

Biodata of Professor Dhanapati Deka, Ph.D., FRSC



Vice Chancellor
Bhattadev University, Pathsala, Assam 781325.
AND
Professor (on Lien), Department of Energy, Tezpur University
And
Former Dean, Research and Development
Former Dean, Students' Welfare, Tezpur University
Former Head, Department of Energy, Tezpur University
Tezpur University (Central University of Government of India),
Tezpur-784028, Assam, INDIA
E-mail :vc@bhattadevuniversity.ac.in/dhanapati@tezu.ernet.in/
dhand0029@gmail.com
Phone (mobile): 9957184356 /9435380897

Nationality: Indian, **Date of Birth:** 2nd October, 1965, **Marital Status:** Married.

Academic Positions	Administrative positions
<ol style="list-style-type: none">Professor: 28th July, 2011-till date, Department of Energy, Tezpur University.Associate Professor: 2006-2011, Department of Energy, Tezpur University.Senior Lecturer: 2001-2006, Department of Energy, Tezpur UniversityLecturer: 1995-2001, Centre for Non-conventional Energy Studies. (Date of Joining 10.05.1995 converted to Department of Energy in 1996).Training Assistant: 1993-1995, Regional Biogas Development and Training Centre for North Eastern Region at Assam Agricultural University, Jorhat, Assam sponsored by MNRE, New Delhi.	<ol style="list-style-type: none">Dean, Research and Development, Tezpur University w.e.f. 6th September, 2022 till date (for 3 years).Dean, Students Welfare, Tezpur University for two terms with extension, 7^{1/2} years (2011-2013, 2017-2022).Head, Department of Energy, Tezpur University. 3 years (2013-2016).Warden, Nilachal Men's Hostel, Tezpur University, 3 years (2008-2011).

Distinction

- Fellow Royal Society of Chemistry (FRSC)** awarded by Royal Society of Chemistry, London in July, 2023.
- International Joint Collaborative Research Project:** 4 (Indo-Finnish-one, Indo-Brazil-one, and Indo-Hungarian-two). Total research projects (National and International) completed: 7
- Attended Leadership for Academicians programme (LEAP)** conducted by Ministry of Education, GOI, (MHRD): 1st Phase- Tata Institute of Social Sciences (TISS) , Mumbai (India) and 2nd Phase-University of Pennsylvania (PENN), USA.
- Country visited with academic and scientific purpose :** Hungary, USA, Brazil, Hungary, Spain, Finland, USA and Sweden
- Personal visit to Abroad:** Austria (Vienna), Malaysia, Singapore and Dubai (UAE)
- Publication:** Journal 80, Conference Proceedings 33, Patent 1 (Applied Patent), Book 1, Book

Chapter 8, General articles 10.

7. **AICTE assignment** as member of Expert Visiting Team for evaluating engineering colleges: 6 Engineering Colleges (AICTE-CR, Bhopal-two times visit and AICTE-NW-one time visit).
8. Nominated by University to represent Tezpur University in the **NITI Aayog meeting** held on 13.10.2023 at NITI Aayog Bhavan, New Delhi.
9. Qualified B.Sc. (Agri.) with **1st class and Distinction** in the year 1990 and **M.Sc. (Agri.) with 1st Class** from Assam Agricultural University, Jorhat, Assam in the year 1992.
10. **University merit scholarship** from Assam Agricultural University, Jorhat, Assam during master and degree level. Year: 1985-1992
11. **National Merit Scholarship** (Ministry of Human Resource Development, Govt. of India) during pre-university level. Year:1982-1984
12. **Chairperson/members** of different committees constituted by the Tezpur University.

Position in National Bodies

1. Vice-President (East), Solar Energy Society of India (2020-2022).
2. Honorary Adviser, Renewable Energy Resources, Institute of Integrative Omics and Applied Biotechnology, Nonakuri, Purba Medinipur, West Bengale-721172, India.

Research Supervision

Ph.D	M. Tech. (One year project)
Degree awarded-12 , Thesis submitted : 1, Ongoing: 5	Completed-42,

Subjects Teaching

Under graduate, Post graduate and Ph.D. level: Energy, Ecology and Environment, Biomass Energy Utilization, Fuel combustion and Technology, Energy Economics and Planning, Advanced Bio-Energy, Bio-energy and conversion systems, Energy and Environment, Energy, Environment and Sustainability, Waste to Energy.

Teaching and Research experience: 29 years continuing

Research Area of Interest: Biofuel and Bioenergy systems, Development of Renewable catalyst, Catalytic transformation of biomass into biofuel and chemicals, Biomass valorization, Modern Biofuel and Bio-refinery, Algal based biofuel system.

Achievements/Awards/Honours

1.	Visiting Scientists: Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, Budapest, Hungary (January 28- February 6, 2024), Federal University of Rio De Janeiro, Brazil (6 June-8 July, 2018), Institute of Materials and Environmental Chemistry, Budapest (June 12-20, 2017), Abo Akademi University, Turku, Finland (8-14 August, 2011).
2.	Honorary Member , Rotary Club of Tezpur (Club ID: 1198::RID:3240), Tezpur , Assam, 2020
3.	Appointed as Students Councilor in Girijananda Choudhury Institute of Management and Technology, Tezpur w.e.f. 28.02.2020 for two years.
4.	Science and Engineering Research Board, DST (SERB-DST), India granted travel support to visit Valencia, Spain for participating in International Cong. And Expo on Biofuel and Bioenergy held from 25.08.2015 to 28.05.2018.
5.	INSA-visiting fellowship under Indian National Science Academy INSA-Visiting Fellowship scheme for selected scientists was awarded by Indian National Science Academy and collaborative research work on Firewood characteristics by lignin structure study with Fourier Transformer Infrared

Spectroscopy (FTIR) was carried out at Wood Energy Division, Institute of Wood Science & Technology, Bangalore from 2.8.2001 to 31.8.2001.
--

Country visited

Purpose of visit

Hungary	Visiting Scientist, Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, Budapest, Hungary under DST sponsored Indo- Hungarian Collaborative Research Project-II “Applied Research and development for industrial realization of lignin recycling and conversion to value-added international market products” during January 28, 2024 to February 4,2024.
USA	Attended second cohort of ‘Leadership for Academician programme (LEAP) at University of Pennsylvania, USA (PENN) during December 5-10,2021sponsored by Ministry of Education, Govt. of India along with 22 nos. of participants from other institution of India including IIT,NIT and Central Universities.
Brazil	Visiting Scientist, Federal University of Rio De Janeiro, Brazil w.e.f. 6 th June, 2018-8 July,2018 under the project provision of International Collaborative project entitled “Integrated Biorefinery Approach towards production of sustainable fuel and chemicals from Algal biobased systems” sponsored by DBT , India and MCTI-CNPq-Brazil.
Hungary	Visiting Scientist, Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, Hungarian Academy of Sciences, Budapest, under DST sponsored Indo-Hungarian Collaborative Research Project “Biochemical and Biofuel production using Green Catalytic Processes” during June 12-20, 2017.
Spain	One of the speakers in the International Congress and Expo on Biofuels & Bioenergy held in Valencia, Spain during August 25-27,2015 and delivered a talk on “Bio-inspired heterogeneous catalyst for sustainable biofuel production”.
Finland	Visiting Scientist, Abo Akademi University, Finland during 8 th August-14 th August, 2011 under DST sponsored Indo-Finnish project on Green Chemistry.
USA	Participated in a Study Tour conducted by Ministry of Home Affairs, Govt. of India sponsored by USAID, USA that allowed for interactions between Government of India (GoI) officials and their U.S. Government counterparts. The Study Tour provided a professional and technical study of disaster management as practiced in the U.S. The Study Tour was conducted 1-14 October, 2006.
Sweden	Attended ‘World Bioenergy Conference 2006’ held in Jonkoping Sweden during 30 th May to 1 st June, 2006 organized by the Swedish Bioenergy Association & Elmia. 2006 and presented paper entitled “Biofuel-the present consumption and future need: the case for some North-East Indian Villages.”

Scientific Collaboration (India and Abroad)

- Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, Hungarian Academy of Sciences, Budapest (Contact: Professor Valyon József/ Dr. Magdolna R. Mihályi).
- Department of Chemical Engineering, Federal University of Rio de Janeiro, Brazil (Contact: Prof. Donato Aranda).
- Process Chemistry Centre, Department of Chemical Engineering, Åbo Akademi University, Finland (Contact: Prof. Jyri-Pekka Mikkola, Dr. Päivi Mäki-Arvel, Dr. Narendra Kumar)
- Department of Chemical Engineering, Umeå University, Sweden (Contact: Prof. Jyri-Pekka Mikkola).

- Department of Chemical Engineering, Indian Institute of Technology Delhi, New Delhi, India (Contact: Prof. K K Pant)
- Department of Chemical Engineering , Indian Institute of Technology Guwahati, Assam, India (Contact: Prof.V.V. Goud)
- CSIR-North East Institute of Science and Technology, Jorhat, India (Contact; Dr. Bipul Kalita).
- Department of Biotechnology, Gauhati University, Guwahati. (Contact; Prof. M C Kalita).

Research Projects

Completed Projects					
Sl. No	Title	Funding Agency	Amount (Rs. in lakh)	Duration	Remarks
1.	Biochemical and Biofuel production using Green Catalytic Processes.	DST, India	34.42	2016-2020	International Joint Collaborative Research Project of DST, India and Hungarian Academy of Sciences, Budapest.
2.	Integrated Biorefinery Approach towards production of sustainable fuel and chemicals from Algal biobased systems	DBT, India	100.46	2016-19 extended till 14.12.2020.	International Joint Collaborative Research Project of DBT, India and MCTI-CNPq, Brazil.
3.	Synthesis of platform bio-fuels from Renewable sources using acid modified supported ionic liquid catalysts	DST, India	34.61	2011-14	International Joint Collaborative Research Project of DST, India and Academy of Finland.
4.	One time grant for up-gradation of Lab and Library facilities to Tezpur University	MNRE, India	30.00	2017-20	Departmental Lab and library facility upgradation.
5.	Assessment and Analysis of the Plant oil feedstock available in North-East India for bio-diesel production.	UGC, India	9.25	2011-14	Major Research Project
6.	Study of performance, combustion and emission characteristics of a turbocharged diesel engine fuelled with some indigenous tree seed based biodiesel; available in North Eastern region of India.	DST, India	33.6	2013-15	Co-PI. (PI- Professor Tapan Gogoi, Dept. Of Mechanical Engineering, Tezpur University).
Ongoing Project					
7.	Applied Research and development for industrial realization of lignin recycling and conversion to value-added international market product.	DST, India	48.38,554	2021-24	International Joint Collaborative Research Project of DST, India and Hungarian Academy of Sciences, Budapest.

Ph.D. Degree Awarded

Sl.No.	About the Scholar
1	 <p>Dr. Dipak Kumar Sarma</p> <p>PhD Topic: Studies on the wetlands of Kaziranga National Park with special reference to few selected limnological parameters for sustainable management. Duration: 2007 - 2012.</p>
2	 <p>Dr Jutika Boro</p> <p>PhD Topic: Development of heterogeneous catalysts from biomass for biodiesel production. Duration: 2008-2013</p>
3	 <p>Dr. Lakhya Jyoti Konwar</p> <p>PhD Topic: Development of Renewable Heterogeneous Catalysts for Production of Liquid Biofuels Duration: 2011-2015 Awarded Research Grant (CIMO Fellowship) at Abo-Akademi University, Finland, 2013.</p>
4	 <p>Dr. Plaban Bora</p> <p>PhD Topic: Formulation of Microemulsion Based Hybrid Biofuels from Non- edible Vegetable Oil using Nonionic Surface Active Agents. Duration: 2012-2015</p>
5	 <p>Dr. Pitambar Sedai</p> <p>PhD Topic: Fuelwood characteristics of some indigenous tree species of Arunachal Pradesh. Duration: 2008-2015</p>
6.	 <p>Dr. Anuchaya Devi</p> <p>PhD Topic: Enhancement of Biodiesel Fuel Quality Using Nature Based Antioxidants. Duration: 2013-2019</p>
7.	 <p>Dr. Minakshi Gohain</p> <p>PhD Topic: Synthesis and application of bio-based heterogeneous catalyst for bio-fuel production. Duration: 2016-2021</p>

8.		Dr. Manash Jyoti Borah PhD Topic: Nanocatalyst Based Biodiesel Production From Non-Edible Oil. Duration: 2015-2021
9.		Dr. Velentina Das Ph.D. Topic: Biodiesel Production From Different Oleaginous Microalgae Of North East India Using Renewable Heterogeneous Catalyst. Duration: 2015-2021 Awarded Fulbright Nehru Doctoral Fellowship at Oklahoma State University, USA for the year 2018-19.
10.		Dr. Swagat Chutia Ph.D. Topic: Design and Development of a Robotic Algae Harvesting System for Efficient Algae Collection in Biofuel Production Route Duration: 2015-2021
11.		Dr. Khalifa Said Mohammed Hassen Ph.D. Topic: Sustainable Biodiesel Production from Selected Microalgae Strains. Ph.D. Duration: 2018-2023 (as Co-Supervisor).
12.		Dr. Niranjana Daimary Ph.D. Topic: Synthesis of heterogenous catalyst for transformation of biomass to biofuels and chemicals. Ph.D. Duration: 2017-2024

A. Paper published with impact factor more than 10					
Year	Title of the paper	Author	Journal Name/ Vol./ page/Publisher	ISSN	Impact factor
2015	Towards carbon efficient biorefining: Multifunctional mesoporoussolid acids obtained from biodiesel production wastes for biomassconversion	Konwar LJ, Maki-Arvela P, Salminen E, Kumar N, Thakur AJ, Mikkola J-P and Deka D.	Applied Catalysis B: Environmental, 176, 20-35. (Publisher: Elsevier).	0926-3373	21.41
2012	A review on solid oxide derived from waste shells as catalyst for biodiesel production	Boro J, Thakur A J and Deka D.	Renewable and Sustainable Energy Reviews, 16, 904-910. (Publisher: Pergamon-Elsevier science ltd)	1364-0321	16.799
2014	Review on latest developments in biodiesel production using carbon-based catalysts	Konwar LJ, Boro J and Deka D.	Renewable and Sustainable Energy Reviews, 29, 546-564. . (Publisher: Pergamon-Elsevier science ltd)	1364-0321	16.799

2016	Microemulsion based hybrid biofuels using glycerol monooleate	Bora P, Konwar LJ and Deka D.	Energy Conversion and Management, 117, 185–192	2590-1745	11.533
2014	Hybrid biofuels from non-edible oils: A comparative standpoint with corresponding biodiesel	Bora P, Konwar LJ , Boro J, Phukan M M , Deka D and Konwar BK.	Applied Energy, 135,450-460	0306-2619	11.446

Details of paper published

Research papers: (Peer Reviewed/Web of Science Group/Scopus/ UGC-Care)

2024

1. Zimik M, Sarmah S, Kakati B K, **Deka D** and Thangavel R. Pyrolytic conversion of Mesua ferrea testa to nitrogen-doped porous carbon for super capacitor applications. *Materials Research Bulletin* 180, 113017(2024).
2. Novodárszki G, Lónyi F*, Csík B, Mihályi M R, Barthos R, Valyon J, Vikár A, **Deka D**, Pászti Z, Shi Y and Solt H E. Hydroconversion of lignin-derived platform compound guaiacol to fuel additives and value-added chemicals over alumina-supported Ni catalysts. *Applied Catalysis A, General* 680 (2024) 119757.
3. Sarmah S, Kakati B K, Kucernak A R J and **Deka D**. Fabrication of hierarchically structured supercapacitor using N and S co-doped activated carbons derived from Samanea saman biomass. *Energy Storage*, 6(2), page e616. <https://doi.org/10.1002/est2.616>
4. Mukherjee C, Suryawanshi P G, Kalita M C, **Deka D**, Aranda D A G and Goud VV. Polarity-wise successive solvent extraction of Scenedesmus obliquus biomass and characterization of the crude extracts for broad-spectrum antibacterial activity. *Biomass Conversion and Biorefinery*, 14 (2), 2467-2483 (2024). <https://doi.org/10.1007/s13399-022-02432-1> . ISSN 2190-6823.

2023

5. Shah S R, Mazumdar N J, Centeno-Pedraza A, **Deka D**, Artioli N and Manyr H. Recent Advances in Catalyst Design for Carboxylation using CO₂ as the C1 Feedstock. *Catalysts*, 13, 1489(2023). <https://doi.org/10.3390/catal13121489>. ISSN 2073-4344
6. Daimary N, Eldiehy, K.S H, Bora N, Boruah P, Rather M A, Mandal M, Bora U and **Deka D**. Towards integrated sustainable biofuel and chemical production: An application of banana pseudostem ash in the production of biodiesel and recovery of lignin from bamboo leaves. *Chemosphere*, 314, 137625 (2023). <https://doi.org/10.1016/j.chemosphere.2022.137625>
7. Vikár A, Lónyi F, Makoye A, Nagy T, Novodárszki G, Barthos R, Szabó B, Valyon J, Mihályi M R, **Deka D** and Solt H F. Ethanol Coupling Reactions over MgO–Al₂O₃ Mixed Oxide-Based Catalysts for Producing Biofuel Additives. *Molecules*, 28, 3788 (2023). <https://doi.org/10.3390/molecules28093788>.
8. Eldiehy K.S.H, Daimary N., Borah, D, Mandal M and **Deka D**. Biodiesel Production from Chlorella homosphaera by Two-Step Catalytic Conversion Using Waste Radish Leaves as a Source for Heterogeneous Catalyst. *Appl Biochem Biotechnol* 195, 4347–4367 (2023). <https://doi.org/10.1007/s12010-023-04312-4>.
9. Borah, D., Eldiehy, K.S.H., Hatiboruah, D. Mandal M and **Deka D**. An Integrated Approach for Simultaneous Monitoring and Data Acquisition on the Culture of Green Microalga Chlorella homosphaera Using Different LED Illumination. *Bioenergy Research* 16 (1), 601-610 (2023). <https://doi.org/10.1007/s12155-022-10452-y>.

2022

10. Sarmah S, Lakhlanlal, Kakati B K and **Deka D**. Recent advancement in rechargeable battery technologies. *WIREs Energy and Environment*, e461. <https://doi.org/10.1002/wene.461> (2022).
11. Das V, Dunford N and **Deka D**. Waste utilization and biodiesel production from Desmodium maximum grown in swine wastewater using waste eggshells as a catalyst. *Aquacultural Engineering*, 99, 102293 (2022). <https://doi.org/10.1016/j.aquaeng.2022.102293>.
12. Eldiehy KSH, Daimary N, Borah D, Sarmah D, Bora U, Mandal M and **Deka D**. Towards biodiesel sustainability: Waste sweet potato leaves as a green heterogeneous catalyst for biodiesel production using microalgal oil and waste cooking oil. *Industrial Crops & Products*, 187, 115467 (2022). <https://doi.org/10.1016/j.indcrop.2022.115467> .
13. Eldiehy, K.S.H., Bardhan, P., Borah, D. *et al*. Optimization of nutrient composition for enhanced microalgal biomass and macromolecules using RSM: An integrated approach towards improving microalgal biodiesel feasibility. *J Appl Phycol* 34, 2869–2882 (2022). <https://doi.org/10.1007/s10811-022-02836-6>.
14. Eldiehy K S H, Pritam B, Borah D, Gohain M, Rather M A, **Deka D**, Mandal M. A comprehensive review on microalgal biomass production and processing for biodiesel production. *Fuel*, 324, 24773 (2022). <https://doi.org/10.1016/j.fuel.2022.124773>.
15. Chutia S, Gohain L, Kakoty N M and **Deka D**. Robotic algae harvester: a novel method for efficient algae collection. *Aquacultural Engineering*, 98,102266 (2022). <https://doi.org/10.1016/j.aquaeng.2022.102266> .
16. Rather M A, Deori P J, Gupta K, Daimary N, **Deka D**, Qureshi A, Dutta T K, Joardar S N and Mandal M. Ecofriendly phytofabrication of silver nanoparticles using aqueous extract of Cuphea carthagenensis and their antioxidant potential and

antibacterial activity against clinically important human pathogens. *Chemosphere*, 300, 134497 (2022). <https://doi.org/10.1016/j.chemosphere.2022.134497> .

17. Eldiehy K S H, Gohain M, Daimary N, Borah D, Mandal M and **Deka D**. Radish (*Raphanus sativus* L.) leaves: A novel source for a highly efficient heterogeneous base catalyst for biodiesel production using waste soybean cooking oil and *Scenedesmus obliquus* oil. *Renewable Energy*, 191, 888-901 (2022). <https://doi.org/10.1016/j.renene.2022.04.070> .
18. Daimary N, Boruah P, Eldiehy K S.H , Pegu T, Bardhan P, Bora U, Mandal M and **Deka D**. Musa acuminata peel: A bioresource for bio-oil and by-product utilization as a sustainable source of renewable green catalyst for biodiesel production. *Renewable Energy*, 187, 450-462 (2022). <https://doi.org/10.1016/j.renene.2022.01.054> .
19. Daimary N, Eldiehy K S H, Boruah P and **Deka D**. Potato peels as a sustainable source for biochar, bio-oil and a green heterogeneous catalyst for biodiesel production. *Journal of Environmental Chemical Engineering*, 10,107108 (2022). <https://doi.org/10.1016/j.jece.2021.107108> .
20. Bardhan P, Eldiehy KS, Daimary N, Gohain M, Goud VV, **Deka D** and Mandal M. Structural Characterization of Mixed Rice Straw and Deoiled Algal Cake-Based Substrate as a Potential Bioenergy Feedstock for Microbial Lipids and Carotenoid Production. *Waste and Biomass Valorization*, 13(1),195-212 (2022). <https://doi.org/10.1007/s12649-021-01512-z> .

2021

21. Gohain M, Eldiehy K S H, Bardhan P, Laskar K, Phukan H, Mandal M, Kalita D. and **Deka D**. Bio-ethanol production: A route to sustainability of fuel using bio-based heterogeneous catalyst derived from waste. *Process safety and environmental protection*, 146, 190-200 (2021). <https://doi.org/10.1016/j.psep.2020.08.046> .

2020

22. Chutia S.,Gohain M., Borah M J, Kakoty N.M. and **Deka D**. Thermal degradation of *Scenedesmus obliquus* for biofuel production. *Biomass Conversion and Biorefinery*. <https://doi.org/10.1007/s13399-020-00982-w> (2020).
23. Borah M, Sarmah H, Bhuyan N, Mohanta D and **Deka D**. Application of Box-Behnken design in optimization of biodiesel yield using WO₃/graphene quantum dot (GQD) system and its kinetics analysis. *Biomass Conversion and Biorefinery*, <https://doi.org/10.1007/s13399-020-00717-x> (2020).
24. Gohain M, Bardhan P, Laskar K, Saswati S, Mandal M, Bora U, Kalita M C, Goud V V and **Deka D**. *Rhodotorula mucilaginosa* : a source for biodiesel production from yeast single cell oil and waste cooking oil. *Renewable Energy*,160,220-230 (2020). <https://doi.org/10.1016/j.renene.2020.06.063>.
25. Das V, Tripathi A M, Borah M J, Dunford N T and **Deka D**. Cobalt-doped CaO catalyst synthesized and applied for algal biodiesel production. *Renewable Energy*,161,1110-1119 (2020). <https://doi.org/10.1016/j.renene.2020.07.040>.
26. Das S K, Tahu M, Gohain M, **Deka D** and Bora U. Bio-based sustainable heterogeneous catalyst for ipso-hydroxylation of arylboronic acid. *Sustainable Chemistry and Pharmacy*, 17,100296 (2020). <https://doi.org/10.1016/j.scp.2020.100296>.
27. Gohain M, Laskar K, Phukan H, Bora U, Kalita D and **Deka D**. Towards sustainable biodiesel and chemical production: Multifunctional use of heterogeneous catalyst from littered *Tectona grandis* leaves. *Waste Management*, 102,212–221(2020). <https://doi.org/10.1016/j.wasman.2019.10.049> .
28. Gohain M, Laskar K, Paul A, Daimary N, Maharana M, Goswami I K , Hazarika Anil , Bora U and **Deka D**. Carica papaya stem: A source of versatile heterogeneous catalyst for biodiesel production and C–C bond formation. *Renewable Energy*, 147, 541-555 (2020). <https://doi.org/10.1016/j.renene.2019.09.016> .
29. Sharma B, Pauli P, Devi A, Kalita MC, **Deka D** and Goud VV. Cost Effective Biomass Production Of *Chlorella homosphaera* and *Scenedesmus Obliquus*-Two Biofuel Potent Microalgae From Northeast India. *Asian Jr. of Microbiol. Biotech. Env. Sc.* 22 (3), 486-490 (2020). © Global Science Publications. ISSN-0972-3005.

2019

30. Laskar K, Bhattacharjee P, Gohain M, **Deka D** and Bora U. Application of bio-based green heterogeneous catalyst for the synthesis of arylidinemalononitriles. *Sustainable Chemistry and Pharmacy*, 14 , 100181 (2019). <https://doi.org/10.1016/j.scp.2019.100181> .
31. Devi A, Das V K, Das V and **Deka D**. A green approach for enhancing oxidation stability including long storage periods of biodiesel via *Thuja orientalis* L. as an antioxidant additive. *Fuel*, 253, 1264–1273 (2019). <https://doi.org/10.1016/j.fuel.2019.05.127> .
32. Borah, M. J., Devi, A., Borah, R., and **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). <https://doi.org/10.1016/j.renene.2018.10.069> .

33. Borah, M.J. , Das, A. , Das, V., Bhuyan, N. and **Deka, D.** Transesterification of waste cooking oil for biodiesel production catalyzed by Zn substituted waste egg shell derived CaO nanocatalyst. *Fuel*, 242, 345-354. (2019). <https://doi.org/10.1016/j.fuel.2019.01.060> .
34. Novodárszki, G., Valyon, J. , Illés, Á., Dóbbé, S., **Deka, D.** , Hancsók, J. and Mihályi, M.R. Heterogeneous hydroconversion of levulinic acid over silica-supported Ni catalyst. *Reaction Kinetics, Mechanisms and Catalysis*, 126 (2), 795-810 (2019). <https://doi.org/10.1007/s11144-018-1507-9> .
35. Novodárszki, G. , Solt, H.E. , Valyon, J. , Lónyi, F. , Hancsók, J., **Deka, D.**, Tuba . and Mihályi M R. Selective hydroconversion of levulinic acid to γ -valerolactone or 2-methyltetrahydrofuran over silica-supported cobalt catalysts. *Catalysis Science and Technology*, 9 (9), 2291-2304 (2019). <https://doi.org/10.1039/C9CY00168A>.
36. 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*, 69, 1135–1146 (2019). <https://doi.org/10.1007/s13213-019-01494-3>.
37. Vas V., Devi A., Das R., Kalita M.C. and **Deka D.** Microalgae lipid augmentation of *Chlorella* sp. and algal biodiesel production using CaO as catalyst-a green outlook. *Algal Res*, 10(1), 43-53 (2019). eISSN: 2229 – 6905.

2018

38. Borah M. J., Devi A., Saikia R. A. and **Deka D.** Biodiesel production from waste cooking oil catalyzed by in-situ decorated TiO₂ on reduced graphene oxide nanocomposite. *Energy*, 158, 881-889 (2018). <https://doi.org/10.1016/j.energy.2018.06.079> .
39. Devi A, Das V K, Das V and **Deka D.** Fuel Quality Assessment of Biodiesels Produced through Alcoholysis from *Pongamia glabra*, *Mesua ferrea* and their blend: A novel yet cinch approach. *Materials Today: Proceedings*, 5, 23076–23082 (2018). <https://doi.org/10.1016/j.matpr.2018.11.037> .
40. Devi A, Das V K and **Deka D.** Evaluation of the effectiveness of potato peel extract as a natural antioxidant on biodiesel oxidation stability. *Industrial Crops & Products*, 123, 454–460 (2018). <https://doi.org/10.1016/j.indcrop.2018.07.022> .
41. Konwar, L.J., Boro, J. and **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 (6), 601-607 (2018). <https://doi.org/10.1080/15567036.2012.733483>.

2017

42. Gohain M., Devi A. and **Deka D.** Musa balbisiana Colla peel as highly effective renewable heterogeneous base catalyst for biodiesel production. *Industrial Crops & Products*, 109, 8–18 (2017). <http://dx.doi.org/10.1016/j.indcrop.2017.08.006> .
43. Borah S, Bhattacharyya B, Deka J, Borah A, Devi A., **Deka D.**, Mishra S., Raidongia K. and Gogoi N. Enhanced catalytic activity and near room temperature gas sensing properties of SnO₂ nanoclusters@mesoporous Sn(IV) organophosphonate composite. *Dalton Trans.*, 46, 8664-8672 (2017). <https://doi.org/10.1039/C7DT01939D>.
44. Novodárszki G., Onyestyák, G., Barthos, R., Wellisch, A. F., Thakur, A. J., **Deka D.** and Valyon J. Guerbet alkylation of acetone by ethanol and reduction of product alkylate to alkane over tandem nickel/Mg,Al-hydroxalite and nickel molybdate/c-alumina catalyst systems. *Reac Kinet Mech Cat*, 121, 69–81 (2017). [10.1007/s11144-016-1132-4](https://doi.org/10.1007/s11144-016-1132-4) .
45. Onyestyak G, Novoda ´rszk G• Wellisch A F, Valyon J, Thakur A J and **Deka D.** Co and Ni catalysts loaded on typical well-ordered micro- and mesoporous supports for acetic acid reduction. *Reac. Kinet Mech Cat.*, 121 (1), 109– 119 (2017). <https://doi.org/10.1007/s11144-016-1134-2>.
46. Onyestyak G, Novoda ´rszk G• Wellisch A F, Valyon J, Thakur A J and **Deka D.** Guerbet self-coupling for ethanol valorization over activated carbon supported catalysts. *Reac Kinet Mech Cat.*, 121 (1), 31–41 (2017). [10.1007/s11144-016-1125-3](https://doi.org/10.1007/s11144-016-1125-3).
47. Devi A, Das V K and **Deka D.** Ginger extract as a nature based robust additive and its influence on the oxidation stability of biodiesel synthesized from non-edible oil. *Fuel*, 187, 306–314 (2017). <http://dx.doi.org/10.1016/j.fuel.2016.09.063> .
48. Das V., Devi A., Bora M. and **Deka D.** Lipid enhancement of Microalgae *Scenedesmus* sp. and catalytic transformation of the lipid to biodiesel using CaO as catalyst. *Journal of Basic and Applied Research*, 4(2),97-102 (2017). ISSN: 2395-3438
49. Chutia S., Kakoty N.M. and **Deka D.** A review of underwater robotics, navigation ,sensing technique and applications. *ACM International Conference proceeding Series Part F 130285,a8*, page 1-6 (2017).
50. Gohain M., Chutia S. and **Deka D.** Microbial Biomass Production and oil Extraction for Algae Biodiesel production- A review. *Journal of Energy Research and Environmental Technology (JERET)*, 4(1),53-57 (2017).
51. Chutia S.,Gohain M., **Deka D.** and Kakoty N.M. A review on the harvesting techniques of algae for algal based biofuel production. *Journal of Energy Research and Environmental Technology (JERET)*, 4(1),58-62 (2017).
52. Borah MJ, Devi A, Das V and **Deka D.** Catalytic conversion of *Thevetia peruviana* oil into biodiesel by TiO₂-ZnO nanocatalyst. *Int J Res Eng Technol*, 6(1),56-60 (2017).

2016

53. Konwar L J, Ma`ki-Arvel P., Kumar N, Mikkola J-P, Sarma A K and **Deka D**. Selective esterification of fatty acids with glycerol to monoglycerides over –SO₃H functionalized carbon catalysts. *Reac Kinet Mech Cat* ,19, 121–138 (2016). [10.1007/s11144-016-1040-7](http://dx.doi.org/10.1007/s11144-016-1040-7).
54. Sedai P, Kalita D and **Deka D**. Assessment of the fuel wood of India: A case study based on fuel characteristics of some indigenous species of Arunachal Pradesh. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 38 (7), 891-897 (2016). <http://dx.doi.org/10.1080/15567036.2013.834399> .
55. Bora P, Konwar LJ and **Deka D**. Microemulsion based hybrid biofuels using glycerol monooleate. *Energy Conversion and Management*, 117, 185–192 (2016). <http://dx.doi.org/10.1016/j.enconman.2016.03.026> .
56. Bora, P., Boro, J., Konwar, L.J.and **Deka D**. A comparative study of Mesua ferrea L. based hybrid fuel with diesel fuel and biodiesel. *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, 38 (9), 1279-1285 (2016). <http://dx.doi.org/10.1080/15567036.2012.747036> .
57. Bora P, Boro J, Konwar LJ and **Deka D**. Formulation of microemulsion based hybrid biofuel from waste cooking oil– A comparative study with biodiesel. *Journal of the Energy Institute*, 89 (4), 560-568 (2016). [10.1016/J.JOEL.2015.07.001](http://dx.doi.org/10.1016/J.JOEL.2015.07.001).
58. Devi, A., Das, V., and **Deka D**. Catalytic Transformation of Four Non-Edible Vegetable Oils into Biodiesel using Egg Shell (Cao) as A Catalyst and Assessment of Their Fuel Properties. *International Journal of Recent Development in Engineering and Technology*, 5 (8), 16-19 (2016). (ISSN 2347-6435(Online)).

2015

59. Konwar LJ, Maki-Arvela P, Begum P, Kumar N, Thakur AJ, Mikkola J-P, Deka R and **Deka D**. Shape selectivity and acidity effects in glycerol acetylation with acetic anhydride: Selective synthesis of triacetin over Y-zeolite and sulfonated mesoporous carbons. *Journal of Catalysis*, 329, 237-247(2015). <http://dx.doi.org/10.1016/j.jcat.2015.05.021> .
60. Bora P, Konwar LJ , Phukan M M , **Deka D** and Konwar BK. Micro emulsion based hybrid biofuels from Thevetia peruviana seed oil: Structural and dynamic investigations. *Fuel*, 157, 208-218 (2015). <http://dx.doi.org/10.1016/j.fuel.2015.04.075> .
61. Devi, A., Das, V., and Deka, D. Designer biodiesel: Preparation of biodiesel blends by mixing several vegetable oils at different volumetric ratios and their corresponding fuel quality enhancement. *Research Journal of Chemical Sciences*. 2231, 606X (2015). [10.13140/RG.2.1.3360.9042](http://dx.doi.org/10.13140/RG.2.1.3360.9042).

2014

62. Bora P, Konwar LJ , Boro J, Phukan M M , **Deka D** and Konwar BK. Hybrid biofuels from non-edible oils: A comparative standpoint with corresponding biodiesel. *Applied Energy* 135,450-460 (2014). <http://dx.doi.org/10.1016/j.apenergy.2014.08.114> .
63. Boro J, Konwar LJ, Thakur AJ and **Deka D**. Ba doped CaO derived from waste shells of T striatula (TS-CaO) as heterogeneous catalyst for biodiesel production. *Fuel*, 129, 182-187 (2014). <http://dx.doi.org/10.1016/j.fuel.2014.03.067> .
64. Boro J, Konwar LJ and **Deka D**. Transesterification of non-edible feedstock with lithium incorporated egg shell derived CaO for biodiesel production. *Fuel Processing Technology*, 122, 72-78 (2014). <http://dx.doi.org/10.1016/j.fuproc.2014.01.022> .
65. Konwar LJ, Das R, Thakur AJ, Salminen E, Maki-Arvela P, Kumar N, Mikkola J-P and **Deka D**. Biodiesel production from acid oils using sulfonated carbon catalyst derived from oil-cake waste. *Journal of Molecular Catalysis A: Chemical*, 388-389, 167-176 (2014). <http://dx.doi.org/10.1016/j.molcata.2013.09.031> .
66. Konwar LJ, Boro J and **Deka D**. Review on latest developments in biodiesel production using carbon-based catalysts. *Renewable and Sustainable Energy Reviews*, 29, 546-564 (2014). <https://doi.org/10.1016/j.rser.2013.09.003>.
67. **Deka D**, Sedai P. and Chutia R S. Investigating woods and barks of some indigenous tree species in north-East India for fuel value analysis. *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, 36 (17), 1913-1920 (2014). <http://dx.doi.org/10.1080/15567036.2010.538802> .
68. Das S, Thakur AJ and **Deka D**. Two-Stage Conversion of High Free Fatty Acid Jatropha curcas Oil to Biodiesel using Bronsted Acidic Ionic Liquid and KOH as Catalysts. *The Scientific World Journal*, Volume 2014, pp 1-9, Article ID 180983, <http://dx.doi.org/10.1155/2014/180983> .

2013

69. Pyracantha MD, Das S, Manhar AK, **Deka D**, Mandal M and Mahanta CL. Removing Antinutrients from Rapeseed Press-Cake and Their Benevolent Role in Waste Cooking Oil-Derived Biodiesel: Conjoining the Valorization of Two Disparate Industrial Wastes. *J. Agric. Food Chem.*, 61, 10746–10756 (2013). <https://doi.org/10.1021/jf403657c>.

70. Hazarik B. and **Deka D.** Modern Use of Biomass Fuel in Domestic Energy Sector: A Household Level Case Study in the Chirang District of Assam. *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, 35, 1328-1337 (2013). <https://doi.org/10.1080/15567036.2010.522435> .
71. Bora P, Boro J and **Deka D.** A Study on the Development of Mesua Ferrea L. Seed Oil based microemulsified fuel system. *International Journal of Emerging Technology and Advanced Engineering*, 3 (3), 47-51 (2013). An ISO 9001:2008 certified Int. Journal, ISSN 2250-2459, available online at www.ijetae.com .
72. Boro J. Konwar LJ and Deka D. *Vigna radiata* (mung bean) Ash as Heterogeneous Base Catalyst for Biodiesel Production. *Journal of Bioprocess Engineering and Biorefinery*, 2 (1), 54-60(7) (2013). <https://doi.org/10.1166/jbeb.2013.1033>.

2012

73. Konwar LJ, Chutia S, Boro J, Katak R and **Deka D.** Biochar supported Cao as heterogeneous catalyst for biodiesel production. *International Journal of Innovative Research and Development*, 1(7Sp), 186-195 (2012).
74. Boro, J. and **Deka, D.** A review on Biodiesel. *Journal of biobased materials and bioenergy*, 6, (2) 125-141(2012). <https://doi.org/10.1166/jbmb.2012.1207>.
75. Boro J, Thakur A J and **Deka D.** A review on solid oxide derived from waste shells as catalyst for biodiesel production, *Renewable and Sustainable Energy Reviews*, 16, 904-910 (2012). <https://doi.org/10.1016/j.rser.2011.09.011>.
76. Sarma D.K, Hoque R R and **Deka D.** Studies on the siltation and chemical contamination in the wellands of Kaziranga National Park. *J.Ecotocol.Envirion. Monit.* 22(3), 201-206 (2012) ISSN 0971-0965.

Till 2011

77. Boro J, Thakur AJ and **Deka D.** Solid oxide derived from waste shells of *Turbonilla striatula* as a renewable catalyst for biodiesel production. *Fuel Processing Technology*, 92, 2061-2067 (2011). <https://doi.org/10.1016/j.fuproc.2011.06.008>.
78. Kakati B and **Deka D.** Effect of Resin matrix precursor on the properties of Graphite Composite Bipolar Plate for PEM Fuel Cell. *Energy and Fuel*, 21, 1681-1687 (2007). <https://doi.org/10.1021/ef0603582>.
79. Kakati B and **Deka D.** Differences in physico-mechanical behaviors of resol(e) and novolac type phenolic resin based composite bipolar plate for proton exchange membrane (PEM) fuel cell. *Electrochimica Acta*, 52, 7330-7336 (2007). <https://doi.org/10.1016/j.electacta.2007.06.021>.
80. **Deka D,** Saikia P and Konwer D. Ranking of fuelwood species by Fuel value Index. *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*, 29, 1499-1506 (2007). <https://doi.org/10.1080/1556703600820476>.
81. Konwer D, Katak R and Deka D. Fuel-wood characteristics of some indigenous tree species of North-East India. *Indian Journal of Forestry*, 24 (3), 316-319 (2001). **ISSN (Print): 0971-9431**

Conference Proceedings as full papers:

1. Borah D, Eldiehy KSH and Deka D. (2023). Optoelectronic sensitivity based investigation on LED inspired microalgae cultivation. In the proceedings of Advances in Algal research of the International Symposium held at IIT Guwahati during June 12-14, 2023 jointly hosted by IIT Guwahati, CSIR-IICT, Hyderabad, GBPUAT, Pantnagar and DTU Copenhagen.
2. Chakraborty, B., Das, V. and **Deka, D.** (2023). Microalgal Growth in Low-Cost Media for Biodiesel Production. In: Deka, D., Majumder, S.K., Purkait, M.K. (eds) Sustainable Environment. NERC 2022. Springer, Singapore. https://doi.org/10.1007/978-981-19-8464-8_17. Print ISBN 978-981-19-8463-1. Paper presented in North-East Research Conclave : **Sustainable Environment** held on May 20-22,2022 at IIT Guwahati.
3. Rasul, I., Chakraborty, B. and **Deka, D.** (2023). Investigation of Microalgae Growth in a Mixture of Kraft Paper Industry Effluent and Biogas Slurry: Wastewater Treatment and Biodiesel Production. In: Deka, D., Majumder, S.K., Purkait, M.K. (eds) Sustainable Environment. NERC 2022. Springer, Singapore. https://doi.org/10.1007/978-981-19-8464-8_2. Print ISBN 978-981-19-8463-1. Paper presented in North-East Research Conclave : **Sustainable Environment** held on May 20-22,2022 at IIT Guwahati.
4. Sarmah, S., Gohain, M. and **Deka, D.** (2021). Study of the Effect of Biomass-Derived N-Self Doped Porous Carbon in Microbial Fuel Cell. In: Bose, M., Modi, A. (eds) Proceedings of the 7th International Conference on Advances in Energy Research. Springer Proceedings in Energy. Springer, Singapore. https://doi.org/10.1007/978-981-15-5955-6_110. Print ISBN: 978-981-15-5954-9

5. Hasin, M., Gohain, M. and **Deka, D.** (2021). Bio-Ethanol Production from Carbohydrate-Rich Microalgal Biomass: *Scenedesmus Obliquus*. In: Bose, M., Modi, A. (eds) Proceedings of the 7th International Conference on Advances in Energy Research PP 1215-1224, October 2020. Springer Proceedings in Energy. Springer, Singapore. https://doi.org/10.1007/978-981-15-5955-6_116. Print ISBN: 978-981-15-5954-9.
6. M. Gohain and **D. Deka**, "Water Hyacinth Derived Mixed-Oxide Heterogeneous Catalyst for Biodiesel Production," *2018 2nd International Conference on Power, Energy and Environment: Towards Smart Technology (ICEPE)*, Shillong, India, 2018, pp. 1-9, doi: 10.1109/EPETSG.2018.8658926. held NIT Meghalaya, 1-2 June 2018. Publisher: IEEE.
7. Chutia, S., **Deka, D** and Kakoty, N.M. A Review of Underwater Robotics, Navigation, Sensing Techniques and Applications. In the proceedings International Conference on Advances in Robotics (AIR 2017), IIT Delhi, June 28th- July 2, 2017.
8. Borah, M., devi, A. Das,V and **Deka, D.** Catalytic Conversion Of Thevetia Peruviana Oil into Biodiesel By Tio₂- Zno Nanocatalyst. In the proceedings International Conference on Emerging Trends in Nanomaterials Science and Technology (ICETNMST-2017), NIT Nagaland, Jan 4-6, 2017.
9. Chutia, S., Gohain, M., Deka, D. and Kakoty, N.M. A Review on the Harvesting Techniques of Algae for Algal Based Biofuel Production. In the proceedings International Conference on GREENTECH 2017, JNU Delhi, March 2017
10. Gohain,M., Chutia, S and **Deka, D.** Microalgal Biomass Production and Oil Extraction for Algae Biodiesel Production – A Review. In the proceedings International Conference on GREENTECH 2017, JNU Delhi, March 2017.
11. Devi, A., Das, V., and **Deka, D.** Renewable vs. Non-renewable antioxidants: Comparison between antioxidant activity of ginger extract and TBHQ for protecting biodiesel. In the proceedings International Conference on JNU Delhi, 5th March 2017.
12. Das,V., Devi, A., Borah, M.J. and **Deka D.** Lipid enhancement of microalgae *Scenedesmus* sp and catalytic transformation of lipid to biodiesel using CaO as a catalyst. In the proceedings International Conference on on GREENTECH 2017, JNU Delhi, 5th march March 2017.
13. Devi A, Barman R and **Deka D.** Designer biodiesel: An optimization of fuel quality by blending multiple oils. Proceedings of the First International Conference on Recent Advances in Bioenergy Research. 131-148 (2016). Publisher-Springer-New Delhi.
14. Devi A, Das V K, Das V and **Deka D.** Fuel Quality Assessment of Biodiesels Produced through Alcoholysis from *Pongamia glabra*, *Mesua Ferrea* and their blend: A novel yet cinch approach. In the proceedings of the 5th International Conference of Advances in Energy Research (ICAER-2015), IIT Bombay, December 15-17, 2015.
15. Das V, Devi A , Das V K and **Deka D.** Microalgae *Chlorella*: A Potential Feedstock For Biodiesel Production - A Review. In the proceedings of the 5th International Conference of Advances in Energy Research (ICAER-2015), IIT Bombay, December 15-17, 2015.
16. Narzary A, Phukan SJ and **Deka D.** Electricity generation from Bio-waste based Microbial Fuel Cells. In the proceedings of the 12th International Congress on Renewable Energy (ICORE-2014) on Renewables for Development of Rural Areas held in New Delhi during 8-9 December, 2014. pp. 26-31.
17. Das S, Thakur AJ, and **Deka D.** Biodiesel production by esterification of oleic acid over a Bronsted acidic ionic liquid catalyst. In the proceedings of the International conference on Harnessing natural Resources for Sustainable Development-Global Trend held on January 29-31, 2014 in Cotton College, Guwahati, Assam, 781 001, India.
18. Bora P, Konwar LJ. and **Deka D.** A study on reduction of waste cooking oil viscosity by microemulsion technique. In the Proceedings of Fifth National Conference on Advances in Energy Conversion Technologies (AECT 2012) held on 04 February 2012 at MIT, Manipal, Karnataka, India. pp. 149-151.
19. Bora P. and **Deka D.** An overview on hybrid fuel production by microemulsification technique. In the Proceedings of National Seminar on New and renewable Sources of Energy (Challenges for Renewable Energy Programme Implementation) organized by Environmental Watch and Management Institute on 21st and 22nd March, 2012, Guwahati, Assam, India.
20. Boro J. Sedai P and **Deka D.** Transesterification of mustard oil using Mollusca shells as catalyst. In the proceedings of the International Conference on Renewable Energy (ICRE-2011) held at Jaipur, India from 17-21 January,2011 organized by Centre for Non-conventional Energy Resources, University of Rajasthan, Jaipur-302055.
21. Shyam B, Konwar LJ., Boro J and **Deka D.** Biodiesel production from mixture of non-edible vegetable oil of North- east India. In the proceedings of International Congress on Renewable Energy (ICORE) held at Tezpur University jointly organized by Solar Energy Society of India and Tezpur University during 2-4 November, 2011.pp. 88-93.

22. Boro J, Konwar L J., **Deka D** and Thakur A J. Review on Carbon Based Catalysts for Biodiesel Production via Transesterification. In the proceedings of International Congress on Renewable Energy (ICORE) held at Tezpur University jointly organized by Solar Energy Society of India and Tezpur University during 2-4 November, 2011.pp. 63-70.
23. Hazarika C, Boro J and **Deka D**. Biomass gasification based power generation systems installed in remote villages of Assam for village electrification-A case study. In the proceeding of the International Congress on Renewable Energy (ICORE-2010) held at Chandigarh, India from 1-3 December, 2010 organized by Solar Energy Society of India, New Delhi.
24. Hazarika B and **Deka D**. Modern use of biomass fuel in domestic energy sector: A household level case study in Chirang District of Assam. In the proceeding of the International Congress on Renewable Energy (ICORE-2009) held at New Delhi, India from 6-7 October, 2009 organized by Solar Energy Society of India, New Delhi.
25. Kataki R, Chuti RS. and **Deka D**. A study on the fuel characteristics of some solid biofuels produced from some indigenous tree species of north-east India. In the proceedings of the 8th International oil & Gas Conference & Exhibition (Petrotech 2009), New Delhi, India. 11-15 January 2009.
26. Boro J and **Deka D**. Hydrogen production by photocatalytic degradation of water: an alternative source of energy.In the proceedings of the National Conference on Emerging trends and recent advances in electrical engineering and renewable energy held at Sikkim Manipal Institute of Technology, Sikkim during 22-24 December, 2008.
27. **Deka D**. 2006. Biofuel-the present consumption and future need: the case for some North-East Indian Villages. In the proceedings of World Bioenergy Conference 2006 held in Jonkoping Sweden, 30 May-1 June 2006, organized by the Swedish Bioenergy Association & Elmia.
28. **Deka D**. Trouble Shooting and remedial measures of Biogas Plant. In the Proceedings of the Short-Term Training on Renewable Energy Applications In North Eastern Region organized by Dept. of Mechanical Engineering, IIT Guwahati sponsored by MNES, New Delhi held during October 21-26, (2002).
29. **Deka D**. "Energy consumption pattern in rural areas of Assam. A comparative study on three different categories of villages in Sonitpur District" In the proceedings of National Renewable Energy Convention 2000, IIT Bombay, Nov 30 - Dec 2 (2000).
30. **Deka D**. Energy Recovery from Road side Hotel Wastes- a case study. In the proceedings of The 23rd National Renewable Energy Convention-99, held at Devi Ahilya Vishwavidyalay, Indore from December 20 - 22 , 369- 371(1999).
31. **Deka D**, Mahapatra S and Konwer D. Rural Energy in a typical village of Assam - A micro level case study. In the proceedings of the Renewable Energy Congress, held on January 14- 16, 1999 at the University of Kalyani, West Bengal, India.
32. **Deka et al**. Biogas Production from some Aquatic plants. In the proceedings of The Workshop in conservation of Hydrocarbon and use of Non-conventional Energy Source-organised by Oil India Limited , Duliajan on 10th February, 1998,pp 104.
33. Kataki, R., **Deka, D**. and Konwer, D., 1997. Fuel Characteristics Of Some Indigenous Wood. In: Biomass Energy Systems: Proceedings of the International Conference, 26-27 February 1996, New Delhi (p. 118). Tata Energy Research Institute.

Patent: Filed Patent no. 202231069759 (Indian Patent) dtd. 02-12-2022

Topic: STAMP (Stacked Tray Modular Photobioreactor).

Book :

Date Published	of Title	Author	ISBN	Publisher
24-01-2017	Zinjiber officinale: A nature based antioxidant for biodiesel.	Devi A, Das V K and Deka D	978-3-330-03736-6	Lap Lambert Academic Publishing, Germany

Book Chapters:

1. Eldiehy K S H, Das V, Borah D, Mandal M and **Deka D**.Strategic approaches to enhance lipid accumulation in microalgae for bioprospecting. In: Algal Biorefinery Developments, Challenges and Opportunities, (eds.) Dalai A, Goud VV, Nanda S and Borugadda V B. Routledge, Taylor & Francis Group, ISBN 9780367570057 (2021).

2. Bhuyan N, Borah M J, Bora N, Saikia D, **Deka D** and Kataki R. Heterogeneous Nanocatalytic Conversion of Waste to Biodiesel. In: Nano- and Biocatalysts for Biodiesel Production, 249–277. doi:10.1002/9781119729969.ch10 (2021). John Wiley & Sons, ISBN: 978-1-119-73000-2.
3. Baruah PP, Bora P and **Deka D**. Biogas quality upgradation using *Musa bulbasiana*: a study on domestic biogas plant. In: Biofuels and Bioenergy (BICE2016), pp 287-297(2017). Springer, Cham.
4. Devi A, Barman R and Deka D. Designer Biodiesel: An Optimization of Fuel Quality by Blending Multiple Oils. Proceedings of the First International Conference on Recent Advances in Bioenergy Research, Springer Proceedings in Energy, pp 131-148, DOI 10.1007/978-81-322-2773-1_10, © Springer India 2016. ISBN: 978-81-322-2771-7 (Print), 978-81-322-2773-1 (Online), 2016.
5. Das S, Thakur A J and Deka D. Influence of free fatty acids content in catalytic activities of [BSMIM] Cl ionic liquid for biodiesel production from non-edible acidic oils. In: *Recent Advances in Bio-energy Research, Vol. III* CHAPTER 33. Editors: Sachin Kumar, A. K. Sarma, S. K. Tyagi, Y. K. Yadav. ISBN 978-81-927097-2-7, Sardar Swaran Singh National Institute of Renewable Energy, Kapurthala-144601 (Punjab), Electronic version published by SSS-NIRE-2014, Kapurthala, India, PP 449-356.
6. Bora P, Boro J and **Deka D**. Formulation and Characterization of Non-edible oil based micro-emulsified fuel. In: Suresh and Sudhakar (eds.). BSP Books Pvt. Ltd., Hyderabad (ISBN: 978-81-7800-286-6), 2013. pp.247-251.
7. **Deka D**. Biofuel resource availability, production and utilization in the case for north east India. In: *Biodiversity and Environmental Biotechnology*. eds. Dwivedi P., Dwivedi S. and Kalita M., Scientific Publishers, Jodhpur, India. (ISBN: 81-7233-467-2) pp.463-480.
8. **Deka D**. APARAMPARA SAKTHI ARU PARIBESH. In: Bikalpa Saktir Utsav, P. Sarma(ed.), a book in Assamese, Society for Chemical Education, Dept. of Chemistry, Gauhati university, Assam, pp 44 – 49.

Dissemination and general articles

1. A popular article on “BHARATAR NATUN SHIKSHA NITIR KISO PARJAYALOSANA” in Assamese was published in the Magazine ‘SHIKSHA PRADIP’ (ed. Bhuyan B B) of All Assam Madhamik School Teachers Association published for 54th biannual Conference held at Nalbari, Assam during March 25-26, 2023 pp.17-19.
2. A popular article on ‘DURGUSHABAR ADHANTIK ARU VAIGYANIK BAIKHISTA’-AK ABALOKAN’ in Assamese was published in the Souvenir (eds. Deka S and Sarma G) of the Centenary Celebration of Madanpur Sarbajanin Durga Puja held during October 1-5, 2022 and October 9, 2022, pp 9-12.
3. A popular article on ‘Green Business for Sustainable Energy Future’ was published in the Souvenir Sampark 2010 - the interface organized by Department of Business Administration, School of Management Sciences, Tezpur University on January 22,2010.
4. A popular article on Biofuel based rural energy-the issues and the challenges. was contributed to online newsletter of North East Research Forum *NE Quest*, vol.1(1),8-11, 2007.
5. A popular article on Biofuel was contributed to the Souvenir on the occasion of the seminar on Gender and Energy Use organized by Department of Energy, Tezpur University on November 11,2005
6. A popular article in vernacular language (Assamese) on APARAMPARA SAKTHI ARU PARIBESH was contributed to a book in Assamese BIKALPA SAKTI UTSAV edited by P. Sarma and published by Society for Chemical Education, Dept. of Chemistry, Guahati university, Assam, pp 44-49, 2000.
7. A project report on Quantity and type of wastes generated in a remote village of Sonitpur District of Assam - A micro level case study was submitted to Additional Chief Engineer, Public health Engineering, North Assam Zone, Tezpur Assam during 1998.
8. As Co-ordinator, Posters and stickers on awareness campaign for efficient energy use and save energy were prepared and distributed to different academic and administrative building of Tezpur University by the students of Department of Energy during Rajiv Gandhi Akshay Urja Diwas, 2009 held on 20-8-2009.
9. As Co-ordinator of the Training Programme, Disaster Management Cell of Tezpur University, training programme on disaster management was conducted under the scheme of Ministry of Home Affairs, Govt. of India in four different places of Sonitpur and Nowgaon districts of Assam specially on Flood and Earthquake Hazards during arch- September,2005. Govt. officials, University and College teachers participated in the training programme.
10. A popular article in vernacular language (Assamese) on JAIBIK GASJANTRAR ABASHISTA: SASWAR UTAM KHAR was published in the esteemed vernacular daily THE DAINIK JANAMBHUMI on May 10,1996.

Leadership for Academicians programme (LEAP) attended:

1. Attended “Leadership for Academicians Programme, **LEAP**, at **Tata Institute of Social Sciences** , Mumbai w.e.f 20th January to 31st January ,2020 under the aegis of Ministry of Human Resource Development (MHRD) , Government of India.
2. Attended second cohort of ‘Leadership for Academician programme, **LEAP**, at **University of Pennsylvania**, USA (PENN) during December 5-10, 2021 sponsored by Ministry of Education, Govt. of India.

AICTE Assignment

1. Member of the Expert Visiting Committee (EVC) of AICTE-CR, Bhopal for evaluating two Engineering College in Surat, Gujarat during 05.03.2018 to 07.03.2018.
2. Member of the Expert Visiting Committee (EVC) of AICTE-CR, Bhopal for evaluating two Engineering College in Indore during 9.10.2017 to 10.10.2017.
3. Member of the Expert Visiting Committee (EVC) of AICTE-NW for evaluating two Government Polytechnic College in Rajasthan during April 18-19, 2016.

Academic assignment as External Examiner /Expert

1. External Examiner for Ph.D. Thesis evaluation and Ph.D. Viva-voce examination of the Department of Chemistry, **Bodoland University** on 20-03-2023.
2. External Examiner for Ph.D. Thesis evaluation of Department of Mechanical Engineering, **North Eastern Regional Institute of Science and Technology**, Arunachal Pradesh during October,2021.
3. External Examiner for conducting Ph.D. Viva Voce Examination held on 29/10/2021 and Ph.D. Thesis evaluation of Academy of Scientific and Innovative Research (AcSIR), **CSIR-North-East Institute of Science and Technology (CSIR-NEIST)**, Jorhat, Assam
4. External Examiner for conducting Ph.D. Viva Voce Examination held on 05/08/2020 and Ph.D. Thesis evaluation of **Department of Biotechnology, Gauhati University** (REF. No. GU/Acad/PhD/Viva-voce dtd 29th July, 2020.).
5. External Examiner for conducting Ph.D. Viva Voce Examination held on 9-03-2020 and Ph.D. Thesis evaluation of **Department of Biochemistry and Agricultural Chemistry , Assam Agricultural University**, Jorhat (Ref. Letter no. AAU-3(8)/2018-PG/4263 dtd. 06.01.2020.)
6. External Examiner for **M.Sc.. Thesis evaluation of Department of Biochemistry and Agricultural Chemistry, Assam Agricultural University**, Jorhat on 03.10.2019.
7. One of the external experts for the Assessment committee in the area of “Chemical Science and Chemical Technology” **CISR-North East Institute of Science and Technology-Jorhat-785006**, on 22-10-2019 at 11.00AM. (Ref. No. 1-2 (32)/2017-18/2019-RAB dtd October 14, 2019).
8. External Examiner to conduct Ph.D. Viva-Voce Examination on 25.10.2014 and Ph.D. Thesis evaluation of **Department of Biotechnology, Gauhati University** (Ref. No. ACR/Ph.D./4658/2014 dtd. 20/10/14).
9. Act as an Expert on the Selection Committee for appointment of Faculty in the Centre for Energy Engineering in **Central University of Jharkhand**, Ranchi held on 10.01.2014 in CUJ, Ranchi.
10. Conducted viva-voce examination as External Examiner for **M.Tech. Students of the Department of Mechanical Engineering, Assam Engineering College** held on 08.03.2008 (Ref. CON/EXR/TH/17/3,4/08 dtd. 01.03.2008).
11. Conducted practical Examination in **Biswanath College of Agriculture, AAU**, for the 1st year B.Sc. (Agri) students of BAC-124 course on 12.09.2001.

Chairperson/Member of committees Constituted by University

2023

1. Ex-Officio member as Dean, Research and Development, Tezpur University of the **Central Management Committee for Institution Incubation Centre (IIC) and Centre for Incubation, Innovation and Entrepreneurship (CIIE)**, Tezpur University as per office order no. F.18-28/2023 (GA-I)/2820 dtd. 01.12.2023.
2. Ex-officio Special Invitee as Dean, Research and Development, Tezpur University **for updating Academic Regulation - 2019 (UG/PG)** in the line of NEP 2020 as per office order no. F.20-15/1/2003(Acad)/805-A dtd 03.11.2023.

3. Ex-officio member as Dean, Research and Development, Tezpur University of the **Research Committee** of the University as per office order no. F.18-8/1/2003 (Acad)/722-A dtd.20.10.2023.
4. Ex-officio member as Dean, Research and Development, Tezpur University of the committee to review the draft **Institutional Development Plan (IDP)** for the University as per office Notification No. F.14-8/97/(GA-I)(Vol.IV)/2270 dtd. 26.10.2023.
5. Chairperson as Dean, Research and Development, Tezpur University of the committee to review the existing guideline of **Consultancy policy** of the University as per office order no. F.DoRD/Cons.Proj/30(Vol-III)/2022 dtd.22.09.2023.
6. Member of the **Sports Board** of the University as per office order no. TU/32/SPT 2007/1742 dtd. 30.08.2023.
7. Convener of the **committee constituted for investing sudden death of an M. Sc student in the hostel** as per office order no. 36-99 (GA-I)/Vol.VII/959.
8. Convener of the committee to **look into the incident of altercation committee between one teacher and on employee** of the University as per office order no. F.36/99(GA-I)/Vol.VII/1196 dtd. 17.07.2023.
9. Chairperson of the committee to modify existing guidelines for **recommending financial assistance to the Faculty members** of the University as per office order no. F.11-105/I(E)/1211 dtd. 18-07-2023.
10. Member of the committee to **recommend teachers award of the University** as per office order no. F.27-162/2011(GA-I)/1130 dtd.11.07.2023.
11. **Chief Coordinator, XXI Convocation**, Tezpur University held on 31st December,2023. As per office order no. F.27-18/2001(GA-I)/Vol-II/424 dtd. 12.05.2023.
12. Chairperson (Ex-Officio) of the Committee constituted by the University to carry forward the activities of the University involving all Science Department in the Indian Science Technology and Engineering facility **Map (I-STEM)** portal vide notification no. DoRD/I-STEM/10-76/926-A dtd. 3/04/2023.
13. Ex-officio Chairperson of the committee constituted to **formulate a Technology Transfer policy** of the University as per office order no. F.36-99/(GA-I)/Vol.VII /196 dtd. 23/09/2023.
14. Member of the committee constituted for **screening of applications and selection of Senior Wardens/Wardens** for the vacant positions of different hostels of the University vide Office order no. TU/DSW/00/16-F.07/4002 dtd. 19.01.2023.
15. Chairperson of the committee constituted to **negotiate the rates of L-1 bidder M/S Vintage**, Tezpur for the work of wiring of Raceway pond of the Department vide Office Order no. F.36.-99/(GA-I)/Vol-VII/3064 dtd. 4/01/2023.

2022

1. Chairperson (Ex-Officio) of the Committee constituted by the University to formulate a **Technology Transfer Document** for DST funded Technology Enabling Centre (DST-TEC), Tezpur University vide Office order no. F-36/99 (GA-I)/Vol-VII/1961 dtd. 28/09/2022.
2. One of the members (Ex-officio) of the **Examination committee** constituted by the University vide Notification no. F-18-3/2/2003(Acad)/1133 dtd. 12/9/22.
3. One of the member (Ex-Officio) of the **standing committee** constituted by the University for scrutinizing and recommending for financial support to the faculty members of the University for attending seminars/Conferences/Symposium etc. vide notification no. F.36/99(GA)/Vol.VII 1710 dtd. 05/09/2022.
4. Chairperson of the committee constituted by the University for **Evaluation of tenders of bids received** via CPP portal vide Notification no. F.13-364/21(EC)/1042 dtd. 4/07/2022.
5. Chairperson (Ex-Officio), **Central Advisory Committee**, DST funded Technology Enabling Centre at Tezpur University vide Office order no. F.36/99/GA-I(Vol-VII)/2195 dtd. 20/10/2022.

2021

1. Member Convener of the committee constituted by the University for giving a suitable name to the newly constructed Girls hostel of the University vide Office Order No. TU/DSW/00/16-F.07(A)/1119-A dtd. 9.9.2021.
2. Chairperson of the Anti-ragging squad of the University constituted on 24/9/2021 for the session 2021-22.
3. Chairperson of the committee constituted by the University for examining the terms and conditions of the Gem bid for hostel manpower vide F.36-99/(GA-I)/Vol.VI/3155 dtd. 11.01.2021.
4. Member (Ex-Officio) of the Anti-ragging committee , Session 2021-22 constituted by the University vide Office order no. F.18-27/2/2009 (Acad)/434-A dtd. 7/08/2021..

2020

1. One of the Members of the Committee constituted for suggesting action plan on the National Educational Policy (NEP)

2020 (Ref: !2-27/2020(GA-I)/1767 dtd. 6.10.2020.

2. Chairperson (Ex-officio) of the committee constituted by the University for Ek Bharat Shrestha Bharat (EBSB) club at Tezpur University vide office order no. F.27-114/2017 (GA-I)5565 dtd.18.02.2020.
3. Chairperson (Ex-Officio), Mental Health Task Force constituted as per directives of MHRD at Tezpur University to monitor the mental health of students vide office order dtd. 3.04.2020.
4. Chairperson (Ex-Officio) of the committee constituted by the University to implement various activities of Nation's Fit India movement as per MHRD guidelines vide notification n. TU/DSW/notice/16-F.08/1009 –A dtd, 27.08.2020.
5. Member (Ex-Officio) of the Committee constituted by the University to look into the discrimination complaints raised by ST/SC/OBC students vide notification no. F.13-7/2007/2.GA-II/1700 dtd.29.09.2020.
6. Chairperson of the committee constituted to consider the request received from the Divisional Superintendent, ASTC Tezpur for revision/enhancement of hiring charge of ASTC bus service (Ref. F.16-3/GA-II/2/2017-18/5783 dtd. 27.02.2020.
7. Chairperson of the committee constituted for celebration of Shilpi Divas (Ref. TU/DSW/notice/16.F.08(A)/951-A dtd. 06.01.2020).
8. Member (Ex-officio) of the Library Sub-committee to do the needful to study and implement the information Commons(IC) in the central Library of the University (Ref. F.36/99(GA-I)/Vol.V/135 dtd. 04.05.2020).

2019

1. Member, Centre Management Committee (CMC) of sophisticated Analytical Instrumentation Centre (SAIC), Tezpur University since June, 2016 -2019.
2. Member (Ex-Officio) of the committee constituted to decide/guide on renting out University facilities (Ref. F.36/99(GA-I)/Vol.V/3628 dtd. 11/11/2019).
3. Chairperson of the committee constituted to observe Rashtriya Ekat Divas or National Unity Day (Ref. F.36/99(GA-I)/3396 dtd. 28.10.2019).
4. Chairperson of the Committee constituted for selection of candidates for award of (i) T &I Best Post Graduate and (2) Best Graduate Award for the year 2019 (Ref. F.19-2(T&I PG/UG)2007 (Acad)/1354-A dtd. 26..10.2019).
5. Chairperson of the committee constituted for observing the 'Death Anniversary" of Dr. Bhupen Hazarika on Nov, 2019 (Ref. TU/DSW/Notice/16-F.08(A)/887 dtd. 25-09.2019).
6. Member (Ex-officio) of the committee constituted for evaluation of the Tenders for providing Housekeeping/Sanitary Services at Tezpur University (Ref. F.36/99/GA_I/Vol.5/2471 dtd. 02.09.2019).
7. Chairperson of the Grievance Redressal Cell constituted as per the provision 10.0 of the Ordinance No.25 of the University. (Ref. F.36/99/(GA-I)/Vol.2379 dtd. 27.08.2019).
8. Member of the Central Advisory Committee (Ex-officio) for the Centre for Innovation, Incubation and Entrepreneurship (CIIE), Tezpur University. (Ref. F.18-28/2013 (GA-I) /2206 dtd. 21.08.2019).
9. Chairperson of the Warden Council of Tezpur University (Ref: TU/DSW/WC/16-F.19 dtd 16.08.2019).
10. Member of the Anti-ragging Committee of Tezpur University (Ex-Officio) (Ref. 18-27/2/2009 (Acad)/811-A dtd. 05.08.2019).
11. Member of the committee to oversee the primary works for institution of "Swahid Stambha" in the University Campus.(Ref. F.36/99 (GA-I)/Vol. V/5299 dtd. 18.03.2019).
12. Adviser of the committee to organize the "State Science Fair" in the University during 23-25 March,2019. (Ref. 36-99/GA-I/Vol. V/5021 dtd. 07/03/2019).
13. Chairperson of the committee constituted to consider for financial assistance from the Alumni Association Fund (Ref: F.18-18/5/2006(Acad)/3039-A dtd. 04.02.2019).
14. Chairperson of the committee to oversee the sterilization drive of street animals in the University campus (Ref. F.36-99/GA-I/Vol-V/4119 dtd. 22.01.2019).
15. Member, Research Committee Tezpur University, Tezpur-till 2019.

2018

1. Chairperson of the Grievance Redressal Cll as per clause 10.0 of Ordinance No.25 on " Constitutional and Functioning of the Students Council of Tezpur University". (Ref. F.27-37/2004(GA-I)/23/9 dtd. 05.09.2018.
2. Chairperson of the committee constituted to examine the alleged unauthorized deduction of Daily wage of cooks & Menials of the SCVRMH (Ref. F.36-99/GA_I/Vol-I/3402-A dtd. 28.11.18).
3. Chairperson of the committee constituted to select group/individual of Swachh Bharat Summer Internship programme of Tezpur University.

4. Chairperson of the Fishery Management Committee of the University (Ref. 36-99/(GA-I)/Vol.IV/889-A dtd.28/05/2018).
5. Chairman of the Student Disciplinary Committee (Ref: 18-5/5/2003(Acad)/1205-A dtd. 29-08-2018).

2017

1. Chairperson of the committee constituted to review the intake of new students and their Hostel Admission Policies for the session 2018-19 (Ref. F.36-99/(GA-I)/Vol.V/3993-A dtd. 12.12.2017).
2. Chairperson of Swimming Pool Management Committee (Ref. F.27-118/2017(GA-I)/2609-A dtd. 15.07.17).
3. Chairperson of the committee constituted to review the existing Hostel Rules, 2015 and Regulations on Maintenance of Students Discipline 2011 (Ref. F.36-99/(GA-I)/Vol.V/3995-A dtd. 12.12.2017).
4. Chairperson of the committee constituted to negotiate and decide upon the honorarium to be paid to trainers and accompanists of UNIFEST team for participation in Esat Zone Youth Festival, National Youth Festival and South Asian Universities Youth Festival for the session 2017-18 (Ref. TU/DSW/oo/16-F.07/489-A dtd. 01-12-2017.).
5. Chairperson of the internal selection committee to select the films made for the National University film making competition on ragging awareness (Ref: F.36/99(GA-I)/3643-A dtd. 22/11/2017).
6. Chairperson of the Committee to suggest about the additional number of buses/trips to be provided by the University for University students and staff members (Ref. 36/99(GA-I)Vol.V/3524-A dtd. 15.11.2017).
7. Chairperson of the committee constituted to celebrate 70 years of Independence and 75th year of quite India Movement by hosting a “Rock concert” by Vodoo Child, a band from Guwahati, Assam (Ref: TU/DSW/oo/16- F.07/422-A dtd. 28-08-2017).
8. Chairman (ex-officio)-Students’ Disciplinary Committee, Tezpur University since February, 2017 continuing.
9. Nodal Officer of Tezpur University–EK Bharat –Shreshtha Bharat a Programme of MHRD, Govt. of India during 2017 and continuing (Ref. 27-114/2017(GA-I)/3014-A dtd. 13.10.2017).
10. Member of the committee constituted to look into the expenses of the University towards (i) Electrical/DG Usages, (ii) Campus Maintenance (Hostels,Sulabh& Security), (iii) Horticulture, Day Care, Electrical Sub Station Maintenance, (iv) Other outsourced workers, and (v) Solid Waste Management (Ref: F.36-99/2017/(GA-I)/Vol-IV/2678-A dtd. 20.09.2017..
11. Member of the Committee constituted to examine the tenders received for supply of hostel beds and to recommend a suitable supply (Rf. F.36-13/99/(GA-I)/1404-A dtd. 28.06.2017).

2016

1. Chairperson (Ex-Officio), Departmental Research Committee during September, 2013 -- September, 2016.
2. Chairperson (Ex-Officio), Departmental Purchase Committee during September, 2013 -- September, 2016.
3. Member of the Departmental Research Committee (DRC), Department of Environmental Science, Tezpur University since 01.12.2016 for two year (Ref. F.18-9/1/2006 (Acad)/1654-A dtd. 02-12-2016).
4. Member of the Departmental Research Committee (DRC), Department of Energy, Tezpur University since 01.12.2016 for two year (Ref. F.18-9/1/2006 (Acad)/1654-A dtd. 02-12-2016).
5. Chairperson (ex-officio), Departmental Advisory Committee during September, 2013 -- September, 2016
6. Chairperson (Ex-Officio), Departmental Board of Studies during September, 2013 -- September, 2016 (Ref. F.16-1/97 (GA-I)/1860 dtd. 03.02.2015).
7. Member of the Departmental Research Committee (DRC), Department of Energy, Tezpur University since 01.12.2016 for two year (Ref. F.18-9/1/2006 (Acad)/1654-A dtd. 02-12-2016).
8. Member Secretary of the Advisory Committee for B.Voc. programme w.e.f. 11/08/2016 for two years (Ref. No. f.21-62/1/2014 (Acad)/701-A dtd. 12/8/16).
9. One of the Members of Ant-ragging Squad for the Academic Session 2016-17 (Ref.TU/DSW/Anti-ragging/16- F.27/310-A dtd. 18.07.2016).
10. Member (ex-officio), School Board, School of Engineering, Tezpur University during 2013-September, 2016.
11. Member of the committee constituted for recommending new rates for procurement of stationery items for the office of the controller of Examination during September, 2016 (Ref. F.20-9/5/2003 (Acad)/1110-A dtd. 14.09.2016).

2015

1. Nodal Officer for the B.Voc. programme for a period of three years w.e.f. 14-08-2015 (Ref: No. F.27-I/97(GA- I)/1835-A dtd. 14-08-2015).
2. Represented Tezpur University in the UGC Regional Workshop on Curricular Aspects and Credit Framework for Skill Based Vocational Course coordinated at Don Bosco University, Azara, Guwahati on 27.03.2015 (Ref. F.27-67/2012 (GA-

I)/5045 dtd. 24.03.2015.

3. Chairperson (Ex-Officio), Departmental Board of Studies during September, 2013 -- September, 2016 (Ref. F.16-1/97 (Ga-I)/1860 dtd. 03.02.2015).
4. Member of the committee for preparing the proposal for establishment of KAUHAL (Knowledge upgradation of skilled Human abilities and livelihood) Kendra at Tezpur University (Ref. F.37/2015/(GA-I) dtd. 07.01.2015).
5. Screening Committee convener as Head of the Department and one of the Screening Committee members of the School Board of School of Engineering, Tezpur University for screening the candidates applying for different faculty positions of the departments under School of Engineering against the advertisement no. 14.2015 dtd. 8.10.2015 and 18/2015 dtd. 18.12.2015.
6. Member of the Cash purchase Committee for procurement of items required for the MSME funded project under the Centre for Innovation, Incubation and Entrepreneurship Cell, Tezpur University constituted by the University during 1st January, 2015 (Ref. TU/11-14/pur/ECE/2014/3765-A dtd. 01/01/2015).

2014

1. Attended as one of the Team members in the Meeting for finalizing the areas of Research Collaboration in between Tezpur University and NRL, Numaligarh held at NRL, Numaligarh on 27.05. 2014.
2. Member of the committee constituted for awarding Best performance award for the year 2014 for Group –C staff and Group C (MTS) staff of the University (Ref. F.27-47/2008 (GA-I)/3664-A dtd. 12-12-2014).
3. Member of the committee constituted for review Hostel rules as per Academic Council Resolution no. AC. 21/2013/2/2.3 (Ref. F.18-18/4/2006 (Acad)/1766-A dtd. 27.01.2014).
4. Chairperson (Ex-Officio), Departmental Research Committee during September, 2013 -- September, 2016.
5. Chairperson (Ex-Officio), Departmental Purchase Committee during September, 2013 -- September, 2016.
6. Chairperson (Ex-Officio), Departmental Advisory during September, 2013 -- September, 2016.

2013

1. President (ex-officio), Students Council, Tezpur University during October, 2011-September, 2013.
2. Member of the committee constituted to oversee the overall day to day running and maintenance of the ponds (Fisheries) of the University(Ref. 36-99/GA-I/Vol-IV/4018-A dtd. 13-12-2013).
3. One of the members of the Centre Advisory Committee constituted for Centre for Innovation, Incubation and Entrepreneurship (Ref. F.18-28/2013(GA-I)/4075 dtd. 18.12.2013).
4. Member of the committee constituted for awarding Best performance award for the year 2013 for Group –C staff and Group C (MTS) staff of the University (Ref. F.27-47/2008 (GA-I) 4076 dtd. 18.12.2013).

2012

1. Screening Committee members for verification of eligibility criteria of the non-teaching post (Ref. No. F.71/1/2003 €/652-A dtd. 15.02.2012.).
2. Coordinator of the Committee for working out a plan for waste management of the University constituted during November, 2012 (Ref. F.36/99(GA-I)/3720(I)A dtd. 05-11-2012).
3. One of the Members of the Managing committee, Tezpur University Employee's Co-operative Credit & Thrift Society (TUECO). (Ref. TUECO/2008-09/ dtd, 31.10.12.).
4. Convener of the Committee constituted to examine the proposal for procurement and installation of Biomethanation plant in the University campus as a mean of management of decomposed wastes during 2012 (Ref. F.36/99(GA- I)/Vol-III/2524-A dtd. 30.08.2012).
5. Chairperson of the committee constituted to consider the revised proposal submitted by M/S SISSO for housekeeping service in the University (Ref. TU/Estate/15-10/Housekeeping/1270-A dtd. 15.06.2012).
6. Chairperson, committee constituted for Orientation of the newly admitted students of the University for the academic session 2012-13 (Ref. F.20-32/2/2004 (Acad)/544-A dtd. 11.07.2012).
7. Convener of the Committee constituted to examine the suitable time and all related aspects for smooth organization of a National Integration Camp at Tezpur University for the year 2012-13.
8. Chairperson of the committee constituted for smooth organization of the Invitational Inter-University Cricket Tournamnet scheduled during 22nd January to 26th Feb, 2012 at Tezpur University (Ref. F.36/99(GA-I)/4686 dtd.11.01.2012).
9. Convener of the committee constituted to examine the suitable time and all related aspects for smooth organization of a National Integration Camp at Tezpur University for the year 2012-13 (Ref. F.36/99 (GA-I)/560-A dtd.08.05.2012.

10. Chairman (ex-officio)-Students' Disciplinary Committee, Tezpur University during February, 2012 for two years. (Ref. F.18-5/3/2003(Acad)/1788-A dtd. 15.02.2012).
11. Chairperson, Ant Ragging Squad, Tezpur University during October, 2011-September, 2013 and 2017-18 onward.(Ref. TU/DSW/18/2008/413-A dtd. 26.06.2012).
12. Chairman (Ex-Officio), Cultural Advisory Board during September 2012 to September 2013 (Ref. F.TU/DSW/12/12-13/438-A dtd. 11-09-2012).
13. Member of the Committee constituted to work out a guideline for extending welfare measures to some needy students of the University during September, 2012 (Ref. F.36-1/99(GA-I)/2018-A dtd. 01.08.2012).

Till 2011

1. One of the members of the committee constituted to organize the lecture programme to be delivered by Prof. B.B. Bhattacharya, former VC of JNU on 24th November, 2011 (Ref. F.36/99(GA-I)/3786-A dtd 21.11.2011.).
2. Chairman, Tezpur University Entrance Examination committee, 2012 (Ref. F.18-13/3/2005 (Acad)/1009-A dtd. 05.09.2011).
3. One of the members of the publicity Sub-committee committee constituted to organize the "Srimanta Sankardeva Lecture" on 28/11/2011 (Ref. F.36/99(GA-I)/3796-A dtd. 22.11.2011).
4. Joint Coordinator, Organizing Committee, East Zone Inter University Festival held at Tezpur University during 2011.
5. One of the members of the committee constituted for selection of candidates for award of T&I Best Postgraduate for the year 2011 (Ref. F.19-8th Convocation/2007 (Acad)/1415-A dtd. 17.11.2011).
6. Member of the Departmental Purchase Committee of the Department of Energy (Ref: TU/DOE/DPC/33/376-A dtd. 01.06.2011).
7. Member of the Board of Studies, Department of Energy 2009-2010 (Ref. F.16-1/97 (GA-I)/1175 dtd. 25.03.2009).
8. Academic Programme Coordinator of the Department of Energy during 2006-07.
9. Laboratory and library in-charge/web master of the department of energy during 2004-2006.
10. Coordinator, Horticultural Cell , Tezpur University 2006-2011. (Ref. F.36-17/2000 (GA-I)/85-A dtd. 06-04-2006).
11. One of the Members of the Campus Beautification Committee of Tezpur University (Ref. TU/VC/03/2006/3415-A dtd. 06/12/2006).
12. One of the members of the plantation committee of Tezpur University (Ref. F-44-3/2001(E) /97-A dtd. 08-04-2003).
13. Coordinated a Workshop for Preparation of VISION NER 2020 held at Tezpur University during December 22- 23,2005.
14. One of the Committee members to participate interaction among senior level officers of institution/organizations located at Tezpur for working together to serve North Eastern Region held at NERIWALM, Tezpur on 10 January, 2005.

Other Academic Assignment

1. Participated a two day online hands on workshop on "Integration of Basic ICT Tools in Teaching Pedagogy" during June 8& 9, 2020 organized by Teaching, Learning Centre Tezpur Univesity in association with IQAC, Tezpur University under PMMMNMTT scheme of MHRD.

Selection Committee Member for Teaching /Non-Teaching position

1. Chairman of the selection committee constituted for selection of Senior wardens/wardens of hostel (Ref. TU/DSW/oo/16-F.07(A)/641 dtd. 27.09.2-18).
2. One of the members of the local selection committee constituted by University to assess candidates for appointment a Violin Instructor in Tezpur University against advertisement no. 09/2018 (Ref: F.5.20/II(RC)/1768 dtd. 30.07.2018).
3. One of the members of the selection committee constituted by University to assess candidates for appointment of Yoga Coach (Ref. F.01-37/IV€ dtd. 03.04.2018).
4. One of the members of the Departmental promotion Committee to examine the case of promotion of senior Medical Officer (SMO), Tezpur University to Chief medical Officer (CMO) under Dynamic Assured Career Progression Scheme (DACP) (Ref: University notification no. F.02-403/I(E)/2991-A dtd. 13.10.2017).
5. One of the members of the Local Selection Committee constituted for recruitment of the Guest faculty position under B.Voc. in Renewable Energy management and B. Voc.in Food processing held on 04.10.2016 in Tezpur University.
6. One of the members of the Local Selection Committee constituted for recruitment of the faculty position under B.Voc. in

- Renewable Energy management and B. Voc.in Food processing held on 23.02.2015 in Tezpur University.
7. One of the members of the Selection Committee constituted for recruitment of the faculty position of the Department of Energy, held on 18.08.2014 in Tezpur University.
 8. One of the members of the Local Selection Committee constituted for recruitment of the adhoc faculty position in the Department of Energy held on 13.09.2013 in Tezpur University.
 9. One of the members of the Selection Committee for the post of Sports Officer of Tezpur University held on 04.03.2013 in Tezpur University.

Selection Committee Member for JRF/SRF position

1. Chairperson of the Selection committee for JRF position in the DST-SERB funded projects entitled ' Switchable Molecular magnetic Materials ' under the Principal Investigator Dr. Nayanmoni Gogoi, Dept. of Ensc. Sci. vide no. DoRD/Chem.Sc/NG/20-510/2562-A dtd 19-1-2022.
2. Chairperson of the selection committee for selection of one Project Assistant in the IIM sponsored research project held on 8/12/2019 (Ref. DoRD/Env.Sc/KKB/20-142/766-A dtd. 3.12.2019).
3. Chairperson of the Selection Committee for selection of one SRF in the MoFPI sponsored research project in the Department of Food Engineering Technology held on 28/11/2019 (Ref. No. DoRD/FET/CLM/20-400/711-A dtd. 19/11/19).
4. Chairperson of the Selection Committee for selection of one JRF in the DBT sponsored project in the Department of Electronics and Communication Engineering, TU held on 27/06/2019 (Ref: DoRD/ECE/NMK/20-433/233-A dtd. 26- 06-2019).
5. External member of the evaluation committee to review of the progress of research work for upgradation of JRF to SRF of DBT- sponsored project in Dept. of Molecular Biology and Biotechnology (Ref: F.43-83/2007(GA-I)/943-A dtd. 24/10/2018).
6. Chairperson of the evaluation committee to review of the progress of research work of project assistant in the DST-SERB sponsored research project for enhancement of fellowship in the Department of Chemical Sciences (Ref: DoRD/Chem. Sci/KKB/20-246/147-A dtd. 5/03/2018).
7. Chairperson of the selection committee constituted for selection of two Junior Research Fellows and one field Assistant in the MoEF & CC funded project, Department of Environmental Sciences (Ref. DoRD/Env.Sc/AD/20-283/009-A dtd. 04-01-2017).
8. Chairperson of the Selection Committee for selection of one JRF in the DBT Twinning sponsored project held on 07.09.2016 as per office order no. DoRD/MBBT/NDN/20-217/7022-A dtd. 10.08.2016.
9. Member Secretary of the Selection Committee for selection of one SRF in the DBT sponsored Indo-Brazil project of the Department of Energy held on 17.08.2016 as per office order no. DoRD/Energy/DD/20-284/7021-A dtd. 10.08.2016.
10. One of the members of Selection Committee for selection of one JRF in the SERB-DST sponsored project of the Department of Energy as per office order no. DoRD/Energy/BKK/20-284/7019-A dtd. 10.08.2016.
11. One of the members of the committee for assessment of research works RGNF-JRF , Department of Energy for upgradation to SRF as per office order no. F.40-23/2011 (GA-1)/6709-A dtd. 22.06.2016.
12. Chairperson of the Selection Committee for selection of one JRF in the DRDO sponsored project, Department of Food Engineering and Technology, Tezpur University as per office order no. DoRD/FET/SCD/20-201/6700-A dtd. 21.06.2016.
13. Chairperson of the Evaluation Committee constituted to evaluate the progress of JRF in the DBT sponsored research project of the Department of Molecular Biology and Biotechnology, Tezpur University as per office order no. DoRD/MBBT/RM/20-192/6679-A dtd. 13.04.2016.
14. Chairperson of the Selection Committee for selection of one SRF in the ICAR sponsored project of the Department of Food Engineering and Technology, Tezpur University as per office order no. DoRD/FET/LSB/20-265/6635-A dtd. 31.03.2016.
15. One of the members of Selection Committee for selection of one JRF in the DST sponsored project of the Department of Energy as per office order no. DoRD/Energy/DCB/20-133/6051-A dtd. 01.10.2015.
16. One of the members of Selection Committee for selection of one Research Associate and two Senior Research Fellows in the DST-SEED sponsored project of the Department of Energy as per office order no. DoRD/Energy/DCB/20- 169/5043-A dtd. 10.11.2014.
17. Act as External member of the Selection Committee for selection of one Project Assistant in the DST sponsored project of the Department of Chemical Sciences as per office order no. DoRD/Chem. Sc./NG/20-173/4767-A dtd. 13.08.2014.
18. Chairperson of the Committee for assessment of research work of one RGNFJRF in the Department of Energy , Tezpur

- university as per office order no. F.14-11/2/2007 (Acad)/4861-A td.05.09.2014.
19. Act as External member of the Selection Committee for selection of one JRF in the DRDO sponsored project, Department of Food Engineering and Technology, Tezpur University as per office order no. DoRD/FET/SCD/20- 201/4642-A dtd. 03.07.2014.
 20. One of the members of Selection Committee for selection of one JRF in the DST sponsored project (ISHAG) of the Department of Energy as per office order no. DoRD/Energy/DCB/20-133/4332-A dtd. 19.03.2014.
 21. Act as External member of the Selection Committee for selection of one JRF in the DRL sponsored project, Department of Food Engineering and Technology, Tezpur University as per office order no. DoRD/FET/CLM/20-187/4217-A dtd. 11.02.2014.
 22. Act as External member of the Selection Committee for selection of one JRF in the DRL sponsored project, Department of Food Engineering and Technology, Tezpur University as per office order no. DoRD/FET/CLM/20-132/3691-A dtd. 18.09.2013.
 23. One of the members of Selection Committee for selection of one JRF in the DST sponsored project (ISHAG) of the Department of Energy as per office order no. DoRD/Energy/DCB/20-133/3620-A dtd. 02.09.2013.
 24. One of the members of Selection Committee for selection of one JRF in the DST sponsored project (ISHAG) of the Department of Energy as per office order no. DoRD/Energy/DCB/20-133/3401-A dtd. 01.07.2013.
 25. Chairperson of the Evaluation Committee constituted to evaluate the progress of one Project Fellow in the UGC sponsored project of the Department of Environmental Science, Tezpur University as per office order no. F.43-176/2010(GA-I)/3361-A dtd. 25.06.2013.
 26. One of the members of Selection Committee for selection of one JRF in the DST sponsored project, Department of Mechanical Engineering, Tezpur University as per office order no. DoRD/ME/TKG/20-125/2717-A dtd.01.02.2013.
 27. Act as External member of the Selection Committee for selection of one JRF in the DST sponsored project, Department of Food Engineering and Technology, Tezpur University as per office order no. DoRD/FET/CLM/20-137/2662-A dtd. 18.01.2013.
 28. Act as External member of the Selection Committee for selection of one JRF in the DST sponsored project, Department of Food Engineering and Technology, Tezpur University as per office order no. DoRD/FET/CLM/20-132/2377-A dtd. 29.10.2012.
 29. Act as External member of the Selection Committee for selection of one JRF in the DBT sponsored project, Department of Food Engineering and Technology, Tezpur University as per office order no. DoRD/FET/SCD/20-28/1104-A dtd. 10.04.2012.
 30. Act as External member of the Selection Committee for selection of one JRF in the DBT sponsored project, Department of Molecular Biology and Biotechnology, Tezpur University as per office order no. DoRD/MBBT/MM/1/1060-A dtd. 16.03.2012.

Resource Person/participant in Seminar/Workshop

1. Delivered an online lecture on “Academic Development and Challenges in Higher Education” in the ‘Online Short Term Program on NEP Orientation and Sensitization’ on 9th July,2024 organized by Malaviya Mission Teacher Training Centre (MMTTC), Tezpur University under the aegis of the University Grants Commission.
2. Delivered an online lecture on” Developing Innovative Practices in Research” in the “Online Short Term Course on NEP Orientation and Sensitization” program on 6 June, 2024 organized by Malaviya Mission Teacher Training Centre (MMTTC), Tezpur University under the aegis of the University Grants Commission.
3. Delivered an online lecture on “Research Quality and Networking with Global Bodies: UNESCO and Higher Education Institutions” as Resource Person in the Online Short Term Course on NEP Orientation and Sensitization during 13-22 March 2024 organized by Malaviya Mission Teacher Training Centre (MMTTC), Tezpur University under the aegis of the University Grants Commission on 22.03.2024.
4. Delivered a lecture on “Automated Modular Photobioreactor with Harvester (AMPH): a microalgae cultivation system” in the Institute of Materials and Environmental Chemistry, Budapest, Hungary on 1st February,2024.
5. Delivered a lecture on “Bio-based fuels and chemicals through biorefinery approach: towards sustainable bioeconomy” in the short term programme on the theme ‘Waste Treatment , Management and Valorization on 18th July,2023 organized by Chemical Engineering Department of National Institute of Technology Durgapur, West Bengal.
6. Delivered a lecture on “Bio-Inspired heterogeneous catalyst for sustainable biodiesel production” on online mode in the one day hybrid mode Seminar on ‘Challenges and opportunities in Sustainable Biodiesel synthesis and its application towards greener future’ organized by Chemical Engineering Department of National Institute of Technology Durgapur, West Bengal on 2nd March,2023.

7. Co-Chaired a session in the Technology Vision -2047-North East India Consultative meeting held at Indian Institute of Technology, Guwahat on March 14-15,2023 on the theme “Energy”.
8. Delivered a lecture as Resources person in the Induction Programme for newly admitted Ph.D. Student on 20th march, 2023 at Bodoland University. Kokrajhar, Assam.
9. Delivered a lecture on “ Guidance and Counselling of students’ in the online Faculty induction programme organized by Teaching Learning Centre , Tezpur University held on 28-02-2022.
10. Attended ‘Ph.D. Supervisor Training’ session on June 15,2021 organized online by Queen’s University Belfast, UK as Co-Supervisor of Mr. Nayan Moni Mazumdar who is enrolled as Ph.D. Student in Queen’s University, Belfast under the guidance of Dr. Hareesh Manyar, School of Chemistry and Chemical Engineering, Research Centre in Sustainable Energy, Theoretical and Applied Catalysis. Queen’s University ,Belfast.
11. Delivered a Lecture as resource person on 19-11-2019 on the topic of “Production of sustainable fuel & chemicals-biomass based route’ in TEQIP –II sponsored FDP “Research Opportunity in Renewable Energy Sector for Mechanical Engineering” organized by Girijananda Choudhury Institute of Management and Technology (GIMT) , Tezpur. Assam.
12. Delivered two lectures on “ Students Support Systems” and :Role of Teacher in Institution Development” at Namrup College, Digrugarh, Assam in the short term Training Programme on “Innovation and Rejuvenations of Teaching in Higher Education” organized by Teaching. Learning Centre, Tezpur University and Namrup College, Assam under the scheme of “ Pandit Mohan Malaviya National Mission on Teachers and Teaching (PMMNMTT) on 13th February, 2019.
13. Attended as one of the panelists for “Stakeholder Engagement Workshop for Assam Energy Vision Setting’ organized by Assam Power Distribution Company Ltd. at Hostel Shoolin Grand, G.S. Road Guwahati on 1st September, 2018. (Ref. letter no. APDCL/CGM(PP&D)/NRE-124/2017-18/99-199 dtd. 24/08/2018).
14. Delivered a lecture on “Selective Biobased materials: potential as catalyst and additive for production of quality biofuel’ as visiting scientist in Federal University of Rio De Janeiro, Brazil on 25-06-2018.
15. Delivered a lecture on “ Renewable heterogenous catalyst for biofuel production” as visiting scientist in Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, Hungarian Academy of Sciences, Budapest 1117 on 16-06-2017.
16. Delivered a lecture on “ Towards Selective Biobased Materials : Potential as catalyst and Additive for production of quality Biofuel” as Invited Speaker in Bioprocessing India 2017 held on 9-11 December, 2017 organized by IIT Guwahati, Assam. India.
17. Delivered a lecture on “ Addressing Problems of Students” in a month long induction Training for faculties of institutions/colleges/Universities on 27-11-2017 held at Tezpur University organized by Teaching, Learning Centre, Tezpur University under the MHRD, Govt. of India initiatives of Modan Mohan Malaviya National Mission on Teachers and Teaching (PMMNMTT).
18. Delivered a popular lecture as “Appointed Speaker” in the Open session of the Golden Jubilee Celebration of the Udalguri Girls’ H.S. School held on 12.11.2016 at Udalguri, Assam (Ref. G.7/15/16 dtd. 25/10/2016).
19. Delivered a talk on Bio-inspired heterogeneous catalyst for sustainable biofuel production as one of the speakers in the International Congress and Expo on Biofuels & Bioenergy held in Valencia, Spain during August 25-27,2015.
20. Delivered an invited talk in the topic Towards production of biofuel and chemicals - a reference to North-East India on 20th June, 2015 in the National Conference on the theme Challenges and Opportunities for the energy Sector in North East under the present Scenario organized by SECONE (Synergy for Energy Challenges & Opportunities in North East India), Guwahati.
21. Delivered an Invited talk in the topic Prospects of Alternate and Renewable Energy in North-East India on 5th February,2015 at 7th Seminar on Hydrocarbon industry growth - prospect and challenges in North-east India, held during February 5-6, 2015 at Numaligarh Refinery, Dist-Golaghat jointly organized by PETROTECH and Numaligarh Refinery Ltd.
22. Chaired a technical session (Theme- Energy and Electric Drives) on 10th January, 2015 in the First Conference on Power, Dielectric and Energy Management at North Eastern Regional Institute of Science and Technology held at NERIST, a Deem University under the Ministry of Human Resources Development, Govt. of India jointly organized by the Department of Electrical Engineering and IEEE, Kolkata Section , IEE PES and DEIS, Kolkata Chapter during 10-11 January, 2015.
23. Delivered a talk as resource person on the topic Recent advances in Bioenergy Research- A route to conversion of biomass to fuel and chemicals. on 18 December, 2014 in the Faculty Development Program (FDP) on Current Approaches in Teaching and Research in Science and Technology Organized by School of Engineering, Tezpur University during 15th Dec -27th Dec, 2014 under AICTE-NEQIP project.
24. Participated as stake holder of Renewable Energy education from North-Easter States of India in the workshop on Developing strategy for education and vocational training for the renewable energy sector in India held in New Delhi on August 22, 2014 organized by IIT Roorkee sponsored by MNRE, Govt. of India.
25. Delivered a popular lecture in the Regional level Science Exhibition and Seminar held on 27.09. 2011 at Kendriya

Vidyalay no. 2 AFS, Tezpur, Assam (Ref. KVAFT/2010-11).

26. Resource person in CEP programme on Biomass : Technology Intervention for sustainable Management and delivered invited lecture on 11th November,2010 in the topic Biogas: raw material, production, upgrading and different use sectors organized by Deference Research laboratory, Tezpur.
27. Delivered invited lecture in the National Seminar on New and innovative renewable energy and energy efficiency Organized by Environmental Watch and Management Institute sponsored by Ministry of New and Renewable Energy, Government of India held at Regional Science Centre, Khanapara, Guwahati-781022 during 10-11 July, 2010.
28. Participated as Resources person in the Short term training programme meant for officers and field level technical staff (RET) under the Forest Department of Assam on organized by Biogas development and training centre, Centre for Energy, IIT Guwahati sponsored by MNRE, New Delhi during 21-22 August,2009 and presented paper on Operation and maintenance of biogas digesters.
29. Lecture delivered as Guest faculty in PGDNRM courses conducted by Nowgong Girls College, Nagaon, Assam during February,2009 in the paper Energy Resources and Energy Planning.
30. Lecture delivered on 21st June, 08 in the topic of Biofuels in the Short Term training programme on Energy Crisis, Wastage and new Sources conducted by Dibrugarh Polytechnic, Lahowal, Dibrugarh-786010 from 18th June, 08 to 22nd June,2008.
31. Lecture delivered in the Training-cum-Workshop on Integrated Rural Energy Planning held from 24th February to 26th February, 2005 organised jointly by Nagaland Renewable Development Agency and Meghalaya Non- conventional and Renewable Energy Sources, Shillong sponsored by MNES, New Delhi.
32. Lecture delivered in the Training-cum-Workshop on Integrated Rural Energy Planning held from 28th January to 30th January,2005 organised jointly by Department of Energy, Tezpur University and Meghalaya Non-conventional and Renewable Energy Sources, Shillong sponsored by MNES, New Delhi.
33. Delivered lectures on Community participation on Disaster Mitigation in the training programme conducted in four different places of Sonitpur and Nowgaon districts of Assam during March-september,2005 by Disaster management Cell, Tezpur University.

Membership of Associations

1. Life member –Society for biological chemists ,2023
2. American Chemical Society-Annual Member 2017-18
3. Life member Solar Energy Society of India.
4. Life member –Assam Science Society, India.
5. Primary member-Tezpur University Teachers’ Association.
6. Honorary Adviser, Renewable Energy Resources, Institute of Integrative Omics and Applied Biotechnology, Nonakuri, Purba Medinipur, West Bengale-721172, India.

Editorial Board Member

- (i) Journal of Advanced Engineering Research, (ISSN 2393-8447), Indtech Publisher. Website: www.jaeronline.com.
- (ii) South Asia Journal Of Multidisciplinary Studies, (ISSN No. 2395-1079), Jabalpur Management Association. Website: <http://www.gjms.co.in>

Important MoUs formulated for academic collaborations

Sl. No	MoUs formulated	Name of Agencies/Departments involved	Year of MoU
1.	To affirm a joint commitment to introduce Skill based Training programmes as part of B.voc. programme at the Tezpur University	National Skill Development Corporation, New Delhi and Tezpur University, Tezpur, Assam , India (Co-ordinated as Head of the Department of Energy, and Chairman, B.Voc. programme committee, Tezpur University).	2015

2.	To strengthen ties between the two MoU signing institutions, specifically in the area of bio-energy research, which might lead to the establishment of one or more partnership agreement for exchange purpose or academic co-operation in future.	Sardar Swaran Singh National Institute of Renewable Energy, Kapurthala-144601 (Punjab), India and Tezpur University, Tezpur, Assam (Coordinated as Head, Department of Energy, Tezpur University).	2014
----	---	--	------

Involvement with formulation of academic programmes

Sl. No.	Nomenclature of Innovative Academic Programmes formulated	Date of approval by Academic Council	Year of Introduction
1.	Course Curriculum of B.Voc. in Renewable Energy Management (Coordinated as Head of the Department of Energy, and Chairman, B.Voc. programme committee, Tezpur University).	04/06/2015 (Approved by 24 th Meeting of Academic Council as per resolution no. AC.24/2015/1/2.3) dtd. 4 th June, 2015.	July, 2015
2.	Revised Course Curriculum of M.Tech. in Energy Technology programme (Coordinated as Head, Department of Energy, Tezpur University).	13/05/2016 (Approved by 26 th Meeting of Academic Council as per resolution no. AC.26/2016/1/2.8 dtd. 13 th May, 2016).	July, 2016

Inter Departmental Research Collaboration in Tezpur University

Department	Research Collaboration
Department of Electronics and Communication Engineering (ECE).	Dr. Nayan Moni Kakoty, Associate Professor of the Department of ECE is the Co-PI of the ongoing Indo-Brazil project.
Department of Molecular Biology and Biotechnology (MBBT).	Dr. Manab Mandal, Associate Professor of the Department of MBBT is the Co-PI of the ongoing Indo-Brazil project.
Department of Chemical Sciences (Chem. Sci.)	(i) Dr. Ashim Jyoti Thakur , Professor and Dr. Utpal Bora, Assistant Professor of the Department of Chem. Sci. are the Co-PIs of the ongoing Indo-Hungary project. (ii) Doctoral Committee (DC) member of one Ph.D. student under the supervision of Professor S.K. Doloi, Dept. of Chem. Sci.
Department of Mechanical Engineering (ME)	Doctoral Committee (DC) member of one Ph.D. student under the supervision of Professor T.K. Gogoi , Department of ME.
Department of Food Engineering and Technology (FET)	Doctoral Committee (DC) member of three Ph.D. students under the supervision of Professor C.L Mahanta , Department of FET.
Department of Environmental Science (EVSc.)	(i) Member of the Departmental Research Committee (DRC), Department of Environmental Science, Tezpur University since 01.12.2016 for two years. (ii) Doctoral Committee (DC) member of two Ph.D. students under the supervision of Professor A. Das and Dr Prativa Deka, Department of EVSc.
