas @tezu.ernet.in

❖ Assistant Professor

Juri Dutta

PhD (Rajiv Gandhi University, Arunachal Pradesh)
Specialization/Areas of Interest: Regional Literatures of India, Translation Studies and Comparative Literature
E-mail: juri@tezu.ernet.in

❖ Office Staff

Pranjal Kumar Sarma

BA (Gauhati)
Data Entry Operator
E-mail: pranjal@tezu.ernet.in

Mohan Saikia

MTS





School of Humanities and Social Sciences

Centre for Endangered Languages

THE CENTRE FOR ENDANGERED LANGUAGES

The University has been awarded the Centre for Endangered Languages by the Ministry of Human Resource Development in 2014 with an approved grant in-aid of Rs.6,00,00,000/- (Rupees six crore only). Out of this 50% of the amount i.e. Rs.3,00,00,000/- was sanctioned as first installment in 3rd April 2014 and the fund was released in 27th August 2015. The remaining 2nd installment was sanctioned on 21.02.2019 and fund released by March 2019.

This is the Nodal Centre for the consortium of North-East India comprising Tezpur University, Rajiv Gandhi University, Arunachal Pradesh and Sikkim University, Sikkim.

The Centre is attached to the Department of English and Foreign Languages. The Centre also offers two CBCS courses during each semester (Academic session)

Academic Programmes and Student Intake

Programme	Student Intake
MA in Linguistics and Endangered Languages	20

Major Facilities and Equipment Available

Phonetic Lab (With 20 seat capacity)

Documentation Lab (Recording and Editing Suite)

Multipurpose Hall

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

The faculty, research associates and field assistants of the Centre have been divided into seven (7) groups for collection of data from the endangered languages being studied at the Center at the moment. Till date six (06) field works have been conducted by the groups. The last field trip was held from 5 - 25 January 2019. The groups went to Manipur, Nagaland and Dima Hasao Areas of Assam for collection of data. The table below shows the details:



State	Groups	Areas	Chosen Endangered Language
Assam	1	Dima Hasao Area	Biate
	2	Dima Hasao Area	Khelma
	3	Dima Hasao Area	Hrangkhol
Manipur	4	Senapati District	Onaeme
	5	Kangpokpi district	Purum
Nagaland	6	Tuensang district	Yimchunger
	7	Tening Peren district	Liangmai

- Currently, the Centre is working towards three comprehensive grammatical descriptions of above-mentioned languages describing their phonology, morphology, and syntax. The three books are expected to be complete and published by end of the current year
- Approval has been given by the university for following development activities and which are under process:

Publication of the following books:

- A Learner's Book on Yimchunger Language.
- Ethnolinguistic account of Biate, Khelma, Hrangkhol, Onaeme, Purum, Liangmai and Yimchunger Language
- 3 Vols of Language Dictionaries on the Seven Endangered Languages
- Digitized form of the 3 Language Dictionaries

Research Projects, Ongoing and New

Centre for Endangered Languages in itself is a major research project, funded by UGC for a period of 3 years (2015 – 2018) with approved amount of Rs. 6 crores. The first installment was released in August 2015 and the second installment in March 2019. The Centre is coordinated by Prof. M. Barbora.

PUBLICATIONS

Journal Publication

- [1] Bhattacharyya P. R. "Indefinite Pronouns in Assamese". Journal of Linguistics society of Nepal. 33 (2018).
- [2] Bhattacharyya P. R. "Changing Patterns in Assamese among Assamese Youths". Journal of North East Indian Linguistics (NEILS). 8 (2018).



- [3] Das P, Barbora M & Sharma U. "Morphological Rule Formulation for Nouns in Assamese to Develop Morphological Tools". *Journal of Language in India*. 19:2 (2019)
- [4] Gope A. "The Phoneme Inventory of Sylheti: Acoustic Evidences". *Journal of Advanced Linguistic Studies (JALS)*. 7 (2018).
- [5] Longmailai M. "Reflexives and Reciprocals in Dimasa". *Journal of North East Indian Linguistics (NEILS)* 8 (2018).
- [6] Pal A, Gope A, & Iannacchione G S. "A Comparative Study of the Phase Separation of a Nematic Liquid Crystal in the Self-Assembling Drying Protein Drops". in *MRS Advances*, 4 (2019)
- [7] Pal A, Gope A, Kafle R & Iannacchione G S. "Phase Separation of a Nematic Liquid Crystal in the Self-assembly of Lysozyme in a Drying Aqueous Solution Drop". in *MRS Communications*. 9 (2019)
- [8] Phukan K & Nath A K. "Dictionary Writing in Assam: A Study Through Select Classical Text". in *Language in India*, 19:7 (2019)

BOOKS AND BOOK CHAPTERS

Edited Books

- [1] Borah, Gautam, K. (Edited with M. M. Sarma and D. P. Nath). *et al* (Eds). 2019. *The Call of the Pherengadao Select Writings of Bishnuprasad Rava*. Guwahati: Katha Publications. ISBN 978-81-89148-85-0. 2019

Book Chapters

- [1] Borah, G. K. The Indefinite and Definite Quantifiers in Assamese. In Linda Kornerth et al. (Eds). *North East Indian Linguistics*. Canberra: Australian National University. ISBN: 978-1-922185-41-9. 2019
- [2] Borah, G. K. (Sangatmak Bhaxabiggan: eti samu abhax (Cognitive Linguistics: An Introduction). In N. Padum (Ed). *Bhaxabigyanar gati-prakriti*. Sibsagar: An Asom Sahitya Sabha Publication. 2018
- [3] Bhattacharyya, P. R. "A Reflection of Cultural Attitudes Towards Animal World Through a Folktale of Khelma, compilation of proceedings of the National Seminar on Route to Oral Literature, organized by Sahitya Akademi, in 2016 at Gangtok, in Anvita Abbi (Ed), published by Sahitya Akademi, ISBN:978-93-88468-02-2. 2018
- [4] Moshahary, J and Barbora, M. "Nonverbal Predicate Clause in Dimasa and Bodo" in Monali Longmailai (Ed)., *Studies on Dimasa: History, Language and Culture, Vol-II*, Page 45-55, DVS Publishers. 2019
- [5] Widinibou, "Oral Narrative as documents for the study of cultural heritage in Liangmai Naga society" in Anvita Abbi (Ed) *Route to Oral Literature*, published by Sahitya Akademi, New Delhi (ISBN 978-93-88468-02-2). 2018

Other Publications

E.Contents:

A. Gope

Video Lecture: Generation of e-module (as part of TLC's mission), funded by MHRD, Govt., of India under PMMMNMTT Scheme. (Published on Dec 21, 2018)

A. Gope

Authored two Units (8 & 9) of a Module (Module III – Applied Linguistics and General Phonology), for the M.A in English (Self-Learning Program) Offered by CODL, Tezpur University.



SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

International and National

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
A. Gope	National Seminar on English in India: Curricular, Cultural and Critical Shifts	28 – 29 March, 2019	Department of English and Foreign Languages, Tezpur University
A. Gope	the 40th International Conference of Linguistic Society of India (ICOLSI 40))	5 – 7 December, 2018	CIIL, Mysore
A. Gope	the 40th International Conference of Linguistic Society of India (ICOLSI 40)	5 – 7 December, 2018	CIIL, Mysore
A. Gope	the 40th International Conference of Linguistic Society of India (ICOLSI 40)	5 – 7 December, 2018	CIIL, Mysore
A.K. Nath	National Seminar on 'English in India: Curricular, Cultural and Critical Shifts'	28 – 29 March, 2019	Tezpur University
A.K. Nath	National Seminar on Book History in North-East India	11 – 12 February, 2019	Tezpur University
A.K. Nath	National Seminar on Book History in North-East India	11 – 12 February, 2019	Tezpur University
A.K. Nath	" in the 40th International Conference of Linguistic Society of India	5 – 7 December, 2018	CIIL, Mysore
B. Sarangthem	National Seminar on 'English in India: Curricular, Cultural and Critical Shifts'	28 – 29 March, 2019	Department of English and Foreign Languages, Tezpur University
B. Sarangthem	International Seminar on Negotiating Culture: New Frontiers in Translation and Language Learning	22 – 23 January, 2019	Department of Foreign Languages, Gauhati University in collaboration with Russian State University for Humanities, Moscow, Russia,
B. Sarangthem	Workshop on Lexicography	25 – 26 October, 2018	Tezpur University and organised by Centre for Endangered languages, Tezpur University
D. Shougrakpam	National Seminar on English in India: Curricular, Cultural and Critical Shifts	28 - 29 March, 2019	Department of English and Foreign Languages, Tezpur University
D. Shougrakpam	International Conference on Indigenous Languages, Societies and Cultures in India (ICILSCI-2019)	21 – 22 February, 2019	University of Hyderabad



Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
E.M. Meitei	Workshop on Lexicography	25 – 26 October, 2018	Centre for Endangered Languages at the Department of English and Foreign Languages, Tezpur University
G.K. Borah	National Seminar on English in India: Curricular, Cultural and Critical Shifts	28-29 March 2019	Department of English and Foreign Languages, Tezpur University
M. Barbora	International Conference on Endangered Languages of India (with special focus on North-East India)	8 May 2018	National Law University, Delhi
M. Barbora	CFEL Cluster Meeting and Socio Linguistics Workshop	11 April 2018	RGU Rajiv Gandhi University, Itanagar, Arunachal Pradesh
M. Longmailai	7th International Conference of Endangered and Lesser Known Languages	22 - 23 February, 2019	Jadavpur University, Kolkata
M. Longmailai	39th Annual Conference of Linguistic Society of Nepal (39LSN)	26 – 27 November, 2018	Tribhuvan University, Kathmandu, Nepal
M. Longmailai	Workshop on Lexicography	25 – 26 October, 2018	Tezpur University and organized by Centre for Endangered Languages
M. Longmailai	Workshop on Preparation of Interactive Talking Dictionaries of Languages of North-East India	May 7-11, 2018	North-Eastern Hill University, Shillong
M. Longmailai	International Conference on Endangered Languages of Delhi-NCR: The Northeast India Focus	8 May 2018	National Law University, Delhi
P.R. Bhattacharyya	International Colloquium on Mediating Multilingualism: An Indo-Scottish Colloquium	18 – 19 March, 2019	Amity School of Communication & Amity Centre for Linguistic Studies at AUGH, Gurgaon
P.R. Bhattacharyya	Workshop on Lexicography	25 – 26 October, 2018	Dept. of English and Foreign Languages, Tezpur University
P.R. Bhattacharyya	National Seminar on Indigenous Languages and Cultural Studies	21 – 22 September, 2018	Centre for Languages and Cultural Studies, Gauhati University
Widinibou	the National Seminar on Indigenous Languages and Cultural Studies	21 – 22 September, 2018	Guwahati University



TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
A. Gope	An invited lecture on the Linguistic and Historical Aspects of the Sylheti Language.	29 th September, 2018	Department of English, Maryam Ajmal Women's College of Science and Technology, Hojai, Assam
A.K. Nath	'Indian Studies Programme.	8 th March, 2019	Gauhati University
A.K. Nath	(2018).	2 nd February, 2019	10th Yearly Session of Assam Sahitya Sabha Meet at Raha.
A.K. Nath	Invited talk on "Basic Linguistics"	22 nd January, 2019	Maryam Ajmal Women's College of Science & Technology, Hojai, Assam
A.K. Nath	Invited talk on "Typological Aspects of the English Language"	29 th September, 2018	Maryam Ajmal Women's College of Science & Technology, Hojai, Assam

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE CENTRE

Title	Date/Period, Year
The Mid-Term Review Meeting of the Centre for Endangered Languages was conducted by the UGC Team. The team had visited the Centre for assessment of the performances of the Centre. The team comprised of the following members: Prof. Sushma Yadav Prof. Panchanan Mohanty Prof. D.G. Rao Ms. Sushma Rathore	22 – 23 October, 2018
A 2-day Workshop on Lexicography was held. Mr. Mayank Jain from JNU and Dr. Devabrata Sarma, Principal, Jorhat College, were the Resource Persons for the workshop.	25 – 26 October, 2018

DISTINGUISHED VISITORS TO THE CENTRE

- i. Prof. Sushma Yadav, Vice-Chancellor, Member UGC,
- ii. Bhagat Phool Singh Mahila Vishwavidyalaya, Haryana
- iii. Prof. Panchanan Mohanty, Coordinator, Centre for Endangered languages and Mother Tongue Studies, University of Hyderabad
- iv. Prof. D.G. Rao, Director, Central Institute of Indian Languages, Mysuru
- v. Ms. Sushma Rathore, Under Secretary (CU), UGC, New Delhi
- vi. Dr. Devabrata Sarma, Principal, Jorhat College
- vii. Mr. Mayank Jain, JNU



OTHER IMPORTANT ACTIVITIES OF THE CENTRE/ACHIEVEMENTS OF THE FACULTY

- A field trip to Nkhenlari, Karbi Anglong district, Assam was made by the 18 students (Semester II) of the MA Programme of Linguistics and Endangered Languages during 6-12 April 2018. The language studied was *Rengma*, a critically endangered language. Rengma is a Naga language belonging to the Tibeto-Burman family of languages.
- Another such field trip to Paite at Khonuam, Karbi Anglong district was made by 14 students of the same programme during 17-22 March, 2019. The language studied was Paite, a critically endangered language. A Kuki-Chin language it belongs to Tibeto-Burman language family. Dr Monali Longmailai, Asst Professor at the Centre supervised both field trips.
- The Centre is planning to offer a Certificate Course in Endangered Languages for Indigenous native speakers of the North East region as an outreach programme initiative.
- The Centre is holding a three-day National Conference on the Indigenous and Lesser Studied Languages (ILSL) of North East India from October 29th to 31st, 2019 at Tezpur University, to commemorate the year of Indigenous Languages announced by UNESCO.

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE: 01

❖ The Faculty of the Centre

Madhumita Barbora

PhD (Tezpur University)

Specialization/Areas of Interest: Syntax, Field Linguistics: Documentation of Tibeto-Burman languages of North East India and Applied Linguistics

E-mail: mmb@tezu.ernet.in

Coordinator, CFEL & Professor, Dept. of EFL

❖ Linguistics Faculties of Department of EFL Associated with the Centre

A. Gope

Ph.D (IIT, Gauhati)

Specialization/Areas of interest: Acoustic Phonetics with special interest in Tone, Psychoacoustics, Computational Linguistics, International Phonology and Language Documentation.

E-mail: amalesh@tezu.ernet.in

Assistant Professor, Dept. of EFL

A.K. Nath

Ph.D (JNU)

Specialization/Areas of interest: Language Typology, Morphology, Language Endangerment, Multilingualism, Sociolinguistics.

E-mail: akn@tezu.ernet.in

Assistant Professor, Dept. of EFL



Bipasha Patgiri

M.Phil (JNU)

Specialization/Areas of interest: Phonetics, Phonology, Historical Linguistics, Dialectology and Language Typology

E-mail: bipasha@tezu.ernet.in

Assistant Professor, Dept. of EFL

G.K. Borah

Ph.D (NTNU, Trondheim, Norway)

Specialization/Areas of interest: Linguistics (General and Cognitive), Philosophy of Language

E-mail: gkb@tezu.ernet.in

Professor, Dept. of EFL

❖ **Assistant Professors of CFEL**

Bobita Sarangthem

PhD (Manipur University)

Specialization: Descriptive Linguistics, Sociolinguistics, Phonetics and Phonology, Field Linguistics (Endangered Languages)

E-mail: bobsara@tezu.ernet.in

Dhanapati Shougrakpam

PhD (Manipur University)

Specialization: Descriptive Linguistics, Morphology, Field Linguistics (Endangered Languages)

E-mail: dippi17@tezu.ernet.in

Monali Longmailai

PhD (NEHU)

Specialization: Descriptive Linguistics, Morpho-Syntax, Field Linguistics and Language Documentation

E-mail: monali@tezu.ernet.in

❖ **Research Associates**

Pushpa Renu Bhattacharyya

PhD (Gauhati University)

Specialization: Descriptive Linguistics and Socio-linguistics

E-mail: pushparb@tezu.ernet.in

Widinibou

PhD (Assam University, Silchar)

Specialization: Phonology and Tibeto-Burman languages

E-mail: widinibou@gmail.com

❖ **Field Assistants**

Barshapriya Dutta

MA in Linguistics and Language Technology (Tezpur University)

E-mail: barp229 @tezu.ernet.in



D. Borah

MA in Linguistics and Language Technology (Tezpur University)
E-mail id: dinkur123@gmail.com

Dulumani Das

MA in Linguistics and Language Technology (Tezpur University)
E-mail id: 93duludas@gmail.com

E.M. Meitei

MA in Linguistics (Manipur University)
E-mail: manimohon@tezu.ernet.in

I.D. Raguibou

MA in Linguistics (Assam University, Silchar)
E-mail: daimairagui@yahoo.com

R.R. Boro

MA in Linguistics and Language Technology (Tezpur University)
E-mail: raju246@tezu.ernet.in

Rima Saikia

MA in Linguistics and Language Technology (Tezpur University)
E-mail id: rimasaikia422@gmail.com

❖ **Technical Staff**

T. Narzari

MSc-CS (SHIATS)
Technical Assistant
E-mail: trilok@tezu.ernet.in

❖ **Office Staff**

Dipali Sona Nayak

B.Com (Gauhati University)
Upper Division Clerk
E-mail: dipasn@tezu.ernet.in

E. Upadhyay

IX Standard
Multi-Tasking Staff
E-mail: eknath@tezu.ernet.in



School of Humanities and Social Sciences

Chandraprabha Saikiani Centre for Women Studies

THE CENTRE

Chandraprabha Saikiani Centre for Women studies (CSCWS) was established in the year 2009. It supports redistribution of women power and control of resources in favour of women. The vision of Chandraprabha Saikiani Centre for Women Studies, Tezpur University is to provide a platform and promote studies on women belonging to the diverse socio-cultural milieu of North-East India. The priority of CSCWS is to build a body of information and knowledge resource pool regarding women of this region. Looking at the diverse population and the geographical dynamics of the region the Centre aims to develop a theoretical understanding of the matter. For the preservation of the rich cultural heritage of the region, documentation will be undertaken to advance the development of women's studies, while contributing to general advances of knowledge in human social and cultural development. The aim basically is to enhance academic component in action and advocacy to demonstrate new service models and strategies and utilize it for teaching simultaneously.

Academic Programmes and Student Intake

Programme	Intake
Post Graduate Diploma in Women's Studies	15

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
Madhurima Goswami	
M Goswami	<p>Women and Trafficking: A study of Boarder areas of Sonitpur District of Assam:</p> <ul style="list-style-type: none"> Acute poverty and natural disaster. Existence of fake placement agencies both in the source and destination. Demand of domestic helps in metro. Effect of social evils. Large family size.



Research Projects, Ongoing and New

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Women in Economic Sector in Assam	CWDS	140000	2018-2019	Madhurima Goswami
Effectiveness of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013	NCW	475000	2018-2019	Madhurima Goswami

PUBLICATIONS

Journal Publications

- [1] Boro S. Power Game of Witch Hunting in Assam: An Analysis. International Journal for research in Social Science and Humanities. 4(2) (2018)
- [2] Daimary I & Swargiary D. Women and Witch-Hunting: Challenges as Victims. Mahila Pratishtha 4(3) (2019)
- [3] Goswami M. Food Culture: Space for Creativity, Protest and Negotiation. International Journal of economics and Social Sciences. 8(3) (2018)

Books

- [1] Daimary I. The Bodo Women: Representation in Folklore and Culture. Akansha Publication Delhi, ISBN-978-81-8370-546-2, (2019).
- [2] Goswami M. The Northeast Indian Women: Issues of Displacement, Violence, Media and Law. Olympia Prakashan, ISBN- 978-93-87035-23, (2018)

Book Chapters

- [1] Goswami M. Staging of Rituals: Role of a Ritual Priestess. The Northeast Indian Women: Issues of Displacement, Violence, Media and Law. Olympia Prakashan, ISBN- 978-93-87035-23, 2018.
- [2] Mahanta M. Women and Mental Health In M. Goswami (Ed) The Northeast Indian Women: Issues of Displacement, Violence, Media and Law. Olympia Prakashan, ISBN- 978-93-87035-23, 2018.
- [3] Daimary I. Bodo Women in Conflict Situation In M. Goswami (Ed)The Northeast Indian Women: Issues of Displacement, Violence, Media and Law Olympia Prakashan, ISBN- 978-93-87035-23, 2018.
- [4] Boro S. Women Trade in Assam: An Analysis In M. Goswami (Ed) The Northeast Indian Women: Issues of Displacement, Violence, Media and Law Olympia Prakashan, ISBN- 978-93-87035-23, 2018.

Other Publications

- [1] Varta The News (2019)



SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
Ivy Daimary	Consultation Meet on Safety and Security of Women in Public Places	National Institute of Public Co-Operation and Child Development	11 February, 2019	Guwahati
Ivy Daimary	Research Exchange Meet	CSCWS	13-14 th November, 2018	Tezpur University
Madhurima Goswami	Research Exchange Meet	CSCWS	13-14 th November, 2018	Tezpur University
Madhurima Goswami	Life History of the Women of Assam	Centre for Women's Development Studies, Delhi	8 th September, 2018	New Delhi
Madhurima Goswami	Gender and Performance, Dynamics of Pedagogy in Training and Transmission of Arts in Relation to Sattriya Dance	Sattriya Kendra	16-18 November, 2018	Gangotri Bhawan, Beltola, Guwahati.
	Status of Women's Studies in North East India	OKD Institute of Social Change and Development	18-19 January, 2019	Guwahati
Mousumi Mahanta	Review of Sexual Harassment at Workplace (Prevention, Prohibition and Redressal) Act, 2013	Centre for Gender Justice, National Law University and Judicial Academy	16 February, 2019	Guwahati
Mousumi Mahanta	Research Exchange Meet	CSCWS	13-14 November, 2018	Tezpur University
Sonali Boro	Research Exchange Meet	CSCWS	13-14 November, 2018	Tezpur University

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Abhijit Baishya	International Women's Day Observation	6 March, 2019	Chatia College
Abhijit Baishya	International Women's Day Observation	8 March, 2019	Tezpur University
Madhurima Goswami	Short-Term Training Programme on "Innovation and Rejuvenation of Teaching in Higher Education"	12-17 January, 2019	Dera Natung Government College, Itanagar
Madhurima Goswami	Status of Women's Studies in North East India	18-19 January, 2019	OKD Institute of Social Change and Development, Guwahati, Assam



Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Madhurima Goswami	National Seminar on “Gender Performativity and Ideology	18-19 February, 2019	Rajiv Gandhi University, Arunachal Pradesh
Madhurima Goswami	International Women’s Day Observation	8 March, 2019	30 Battalion, CRPF, Chariduar
Madhurima Goswami	International Women’s Day Observation	8 March, 2019	Tezpur Law College
Mousumi Mahanta	International Women’s Day Observation	6 March, 2019	Chatia College
Mousumi Mahanta	International Women’s Day Observation	8 March, 2019	Tezpur University
Sonali Boro	International Women’s Day Observation	10 March, 2019	Jan Jagriti Nari Marcha, Sonitpur, Missamari
Sonali Boro	International Women’s Day Observation	8 March, 2019	Milan Jyoti Nari Marcha and Action Aid Association at Maz Mikir Gaon under Dharamtal Gaon, Morigaon.
Sonali Boro	International Women’s Day Observation	6 March, 2019	Chatia College
Sonali Boro	Sexual Harassment as per the provision of Sexual Harassment of women at Workplace (Prevention, Prohibition and Redressal) Act. 2013 at Prasar Bharti India’s Public Service Broadcaster)	28 March	All India Radio, Tezpur

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE CENTRE

Title	Date/Period, Year
Research Exchange Meet on Women and Market	13-14 November, 2018

DISTINGUISHED VISITORS TO THE CENTRE

Bandana Shiva, Environmentalist, Navdanya

Kamla Bhasin, Feminist, Sangat

THE FACULTY OF THE CENTRE

❖ Associate Professor

Madhurima Goswami

PhD (T.U)

Specialization/Areas of Interest: Women and Religion, Critical Theory, Performance Studies and Sanskrit Literature

E-mail: mgs@tezu.ernet.in



❖ Assistant Professors

Mousumi Mahanta

PhD (T.U)

Specialization/Areas of Interest:

Gender and Mental Health, Women's Studies,
Sociology of Health, Mental Illness, Feminist Research

Email: mousumi@tezu.ernet.in

❖ Research Staff

Ivy Daimary

PhD (T.U),

Research Associate

Email: ivy2@tezu.ernet.in

Sonali Boro

Research Assistant

Email: sonaliw@tezu.ernet.in

❖ Technical Staff

Abhijit Baishya

Professional Assistant

Email: abhi@tezu.ernet.in

Pranjal Kumar Sarma

Data Entry Operator

Email: pranjal@tezu.ernet.in

❖ Staff

Malati Boro

MTS

Email: Malati@tezu.ernet.in



School of Humanities and Social Sciences

Dr. Ambedkar Chair

Dr. Ambedkar Chair, Tezpur University was established by Dr. Ambedkar Foundation, Ministry of Social Justice and Empowerment, New Delhi in the year 2016, to serve as core centre for North East India furthering ideas and philosophy of Dr. B.R. Ambedkar and emancipation of the disadvantaged sections. The thrust area of the Chair is to conduct research on issues related to disadvantaged communities in the context of North East India with particular emphasis on their marginalisation, development and participation. The Chair was set up with the following objectives:

- i. Teaching and research
- ii. Building a library
- iii. Conducting research projects
- iv. Organising public lectures
- v. Conducting awareness and skill development programmes

Research Projects, Ongoing and New

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator/s
Annotated Bibliography on Scheduled Castes and Scheduled Tribes in Social Sciences & Humanities	Dr. Ambedkar Foundation (DAF), Ministry of Social Justice & Empowerment, New Delhi	1.5 Lakh	Two Years	K. Kikhi and D.R. Gautam
An Evaluation of Schemes under Dr. Ambedkar Foundation in the Context of Mizoram	Dr. Ambedkar Foundation (DAF), Ministry of Social Justice & Empowerment, New Delhi	1.5 Lakh	Two Years	K. Kikhi and D.R. Gautam

PUBLICATIONS

Book Chapter

- [1] Kikhi, Kedilezo. 2018. 'A Critical Understanding of Sociology of Northeast India: Geo-political History and Migration' in Jyoti Prasad Saikia & Partha Pratim Borah (eds.) *Sociology of Northeast India: Empirical Reality and Disciplinary Practice*. pp. 17-33. Guwahati: DVS Publishers.

Other Publications

- [1] Gautam, D.R. 2018. 'Social Stratification – Marxist Perspective'. SLM – CODL, Tezpur University



SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE CHAIR

National Seminar on *Equity with Special Emphasis to North Eastern Region*. Sponsored by ICSSR, New Delhi & ICSSR-NERC, Shillong, June 21-22, 2018.

National Seminar on *Marginalisation and Marginality in India with a Focus on NER: Multiple Contexts for State Intervention*. Sponsored by RGNIYD & Organized in collaboration with OKDISCD, Guwahati, March 15-16, 2019.

Sh. S.K. Biswas delivered *Memorial Lecture* to commemorate 127th Birth Anniversary of Dr. B. R. Ambedkar, on the theme *Relevance of Ambedkar: Then and Now*, April 27, 2018.

Prof. Y. Chinna Rao delivered *Dr. Ambedkar Memorial Lecture Series (Inaugural)*, on the theme *Ambedkar and the Reconstruction of Modern India*, November 26, 2018.

Panel Discussion on the theme *Multiple Dimensions of Inclusion: The Context of Northeast India* on the occasion of 69th Constitution Day Celebration, November 26, 2018.

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
D.R. Gautam	National Seminar on <i>Writing Quality Research Papers: Preparation, Presentation and Productio</i>	February 22, 2019	Fazl Ali College, Mokokchung, Nagaland
D.R. Gautam	National Seminar on <i>Understanding the Sacred</i>	February 25-26, 2019	Department of Cultural Studies,
K. Kikhi	Dr. Ambedkar Jayanti organize	April 14, 2018.	Deputy Commissioner Office, Sonitpur District, Assam
K. Kikhi	<i>National Seminar on Verrier Elwin: Field Work Tradition and Indian Anthropology</i>	May 21-22, 2018	Ministry of Culture, Government of India, NERC, Shillong, May.

‘Gautam, D.R. ‘Making of the Sacred in India: Religious or Social Othering?’

DISTINGUISHED VISITORS TO THE CHAIR

Prof. A.C. Sinha, NEHU, Shillong

Prof. Ch. Priyoranjan Singh, Department of Economics, Manipur University

Prof. Narender Kumar, Centre for Political Studies, JNU, New Delhi

Sh. S.K. Biswas, Eminent Social Scientist & Ex-Bureaucrat

Prof. Yagati Chinna Rao, Chairperson, Centre for the Study of Discrimination & Social Exclusion SSS, JNU

Prof. Y. Josephine, NIEPA, New Delhi



OTHER IMPORTANT ACTIVITIES OF THE CHAIR

CBCS course at doctoral level (AC 701: Philosophy of B.R. Ambedkar & Its Contemporary Relevance)

127th Birth Anniversary celebration of Dr. B. R. Ambedkar – Floral tribute

63rd Mahaparinirvana Diwas of Dr. B.R. Ambedkar – Floral Tribute and Sensitization towards cleanliness & dignity of labour (distribution of gloves & half jackets to Sulabh workers), December 6, 2018.

Procurement of books including available volumes of writings & speeches of Dr. B.R. Ambedkar.

THE FACULTY

❖ Professor

K. Kikhi

PhD (NEHU)

Chair Professor

Specialization/Areas of interest: Sociology of North East India, Tribal Studies, Ethnic movements

E-mail: kedi@tezu.ernet.in

❖ Research Officer

D R Gautam

PhD (NIEPA)

Specialization/Areas of interest: Social Exclusion and Higher Education

E-mail: dgautam@tezu.ernet.in

❖ Technical Staff

Anu Singh

MSc (Gauhati)

Stenography

E-mail: aarav26anu@gmail.com

❖ Project Staff

Ms. Jiumoni Borah

Project Assistant

E-mail: jiumonibora123@gmail.com

Ms. Catherine Lalnuntluangi

Research Investigator

E-mail: catherinelnti05@gmail.com



SCHOOL OF MANAGEMENT SCIENCES

- ❖ **Dean, School of Management Sciences**
- ❖ **Department of Business Administration**
- ❖ **Department of Commerce**
- ❖ **Centre for Disaster Management**
- ❖ **Tezpur University Intellectual Property Rights Cell**



School of Management Sciences

The School of Management Sciences comprises Department of Business Administration, Department of Commerce, Centre for Disaster Management and Intellectual Property Rights Cell. The school has been able to make its presence felt in the country by way of academic excellence and social contribution.

Ranked 16th by India Today B-School ranking 2018 of Govt. B School (Non IIM & IIT category), the Department of Business Administration has successfully completed UGC-SAP DRS I and has taken up the second phase (SAP DRS II). The department has expanded its international exposure for students by conducting their trips to Singapore, Dubai, Malaysia and Bhutan last year, and three MBA students underwent one semester of their studies in Avans University, Netherlands. One international student from Nepal passed out the MBA programme and two international students from Malawi joined the MBA programme. The students from MTTM programme spent one month of winter internship at Ramoji Film City, Hyderabad. Their services were highly appreciated.

The department organized a case study workshop for management faculty of this region in collaboration with Welingkar institute of management, Bangalore and supported by Association of Indian Management Schools. An interactive session by Sri Venkatesh Iyer, Founder and CEO of Goli Vadapav with students and faculty was organized on the occasion. The department also organized an International seminar on Emerging Trends in Insurance jointly with Insurance Institute of India, a NEC Sponsored National Seminar on Impact of Government Policies, World Tourism Day and a Seminar on Corporate Governance and Companies Act, 2018 jointly with Department of Commerce. Like previous years it also organized the M.C. Bora oration and SAMPARK on Act East. The department also started a workshop cycle after the autumn end term examination for MBA students. Two workshops namely, Personality Development Workshop by Walchand People First Ltd (Dale Carnegie) and MS Excel Advanced Workshop by Power BIFox were conducted.

Some notable visitors to the department during the period were, Prof. Stan Smith, Dean of International EPS, Prof. Su Taylor, Dean of Research, Queen's University Belfast, Mr. Trueman, QUB officer at New Delhi, Dr. Jaimini Bhagwati, RBI Chair Professor at the Indian Council for Research on International Economic Relations, New Delhi, Samrat Deka, Director, SRD Group, Mr. Chandra Schaffter, CEO, Janashaki Insurance Company, Sri Lanka, Mr. Chunky Chhetry, CEO, Sagarmatha Insurance Company Limited, Nepal Mrs. Papiya Rahman, ACII (UK) Chartered Insurer, Deputy Managing Director, Pragati Insurance Limited, Bangladesh, Dr. George E Thomas, Chartered Insurance Practitioner, Professor (Research & Non-Life), College of Insurance, Insurance Institute of India, Mumbai, Sazzad Alam ACS, Deputy Secretary, Industries and Commerce Department, Govt. of Assam, Thaneshwar Malakar, IAS Retd. Commissioner and Secretary, Urban Development, Govt. of Assam, Ms. Nandini Sen Sarma, Entrepreneur, Ms. Geetima Das Krishna, Former Asst. Vice President, Reliance Capital Asset Management Company Ltd., Prof. Ch. Ibohal Meitei from Manipur University, Mr. Mrinal Krishna Choudhury, Assam Energy Development Agency, Dr. Sriparna



Bhuyan Baruah, Head, Centre for Industrial Extension, Indian Institute of Entrepreneurship, Mr. Samir Baruah, Ex GM, Indian Overseas Bank, Mr. Biswajit Hazarika, Director, Finer, Ms. Olee Bora, General Manager, NEDFi, Dotta Dev, Vice-President, Axis Bank, Nipam Deka, Marketing Head, reliance Jio North East, Mayur Bora, faculty IIBM.

Worth mentioning participation by faculty members are, Dr.Mridul Dutta visited Murray Edwards College of Cambridge University, England. He also participated a workshop on excellence in research and education at Indian Institute of Management Indore. Prayash Baruah undertook a Course on Global Navigation Satellite System (GNSS), sponsored by UNESCAP at Asian Institute of Technology, Bangkok, Thailand. Three faculty members namely, Prof. Chandana Goswami, Prof.S.s.Sarkar and Prof.D.Das underwent LEAP at Pen-state University and Oxford University.Mr. Amlan Bora MBA (AIT) Trade and Investment Commissioner, Netherland Business Support Office joined the department as an Adjunct Faculty.

Department of Commerce is the latest addition to the school. It offers Integrated M.Com programme. We endeavoured to give the students a competitive edge by aligning the program to professional courses like CA, CS and CMA. Lateral entry and exit is permitted. Student engagement is visible through industrial visits, excursions and creation of an e-magazine. The department organized a discussion on Goods and Service Tax, Intensive workshop on advanced Microsoft Excel, a lecture on Money Ki Baat, one Day Workshop on Data Presentation and Report Writing, an Entrepreneurship Evening with Entrepreneur and a Seminar on Corporate Governance and Companies Act,2013. Notable visitors to the department were, Mr Amitava Banerjee, Consultant, National Foundation for Corporate Governance, New Delhi, Mr Anjan Chowdury, Soft Skills Trainer, Guwahati, Dr Gautam Dutta, Professor, Indian Institute of Foreign Trade, Kolkata, Mr Gunamoni Gogoi, Managiong Director, Assam Cooperative Jute mills, Silghat, Dr. Joydeep Baruah, Associate Professor, Omeo Kumar Das Institute of Social Change and Development, Guwahati, Mr O P Bagaria, Industrialist, Tezpur, CA Purushottam Gaggar, ICAI, CA Rohit Agarwala, Chairman, Guwahati Branch of ERIC of ICAI, Guwahati, CA Swati Tejawat, ICAI

The Centre for Disaster Management offers two CBCS courses, one add-on course and two modules for Post Graduate Diploma in Environmental Management under distance education programme of the University. Dr. Dipak Nath, Assistant Professor, CDM attended Workshop on “Drone and its Application: Harnessing full potential through Industry Academia Interactions”, Organized by AIT, Thailand and Tezpur University, on 16 March, 2018 at Tezpur University. He also acted as a Resource Person in the Thematic Training Programme Comprehensive Disaster Risk Mitigation – Flood & Earthquake, on 13 June, 2017, at the Centralized Training Centre, Sashastra Seema Bal (SSB), Salonibari, Tezpur.

The IPR Cell completed a decade long presence. It offers three CBCS courses. Outreach programs were conducted and patent filing was in progress during the year. TUIPR Cell of Tezpur university was invited to conduct a daylong workshop on ‘Intellectual Property Rights’ at Beltola College, Guwahati on August 10, 2019.It is heartening to mention that Winner of GYTI Award -2019, the three mechanical engineering students of TU namely Saurav Jyoti Sarma, Abhijit Nath and Chandeeep S. Gogoi applied patent through TUIPR Cell. Like previous years, the cell observed Intellectual Property Day on 2019 April, 26 with a day long programme. A national symposium was organized on the occasion. As part of celebration of its silver jubilee, a regional workshop on “Translational Research



and Innovation-.....making use of IPR across value chain” was organized on 30th of December, 2018 at Tezpur University. This workshop cum training programme, jointly organized by TUIPR Cell with NRDC, was aimed at providing solutions to technological demands through deliberations from top technocrats belonging to various sectors. In a landmark initiative for commercializing the homegrown technologies, Tezpur University had signed a MOU with National Research Development Corporation (NRDC), an enterprise of the Department of Scientific & Industrial Research, Ministry of Science & Technology, Govt. of India. A maiden event in this region of the country at school level to facilitate students, teachers and educators realize the importance of Intellectual Property Rights and to orient them towards an IP conscious ecosystem, a special IPR workshop was conducted for school children in Tezpur University campus on 1st October, 2018. As many as 256 students and school teachers from Tezpur town and villages in and around Tezpur University participated in the event. The programme was organized in collaboration with CIPAM, a professional body under the aegis of Department of Industrial Policy and Promotion (DIPP), Govt. of India.

During this period several well known organizations visited the campus for recruitment. The campus placement statistics are 40% for m.com, 53.8% for MTTM and 91.1 % for MBA.

The School of Management Sciences, began with one department in January 1995 and has come a long way, consistently maintaining its student quality and focusing on right mix of values, holistic development of our students and enabling a favourable work climate.



School of Management Sciences

Department of Business Administration

THE DEPARTMENT

The Department of Business Administration started its academic programmes in January 1995. The flagship programme of the Department is its 2-year Master's degree in Business Administration. The Department has also introduced a new 2-year Master's degree in Tourism and Travel Management from 2016. Doctor of Philosophy is also offered by the department. The specialization areas include Human Resource Management, Financial Management, Marketing Management, Operations Management, and Information Technology.

The Faculty members of the Department are actively engaged in research and other academic activities, availing of overseas fellowships, and participating in national and international seminars and conferences. The Department has successfully completed UGC-SAP DRS-1. The Department has also been regularly organizing seminars, conferences, symposiums, and refresher courses. It has also been conducting MDPs/FDPs for the corporate executives and academics. The Department is rated A3 by AIMA in 2012. The students of the Department have been bagging various prizes by participating in extra-curricular activities organized in and outside the University. The Department has also Ranked 16th India Today **B-School** ranking 2018 of Govt. B School (Non IIM & IIT category) and Rating "**A**" by Chronicle B-school survey 2019 and ranked among Top 10 B-school of the Eastern Region.

Academic Programmes and Student Intake

Programme	Intake
MBA (Full-time)	51
Master of Tourism and Travel Management	17
NSE certified Capital Market Professional (NCCMP)	35
PhD	Variable

Major Facilities and Equipment Available

The Department has one air-conditioned Boardroom and one Student Lounge which facilitates case discussions. All classrooms have audio-visual facilities such as LCD projectors, sound systems etc. Moreover, one classroom is also equipped with smart classroom facilities.



The Department has a small library-cum-reading room, a fully air conditioned seminar hall, a training hall and a Computer Lab. The Office is equipped with a modern office automation system.

Research Projects, Ongoing and New

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Post Project evaluation of Sansad Adarsh Gram Yojana	Ministry of Rural Development	44 Lakhs	1 Year	S.S. Sarkar and P. Baruah
UGC SAP DRS II	UGC	39.10 Lakhs + 1 PF (Actuals)	July, 2018-June, 2023	Department
Entrepreneurship Development Incentives	AICTE	5.9 Lakhs	3Yrs	S.S. Sarkar

PUBLICATIONS

Journal Publications

- [1] Baruah P. Exploring Enablers of Industry Collaboration in Higher Education by Tracing Its Evolution Through Systematic Literature Review. *Journal of Contemporary Educational Research and Innovations*. 8(2) (2018)
- [2] Bharali P. & Goswami C. Brand Switching in Telecom Sector: An Insight into Switching Behaviour and Switching Factors. "Abhigyan" *Management Journal*. 36(3) (2018)
- [3] Dutta M. Gastronomic behaviour in Community Based Tourism: Ethnic food & beverages of North Eastern India. *Amity Research Journal of Tourism, Aviation and Hospitality*. 3(5) (2018)
- [4] Dutta M. Interpretation and Communication skills of regional guides of Himalayan region of North East India. *International Journal of Research in Humanities, Arts and Literature*. 6(5) (2018)
- [5] Goswami S. & Sarma M.K. Modelling Customer Delight in Hotel Industry. *Global Business Review*. 20(2) (2019)
- [6] Goswami C. & Boro K. Technology Based Banking Behaviour of Urban Customers: An Empirical Study in Kamrup Metro Districts of Assam, India. *Asian Journal of Research in Banking and Finance*. 8(4) (2018)
- [7] Saikia A.A. & Goswami C. The Concept of Youth Tourism as A Distinct Tourism Market Segment: A Review of Literature. *Asian Journal of Multidimensional Research*. 8(5) (2019)
- [8] Saikia A.A. & Goswami C. Estimating Peoples' Willingness to Pay for Ecotourism Resources Using Contingent Valuation Method: Review of Existing Literature. *Assam Economic Review*. 11 (2018)
- [9] Sarma T.R. & Bora B. Application of DMAIC Methodology for Wastage Reduction to Improve Productivity in a FMCG unit. *International Journal of Scientific & Engineering Research*. 9(4) (2018)
- [10] Singh S. & Sarma M.K. Understanding the Interplay Between Message Characteristics, Demographic Factors and Word of Mouth Effectiveness. *Journal of Marketing Vistas*. 8(2) (2018)

Conference Proceedings

- [1] Roy A. Beginning of the Professional Stock Market Course (NCCMP) in the North East Region of India. A joint initiative between National Stock Exchange Academy Limited and Tezpur University. Published by the Department of Business Administration, Tezpur University for Sampark 2018 in the 18th Edition Souvenir. 26-30. 2018.
- [2] Saikia A. A. & Goswami C. An Empirical Study on Factors affecting Visitors' Willingness to Pay in Kaziranga National Park of Assam. National Seminar on Consolidation and Challenges of Tourism: The Road Ahead, organised by IQAC, Shillong Commerce College. 2018.
- [3] Saikia A. A. & Goswami C. Connecting Visitor Characteristics and Willingness to Pay: A Study from National Park Tourism Perspective, In NEC sponsored National Seminar on Emerging Trends in Finance, Accounting & Management of Business with Reference to North Eastern Region, organised by Gauhati Commerce College. 2018.



- [4] Saikia A. A. & Goswami C. Factors Determining Tourists' Willingness to Pay for Ecotourism Sites: A Tool for Effective Pricing and Financing through Visitation Charges. 1st National Conference on Applied Finance, organised by M.G. School of Economics and Commerce, Assam University, Silchar. 2018.
- [5] Sarkar S.S. Taxation System in Asian Countries – An Empirical Analysis. Paper presented at the World Business, Economics and Finance Research Conference at Bangkok. April 2018.
- [6] Sarma T. R. & Mokhelles M. A Comparative Analysis of MSMEs in Assam with the National Scenario in the New Millennium, NEICMA National Conference. 2018.
- [7] Sarma T.R. & Mokhelles M. A Growth Perspective Analysis of Micro and Small Enterprises (MSEs) of Jorhat District (Assam), ICSSR NERC International Conference on Sustainable Entrepreneurship Development. 2018.

Books Edited

- [1] Baruah P. Emerging Trends in Business and Economic Development in India with reference to North east India. Purbayan Publication. Guwahati, 2018.

Book Chapters

- [1] Baruah P. Public Service Motivation for Service Delivery: A study in Arunachal Pradesh. In Baruah and Thapa (eds.) Emerging Trends in Business and Economic Development in India with reference to North east India. Purbayan Publication. Guwahati. 2018.
- [2] Das R. CSR-Highlighting the Aspects of Human Development. In Digital Impact on Human Resource Practices –Text and Cases. Mittal Publications New Delhi (India). ISBN 81-8324-894-2. 2018
- [3] Dutta M. Majuli: An emerging niche tourism destination village in North East India. In Shukla U.N. & Kulshreshtha S.K. (eds.) Emerging Dynamics of Indian Tourism & Hospitality: Transformation & Innovation. (322-333). Copal Publishing, Gaziabad. ISBN 978-93-83419-56-2. 2019.
- [4] Gogoi K. & Baruah P. Performance Goal Setting and its Outcome in the Digital Age: Perception of Employees in Public Service Organization. In Bhattacharjee A. (ed.) Human Resource Management and Development in the Digital Age, Mittal Publications New Delhi. 2018.
- [5] Yasung M. & Baruah P. Public Service Motivation for Service Delivery: A study in Arunachal Pradesh. Thapa and Baruah (eds), Emerging Trends in Business and Economic Development in India with reference to North east India, Purbayan Publication, Guwahati. 2018.

Other Publications

- [1] Sarkar S.S. Union Budget 2019: Is it interim, *Assam Tribune,* p.6. 2 February, 2019

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
Heera Barpujary	Machine Learning with R and Python	Department of Computer Science and Engineering	28 January – 1 February, 2019	Tezpur University
Mridul Dutta	Excellence in Research and Education	Indian Institute of Management Indore, India	May 03-05, 2019	Indian Institute of Management Indore
Mridul Dutta	Turnaround for Indian Railways: Strategic shift in BRICS economic policy	Murray Edwards College of Cambridge University	July 02-03, 2018	Murray Edwards College of Cambridge University, England
Prayash Baruah	Global Navigation Satellite System (GNSS) Course: T151-30	Sponsored by UNESCAP	14-18 January, 2019	AIT, Bangkok, Thailand



Excursion/ Industrial Tour

Academic excursion for the 3rd Semester MTTM Students of the Department of Business Administration to Bhutan during 22-28 December 2018.

Industrial Visit for the 1st and 3rd Semester MBA Students of the Department of Business Administration to Kamrup Industries on 27 October 2018.

International exposure trip was organised by the Department for the MBA students to Malaysia, Singapore and Dubai during 1st week to 3rd week of January 2019.

SEMINAR/ WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/Period, Year
An interactive session cum lecture with all the students of Business Administration taken by Prof. Ch. Ibohal Meitei, Manipur University	30 April, 2019
An interactive session by Sri Venkatesh Iyer is the Founder and CEO of Goli Vadapav	4 May, 2018
Orientation Programme for newly admitted student organized by the Department	26 July, 2018
World Tourism Day organized by the Department.	27 September, 2018
An interactive session cum lecture with all the students of Business Administration taken by Ms. Smita Day Tarafdar on the theme of “carrier beyond your masters	22 October, 2018
A short programme organised by the department to pay tribute to the father of nation on the occasion of his 150th birth anniversary.	9 October, 2018
Seminar on Corporate Governance and Companies Act, 2018 jointly organised by Department of Business Administration and Department of Commerce, Tezpur University	27 October, 2018
Remembrance Day celebration in memory of Late Prof. Madhab Chandra Bora Oration lecture delivered by Mr. Mayur Bora was organized by the Department.	19 November, 2018
Investiture ceremony was organised by the Department.	29 November, 2018
Personality Development Workshop conducted by Walchand PeopleFirst Ltd (Dale Carnegie) for MBA first year students	13-15 December, 2018
MS Excel Advanced Workshop conducted by Power BIFox for MBA first year students	17-19 December, 2018
An International seminar jointly organized by the Department of Business Administration and Insurance Institute of India	01 February, 2019
Department of Business Administration organized a NEC Sponsored National Seminar on Impact of Governance Policies	15-16 February, 2019



DISTINGUISHED VISITORS TO THE DEPARTMENT

Mr. Biswajit Hazarika, Director, FINER

Prof. Ch. Ibohal Meitei, Manipur University

Ms. Geetima Das Krishna, Former Asst. Vice President, Reliance Capital Asset Management Company Ltd.

Dr. Jaimini Bhagwati, RBI Chair Professor at the Indian Council for Research on International Economic Relations, New Delhi.

Mr. Mrinal Krishna Choudhury, Assam Energy Development Agency

Ms. Nandini Sen Sarma, Entrepreneur

Ms. Olee Bora, General Manager, NEDFi

Mr. Samir Baruah, Ex GM, Indian Overseas Bank

Sazzad Alam ACS, Deputy Secretary, Industries and Commerce Department, Govt. of Assam

Ms. Smita Day Tarafdar, Freelancer

Dr. Sriparna Bhuyan Baruah, Head, Centre for Industrial Extension, Indian Institute of Entrepreneurship

Prof. Stan Smith, Dean of International EPS

Prof. Su Taylor, Dean of Research, Queen's University Belfast

Thaneshwar Malakar, IAS Retd. Commissioner and Secretary, Urban Development, Govt. of Assam

Mr. Trueman, QUB officer at New Delhi

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ ACHIEVEMENTS OF THE FACULTY

Department organized the annual Industry Academia interaction, *Sampark-the Interface*, at Department of Business Administration, Tezpur University, Tezpur, Assam, on 15-16 February, 2019. With *Sampark*, the Department in particular and Tezpur University in general aims to stand high on a pedestal where our illustrious legacy comes together with the corporate world to script a golden future.

FORMEX Activities

SPARSH - The Institutional Social Responsibility Club fulfils the social responsibilities of the department towards the community and society at large. Students carry out extension and outreach activities to address social issues and benefit society. The club also organises talks with eminent social workers to create awareness and a sense of responsibility among the students. The MTTM students maintain the Park at Kalia Bhomora Bridge.



HORIZON - Initiative of HR specialization students - Horizon Club organises seminars and lectures involving prominent HR executives from the industry.

I-CONNECT - The I-Connect Club acts as the bridge between academics and industry. The Club undertakes activities such as organising weeklong focussed studies on a particular organisation and then bringing in experts from that organisation to judge the research done by students.

EACH ONE TEACH ONE - aimed at promoting peer learning and knowledge sharing. Groups are made consisting of students from both senior and junior batches and the students are encouraged to interact with each other and also share their tacit knowledge.

KRITI - THE ART, DESIGN AND INNOVATION - aimed at creating the perfect ambience for Art, Design and innovation. This club consists of the creative members of the department which takes responsibility of wall magazine competition, Rangoli competition and other events related to art and craft.

Extension Activities

1. Sacred Heart Disability centre
2. Awareness Camp in Dibru Darrang Tea Estate with PAJHRA
3. Awareness about women empowerment with PRAGYA
4. Swaadhar Shelter Home
5. ANIMAL CARE for reducing stray dogs in TU
6. Sanitary hygiene under the NGO CARE u 365
7. Zero Waste Tezpur with Green Hub ngo
8. Counselling sessions with less privileged women with Tezpur Mahila Samiti
9. Conserving Greens with Napaam M.E School
10. Maintenance of a park and renovation of Bhumuraguri rock inscription in collaboration with district administration and local citizen.

Industry Collaboration/ Consultancy Services

- Collaboration with Don Bosco Socio-technical Institute, Tezpur for a Certificate Programme on Tourism
- Collaboration with University of Science and Technology, Meghalaya for mentoring research and academic activities
- Collaboration with Avans University, Netherlands
- Collaboration with FINER



NUMBER OF STUDENTS QULIFIED NET-JRF/GATE/SLET

NET: 06

NOTABLE PLACEMENT

Name	Organization	Profile
Chinmoy Deka	AMUL	Territory Sales Incharge
Priyanka Das	AMUL	Territory Sales Incharge
Tasnim Akhtar	Azim Premji Foundation/ ICICI Bank	HR Trainee/ Deputy Manager Grade-1
John Roshan Purty	Cholamandalam	Management Trainee
Kavita Chetry	Cholamandalam	Management Trainee
Nripankar Kalita	Cholamandalam	Management Trainee
Rajendra Laxmi Dhamala	Cholamandalam	Management Trainee
Sarabjit Singh	Colgate Palmolive	CD intern-Customer Development Officer
Saurav Gautam	Colgate Palmolive	CD intern-Customer Development Officer
Diluwar Hussain	Crompton Greaves Electrical Pvt Ltd/ Bandhan Bank	Sales Trainee/ (Management Trainee)
Subham Jalan	Federal Bank	Junior Management Grade I
Sushmita Borah	Federal Bank	Junior Management Grade I
Gargi Deka	GlaxoSmithKalein / Axis Bank	Sales Officer Trainee/ CSO
Amit Kar	GlaxoSmithKalein/ Axis Bank	Sales Officer Trainee/ CSO
Anurag Chanda	GlaxoSmithKalein/ Kotak Life	Sales Officer Trainee/Management Trainee
Mrityunjay Kr Ram	HDFC	Personal Banker
Nabarun Bharadwaj	HDFC	Personal Banker
Saumick Kumar Das	HDFC	Personal Banker
Chayanika Gogoi	ICICI Bank	Deputy Manager Grade-1
Jeebita Moshahari	ICICI Bank	Deputy Manager Grade-1
Sonali Saikia	ICICI Bank	Deputy Manager Grade-1
Manab Jyoti Saikia	ITC	Sales Trainee
Rahul Dhar	ITC	Sales Trainee
Manas Pratim Sarma	Kotak Life	Management Trainee
Purnima Kumari	Kotak Life	Management Trainee
Dulal Saikia	LOADSHARE	Management Trainee
Abhijit Sonowal	Mahindra Finance	Management Trainee
Gaurab Borah	Mahindra Finance	Management Trainee
Owaker Yunus	Mahindra Finance	Management Trainee



Name	Organization	Profile
Abinash Pariri	OYO Rooms	Sales Associate
Winky Hazarika	Qua Qua Experiences Pvt Ltd	Analyst – Product
Juena Gogoi	SBI Life	Assistant Manager
Susmita Sarma	SBI Life	Assistant Manager
Priyanshu Kalita	Scatantra Microfin Pvt. Ltd.	Management Trainee
Rajat Rajkhowa	Svatantra Microfin Pvt. Ltd.	Management Trainee
Pranjit Kurmi	Svatantra Microfin Pvt. Ltd./ Bandhan Bank	Management Trainee
Samarjit Borah	Svatantra Microfin Pvt. Ltd./Bandhan Bank	Management Trainee
Ashik Khan	Svatantra Microfin Pvt. Ltd/ ICICI Bank	Management Trainee/ Deputy Manager Grade-1
Dhrubajyoti Das	UTI AMC Ltd	Management Trainee
Haripriya Saikia	UTI AMC Ltd	Management Trainee
Willy Chetia	UTI AMC Ltd	Management Trainee

THE FACULTY MEMBERS OF THE DEPARTMENT

❖ Professors

Mrinmoy Kumar Sarma

PhD (Tezpur)

Director, Training Learning Centre

Specializations/Areas of interest: Marketing, Tourism Management

E-mail: mrimmoy@tezu.ernet.in

Chandana Goswami (Mrs)

PhD (Gauhati) FDP (IIMA)

Dean, School of Management Sciences

Specializations/Areas of interest: Financial Management, General Management

E-mail: cg1@tezu.ernet.in

Subhrangshu Sekhar Sarkar

PhD (Tezpur)

Head in charge, Department of Commerce

Specializations/Areas of interest: Financial Management, Accounting & Taxation

E-mail: subh@tezu.ernet.in

Debabrata Das

PhD (RGU), AIII (Mumbai)

Director, Centre for Open and Distance Learning

Specializations/Areas of interest: Financial Management

E-mail: ddas09@tezu.ernet.in



Chandan Goswami

PhD (Tezpur)
Specialization/Areas of interest: Marketing Management
E-mail: chand@tezu.ernet.in

Papori Baruah

PhD (Tezpur)
Head, Department of Business Administration
Specialization/Areas of interest: Human Resource Management
E-mail: papori@tezu.ernet.in

❖ **Associate Professors**

Tridib Ranjan Sarma

PhD (Tezpur)
Specialization/Areas of interest: System Management and Operation Management
E-mail: tridib@tezu.ernet.in

Anjan Bhuyan

PhD (Tezpur)
Specialization/Areas of interest: Managerial Economics, Entrepreneurship Development
E-mail: anjanb@tezu.ernet.in

Arup Roy

PhD (Tezpur)
Specialization/Areas of interest: Financial Management
E-mail: arup@tezu.ernet.in

❖ **Assistant Professors**

Heera Barpujary

PhD (Tezpur)
Specialization/Areas of interest: System Management and Knowledge Management
E-mail: heera@tezu.ernet.in

Kakali Mahanta (Mrs)

PhD (Dibrugarh)
Specialization/Areas of interest: Marketing, Human Resource Management
E-mail: kakali@tezu.ernet.in

Runumi Das (Mrs)

PhD (Gauhati)
Specialization/Areas of interest: Marketing Management
E-mail: runumi@tezu.ernet.in

Mridul Dutta

PhD (Gauhati),
Specialization/Areas of interest: Tourism
E-mail: mridul@tezu.ernet.in



Prayash Baruah

MBA (SIU, Pune)),

Specialization/Areas of interest: Supply Chain management, Logistics, Transportation

E-mail: prayashb@tezu.ernet.in

❖ **Adjunct Faculty**

Amlan Bora

MBA (AIT)

Trade and Investment Commissioner, NBSO.

Specialization/Areas of interest: Brand Management

❖ **Guest Faculty**

Niranjan Das

PhD (NEHU)

Specialization/Areas of interest: Tourism, Community Livelihood

E-mail: niranjandas@tezu.ernet.in

❖ **Visiting Fellow**

B K Das

PhD (Gauhati)

Former MD, Numaligarh Refinery Ltd.

Specialization/Areas of interest: Human Resource

❖ **Technical Staff**

Tarun Jyoti Borah

MPhil (NOU)

Senior Technical Assistant

Email: taruntu@tezu.ernet.in

Kushal Roy

DETC (AEI)

Technical Assistant

Email: kushal@tezu.ernet.in

❖ **Office Staff**

Brindabon Borah

M.Com (Gauhati)

UDC

Email: brind@tezu.ernet.in

Suren Kumar Borah

MTS



School of Management Sciences

Department of Commerce

THE DEPARTMENT

The Department of Commerce is the second department established under the School of Management Sciences. With a vision to emerge as a Centre of excellence by exploring new frontiers in knowledge, research and innovation in commerce education, it came into existence in the year 2014 with Integrated M Com Programme (5 Years). The Curricula for the Integrated M Com. Programme is aligned to professional courses like CA, CS and CMA. The courses are designed in a way to make the students capable of pursuing their career in manifold directions including teaching and research. Besides, faculty members exclusively meant for Department of Commerce, assistance in teaching is regularly received from the faculty members of Department of Business Administration, Department of English and Foreign languages, etc.

Academic Programmes and Student Intake

Programme	Intake
Integrated M.Com	30
M.Com (Lateral Entry)	Variable (06 in 2018-19)

Major Facilities and Equipment Available

- Interactive Pen Display
- Electronic Podium with Microphone and Speaker
- Student Response system

PUBLICATIONS

Journal Publications

- [1] Hussain F. & Saikia B. Rural Non- Farm Employment in North Eastern Region: The Changing Structure. Quest International Multidisciplinary Research Journal. 7 (2018)



Other Publications

Edited Book

- [1] Teron A., Saikia B. & Hussain F. Economic Empowerment of Women under the aegis of NERCORM Project for Upland Area in West Karbi Anglong District of Assam. Edification Vol. II, Issue I, 2018.

SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/Institute/Venue
D.J. Bharadwaz	Emerging Trends in Insurance- Role of Micro Insurance & Government Insurance Schemes in Providing Social Security	Department of Business Administration, Tezpur University in association with Guwahati Insurance Institute, Guwahati	1 st February, 2019	Tezpur University
D.J. Bharadwaz	Industry Academia Conclave	Centre for University-Industry Interface (CUII), Tezpur University	20 th January, 2019	Tezpur University
D.J. Bharadwaz	ToT on “Rural Livelihoods Incubation”	National Institute of Rural Development & Panchayati Raj, North Eastern Regional Centre, Ministry of Rural Development, Govt. of India	February 25 to March 1 2019	NIRD& PR-NERC, Guwahati
D.J. Bharadwaz	National Conference on Entrepreneurship, Innovation and Society (NCEIS), 2018	Centre for Global Management & Responsible Leadership (CGMRL), XLRI, Jamshedpur, India along with St. Anthony’s College, Shillong	13-15 December, 2018	St. Anthony’s College, Shillong
K. Das	Emerging Trends in Insurance – Role of Micro Insurance & Government Insurance Schemes in Providing Social Security	Department of Business Administration, Tezpur University	1 st February, 2019	Department of Business Administration, Tezpur University, Napaam
R. Saikia	Emerging Trends in Insurance – Role of Micro Insurance & Government Insurance Schemes in Providing Social Security	Department of Business Administration, Tezpur University	1 st February, 2019	Department of Business Administration, Tezpur University, Napaam



SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/Period, Year
One Day Workshop on Data Presentation and Report Writing	25 September 2018
An Entrepreneurship Evening with Entrepreneur	29 September 2018
Seminar on Corporate Governance and Companies Act, 2013	27 October 2018

DISTINGUISHED VISITORS TO THE DEPARTMENT

Mr. Amitava Banerjee, Consultant, National Foundation for Corporate Governance, New Delhi

Mr. Anjan Chowdury, Soft Skills Trainer, Guwahati

Dr. Gautam Dutta, Professor, Indian Institute of Foreign Trade, Kolkata.

Mr. Gunamoni Gogoi, Managing Director, Assam Cooperative Jute mills, Silghat.

Dr. Joydeep Baruah, Associate Professor, Omeo Kumar Das Institute of Social Change and Development, Guwahati

Mr. O P Bagaria, Industrialist, Tezpur

CA Purushottam Gaggar, ICAI

CA Rohit Agarwala, Chairman, Guwahati Branch of ERIC of ICAI, Guwahati

CA Swati Tejawat, ICAI

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

Industrial Visits

The Department organized Industrial visit to Assam Co-operative Jute Mills, Silghat on 30 March 2019 for the students of Integrated M Com 2nd Semester (batch-2018).

NUMBER OF STUDENTS QUALIFIED NET-JRF/GATE/SLET

NET: 4

THE FACULTY OF THE DEPARTMENT

❖ Professor

S.S. Sarkar

PhD (Tezpur)

Head i/c

Specialization/Areas of Interest: Accounting and Taxation

Email: subh@tezu.ernet.in



❖ Assistant Professors

Reshma Tiwari

PhD (Gauhati)

Specialization/Areas of Interest: Accounting, financial inclusion, microfinance

Email: reshma@tezu.ernet.in

Farah Hussain

PhD (Dibrugarh)

Specialization/Areas of Interest: Economics and Mathematical Economics

Email: farah@tezu.ernet.in

M. Kumar

M.Com (Delhi)

Specialization/Areas of Interest: Corporate Finance and Accounting

Email: manish@tezu.ernet.in

❖ Assistant Professors (on Contract)

D.J. Bharadwaz

M.Com (Dibrugarh)

Specialization/Areas of Interest: Accounting, Micro Finance and Risk Management

Email: bharadj@tezu.ernet.in

K. Das

PhD (Silchar, AU)

Areas of Interest: Accounting and Finance

Email: drkdas@tezu.ernet.in

Rajashree Saikia

M. Com (Guwahati, USTM)

Areas of Interest: Accounting and Finance

Email: rajashree@tezu.ernet.in

❖ Guest Faculty

CA R.K. Nahata

Specialization/Areas of Interest: Indirect Taxes

CA Rachita Saraf

Specialization/Areas of Interest: Banking, Taxation

A. Chowdhury

Specialization/Areas of Interest: Soft Skills Trainer and Career Counseling

J. Baruah

PhD (Dibrugarh)

Specialization/Areas of Interest: Regional Development, Poverty & Inequality, Quantitative Methods



❖ Office Staff

B. Das

MA (Gauhati)

Upper Division Clerk

Email: bhrigu@tezu.ernet.in

❖ Office Staff (on Contract)

N. Dutta

MTS

Email: nipend@tezu.ernet.in



School of Management Sciences

Centre for Disaster Management

THE CENTRE

The Centre for Disaster Management was established in 1997 under the Central Sector Scheme of NDM Division, Ministry of Agriculture and Cooperation, Government of India. The scheme has subsequently been transferred to the Ministry of Home Affairs, Government of India during 2002. At present, the Centre is functioning under Tezpur University. The main objectives of the Centre are to:

- Organise and conduct training programmes, conferences, and workshops on disaster management
- Extend academic support to other organisations
- Conduct regular/ optional courses and research work on Disaster Management

COURSES CONDUCTED

- CBCT/ open elective course on Disaster Management (DM 301) was conducted during 2018-19 for the PG students of Tezpur University.
- CBCT/ open elective course on Disaster Management (DM 101) was introduced during 2018-19 for the UG students of Tezpur University.
- The Centre has continued the courses DEM 104 and DEM 203 in the Post Graduate Diploma in Environment and Disaster Management under distance education programme of the University during 2018-19.

PUBLICATIONS

Journal Publication

- [1] Debnath R. & Nath D. Status of Tribal Women: A Case Study on Barman Women of Dhanipur Village, Cachar, Assam, *Intellection: A bi-annual interdisciplinary research journal*. 6(1) (2018)

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/Period, Year	Place/Institute/Venue
Dipak Nath	Induction Training of Faculty	21 Dec, 2018	Teaching Learning Centre, Tezpur University



THE FACULTY OF THE CENTRE

❖ Assistant Professor

D. Nath

PhD (Gauhati)

Head of the Centre

Specialization/Areas of Interest: Nuclear Physics & Cosmic Radiation/Disaster Risk Assessment

E-mail: dipak@tezu.ernet.in

❖ Office Staff

B. Das

B. Com (Gauhati)

UDC



School of Management Sciences

Intellectual Property Rights Cell

THE CELL

Tezpur University Intellectual Property Rights (TUIPR) Cell has completed its decadal journey of nourishing and protecting intellectual property this year. To celebrate its eventful journey since its inception in 2009, an array of programmes were organised under its flagship that encompassed annual IP events as well as some special programmes. Out of these, one of the significant events that brought top management professionals from industries, academicians, researchers & students of diverse fields together to discuss various dimensions of academia-industry partnership and exchange ideas, practice and experiences on different aspects of industry-academia integration was in the form of RITES-2018. This was a national symposium on “Role of Innovation and Technology for Sustainable Development: Integrating Transformation with Sustainability organised by the Cell on 26th April, 2018 to celebrate its decadal existence. Industries like Hindustan Unilever, IBM, Permacel Ltd., ONGC, etc. deliberated upon the latest innovations in their respective sectors and discussed on facilitating pro-industry research in the region. The programme included an Innovation exhibition of home-grown technologies. On the eve of World IP day, the annual IP Quiz and innovation competitions were organised that themed around “Powering change: Women in innovation and creativity”. In an attempt to make schoolchildren IP aware, a special workshop was organised on 1st October, 2018 on the theme IPR in fundamental years of learning. This was a maiden attempt in this region at school level to facilitate students, teachers and educators realize the importance of Intellectual Property Rights and to orient them towards an IP conscious ecosystem. The programme was organized in collaboration with CIPAM, a professional body under the aegis of Department of Industrial Policy and Promotion (DIPP), Govt. of India. As part of celebration of silver jubilee of Tezpur University and culmination of the special programmes commemorating 10 years of TUIPR Cell, a regional workshop was organised on “Translational Research and Innovation-.....making use of IPR across value chain” on 30th of Dec, 2018. This workshop cum training programme, jointly organised by TUIPR Cell with NRDC, was aimed at providing solutions to technological demands through deliberations from top technocrats belonging to various sectors like Oil India Ltd, Duliajan, M/s Medlis Healthcare Pvt Ltd., Ahmedabad, Bhogali Food Products Pvt. Ltd., Guwahati, Williamson Magor Group etc. and professionals from organisations like LS Davar and Co. (IP attorney), Indian Patent Office, Kolkata and NEIST Jorhat. The workshop, which was also the 2nd Industry-Academia Conclave after RITES-2018, included presentations from 14 university innovators which were showcased to the industry representative and IPR professionals for comments.



Like past years, the Cell has continued providing technical assistance to the innovations from Tezpur University. Choice based Credit Transfer (CBCT) courses on IPR were offered for only Ph.D. level students due to various constrains. This year, the TUIPR Cell received 6 invention disclosures from 4 departments. These were evaluated by the Cell in consultation with the inventors. Contextual prior art searches done by the Cell, in addition to those conducted by the researchers, were the basis for assessing novelty and inventive steps for the innovations. The applications were eventually filed in the Indian Patent Office after completion of the inhouse procedures.

The application “Single step process for the synthesis of polyaniline nanofiber reinforced polymer nano composites” by Prof. A. Kumar and Dr. S. Roy got grant of a patent on 06/06/2018 with patent number 297449.

ACADEMIC COURSES

- Intellectual Property Rights in Research and Beyond, CBCS in PhD level (4 credit)

IPRS FILED /GRANTED

Sl. No.	Application No/ Patent No.	Title of Invention
1	201931012050	A continuous jaggery making machine
2	201831038837	Toxins-targeted specific novel anti snake venom
3	201831045154	A bicycle saddle system adapted to exert backward reactive force in countering the forward slip of the rider during sudden braking
4	201831045155	System for enhancing stability of bicycle by steering-back handle bar automatically
5	297449	Single step process for the synthesis of polyaniline nanofiber reinforced polymer nano composites

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE CELL

- Colloquium for celebrating Intellectual Property Day, April 25-26, 2018.
- National symposium on “Role of Innovation and Technology for Sustainable Development: Integrating Transformation with Sustainability, 26th April, 2018.
- Workshop on IPR in fundamental years of learning, 1st April, 2018.
- Regional workshop on “Translational Research and Innovation-.....making use of IPR across value chain”, 30th of Dec, 2018.

TALKS DELIVERED BY FACULTY MEMBERS ABROAD AND IN INDIA

- Invited Talk on “Basics of IPR” and “IPR for young Entrepreneurs” in the IPR workshop organized at St. Mary’s College, Shillong on 7th March, 2019



- Invited Talk on “*Intellectual Property Rights*” at Lokanayak Omeo Kumar Das College, Dhekiajuli on 31st October, 2018 as part of the Outreach Activity to commemorate Silver Jubilee of Tezpur University.

DISTINGUISHED VISITORS TO THE CELL

- Dr. Amitava Pramanik, Director, Strategic Science Group, Hindustan Unilever Ltd, Bengaluru.
- Dr. Anant Aghase, VP, PRS- Permacel Pvt. Ltd. Mumbai.
- Shri B.P. Sarma, Resident Chief Executive, OIL, Duliajan.
- Ms. Divya Srinivasan, CIPAM, a professional body under the aegis of Department for promotion of industry and internal trade (DPIIT), Govt. Of India.
- Dr. H. Purushotham, CMD, National Research and Development Corporation, under the Dept. of Scientific & Industrial Research, Ministry of Science & Technology, Govt. Of India
- Shri. Harendra Singh, General Manager/Head INBIGS, ONGC.
- Shri. Sanjay Bhattacharya, Deputy Controller of Patents & Designs, Indian Patent Office, Kolkata.
- Shri. Sanjay Sikdar, Program Director, Cloud Platform services at IBM Software Lab, IBM India.

AWARDS & HONOURS/ NOTABLE RESEARCH ACHIEVEMENTS OF FACULTY/ RESEARCH

Prof. P. Deb, Coordinator, TUIPR Cell and Professor at the Dept. of Physics has been conferred with S. Ramachandran National BIO-Science Award for career development for 2017-18 by the Department of Biotechnology, Govt. of India. The award was presented to him in March 2019 in recognition to his research contributions in pioneering a new class of secondary magnetic nanosystems and development of smart nanoprobes for molecular imaging.

OTHER IMPORTANT ACTIVITIES OF THE CELL

In a landmark initiative for commercializing the home-grown technologies, TUIPR Cell facilitated signing of a Memorandum of Agreement of Tezpur University with National Research Development Corporation (NRDC), an enterprise of the Department of Scientific & Industrial Research, Ministry of Science & Technology, Govt. of India, to develop fruitful collaborations with suitable industry partners and commercialise promising technologies developed in the campus. This MOA was signed on 02.06.2018 in the University in presence of key functionaries. This initiative is believed to accelerate the process of rolling out of the home-grown technologies to the market, that will make these available to the society, beyond the university campus.

THE PERSONNEL OF THE CELL

❖ Coordinator

P. Deb

PhD (Jadavpur)

Professor, Department of Physics

Specialization/Areas of Interest: IPRs, Patents and Trade Secrets

E-mail: coordinator_tuipr@tezu.ernet.in

❖ Research Officer

Juri Borbora Saikia

PhD (Tezpur)

Specialization/Areas of Interest: IPRs, Patents, Industrial Design and GI

E-mail: juriipr@tezu.ernet.in

❖ Office Staff

M. Das

MTS

E-mail: mohen31@tezu.ernet.in





SCHOOL OF SCIENCES

- ❖ **Dean, School of Sciences**
- ❖ **Department of Chemical Sciences**
- ❖ **Department of Environmental Science**
- ❖ **Department of Mathematical Sciences**
- ❖ **Department of Molecular Biology and Biotechnology**
- ❖ **Department of Physics**
- ❖ **Advanced Institutional Level Biotech Hub**



School of Sciences

The School of Sciences consists of five departments, viz., Department of Chemical Sciences, Department of Environmental Science, Department of Mathematical Sciences, Department of Molecular Biology and Biotechnology and Department of Physics. These five departments of the school offer 12 different M. Sc., Integrated M. Sc. and Integrated B. Sc. B. Ed. Programmes, in addition to their individual discipline specific Ph. D. programmes. Four departments namely department of Chemical Sciences, Mathematical Sciences, Molecular Biology and Biotechnology and Physics offer Integrated M. Sc. programmes with an intake of 20 students each. The departments of Chemical Sciences, Mathematical Sciences and Physics also offer integrated B. Sc. B. Ed. Programmes with an intake of 10 students each. The departments of the School also support the required teaching and laboratory courses of the B. Tech. programmes in seven disciplines offered by the School of Engineering. The total intake of students in all 12 non-Ph. D. programmes running in the School is 471.

There are 78 members of faculty that include 27 Professors, 11 Associate Professors and 40 Assistant Professors working in the five departments of the School of Sciences. In addition, Prof. M. Lakshmi Kantam, Professor at ICT, Mumbai is an Adjunct Professor in the Department of Chemical Sciences.

The members of the faculty of the School are engaged in cutting-edge research in their respective areas. They have made several significant contributions in academic and research activities during 2018-2019. From the Department of Physics, Prof. Ashok Kumar has been awarded the Fellow of the Royal Society of Chemistry (FRSC) in 2019. Dr. P. Nath from the same department has been selected by INSA to visit the University of Hebrew, Jerusalem during July 2019. From the Department of MBBT, Dr. N. D. Namsa received the Biotechnology Overseas fellowship Award by DBT. From the Department of Environmental Science, Prof. K. P. Sarma has been selected as an Expert Member of the “National Mission on Himalayan Studies”.

The members of faculty of the School secured projects funded from agencies like DST, DBT, Deity, DRDO, BRNS, SERB, CSIR and UGC. All five departments in the School are DST-FIST and UGC-SAP supported. The faculty members of these five departments of the School have published 275 research papers in peer-reviewed international and national journals during 2018-2019. Two patents have been granted to Prof. R. K. Dutta of the Department of Chemical Sciences for his work on a highly efficient removal of fluoride and arsenic from drinking water.

Alumni of the school are well placed in various academic institutions and industries in India. This year from the School of Sciences many students qualified NET, GATE and SLET.

The departments under the school regularly organize conferences/workshops and outreach programmes.

THE PERSONNEL OF THE OFFICE OF THE DEAN

❖ Dean, School of Sciences

R.C. Deka, PhD (NCL, Pune)

Professor, Dept of Chemical Sciences

E-mail: ramesh@tezu.ernet.in



School of Sciences

Department of Chemical Sciences

THE DEPARTMENT

The Department of Chemical Sciences came into existence in the year 1997 with the prime objective of providing a pool of quality manpower in different areas of Chemical Sciences keeping in mind the requirement of Industry and Academia. At the very beginning, the Department started functioning by offering MSc program in Polymer Science. The Department started offering Integrated MSc in Chemistry program in 2009, and MSc in Chemistry in 2012. With rise in demand, since autumn 2011, the Department has been offering MTech in Polymer Science & Technology and Integrated BSc BEd in Chemistry. The Department has also been running a PhD program covering several important frontier areas of research in Chemical Sciences and interdisciplinary Sciences. There are several post-doctoral fellows working in various fields. The Department has eighteen well-experienced (both in academia and industry) and highly qualified faculty members including one inspire faculty, who are actively engaged in research in various fields of Chemical Sciences. The programs in the department are well-established and infrastructural facilities exist for studies and research. During these glorious two decades, faculty members of the Department have published quality research papers in international and national journals of repute. Many major projects (including international collaborations) were executed successfully and many are undergoing. Two patents were granted to the faculty members of this department. The alumni of the Department are well placed in different industries, R&D organizations and other prestigious institutes in India and abroad. DST-FIST and UGC-SAP provide financial assistance to the Department.

Academic Programmes and Student Intake

Academic Programmes	Student Intake
MSc in Chemistry	20
Integrated MSc in Chemistry	20
MTech in Polymer Science and Technology	10
Integrated BSc BEd	10
PhD	Variable (21 in 2018-19)

Major Facilities and Equipment Available

- 400 MHz NMR spectrophotometer, Jeol
- GCMS, PerkinElmer
- Thermal Analyzer, Shimadzu, (FIST Funded)



- CHN Analyzer, Perkin Elmer (FIST Funded)
- FTIR spectrophotometer, Model: Nicolet Impact I-410
- FTIR spectrophotometer, PerkinElmer
- Automated Compression Press, S5 Type, Santac
- Polarizing Microscope, Olympus,
- UV-Visible Spectrophotometer, Shimadzu,
- Universal Testing Machine, 10 KN Zwick
- Rheometer, Bohlin Instruments
- Microwave reactor
- High performance computational facilities
- Digital Polarimeter
- Millipore Water Purification System
- Table Top Magnetometer
- Single Screw Laboratory Extruder
- Cyclic Voltmeter
- Cyclic Voltmeter with Rotating Disk Electrode

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
A.J. Thakur	<ul style="list-style-type: none"> ● A novel route involving the three-component reaction between alkyl- or arylamines, β-ketoesters and 5-benzylidene-1,3-dialkylpyrimidine-2,4,6(1H,3H,5H)-trione towards the synthesis of Pyrido[2,3-d]pyrimidine-6-carboxylates and Quinazoline-6-carboxylate in refluxing ethanol has been developed. The reaction is catalyzed by Ce(IV) ammonium nitrate. ● N-arylation of hydantoins using hypervalent iodine compounds has been accomplished. ● Gold nanoparticles were synthesized using 20% of water extract of dried fruit of <i>Garcinia cowa</i> and the catalytic application of the synthesized Au NPs were studied in the synthesis of bis(indolyl)methanes from indole and aldehyde derivatives.
A.K. Phukan	<ul style="list-style-type: none"> ● Unraveling of the potential of hitherto unexplored singlet carbenes towards metal-free activation of enthalpically strong bonds. ● Computational design of a N-heterocyclic borylene. ● Computational design of a series of stable singlet metalla-N-heterocyclic carbenes (MNHCs). ● Computational investigation of catalytic production of dihydrogen from carbene decorated [FeFe]-Hydrogenase model complexes.



Principal Investigator	Salient Research Findings
K.K. Bania	<ul style="list-style-type: none">● Gold vanadate as effective catalyst for water splitting reaction● Pd-Au-based catalyst for C-Cl bond and benzylic C-H bond activation.
N. Karak	<ul style="list-style-type: none">● Development of interpenetrating polymer network based nanocomposites containing octadecylamine capped Cu/RGO nanohybrid with good antimicrobial, self-cleaning and antistatic behavior.● Development of robust hyperbranched polyester and clay@carbon dot as a robust photocatalyst for environmental remediation.● Development of hyperbranched polyurethane/reduced carbon dot-zinc oxide nanocomposite for solar light-assisted photocatalytic degradation of organic contaminant.
P. Bharali	<ul style="list-style-type: none">● Various Pd-based bimetallic and trimetallic nanoparticles on carbon support have been synthesized and employed as electrocatalysts toward oxygen reduction and formic acid oxidation reactions. Among several electrocatalysts, Pd₃Cu_{0.5}Fe_{0.5}/C nanoparticles show superior oxygen reduction activity in comparison to Pd/C and benchmark Pt/C.● In another work, presence of rich metal-oxide interface has been found to play key role in enhancing oxygen reduction activity (e.g. Cu/CuFe₂O₄/C) comparable to precious metal electrocatalysts.● Pd-based bimetallic nanoparticles on carbon with or without CeO₂ are very active towards electrochemical formic acid oxidation as well as CO₂ reduction. This work is being carried out under ongoing DST-RFBR (Indo-Russian) project.
P. Puzari	<ul style="list-style-type: none">● A new hybrid bilayer of 11 –Mercatoundecanoic acid and chitosan has been developed as a platform for studying biomolecular interaction. Using the platform, interaction of ionic liquid with lipid bilayer was studied by using electrochemical method.● Kinetics of inhibition of AChE by organophosphate pesticides and reactivation of the same by the cholinesterase reactivators was studied using the hybrid bilayer of SAM –chitosan. Found that asoxime is better reactivator than 2-PAM for chlopyrephos pesticide.● A novel method for preparation of carbonate rich black board chalk from egg shell has been developed.
R. Borah	<ul style="list-style-type: none">● Two series of hybrid material of [Dsim]₂[ZnCl₄] and [Dsim]₂[NiCl₄] on HZSM-5 zeolite were synthesized as solid acidic materials after immobilization of the ionic salts in various percentages where the modification of zeolite framework occurred by dealumination, realumination and desilication processes.● Physicochemical and electrochemical properties of 2-alkyl,1-3-disulfoimidazolium ionic liquids were explored.
R.C. Deka	<ul style="list-style-type: none">● Finding the mechanism of hydride pinning pathway in the hydrogenation of CO₂ to Formic acid on dimeric Tin Dioxide.● Effect of single metal dopant (Rh, Ru and Sn) on P_{tn}⁺ (n= 3 and 4) clusters for controlled CO tolerance.● Computational studies of anti-cancer drug mediated by graphene and reaction mechanism of drug generated alkyl radical with guanine.



Principal Investigator	Salient Research Findings
	<ul style="list-style-type: none"> • QM/MM investigation for CO oxidation on metal exchanged zeolites using Chemshell code. • Atmospheric impact of Z-and E-isomers of CF₃CHCHC₂F₅ molecule initiated by OH radicals: Reaction mechanisms, kinetics and global warming potential. • Investigation about Dr. Radhikaram Dhekial Phukan being the first Ph.D in Chemistry from Assam. • Computational studies of sugar modified bridged nucleic acids monomers and oligonucleotides.
S.K. Dolui	<ul style="list-style-type: none"> • Development of bio-based nano -isocyanate Polyurethane. • Fabrication of polymer nanocomposite. • Synthesis of self-healing polymers through extrinsic method such as microencapsulation and intrinsic methods such as Diels-Alder and metal-ligand crosslinking. • Synthesis of multifunctional initiators for synthesis of various graft, star as well as polymer composites by ATRP. • To determine self-healing efficiency of the self-healing systems. • Development of carbon-based nanomaterials (carbon nanotubes, carbon black, graphene, carbon dots) and its application in sensor, dye sensitized solar cell, supercapacitor and catalyst. • Stimuli -Sensitive polymeric hydrogels based on different monomers have been prepared. The same were characterised and studied in different application purpose.
S.K. Das	<ul style="list-style-type: none"> • Synthesis of 11-aryl-11H-indeno [1', 2': 4, 5] imidazo [1, 2-a] pyridines via dehydrative cyclization of aryl (2-arylimidazo [1, 2-a] pyridin-3-yl) methanols • Selective detection of fluoride via amplified donor-acceptor interaction of 6H-indolo [2, 3-b] quinolone • Boron trifluoride-etherate in fluorinated alcohols: A powerful promoter system for intramolecular alkyne-aldehyde metathesis of o-(3-arylpropargyloxy) benzaldehydes
U. Bora	<ul style="list-style-type: none"> • Development of Agro-Waste Extract Based Solvents for organic reactions.

Research Projects, Ongoing and New

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Application and Development of "NOSE" approach with special reference to Carbon-Carbon and Carbon-Heteroatom bond formation reactions	CSIR	20.00 Lakhs	2017- 2020	A.J. Thakur
Homocoupling, Heterocoupling and Liberation of Borylene Ligands	DST	10.15 Lakhs	2016-2018	A. K. Phukan
Chemistry of Monovalent Group 13 and Divalent Group 14 Bases: A Theoretical Study	DST	43.77 Lakhs	2017-2020	
Computational Design of Functional and Structural Mimics of the Active Site of [FeFe]-Hydrogenase	CSIR	5.40 Lakhs	2017-2020	



Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Control Polymorph Nucleation of Drugs on Functionalized Surfaces	SERB	26.26 Lakhs	2015-2018	B. Sarma
Metal Complexes of New Chiral Schiff Bases: Design, Structure Elucidation, Reactivity and Synthetic Applications	SERB	35.04 Lakhs	2016-2019	
Multi-component crystal technology to improve drug pharmacokinetic attributes	CSIR	28.25 Lakhs	2017-2020	
Development of polymer supported Nb and Ta based catalysts for organic oxidation under ecologically sustainable reaction condition	SERB	45.17 Lakhs	2017-2020	Nashreen S. Islam
Development of Chiral Single Molecule Magnets	SERB	24.90 Lakhs	2016-2019	N. Gogoi
Investigation on structure-property relationship for self-healing smart hyperbranched polyurethane nanocomposites with antistatic and antimicrobial attributes	SERB	29.93 Lakhs	2017-2020	N. Karak
Development of waterborne hyperbranched polyester and polyurethane from bio based resources and their nanocomposites	CSIR	24.00 Lakhs	2018-2020	
Development of hybrid catalysts for oxygen reduction reaction	SERB	29.49 Lakhs	2015- 2018	P. Bharali
Directed functionalization of oxide and carbon nanomaterials for the development of efficient catalysts for carbon dioxide conversion into value-added products.	DST (DST-RFBR)	24.00 Lakhs	2017-2019	
Directed functionalization of oxide and carbon nanomaterials for the development of efficient catalysts for carbon dioxide conversion into value-added products	DST-RFBR (Indo-Russian)	21.844 Lakhs	2019-2021	
Electrochemical study of enzyme embedded supported bilayer lipid membrane for development of a sensor for organophosphate and organocarbamate pesticides	SERB	64.97 Lakhs	2017- 2020	P. Puzari
Theoretical investigation of methane oxidation catalyzed by metal nanoclusters supported on zeolites	SERB	47.00 Lakhs	2017-2020	R.C. Deka
Theoretical investigation of methane oxidation catalyzed by metal nanoclusters supported on zeolites	DBT	61.95 Lakhs	2017-2020	
Continuous Flow reaction-An Attempt to Miniaturization of some pharmaceutical processes	SERB	47.40 Lakhs	2017-2020	
Synthesis and characterization of task-specific ionic liquid systems for one pot synthesis of pyrimidine derivatives	CSIR	20.00 Lakhs	2017-2020	Ruli Borah
Synthesis, characterization and investigation of physicochemical properties of specific ionic liquid (IL) based systems for evaluation of electrochemical and photocatalytic activities	SERB	44.35 Lakhs	2017-2020	
Functional Graphene based nanocomposites and their Catalytic Application	CSIR	20.00 Lakhs	2017-2020	S. K. Dolui



Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Design, syntheses and anion binding studies of pyrrole based cyclic pseudopeptides	SERB	27.36 Lakhs	2015-2018	S. P. Mahanta
Green nanocomposite from fully renewable biopolymers: Vegetable oil reinforced with rosin acid and Keratin	SERB	23.42 Lakhs	2016-2019	T. K. Maji
Site specific Functionalization of Nitrogen Based heterocyclic moieties via C-H activation	SERB	48.70 Lakhs	2017-2020	U. Bora

PUBLICATIONS

Journal Publications

- [1] Baishya P. & Maji T. K. A comparative study on the properties of graphene oxide and activated carbon based sustainable wood starch composites. *International Journal of Biological Macromolecules*. 115, 970-977 (2018)
- [2] Baishya P., Saikia D., Mandal M. & Maji T.K. Biodegradability, flammability, dimensional stability, and UV resistance study of green wood starch gluten nanocomposites, *Polymer Composites.*, 2019, 40, 46-55. (2019)
- [3] Baruah S.D., Sarma P. J., Gour N.K. & Deka R.C. Effect of single metal dopant (Rh, Ru and Sn) on Pt-n(+) (n=3 and 4) clusters for controlled CO tolerance. *Chemical Physics Letters*. 717, 82-86 (2019)
- [4] Bayan R. & Karak N. Bio-derived aliphatic hyperbranched polyurethane nanocomposites with inherent self healing tendency and surface hydrophobicity: Towards creating high performance smart materials. *Composites Part A-Applied Science And Manufacturing*. 110, 142-153 (2018)
- [5] Bayan R. & Karak N. Hyperbranched Polyurethane-Supported Pd-Ag@CQD Nanocomposite: A High Performing Heterogeneous Catalyst. *Chemistryselect*. 3, 11210-11218 (2018)
- [6] Bayan R. & Karak N. Photoluminescent oxygenous-graphitic carbon nitride nanodots incorporated bio-derived hyperbranched polyurethane nanocomposite with anti-counterfeiting attribute. *ACS Omega*. 4, 9219-9227 (2019)
- [7] Begum S. S., Gour N.K., Baruah S.D. & Deka R.C. Kinetics and mechanism of 3-chloro-2-methyl-1-propene(3-ClMP) initiated by OH radical: an insight from DFT calculations([1]). *Molecular Physics*. 117, 280-288 (2019)
- [8] Begum S.S., Deka R.C. & Gour N.K. Theoretical prediction of the mechanistic pathways and kinetics of methylcyclohexane initiated by OH radicals. *Molecular Physics*. 116, 1589-1597 (2018)
- [9] Bharadwaz P. & Phukan A.K. Introducing N-Heterocyclic Borylenes: Theoretical Prediction of Stable, Neutral, Monomeric Boron(I) Carbenoids. *Inorganic Chemistry*. 58, 5428-5432 (2019)
- [10] Bharadwaz P., Dewhurst R.D. & Phukan A.K. Metal-Free Activation of Enthalpically Strong Bonds: Unraveling the Potential of Hitherto Unexplored Singlet Carbenes. *Advanced Synthesis & Catalysis*. 360, 4543-4561 (2018)
- [11] Bora A., Mohan K., Doley S., Goswami P. & Dolui S.K. Broadening the sunlight response region with carbon dot sensitized TiO₂ as a support for a Pt catalyst in the methanol oxidation reaction. *Catalysis Science & Technology*. 8, 4180-4192 (2018)
- [12] Borah B.J., Mahanta A., Mondal M., Gogoi H., Yamada Y. & Bharali, P. Cobalt-Copper Nanoparticles Catalyzed Selective Oxidation Reactions: Efficient Catalysis at Room Temperature. *Chemistryselect*. 3, 9826-9832 (2018)
- [13] Borah M.J., Devi A., Borah R. & Deka D. Synthesis and application of Co doped ZnO as heterogeneous nanocatalyst for biodiesel production from non-edible oil. *Renewable Energy*. 133, 512-519 (2019)
- [14] Borah R., Ingavle G.C., Sandeman S.R., Kumar A. & Mikhalovsky S.V. Amine-Functionalized Electrically Conductive Core-Sheath MEH-PPV:PCL Electrospun Nanofibers for Enhanced Cell-Biomaterial Interactions. *ACS Biomaterials Science & Engineering*. 4, 3327-3346 (2018)
- [15] Borthakur B. & Phukan A.K. Can Carbene Decorated [FeFe]-Hydrogenase Model Complexes Catalytically Produce Dihydrogen? An Insight from Theory. *Dalton Transactions*. 48, 11298-11307 (2019)
- [16] Borthakur B. & Phukan A.K. Structure and Reactivity of Carbenes and Ylide Stabilized Carbenes: Contributions from Theory Modern Ylide Chemistry: Applications In Ligand Design. *Organic And Catalytic Transformations*. 177, 1-24 (2018)
- [17] Borthakur B., Das S. & Phukan A.K. Strategies toward realization of unsupported transition metal-boron donor-acceptor complexes: an insight from theory. *Chemical Communications*. 54, 4975-4978 (2018)



- [18] Borthakur B., Vargas A. & Phukan A.K. A Computational Study of Carbene Ligand Stabilization of Biomimetic Models of the Rotated H-red State of [FeFe]-Hydrogenase. *European Journal of Inorganic Chemistry*. 2295-2303 (2019)
- [19] Boruah K. & Borah R. Design of Water Stable 1,3-Dialkyl-2-Methyl Imidazolium Basic Ionic Liquids as Reusable Homogeneous Catalysts for Aza-Michael Reaction in Neat Condition. *Chemistryselect*. 4, 3479-3485 (2019)
- [20] Chandra S. & Karak N. Environmentally Friendly Polyurethane Dispersion Derived from Dimer Acid and Citric Acid. *ACS Sustainable Chemistry & Engineering*. 6, 16412-16423 (2018)
- [21] Das A.J., Devi R. & Das S.K. Boron trifluoride-etherate in fluorinated alcohols: A powerful promoter system for intramolecular alkyne-aldehyde metathesis of o-(3-arylpropargyloxy)benzaldehydes. *Tetrahedron Letters*. 59, 4263-4266 (2018)
- [22] Das B., Sharma M., Kashyap C., Guha A.K., Hazarika A. & Bania K.K., Substrate Oxidation Prompted by Solvent Dissociation: The Role of Peroxo-Vanadate and Ag- π Interaction. *Applied Catalysis A-General*. 568, 191-201 (2018)
- [23] Das P., Ojah N., Kandimalla R., Mohan K., Gogoi D., Dolui S.K. & Choudhury A.J. Surface modification of electrospun PVA/chitosan nanofibers by dielectric barrier discharge plasma at atmospheric pressure and studies of their mechanical properties and biocompatibility. *International Journal of Biological Macromolecules*. 114, 1026-1032 (2018)
- [24] Das R., Sarma P.J., Borborah A., Bharati S.P. & Mahanta S.P. *New Journal of Chemistry*. 43, 3447-3453 (2019)
- [25] Deka P., Borah B.J., Saikia H. & Bharali P. Cu-Based Nanoparticles as Emerging Environmental Catalysts. *Chemical Record*. 19, 462-473 (2019)
- [26] Devi R. & Das S.K. Combining spiro-fused cyclohexadienone - tetrahydrofuran ring system with glycine: Asymmetric synthesis of a new class of alpha-amino acid derivatives. *Tetrahedron Letters*. 59, 2281-2283 (2018)
- [27] Devi R., Begum P., Bharali P. & Deka R.C. Comparative Study of Potassium Salt-Loaded MgAl Hydrotalcites for the Knoevenagel Condensation Reaction. *ACS Omega*. 3, 7086-7095 (2018)
- [28] Devi R., Das J., Sarma B. & Das S.K. Phenolate-induced intramolecular ring-opening cyclization of N-tosylaziridines: access to functionalized benzoxacycles. *Organic & Biomolecular Chemistry*. 16, 5846-5858 (2018)
- [29] Dewan A., Sarmah M., Thakur A.J., Bharali P. & Bora U. Greener Biogenic Approach for the Synthesis of Palladium Nanoparticles Using Papaya Peel: An Eco-Friendly Catalyst for C-C Coupling Reaction. *ACS Omega*. 3, 5327-5335 (2018)
- [30] Doley S. & Dolui S.K. Solvent and catalyst-free synthesis of sunflower oil based polyurethane through non-isocyanate route and its coatings properties. *European Polymer Journal*. 102, 161-168 (2018)
- [31] Doley S., Sarmah A., Sarkar C. & Dolui S.K. In situ development of bio-based polyurethane-blend-epoxy hybrid materials and their nanocomposites with modified graphene oxide via non-isocyanate route. *Polymer International*. 67, 1062-1069 (2018)
- [32] Duarah G., Kaishap P.P., Sarma B. & Gogoi S. Ruthenium(II)-Catalyzed Dearomatized C-H Activation and Annulation Reaction of Vinylnaphthols with Alkynes: Access to Spiro-Pentacyclic Naphthalenones. *Chemistry-A European Journal*. 24, 10196-10200 (2018)
- [33] Duarah R. & Karak N. Hyperbranched polyurethane/reduced carbon dot-zinc oxide nanocomposite-mediated solar-assisted photocatalytic degradation of organic contaminant: An approach towards environmental remediation. *Chemical Engineering Journal*. 370, 716-728 (2019)
- [34] Dutta A.K., Gogoi P. & Borah R. Diethyl disulfoammonium chlorometallates as heterogeneous Brønsted-Lewis acidic catalysts for one-pot synthesis of 14-aryl-7-(N-phenyl)-14H-dibenzo [a, j] acridines. *App. Organometallic Chem*. 32, 3900, 2018 (2018)
- [35] Dutta G. & Karak N. Environmentally benign bio-based waterborne polyesters: Synthesis, thermal- and biodegradation studies. *Progress in Organic Coatings*. 127, 419-428 (2019)
- [36] Dutta G. & Karak N. Waste brewed tea leaves derived cellulose nanofiber reinforced fully bio-based waterborne polyester nanocomposite as an environmentally benign material. *RSC Advances*. 9, 20829-20840 (2019)
- [37] Dutta G.K. & Karak N. One-Pot Synthesis of Bio-Based Waterborne Polyester as UV-Resistant Biodegradable Sustainable Material with Controlled Release Attributes. *ACS Omega*. 3, 16812-16822 (2018)
- [38] Ghosh T. & Karak N. Interpenetrating polymer network-based nanocomposites reinforced with octadecylamine capped Cu/reduced graphene oxide nanohybrid with hydrophobic, antimicrobial and antistatic attributes. *Materials Science and Engineering: C*. 105, 110055 (2019)
- [39] Ghosh T. & Karak N. Multi-walled carbon nanotubes reinforced interpenetrating polymer network with ultrafast self-healing and anti-icing attributes. *Journal Of Colloid And Interface Science*. 540, 247-257 (2019)



- [40] Ghosh T. & Karak N. Silicone-Containing Biodegradable Smart Elastomeric Thermoplastic Hyperbranched Polyurethane. *ACS Omega*. 3, 6849-6859 (2018)
- [41] Ghosh T. & Karak N. Tough interpenetrating polymer network of silicone containing polyurethane and polystyrene with self-healing, shape memory and self-cleaning attributes. *RSC Advances*. 8, 17044-17055 (2018)
- [42] Gogoi B., Barua, S., Sarmah J.K. & Karak N. In situ synthesis of a microbial fouling resistant, nanofibrillar cellulose-hyperbranched epoxy composite for advanced coating applications. *Progress In Organic Coatings*. 124, 224-231 (2018)
- [43] Gogoi N., Bora U. & Gogoi P.K. Ru (III) Schiff base Complex Anchored onto Rice Husk Derived Nanosilica Support: An Efficient Heterogeneous Catalyst for Oxidation of Alcohols. *Letters In Organic Chemistry*. 15, 559-568 (2018)
- [44] Gogoi P. & Borah R. Investigation of PEG-6000 bridged -N-SO₃H functionalized germinal dicationic ionic liquids for catalytic conversion of fructose to 5-hydroxymethyl furfural. *J. Chem. Sci.* 130, 170. (2018)
- [45] Gogoi P., Boruah K. & Borah R. Synthesis of triethylamine bridged basic tricationic ionic liquids and evaluation of their catalytic efficiencies for preparation of arylidene or alkylidenemalononitriles. *Chemistry Select*. 3, 9476-9483 (2018)
- [46] Gogoi P., Boruah K. & Borah R. Synthesis of Triethylamine-Bridged Basic Tricationic Ionic Liquids and Evaluation of Their Catalytic Efficiencies for Preparation of Arylidene or Alkylidenemalononitrile. *Chemistryselect*. 3, 9476-9483 (2018)
- [47] Gogoi P., Das M.K., Ramteke A. & Maji T.K. Soy flour-ZnO nanoparticles for controlled release of silibinin: Effect of ZnO nanoparticle, surfactant, and cross-linker. *International Journal Of Polymeric Materials And Polymeric Biomaterials*. 67, 543-552 (2018)
- [48] Gogoi, D., Pal A., Chattopadhyay P., Paul S., Deka R.C. & Mukherjee A.K. First Report of Plant-Derived beta-Sitosterol with Antithrombotic, in Vivo Anticoagulant, and Thrombus-Preventing Activities in a Mouse Model. *Journal Of Natural Products*. 81, 2521-2530 (2018)
- [49] Gour N.K., Begum S.S. & Deka R.C. Computational study on night-time reaction of 1, 1-Dichlorodimethylether (DCDME) CH₃OCHCl₂ with NO₃ radical and the fortuity of alkoxy radical CH₃OC(O-center dot)Cl-2. *Chemical Physics Letters*. 701, 157-164 (2018)
- [50] Gour N.K., Rajkumari N.P., Deka R.C., Paul S. & Deka A. Atmospheric degradation pathways and kinetics of 2,2-difluoroethanol (CHF₂CH₂OH) with Cl atom: A theoretical investigation. *Chemical Physics Letters*. 716, 35-41 (2019)
- [51] Hazarika D. & Karak N. Bio-based waterborne tough hyperbranched polyester thermosets as environmentally benign polymeric materials. *Journal of Applied Polymer Science*. 135, 46738 (1-13) (2019)
- [52] Hazarika D. & Karak N. Nanocomposite of waterborne hyperbranched polyester and clay@carbon dot as a robust photocatalyst for environmental remediation. *Applied Surface Science*. 498, 143238 (2019)
- [53] Hazarika D., Saikia D., Gupta K., Mandal M.A & Karak N. Photoluminescence, Self cleaning and Photocatalytic Behavior of Waterborne Hyperbranched Polyester/Carbon dot@TiO₂ Nanocomposite. *Chemistryselect*. 3, 6126-6135 (2018)
- [54] Hazarika K.K., Goswami C., Saikia H., Borah B.J. & Bharali P. Cubic Mn₂O₃ nanoparticles on carbon as bifunctional electrocatalyst for oxygen reduction and oxygen evolution reactions. *Molecular Catalysis*. 451, 153-160 (2018)
- [55] Kaishap P.P., Duarah G., Sarma B., Chetia D. & Gogoi S. Ruthenium(II)-Catalyzed Synthesis of Spirobenzofuranones by a Decarbonylative Annulation Reaction. *Angewandte Chemie-International Edition*. 57, 456-460 (2018)
- [56] Khatioda R., Bora, P. & Sarma B. Trimorphic Ethenzamide Cocrystal: In Vitro Solubility and Membrane Efflux Studies. *Crystal Growth & Design*. 18, 4637-4645 (2018)
- [57] Khatioda R., Pathak D. & Sarma B. Cu(II) Complex onto a Pyridine-Based Porous Organic Polymer as a Heterogeneous Catalyst for Nitroarene Reduction. *Chemistryselect*. 3, 6309-6320 (2018)
- [58] Mandal M., Nath D. & Maji T.K. Wood polymer nanocomposites from functionalized soybean oil and nanoclay. *Wood Science And Technology*. 52, 1621-1643 (2018)
- [59] Matus E.V., Shlyakhtina A.S., Sukhova O.B., Ismagilov I.Z., Ushakov V.A., Yashnik S.A., Nikitin A.P., Bharali P., Kerzhentsev M.A. & Ismagilov Z.R. Effect of Preparation Methods on the Physicochemical and Functional Properties of Ni/CeO₂ Catalysts. *Kinetics And Catalysis*. 60, 221-230 (2019)
- [60] Mohan K., Bora, A. & Dolui S.K. Efficient Way of Enhancing the Efficiency of a Quasi-Solid-State Dye-Sensitized Solar Cell by Harvesting the Unused Higher Energy Visible Light Using Carbon Dots. *ACS Sustainable Chemistry & Engineering*. 6, 10914-10922 (2018)



- [61] Mondal M., Begum T. & Bharali P. Regioselective C-H and N-H functionalization of purine derivatives and analogues: a synthetic and mechanistic perspective. *Catalysis Science & Technology*. 8, 6029-6056 (2018)
- [62] Nath J. & Dolui S.K. Synthesis of carboxymethyl cellulose-g-poly(acrylic acid)/ LDH hydrogel for in vitro controlled release of vitamin B-12. *Applied Clay Science*. 155, 65-73 (2018)
- [63] Nath J., Chowdhury A. & Dolui S.K. Chitosan/graphene oxide-based multifunctional pH-responsive hydrogel with significant mechanical strength, self-healing property, and shape memory effect. *Advances In Polymer Technology*. 37, 3665-3679 (2018)
- [64] Nutz M., Borthakur B., Pranckevicius C., Dewhurst R.D., Schaefer M., Dellermann T., Glaab F., Thaler M., Phukan A.K. & Braunschweig H. Release of Isonitrile- and NHC-Stabilized Borylenes from Group VI Terminal Borylene Complexes. *Chemistry-A European Journal*. 24, 6843-6847 (2018)
- [65] Paul S., Deka R.C. & Gour N.K. Kinetics, mechanism, and global warming potentials of HFO-1234yf initiated by O-3 molecules and NO₃ radicals: insights from quantum study. *Environmental Science And Pollution Research*. 25, 26144-26156 (2018)
- [66] Paul S., Gour N.K. & Deka R.C. Quantum mechanical study on the oxidation of ethyl vinyl ketone initiated by an OH radical. *Environmental Science-Processes & Impacts*. 20, 1708-1715 (2018)
- [67] Pegu R., Pandit G., Guha A.K. & Das S.K. Pratihari, S. Selective detection of fluoride via amplified donor-acceptor interaction of 6H-indolo[2,3-b]quinolone. *Spectrochimica Acta Part A-Molecular And Biomolecular Spectroscopy*. 211, 246-253 (2019)
- [68] Rao PK, Deka R.C., Gour N.K. & Gejji S.P. Understanding the Atmospheric Oxidation of HFE-7500 (C₃F₇CF(OC₂H₅)CF(CF₃)(2)) Initiated by Cl Atom and NO₃ Radical from Theory. *Journal Of Physical Chemistry A*. 122, 6799-6808 (2018)
- [69] Rohman S.S., Ghosh B. & Phukan A.K. In Search of Stable Singlet Metalla-N-Heterocyclic Carbenes (MNHCS): A Contribution from Theory. *Dalton Transactions*. 48, 11772-11780 (2019)
- [70] Rohman S.S., Sarmah B., Borthakur B., Remya G.S., Suresh C.H. & Phukan A.K. Extending the Library of Boron Bases: A Contribution from Theory. *Organometallics*. 38, 2770-2781 (2019)
- [71] Saha U., Dutta D., Bauza A., Frontera A., Sarma B. & Bhattacharyya M.K. Werner type clathrates involving guest benzoic acid and benzoate in discrete Mn(II) hosts: Experimental and theoretical studies. *Polyhedron*. 159, 387-399 (2019)
- [72] Saikia A. & Karak N. Fabrication of renewable resource based hyperbranched epoxy nanocomposites with MWCNT/polyaniline nanofiber-carbon dot nanohybrid as tough anticorrosive materials. *eXPRESS Polymer Letters*. (2019)
- [73] Saikia A., Debbarma L. & Karak N. Renewable resource based hyperbranched epoxy thermosetting nanocomposite with cellulose nanofiber as a sustainable material. *Cellulose*. 26, 4743-4755 (2019)
- [74] Saikia A., Hazarika D. & Karak N. Tough and biodegradable thermosets derived by blending of renewable resource based hyperbranched epoxy and hyperbranched polyester. *Polymer Degradation And Stability*. 159, 15-22 (2019)
- [75] Saikia A., Sarmah D., Kumar A. & Karak N. Bio-based epoxy/polyaniline nanofiber-carbon dot nanocomposites as advanced anticorrosive materials, *Journal of Applied Polymer Science*. , 2019, 136, 47744 (1-11) (2019).
- [76] Saikia S., Puri K. & Borah R. Supported dual acidic 1,3-disulfoimidazolium chlorozincate@HZSM-5 as promising heterogeneous catalyst for synthesis of indole derivatives. *App. Organometallic Chem*. 33, 1-12 (2019)
- [77] Sarkar C., Nath J., Bhuyan S. & Dolui S.K. Multifunctional Ternary Nanocomposites of Ni/Polypyrrole/Reduced Graphene Oxide as Supercapacitor and Electrocatalyst in Methanol Oxidation. *Chemistryselect*. 4, 2529-2537 (2019)
- [78] Sarma P.J., Baruah S.D., Logsdail A. & Deka R.C. Hydride Pinning Pathway in the Hydrogenation of CO₂ to Formic Acid on Dimeric Tin Dioxide. *Chemphyschem*. 20, 680-686 (2019)
- [79] Sarmah K., Mukhopadhyay S., Maji T.K. & Pratihari S. Switchable Bifunctional Bistate Reusable ZnO-Cu for Selective Oxidation and Reduction Reaction, *ACS Catalysis*. , 2019, 9, 732-745. (2019)
- [80] Sarmah M., Neog A.B., Boruah P.K., Das M.R., Bharali P. & Bora U. Effect of Substrates on Catalytic Activity of Biogenic Palladium Nanoparticles in C-C Cross-Coupling Reactions. *ACS Omega*. 4, 3329-3340 (2019)
- [81] Sharma M., Das B., Hazarika A., Mangina N.S.V.M.R., Karunakar G.V. & Bania K.K. An indirect approach for encapsulation of chiral cobalt catalyst in microporous Zeolite-Y. *Microporous And Mesoporous Materials*. 272, 31-39 (2018)



Book Chapters

- [1] Borah B.J., Mondal M. & Bharali P. Palladium-based Hybrid Nanocatalysts: Application toward Reduction Reactions. In Noble Metal-Metal Oxide Hybrid Nanoparticles: Fundamentals and Applications. Elsevier Pub., Chap 27, pp. 565 – 583, 2019.
- [2] Goswami C., Chutia B. & Bharali P. Metal and Metal Oxide-Based Nanomaterials for Electrochemical Applications. In Emerging Nanostructured Materials for Energy and Environmental Science. Springer Pub., Chap 12, pp. 499-530, 2019.
- [3] Karak N. Fundamentals of Sustainable Nanostructural Materials at Bio-Nano Interface. In Dynamics of Advanced Sustainable Nanomaterials and Their Related Nanocomposites at the Bio-Nano Interface. Elsevier Pub., Chap 1, pp. 1-24, 2019.
- [4] Karak N. Silver Nanomaterials and Their Polymer Nanocomposites. In Nanomaterials and Polymer Nanocomposites. Elsevier Pub., Chap 2, pp. 47-89, 2019.
- [5] Karak N. Fundamentals of Nanomaterials and Polymer Nanocomposites. In Nanomaterials and Polymer Nanocomposites. Elsevier Pub., Chap 1, pp. 1-45, 2019.

Patents

- [1] Karak N. & Be B. A tough synthetic low dielectric hyperbranched epoxy thermoset and a process for preparing thereof, Indian Patent, Patent No. 312661 on 13/05/2019 (application No. 786/KOL/2013 of 28.06.2013).

SEMINARS/ CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/ Institute/ Venue
A.J. Thakur	“Lecture Series: Materials Science”	Department of Applied Sciences, Gauhati University	22 nd March, 2019	Gauhati University, GUIST building, Guwahati
B.C. Sarma	“Lecture Series: Materials Science”	Department of Applied Sciences, Gauhati University	22 nd March, 2019	Gauhati University, GUIST building, Guwahati
K.K. Bania	GSES-2019 National Conference on Green, Sustainable and Evolving Sciences	Cotton University	June 28-29, 2019	Cotton University, Guwahati
N. Karak	“ Invt. Lecture: Continue Education Programme & DRL-Tezpur”	DRL, Tezpur	April 01-03, 2019	DRL, Tezpur
	“ Invt. Lecture: Int. Conference & Mysore University”	Mysore University	March 18-20, 2019	Mysore University
	“ Invt. Lecture: Orientation lecture for Research Scholars of USTM”	USTM	February 09, 2019	USTM, Guwahati



Name of the Faculty Member	Title	Organized by	Date/Period, Year	Place/ Institute/ Venue
	“ Invt. Lecture: 6 th World Congress on nanomedicine (ISNSCON-2018)”	World Congress & Delhi University	January 8-10, 2019	Bigyan Bhavan, New Delhi
	“ Invt. Lecture: 106 th Indian Science Congress (ISC-2019)”	Indian Science Congress & LPU	January 3-6, 2019	Lovely Professional University, Jalandhar
	“ invt. Lecture: International Conference on Polymer Science and Technology (SPSI-MACRO 2018)”	IISER-Pune	December 18-20, 2018	IISER-Pune
P. Bharali	“Lecture Series: Materials Science”	Department of Applied Sciences, Gauhati University	22 nd March, 2019	Gauhati University, GUIST building, Guwahati

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/ Period, Year	Place/ Institute/ Venue
K.K. Bania	National Conference on Green, Sustainable and Evolving Sciences	June 28-29, 2019	Cotton University
P. Bharali	Lecture	March 22, 2019.	Institute of Science and Technology, Gauhati University
K.K. Bania	Lecture	March 22, 2019	Department of Applied Science, Gauhati University
B. Sarma	Lecture	March 22, 2019	Department of Applied Science, Gauhati University

SEMINAR/ WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/ Period, Year
Workshop on ‘Powder X-ray diffraction’ during under the UGC-SAP DRS-II scheme	14-15 th March 2019
Seminar on History of Chemistry with special reference to Dr. Radhikaram Dhekial Phookan	12 December 2018
OrganiX-2018, An International Conference in Chemistry	20-21 December, 2018



DISTINGUISHED VISITORS TO THE DEPARTMENT

Prof. B. C. Ranu; INSA Senior Scientist & J C Bose National Fellow, Department of Organic Chemistry, IACS, Kolkata.

Prof. D. S. Pandey; Department of Chemistry, Banaras Hindu University.

Dr. Diganta Bhusan Das, Associate Professor/Senior Lecturer, Chemical Engineering Department, Loughborough University, UK.

AWARDS & HONOURS RECEIVED BY THE FACULTY/ RESEARCH SCHOLARS/ STUDENTS

Dr. B. Sharma, selected as Editorial Board Member of Journal of Pharmaceutical Sciences of Wiley Online Library (<https://onlinelibrary.wiley.com>)

K Mudoj, a student of Int. MSc. Programme participated in 12th Asian Science Camp held at Indonesia during 3-9th August 2018.

N. Karak, selected as Associate Editor of Journal of Renewable Materials (IF:1.429) for the period of 2019-2020.

NUMBER OF STUDENTS WHO PASSED NET-JRF/ GATE

NET: 17

GATE: 24

SLET: 16

NOTABLE PLACEMENT

03 (Montex Glass Fibres Industries Ltd.)

02 (Berger Paints)

01 (Mahindra and Mahindra)

THE FACULTY OF THE DEPARTMENT

❖ Professors

S.K. Dolui

PhD (IIT, Kharagpur)

Specialization/Areas of interest: Polymer Chemistry

E-mail: dolui@tezu.ernet.in

Nashreen S. Islam

PhD (NEHU)

Specialization/Areas of interest: Inorganic Chemistry

E-mail: nsi@tezu.ernet.in

T.K. Maji

PhD (Calcutta)

Specialization/Areas of interest: Polymer Chemistry

E-mail: tkm@tezu.ernet.in



R.K. Dutta

PhD (NEHU)

Specialization/Areas of interest: Physical Chemistry

Email: robind@tezu.ernet.in

N. Karak

PhD (IIT, Kharagpur)

Specialization/Areas of interest: Advance Polymers and Nanomaterials

E-mail: nkarak@tezu.ernet.in

R.C. Deka

PhD (NCL, Pune)

Dean, School of Sciences

Specialization/Areas of interest: Theoretical Chemistry

E-mail: ramesh@tezu.ernet.in

A.J. Thakur

PhD (NEIST, Jorhat)

Head of the Department

Specialization/Areas of interest: Organic Chemistry

E-mail: ashim@tezu.ernet.in

A.K. Phukan

PhD (Hyderabad)

Specialization/Areas of interest: Inorganic Chemistry

E-mail: ashwini@tezu.ernet.in

Ruli Borah

PhD (NEIST, Jorhat)

Specialization/Areas of interest: Organic Chemistry

E-mail: ruli@tezu.ernet.in

❖ Assistant Professors

P. Puzari

PhD (IIT, Guwahati)

Specialization/Areas of interest: Physical Chemistry

E-mail: pancha@tezu.ernet.in

K.K. Bania

PhD (Tezpur)

Specialization/Areas of interest: Inorganic Chemistry

E-mail: kusum@tezu.ernet.in

P. Bharali

PhD (IICT, Hyderabad)

Specialization/Areas of interest: Inorganic Chemistry & Catalysis

E-mail: pankajb@tezu.ernet.in



N. Gogoi

PhD (IIT, Bombay)
Specialization/Areas of interest: Inorganic Chemistry
E-mail: ngogoi@tezu.ernet.in

B. Sarma

PhD (Hyderabad)
Specialization/Areas of interest: Organic Chemistry
E-mail: bcsarma@tezu.ernet.in

S.K. Das

PhD (CDRI, Lucknow)
Specialization/Areas of interest: Synthetic Organic Chemistry
E-mail: sajalkd@tezu.ernet.in

U. Bora

PhD (NEIST, Jorhat)
Specialization/Areas of interest: Organic Chemistry
E-mail: ubora@tezu.ernet.in

S.P. Mahanta

PhD (Hyderabad)
Specialization/Areas of interest: Physical Chemistry
E-mail: samahan@tezu.ernet.in

Dr. Sanjay Pratihar

INSA Young Scientist
Email: spratihar@tezu.ernet.in

❖ **Adjunct Professor**

M. Lakshmi Kantam

PhD (Kuruksheetra)
Specialization/Areas of interest: Inorganic
Email: mlakshmi@iict.res.in

❖ **Technical Staff**

B. Gohain

PhD (Tezpur)
Technical Officer
E-mail: bng@tezu.ernet.in

B.J. Borah

MSc (Dibrugarh)
Senior Technical Assistant
E-mail: biraj@tezu.ernet.in



R. Borah

MSc (Dibrugarh)
Technical Assistant
E-mail: raju@tezu.ernet.in

N. Dutta

MSc (Annamalai)
Technical Assistant
E-mail: nipu@tezu.ernet.in

S. Phukan

MSc (VMU)
Technical Assistant
E-mail: sankur@tezu.ernet.in

M. Sarma

MBA (SMU)
Laboratory Assistant
E-mail: mranjan@tezu.ernet.in

B. Ozah

MSc (IGNOU)
Laboratory Assistant
E-mail: bipozah@tezu.ernet.in

❖ **Office Staff**

Prohelika Hazarika

MSc (Geo) (GU)
UDC
E-mail: rimjhim@tezu.ernet.in





School of Sciences

Department of Environmental Science

THE DEPARTMENT

Initially established as a Centre for Environmental Science in 2003, the centre was converted to the Department of Environmental Science in 2004, with the objective of imparting education on regional and global environmental issues. The curriculum for the M. Sc. programme focuses on all important aspects of Environmental Science covering contemporary problems of natural resource conservation and environmental quality. Areas of research include Environmental Pollution, Greenhouse Gas Emission, Riverine Hazards, Geomorphology, Climate, Atmospheric Processes, Vulnerability & Adaption, Hydrogeochemistry, Vermicomposting, Pollution Remediation, Biodiversity Conservation and Atmospheric System Modeling.

Academic Programmes and Student Intake:

Programme	Intake
M. Sc .	30
Ph.D.	Variable (03 in 2018-19)

Major Facilities and Equipment Available

- Besides laboratories for regular academic activities the department has specialized laboratories that facilitate research. Some of the instruments the laboratories of the department house includes ICP-OES, Laser Leaf Area Meter with Root Measurement Attachment, Light Meter, Portable Photosynthesis Systems, Gas Chromatographs, Ion Chromatograph, TOC Analyzer, Continuous Air Pollution Monitoring Station, UV-Visible Spectrophotometer, Ion meter, Repairable dust sampler with gaseous sampling attachment, High Speed Refrigerated Centrifuge, Sartorius RO System, Sartorius Ultra-Pure Water Purification System, HOBO Pro V2 Tea/RH data logger, Flame Photometer, Electrophoresis gel unit and Fluorescence Microscope with Camera & Software. Department also have GIS laboratory facilitate with Arc GIS Master Lab Kit and ERDAS Software and plant culture house.

New Equipment

- Inductively Coupled Plasma Mass spectrophotometer (ICP-MS)
- Carbon Hydrogen Nitrogen and Sulphur Analyzer (CHNS)
- High-performance liquid chromatography (HPLC)
- Ion Chromatography (IC)



MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings
A. K. Das	<p>Channel changes in Ai-Manas river system during the last three decades are characterized by neck cut off and channel length reduction in downstream reaches and gradual widening in the upper reaches. Meandering shift and frequent alternation in direction are common too.</p> <p>In terms of floodplain alternation, deposition is dominant over erosion during last three decades.</p>
Ashalata Devi	<p>Sacred groves of Assam: Sacred groves of Assam are vulnerable to various anthropogenic and developmental activities though indigenous communities have strong approach of protection associated with their socio-cultural and religious practices. Out of the 282 recorded sacred groves of Assam, 59% of the sacred groves are highly threatened, 31.2% are moderately threatened and 9.5% are least threatened.</p> <p>Vegetation diversity and composition changes according to the altitude in the Talle valley wildlife sanctuary of Arunachal Pradesh. Rich faunal diversity and high diversity of Felidae species was recorded in the low altitudinal region of Pange area of the sanctuary. Avifauna of the sanctuary found to migrate to the lower altitude region during the winter season.</p> <p>Cattle's grazing and hunting activities are found to be main factor for threatening the wildlife of the sanctuary. Logging activities is not recorded inside the sanctuary.</p>
K. K. Baruah	<p>During a 3 year study on monsoon rice ecosystem, it is found that this ecosystem can act as an effective sink of carbon with an overall SOC accumulation rate of 0.566 Mg C ha⁻¹yr⁻¹.</p> <p>Bahadur and Dinanath were identified to have high photosynthetic efficiency and high partitioning efficiency out of 06 genotypes of irrigated boro rice studied, and these two varieties are also identified to be low methane emitting rice variety</p> <p>A modern wheat variety, WH-1021 with higher yield and higher photosynthetic efficiency was identified, out of 07 wheat varieties grown under irrigated condition and is considered to be suitable for cultivation in future climate change situation in Indian agriculture.</p>
K. P. Sarma	<p>Identified a wetland plant of Assam for remediation of Arsenic from aqueous solution.</p>
S. S. Bhattacharya	<p>Silver nanoparticles (AgNP) prepared through a new green synthetic route showed efficient soil conditioning abilities with minimal toxicity in plant-earthworms-microbe matrices (<i>Journal of Hazardous Materials, 2018; Geoderma, 2018</i>).</p> <p>Standardization of the vermicomposting technology could have been achieved for remediating toxic silk industry effluents and sludge (SPES). Also, reported the effectiveness of earthworm <i>Eudrilus eugeniae</i> in vermicomposting of SPES for the first time (<i>Bioresource Technology, 2018</i>).</p> <p>Carlinoside and Capsaicin are two medicinally active secondary metabolites found in <i>Cajanus cajan</i> (Arhar) and <i>Capsicum chinense</i> (Bhut jolokia) respectively. The crops were grown in two different soil types and the research findings suggested that the soil with higher C induced greater production of Carlinoside and Capsaicin in Arhar and Bhut jolokia respectively as compared to C fatigued soils (<i>Environmental Research, 2018; Scientia Horticulturae, 2016</i>).</p>

**Research Projects, Ongoing and New**

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
Exploration of Biodiversity and conservation issues of Talley Valley Wildlife sanctuary, Arunachal Pradesh with reference to wildlife species distribution along climate and topographical gradients	MoEF&CC, New Delhi	38.96 Lakhs	3 years	Ashalata Devi
Utilization Of Textile Industry Sludge Through Application Of Vermitechnology: An In-Sight On Metal Accumulation Potential Of Earthworm.	DST-SERB, New Delhi	54.8 Lakhs	3 years	S. S. Bhattacharya
Elucidating The Mechanism And Assessing Amelioration Potential Of Ocium And Lucas In Stress Induced Impaired Homeostasis On Growth And Reproduction In Zebrafish.	ICAR-NASF	46.57 Lakhs	3 years	S. S. Bhattacharya
Prospect of a novel protein in earthworm gut to minimize heavy metal risk in vermicompost for sustainable crop production	CSIR	26.96 Lakhs	3 years	S. S. Bhattacharya

PUBLICATIONS**Journal Publications**

- [1] Ahmed E., Szulejko J.E., Adelodun A.A., Bhattacharya S.S., Jeon B.H., Kumar S. & Kim K.H. Sorptive process and breakthrough behavior of odorous volatile compounds on inert surfaces. *Nature-Scientific Reports*. (2018)
- [2] Bharadwaj N., Barthakur S., Biswas A. D., Das M. K., Kour M., Ranteke A. & Gogoi N. Transcript expression profiling in two contrasting cultivars and molecular cloning of a SKP-1 like gene, a component of SCF-ubiquitin proteasome system from mungbean *Vigna radiata* L. *Scientific reports*. 9(1) (2019)
- [3] Bhuyan P., Deka P., Prakash A., Balachandran S. & Hoque R.R. Chemical characterization and source apportionment of aerosol over mid Brahmaputra Valley, India. *Environmental Pollution*. 234 (2018)
- [4] Borah M., Devi A. & Kumar A. Diet and feeding ecology of the western hoolock gibbon (*Hoolock hoolock*) in a tropical forest fragment of Northeast India. *Primates*. 59(1) (2018)
- [5] Bordoloi N., Baruah K.K. & Thakur A.J. Effectiveness of plant growth regulators on emission reduction of greenhouse gas (Nitrous oxide): An approach for cleaner environment. *Journal of Cleaner Production*. 171 (2018)
- [6] Das N., Das A., Sarma K.P. & Kumar M. Provenance, prevalence and health perspective of co-occurrences of arsenic, fluoride and uranium in the aquifers of the Brahmaputra River floodplain. *Chemosphere*. 194 (2018)
- [7] Das P., Barua S., Sarkar S., Chatterjee S.K., Mukherjee S., Goswami L., Das S., Bhattacharya S., Karak N. & Bhattacharya S.S. Mechanism of toxicity and transformation of silver nanoparticles: Inclusive assessment in earthworm-microbe-soil-plant system. *Geoderma*. 314 (2018)
- [8] Das P., Barua S., Sarkar S., Karak N., Bhattacharyya P., Raza N., Kim K.H. & Bhattacharya S.S. Plant extract-mediated green silver nanoparticles: Efficacy as soil conditioner and plant growth promoter. *Journal of hazardous materials*. 346 (2018)
- [9] Das S., Teja K.C., Mukherjee S., Seal S., Sah S., Duary R.K., Kim K.H. & Bhattacharya S.S. Impact of edaphic factors and nutrient management on the hepatoprotective efficiency of Carlinoside purified from pigeon pea leaves: An evaluation of UGT1A1 activity in hepatitis induced organelles. *Environmental Research*. 161 (2018)
- [10] Gopal P., Nadimpalli G., Saikia R., Sankari H., Ratnam R., Gogoi N., Garg A. & Katak R. Optimization of pyrolyzer design to produce maximum bio-oil from *Saccharum ravannae* L.: an integrated approach using experimental data and artificial intelligence. *Biomass Conv. Bioref.* (2019)



- [11] Goswami L., Mukhopadhyay R., Bhattacharya S.S., Das P. & Goswami R. Detoxification of chromium-rich tannery industry sludge by *Eudrillus eugeniae*: Insight on compost quality fortification and microbial enrichment. *Bioresource Technology*. 266 (2018)
- [12] Hazarika N., Barman D., Das A.K., Sarma A. K. & Borah S.B. Assessing and mapping flood hazard, vulnerability and risk in the Upper Brahmaputra River valley using stakeholders' knowledge and multicriteria evaluation (MCE). *Journal of flood Risk Management*. 11 (2018)
- [13] Hussain N., Das S., Goswami L., Das P., Sahariah B. & Bhattacharya S.S. Intensification of vermitechnology for kitchen vegetable waste and paddy straw employing earthworm consortium: Assessment of maturity time, microbial community structure, and economic benefit. *Journal of Cleaner Production*. 182 (2018)
- [14] Kalita S. & Bhola R.K. Antifeedant effect of some plant extracts on *Tribolium castaneum* (Herbst). *PARIPEX- Indian Journal of Research*. 7(3) (2018)
- [15] Khanikar L., Gogoi R.R. & Sarma K.P. Hydrogeochemical investigation and health perspective of Arsenic in the Mid-Brahmaputra Floodplain of Assam, India. In: *Emerging Issues in the Water Environment during Anthropocene: A South East Asian Perspective*. Capital Springer. (2018)
- [16] Mondal S.C., Sarma B., Farooq M., Nath D.J. & Gogoi N. Cadmium bioavailability in acidic soils under bean cultivation: Role of soil additives. *International Journal of Environmental Science and Technology* (In the Press). (2019)
- [17] Paul S., Das S., Raul P. & Bhattacharya S.S. Vermi-sanitization of toxic silk industry waste employing *Eisenia fetida* and *Eudrilus eugeniae*: Substrate compatibility, nutrient enrichment and metal accumulation dynamics. *Bioresource Technology*. 266 (2018)
- [18] Sah R.K. & Das A.K. Morphological Dynamics of the Rivers of Brahmaputra. *Journal of the Geological Society of India*. 92 (4) (2018)
- [19] Sarma B., Farooq M., Gogoi N., Katak R., Borkotoki B. & Garge A. Soil organic carbon dynamics in wheat green gram crop rotation amended with vermicompost and biochar in combination with inorganic fertilizers: A comparative study. *Journal of Cleaner Production*. 201 (2018)
- [20] Sarma D., Baruah K.K., Baruah R., Gogoi N., Bora A., Chakraborty S. & Karipot A. Carbon dioxide, water vapour and energy fluxes over a semi- evergreen forest in Assam, Northeast India. *Journal of Earth System Science*. 127(7) (2018)

THE FACULTY MEMBERS OF THE DEPARTMENT

❖ Professor

K.K. Baruah

PhD (PAU) (upto 31st July, 2018)

Specialization/Areas of Interest: Environmental Plant Physiology and Biochemistry

E-mail: kkbaruah@tezu.ernet.in

K.P. Sarma

PhD (NEHU)

Specialization/ Areas of Interest: Water & soil Pollution, Hydrogeochemistry, Remediation of Toxic substances

E-mail: sarmakp@tezu.ernet.in

R.R. Hoque

PhD (JNU)

Specialization/ Areas of Interest: Air pollution and Environmental Monitoring and Assessment

E-mail: rrh@tezu.ernet.in



A.K. Das

PhD (JNU)

Specialization/ *Areas of Interest*: Fluvial Geomorphology, Riverine hazards, Application of RS & GIS in hydro-geomorphology, Urban Climate

E-mail: apurba@tezu.ernet.in

❖ **Associate Professor**

Ashalata Devi

PhD (NEHU)

❖ **Head**

Specialization/ *Areas of Interest*: Forest Ecology, Wildlife and Biodiversity conservation

E-mail: kh_asha@tezu.ernet.in

❖ **Assistant Professor**

Nirmali Gogoi

PhD (Dibrugarh)

Specialization/ *Areas of Interest*: Stress Physiology & Biochemistry

E-Mail: nirmali@tezu.ernet.in

S.S. Bhattacharya

PhD (Visva Bharati)

Specialization/ *Areas of Interest*: Vermiculture, Plant Nutrition & Soil Fertility Management

E-mail: satya72@tezu.ernet.in

Sumi Handique

PhD (Tezpur University)

Specialization/ *Areas of Interest*: Geochemistry

E-mail: sumihan@tezu.ernet.in

A. Prakash

PhD (JNU)

Specialization/ *Areas of Interest*: Atmospheric Processes, Air and Noise pollution monitoring and modelling,

Environmental System modelling, Urban Climate.

E-mail: ap@tezu.ernet.in

Nayanmoni Gogoi

PhD (IIT Guwahati)

Specialization/ *Areas of Interest*: Ecosystem functions (hydrochemistry and geochemistry), wetland productivity, nanotechnology in environmental research, pollution indexing, geostatistics

E-mail: nayanmoni@tezu.ernet.in



Santa Kalita

PhD (Gauhati University)
Specialization/ *Areas of Interest*: Insect Biology
E-mail: santa@tezu.ernet.in

Pratibha Deka

PhD (Tezpur University)
Specialization/ *Areas of Interest*: Environmental pollution -air, water and soil;
Human-environment interactions
E-mail: pratibha@tezu.ernet.in

❖ **Technical staff**

P. Goswami

MCA (Dibrugarh University),
Senior Technical Assistant
E-mail: pranjol@tezu.ernet.in

J. Borah

MSc (Gauhati University)
Technical Assistant
E-mail: jborain@tezu.ernet.in

❖ **Office Staff**

J. Sarma

PhD (Tezpur University)
UDC
E-mail: jsarma@tezu.ernet.in

P.P. Basumatary

MTS



School of Sciences

Department of Mathematical Sciences

THE DEPARTMENT

Established in 1994, the Department of Mathematical Sciences is one of the first three departments of the University. So far 24 batches of students have successfully completed their M.Sc. in Mathematics, and 6 batches of students have successfully completed their Integrated M. Sc. in Mathematics from the department. Besides this, 50 scholars have done their Ph.D. in Mathematics from the department. The faculty of the department have published more than 200 research papers in national and international journals during the last five years.

Academic Programmes and Student Intake:

Programme	Intake
M.Sc. in Mathematics	42
Integrated M.Sc. in Mathematics	20
Integrated B.Sc. B.Ed. (Major in Mathematics)	10
Ph.D. in Mathematical Sciences	Variable (12 in 2018-19)

Major Facilities and Equipment Available

Computer lab equipped with 1 server, 22 PCs, other accessories and necessary software support for researchers and students. Department has 3 photocopiers and 1 Scanner for academic and administrative usages.

Research Projects, Ongoing and New

Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
On Algebraic Connectivity and Laplacian Spectral Radius of Graphs	DST-SERB	6,60,000 /-	3 years	Debajit Kalita
On pareto eigenvalue of distance matrix of connected graphs	DST-SERB	6,60,000 /-	3 years	Milan Nath
A study on exact generating functions and congruences for partition functions associated to Ramanujan's mock theta functions and other related functions	DST-SERB	6,60,000 /-	3 years	Nayandeep Deka Baruah



Project Title	Funding Agency	Amount (in INR)	Duration	Principal Investigator
A Study of controllability of Navier-Stokes Equations with Navier boundary conditions.	DST-SERB	6,60,000 /-	3 years	Rajib Haloi
A Study of of Navier-Stokes Equations with Navier boundary conditions.	NBHM	12,93,100 /-	3 years	Rajib Haloi
Development of dispersion, dissipation characteristics preserving finite difference schemes for fluid flow problems	DST-SERB	6,60,000 /-	3 years	Shuvam Sen

PUBLICATIONS

Journal Publications

- [1] Baruah N.D. & Begum N.M. Proofs of some conjectures of Chan on Appell-Lerch sums. The Ramanujan Journal. (In press) (2019)
- [2] Baruah N.D. & Kaur M. New congruences modulo 2, 4, and 8 for the number of tagged parts over the partitions with designated summands. The Ramanujan Journal (In press). (2019)
- [3] Baruah N.D., Kaur M., Kim M. & Oh B.K. Proofs of some conjectures by Z. -H. Sun on relations between sums of squares and sums of triangular numbers. Indian Journal of Pure and Applied Mathematics. (2019)
- [4] Basnet D.K. & Bhattacharyya J. Weak clean index of a ring, Beiträge zur Algebra und Geometrie. Contributions to Algebra and Geometry. (2019)
- [5] Basnet D.K. & Dutta J. Some bounds for commuting probability of finite rings. Proceedings - Mathematical Sciences. 129 (1) (2019)
- [6] Bose S.S., Nath M. & Sarma D. Maximal distance spectral radius of trees. Discrete Mathematics, Algorithms and Applications. 11 (02) (2019)
- [7] Chutia D. & Haloi R. Approximate controllability of quasilinear functional differential equations. Electronic Journal of Differential Equations. (2018)
- [8] Das P.K. A class of solid burst error correcting codes derived from a reversible code. University Politehnica of Bucharest Scientific Bulletin, Series A. 80 (4) (2018)
- [9] Das P.K. Codes detecting, locating and correcting random errors occurring in multiple subblocks. Proyecciones Journal of Mathematics. 38 (1) (2019)
- [10] Dutta J., Basnet D.K. & Nath R.K. A note on n-centralizer finite rings. An. Stiint. Univ. Al. I. Cuza Iasi Math. LXIV (1) (2018)
- [11] Dutta J., Fafous W.N.T. & Nath R.K. Spectrum and genus of commuting graphs of some classes of finite rings. Acta et Commentationes Universitatis Tartuensis de Mathematica. (2018)
- [12] Dutta P., Dutta J. & Nath R.K. On Laplacian spectrum of non-commuting graph of finite groups. Indian Journal of Pure & Applied Mathematics. 49 (2) (2018)
- [13] Dutta P. & Nath R.K. A generalization of commuting probability of finite rings. Asian-European Journal of Mathematics. 11 (2) (2018)
- [14] Dutta P. & Nath R.K. Generalized autocommuting probability of a finite group relative to its subgroups. Hacettepe Journal of Mathematics and Statistics. (2018)
- [15] Dutta P. & Nath, R.K. On Laplacian energy of non-commuting graphs of finite groups. Journal of Linear and Topological Algebra. 7 (2) (2018)
- [16] Dutta P. & Nath, R.K. On relative commuting probability of finite rings. Miskolc Mathematical Notes. (2018)
- [17] Dutta S. & Biswas S. Nonparametric estimation of $100(1 - p)\%$ expected shortfall: $p \rightarrow 0$ as sample size is increased. Communications in Statistics-Simulation and Computation. 47(2) (2018)
- [18] Haloi R. On Solutions to fractional neutral differential equations with infinite delay. Journal of fractional Calculus and Applications. 9 (02) (2018)



- [19] Hazarika H. & Marik S. Toeplitz and slant Toeplitz operators on the polydisk. Arab Journal of Mathematical Sciences. (2019)
- [20] Kalita D. & Sarma K. Minimizing algebraic connectivity over graphs made with given blocks. Linear and Multilinear Algebra. 67(5) (2019)
- [21] Nath R.K. On asymptotic commutativity degree of finite groups. Proyecciones Journal of Mathematics. (2018)
- [22] Nath R.K. & Prajapati S.K. On the number of solutions of a generalized commutator equation in finite groups. Acta Mathematica Hungarica. 156(1) (2018)
- [23] Sarma D. Minors of Hermitian (quasi-) Laplacian matrix of a mixed graph. Linear and Multilinear Algebra. (2019)
- [24] Sharma A. & Basnet D.K. Weak nil clean ideals. Rendiconti del Circolo Matematico di Palermo Series 2. (2019)
- [25] Sharma A. & Basnet D.K. Weakly r-clean rings and weakly *-clean rings. An. Stiint. Univ. Al. I. Cuza Iasi Math. (2018)

Conference Proceedings

- [1] Haloi R.A. Note on Necessary Condition for L^p Multipliers with Power Weights. In: Ghosh D., Giri D., Mohapatra R., Sakurai K., Savas E., Som T. (eds) Mathematics and Computing. ICMC 2018. Springer Proceedings in Mathematics & Statistics, Springer, Singapore. 253, 2018.

MAJOR RESEARCH FINDINGS/RESEARCH AND DEVELOPMENT ACTIVITIES

Sl. No	Principal Investigator/ Supervisor/ Communicating Author	Salient Research Findings
1	Dhiren Kumar Basnet	<ul style="list-style-type: none"> • We introduced weak clean index and characterised rings of weak clean index 1, 2 and 3. • We introduced Nil clean ideal of a ring and proved some interesting properties. • We introduced Weakly r-clean rings and weakly *-clean rings and discussed some of their interesting properties.
2	Munmun Hazarika	<ul style="list-style-type: none"> • We have determined the reducing and minimal reducing subspaces of slant Toeplitz operators
3	Nayandeep Deka Baruah	<ul style="list-style-type: none"> • New congruences modulo 2, 4, and 8 for the number of tagged parts over the partitions with designated summands have been found. • Resolved some conjectures posed by Zhi -Hong Sun on relations between sums of squares and sums of triangular numbers
4	Rajat Kanti Nath	<ul style="list-style-type: none"> • The notion of relative commuting probability of a finite ring is generalized and obtained a computing formula and several bounds. Also, we have characterized some finite rings through this generalized relative commuting probability. • We have computed Laplacian spectrum and Laplacian energy of non-commuting graphs of certain classes of finite non-abelian groups. • We have characterize finite rings having n distinct centralizers for $n \leq 7$. • We have considered some generalized commutator equations in a finite group and show that the number of solutions of such equations are characters of that group.



Sl. No	Principal Investigator/ Supervisor/ Communicating Author	Salient Research Findings
5	Santanu Dutta	<ul style="list-style-type: none"> • Obtained asymptotic properties of empirical and kernel based estimators of distribution function and quantile functions based on length biased data. • Obtained asymptotically optimal bandwidth for the kernel distribution function estimator based on length biased data. • Compared the finite sample mean squared errors of the empirical and kernel distribution function estimators using Monte-Carlo Simulation • Compared predictive performance of point fore-casts of elicitable risk measures based on real data on Nifty 50 index returns.

SEMINARS/ CONFERENCES/WORKSHOPS/ SYMPOSIA ATTENDED

Name of The Faculty Member	Title	Organized By	Date/ Period, Year	Place/ Institute/ Venue
Bhattacharyya, A	C-Programming Language	DKD College,	26-27 April, 2018.	Dergaon.
Chakraborty, D.	Advanced Instructional School on Algebraic Number Theory	Department of Mathematics	14 May- 02 June, 2018.	IIT Guwahati.
Deka Baruah, N.	Refresher Course on Mathematics & Statistics	Gauhati University	21-22, December, 2018.	Gauhati University.
Haloi, R.	Mathematical Modelling and Computations (ICMMC-2018)	Department of Mathematics	01-03 December 2018.	South Asian University, New Delhi.
Nath, R. K.	Revised Framework of NAAC Accreditation	IQAC	May 4, 2018.	Tezpur University.
Nath, R. K.	UGC guidelines of Career Advancement Scheme	IQAC	June 13, 2018.	Tezpur University.
Nath, R. K.	National Seminar on pure and Applied Mathematics	Department of Mathematics	19-20 September, 2018.	St Mary's College, Shillong.
Nath, R. K.	Development of MOOCS (Massive Open Online Courses)	IQAC	November 16, 2018.	Tezpur University.
Nath, R. K.	Industry Academia Conclave (Tezpur University Silver Jubilee Programme)	Center for University-Industry Interface	January 20, 2019.	Tezpur University.
Nath, R. K.	Refresher Course on Analysis	Department of Mathematical Sciences	18 to March 02, 2019.	Tezpur University.



Name of The Faculty Member	Title	Organized By	Date/ Period, Year	Place/ Institute/ Venue
Nath, R. K.	Discrete Mathematics and its Application to Network Science	Department of Mathematics	July 7-10, 2018.	BITS Pilani, K. K. Birla Goa Campus.
Sen, S.S.	Recent Progress on Flow Simulation and Stability Analysis	Prof. Tony Wen Hann Sheu, CASTS	15-17 March, 2019.	National Taiwan University, Taipei.
Sen, S.S.	84 th Annual Conference of Indian Mathematical Society	Shri Mata Vaishno Devi University	27-30 November, 2018.	Katra, Jammu and Kashmir.

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of The Faculty Member	Event	Date/ Period, Year	Place /Institute/ Venue.
Basnet, D.K.	Linear Algebra', TPM (Training Programme in Mathematics)	June, 2018.	NISER, Bhubaneswar.
Basnet, D.K.	Capacity Building Programme on Mathematics	02-03 November, 2018.	CBSE Maria's Public School, Guwahati.
Basnet, D.K.	Algebra and Optimization, (AAO-2018)	10-12 December, 2018.	NIT Nagaland.
Basnet, D.K.	Mini MTTS programme 2018	03-08, December, 2018.	Kohima Sciences College.
Basnet, D.K.	Pi Day	14 March, 2019.	University of Sciences & Technology, Meghalaya.
Basnet, D.K.	Topology and Algebra	13-14 March, 2019.	NEHU, Shillong.
Chakraborty, D.	Mini MTTS	24-29 December, 2018.	Vivekananda Centenary. College, Kolkata.
Das, P. K.	National Workshop on Cryptography	25-26 September, 2018	Department of Mathematics, USTM Meghalaya.
Deka Baruah, N.	29th Srinivasa Ramanujan Memorial Award lecture of Indian Mathematical Society in its 84th Annual Conference of Indian Mathematical Society	27-30 November, 2018.	Shri Mata Vaishno Devi University, Katra, Jammu and Kashmir.
Deka Baruah, N.	Refresher Course on Mathematics & Statistics	21-22, December, 2018.	Gauhati University.
Deka Baruah, N.	Ramanujan and a Glimpse of his Mathematics" in the National Seminar on Advances in Mathematical Sciences commemorating the 131st birth anniversary of Srinivasa Ramanujan & National Mathematics Day	December 22, 2108.	Gauhati University.



Name of The Faculty Member	Event	Date/ Period, Year	Place /Institute/ Venue.
Haloi, R.	approximate controllability of a nonlocal quasilinear differential equations with repeated deviating arguments	July 5-9, 2018.	Taipei, Taiwan.
Hazarika, D.	Refresher Course on Mathematics & Statistics	2-3, January, 2019.	Gauhati University.
Sarmah, B.	Hands on activity in Astronomy Session at Si-connect Level	21-23 August, 2018. And 28-30 August, 2018.	Gangtok, and Aizwal repectively.

SEMINAR/ WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/ Period, Year
"Remembering Ramanujan: The Indian Mathematical Genius"	April 26, 2018.
Refresher Course on Analysis	February 18 to March 02, 2019.
pi-day celebration	March 30, 2019.

DISTINGUISHED VISITORS TO THE DEPARTMENT

- Dr. V. Bist, Punjab University.
- Dr. Diganta Bhusan Das, Loughborough University, UK.
- Dr. Lipika Deka, De Montfort University, UK.
- Prof. S. Thangavelu, IISc. Bangalore.
- Prof. A. Adimurthi, TIFR CAM, Bangalore
- Prof. G.D.V. Gowda, TIFR CAM Bangalore
- Prof. A.K. Nandakumaran, IISc. Bangalore.
- Prof. A.B. Raha, ISI Kolkata.
- Prof. R.P. Sarkar, ISI Kolkata.
- Dr. Atul Dixit, IIT Gandhinagar.
- Dr. Bibekananda Maji, IIT Gandhinagar.
- Dr. R.K. Shrivastava, IIT Guwahati.
- Prof. J.C. Kalita, IIT Guwahati.
- Dr. Bhupen Deka, IIT Guwahati.



OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

- DST-FIST 2014 to 2019
- UGC-SAP (DRS-II) 2018 to 2023

NUMBER OF STUDENTS WHO PASSED NET-JRF/GATE

- NET-JRF 6
- NET-LS 2
- SLET-NE 3
- GATE 2

NOTABLE PLACEMENT OF STUDENTS

Name	Designation	Organization
Subhajit Bandyopadhyay	Research Scholar	Tezpur University
Pronay Kumar Karmakar	Research Scholar	IISER Mohali
Pinku Sarkar	Research Scholar	Gauhati University
Debdeep Roy	Research Scholar	Central University of Tamilnadu
Hirakjyoti Das	Research Scholar	Tezpur University
Ankur Sharmah	Research Scholar	Tezpur University
Parama Dutta	Assistant Professor (On Contract)	Tezpur University
Nilufar Mana Begum	Assistant Professor (On Contract)	Tezpur University
Ajay Sharma	Assistant Professor (On Contract)	Tezpur University
Deepak Sarma	Assistant Professor (On Contract)	Tezpur University
Loymee Borah	Guest Faculty	Tezpur University
Dr. Stuti Borgohain	Assistant Professor	Institute of Chemical Technology, Mumbai
Chayanika Baruah	Assistant Professor	University of Science and Technology, Meghalaya
Chinmoyee Kumar	Research Scholar	Gauhati University
Anurag Baruah	Research Scholar	Gauhati University
Parthajit Bhowal	Research Scholar	Tezpur University
Satyajit Gayan	Research Scholar	Tezpur University
Monalisha Sharma	Research Scholar	Tezpur University
Himanshu Hazarika	Research Scholar	Tezpur University
Lakhyajit Borah	Research Scholar	Cotton University
Namita Changmai	AAO	APDCL
Dhiman Dutta	Research Scholar	NIT Silchar



THE FACULTY OF THE DEPARTMENT

❖ Professors

Nayandeep Deka Baruah

M.Sc. (IITK), Ph.D. (TU)

Specialization: Number Theory, Ramanujan's Mathematics

E-mail: nayan@tezu.ernet.in

Debajit Hazarika

M.Sc. (DU), Ph.D. (JMI)

Specialization: General Topology, Fuzzy sets & applications

E-mail: debajit@tezu.ernet.in

Munmun Hazarika

M.Sc. (DU), M.Phil. (DU), Ph.D. (TU)

Specialization: Operator Theory, Functional Analysis

E-mail: munmun@tezu.ernet.in

Milan Nath

M.Sc. (GU), Ph.D. (IITG)

Specialization: Ordinary Graph Spectra, Inverse eigenvalue problem

E-mail: milan@tezu.ernet.in

❖ Associate Professors

Bhim Prasad Sarmah

M.Sc. (GU), Ph.D. (GU)

Specialization: Theoretical Physics

E-mail: bhim@tezu.ernet.in

Santanu Dutta

M.Sc. (DU), Ph.D. (TU)

Specialization: Statistics (Non-parametric)

E-Mail: sdutta@tezu.ernet.in

Shuvam Sen

M.Sc. (GU), Ph.D. (IITG)

Specialization: Computational Fluid Dynamics

E-Mail: shuvam@tezu.ernet.in



Dhiren Kumar Basnet

M.Sc. (GU), Ph.D. (Dibrugarh Univ.)
Specialization: Algebra; Fuzzy Set Theory
E-Mail: dbasnet@tezu.ernet.in

❖ **Assistant Professors**

Rajib Haloi

M.Sc. (GU), Ph.D. (IITK)
Specialization: Analysis
E-Mail: rhaloi@tezu.ernet.in

Bipul Kumar Sarmah

M.Sc. (GU), B.Ed. (GU), Ph.D. (TU)
Specialization: Theory of Partitions; Ramanujan Mathematics
E-Mail: bipul@tezu.ernet.in

Rajat Kanti Nath

M.Sc. (TU), M.Phil. (NEHU), Ph.D. (NEHU)
Specialization: Group Theory; Character Theory
E-Mail: rknath@tezu.ernet.in

Debajit Kalita

M.Sc. (GU), Ph.D. (IITG), Specialization: Algebraic Graph Theory
E-Mail: kdebajit@tezu.ernet.in

Deepjyoti Goswami

M.Sc. (DU), Ph.D. (IITB), Specialization: Finite Element Method
E-Mail: deepjyoti@tezu.ernet.in

Pankaj Kumar Das

M.Sc. M. Phill. Ph.D. (Delhi Univ.), Specialization: Coding Theory
Phone(Ext.): 03712-27-5520
E-Mail: pankaj4@tezu.ernet.in

Debopam Chakraborty

M.Sc. (VU), Ph.D. (IITG),
Specialization: Class groups and fundamental units of number fields
E-Mail: debopam@tezu.ernet.in

❖ Technical staff

A.K. Bhattacharyya

M.Sc. (TU), Ph.D. (TU)

System Analyst

E-mail: anjan@tezu.ernet.in

K. Das

MCA (TU)

Technical Assistant

E-mail: krishnadas@tezu.ernet.in

❖ Office Staff

P.K. Das

UDC

E-mail: pranabkd@tezu.ernet.in

N. Ali

MTS





Department of Molecular Biology and Biotechnology

The Department of Molecular Biology and Biotechnology (MBBT) completed Twenty two years since its inception in 1997. In this year one of the notable achievements is that our Master degree students of the Department qualified in the PhD entrance of reputed research institutions such as IISc, IGIB, NCCS, NISER, NBRC, IICB, IMTECH etc. Like the earlier years, this year too several students had qualified in the national level test such as NET-JRF/LS, DBT-JRF and GATE. In term of research, several publications have come in high impact journals such as Scientific reports, Frontiers in Oncology, Oncotarget, J. Virology. Frontiers in Plant sciences, Biochimie etc.

Academic Programmes and Student Intake

Programme	Student Intake
MSc in Molecular Biology and Biotechnology	29
Integrated MSc in Bioscience and Bioinformatics	14
PhD	17

Major Facilities and Equipment Available:

1. DNA sequencers (4 capillary)
2. Bioanalyzer
3. Quantitative PCR
4. Fast protein Liquid Chromatography (FPLC)
5. UHPLC systems
6. Ultracentrifuge
7. HPLC
8. FTIR
9. Spectrofluorometer
10. Fluorescence microscope
11. Animal cell culture facility
12. Plant tissue culture facility
13. Microbiology lab
14. Bioinformatics infrastructure facility
15. ONGC CPBT Centre For Petroleum Biotechnology



MAJOR RESEARCH FINDINGS/ RESEARCH AND DEVELOPMENT ACTIVITIES

Principal Investigator	Salient Research Findings (In Short Bullet Points)
Kumar	<ul style="list-style-type: none"> Annotation of regulatory regions in the genome is crucial for complete understanding of functional genomics. Sequence based approaches are generally found to be less effective (result in to more false positives) and most importantly they are organism specific in nature. In contrast, DNA structural properties have been found to be present distinctly in the regulatory regions and also, they are found to be universal in nature, across the domains of life. Hence, we are working towards the development of algorithms on annotation of regulatory regions based on DNA structural features.
A.K. Mukherjee	<ul style="list-style-type: none"> Unveiling the venom proteomes of eastern India Naja naja and western India Russell's Viper.
A.N. Jha	<ul style="list-style-type: none"> Studies from our lab led to the atomic level understanding of interactions and effect of Zinc Oxide/Silver nanoparticles with different structural proteins.
A. Ramteke	<ul style="list-style-type: none"> To understand the molecular basis of carcinogenesis and prevention in multiple cancer types including breast, lung and head and neck cancer, through intervention of phytochemical. We are primarily involved in understanding mechanistic effect of phytochemical on the signaling molecules involved in tumor progression, metastasis and drug resistance using in vitro and in vivo pre-clinical cancer models (breast, lung and colon cancer). We are also conducting research on the development of nanocomposite/nanoparticles from biopolymers for delivery of drug/therapeutic agents to the cancer cells.
B.K. Konwar	<ul style="list-style-type: none"> In silico studies on the molecular interaction analysis of dietary flavonols as a potent inhibitor of heat shock protein 90 enzyme in fighting against cancer. S. P. Singh, C R Dev, S U Ahmed, Y Saratchandra, B K Konwar (2016)- This study is on dietary flavonols (viz- quercetin, myricetin and kaempferol) shows that they effectively help in degradation of Hsp90 protein which helps in stabilization of several proteins responsible for tumour and cancer. These flavonols through competitive inhibition block the N terminal site of the Hsp90, thereby degrading the protein and preventing cancer cell growth. These flavonols are known to have anti-cancer property and study reveals that they can be orally ingested as they have less lethal dose.
E. Kalita	<ul style="list-style-type: none"> Development of ZnO: CeO₂: nanocellulose: PANI based lignocellulosic bio-nanocomposites for the adsorption of dissolved Arsenic from aqueous systems. Development of ZnO, CeO₂, embedded edible films based based bio-nanocomposites for use as potential antibacterial agents Development of surface engineered Cu:ZnS nanocomposites for use as potential antibacterial agents. In vitro establishment of the biotrophic phyto-pathogen Exobasidium vexans.
J.P. Saikia	<ul style="list-style-type: none"> Vigna radiata (mung) seed on imbibition in low concentration sodium borohydride solution show increase in germination. We found 100% germination in seeds treated with sodium borohydride. The same method may be used to increase germination in other seeds whose germination rate is very low. We also found that NaCl can also stimulate germination in mung seed.
M. Mandal	<ul style="list-style-type: none"> 3 potential probiotic strains have been found suitable for commercial use. Several medicinal plants were screened out for control of microbial biofilm formation.



Principal Investigator	Salient Research Findings (In Short Bullet Points)
M.V. Satish Kumar	<ul style="list-style-type: none"> ● Research on Alzheimer's disease: We have predicted the seed structure of Amyloid beta 1-42 peptide responsible for aggregation that is the major risk factor in Alzheimer's disease and investigated the interactions that stabilize the toxic intermediates. Finally, we have devised three approaches to inhibit the aggregation of Amyloid beta 1-42 peptide. ss-oligonucleotide, Amyloid beta 1-40 and small 6-mer peptide were found to act as potent inhibitor in the aggregation of Amyloid beta 1-42 peptide. ● Research on Parkinson's disease: We found a probable method to control the aggregation in α-synuclein which is responsible for Parkinson's disease. Basic region of Tau protein strongly interacts with C-terminal acidic regions of α-synuclein fibrils and undergo conformational change resulting in the formation of seed for assembly of Tau into amyloid like fibrils. Targeting the Tyr residue at the position 133 may provide better solution to significant delay in the early stage of aggregation in α-synuclein. We see predominant transient interactions between αS and βS can be used to drive inhibition of αS aggregation. ● Research on Breast Cancer: We obtained the salient structural features of human Lemur Tyrosine Kinase 3 (LMTK3) which is considered as a novel therapeutic target for breast cancer, then characterized its probable interaction with different proteins such as ERα, CDK5 and GRB2 and identified probable interface interacting residues between them. Then ATP competitive potential inhibitors were designed against LMTK3 to control breast cancer.
N.D. Namsa	<ul style="list-style-type: none"> ● The laboratory has developed the routine protocol for detection and typing of rotavirus, adenovirus, astrovirus and norovirus. These are common enteric viruses often associated with acute gastroenteritis in infants. We observed high association of rotavirus-led diarrhoea in children in the age group of 6 -12 months. The findings revealed the presence of commonly detected G genotypes such as G1, G9, G3, G2, G4 and G9. ● Computational analysis of rotavirus proteins has led to the identification of potential B and T- cell epitopes that may help to design multi-epitope chimeric antigen for development of rapid diagnostic kits and its possible application in rotavirus surveillance studies.
P. Barah	<ul style="list-style-type: none"> ● 'EvoLOMICs' (short form of Evolutionary OMICs) group in the Department of Molecular Biology and Biotechnology, at Tezpur University studies the complex phenomena of evolution in biological systems starting from the subcellular molecular levels (microscopic) to the whole organism and ecosystem level (macroscopic) level using Next Generation Sequencing, Big data and robust computer algorithms. ● We are trying to solve few interesting questions such as: <ul style="list-style-type: none"> ● How do certain cancers develop therapy resistance and evolve to high grade tumors? ● Why certain diseases have population specific and/or geography specific incidence rates? ● Being sessile in nature, how do plants perceive, respond, adapt and evolve during simultaneous exposure of harsh biotic and abiotic factors? ● Do non-coding regions of the genome play crucial role in evolution of biological systems? ● Can we utilize heterogenous high dimensional biological and clinical datasets (Big data) to identify translatable biomarkers using machine learning methods?



Principal Investigator	Salient Research Findings (In Short Bullet Points)
R. Doley	<ul style="list-style-type: none"> The proteome profile of <i>Naja kaouthia</i> venom of North East India has been deciphered. Non-immunodepleted protein from this venom has been identified which is being characterized for diagnostic application. We have overexpressed and characterized a venom protein named Flavikunin a kunitz type serine protease inhibitor using bacterial expression system which has the potential to be developed as anti-bleeding agent. Biochemical and immunological characterization of Green pit viper venom from North East India is being characterized for the first time in my laboratory. Overexpression and characterized two anti-thrombin peptides named haemathrins 1 and haemathrin 2 identified in the salivary gland of tick <i>Haemaphysalis bispinosa</i> (Acari: Ixodidae)
R. Mukhopadhyay	<ul style="list-style-type: none"> Inflammation is considered to be a critical player for development of many human diseases like cardiovascular disease, arthritis, diabetes and cancer. Our laboratory is interested to study the role of ribosomal proteins in regulation of inflammation. Mechanism of a ribosomal protein-mediated regulation of CCL2, a gene responsible for inflammation has been established. Two medicinally important plants have been studied for their anti-cancer efficacy. The plant extracts and its components were shown to be inhibit metastatic development in breast cancer cell lines beside induction of apoptosis, a hallmark of an anti-cancer agent. Inflammation is considered to be a critical player for development of many human diseases like cardiovascular disease, arthritis, diabetes and cancer. Our laboratory is interested to study the role of ribosomal proteins in regulation of inflammation. Mechanism of a ribosomal protein-mediated regulation of CCL2, a gene responsible for inflammation has been established.
S. Baruah	<ul style="list-style-type: none"> The incidence of anti cardiolipin positivity was found to be 26.19 % in the overall obstetrics population which is higher than the global average range (1-7%) as per literature wherein it affected 25 % of RPL cases. Though, net inhibitory receptor gene content was high (KIR2DL3>2DL2>2DL1) in RPL cases as compared to the non RPL cases the frequency of KIR2DS1 was found to be high compared to KIR2DL1 in RPL cases. The allelic diversity of <i>KIR2DL1</i> gene and its cognate ligand <i>HLA-C</i> was assessed in the population of Assam, North-East India. We found KIR2DL1*003 at highest frequency of 79.1%. The nucleotide diversity of <i>KIR2DL1</i> alleles and of <i>HLA-C</i> gene suggested substantial variability in the population. We also identified 9 <i>HLA-C</i> alleles in the study population. The binding affinity study of alleles found on centromeric A and B KIR motif of the 2DL1 gene with <i>HLA-C</i> gene was investigated where a stronger binding affinity of KIR2DL1*003 with <i>HLA-CW4</i> as compared to KIR2DL1*004 and KIR2DL1*005 was found.
S. Dasgupta	<ul style="list-style-type: none"> Saturated free fatty acid-induced adipocyte inflammation plays a pivotal role in implementing insulin resistance and type 2 diabetes. Recent reports suggest A2A adenosine receptor (A2AAR) could be an attractive choice to counteract adipocyte inflammation and insulin resistance. We therefore explored various small molecules of different categories like flavonoid, alkanoids, terpenes and sulfonylurea for its binding efficacy with the agonist conformation of A2AAR and the attenuation of lipid-induced adipocyte inflammation and insulin resistance.



Principal Investigator	Salient Research Findings (In Short Bullet Points)
	<p>Using a combination of in-silico virtual screening of potential anti-diabetic candidates and in-vitro study on insulin resistant model of 3T3-L1 adipocytes, we determined indirubin-3'-monoxime (I3M) through A2AAR activation markedly prevents lipid-induced impairment of the insulin signaling pathway in adipocytes without any toxic effects. Our research thus showing promise for the management of insulin resistance and type 2 diabetes. This work recently published in <i>Biochemical Journal</i> (DOI: 10.1042/BCJ20190251). We are also involved in research to find out novel small molecules targeting insulin resistance and type 2 diabetes.</p> <ul style="list-style-type: none"> • The transformation of macrophages into lipid-loaded foam cells is a critical and early event in the pathogenesis of atherosclerosis. To investigate the underlying molecular mechanism of inflammation induced foam cell formation, we observed that the TLR4 mediated inflammatory signaling communicated with mTORC2-Akt-mTORC1 metabolic cascade in macrophage and thereby promoting lipid uptake and foam cell formation. This work was published in the journal <i>Biochimie</i> (DOI: 10.1016/j.biochi.2018.06.001). We are now investigating the cross-talk between macrophage foam cells and adipocytes to explore the novel biomarkers in obesity-induced adipocyte inflammation and insulin resistance. • We are also involved in research on the effect of exercise on insulin sensitivity and its underlying molecular mechanisms. Although several reports indicate the salutary effect of physical exercise on insulin sensitivity and glucose homeostasis, however, the underlying mechanism is yet unclear. To address this issue, we are in process to find out novel exercise-induced myokines that could impair lipid-induced adipocyte inflammation and insulin resistance.
S.K. Ray	<ul style="list-style-type: none"> • Molecular plant microbe interactions: we have isolated several transposon induced mutants of <i>R. solanacearum</i> that are deficient in virulence in tomato seedlings. Some of the mutants are virulence deficient by root inoculation but virulence proficient by leaf clip inoculation in tomato seedlings. Presently we are doing molecular characterization of these mutants. • Molecular evolution: we are studying nucleotide polymorphisms in bacteria by comparing genome sequences different strains within a species to understand base substitution mutation spectra and the role of replication and transcription .
S.P.G. Ponnamp	<ul style="list-style-type: none"> • Ours is probably the only group working on the molecular genetic analysis of Keratoconus patients from Assam, India. We are also attempting to perform in vitro studies to correct defective region of the CHST6 gene associated with Macular Corneal Dystrophy using the CRISPR-Cas9 system. Currently, both the projects are being actively pursued.
S. Saha	<ul style="list-style-type: none"> • Cellular stress response proteins play very important role in protecting cells during different stress conditions like heat stress, oxidative stress or radiation. Heat shock protein 70 (HSP70) is one such protein which protects cells from many stress conditions including heat stress. Investigation in the laboratory showed that protein arginylation is very important for heat stress response and plays a protective role during heat stress by stabilization of HSP70 transcript and increased HSP70 expression.
T. Medhi	<ul style="list-style-type: none"> • Insecticide resistance: Development of one synthetic and two biological pesticides merged with biofertilizer attributes for the management of <i>H.theivora</i>, a major tea pest. • Biosensor: A novel ISFET based biosensor for hydrocarbon detection using cytochrome P450 as transducing element. • MEOR: We have prepared a standard biosurfactant based slug for the recovery of residual oil in porous media, collected from Upper Assam oil field.



Research Projects, Ongoing and New

Project Title	Funding Agency	Amount in (Lakhs)	Duration	Principal Investigator
Development of a cost-effective, novel antithrombotic anticoagulant herbal drug and standardization of its biomarker assisted quality control	DBT-BIRAC	49.75	2016-2018	A.K. Mukherjee
Discovering novel drug formulations from non-toxic, potent anticoagulant components of snake venom for the prevention and/or treatment of cardiovascular disease (CVD)	DBT	15.00	2014-2017	
Venomomics and antivenomics of Indian Cobra and Russell's viper: implications in drug discovery and quality control of antivenoms	DBT	132.20	2014-2018	
Studies on epidemiology, hospital management of snakebite, and standardization of laboratory tests for assessment of efficacy and quality control of commercial antivenom manufactured in India and in ASEAN countries	DST-SERB (Under ASEAN)	46.43	2018-2021	
Development of functionalized nanoparticles-based novel diagnostic kit for the detection of species-specific snake envenomation	DBT Tata Innovation project	18.00	2018-2021	
Development of snake venom toxins-target specific novel antivenom	DBT-BIRAC	43.10	2018-2021	
Search of potent inhibitors against target from <i>L. donovani</i> (Visceral Leishmaniasis) using systems biology, virtual screening and molecular dynamics (sanctioned on 29-04-2019)	DBT	15.00	2019-2022	A.N. Jha
Biophysical Characterization of adenylosuccinate lyase- a potential drug target from <i>Leishmania donovani</i> - a computational and molecular approach	DBT	70.00	2017-2000	
Nanoparticle based approach to enhance the AMP efficacy against AMP resistant bacteria	DBT	38.00	2016-2020	
Development of synthetic derivatives of natural compound, Noscapine as tubulin binding chemotherapeutic agent and evaluation of its synergistic effect with Taxotere for management of human breast cancer	DBT	70.50	2018-2021	A. Ramteke
Studies on exosomal lipidomics and microRNAs and their clinical utility in the management of metastatic and multiple drug resistant breast cancer	DST	54.032	2016-2020	
Studies on proteome and lipidome and their clinical implications in the management of drug resistant and recurrent head and neck squamous cell carcinoma (HNSCC)	ICMR	19.950	2016-2019	



Project Title	Funding Agency	Amount in (Lakhs)	Duration	Principal Investigator
Towards identification isolation and characterization of <i>Exobasidium vexans</i> strains and their pathogenic determinants/effectors from Blister blight infested tea plantations of Assam and development of future road-map for effective management practices.	DBT	90.27	2015-2018	E. Kaliita
Bio-refinery Approach for Generation of Platform Chemicals and Bioethanol from Indigenous Lignocellulosic Agro-waste And Algal Bioresources.	DBT	75.67	2017-2020	
UGC StartUp grant	UGC	10.00	2017-19	J.P. Saikia
Studies on antimicrobial and anti-biofilm activities of medicinal plant extracts obtained from North Eastern India against pathogenic bacteria isolated from pigs, cattle and poultry of NER India; and cattle, poultry and ducks of West Bengal	DBT	52.97	2017-2020	M. Mandal
“Bioconversion of organic wastes and de-oiled algal residue into biodiesel and value added products (carotenoids) using oleaginous microbes”	DBT	11.99	2019-2021	
Computational Investigation on the membrane-induced self-assembly and aggregation of α -Synuclein	SERB	44.78	2018-2021	M.V. Satish Kumar
Molecular Epidemiology of Group A rotavirus (RVA) Infections in the North-eastern region (NER)	DBT	75.18	2014-2018	N.D. Namsa
Estimation of the diversity of endophytes in subtropical forest of Arunachal Pradesh and creation of a genetic resource	DBT	12.40	2015-2018	
Identification and characterization of active molecules derived from selected edible medicinal plants of Arunachal Pradesh against rotavirus and clinical isolates of drug resistant <i>E. coli</i> and <i>S. aureus</i>	DBT	58.41192	2019-2022	
Integrative approach for understanding the role of noncoding mutations in the evolution of biological systems	DBT	113.00	2018-2023	P. Bara
Integrative systems biology approach to identify the molecular response signatures in Rice during concurrent biotic (<i>Rhizoctonia solani</i>) and abiotic (heat) stresses	DBT	83.00	2018-2021	
Search for novel anti-platelet and anti-thrombin peptides from Indian viper venom (<i>Daboia russelii</i>): Purification, characterization and evaluation of its anti-thrombotic potential	DBT	60.796	2018-2021	R. Doley
Isolation, identification and characterization of marker proteins from the venom of <i>Naja kaouthia</i> and <i>Bungarus fasciatus</i> of North East India for development of rapid diagnostic tool for identification snakebite in North East India	ICMR	38.53580	2018-2021	
Aptmer based rapid test to differentiate venomous snake bites from non-venomous and dry snake bites	BIRAC-DBT	12.25	2018-2019	



Project Title	Funding Agency	Amount in (Lakhs)	Duration	Principal Investigator
Exploring gene expression differences between atherosclerotic and non-atherosclerotic coronary and peripheral arteries within a patient to enable discovery of novel targets that mediate development of localized atherosclerotic plaques	SERB	25.94	2015-2019	R. Mukhopadhyay
Polymorphism of Toll like and Nod Like receptors and their role in inflammasome activation in Head and Neck Squamous Cell Carcinoma	ICMR	49.81	2017-2019	S. Baruah
Diagnosis and Immunopathogenesis of Dengue Virus Infections; a longitudinal investigation into genotype diversity, diagnosis and immune response to dengue infections in Assam, Northeast India.	DRDO	61.59	2017-2019	
Identification of exercise induced myokine(s) and its role on white to brown/beige adipocyte conversion and suppression of obesity induced adipose tissue inflammation and insulin resistance.	DBT	116.59	2016-19	S. Das Gupta
To investigate the role of toll-like receptor 4 (TLR4) in lipid induced impairment of adipogenesis and adipose tissue function implementing insulin resistance.	DBT	42.30	2015-18	
Exploring the effects of peroxisome proliferator-activated receptor beta/delta activation in lipid induced adipocyte inflammation and insulin resistance.	SERB	25.20	2015-18	
Role of fetuin-A gene and protein expression in obesity induced impairment of adipogenesis and stimulation of adipose tissue inflammation implementing insulin resistance and type 2 diabetes.	UGC	14.025	2015-18	
Role of transcription factors IRF8 and KLF4 in lipid induced adipose tissue inflammation and insulin resistance.	INSA	15.00	2014-17	S.P. Ponnam
Studies on genetic and epigenetic alternations on keratoconus patients from Assam, India	DBT	15.98	2019-2022	
In vitro studies to investigate the therapeutic approach of editing the defective exon 3 of the human CHST6 gene associated with Macular Corneal Dystrophy through the CRISPR-Cas9 technology".	SERB, DST	45.94	2019-2022	S. Saha
Understanding the role of adipose tissue remodelling in exercise induced insulin sensitivity	DBT	74.69992	2018-2021	
Identification of exercise induced myokine(s) and its role on white to brown/beige adipocyte conversion and suppression of obesity induced adipose tissue inflammation and insulin resistance.	DBT	116.59	2016-19	



Project Title	Funding Agency	Amount in (Lakhs)	Duration	Principal Investigator
To investigate the role of toll-like receptor 4 (TLR4) in lipid induced impairment of adipogenesis and adipose tissue function implementing insulin resistance.	DBT	42.30	2015-18	
Exploring the effects of peroxisome proliferator-activated receptor beta/delta activation in lipid induced adipocyte inflammation and insulin resistance.	SERB	25.20	2015-18	
Role of fetuin-A gene and protein expression in obesity induced impairment of adipogenesis and stimulation of adipose tissue inflammation implementing insulin resistance and type 2 diabetes.	UGC	14.025	2015-18	
Role of transcription factors IRF8 and KLF4 in lipid induced adipose tissue inflammation and insulin resistance.	INSA,	15.00	2014-18	
Development of phytoremediation protocol for bioremediation of crude oil contamination.	ONGC	17.0	2014-2020	T. Medhi
Formulation of an MEOR slug for Enhanced Oil Recovery of Upper Assam Basin (MEOR)	ONGC	40.95	2018-2021	
Development of a biodemulsifier based process technology for oil recovery from petroleum sludge and towards a sustainable Sludge management protocol	ONGC	64.42	2019-2022	

Publications

- [1] Anand, R., Agrawal, M., Mattaparthi, V.S.K., Swaminathan, R. and Santra, S.B., Consequences of Heterogeneous Crowding on an Enzymatic Reaction: A Residence Time Monte Carlo Approach. *ACS Omega*, 4(1), pp.727-736. (2019)
- [2] Asthana, S., Hazarika, Z., Nayak, P.S., Roy, J., Jha, A.N., Mallick, B. and Jha, S., Insulin adsorption onto zinc oxide nanoparticle mediates conformational rearrangement into amyloid-prone structure with enhanced cytotoxic propensity. *Biochimica et Biophysica Acta (BBA)-General Subjects*, 1863(1), pp.153-166. (2019)
- [3] Bardhan, P., Gohain, M., Daimary, N., Kishor, S., Chattopadhyay, P., Gupta, K., Chaliha, C., Kalita, E., Deka, D. and Mandal, M. Microbial lipids from cellulolytic oleaginous fungus *Penicillium citrinum* PKB20 as a potential feedstock for biodiesel production. *Annals of Microbiology*, pp.1-12. (2019)
- [4] Bharadwaj, N., Barthakur, S., Biswas, A.D., Das, M.K., Kour, M., Ramteke, A. and Gogoi, N., Transcript expression profiling in two contrasting cultivars and molecular cloning of a SKP-1 like gene, a component of SCF-ubiquitin proteasome system from mungbean *Vigna radiata* L. *Scientific reports*, 9(1), p.8103. (2019)
- [5] Bharali, P., Singh, S.P., Bashir, Y., Dutta, N., Konwar, B.K. and Singh, C.B., Characterization and assessment of biosurfactant producing indigenous hydrocarbonoclastic bacteria: potential application in bioremediation. *Nova Biotechnologica et Chimica*, 17(2), pp.103-114. Bora N. and Jha AN (2019). An integrative approach using systems biology, mutational analysis with molecular dynamics simulation to challenge the functionality of a target protein. *Chemical Biology and Drug Design*. 93:1050-1060. (2018)
- [6] Borah, S.M. and Jha, A.N., Identification and analysis of structurally critical fragments in HopS2. *BMC bioinformatics*, 19(13), p.552. (2019)
- [7] Bordoloi, N., Dey, M.D., Mukhopadhyay, R. and Kataki, R., Adsorption of Methylene blue and Rhodamine B by using biochar derived from *Pongamia glabra* seed cover. *Water Science and Technology*, 77(3), pp.638-646. (2017)



- [8] Chaliha, C., Rugen, M.D., Field, R.A. and Kalita, E., Glycans as modulators of plant defense against filamentous pathogens. *Frontiers in plant science*, 9, p.928. (2018).
- [9] Chamuah, N., Bhuyan, N., Das, P.P., Ojah, N., Choudhary, A.J., Medhi, T. and Nath, P., Gold-coated electrospun PVA nanofibers as SERS substrate for detection of pesticides. *Sensors and Actuators B: Chemical*, 273, pp.710-717. (2018)
- [10] Choudhury, S.N., Konwar, B., Kaur, S., Doley, R. and Mondal, B., Study on snake venom protein-antibody interaction by surface plasmon resonance spectroscopy. *Photonic Sensors*, 8(3), pp.193-202. (2018)
- [11] Banerjee, D., Sinha, A., Saikia, S., Gogoi, B., Rathore, A.K., Das, A.S., Pal, D., Buragohain, A.K. and Dasgupta, S., Inflammation-induced mTORC2-Akt-mTORC1 signaling promotes macrophage foam cell formation. *Biochimie*, 151, pp.139-149. (2018)
- [12] Das, S., Bora, N., Rohman, M.A., Sharma, R., Jha, A.N. and Roy, A.S., Molecular recognition of bio-active flavonoids quercetin and rutin by bovine hemoglobin: an overview of the binding mechanism, thermodynamics and structural aspects through multi-spectroscopic and molecular dynamics simulation studies. *Physical Chemistry Chemical Physics*, 20(33), pp.21668-21684. (2018)
- [13] Das, S., Khanikar, P., Hazarika, Z., Rohman, M.A., Uzir, A., Nath Jha, A. and Singha Roy, A., Deciphering the Interaction of 5, 7-Dihydroxyflavone with Hen-Egg-White Lysozyme through Multispectroscopic and Molecular Dynamics Simulation Approaches. *ChemistrySelect*, 3(17), pp.4911-4922. Das, P. P., & Medhi, T. (2018). Isolation and molecular identification of four culturable endophytes from TV22 clone of *Camellia sinensis* (L.). *Annals of Plant Sciences*, 7(4), 2119-2125. (2018)
- [14] Deka, A., Gogoi, A., Das, D., Purkayastha, J. and Doley, R., Proteomics of *Naja kaouthia* venom from North East India and assessment of Indian polyvalent antivenom by third generation antivenomics. *Journal of proteomics*, 207, p.103463. (2019)
- [15] Deka, A., Reza, M.A., Hoque, K.M.F., Deka, K., Saha, S. and Doley, R., Comparative analysis of *Naja kaouthia* venom from North-East India and Bangladesh and its cross reactivity with Indian polyvalent antivenoms. *Toxicon*, 164, pp.31-43. (2019)
- [16] Dhillon, P., Tandra, V.N., Chorghade, S.G., Namsa, N.D., Sahoo, L. and Rao, C.D., Cytoplasmic relocalization and colocalization with viroplasm of host cell proteins, and their role in rotavirus infection. *Journal of virology*, 92(15), pp.e00612-18. (2018)
- [17] Dutta, M. and Mattaparthi, V.S.K., A comparative study to elucidate the inhibitory mechanism of a 6-mer fragment of amyloid-beta 42 peptide as a potential therapeutic in Alzheimer's disease: insights from molecular dynamics simulations. *Current Science* (00113891), 114(6). (2018)
- [18] Dutta, M. and Mattaparthi, V.S.K., In silico investigation on the inhibition of A β 42 aggregation by A β 40 peptide by potential of mean force study. *Journal of Biomolecular Structure and Dynamics*, 36(3), pp.741-752. (2018)
- [19] Gogoi, P., Das, M.K., Ramteke, A. and Maji, T.K., Soy flour-ZnO nanoparticles for controlled release of silibinin: Effect of ZnO nanoparticle, surfactant, and cross-linker. *International Journal of Polymeric Materials and Polymeric Biomaterials*, 67(9), pp.543-552. (2018)
- [20] Goswami, L., Mukhopadhyay, R., Bhattacharya, S.S., Das, P. and Goswami, R., Detoxification of chromium-rich tannery industry sludge by *Eudrillus eugeniae*: Insight on compost quality fortification and microbial enrichment. *Bioresource technology*, 266, pp.472-481. (2018)
- [21] Gupta, K., Singh, S.P., Manhar, A.K., Saikia, D., Namsa, N.D., Konwar, B.K. and Mandal, M., Inhibition of *Staphylococcus aureus* and *Pseudomonas aeruginosa* Biofilm and Virulence by Active Fraction of *Syzygium cumini* (L.) Skeels Leaf Extract: In-Vitro and In Silico Studies. *Indian journal of microbiology*, 59(1), pp.13-21. (2019)
- [22] Hazarika, C., Sarma, D., Neroula, S., Das, K., Medhi, T. and Sharma, S., Characterisation of a Schottky ISFET as Hg-MOSFET and as cytochrome P450-ENFET. *International Journal of Electronics*, 105(11), pp.1855-1865. (2018)
- [23] Hazarika, C., Sarma, D., Puzari, P., Medhi, T. and Sharma, S., Use of Cytochrome P450 Enzyme Isolated From *Bacillus Stratosphericus* sp. as Recognition Element in Designing Schottky-Based ISFET Biosensor for Hydrocarbon Detection. *IEEE Sensors Journal*, 18(15), pp.6059-6069. (2018)



- [24] Deka, K., Guleria, A., Kumar, D., Biswas, J., Lodha, S., Kaushik, S.D., Choudhary, S.A., Dasgupta, S. and Deb, P., Janus nanoparticles for contrast enhancement of T 1-T 2 dual mode magnetic resonance imaging. *Dalton Transactions*, 48(3), pp.1075-1083. (2019)
- [25] Deka, K., Guleria, A., Kumar, D., Biswas, J., Lodha, S., Kaushik, S.D., Dasgupta, S. and Deb, P., Mesoporous 3D carbon framework encapsulated manganese oxide nanoparticles as biocompatible T1 MR imaging probe. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 539, pp.229-236. (2018)
- [26] Kalita, B., Patra, A., Das, A. and Mukherjee, A.K. Proteomic analysis and immuno-profiling of eastern India Russell's Viper (*Daboia russelii*) venom: correlation between RVV composition and clinical manifestations post RV bite. *Journal of proteome research*, 17(8), pp.2819-2833. 2018
- [27] Kalita, B., Patra, A., Jahan, S. and Mukherjee, A.K.. First report of the characterization of a snake venom apyrase (Ruviapyrase) from Indian Russell's viper (*Daboia russelii*) venom. *International journal of biological macromolecules*, 111, pp.639-648. (2018)
- [28] Kalita, B., Singh, S., Patra, A. and Mukherjee, A.K.. Quantitative proteomic analysis and antivenom study revealing that neurotoxic phospholipase A2 enzymes, the major toxin class of Russell's viper venom from southern India, shows the least immuno-recognition and neutralization by commercial polyvalent antivenom. *International journal of biological macromolecules*, 118, pp.375-385. (2018)
- [29] Kalita, D., Saikia, S., Gautam, G., Mukhopadhyay, R. and Mahanta, C.L. Characteristics of synbiotic spray dried powder of litchi juice with *Lactobacillus plantarum* and different carrier materials. *LWT*, 87, pp.351-360. (2018)
- [30] Kaur, S., Devi, A., Saikia, B. and Doley, R. Expression and characterization of Flavikunin: A Kunitz-type serine protease inhibitor identified in the venom gland cDNA library of *Bungarus flaviceps*. *Journal of biochemical and molecular toxicology*, 33(4), p.e22273. (2019)
- [31] Kaur, S., Doley, R. Structure and Pharmacological Properties of Some Snake Venom Protein Families with Special Reference to Kunitz-Type Serine Protease Inhibitors *Journal of Bioresources* 5(2): 1-23 (2018)
- [32] Khatun, B., Banik, N., Hussain, A., Ramteke, A. and Maji, T. Genipin crosslinked curcumin loaded chitosan/montmorillonite K-10 (MMT) nanoparticles for controlled drug delivery applications. *Journal of microencapsulation*, 35(5), pp.439-453. (2018)
- [33] Mahanta, A., Ganguli, P., Barah, P., Sarkar, R.R., Sarmah, N., Phukan, S., Bora, M. and Baruah, S. Integrative approaches to understand the mastery in manipulation of host cytokine networks by protozoan parasites with emphasis on *Plasmodium* and *Leishmania* species. *Frontiers in immunology*, 9, p.296. (2018)
- [34] Mukherjee, A.K., Saviola, A.J. and Mackessy, S.P. Cellular mechanism of resistance of human colorectal adenocarcinoma cells against apoptosis-induction by Russell's Viper venom L-amino acid oxidase (Rusvinoxidase). *Biochimie*, 150, pp.8-15. (2018)
- [35] Nath, B.K., Chaliha, C., Bhuyan, B., Kalita, E., Baruah, D.C. and Bhagabati, A.K.. GIS mapping-based impact assessment of groundwater contamination by arsenic and other heavy metal contaminants in the Brahmaputra River valley: A water quality assessment study. *Journal of Cleaner Production*, 201, pp.1001-1011. (2018)
- [36] Nayak, P.S., Borah, S.M., Gogoi, H., Asthana, S., Bhatnagar, R., Jha, A.N. and Jha, S.,. Lactoferrin adsorption onto silver nanoparticle interface: Implications of corona on protein conformation, nanoparticle cytotoxicity and the formulation adjuvanticity. *Chemical Engineering Journal*, 361, pp.470-484. (2019)
- [37] Panigrahi, G.K., Ramteke, A., Birks, D., Ali, H.E.A., Venkataraman, S., Agarwal, C., Vibhakar, R., Miller, L.D., Agarwal, R., Elmageed, Z.Y.A. and Deep, G.,. Exosomal microRNA profiling to identify hypoxia-related biomarkers in prostate cancer. *Oncotarget*, 9(17), p.13894. (2018)
- [38] Phukan, T., Kabyashree, K., Singh, R., Sharma, P.L., Singh, N., Barman, A., Jena, B.R. and Ray, S.K. *Ralstonia solanacearum* virulence in eggplant seedlings by the leaf-clip inoculation. *Phytopathology Research*, 1(1), pp.1-11. (2019)
- [39] Phukan, M.M., Bora, P., Gogoi, K. and Konwar, B.K. Biodiesel from *Saccharomyces cerevisiae*: fuel property analysis and comparative economics. *SN Applied Sciences*, 1(2), p.153. (2019)
- [40] Pradhan, S. and Mattaparthi, V.S.K. Structural dynamics and interactions of *Xeroderma pigmentosum* complementation group A (XPA98-210) with damaged DNA. *Journal of Biomolecular Structure and Dynamics*, 36(13), pp.3341-3353. (2018)



- [41] Pradhan, S., Das, P. and Mattaparthi, V.S.K., Characterizing the Binding Interactions between DNA-Binding Proteins, XPA and XPE: A Molecular Dynamics Approach. *ACS Omega*, 3(11), pp.15442-15454. (2018)
- [42] Pradhan, S., Sarma, H. and Mattaparthi, V.S.K. Investigation of the probable homo-dimer model of the Xeroderma pigmentosum complementation group A (XPA) protein to represent the DNA-binding core. *Journal of Biomolecular Structure and Dynamics*, 37(13), pp.3322-3336. (2019)
- [43] Purkayastha, J., Kalita, J., Brahma, R.K., Doley, R. and Das, M. A review of the relationships of *Xenochrophis cerasogaster* Cantor, 1839 (Serpentes: Colubridae) to its congeners. *Zootaxa*, 4514(1), pp.126-136. (2018)
- [44] Choudhary, S.A., Bora, N., Banerjee, D., Arora, L., Das, A.S., Yadav, R., Klotz, K.N., Pal, D., Jha, A.N. and Dasgupta, S., A novel small molecule A2A adenosine receptor agonist, indirubin-3'-monoxime, alleviates lipid-induced inflammation and insulin resistance in 3T3-L1 adipocytes. *Biochemical Journal*, 476(16), pp.2371-2391. (2019)
- [45] Saikia, D., Manhar, A.K., Deka, B., Roy, R., Gupta, K., Namsa, N.D., Chattopadhyay, P., Doley, R. and Mandal, M. Hypocholesterolemic activity of indigenous probiotic isolate *Saccharomyces cerevisiae* ARDMC1 in a rat model. *Journal of food and drug analysis*, 26(1), pp.154-162. (2018)
- [46] Saikia, J.P., Singh, K., Ray, S. K. NaBH₄ and APS as Novel Inducers of Seed Germination in Green Gram (*Vigna radiata*) and Black Gram (*Vigna mungo*) (Vol. (5)1 (2018)
- [47] Salomone-Stagni, M., Bartho, J.D., Kalita, E., Rejzek, M., Field, R.A., Bellini, D., Walsh, M.A. and Benini, S. Structural and functional analysis of *Erwinia amylovora* SrlD. The first crystal structure of a sorbitol-6-phosphate 2-dehydrogenase. *Journal of structural biology*, 203(2), pp.109-119. (2018)
- [48] Sanjeev, A. and Mattaparthi, V.S.K. Computational investigation on the effects of h50q and g51d mutations on the α -synuclein aggregation propensity. *Journal of Biomolecular Structure and Dynamics*, 36(9), pp.2224-2236. (2018)
- [49] Sanjeev, A. and Mattaparthi, V.S. Computational Study on the Role of γ -Synuclein in Inhibiting the α -Synuclein Aggregation. *Central Nervous System Agents in Medicinal Chemistry (Formerly Current Medicinal Chemistry-Central Nervous System Agents)*, 19(1), pp.24-30. (2019)
- [50] Sanjeev, A., and Mattaparthi, V.S.K.. Dimerization of C-terminal truncations of α -synuclein and its effect on the aggregation propensity: A Potential of Mean Force Study. *Current Chemical Biology*, 12, 191-200. DOI: 10.2174/2212796812666180430143502. (2018)
- [51] Sanjeev, A. and Mattaparthi, V.S. Effect of C-terminal truncations on the aggregation propensity of A53E, a familial mutant of α -Synuclein: An Insilico Study. *International Journal for Computational Biology (IJCB)*, 7(1), pp.16-28. (2018)
- [52] Sarma, H., Mattaparthi, K. and Venkata, S. Unveiling the Transient Protein-Protein Interactions that Regulate the Activity of Human Lemur Tyrosine Kinase-3 (LMTK3) Domain by Cyclin Dependent Kinase 5 (CDK5) in Breast Cancer: An in silico Study. *Current Proteomics*, 15(1), pp.62-70. (2018)
- [53] Sarma, H., Mattaparthi, K. and Venkata, S., Salient Structural Features of Human Lemur Tyrosine Kinase 3 (LMTK3) Domain from Molecular Dynamics Simulation Study. *Current Biotechnology*, 7(4), pp.309-316. (2018)
- [54] Sarma, H. and Mattaparthi, V.S.K. Structure-based virtual screening of high-affinity ATP-competitive inhibitors against human lemur tyrosine Kinase-3 (LMTK3) domain: a novel therapeutic target for breast cancer. *Interdisciplinary Sciences: Computational Life Sciences*, 11(3), pp.527-541. (2019)
- [55] Sarmah, N., Baruah, M.N. and Baruah, S., Immune Modulation in HLA-G Expressing Head and Neck Squamous Cell Carcinoma in Relation to Human Papilloma Virus Positivity: A Study From Northeast India. *Frontiers in oncology*, 9, p.58. (2019)
- [56] Singh, N., Kumar, R., Ray, S. K. An innovative approach to study *Ralstonia solanacearum* pathogenicity in 6 to 7 days old tomato seedlings by root dip inoculation. *BioProtoc*, 8, 21 (2018)
- [57] V. R. Yella, A. Kumar and Manju Bansal., Identification of putative promoters in 48 eukaryotic genomes on the basis of DNA free energy, *Nature Scientific Reports*, 8, 4520. (2018)
- [58] Yanik, M., Ponnampalani S.P.G., Wimmer, T., Trimborn, L., Müller, C., Gambert, I., Ginsberg, J., Janise A, Domicke, J., Wende, W., Lorenz, B., Stieger, K. Development of Reporter System to Explore MMEJ in the Context of Replacing Large Genomic Fragments. *Mol Ther Nucleic Acids*. Jun 1;11:407 (2018)



Conference Proceedings

- [1] Sarmah, N, Longkumer, I, Bora, M, Baruah, S, Baruah, M.N, HLA-G: Expression and Regulation in Head and Neck Squamous Cell Carcinoma, Immunocon 2018, 45th Annual Conference of the Indian Immunology Society (IIS), 1st - 3rd November, 2018, Translational Health Science and Technology Institute (THSTI), Faridabad, India.
- [2] Sarmah, N, Longkumer, I, Baruah, M.N, Baruah, S, Immunoregulation in Head and Neck Squamous Cell Carcinoma with respect to HPV positivity: a study from Northeast India, Asian Advanced Course in Basic and Clinical Immunology, 26th -29th March, 2019, Federation of Clinical Immunological Societies (FOCIS), Kukas, Rajasthan, India.
- [3] Phukan, S, Baruah, M.N, Baruah, S, KIR2DL1 and HLA-C Protein Expression and Copy Number Variation in Head and Neck Squamous Cell Carcinoma, Immunocon 2018, 45th Annual Conference of the Indian Immunology Society (IIS), 1st - 3rd November, 2018, Translational Health Science and Technology Institute (THSTI), Faridabad, India.
- [4] Bora, M, Hazarika, S.G, Deka, G, Baruah, S, Investigation into APLA and KIR genotype in relation to Recurrent Pregnancy Loss. Immunocon 2018, 45th Annual Conference of the Indian Immunology Society (IIS), 1st - 3rd November, 2018, Translational Health Science and Technology Institute (THSTI), Faridabad, India.
- [5] Saikia, JP. Sustainability of medicinal plant research. Proceeding of the DST (SERB) Sponsored National Seminar on “Recent Discoveries in Medicinal and Aromatic Plants Research and its Sustainable Development in North East India” (REDIMAP- 2018), ADP College, Nagaon. 17-18 August 2018.
- [6] D. Banerjee, M. Poudyal, N. Bora, S.A. Choudhary, S. Dasgupta. A Novel Adenosine 2A Receptor Agonist Impairs Lipid-Induced Adipocyte Inflammation and Insulin Resistance. 6th International Conference on Molecular Signalling (ICMS 2018), organised jointly by University of Hyderabad and National Institute of Animal Biotechnology during 8th -10th February 2018 at School of Life Science, University of Hyderabad.
- [7] A. Sinha, D. Banerjee, S. Saikia, B. Gogoi, S. Dasgupta. Inflammation induced mTORC2-Akt signaling promotes macrophage foam cell formation. 6th International Conference on Molecular Signalling (ICMS 2018), organised jointly by University of Hyderabad and National Institute of Animal Biotechnology during 8th -10th February 2018 at School of Life Science, University of Hyderabad.
- [8] Cellulase enzyme through metagenomics. B K Konwar (2018). ADNAT International Symposium ‘Biodiverse-2018, IIT Guwahati, 27-29th January 2018 (Chaired one Technical Session).
- [9] Forest Ecology. B K Konwar (2018), “Workshop on Wildlife Ecology and Serbioresources (BIOCONVERSE 2018)”, Directorate of Sericulture, Bodoland Territorial Council (BTC) and College of Veterinary Science (AAU), Khanapara in association with IITG and ADNAT at Manas National Park 30.01.18-01.02.2018 (Chaired the Opening and Technical Sessions).
- [10] Potential bioremediating enzyme of Metagenomics AlkB gene. B K Konwar (2018). Satellite International Symposium ‘Technological Intervention in Microbial Resource’ at Tezpur University, Napaam as a part of “Advance DNA Technology (ADNAT)” Symposium organised in collaboration with IIT Guwahati, 4-5.02.2018 (Chaired the Opening Session).
- [11] Status, problems and prospects of Silkworm cultivation in Assam and adjoining states. B K Konwar (2018). National Workshop “SeriBioEcon, 2018”, CMER&TI, Lahdoigarh, Jorhat 12-13.03.2018 (Chaired the Inaugural and one Technical Session).
- [12] Indigenus peoples and local economic development. B K Konwar (2019). Souvenir INSCIGNIS: Science throughout the Ages. Vol. V: pp 1-5.
- [13] Majumder M, Jaishankar P & Mukhopadhyay R. Fruit extract of a Euphorbiaceae family plant induced apoptosis in breast cancer cells by targeting phosphorylation of STAT3 in a p53 independent manner in International Conference on Molecular Basis of Disease & Therapeutics organized by the Central University of Rajasthan, Ajmer, India, Mar 8-10, 2019.
- [14] Majumder M and Mukhopadhyay R. A mechanistic study on the anti-cancer activity of edible tuber *Amorphophallus paeoniifolius* (Dennst) in National Seminar on Probiotics and Functional Foods on Health Management, Tezpur University, India, Mar 4-5, 2019.



Books

- [1] Bolin Kumar Konwar (2018). Joimati – Gadapani: Ek Amar Dampatya Premgatha, Papyrus, Jasuwanta Rd, Panbazar, Guwahati-781001, ISBN No. 978-93-81287-97-2.

Book Chapters

- [1] A. Kumar and M. Bansal. Modulation of gene expression by gene architecture and promoter structure. In Book: Bioinformatics in the era of post genomics and big data. InTechOpen, 2018.
- [2] A. Maurya, M. Das, A. Ramteke, SC Deka, P Rajamani. Encapsulation of polyphenols into micro- and nanoparticles for Improved Health effects, Research Methods and Applications in Biological and chemical Engineering, CRC Press 2019.
- [3] Airy Sanjeev, Venkata Satish Kumar Mattaparthi and Sandeep Kaushik. Nucleic-acid Structure Databases. *Encyclopedia of Bioinformatics and Computational Biology* 2018
- [4] Biswa R Meher, Venkata Satish Kumar Mattaparthi, Seema Patel and Sandeep Kaushik Mutation effects on 3D-structural reorganization using HIV-1 protease as a case study. *Encyclopedia of Bioinformatics and Computational Biology*. 2018.
- [5] Deka, K. and Saha, S., 2018. Regulation of Mammalian HSP70 Expression and Stress Response. In Regulation of Heat Shock Protein Responses (pp. 3-25). Springer, Cham. 2018.
- [6] Himakshi Sarma, Sushmita Pradhan, Sandeep Kaushik and Venkata Satish Kumar Mattaparthi Phylogenetic analysis: Early evolution of life. *Encyclopedia of Bioinformatics and Computational Biology*. 2018.
- [7] M. Das, N Singh, P. Baishya, P Rajamani, SC Deka and A. Ramteke Recent trends on dietary natural products for prevention and treatment of cancer, Food Bioactives Functionality and Human Health, Published by CRC Press 2019.
- [8] Sanjeev, A., Kaushik, S., Meher, B.R., and Mattaparthi, V. S. K. Disorder in Proteins. In: Reference Module in Life Sciences, Elsevier, 2018.

SEMINAR/ CONFERENCE/ WORKSHOP/ SYMPOSIA ATTENDED

Name of the Faculty Member	Title (of the Semi./ Conf./ W'ps/ Sym.)	Organized by	Date/ Period, Year	Place/ Institute/ Venue
J.P. Saikia	Induction Training of Faculty	TLC, Tezpur University	6th June to 5th July 2018	Tezpur/Tezpur University/ TLC Centre
	DST (SERB) Sponsored National Seminar on "Recent Discoveries in Medicinal and Aromatic Plants Research and its Sustainable Development in North East India	ADP College, Nagaon	17th to 18th August 2018	Assam
N.D. Namsa	CSIR-Aroma Mission: Cultivation, Processing, Value-Chain and Marketing of High Value Medicinal and Aromatic Plants For Rural Prosperity	Organized by MBBT in collaboration with CSIR-CIMAP Lucknow, CSIR-IHBT Palampur and CSIR-IIIM Jammu	17th to 19th January 2019	Kalaktang, Arunachal Pradesh
	Aroma Crops for Boosting Rural Economy of North East India.	Organized by MBBT in collaboration with CSIR-CIMAP Lucknow	15th October 2018	Council Hall, Tezpur University



Name of the Faculty Member	Title (of the Semi./ Conf./ W'ps/ Sym.)	Organized by	Date/ Period, Year	Place/ Institute/ Venue
S. Baruah	IRACON 2018	Dept. of Rheumatology, Excel Care Hospital, Guwahati	08th December 2018	Guwahati, Assam, India
	IMMUNOCON 2018	Indian Immunology Society	1st to 3rd November 2018	Faridabad, Haryana, India
	Advanced Course in Basic and Clinical Immunology	FOCIS	26th to 29th March 2019	Jaipur, Rajasthan, India
	FOCIS -Member Society Symposium	FOCIS	18th to 21st June 2019	Marriott Coupley Place, Boston, USA.
S.K. Ray	Young scientists' conclave	KIIT, Bhubaneswar	27th to 31, December 2018	KIIT, Bhubaneswar
	MIPAM 2019	NIPGR, New Delhi	1st to 3rd February , 2019	NIPGR, New Delhi

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/ Period, Year	Place/ Institute/ Venue
A.N. Jha	Presented a paper in the International Conference on Bioinformatics (InCoB – 2018) on “Comparative analysis of thermal, chemical and thermochemical unfolding of proteins from different classes”	26 th to 28 th September 2018	JNU, New Delhi
	Invited lecture on Physics: Applications as Backbone of Biotechnology	8 th February 2019	MIT Academy of Engineering, Pune
	Accelerating Biology 2019: Towards Thinking Machines	5 th to 7 th February 2019	CDAC, Pune
	Resource Person in National short term training program on “Bioinformatics: Computation in Wet Lab”	25 th February to 2 nd March 2019	North-Eastern Hill University, Tura Campus, Meghalaya
	Resource Person on Recent Trends in Computer Aided Drug Design	26 th to 27 th March 2019	Dibrugarh University, Dibrugarh
	Invited lecture on Recent Advances in Bioinformatics	23 rd to 26 th May 2019	CSIR-NEIST, Jorhat



Name of the Faculty Member	Event	Date/ Period, Year	Place/ Institute/ Venue
J.P. Saikia	DST (SERB) Sponsored National Seminar on "Recent Discoveries in Medicinal and Aromatic Plants Research and its Sustainable Development in North East India	17 th to 18 th August 2018	ADP College, Nagaon
	Outreach Programme, Silver Jubilee Celebration, Tezpur University	6 th October 2018	Madhabdev College, Lakhimpur, Assam.
M.V. Satish Kumar	Delivered Talk in the National symposium (supported by Probiotic Association of India) on "Probiotics and Functional Foods on Health Management	4 th to 5 th March 2019	Department of Food Engineering and Technology, Tezpur University
	Delivered Talk in the National Workshop (supported by MHRD) on "Machine Learning in R and Python"	28 th January to 1 st February 2019	Department of Computer Science and Engineering, Tezpur University, Tezpur
N.D. Namsa	CSIR-Aroma Mission: Cultivation, Processing, Value-Chain and Marketing of High Value Medicinal and Aromatic Plants For Rural Prosperity	17 th to 19 th January 2019	Kalaktang, Arunachal Pradesh
	Aroma Crops for Boosting Rural Economy of North East India.	15 th October 2018	Council Hall, Tezpur University
R. Mukhopadhyay	Invited talk	5 th March 2019	Narayana Nethralaya, Bengaluru
S. Baruah	Nobel Laureate lecture Series on Physiology and Medicine-2018	15 th to 16 th November 2018	Tezpur University
	FOCIS -Member Society Symposium	18 th to 21 st June 2019	Marriott Coupley Place, Boston, USA.

SEMINAR/ WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/ Period, Year
National Workshop on Whole Genome Data Analysis using Computational Framework and Tools	24 th -25 th January 2019
Workshop on CSIR-Aroma Mission: Cultivation, Processing, Value-Chain and Marketing of High Value Medicinal and Aromatic Plants For Rural Prosperity Organized by MBBT in collaboration with CSIR-CIMAP Lucknow, CSIR-IHBT Palampur and CSIR-IIIM Jammu	17 -19, January 2019
Aroma Crops for Boosting Rural Economy of North East India. Organized in collaboration with CSIR-CIMAP Lucknow	15 th October, 2018



DISTINGUISHED VISITORS TO THE DEPARTMENT

1. Dr. George M. Varghase, Christian Medical College, Vellore
2. Dr. Ajaya K. Biswal, Scientist, University of Georgia, USA
3. Dr. R. Panigrahi, Dept. of Biochemistry, University of Alberta
4. Prof. Knut Stieger, University of Leipzig, Germany
5. Dr. Anil M. Limaye, IIT, Guwahati
6. Dr. M.K. Goswami, Dept. of Pulmonary Medicine, Jorhat Medical College & Hospital, Jorhat, Assam

AWARDS & HONOURS/ NOTABLE RESEARCH ACHIEVEMENTS OF FACULTY/ RESEARCH SCHOLARS/ STUDENTS/STAFF

Ms. Yengkhom Damayanti Devi, Research Scholar, awarded 2nd Best Oral Presentation Award in Medical Virology entitled “Exploring Rotavirus Proteins to Design B- and T-cell Multi-epitope chimeric antigen using *in silico* Approach” conferred at the 27th International Conference of Virology “INTERVIROCON 2018” organized by Indian Virological Society (IVS), 12 to 14th November, 2018, organized by Department of Virology, PGIMER, Chandigarh

Faculty Members

Prof. A.K. Mukherjee received Visitors Award for Research in Basic and Applied Sciences-2018, from honorable President of India at Rashtrapati Bhawan on 2 May, 2018

Prof. A.K. Mukherjee awarded Tata Innovation Fellowship (2017-18) by Department of Biotechnology, Ministry of Science and Technology, Govt. of India

Prof. A.K. Mukherjee received Visitors Award for Research in Basic and Applied Sciences-2018 from honorable President of India at Rashtrapati Bhawan on 2 May, 2018

Prof. A.K. Mukherjee elected as Fellow of the Royal Society of Biology (FRSB), United Kingdom, 2018

Dr. N.D. Namsa, DBT Overseas Associateship 2018.

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT

Dr. Nima D Namsa has been involved in outreach activity on Cultivation, processing and value-addition of aromatic crops (lemongrass, citronella, clarysage, geranium, lavender, etc) in various farmers field of Assam and Arunachal Pradesh in collaboration with CSIR-CIMAP Lucknow, CSIR-IHBT Palampur and CSIR-IIIM Jammu.



NUMBER OF STUDENTS QUALIFIED NET-JRF/ GATE/ SLET

SLET: 01 , GATE = 28, NET = 20

Notable Placement [2018--2019, Report period]

Name	Designation	Organization
Ms. Vatsala Pokhrel	System Engineer	Tata Consultancy Services
Ms. Anushree Roy	Faculty	Spectrum Eduventures

THE FACULTY OF THE DEPARTMENT

❖ Professors

A.M. Ramteke

PhD (JNU, New Delhi)

Head of the Department, Specialization/Areas of interest: Cancer Genetics and Chemoprevention

E-mail: anand@tezu.ernet.in

B.K. Konwar

PhD (Imperial College, London), DIC

Specialization/Areas of interest: Petroleum Biotechnology, Plant Biotechnology, Genetic Engineering- Metagenomics, Bioenergy

E-mail: bkkon@tezu.ernet.in

A.K. Mukherjee

PhD (Burdwan University)

Specialization/Areas of interest: Snake Venom Biochemistry and Microbial Biotechnology

E-mail: akm@tezu.ernet.in

Shashi Baruah

PhD (PGIMER, Chandigarh)

Specialization/Areas of interest: Molecular Immunology

E-mail: sbaruah@tezu.ernet.in

S.K. Ray

PhD (CCMB-Hyderabad)

Specialization/Areas of interest: Plant-Microbe Interactions; Molecular Evolution

E-mail: suven@tezu.ernet.in

M. Mandal

PhD (IGIB-Delhi)

Specialization/Areas of interest: Microbial Biotechnology

E-mail: mandal@tezu.ernet.in

❖ Associate Professor

R. Doley

PhD (Tezpur University, Tezpur)

Specialization/Areas of interest: Molecular Toxinology

E-mail: doley@tezu.ernet.in



❖ Assistant Professors

T. Medhi

PhD (IIT-Kharagpur)

Specialization/Areas of interest: Redox Biochemistry and Enzymology

E-mail: tmedhi@tezu.ernet.in

E. Kalita

PhD (NIPGR, New Delhi & Gauhati University)

Specialization/Areas of interest: Molecular Biology

E-mail: ekalita@tezu.ernet.in

S.P.G. Ponnamp

PhD (LVPEI & Hyderabad University, Hyderabad)

Specialization/Areas of interest: Human Molecular Genetics & Synthetic Biology

E-mail: suryap@tezu.ernet.in

A.N. Jha

PhD (IISc-Bangalore)

Specialization/Areas of interest: Computational Biophysics, Bioinformatics

E-mail: anjha@tezu.ernet.in

R. Mukhopadhyay

PhD (Jadavpur University, Kolkata)

Specialization: Inflammation biology, Plant-derived anti-cancer compounds

E-mail: mrupak@tezu.ernet.in

S. Saha

PhD (IISc-Bangalore)

Specialization/Areas of interest: Cell and Molecular Biology, (Protein Arginylation)

E-mail: sougata@tezu.ernet.in

N.D. Namsa

PhD (IISc-Bangalore)

Specialization/Areas of interest: Molecular Virology/Traditional medicinal plants

E-mail: namsa@tezu.ernet.in

S. Dasgupta

Ph.D (Visva-Bharati University, West Bengal)

Specialization/Areas of interest: Molecular Biology/ Disease Biology/Cellular metabolism

E-mail: suman@tezu.ernet.in

M.V.S. Kumar

Ph.D. (IIT Guwahati)

Specialization/Areas of interest: Computational Biotechnology and Bioinformatics

E-mail: venkata@tezu.ernet.in

J.P. Saikia

Ph.D. (Tezpur University, Tezpur)

Specialization/Areas of interest: Plant Biology

E-mail: jyoti06@tezu.ernet.in



A. Kumar

Ph.D. (IISc, Bangalore)
Specialization/Areas of interest: Bioinformatics
Email: aditya@tezu.ernet.in

P. Barah

Ph.D. (Norwegian University of Science and Technology, Trondheim, Norway)
Specialization/Areas of interest: Computational Systems Biology
Email: barah@tezu.ernet.in

❖ **Technical Staff**

K.K. Hazarika

PhD (Tezpur University, Tezpur)
Technical Officer
E-mail: kalyan@tezu.ernet.in

N.K. Bordoloi

PhD (Tezpur University, Tezpur)
Senior Technical assistant
E-mail: nabakb@tezu.ernet.in

P. Mudoi

MSc (Diburgarh University, Dibrugarh)
Junior Technical assistant
E-mail: pmudoi@tezu.ernet.in

❖ **Office Staff**

Mrs. P.S. Talukdar

Assistant
E-mail: pranita@tezu.ernet.in

Mr. Guna Das

MTS
E-mail: gdas@tezu.ernet.in

Mr. Kishan Basfor

MTS



School of Sciences

Department of Physics

THE DEPARTMENT

Eighteen years since its commencement in January 1998, Department of Physics has stridden out not only in its post-graduation teaching but also in new frontiers of research. To keep pace with the advancement in science and technology, new special papers have been included with adaptation to new developments within the course content. The areas of specialization for post-graduation are: Condensed Matter Physics; Electronics and Photonics; High Energy Physics; Astrophysics; Plasma Physics and Nano Science. To develop the students from the graduate level, the Department also started an Integrated M.Sc. in Physics in 2009. Keeping in mind the need of teachers at the school level, the Department has also been running a B.Sc.-B.Ed. programme since July 2011.

Major thrust areas of research of the Department are, Astrophysics, High Energy Physics (Theoretical), Nanoscience, Neutrino, Optoelectronics, Plasma Physics, Microwaves and Solid State Ionics.

Academic Programmes and Student Intake

Programme	Intake
MA/MSc in Physics	30
Integrated M.Sc. in Physics	20
Integrated B.Sc. B. Ed.	10
PhD	Variable (19 in 2018-2019)

Research Projects, Ongoing and New

Project Title	Funding Agency	Amount (in Inr)	Duration	Principal Investigator
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Development of grapheme based conducting polymer nanocomposites for electrochemical energy storage applications.	SERB-DST	50.10 Lakhs	2016-2019	A. Kumar
Study of interactions of Ionic Liquid ions with unsaturated metal centers in Metal Organic Framework based polymer electrolyte nanocomposites incorporated with Ionic Liquids through Neutron Scattering and Raman Spectroscopy.	UGC-DAE-CSR, Mumbai	10.71 Lakhs	2018-2021	
Development of conducting polymer based nanocomposites for efficient detection of Mycotoxins.	DAE-BRNS	34.33 Lakhs	2019-2022	
Departmental Project UGC-SAP-DRS-II	UGC	89.5 Lakhs	2016-2021	
Studies on bifunctional (wetting-dewetting and biophotonic colouration) properties of certain natural systems of biological origin.	DST, New Delhi	40 Lakhs	2017-2020	D. Mohanta
Studies on photo-catalytic, photo-luminescence and mechanical properties of WS ₂ /C-dot nano scale systems subjected to irradiation.	IUAC, New Delhi	6.75 Lakhs	2017-2020	
Evaluation of rheological and visible emission responses of nano WS ₂ /C-dot as additives.	CSIR, New Delhi	10.33 Lakhs	2018-2021	
Effect of energetic γ -photons and ion beams on structural, opto-electronic and rheological property of tungsten dichalcogenide-based composites.	UGC-DAE, Kolkata	11 Lakhs	2019-2022	
Studies on parton recombination and related non-linear equations.	CSIR, New Delhi	2.7 Lakhs	2018-2021	J. K. Sarma
Neutrino mass, Lepton number violation, baryogenesis, dark matter and related cosmology within Beyond Standard Model	SERB-DST	21.969 Lakhs	2018-2021	M. K. Das
Design and realization of light weight shields to reduce electromagnetic interference (EMI) at microwave ranges (C and X band) with different geometries for customized applications like anechoic chamber, as terminations and stealth for strategic device camouflaging.	DeitY	216.04 Lakhs	2016-2019	N. S. Bhattacharyya
Miniaturized flexible planar antennas for body worn applications as health monitoring systems in L and S band using nano magneto-dielectric composite as substrate.	DST (nano-mission)	86.962 Lakhs	2017-2020	
Neutrino Mass Ordering Leptonic CP violation and Matter-Antimatter Asymmetry	SERB-DST	6.17 Lakhs	2016-2019	Ng. K. Francis



Small Angle Scattering based study on hierarchical mesoporous assemblies of nanoparticles.	UGC-DAE-CSR	14 Lakhs	2017-2019	P. Deb
Efficient oil recovery as conventional energy using smart graphitic nanocomposite.	DBT, Govt. of India	15 Lakhs	2019-2022	
Departmental Project DST-FIST-II	DST	192.0 Lakhs	2017-2022	
Stability analysis of astrophysical complex plasmas.	SERB, DST	16.93 lakhs	2019-2022	P. K. Karmakar
Smart phone based optical microscope for clinical applications.	ICMR, New Delhi	29.58 Lakhs	2017-2020	P. Nath
Smartphone based instrumentation for water quality monitoring with reference to resource poor regions.	BIRAC-SRISTI GYTI,	15 Lakhs	2017-2019	
A multiwavelength study of Active Galactic Nuclei and X-ray sources.	CSIR, New Delhi	9.32 Lakhs	2017-2020	R. Gogoi
Study of the Abundance and Characteristics of Interstellar Dust	SERB-DST, New Delhi.	19.65 Lakhs	2018-2021	

PUBLICATIONS

Journal Publications

- [1] Banerjee S., Dutta K.R., Kumar A. & Burahohain A.K. Polyaniline nanofiber reinforced pva-starch nanocomposites: biodegradable electrically conducting polymers (becp) for potential biomedical applications. International J. Engg. Sci. Tech. (IJEST). 10(02S) (2018)
- [2] Baruah B. & Kumar A. PEDOT:PSS/MnO₂/rGO ternary nanocomposite based anode catalyst for enhanced electrocatalytic activity of methanol oxidation for direct methanol fuel cell. Synthetic Metals. 245 (2018)
- [3] Baruah B. & Kumar A. Electrocatalytic activity of rGO/PEDOT:PSS nanocomposite towards methanol oxidation in alkaline media. Electroanalysis. 30 (2018)
- [4] Baruah B., Kumar A., Umapathy G.R. & Ojha S. Enhanced electrocatalytic activity of ion implanted rGO/PEDOT:PSS hybrid nanocomposites towards methanol electro-oxidation in Direct Methanol Fuel Cells. J. Electroanal. Chem. 840 (2019)
- [5] Baruah B.S. & Biswas R. Mangifera indica leaf extract mediated gold nanoparticles: a novel platform for sensing of As(III). IEEE Sensors Letter. 3(3) (2019)
- [6] Baruah B.S. & Biswas R. An optical fiber based surface plasmon resonance technique for sensing of lead ions: A toxic water pollutant. Optical Fiber Technology. 46, 152-156 (2018)
- [7] Baruah B.S. & Biswas, R. Localized surface plasmon resonance based U-shaped optical fiber probe for the detection of Pb²⁺ in aqueous medium. Sensors and Actuators B Chemical. 89-94, 276 (2018)
- [8] Baruah B.S., Biswas, R. & Deb P. A green colorimetric approach towards detection of arsenic (III): a pervasive environmental pollutant. Optics and Laser Technology. 111, 825-829 (2019)
- [9] Bezbaruah P. & Das N. Anomalous transport of charged dust grains in a magnetized collisional plasma: A molecular dynamics study. Phys. Plasmas. 25, 053708 (2018)
- [10] Bezbaruah P. & Das N. Ion-Flow-Induced Excitation of Electrostatic Cyclotron Mode in Magnetized Dusty Plasma. Plasma Physics Reports. 44, 514 (2018)
- [11] Biswas R. A Short Appraisal on Cloud Computing. Scientific Review. 4 (3), 22-25 (2018)



- [12] Biswas R. Adulteration in milk: A growing concern. *Journal of Dairy and Veterinary Sciences*. (2019)
- [13] Biswas R. Challenging Factors Influencing Biodiversity. *Biodiversity Online J* .1(1). BOJ.000502 (2018)
- [14] Biswas R. Editorial, *Journal of Environmental Hazards*, 1(2), 2018.
- [15] Biswas R. Heavy metal ion pollution in aqueous solution: an environmental hazard. *Int. Journal of Environmental Sciences and Natural Resources*. 16(2) (2019)
- [16] Biswas R. Plastic Pollution: A Menace to Marine Biology. *Ad Oceanogr & Marine Biol*. 1(1) (2018)
- [17] Biswas R., Baruah S. & Bora N. Assessing shear wave velocity profiles using multiple passive techniques of Shillong region of northeast India. *Natural Hazards*. 94(3), 1024-1041 (2018)
- [18] Biswas R., Bora N. & Boruah S. Frequency dependent site response inferred from microtremors accompanied by ambient noise. *Physics and Astronomy International Journal*. 2(4) 273-277 (2018)
- [19] Biswas. S & Biswas R. Water and Sustainability Issues: A global perspective. 2(3) (2018)
- [20] Bora N. & Biswas R. P- and s-wave attenuation in the Kopili region of northeastern India. *Annals of Geophysics*. 61(6) SE668 (2018)
- [21] Bora, N. & Biswas R. Delineation of subsurface profiles beneath the Kopili fault zone in northeast India utilizing coda portion. *Journal of Asian Earth Sciences*. (2019)
- [22] Borah P & Das N. Effect of electrostatic interaction in the formation of Dust-Acoustic Shock Wave with fluctuating dust charge. *Plasma Physics Reports*. 44, 738 (2018)
- [23] Borah P, Das N. & Schamel H. The wavenumber of privileged cnoidal electron and ion holes-a nonlinearly nontrivial parameter. *Phys. Plasmas*. 25, 094506 (2018)
- [24] Borah R., Ingavle G.C., Sandeman S.R., Kumar A. & Mikhalovsky S.V. Electrically Conductive MEH-PPV:PCL Electrospun Nanofibers for Electrical Stimulation of Rat PC12 Pheochromocytoma Cells. *Biomaterials Science*. 6 (2018)
- [25] Borah R., Ingavle G.C., Sandeman S.R., Kumar A. & Mikhalovsky S.V. Amine functionalized electrically conductive core-sheath MEH-PPV:PCL electrospun nanofibers for enhanced cell-biomaterial interactions. *ACS Biomaterials Science & Engineering*. 4(9) (2018)
- [26] Borgohain H. & Das M.K. Phenomenological study of texture zeroes in lepton mass matrices of minimal left-right symmetric model. *JHEP*. 1906 (2019)
- [27] Borgohain H. & Das M.K. Phenomenology of two texture zero neutrino mass in left-right symmetric model with $Z_8 \times Z_2$. *JHEP*. 1902 (2019)
- [28] Boruah B.S., Daimari N.K. & Biswas R. Functionalized silver nanoparticles as an effective medium towards trace determination of arsenic (III) in aqueous solution. *Results in Physics*. 12, 2061-2065 (2019)
- [29] Das N., Borah P. & Schamel H. Free energy and spatial periodicity of generalized cnoidal ion holes. *Phys. Lett. A*. 382, 2693-2699 (2018)
- [30] Das P., Mukherjee A. & Das M.K. Active and sterile neutrino phenomenology with A4 based minimal extended seesaw. *Nucl.Phys. B*. 941 (2019)
- [31] Devi M. & Kumar A. 85 MeV C6+ swift heavy ion irradiation of in-situ reduced graphene oxide-polypyrrole nanotubes nanocomposite films for supercapacitor electrodes. *Electrochimica Acta*. 261 (2018)
- [32] Devi M. & Kumar A. Enhanced electrochemical performance of in-situ reduced graphene oxide-polyaniline nanotubes hybrid nanocomposites using redox-additive aqueous electrolyte. *J. Phys. D: Appl. Phys.* 51 (2018)
- [33] Dutta R. & Kumar A. Effect of IL incorporation on ionic transport in PVdF-HFP based polymer electrolyte nanocomposite doped with NiBTC-Metal-Organic Framework. *J. Solid State Electrochem.* 22 (2018)
- [34] Dutta R. & Kumar A. Ion transport dynamics in Ionic Liquid incorporated CuBTC-Metal-Organic Framework based composite polymer electrolyte. *Journal of Materials Science: Materials in Electronics*. 30(2) (2019)
- [35] Gebreegziabher G., Asemahegne A., WorkuAyele D., Kumar A. & Mani D. One-step Synthesis and Characterization of Reduced Graphene Oxide Using Chemical Exfoliation Method. *Materials Today Chemistry*. 12 (2019)
- [36] Goswami P., Sahayanathan S., Sinha A., Misra R. & Gogoi R. Influence of energy-dependent particle diffusion on the X-ray spectral curvature of MKN421. *Monthly Notices of the Royal Astronomical Society*. 480(2), 2046 (2018)



- [37] Kumar S., Bhorolua D., Ojha A.K. & Kumar A. Onion juice assisted green reduction of graphene oxide with tunable structural and optical properties: Effect of onion juice concentration and reaction temperature. *Advanced Materials Letters* 10(1) (2019)
- [38] Kumar S., Ojha A.K., Das J., Kumar A. & Hazarika A. Facile synthesis of CuO nanowires and Cu₂O nanospheres grown on rGO surface and exploiting its photocatalytic, antibacterial and supercapacitive properties. *Physica B: Condensed Matter*. 558 (2019)
- [39] Kuri D.K., Das N. & Patel K. Collimated proton beams from magnetized near-critical plasmas. *Laser. Part. Beams*.1-10 (2018)
- [40] Lahan H. & Das S. K. Al³⁺ ion intercalation in MoO₃ for aqueous aluminum-ion battery. *Journal of Power Sources*. 413 (2019)
- [41] Lalung M., Phukan P. & Sarma J.K. On phenomenological study of the solution of nonlinear GLR-MQ evolution equation beyond leading order. *Nuclear Physics A*. 984, 29-43 (2019)
- [42] Phukan P., Lalung M. & Sarma J.K. Studies on gluon evolution and geometrical scaling in kinematic constrained unitarized BFKL equation: application to high-precision HERA DIS data. *The European Physical Journal C*. 79: 507 (2019)
- [43] Saikia G., Gogoi R., Gupta R. & Vaidya D.B. Modelling the mid-infrared polarization in dust around young stars. *Monthly Notices of the Royal Astronomical Society*. 484(3), 3582 (2019)
- [44] Sarmah D. & Kumar A. Layer-by-layer self-assembly of ternary MoS₂-rGO@PPyNTs nanocomposites for high performance supercapacitor electrode. *Synth. Met*. 243 (2018)
- [45] Schamel H., Das N. & Borah P. The privileged spectrum of cnoidal ion holes and its extension by imperfect ion trapping. *Phys. Lett. A*. 382, 168-174 (2018)
- [46] Sinha A., Khatoon R., Misra R., Sahayanathan S., Mandal S., Gogoi R. & Bhatt N. The flux distribution of individual blazars as a key to understand the dynamics of particle acceleration. *Monthly Notices of the Royal Astronomical Society: Letters*. 480(1), L116 (2018)
- [47] Tikish T.A., Kumar A. & Kim J.Y. Study on the Miscibility of Polypyrrole and Polyaniline Polymer Blends, *Advances in Materials Science and Engineering*. (2018)

Conference Proceedings

- [1] Borgohain H. & Das M.K. Lepton Number Violation and Lepton Flavour Violation in Left-Right Symmetric Model. *Springer Proc. Phys.* 203, 2018.
- [2] Critical Points in the Modern Particle Physics, *International Journal of Modern Physics: Conference Series*. 47, 1860100, 2018.
- [3] Francis N.K. The Effects of Majorana Phases in Estimating the Masses of Neutrinos. XXXI International Workshop on High Energy Physics.
- [4] Mukherjee A. & Das M.K. Neutrino phenomenology within Inverse and Type II Seesaw based on S₄ flavor symmetry. *Springer Proc. Phys.* 203, 2018.

Book Chapters

- [1] Biswas R. Spectrum Sensing Techniques: An overview. In *IGI-Sensing Techniques for Next Generation Cognitive Radio Networks*. ISBN 97815225540
- [2] Borah R. & Kumar A. Enhanced cellular activity on conducting polymer nanofibers: chitosan nanocomposite scaffolds for tissue engineering application. In *Polymer Nanocomposites for Advanced Engineering and Military Applications*, IGI Global. 2019. ISBN 13: 9781522578383, ISBN 10: 1522578382
- [3] Hazarika J. & Kumar A. Swift heavy ion irradiation effects on the properties of conducting polymer nanostructures. In *Springer Series on Polymer and Composite Materials - Radiation Effects in Polymeric Materials*. (Eds.) Vijay Kumar, Babulal Chaudhary, Vishal Sharma and Kartikey Verma. 2019. ISBN:978-3-030-05769-5; ISBN 978-3-030-05770-1 (eBook).



SEMINARS/ CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/ Period, Year	Place/ Institute/ Venue
A. Kumar	International Meeting on Energy Storage Devices	IIT, Roorkee	December 10-12, 2018	Department of Physics, IIT
A. Kumar	7th International Conference on Electroactive Polymers		February 3-8, 2019	Udaipur
R. Biswas	International OSA Network of Students	MAHE	January 11-14, 2019	Manipal
R. Gogoi	Meeting on "Astronomy in Universities"	IUCAA, Pune,	September, 2018.	IUCAA, Pune,
R. Gogoi	IUCAA sponsored North East Meet of Astronomers-IV	Assam University	December, 2018	Assam University
S.K. Das	Indo-UK Newton-Bhabha Workshop	JNCASR, Bangalore		JNCASR, Bangalore

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/ Period, Year	Place/ Institute/ Venue
A. Kumar	International Meeting on Energy Storage Devices	December 10-12, 2018	Department of Physics, IIT
A. Kumar	7th International Conference on Electroactive Polymers	February 3-8, 2019	Udaipur
R. Biswas	International OSA Network of Students	January 11-14, 2019	Manipal
R. Gogoi	Meeting on "Astronomy in Universities",	September, 2018.	IUCAA, Pune,
R. Gogoi	IUCAA sponsored North East Meet of Astronomers-IV	December, 2018	Assam University
S.K. Das	Indo-UK Newton-Bhabha Workshop		JNCASR, Bangalore

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE DEPARTMENT

Title	Date/ Period, Year
Workshop on "Southampton IUCAA Training for Astronomical Research and Education" (SITARE)	May 2-4, 2018
National Conference on Hard and Soft Condensed Matter Physics (NCHSCMP-2019) , (UGC-SAP-II sponsored)	March 4-6, 2019

DISTINGUISHED VISITORS TO THE DEPARTMENT

Dr. Jawad Y. Siddiqui, Calcutta University

Prof. N. Nimai Singh, Manipur University



Prof. Nareshpal S. Saini, Guru Nanak Dev University

Prof. Asoke Kumar Sen, Assam University

Prof. P. Goswami, IIT, Guwahati

Prof. Ranjan Gupta, IUCAA, Pune

Prof. Kallol Bhattacharya, Calcutta University

AWARDS & HONOURS/ NOTABLE RESEARCH ACHIEVEMENTS OF FACULTY/ RESEARCH SCHOLARS

Scholars/ Students/ Staff

Faculty Members

Bioscience Award, Prof. P. Deb, Dept. of Biotechnology

Research Scholar/ Student

Raman-Charpak Fellowship, Mr. Nilutpal Bora, DST

NUMBER OF STUDENTS QULIFIED NET-JRF/GATE/SLET

NET: 8

SLET: 7

GATE: 7

THE FACULTY MEMBERS OF THE DEPARTMENT

❖ Professors

A. Kumar

MTech (IIT Kanpur), PhD (IIT Kanpur)

Specialization: Materials Science/Condensed matter Physics, GPS

E-mail: ask@tezu.ernet.in

J.K. Sarma

MSc (Gauhati), PhD (Gauhati)

Specialization: High Energy Physics, Particle Physics

E-mail: jks@tezu.ernet.in

Nidhi Saxena Bhattacharyya

M.Sc (Merrut), PhD (Delhi)

Specialization: Microwave, Material Devices and Antennas

E-mail: nidhi@tezu.ernet.in

Nilakshi Das

MSc (Gauhati), PhD (Gauhati)

Specialization: High Energy Physics, Plasma Physics

E-mail: ndas@tezu.ernet.in



P. Deb

MSc (Calcutta), PhD (Jadavpur)
Specialization: Nanoscience and Technology
E-mail: pdeb@tezu.ernet.in

❖ **Associate Professors**

G.A. Ahmed

MSc (Gauhati), PhD (Gauhati)
Specialization: Laser Physics
E-mail: gazi@tezu.ernet.in

D. Mohanta

MSc (Utkal), PhD (Tezpur)
Specialization: Nanotechnology & Condensed Matter Physics
E-mail: best@tezu.ernet.in

P.K. Karmakar

MSc (Gauhati), PhD (Gauhati)
Specialization: Theoretical Plasma Physics
E-mail: pkk@tezu.ernet.in

M.K. Das

MSc (Gauhati), PhD (Gauhati)
Specialization: High Energy Physics, Neutrino
E-mail: mkdas@tezu.ernet.in

P. Nath

MSc (Tezpur), PhD (Gauhati)
Specialization: Fibre Optics
E-mail: pnath@tezu.ernet.in

❖ **Assistant Professors**

Ng. K. Francis

MSc (Delhi), PhD (Gauhati)
Specialization: High Energy Physics (Theoretical)
E-mail: francis@tezu.ernet.in

R. Biswas

MSc (Dibrugarh), PhD (Dibrugarh)
Specialization: Electronics & Condensed Matter Physics, Seismology
E-mail: rajib@tezu.ernet.in

Rupjyoti Gogoi

MSc (Gauhati), PhD (Gauhati)
Specialization: High Energy Physics
E-mail: rgogoi@tezu.ernet.in

S.K. Das

MSc (IIT Guwahati), PhD (IISc, Bangalore)
Specialization: Materials Science
E-mail: skdas@tezu.ernet.in



R. Sarmah

MSc (IIT, Guwahati), PhD (IISc, Bangalore)
Specialization: Condensed Matter Physics
E-mail: ritupan@tezu.ernet.in

Moon Moon Devi

MSc (Gauhati University), PhD (TIFR, Mumbai)
Specialization: Astro Particle Physics
E-mail: devimm@tezu.ernet.in

❖ **DST INSPIRE Faculty**

Arup J. Choudhury

MSc (Tezpur), PhD (Gauhati)

Specialization: Electronics & Photonics
E-mail: arup01@tezu.ernet.in

❖ **Technical Staff**

K. Baruah

PhD (Gauhati),
Technical Officer
Email: kiba@tezu.ernet.in

R. Boruah

PhD (Tezpur),
Technical Assistant
Email: rboruah@tezu.ernet.in

M. Gohain

Diploma in E&T (AICTE)
Laboratory Assistant
Email: mgohain@tezu.ernet.in

B. Boro

B.Sc (Dibrugarh)
Laboratory Assistant
Email: bbiju@tezu.ernet.in

D. Deka

B.Sc (Guwahati)
Laboratory Assistant
Email: ddeka@tezu.ernet.in

❖ **Office Staff**

U. Patir

B.Sc+PGDTM (Tezpur)+Masters in Public
Administration
UDC
Email: patir@tezu.ernet.in

N. Sarma

MTS





School of Sciences

Advanced Institutional Level Biotech Hub

Institutional Biotech Hub (IBT Hub) is an initiative of Department of Biotechnology, Government of India with a view to promote research and for manpower development. The mandate of Institutional Biotech Hub is to create trained manpower in the field of Biotechnology. The IBT Hub at Tezpur University was established in the year 2011 (Sanction no. BT/22/NE/11) at the Department of Molecular Biology and Biotechnology for a period of five years with the mandate to contribute to the advancement of the emerging area of Disease Biology with area of specialization Human Diseases. It has now been upgraded to Advanced Level Biotech Hub on the basis of its performance rated as “Very Good”. IBT Hub, Tezpur University besides conducting trainings, workshops, seminars and outreach programs in basic and advanced areas of Biotechnology, has also been extending support to the research and teaching programs of the Department of MBBT. IBT Hub has also been extending infrastructure, technical and consumable support to the Department of MBBT. IBT Hub has one completed Ph.D. thesis, one on going Ph.D. thesis, eleven M.Sc. dissertations and ten publications to its credit.

Objectives of the Hub

- To conduct hands on trainings and workshops in the area of Disease Biology
 - To support teaching and research programs of the University
 - Extension of facility for research activity of the departments of the University
- Extend teaching and training facilities to neighbouring institutes of the region

Major Facilities and Equipment Available

IBT Hub, TU provides laboratory, equipment and research facilities to Undergraduate, Post-graduate students and Research Scholars.

Equipment Present in IBT Hub

- SDS PAGE gel running and transfer apparatus
- Purification system for ultra pure water
- Freeze Dryer
- Real Time PCR

**MAJOR RESEARCH FINDINGS/ RESEARCH AND DEVELOPMENT ACTIVITIES**

Title of Research Projects	Persons Involved	Status	Remarks
Understanding Immune Suppression in Head & Neck Squamous Cell Carcinoma (HNSCC)	01	Ongoing	<p>The study on HPV and HLA-G mediated immune regulation in Head and Neck cancers evidenced increased ectopic expression of HLA-G with HPV positivity and predominant expression of HLA-G7, a soluble isoform of HLA-G in HNSCC and with HPV positivity. Our findings hint that HPV positive tumors manipulate the expression of SOCS, IFN-γ, IL-10 and, cyclinD1 in partnership with HLA-G for immune evasion and to support the growth of HNSCC tumors.</p> <ul style="list-style-type: none">Data obtained is being shared with the Clinicians for appropriate treatment and patient careOne publication and one conference presentation

PUBLICATIONS**Journal Publications**

- [1] Banerjee D., Sinha A., Saikia S., Gogoi B., Rathore A., Das A., Pal D., Buragohain A. & Dasgupta S. Inflammation-induced mTORC2-Akt-mTORC1 signaling promotes macrophage foam cell formation. *Biochimie*.151 (2018)
- [2] Sarmah N., Baruah M.N. & Baruah S. Immune modulation in HLA-G expressing Head and Neck Squamous Cell Carcinoma in relation to Human Papilloma Virus positivity: a study from Northeast India. *Frontiers in Oncology*. doi: 10.3389/fonc.2019.00058 (2019)

Conference Proceedings

- [1] Sarmah N., Longkumer I., Bora M., Baruah S. & Baruah M.N. HLA-G: Expression and Regulation in Head and Neck Squamous Cell Carcinoma. *Immunocon 2018, 45th Annual Conference of the Indian Immunology Society (IIS)*. Translational Health Science and Technology Institute (THSTI), Faridabad, India. 1st - 3rd November, 2018.
- [2] Sarmah, N., Longkumer, I., Baruah, M.N. and Baruah, S. Immunoregulation in Head and Neck Squamous Cell Carcinoma with respect to HPV positivity: a study from Northeast India. *Asian Advanced Course in Basic and Clinical Immunology, Federation of Clinical Immunological Societies (FOCIS)*, Kukas, Rajasthan, India. 26th – 29th March, 2019.

SEMINARS/ CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED**Neelanjana Sarmah Presented Two Papers**

1. HLA-G: Expression and Regulation in Head and Neck Squamous Cell Carcinoma at *Immunocon 2018, 45th Annual Conference of the Indian Immunology Society (IIS)* held from 1st - 3rd November, 2018 at Translational Health Science and Technology Institute (THSTI), Faridabad, India.
2. Immunoregulation in Head and Neck Squamous Cell Carcinoma with respect to HPV positivity: a study from Northeast India at *Asian Advanced Course in Basic and Clinical Immunology, Federation of Clinical Immunological Societies (FOCIS)* held from 26th – 29th March, 2019 at Kukas, Rajasthan, India.



Dr. S. Baruah presented a paper on Immunomodulation in HPV positive HNSCC in relation to HLAG and KIR2DLI-HLAC genotypes: a study from Northeast India at FOCIS -Member Society Symposium held from 18-06-19 to 21-06-19 at Marriott Copley Place, Boston, USA.

TALKS BY THE FACULTY ABROAD AND IN INDIA

Dr. S. Baruah delivered an invited lecture on Immunomodulation in HPV positive HNSCC in relation to HLAG and KIR2DLI-HLAC genotypes: a study from Northeast India at FOCIS -Member Society Symposium held from 18-06-19 to 21-06-19 at Marriott Copley Place, Boston, USA.

SEMINAR/WORKSHOP/ SYMPOSIA/ INVITED LECTURES ORGANISED BY THE DEPARTMENT

Outreach program on *Basic Molecular Biology Techniques* for the Class XI and XII students of Kendriya Vidyalaya, Tezpur University sponsored by the Department of Biotechnology, Government of India, 11th-13th February 2019.

Celebration of World immunology Day on 29th April, 2019 by conducting short animated movie making competition and quiz competition for the students of Tezpur University.

THE PERSONNEL OF THE CELL

❖ **Coordinator**

Sashi Baruah

Professor, Dept of Molecular Biology and Biotechnology

E-mail: sbaruah@tezu.ernet

❖ **Co-Coordinator**

S. K. Ray

Professor, Dept. of Molecular Biology and Biotechnology

E-mail: suven@tezu.ernet.in

❖ **Research Fellow**

Neelanjana Sarmah

Senior Research Fellow

neela@tezu.ernet.in



Centre for Open and Distance Learning

THE CENTRE

The Centre for open and Distance Learning was established in the year 2011 with an aim to disseminate and impart education through open and distance mode in chosen areas. The Centre offers various post-graduate, undergraduate, diploma and certificate programmes in emerging areas of science & technology, social sciences, management and humanities with flexible system to cater to the needs of the learners facing difficulty in availing regular mode of education.

Ongoing programmes under the Centre are MSc in Mathematics, MA in Mass communication, MA in English, and MA in Sociology. Post graduate diploma courses are offered in thrust areas such as Human Resource development, Environment and Disaster management and Renewable Energy and Energy Management.

The Centre, in its endeavor to offer more and more upcoming courses, is supported by international organization like UNICEF and a Post Graduate Diploma in Child Rights and Development is currently sponsored by the organization. In near future the Centre visions to connect itself to a wide range of learners through new and skill based programmes.

Academic Programmes and Student Intake

Sl. No.	Name of the Programme	No. of the Intake (Current)
1	M.A. in Mass communication	88
2	M.A. in English	25
3	M.A. in Sociology	31
4	M.Sc. in Math	36
5	Post Graduate Diploma in Renewable Energy and Energy Management	91
6	Post Graduate Diploma in Human Resource Management	127
7	Post Graduate Diploma in Environmental & Disaster Management	41
8	Post Graduate Diploma in Child Rights & Governance	46
9	Post Graduate Diploma in Investment Management	2
10	Post Graduate Diploma in Retail Management	1
11	Post Graduate Diploma in Functional Hindi	1
12	Post Graduate Diploma in Governance & Development	1
	Total	490



PUBLICATIONS

- [1] Boruah M. "Media Literacy Education as a Pedagogy of Critical Thinking". *Communicator*. Volume 3. July-September, 2018
- [2] Boruah M. "A Critical Media Literacy Approach of Reading Nationalism in MNC's Advertising in India". *Communication Today*, Vol.23, No. January-March, 2019.

SEMINARS/ CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/ Period, Year	Place/ Institute/ Venue
Debabrata Das	One Day National Consultative Committee programme by NAAC, ODL to formulate guideline for Assessment and Accreditation	NAAC, Bengaluru	4 May, 2018	India International Centre, New Delhi
Debabrata Das	One Day National Consultative Committee programme on NAAC, ODL manual preparation for criterion 5	KKHSOU	20 May, 2018	KKHSOU, Guwahati
Debabrata Das	Round Table Conference of Directors of Distance Education	University of Mumbai & Indian Distance Education Institution	29 May, 2018	University of Mumbai
Debabrata Das	One Day National Consultative Committee programme of NAAC, ODL	NAAC, Bengaluru	31, October, 2018	NAAC, Bengaluru
Debabrata Das	Round Table Conference of Vice Chancellors of Open Universities	Dr. B. R Ambedkar Open University	11-12 November, 2018	Hyderabad

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty member	Event	Date/ Period, Year	Place/ Institute/ Venue
Debabrata Das	Career Opportunities in Development Sectors	13 October, 2018	Amguri College, Sivasagar
Suchibrata Goswami	Symposium on Intellectual Property Rights	5 January, 2019	Dibru College, Dibrugarh

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE CENTRE

Title	Date/Period, year
One Day Workshop on Child Rights and Governance	26 October, 2018



DISTINGUISHED VISITORS TO THE DEPARTMENT

Dr. Nikola Balvin, Knowledge Management Specialist, UNICEF, India

Dr. Tushar Rane, Chief of field Office, UNICEF , Assam

OTHER IMPORTANT ACTIVITIES OF THE DEPARTMENT/ACHIEVEMENTS OF THE FACULTY

Contribution of the Department to the Society

Centre for Open and Distance Learning, apart from disseminating knowledge to the nook and corner of the society, keeps connecting itself to the society at large by means of organizing awareness programmes in areas where the Centre feels awareness is urgently required. Apart from involving its learners who are working in those fields, the Centre also invites members from different strata of the society. Children, women and elderly citizens of the society are thus addressed in the same platform. Making children aware of their rights, child trafficking, trafficking of human organs are few burning issues that the Centre deals with the help of experts like activists and law makers.

THE FACULTY MEMBERS OF THE CENTRE

❖ Professor

Prof. Debabrata Das

Ph.D (RGU)

❖ Director

Email:codldirector@tezu.ernet.in

❖ Assistant Professors

Suchibrata Goswami

PhD (DU), Specialization/Areas of Interest: American Literature, postcolonial literature

Email: suchitu@tezu.ernet.in

Ankita Bhattacharyya

MA (TU),

Specialization/Areas of Interest: Sociology of Health and Illness

Email:ankita@tezu.ernet.in

Madhusmita Boruah

MA (TU), Specialization/Areas of Interest: Advertising and Public Relation

Email:madhu@tezu.ernet.in

❖ Officials

Partha P. Kalita

MBA (TU), Assistant Registrar

Email: parthap@tezu.ernet.in



❖ Technical staff

Kalpadroom Almanyia

BCA, Computer Operator

Email: kalpa01@tezu.ernet.in

❖ Office Staff

Anita Ghosh

BA, Office Assistant

Email: anitag_ta@tezu.ernet.in

Rajit Bora

MTS



Teaching Learning Centre

THE CENTRE

The Teaching Learning Centre (TLC), Tezpur University was formally inaugurated on January 28, 2016 as a Centre of Excellence for Curriculum and Pedagogy under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) scheme. The scheme is funded by Department of Higher Education, MHRD. TLC envisages developing and promoting a responsive and relevant teaching-learning system for higher education communities and contributing to excellence in teaching and learning as an innovative and resourceful Centre through reflective research-based practice and the optimal use of technology. The Centre has conducted 13 programs in this financial year and trained 465 teachers and prospective teachers. Through these programs, TLC has been providing assistance and support for promoting best practices in teaching learning environment among higher education communities. Focus areas of the conducted activities are teaching learning pedagogy, learning through second language, generating resources in specific fields of pedagogy and professional development through various skills. In 2018-2019, TLC has conducted 6 weeklong outreach programs in different colleges of Assam and Arunachal Pradesh. It has also completed few action research projects, developed approximately 254 minutes of video contents and developed references for e-resources on 38 micro topics through teacher training programs. The new TLC building was also completed and handed over to TLC by the end of 2018.

Major Facilities and Equipment Available

One ICT Lab. Video Recording Facility

Publications

Journal Publication

Bora, S & Handique, S. Significance of Bound Root in Khamti Morphology. Anandam: Journal of Anandoram Borooah Institute of Language, Art and Culture, Assam. 9 (2019)

Books and Book Chapters

Ahmed, I.H. Screencasting For Effective Teaching. In Nibedita Phukan and Jayanta Sonowal(Eds.). Innovation and Rejuvenation of Teaching in Higher Education. Namrup College and TLC, Tezpur University, 2019



SEMINARS/ CONFERENCES/ WORKSHOPS/ SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized By	Date/Period, Year	Place/Institute/Venue
B. Patowari	Data Analysis in R	Assam University, Silchar	January 2 – 5, 2019	Assam University, Silchar
B. Patowari	STEC2019 Sharing Teaching-Learning Experience Conference	TLC, IIT (BHU) Varanasi	March 8-9, 2019	IIT (BHU) Varanasi
S. Bora	STEC2019 Sharing Teaching-Learning Experience Conference	TLC, IIT (BHU) Varanasi	March 8-9, 2019	IIT (BHU) Varanasi
S. Bora	Recent Issues in Literature and Language Studies	Dept. of Assamese, Dibrugarh University	March 30, 2019	Dept. of Assamese, Dibrugarh University

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/ Period, Year	Place/ Institute/ Venue
S. Bora	Cultural studies: Traditional Concept and Changing Trends	March 29, 2019	Dept. of Assamese, DCB Girls' College, Jorhat

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE CENTRE

Title	Date/ Period, Year
Convergence-I(A Follow Up Workshop)	April 25, 2018
Workshop on Action Research	May 8, 2018
Induction Training of Faculty-II	June 6- July 5, 2018
Workshop on Development of Structure for Outreach Training Programme on Innovation and Rejuvenation of Teaching in Higher Education	August 1, 2018
Induction Training of Faculty-III	November 26- December 26, 2018
Outreach Programme on Innovation and Rejuvenation of Teaching in Higher Education at Silapathar College	December 28, 2018 –January 3, 2019
Outreach Programme on Innovation and Rejuvenation of Teaching in Higher Education at DNG College	January 12-17, 2019
Outreach Programme on Innovation and Rejuvenation of Teaching in Higher Education at SPP College	January 28 – February 2, 2019
Workshop on Teaching Methodology and Technical Writing in Collaboration With Dept. of Environmental Science, TU	January 28- February 3, 2019
Outreach Programme on Innovation and Rejuvenation of Teaching in Higher Education at Suren Das College	February 4-9, 2019
Outreach Programme on Innovation and Rejuvenation of Teaching in Higher Education at Namrup College	February 9-14 , 2019
Workshop on Decoding Social Media: Dynamics, Uses and Abuses in Collaboration with Dept. of Mass communication and Journalism, TU	February 11-17, 2019
Outreach Programme on Innovation and Rejuvenation of Teaching in Higher Education at North Lakhimpur College	February 18-23, 2019



DISTINGUISHED VISITORS TO THE CENTRE

- A.K. Buragohain, Vice-Chancellor, Dibrugarh University
- B.K. Sarma, Director, DBT-AAU Centre for Agricultural Biotechnology
- Bhabesh Ch. Goswami, Vice-chancellor, Cotton University
- Mridul Hazarika, Vice-chancellor, Gauhati University
- Mukul K. Sarma (Rtd), Department of Education, Dibrugarh University.
- Munin Kakati, Vice-Chancellor, Assam Rajiv Gandhi University of Cooperative Management, Sivasagar
- N.C. Shivaprakash, Chief Research Scientist, Department of Instrumentation, IISc, Bangalore
- Nilima Bhagabati, Executive member, Commonwealth Council for Educational Administration & Management
- Padma Shri Dr. Uddhab Bharali, Indian Inventor from Lakhimpur, Assam
- Pushpanadham, M.S. University, Gujrat
- R. Meganathan, Associate Professor, Department of Education in Languages, NCERT, New Delhi
- Saket Kushwaha, Vice-chancellor, Rajib Gandhi University, Arunachal Pradesh

OTHER IMPORTANT ACTIVITIES OF THE CENTRE

E-Content Development: 254 Minutes of Video Content Developed

Repository of E-resource support for Teaching Learning- 38

Experimental Action Research- 4a

THE PERSONNEL OF THE CENTRE

❖ Director-in-Charge

M K Sarma, PhD (Tezpur University)

Professor, Dept. of Business Administration & Coordinator MTTM

Specialization/Areas of Interest: Research Methodology, Services Marketing, Tourism Marketing

E-mail: mrimoy@tezu.ernet.in, tlc@tezu.ernet.in

❖ Assistant Professors

I H Ahmed

MPhil (Delhi University), B.Ed (Gauhati University)

Specialization/Areas of Interest: Evolutionary Ethics, Environmental Ethics, Symbolic Logic, Philosophy of Education

E-mail: ikbal@tezu.ernet.in



Swapnarani Bora

PhD (Dibrugarh University)

Specialization/Areas of Interest: Folklore, Sociolinguistics, Pedagogy of Assamese

E-mail: swapnabora@tezu.ernet.in

❖ **Research Associate**

Bhushita Patowari

PhD (Gauhati University)

Specialization/Areas of Interest: Survey Sampling & Statistical Epidemiology

E-mail: b.stat@tezu.ernet.in

❖ **Technical Staff**

M J Deka

BTech (Gauhati)

Technical Assistant

E-mail: milandeka15@gmail.com



Community College

ABOUT THE COLLEGE

The Community College of Tezpur University started functioning from July, 2015. The primary objective of Community College is to offer demand driven vocational modular courses to impart employable skills, to facilitate skill up-gradation, multi-skilling, multi entry and exit, vertical mobility and life-long learning in a flexible manner to offer different levels of programmes to meet demands of various target groups with provision for horizontal as well as vertical mobility, to allow recognition of prior learning skills (certification of skills acquired informally) effectively and to integrate relevant skills into the higher education system.

ACADEMIC ACTIVITIES

Presently the Community College is offering a Diploma Programme in Paralegal Practice to provide functional understanding of law and the Indian Legal System and to develop paralegal skills to access law and justice. It is a full time programme of one year (two semesters) duration with approval of an intake of 50..

Moreover, a full time Certificate Programme in Income Generation in Financial Services Sector, a Diploma programme in Repair, Installation and Maintenance of Electronic Appliances and a Certificate programme in Repair, Installation and Maintenance of Electronic Appliances are proposed to offer subject to approval of Board of Management of the university.

DISTINGUISHED VISITORS TO THE COLLEGE

Prof B K Chakravarty, Retired Professor of the Department of Law, Gauhati University & HOD, Department of Law, TU

Nilay Dutta, Senior Advocate of the Gauhati High Court.

G N Sahewala, Senior Advocate of the Gauhati High Court.

Debojit Senapati, Advocate of the Gauhati High Court.

Dr Anurag Deep, Associate Professor of the Indian Law Institute, Delhi.

THE PERSONNEL OF THE COLLEGE

❖ Nodal Officer

A Baishya, PhD, (Jadavpur)

E-mail: anukul@tezu.ernet.in



❖ Office Staff

Bidisha Baishya, BCom (Gauhati)

Office Assistant

E-mail: bidisha@tezu.ernet.in

❖ Guest Faculty

B. Kalita, Advocate, District and Session Court, Tezpur.

E-mail: bipulkalita1985@gmail.com

A.K. Sharma

Technical Assistant, Dept. of Computer Science and Engineering, Tezpur University.

E-mail: ajay@tezu.ernet.in

Krishna Das

Technical Assistant, Dept. of Mathematical Science, Tezpur University.

E-mail: krishnadas@tezu.ernet.in

Pinky Dutta

Research Scholar, Dept. of Business Administration, Tezpur University.

E-mail: pinky@tezu.ernet.in

B.J. Kalita

Research Scholar, Dept. of Business Administration, Tezpur University.

E-mail: bidyutkalita1990@gmail.com







CENTRAL FACILITIES

- ❖ **Central Library**
- ❖ **Centre for Inclusive Development**
- ❖ **Centre for Innovation, Incubation and Entrepreneurship**
- ❖ **Computer Centre**
- ❖ **Engineering Cell**
- ❖ **Health Centre**
- ❖ **Horticulture Cell**
- ❖ **Internal Quality Assurance Cell**
- ❖ **International Office**
- ❖ **Sophisticated and Analytical Instrumentation Centre**



The Central Library

THE LIBRARY

The Central Library, Tezpur University was established in 1994 along with the establishment of the University. The library holds its goal to achieve the height as an ideal University library in the region as well as in the country. Central Library has a diverse collection of more than one lakh books and journals etc. The Library is fully computerized with the KOHA Open source software, which is an integrated multi-user library management system that supports all its in-house operations.

The collection of the library covers the latest information resources on all areas of Engineering, Science, Management, Social Science, Humanities. Library is providing access to e-resources & databases through the e-ShodhSindhu Consortia of INFLIBNET Centre and DelCon Consortium. Library is also member of DELNET and utilising its services.

Library users can access book database, theses, journal database, e-journals and other e-resources from any computer within the University campus. The Central Library is an invaluable resource for students, researchers and faculties of the University. The library delivers innovative information products, services and programmes of the highest quality that are integrated with teaching, learning and research activities. The library occupies a unique place in academic and research activities of the university. The mission of the Library is to support and supplement learning, teaching and research programmes.

THE LIBRARY BUILDING

The Library is housed at the center of the University campus in an aesthetically built three storied building occupying an area of 4734 sq mt.

MANAGEMENT

The Library Committee is the apex body for management of the Library and it is constituted by the Vice-Chancellor of the University as the Chairperson, the Librarian as the Member-Secretary. All Deans and nominees of the Academic Council, and two students as members of the Committee.

OPENING HOURS

The Library is open from 9.00 am–1.00am midnight of next day on all working days; from 10 am to 9.00 pm on Saturdays and Sundays.



COLLECTIONS OF THE LIBRARY

Books	88840
Books added during	1199
Print Journals	212
E-Journals	10360
Back Volumes of Journals	9661
Online databases	41
Theses	620
Dissertations	1388
CDs	2622
VCDs	81
VHS Cassettes	36
Newspaper/Magazines	10
Manuscripts	32

NEW APPOINTMENTS

Central Library appointed the following three library trainees for the year 2018-19,

1. Mr. Abdul Mukthadir Mazarbhuiya, MLISc (AMU)
2. Miss Rima Mani Devi, MLISc (USTM), UGC-NET
3. Miss Rupsikha Choudhury, MLISc (USTM)

DEVELOPMENTAL ACTIVITIES AT THE LIBRARY

- Implementation of KOHA open source Software for Library Automation.
- New reading hall has been setup with 64 seating capacity in the extension part of library building.
- The Central Library has developed QR Code for access of resources through mobile.

LIBRARY SERVICES

The Library is providing the following services:

- 365 days reading facility.
- Book Lending Facility.
- Book Bank Facility for EWS.
- Reference Services.
- OPAC/WebOPAC /CD Lib. Catalogue
- User Orientation and Information Literacy Programmes for Research Scholars, faculty members and students



- Current Awareness Service (Monday Morning, InfoJ, InfoGranth)
- New Arrival of Books.
- Training cum Demo on Electronic Resources
- Online Renewal and Reservation of Books
- Photocopy Services
- Children section
- Library & Information Services to Outsiders on Request
- Research Support Services
- Plagiarism Check (Urkund).
- Document Delivery Services (DELNET, JCCC).

VISITORS TO THE LIBRARY (2018-2019)

Visitor category	Student	Research Scholar	Faculty member	Staff	Outsider	Total
Average daily visitor	415	33	09	4	7	468

CURRENT LIBRARY STAFF

Dr. Mukesh Saikia

Librarian
MLISc, Ph.D (NEHU)
E-mail: mukesh@tezu.ernet.in

Dr. Monawwer Eqbal

Deputy Librarian
MLISc, MA, Ph.D (AMU)
E-mail: meqbal@tezu.ernet.in

Mr. Jitu Mani Das

Assistant Librarian
MLISc (GU), UGC-NET
E-mail: jmdas@tezu.ernet.in

Mr. Sambhunath Sahoo

Information Scientist
MLISc (Utkal), MCA, UGC-NET
E-mail: sambhu@tezu.ernet.in

Mr. Dipak Sarma

Professional Assistant
MLISc (GU), UGC-NET
E-mail: dsarma@tezu.ernet.in

**Mr. Anjan Gohain**

Professional Assistant
MA, MLISc, MPhil (VMU), UGC-NET
E-mail: anjang@tezu.ernet.in

Mrs. Monmi Choudhury

Semi Professional Assistant
BA, MLISc, PGDELT (IGNOU)
E-mail: monmi@tezu.ernet.in

Mr. Dipak Kumar Gogoi

Semi Professional Assistant
BA, MLISc (IGNOU)
E-mail: dkgogoi@tezu.ernet.in

Mr. Rajesh Sharma

Library Assistant
BA, DLISc (KKHSOU)
E-mail: rajesh@tezu.ernet.in

Mr. Ijaz Ahmed

Library Assistant
BA, BLISc (IGNOU)
E-mail: ijazah@tezu.ernet.in

Mr. Saurav Kumar Mahanta

Library Assistant
MLISc (CUH)
E-mail: souravk@tezu.ernet.in

Mr. Pinchu Basumatary

LDC
BA, BLISc (SHIATS)
E-mail: pinchu7@tezu.ernet.in

Mr. Hiranya Sarmah

LDC
BA (GU)
E-mail: hsarmah@tezu.ernet.in

Mr. Mahendra Kr. Nath

Library Attendant
BA (GU)
E-mail: mknath@tezu.ernet.in

Mr. Manjit Tamuli

Library Attendant
HSSLC (AHSEC)
E-mail: mtamuli@tezu.ernet.in



Md. Derajuddin Ahmed

MTS

E-mail: deraj@tezu.ernet.in

Mr. Dinesh Bhuyan

MTS

E-mail: dinesh@tezu.ernet.in

Mrs. Kanaka Das

MTS

EVENTS ORGANIZED

1. Organized half day Workshop on **“Access and Awareness of E-journals and e-Literature with special reference to J-Gate and NDL (National Digital Library of India)”** in collaboration with Informatics, Bangalore on dated 12th September 2018. The objective of the program is to make awareness among the faculty members and research scholars about the access and uses of e-Journal and e-Literature.
2. **National Librarians’ Day** is observed on 12 August every year to commemorate the birth anniversary of Padmashri Dr. S. R. Ranganathan (1892-1972), who is considered as father of library science in India. Dr. Ranganathan dedicated his entire life to library profession in India leaving a rich legacy. On 126th birth anniversary of Dr. S. R. Ranganathan, the Central Library of Tezpur University celebrated National Librarian’s Day on 13 August 2018.
3. **Library Orientation Program** is conducted from 3rd - 17th August 2018, newly admitted students has attended the orientation program to get acuinted with the library facilities and services.
4. **“Walk to the Library Program”** was organized by Central Library on 1st of August, 2018 under the leadership of Dr. Mukesh Saikia (Librarian) as Chairperson of the program. Prof. D.K. Saikia, Pro. V.C. Tezpur University led the program in presence of all Deans, HoDs and numbers of faculty members from various departments. Students were assembled near the water fountain and marches forward to Central Library, total 725 students participated the program to make the program a success.

FUTURE PLANS

- RFID implementation
- Remote login access of E- Resources
- Establishment of separate competitive examination section (CES)
- Establishment of Manuscript archival section / museum



Centre for Inclusive Development

THE CENTRE

In congruence with the spirit of one of Tezpur University's objectives to educate and train manpower in an equal learning space, the Centre for Inclusive Development was established in 2013. The Centre, among other things, embraces the activities of the Equal Opportunity Cell and the SC/ST Cell that have a great deal of functional commonality. The prime objective of the Centre is to play a catalytic role in uplifting the needy and underprivileged students of the University, particularly, in the academic and intellectual sphere, through education, training & engagement and counselling. In pursuance of this objective, the Centre proactively makes all out efforts to identify areas requiring intervention and takes appropriate measures for improvement through special remedial programmes such as need-based training, remedial classes, etc. Additionally, the Centre makes endeavours to reach out to the society outside the University's periphery and extend support to the needy people, particularly children and youths, through resource sharing, intellectual support and counselling.

The Centre also offers academic programmes with the objective of making meaningful contributions to the society by developing professional human resource in relevant areas. At present, the thrust area of academic programme is Child Rights and Governance. The current programme is designed in consonance with the belief that the University as an institution of higher education must endeavour to protect and strengthen the lives of our future citizens, i.e., the children. The Centre also envisions to engage with the issues pertaining to development of the marginalised sections of the society, particularly in north-east India, in future.

Academic Programmes and Student Intake

Programme	Intake
Post Graduate Diploma in Child Rights and Governance	22

Major Facilities

- Computer Laboratory with 13 PCs
- Seminar Hall (100 seater)
- Multi-media projector with screen-01
- Class Room- 02

Publications

Dhar S. Governance and Child Rights. Self-Learning Material for the Centre for Open and Distance Learning. Centre for Inclusive Development, (2018).



SEMINARS/CONFERENCES/WORKSHOPS/SYMPOSIA ATTENDED

Name of the Faculty Member	Title	Organized by	Date/ Period, Year	Place/ Institute/ Venue
Doley R.K.	Workshop on Social Media : Use and Effects	Ministry of Human Resource Development, Govt. of India	10/04/2018	AICTE, N. Delhi
Doley R.K.	National Workshop on Management of University Administration	Association of Indian Universities, New Delhi, and Tezpur University	6/02/2019 -8/02/2019	Tezpur University, Tezpur, Assam

TALKS BY THE FACULTY ABROAD AND IN INDIA

Name of the Faculty Member	Event	Date/ Period, Year	Place/ Institute/ Venue
Das Ritumoni	Attended orientation workshop of Certificate Programme on Community Health programme as a Guest for NHM Manipur, in Thoubal Hospital, Imphal	24/8/2018	Thoubal, Manipur
Das Ritumoni	Guest lecture probing in research to field investigators of a study titled An Assessment of Conflict as a Social Determinant of Health in North East Region of India	12/01/2019	Department of Social Work, Tezpur University
Dhar, Subhrangshu	Delivered a lecture on Introduction to Child Rights in the “Two-day Capacity Building Workshop on Child Rights” by the Department of Social Work, Tezpur University, and Save the Children.	25/06/2018	Department of Social Work, Tezpur University
	Delivered a lecture on Leadership Skills in the “Three-day Capacity Building Workshop on Child Rights” organized by the Department of Social Work, Tezpur University, and Save the Children.	02/09/2018	Department of Social Work, Tezpur University
Doley, Rajeev K.	Delivered a lecture on Communication Strategies Against Child Trafficking for Remote Areas of Assam in the “Day-long Workshop on Child Trafficking” organized by the National Commission for Protection of Child Rights.	19/03/2019	Dept. of Mass Communication & Journalism, Tezpur University

SEMINAR/WORKSHOP/SYMPOSIA/INVITED LECTURES ORGANISED BY THE CENTRE

Title	Date/ Period, Year
One-Day Workshop on PG Diploma in Child Rights & Governance organized in collaboration with UNICEF-Assam	16/10/2018
“One-Day Orientation Programme on Child Rights & Governance” organized jointly by the Centre for Inclusive Development and the Centre for Open and Distance Learning	26/10/2018



DISTINGUISHED VISITORS TO THE CENTRE

Dr. Tushar Rane, Chief Field Officer, UNICEF-Assam.

Dr. Nikola Balvin, Knowledge Management Specialist, UNICEF, Delhi.

AWARDS & HONOURS/ NOTABLE RESEARCH ACHIEVEMENTS OF FACULTY/ RESEARCH

Scholars/Students/Staff

Dr Ritumoni Das, Assistant Professor, CID is engaged as Observational Auditor in a project on Observational Audit Assessment of Training of PRI members conducted as a collaboration among TU-UNICEF and State Institute of Panchayat and Rural Development, Assam.

OTHER IMPORTANT ACTIVITIES OF THE CENTRE

1. Workshop/Interaction Organized:

Title	Date/ Period, Year
Students' Interactive Sessions with Dr. Nikola Balvin, Knowledge Management Specialist of UNICEF	24-25 October, 2018

2. Outreach programme organized:

Title	Date/ Period, Year
Field Immersion Programme Sponsored by UNICEF in collaboration with District Children and Adolescent Cell, Sivasagar.	7-12 October, 2018
"Learn with Fun" on Children's Day Celebration in Napaam M. V. school	14 November, 2018
Health Camp organized at Nabaprabhat Ashram in collaboration with the Health Centre, Tezpur University.	20 November, 2018
Celebrating International Women's Day with adolescence children at Napaam M.V. School, Sonitpur, through screening of Academy Award winning movie, "Period. End of Sentence" followed by a discussion on women's menstrual hygiene	8 March, 2019

NOTABLE PLACEMENT

Name	Designation	Organization
Ms. Tirina Deori Sakusa	Block Assistant	"Poshan Abhiyan", Department of Social Welfare, Govt. of Assam
Ms. Nabanita Saikia	Counsellor	AIDS Control Society, Golaghat, Assam AIDS Control Society, Department of Health and Family Welfare, Govt. of Assam



SC/ST CELL

The SC/ST Cell was set up under the Notification No F 15-2/GA-II (SCT)/3638-A dtd 16.10.07. The Cell is headed by a Liaison Officer who is assisted by a supporting staff. The Cell takes care of the welfare of the Scheduled Caste and Scheduled Tribe (SC/ST) students and employees of the University.

The Objectives of the Cell are

- To implement the reservation policy for SC/ST students and employees of the University.
- To collect data regarding the implementation of policies in respect of admission, appointment to teaching and non-teaching positions at the University; to analyze the data showing the trends and changes towards fulfilling the required quota.
- To take up such follow-up measures for achieving the objectives and targets as laid down by Government of India and UGC.
- To implement, monitor continuously and evaluate the reservation policy in the University and suggest measures for ensuring the effective implementation of the policy and programmes of the Government of India.

The SC/ST Cell has been strictly following the UGC guidelines in exercising its function. The Cell organized the following programmes during 2018-2019.

Programmes Organized by the SC/ST Cell

- Monitored admissions and recruitments of the University to ensure that govt. guidelines are strictly adhered to with regard to reservation of seats/positions for SCs and STs.
- Coordinated with the Government of Assam for Post-Matric Scholarships for SC and ST students.
- Displayed a Complaint Box outside the SC/ST Cell along with awareness drives as to how complaints or grievances, if any, can be lodged (hard copy or online).
- Furnished information related to SC/ST students and employees to the UGC/MHRD as asked from time to time.
- Special programmes on employability enhancement and personality development programmes were organized in association with the Training & Placement Cell.

❖ Professor

Dr. Rajeev K.Doley

Ph.D. (IIT, Ghy.)

Sociolinguistics, Communication Skills, Child Rights

E-mail: rkdoley@tezu.ernet.in



❖ Assistant Professors

Dr. Subhurangshu Dhar

Ph.D. (VB)

Specialization/Research area: Women & Child welfare and Child Rights

E-mail: sdhar@tezu.ernet.in

Dr. Ritumoni Das

PhD. (JNU)

Specialization/Research area: Child Rights & Governance

E-mail: ritumoni@tezu.ernet.in

L Boro

Assistant Registrar, SC/ST Cell

lboro@tezu.ernet.in

❖ Technical Staff

Dr. Bhanu Pangging Gogoi

Ph. D. (Dib.U.)

E-mail: bhanubj@tezu.ernet.in

❖ Office Staff

Shri Mohan Saikia



Centre for Innovation Incubation and Entrepreneurship

THE CENTRE

The Centre for Innovation, Incubation and Entrepreneurship was established in September 2013 which was merged with the Entrepreneurship Development Cell (EDC) initially funded by AICTE. The objectives of the cell are to:

- Create awareness among the students of the University and the educated unemployed youths of North east India regarding entrepreneurship as a career option.
- Conduct training programmes in the field of entrepreneurial skill development
- Develop entrepreneurship related course curriculum to incorporate in management and engineering programmes
- Provide guidance and facilities to first time entrepreneurs during gestation.
- Explore the possibility of commercialization of some of the potential technologies developed by the faculty members and students of TU
- Form a Technology Development group in Tezpur University comprising enthusiastic former students of the university and thereby motivating towards self-employment

Major Facilities and Equipment Available

Laboratory

TUNOVATION (A display room for developed research items/ artifacts)

Activities and Participation

Programme	Venue	Date
Conducted E-Leader Workshop	Tezpur University	12 May 2018
Conducted Assam Yatra, Startup India, Yatra Project	Assam Startup- the nest , Assam	4-5 Feb 2019
Industry Orientation & Entrepreneurial Enhancement	Dean's Gallery, SoE Tezpur University	6 Feb 2019
Awareness Program on Startup Initiative	Dean's Gallery, SoE Tezpur University	14 Feb 2019
Student members participated in Pm Yuva Yojana E-Leader Workshop	IIE, near Game Village, Lalmati, Guwahati	26-27 April 2018
Student members participated in Inter NIT E Summit, Carpe Diem	NIT Agartala, Tripura	2-4 Nov 2018



Expansion of CIIE Activities

- a. Defended proposal for establishment of technology enabling centre, was presented to review committee, which was approved for functioning w.r.t. 2019..
- b. Submitted proposal for establishment of NRDC-Innovation Facilitation Centres under DSIR Grants-in-Aid programme, wich was approved for the year 2019-20

THE PERSONNEL OF THE CENTRE

❖ Head

Dr. M.K. Hazarika

Associate Professor, Department of Food Engineering and Technology

E-mail: headciie@tezu.ernet.in

❖ Office Staff

Mr. U. Roy

UDC (on sharing basis)

Mr. J.C. Das

STA (on sharing basis)



Computer Centre

THE CENTRE

The University has a well-equipped Computer Centre (CC) with latest configured Desktop Personal Computers (PCs) spread over three units of laboratories supported by high-end servers and a host of latest software packages. The resources procured through the CC is used mostly for computational & laboratory purposes and sometimes for skill tests, online interviews, workshops, etc.

The ICT-enabled Campus of the University is well supported by the Computer Centre. It acts as a support centre for the University Community in the form of Hardware, Software and Network related activities. The extent of Local Area Network (LAN) is spread throughout the campus with 10Gigabit backbone with high speed Switching Network Devices.

A 70-seater state-of-the-art Video Conferencing facility is also available for Online Meetings, Interviews and Virtual Classes in addition to Software based Video conferencing like Skype, Aview, Vidyio, etc.

A number of Software Packages developed in-house by the CC Staff are used extensively in automation aspect of Administration as well as in Academic Departments.

Other important services rendered by the CC are the Campus Telephony System and the Video Surveillance System which runs over the Campus LAN. The Internet facility is being facilitated through the high performance 1Gbps link of National Knowledge Network (NKN).

The Campus Connect WiFi Scheme of the MHRD has been operational since August 2017 and currently over 4200 users enrolled into the system comprising of Students, Faculty members and Staff. The WiFi services are fully maintained and managed by external service provider with onsite service engineers.

SERVICES PROVIDED BY THE COMPUTER CENTRE

The primary goal of the Computer Centre is to provide quality ICT services including computational facilities to the University community. In addition to the maintenance of the computational infrastructure, the following services are supported by the Computer Centre:

- Email & Internet Services
- Credit/audit practical courses of different Departments
- Organizing practical sessions for various workshops and refresher courses of various Academic Departments.
- Organizing training programmes for the University Employees
- Assist the Administration in the process of selection and procurement of computing resources



- Providing maintenance services for computers/ peripherals to the Faculty/Staff /Departments
- Maintaining and monitoring the Campus LAN.
- Maintaining and monitoring various Internet Links.
- System Administration, Network Administration and monitoring of various servers- Email, Web, Proxy, Firewall, etc.
- Maintaining the University Website and intranet portal.
- Develop, procure and maintain software for administration and other sections of the University.
- Software maintenance Services.
- Providing presentation assistance in the auditorium and conference halls.
- EPABX system administration and maintenance.
- IP CCTV Surveillance Management.

Academic Programmes and Student Intake

Programme	Student Intake
DOEACC 'O' Level Diploma	20
DOEACC 'A' Level Diploma	20

Major Facilities and Equipment Available

Equipment

Sl. No.	Particulars	Hardware (Make/Model)	Qty
1	Video Conferencing System	Polycom 8000 Series	1
2	VoIP Telephony Server with 1200 Extension capacity	Avaya S8500 with Avaya Media Gateways G650 (2Nos), G450(2Nos), G700(5Nos), G430(2Nos)	1
3	Core Switch with 64 10G Ports	Cisco C6807-XL	1
4	Distribution Switch with 32 10G Ports	Cisco WS-C3850-24XS	16
5	Access Switches	Cisco WS-C2960X-24TD-L	80
		Extreme X350 48T	56
		Extreme X350 24T	19
		Allied Telesis AT-x510L-28GT	11
		Allied Telesis AT-x510L-52GT	3
		HP 2520G	9
6	Firewall	Huawei Eudemon 200E-X7	1
7	Router (NKN)	Cisco ASR 1000	1



Servers

Sl. No.	Server Particulars	Hardware (Make/Model)	Operating System and Application Platform
1	Secondary Storage Server	HP StoreEasy 1650	Windows Storage Server 2012
2	Email cum DNS Server	Dell PowerEdge R730xd	CentOS 6.4/ Sendmail, Bind
3	Proxy/NAT/Firewall Server	Dell PowerEdge R730xd	CentOS 6.4/ Squid Proxy 4.0
4	Email Storage Server	Dell NX 3220	Windows Storage Server 2012 R2
5	Proxy Storage Server	Dell NX 3220	Windows Storage Server 2012 R2
6	Aruba NMS Server	HP / DL-380G5	CentOS/Aruba Airwave
7	Oracle 10g Database (old)	HP / DL-380G5	Windows 2003 Server/ Oracle 10g Suite
8	Oracle 10g Database	IBM/X3560	Windows 2008 R2 Server/ Oracle 10g DB
9	Application Server	IBM/X3560	Windows 2008 R2 Server/ MySql-XAMPP
10	File cum Kaspersky Antivirus Admin Server	HP ML350 G5	Windows 2003 Server/ Kaspersky Total Space Security Admin
11	File Server cum Programming	HP DL 180G5	Redhat Enterprise Linux ES 4.0/ Open Source
12	Video Streaming Server with Storage	IBM/X3650 + IBM/DS3524	Windows 2008 R2 Server/ Adobe Media Server 5
13	Web Server	IBM/X3560	RHEL 6/Apache

Computer Terminals & Peripherals

Unit No.	Unit Name/Location	Terminals & Peripherals
Unit-0	Central Computer Centre (Academic Building -2)	Terminals = 60 (Core i5 / Windows 7 Pro./Windows 10 Pro. Desktops) Laser Printer =2 Scanner = 2 Projector =1
Unit-1	Computer Centre-Cluster-1 (SoE Complex)	Terminals = 100 (Core i5 / Windows 10 Pro. Desktops) Laser Printer =1 Scanner = 1 Projector = 1
Unit-2	Training Room (SoE Complex)	Terminals = 12 (Core i5 / Windows 10 Pro. Desktops) Projector = 1

Software Subscriptions

Sl. No.	Packages	Renewal Period
1	Microsoft Campus Agreement	Yearly
2	Kaspersky Total Space Security	Yearly



THE PERSONNEL OF THE CENTRE

❖ **Head**

S. Saharia

PhD (Tezpur)

Associate Professor, Department of Computer Science & Engineering

Specialization/Areas of Interest: Pattern Recognition, Image procession & Machine Intelligence

E-mail: sarat@tezu.ernet.in

❖ **Technical Staff Computer Engineer**

D.K. Sarma

BE(DU), MS (Tezpur)

Specialization/Areas of Interest: Computer Networks and Security

E-mail: dhiraj@tezu.ernet.in

❖ **Junior Programmer**

D.C. Choudhury

MCA (Tezpur)

J. Ahmed

M Tech(CSE) (NIT, Meghalaya)

❖ **Senior Technical Assistant**

A.K. Das

Diploma in Engg. (CSE)

N.K. Deka

Diploma in Engg. (Electronics & Telecommunication)

❖ **Technical Assistants**

M. Baruah,

Diploma in Engg (CSE)

P. Borah

DOEACC-A Level, MS(IT)

R. Choudhary

Diploma in Engg (CSE), CCNA

❖ **Other Support Staff**

Multi Tasking Staff: 03

EPABX Technician: 01 (Contractual)

Part-time Student Assistants: 05



Engineering Cell

The Engineering Cell of the university was established in March 1995. It is assigned with the prime responsibility of developing and maintaining the infrastructure in the University campus, covering an area of about 262 acres of land. The following are the major duties and responsibilities entrusted on the Engineering Cell :

1. Allotment and execution of construction projects involving civil, electrical, water supply and sanitary works.
2. Maintenance and repairing of buildings and roads.
3. Maintenance of power supply to the university campus.
4. Maintenance of water supply to all the buildings including hostels and canteens.
5. Preparing of agenda notes and writing minutes of Building Committee meetings.
6. Maintenance and development of the University campus.

CONSTRUCTION ACTIVITIES

The following construction activities were accomplished during 2018-19.

1. Replacement of existing 70W&150W HPSV street light with LED
2. Development of Side berms with PCC & Inter locking concrete block pavement at SoE

WORKS DONE WITH TENDER PROCESS

The following projects are expected to be started soon as awaiting for grant.

1. Construction of RCC 3storied 180 capacity Girls Hostel
2. Renovation of Academic Building No. I & II
3. Few Academic Buildings & Hostels under HEFA funding.

POWER SUPPLY

The Govt. of Assam has sanctioned 2 MW of power to Tezpur University. This power is released to the university by APDCL as per the load demand. Currently, the university is drawing 1500 KW (1.5MW) from the 132/33 KV Depota Grid Sub-Station of APDCL through a 13.50 KM long dedicated power line. This power is received at the university end through a 2 x 2.5 MVA, 33/11KV Sub-Station constructed by the university and is distributed through an 11KV H.T. Ring Main connected to 4 nos. of Sub-station of capacity 2 x 315 KVA, 11KV/0.433 KV located at peak load centres inside the



campus. During 2018-19, the total hours of interruptions in supply of power to the university was 273.07 hours. Out of this maintenance shut down availed by the university was 12 hours, which was rather insignificant considering the present power crisis in Assam.

WATER SUPPLY

Four deep tube well, each 102 meters deep, associated with submersible pumps were installed in the University campus to access ground water. The treatment plant consisting of aretor , flush mixture, sedimentation tan, filter unit, chlorination, underground clear water constructed for proper treatment of raw water.

Two overhead reservoir (OHR) of capacity 3.0 lakh liter and 3.50 lakh liters were constructed to store treated water . Water from the OHR reaches the consumer points through a pipe-line network under the gravity flow.

The present requirement of water in the university campus is more than 10.00 lakh liters per day. The demand is likely to increase with the increase of new Academic Buildings, Hostels and Residential Buildings. There was no instance of interruption in supply of treated water during the concerned year.

PROPOSALS OF THE YEAR

Planning and designing of the following projects have been taken up and construction works of these projects are awaited as these are placed under HEFA scheme.

1. Lecture Hall complex-II for School of Humanities & Social Sciences, School of Education and School of Sciences
2. RCC 4 storied Academic Building for the Department of Physics
3. RCC 4 storied Academic Building for the Department of Commerce
4. RCC 4 storied Academic Building for the School of Law
5. RCC 4 storied 500 capacity Boy's Hostel
6. RCC 4 storied 500 capacity Girl's Hostel
7. Type-C Residential Building
8. Type-D Residential Building
9. RCC 2 storied Animal House for Department of MBBT



Health Centre

Health Centre of Tezpur University has been functioning since 1995. It provides health care services mainly to the students, faculty members, staff along with their families and others those who are involved with the University. At present we have over 5000 beneficiaries.

SERVICES/ FACILITIES AVAILABLE

We offer OPD services but ten indoor beds are also available to provide initial care to the indoor patients including emergency cases.

OPD SERVICES

The OPD Timings

Session	Morning	Evening
April to September	8.30AM to 12.30PM	4 PM to 6 PM
October to March	8.30AM to 12.30PM	3 PM to 6 PM
Saturdays and Sundays	10 AM to 12 NOON	

One Medical Officer is always available for 24hrs emergency duty. The cases requiring hospitalization are referred to the referral Hospitals at Tezpur. Ambulance service is available round the clock and is provided free of cost. A second ambulance is also available for the PWD candidates to attend to their classes.

A stock of common medicines including lifesaving drugs are maintained and are supplied free of cost. Routine laboratory investigations are also done free of cost.

An Autoanalyser (fully automatic) and a Hormone Analyser (Mini-Vidas) is available for doing the investigations. ECG and X-ray facilities are also made available at the Health Centre for the benefit of the University community.

We also keep a set of appliances for person with disability.

Visit by Specialists

The University has engaged Specialists of different disciplines (Paediatrics, Obstetrics and Gynaecology) who visits the Health Centre on different days of the week on regular basis for the benefit of the University community.

A Clinical Psychologist also visits the University regularly for offering counselling on stress related problems. A Physiotherapist visits the health center twice a week for offering physiotherapy to the differently abled students as well as other patients.



Important Activities

- The Medical Officers visited the hostels and canteens for assessing the prevailing hygiene of the dining hall and the drainage system of the surroundings to check for any outbreak of waterborne diseases.
- Annual Health Checkup programme for employees was conducted in the current year which started from 17-09-2018.
- Fogging in the campus was done on 24-08-2018 to prevent outbreak of mosquito borne diseases.
- Pulse Polio Immunization camps was organized on 10-03-2019 in the campus as per directive of the Govt.
- A health camp was done on 20-11-18 at Navapratat, Ketekibari Tezpur, organized by IPR cell.
- Blood donation camp was also organized on different occasions.

Other Activities

- A lecture cum demonstration was given to PGDT students.
- Regularly attended as a DC member of Ph. D student in the Dept. of MBBT.
- A talk session related to Cardio Vascular & Thoracic surgery was done by Dr. A.K. Sarma on 24-09-2018

Current Staff Position

Name of the Medical Staff	Designation
Dr. (Mrs) J.S. Goswami, MBBS, DLO	CMO
Dr. S.K. Yadav , MBBS (Contract)	MO
Dr. R. Boro, MBBS (Contract)	MO
Mrs Eliza H. Barla, GNM	Nurse
Mr Pranab Baruah , D. Pharm.	Pharmacist
Ms Amrita Purty, GNM	Nurse
Mr Anuj Baruah, BA, CMLT	Lab. Technician
Mrs Niramoni Das, ANM	Lab. Technician
Mr Hiten Debnath, DMRT (Contract)	Radiographer
Mr Manoj Kr. Saikia	MTS
Mr Jiten Rajbongshi	MTS



Horticulture Section

The Horticulture Section of Tezpur University is entrusted to carry out landscaping and beautification activities on the University campus. The Assistant Horticulturist employed at Horticulture Section looks after the whole horticultural/ landscaping activities under the supervision of a Campus Horticultural Committee with a teacher as Coordinator. He is assisted by two supervisor along with 38 daily wage labourers (out of which 10 nos. of labourers were engaged for the period from 18.6.2018 to 31.3.2019 only) and a tractor driver. The annual horticultural activities during the (reported) period are detailed below.

PLANTATION PROGRAMME

A total of 935 seedlings of different ornamental plants/shrubs, fruit trees and medicinal plants etc. (excluding plantation of Swimming Pool, School of Engineering Field) were planted in different parts of the University campus, which include the Tezpur University Botanical Garden, Administrative Building, Takshashilla Vidyapeeth, Garden near waterbody, Kendriya Vidyalaya, Cafeteria, Guest House, Health Centre, Shopping complex, Auditorium, Library, Additional plot, School of Engineering, Academic Building II, Dept. of Energy, School of Management Science, 33/11 KV substation, plot near entrance gate, roads of residential colony, parts of ring road, boundary planation etc.

NEW DEVELOPMENTAL WORK

- a. Beautification of front side of Newly constructed Swimming Pool premise by plantation of 52 nos. of different ornamental plants, shrubs and other ornamental herbs beds etc.
- b. Beautification of School of Engineering field by plantation of 63 nos. of different ornamental shrubs .along the periphery.

EXTENSION ACTIVITIES

On 4.8.2018, a massive plantation programme was carried out within the premise of Krishi Vigyan Kendra, Napaam, Sonitpur as part of extension activities of Horticulture Section as well as Silver Jubilee Celebration of the University. The programme was organized by Horticulture Section, Tezpur University in collaboration with Krishi Vigyan Kendra, Napaam, Sonitpur which was inaugurated by Dr. Biren Das, Registrar, Tezpur University. In this programme, Dr Dhanapati Deka, Dean, Students Welfare, Dr Ashalata Devi & Dr. Satya Sundar Bhattacharya, Dept. of Environmental Science, Dr Amiya Kr Das, Dept. of Sociology, Mr Girindra Hazarika, Assistant Horticulturist along with a group of NSS volunteers from Tezpur University and Dr. Pramod Ch. Deka, Professor and Head, along with all staff of Krishi Vigyan Kendra, Napaam, Sonitpur were present. In this programme, About 190 seedlings of different plant species like Arjun, Agarwood, Champak, Rain tree, Ritha tree, Butterfly tree, Indian Coral Tree, Golden Shower Tree, Pink Shower Tree, Rusty Shield Bearer, Pongam Tree,



Litchi, Aonla, Olive, Black Myrobalan, Tamarind, Pomegranate, Rose apple, Guava, Burmese grape, Passion fruit, Agati, Mussaenda, Nerium, Bougainvillea etc. were planted.

MAINTENANCE OF THE EXISTING TREES

Maintenance of all existing earlier planted trees (like road side and other plantation) other than garden area were done with cleaning, fertilization and watering etc.

MAINTENANCE OF THE EXISTING GARDENS

Essential maintenance work on all the flower gardens which are located in the front of the Administrative Building, the Auditorium, the Guest House, the Library, the Community Hall, the Health Centre, the Student Activity Centre, Swimming Pool, Dept. of Energy, Dept. of Chemical Sciences, Dept. of MBBT, Dept. of Environmental Science, Dept. of Mass Communication and Journalism, HSS Building, Dept of Business Administration, Academic Buildings I and II, School of Engineering, VC's residence, Garden near waterbody, the Cafeteria, the Sophisticated Analytical & Instrumentation Centre, the Community hall, the Chandraprabha Saikianee Bhaban, the Shopping Complex, the Day Care Centre, Car parking areas near Administrative Building, Takshashilla Vidyapeeth, Kendriya Vidyalaya, the Children Park, Botanical Garden, Citrus Garden etc. was carried out throughout the concerned year.

MAINTENANCE OF HOUSE PLANT POTS FOR INDOOR DECORATION

Essential maintenance work was also carried out on all the house plant pots (about 950 in number) placed in the Administration Building, the Academic buildings, the Library, the Guest House, the Community Hall, the KBR Auditorium, the Health Centre, the Student Activity Centre and all other office buildings of the University.

MAINTENANCE OF VERMICOMPOST UNIT

A Vermicompost Unit has also been running successfully and has fulfilled the need of organic manure to some extent. About 28.60 quintals of vermicompost was produced during the concerned year.

MAINTENANCE OF THE UNIVERSITY NURSERY

The University has a nursery of its own, which has been the source of seedlings of ornamental and fruit trees of different types; shrubs; indoor plants and also some seasonal flowers for the use of the University. Essential maintenance work was carried out on the nursery throughout the concerned year.

OTHER ACTIVITIES

In addition to the above, cleaning (by jungle cutting) of different parts of University campus like surroundings of Administrative Building, different Offices and Academic Buildings, Library, Auditorium, Guest House, Chandraprabha Saikiani Bhaban, Community hall, Sports Complex, Shopping Complex/Day Care Centre, Children park, Takshashilla Vidyapeeth, Kendriya Vidyalaya, Car parking area and both sides of different roads including boundary footpath etc. were done from time to time.



Internal Quality Assurance Cell

The Tezpur University Internal Quality Assurance Cell (TU IQAC) is engaged in a series of activities required to foster the spirit of quality among the members of the University Community. The IQAC also prepares the template of applications for promotion of Faculty members under CAS as per norms specified by the UGC. Further, as per the mandatory requirement of National Assessment and Accreditation Council (NAAC), IQAC prepares the Annual Quality Assurance Report (AQAR) based on the inputs received from all the Departments/Centres/Cells/Offices of the University.

Some of the notable activities during the period 2018-2019 are highlighted below:

1. As per the recommendation of the IQA meeting held on 14 March 2018, IQAC organized a series of Workshops on revised NAAC Accreditation Framework for the Faculty members of Tezpur University during 02 to 04 May 2018.
2. Workshop on UGC Guidelines of Career Advancement Scheme (CAS) was organized for the Faculty members of Tezpur University on 13 June 2018.
3. A 2-Days Workshop on Programme Objectives, Programme Specific Objectives and Course Objectives was organized during 18 to 19 June 2018. Dr. N.C. Shivaprakash, Indian Institute of Science, Bangalore was invited for conducting the workshop sessions.
4. One day workshop on PO PSO LO concerning Curriculum was organized on 12 October 2018.
5. Academic and Administrative Audit (AAA) of Tezpur University was held during 29 to 31 October 2018.
6. Sensitization Workshop on Development of MOOCs (Massive Open Online Courses) for the Faculty members of Tezpur University was organized on 16 November 2018.
7. Debriefing meeting and discussion on Academic and Administrative Audit (AAA) Report 2018 was held on 13 December 2018.
8. Preliminary screening of the CAS applications are processed through series of meeting (10 numbers) held during the year.
9. IQAC meets on 08 August 2018 and 27 March 2019 to deliberate several important matters.



THE PERSONNEL OF THE CELL

❖ Director

D.C. Baruah, PhD

Professor, Department of Energy

E-mail: baruahd@tezu.ernet.in

❖ Data Entry Assistant

S. Mahanta, MA

E-mail: santanu@tezu.ernet.in





International Office

The International Office (IO) of Tezpur University was established in February 2013 at a time when capacity development of tertiary education in Northeast India was being actively promoted by UGC and the Ministry of Development of North Eastern Region (DONER) in collaboration with Queens' University, Belfast. The International Office has since then been run by a part-time Director, Professor PK Das, Dept. of English and Foreign Languages, and a part-time Deputy Director, Dr Rupak Mukhopadhyay, Assistant Professor, Dept. of MBBT. Over the years, the International Office has handled the admission of international students, organized talks and seminars on overseas education and research opportunities and facilitated collaboration between the university and institutions abroad.

ACTIVITIES

In April, the International Office processed and confirmed the applications of 12 foreign students sponsored by the Indian Council for Cultural Relations (ICCR).

A get-together of graduating foreign students was held on June 23. On August 9, the IO a meeting of foreign students with the Vice Chancellor. On September 28, the IO organized (at Tezpur University) an interaction of ICCR students with the Regional Director, Guwahati. The IO was visited by the AAA team on October 30. The team evaluated the IO and its activities. It recommended that the IO should have a budget of its own.

The Director (with four Deans) visited National Chung Hsing University, Taichung, Taiwan on December 17 and 18 to discuss collaboration with Tezpur University. This visited was jointly financed by National Chung Hsing University.

On January 23 and 24, the IO participated in meetings with a Queen's University Belfast (QUB) delegation consisting of Professors Stan Scott and Su Taylor and Mr Trueman. The meeting finalized the details of the MoU that will enable students and faculty to visit QUB (and vice versa) from the second half of 2019.

On March 29, the Director attended the oral defence evaluation of Alebachew Alemnew Wobete (thesis title: "School Climate and Trust: Status and Impact on the Academic Achievement of Primary Scholl Students in Ethiopia"), Ethiopian national and the first research scholar of the PhD programme of the Department of Education.

PERSONNEL OF THE OFFICE

❖ Professor

P.K. Das

Department of English and Foreign Languages
E-mail: prsntdas@tezu.ernet.in /io@tezu.ernet.in

❖ Assistant Professor

Rupak Mukhopadhyay

Department of MBBT
E-mail: mrupak@tezu.ernet.in/io@tezu.ernet.in



Sophisticated Analytical Instrumentation Centre

Instrumental methods of analysis form an indispensable aspect of Research and Development. Tezpur University has a number of departments and centers working on areas which require sophisticated analytical equipment. Sophisticated Analytical Instrumentation Centre (SAIC) at Tezpur University is set up to cater to these requirements. The Centre also extends these facilities to other educational institutions and industries within the North East region and even beyond, as many of them do not have the resources to procure and maintain sophisticated analytical instruments. The Centre also provides demonstration of instruments and their utility in different fields of research to the graduates/non-graduate students of colleges of North-East and even beyond.

The SAIC was established in 2010 with two equipment, namely, High-performance liquid chromatography (HPLC) and Gel permeation chromatography (GPC). Now SAIC boasts of thirty- nine equipment. The Centre also intends to install other sophisticated equipment like XPS, HR-MS, Confocal Microscope etc.

CENTRE MANAGEMENT COMMITTEE

The Centre Management Committee (CMC) composed of faculty members from different departments chaired by Dean R & D is the apex body for the management of sophisticated instrument facilities in an efficient way to support the research community. Following are the members of the CMC:

1. Prof. A.K. Mukherjee, Chairperson, Dean, R&D
2. Prof. A. Kumar, Convener, Head, SAIC
3. Prof. Charulata. Mahanta, Dean, SoE
4. Prof. A.J. Thakur, Dept. of Chemical Sciences
5. Prof. K.P. Sarma, Dept. of Environmental Sciences
6. Prof. D. Deka, Dept. of Energy
7. Prof. N. Karak, Dept. of Chemical Sciences

Details of Equipment under SAIC

Sl. No.	Name	Model/Date of Installation
1	Transmission electron Microscopy (TEM)	Model: TECNAI G2 20 S-TWIN (200KV) Date of Installation: 22.10.2013
2	Single crystal XRD	Model: AXS SMART APEX-I Date of Installation: 04.07.2012
3	Powder XRD	Model: D8 FOCUS Date of Installation: 02.11.2012



Sl. No.	Name	Model/Date of Installation
4	BET (Surface and Pore size analyzer)	Model: NOVA 1000E Date of Installation: 15.06.2011
5	Raman Spectrometer	Model: RENISHAW BASIS SERIES WITH 514 LASERS Date of Installation: 12.10.2012
6	Atomic absorption spectrometer (AAS)	Model: AAS-ICE 3500 Date of Installation: 18.09.2012
7	High Performance Liquid Chromatography (HPLC)	Model: UV VISIBLE DETECTION-2489, REFRACTIVE INDEX DETECTOR-2414, HPLC PUMP-515 Date of Installation: 08.06.2011
8	GPC (Gel Permeation Chromatography)	Model: UV/V VISIBLE DETECTION- 2489, REFRACTIVE INDEX DETECTOR-2414, HPLC PUMP-515 Date of Installation: 09.06.2011
9	Scanning Electron microscopy (SEM),	Model: JSM 6390LV Date of Installation: 18.11.2008
10	Photoluminescence	Model: LS-55 Luminescence Spectrometer Date of Installation: 13.06.2008
11	UV-VIS	Model: UV 2450, 206-55672-34 Date of Installation: 13.06.2008
12	NMR (multi-nuclei)	Model: ECS-400 Date of Installation: 08.04.2010
13	Thermal Analyzer (TGA-DSC)	Model: TGA-50 & DSC-60 Date of Installation: 26.05.2006
14	CHN analyzer	Model: 2400 SERIES 2 Date of Installation: 24.09.2006
15	Gas Chromatography –Mass Spectrometer	Make: PERKINELMER, USA Model No.: CLARUS 600 Date of Installation: 04.02.2009
16	Gas Chromatography	Make: Chromatography & Instrument Company, India Model: GC2010 Date of Installation: 22.01.2011
17	Fourier Transform Infrared Spectrometer	Make: Perkin Elmer Date of Installation: 29.01.1998
18	Inductively Coupled Plasma Optical Emission Spectrophotometer	Make: Perkin Elmer, USA Model No.: optima 2100 DV Date of Installation: 04.11.2009
19	DNA Sequencer	Make: Applied Biosystem Model No.: 3130 Genetic Analyzer Date of Installation: 05.07.2010
20	Fluorescence Spectrometer	Make: Perkin Elmer Date of Installation: 12.05.2010
21	Bomb Calorimeter	Make: MS. CHANGSHA KAIYUAN INSTRUMENTS CO. LTD., CHANGSHA, CHINA Model: SE-1AC/ML Date of Installation: 02.04.200822
22	Oxidation Stability Apparatus	Make: METROHM, USA Model: RANCIMAT 743 Date of Installation: 05.03.2008



Services Provided by SAIC

The center provides the following services:

- Analysis of sample as per user defined protocol
- Instrument facility is available for internal as well as external user also.
- Consumables (analytical gases, LN₂, chemicals, spare parts and glass blowing works) to all central facilities, departmental requirements as well as personal projects as and when required.
- Demonstration and presentation on the use and application of various spectroscopic and analytical techniques for students, teachers and scientists from different Laboratories, Universities and Industries.

Visitors to the Centre

Visitor Category	Internal User	External User	Total
Average visitor/day	200	20	220

Future/ Developmental Plans

The Centre plans to organize short-term courses/workshops on the use and application of various spectroscopic and analytical techniques for students, teachers and personnel from other laboratories, universities and industries for research and development in science and technology.

Plans to Procure the New Equipment

Apart from providing the research facilities as well as other related activities in this domain to in-house and others, with a view to augment the research activities, the Centre has drawn up a plan to procure the following equipment based on demand of user community:

- Confocal Microscope
- HRMS (High Resolution Mass Spectrometer)
- GC-MS (Gas Chromatography Mass Spectrometer)
- XPS (X-Ray Photoelectron Microscope)
- AFM (Atomic Force Microscope)

Facilities/ Services Extended to the User Community

- The central facility is extending the analytical facilities to the targeted user groups effectively. Moreover, the Centre is managing an inventory of analytical gases and liquid nitrogen to ensure a reliable and regular supply of these to the university users.
- Keeping in view the requirements of users, a *glass blowing workshop* is already being set up as part of the central facility under SAIC. Different types of laboratory glass apparatus are repaired in this facility and new apparatus are also designed as per user requirements.



- The Centre also provides power point presentation of instruments operation as and when required with due permission. It is worth mentioning that we have presented the power point presentation of operation/importance in research etc of all facilities under SAIC in the Faculty Development Program organized by Tezpur University under School of Engineering. We also organized glass blowing workshop program for school level students.

THE PERSONNEL OF THE CENTRE

❖ **Head, SAIC**

A Kumar, PhD (IIT-Kanpur)

Professor, Department of Physics

E-mail: ask@tezu.ernet.in, asktezu64@tezu.ernet.in

❖ **Technical Officer**

A. Hazarika

E-mail: anilh@tezu.ernet.in

❖ **Technical Assistant**

P. Kurmi

E-mail: prakash@tezu.ernet.in

T.R. Nath

E-mail: trnath@tezu.ernet.in

N.K. Gogoi

E-mail: nabag@tezu.ernet.in

❖ **Glass Blower**

P. Bharali

E-mail: pankaj@tezu.ernet.in



Programmes Organized by the University

- 1. Tezpur University completes 25 glorious years:** The year 2018-19 was significant for the University as the University, which was established on January 21, 1994 by an Act of Parliament of India completed 25 glorious years on January 21, 2019. The University celebrated the momentous occasion by organizing a three-day (19-21 January) event. Prof. D.N. Buragohain, former Director, IIT Guwahati, Prof. V.S. Chauhan, noted scientist and Executive Chairman of National Assessment and Accreditation Council (NAAC), Mr. S. K. Barua, Managing Director of Numaligarh Refinery Limited, Dr. N. C. Borah, Chairman-cum-Managing Director, GNRC Guwahati, Dr. Tushar Rane, Head, UNICEF, Assam were some of the prominent dignitaries graced the occasion. A number of activities, such as, alumni meet, Industry-academia interaction on R&D, felicitation of the retired employees of the University and various cultural programmes were organised on the occasion.
- 2. XVI Convocation of Tezpur University held:** Tezpur University organised its XVI Convocation on December 27, 2018 at Kalaguru Bishnu Prasad Rabha auditorium of the University with a total of 1132 students been conferred upon Degrees and Diplomas. Amongst them, 51 were awarded PhDs, 674 were Masters, 352 were Under Graduates (B.Tech/B.Sc/BA), 25 were PG Diplomas and 30 were Degrees and Diplomas under the Open and Distance Learning programmes. Professor (Dr.) Ramesh C. Deka, Professor Emeritus & Advisor to Director Indira Gandhi Institute of Medical Sciences, Patna and Former Director, AIIMS, New Delhi was the Chief Guest, while Hon'ble Governor of Assam Prof. Jagdish Mukhi presided over the Convocation as the Chancellor of the University.
- 3. Summer Camp for School Students:** The University jointly with Kaliabor Sub-Divisional Administration organised a 3-day summer camp during 13 – 15 July, 2018. Various programmes and activities were organised as part of the camp, such as workshop on introduction to Robotics, Night Sky Viewing by the Astronomy Club and a virtual tour of the university. The students visited various departments, laboratories and the central library and got acquainted with the state-of-the-art facilities in the University.
- 4. “InSCIgnis” Organised on the Occasion of National Science Day:** On the occasion of National Science Day observed every year throughout the country to commemorate the invention of the Raman Effect by the noted Indian physicist, Sir C.V. Raman, the University too celebrated the day with great enthusiasm and joy. Tezpur University's annual science fest showcased an array of activities ranging from experimentation and designing, astronomy exhibition, quizzes, workshops, fun events and lecture series from eminent scientists from around the globe. Apart from the lecture series, workshops and other mentioned activities, a book fair was also being organized during the event.



5. **International Day of Yoga:** The University celebrated the 4th International Day of Yoga with great enthusiasm on the University campus. Various Yoga related activities, such as, demonstration and exhibition of various yoga asanas and postures, online essay competition, quiz competition on Yoga were held. A week-long yoga camp for different age groups was also organised.
6. **Annual Meet:** The University organised the 22nd Annual Meet with lots of enthusiasm and with a large number of participation of the students. The event started with lighting of the Olympic Torch, followed by Flag Hoisting and University song. A host of sporting/cultural activities, such as, march past competition, inter-hostel chorus competition, one act play, visual /fine arts, literary events etc were organised. The annual meet concluded with a Gala cultural Evening.
7. **Independence Day:** The University community celebrated the 72nd Independence Day with a daylong programme. Prof. V.K.Jain, Vice-Chancellor hoisted the National Tricolour in the playground of the University. The unfurling of the flag was followed by a program of patriotic songs, dances presented by the University students and students of Taxashila Vidyapith and Kendriya Vidyalaya, CUT.
8. **Republic Day:** The University celebrated the 70th Republic Day with great fervor and joy with a daylong programme. The day started with a cycle rally by the students followed by hoisting of the National Flag in the playground of the University by the Vice Chancellor, Prof. V.K.Jain. It was followed by a program of patriotic songs/chorus/group dance by the students of the University, Takshashila Vidyapeeth and Kendriya Vidyalaya. A friendly cricket match by the employees of the University was also played along with various other sporting activities.
9. **Kalaguru Bishnuprasad Rabha remembered on Rabha Divas:** On the occasion of death anniversary of Kalaguru Bishnuprasad Rabha, the University organized the day on 20th June, 2018 in the Council Hall of the University.
10. **Nobel Laureate lecture series organised:** A series of lectures delivered by faculty members of the University on Frontier knowledge, Imagination and Initiatives based on the works of Nobel Laureates of the year 2018 was organised during November 15-17, 2018 at KBR auditorium.
11. **Hindi fortnight:** To promote the official language of the country, Hindi, Hindi fortnight was organised at the University during September 01-14, 2018. Various competitions such as essay writing, quiz, recitation etc were organised amongst employees and students of the University.
12. **Silpi Divas:** Like previous years, the University paid rich tributes to Rupkonwar Jyoti Prasad Agarwala by observing 'Silpi Divas', the death anniversary of, the icon of Assamese culture, on January 17 with a befitting programme organised at the University.
13. **Rabindra Jayanti:** The University paid rich tributes to Kaviguru Rabindranath Tagore on his Birth Anniversary by observing Rabindra Jayanti at the screening hall of the Dept of Mass Communication and Journalism.
14. **Tithi of Shrimanta Shankardeva:** The death anniversary of Srimanta Sankaradev, the great social reformer, Vaishnava saint and doyen of Assamese culture and literature was observed in a befitting manner.



15. **Death anniversary of Bhupen Hazarika:** The University paid fitting tribute to the legendary Bhupen Hazarika on his 7th death anniversary by organizing a cultural program at KBR auditorium of the University.
16. **National Education Day:** National Education Day was observed by the University on November 11, 2018 by organizing a host of activities, such as, Cycle rally, student seminar, debate, poster making competition, and essay writing on topic, Role of value education in contemporary society.
17. **Vigilance Awareness Week, 2018:** The University, like previous years organised Vigilance Awareness Week to create awareness on corruption from October 27-November 04, 2018.





The Year in Figures

Teaching

Employees	As on 31.03.2018	Joined during 2018-19	Left during 2018-19	As on 31.03.2019
Professor	67	0	5	62
Associate Professor	39	0	0	39
Assistant Professor	146	0	1	145
Total	252	0	6	246

Non-Teaching

Employees	As on 31.03.2018	Joined during 2018-19	Left during 2018-19	As on 31.03.2019
Group-A	38	2	4	36
Group-B	55	3	0	58
Group-C	104	9	8	105
Group-C (MTS)	73	1	0	74
Total	270	15	12	273

Statistics: SC/ST Employees, Female/ Male Employees (as on 31 March, 2019)

Teaching

Employees	SC	OBC	ST	Gen	Female	Male	Total
Professor	04	9	04	45	11	51	62
Associate Professor	05	11	02	21	06	33	39
Assistant Professor	25	38	15	67	49	96	145
Total	34	58	21	133	66	180	246

Non-Teaching

Employees	SC	OBC	ST	Gen	Female	Male	Total
Group-A	05	11	02	18	03	33	36
Group-B	11	20	04	23	11	47	58
Group-C	18	41	12	34	11	94	105
Group-C (MTS)	13	25	05	31	05	69	74
Total	47	97	23	106	30	243	273

STATISTICS: STUDENTS (as on 31 December, 2018)

Total	Male	Female	General		SC		ST		OBC/MOBC		PWD	
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
4007	2308	1699	1225	925	298	207	170	151	585	399	30	17

Compiled and Edited by

Dr. Apurba Kumar Das, Professor, Dept of Environmental Science
Dr. Rupam Kataki, Professor, Dept of Energy
Dr. Pabitra Nath, Associate Professor, Dept of Physics
Dr. V.K. Nath, Associate Professor, Dept of Electronics and Communication Engineering
Dr. Panchanan Puzari, Assistant Professor, Dept. of Chemical Sciences
Mohammad Asif, Assistant Professor, Dept. of Education
Dr. Sanghamitra Nath, Assistant Professor, Dept. of Computer Science & Engineering
Dr. Bipasha Patgiri, Assistant Professor, Dept. of English & Foreign Languages
Mr. Prayash Baruah, Assistant Professor, Dept. of Business Administration
Mr. Samaresh Barman, Public Relations & Information Officer

Hindi Version

Dr. Anushabda, Assistant Professor, Dept. of Hindi
Mr. Kul Pd Upadhyay, Hindi Officer
Ms. Rekha Rani Bezbaruah, Hindi Translator

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TEZPUR UNIVERSITY

Napaam, Tezpur 784028, Assam

Phone: +91 3712 273100, Fax: +91 3712 267005 / 6

E-mail: registrartu@tezu.ernet.in | Web: www.tezu.ernet.in