

## Dr. Parikshit Gogoi

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Date of Birth: 31<sup>st</sup> August 1977

Marital Status: Married

Gender: Male

### Education

- Ph. D. (Chemical Engineering) from NEIST(CSIR) Jorhat, Assam, India / Gauhati University.  
Thesis title: Enzymatic Synthesis and Antioxidant properties of tea polyphenolic derivatives: Kinetic and Mechanistic Studies, Supervisors: Dr. P. G. Rao, Professor M. L. Das (16.04.2003 to 02.12.2010)
- M. Tech. (Petroleum Refining & Petrochemicals) from Dibrugarh University, Dibrugarh, India (01.01.2002 to 10.01.2004)
- M. Sc. (Physical Chemistry) from Cotton University, Guwahati/ Gauhati University, Guwahati (01.01.2000 to 01.04.2002)
- B. Sc. (Chemistry) from Science College Jorhat/ Dibrugarh University, Dibrugarh, India (01.08.1996 to 08.10.1999)

### Post-Doctoral Research

**ChBE & RBI, Georgia Institute of Technology, Atlanta, USA** (Raman Research Fellowship for Post-Doctoral Research for India Scholars in USA offered by UGC, India) Supervisor: Professor Yulin Deng (From 22.08.2016 to 21.08.2017)

- conversions of biomass to biofuel and valuable chemicals

**I&PC Division, IICT Hyderabad** (SRF for Teachers 2014, Indian Academy of Science, Bangalore) Supervisor: Dr. B. M. Reddy (From 20.05.2014 to 15.07.2014)

- ceria, iron and molybdenum base metal oxides for synthetic applications

### Professional positions held

**Assistant Professor, Nowgong College, Nagaon Assam, India** (August 2011-continueing)

**Research Guidance:** Ph. D. supervisor, Science Faculty, Gauhati University from 2018.

Ph. D (awarded): 02

Ph. D (ongoing): 03 (01 in Gauhati University 02 in Nowgong College)

### Area of Research Expertise

- Biomass chemicals and biofuel production
- Natural products chemistry: extraction, purification and characterization
- Separation Sciences: adsorptive separation of biomolecules
- Nano catalysis: synthesis and characterization of metal oxide composites
- Skills on chemical structure and surface characterization: FTIR, GC-MS, LC-MS, XRD, UV-Vis, TGA, XPS, HPLC, SEM and TEM

### Research Project supervised

- Development of a novel separation process for polyphenols from green tea of Nagaon, Assam, India (Funding agency: UGC, India, Cost: Rs. 2.45 lakh, Completed)
- M. Sc & B. Sc chemistry projects supervised: 27
- B. Sc Environmental projects supervised: 90

### Courses taught

- Physical Chemistry for M. Sc. (Semester I-IV), B, Sc. (Semester I-VI, Honours and Generic courses)
- Catalysis Science & Technology (M. Sc. Semester IV)

### Services provided to students and the home institution

- Director, Research & Development Cell, Nagaon University
- Convener, Research Advisory Council, Nagaon University, August 2025
- Convener, Vision document preparation committee, Nagaon University, August 2025
- Coordinator, ABC, Nowgong College (Autonomous), July 2024-July 2025

- Head, Department of Computer Science & applications (2021-2023)
- Co-ordinator, Pharmaceutical chemistry, center for vocational studies (2021-2023)
- In-charge, Library, Department of Chemistry (2013-2016 and 2017-2019)
- Member, Departmental PG committee (2013 onwards)
- Member, Board of studies, Department of Chemistry
- Member, Board of studies, Center for vocational studies
- AOC, Examinations for several times.
- Co-ordinator, Spoken Tutorial, IIT Bombay at Nowgong College (27.05.2018-01.08.2025).
- Co-ordinator, Training & Placement Cell of Nowgong College, (2012-2015)
- In-charge sports, Nowgong College Student Union (2012-2014, 2017-2019)
- Member, DBT star College scheme (2013 onwards)
- As Presiding Officer in Panchayat Election 2012, Lok Sabha Election 2014, 2019 and Legislative assembly election 2015, 2021.
- Training programme for students and staff on safety and analytical techniques in laboratory.

#### **Workshop organized**

- Coordinator, online FDP, IIT Bombay & Nowgong College, Remote training on “LaTex and Moodle Learning Management System” (24<sup>th</sup> April to 7<sup>th</sup> May, 2020)
- Coordinator, online FDP on Mentoring Pedagogy and Teaching for Higher Education, Electronics & ICT Academy IIT Guwahati and Nowgong College, (08-15 June 2020).

#### **Conference organized**

1. Member, International conference on Recent Advances in Agricultural, Biological and Applied Sciences, organized by SBER and Nowgong College (Autonomous), Assam, (8-9 August 2022)
2. Secretary (Technical), e-International Conference on Nutrients acquisition by plant based remedies against viral diseases, Nowgong College, Assam, India, (07 to 08 August 2020).
3. Convener & organizing secretary, 1st International e-conference on Current Trends in Chemical Research, Nowgong College, (22 August 2020).

#### **Junior Technical Superintendent, Department of Chemistry, IIT Guwahati, Guwahati, Assam** (July 2005-July 2005)

- Conducting M. Sc. & B. Tech. laboratory classes.
- Developed two practical courses for M. Sc. Practical Inorganic & Organic Chemistry with Professor J. B. Baruah, IIT Guwahati
- Operation and management of sophisticated instruments like UV-Vis spectrophotometer, IR Spectrometer, TGA, DSC, GC-MS, HPLC, Polarimeter, Fluorimeter and elemental analyzer.
- Management of Placement Interviews for the B. Tech, M. Tech and M. Sc students.
- As a center representative for Patna and Katihar, India to conduct IIT JEE 2006, 2007, 2008, 2010 & 2011 examination.
- As a centre representative for Hyderabad, India to conduct DRDO-SET 2009.

#### **Project Assistant Chemical Engineering Division, NEIST(CSIR) Jorhat, Assam**

(April 2003 – July 2005)

- Enzyme deactivation, green tea preparation, extraction of polyphenols and their characterization. Extraction was performed by using solvent extraction, adsorption and membrane based methods.

**Publication Details:** <https://scholar.google.com/citations?user=LRdIyJAAAAAJ&hl=en>

#### **Research papers**

1. R. Kemprai, N. Sut, S. Pal, B. Bhuyan, **P. Gogoi\***, Magnetically Recoverable Fe<sub>3</sub>O<sub>4</sub>-lignin Nanocomposites as a Sustainable Fenton-like Catalyst for Dye Degradation, Chemical Physics Letters (Submitted).
2. P. M. Bhuyan, S. Borah, D. J. Deuri, S. Hazarika, **P. Gogoi\***, Synthesis of CeS<sub>2</sub>-Fe<sub>3</sub>S<sub>4</sub> Nanocomposite and its Heterogeneous Fenton Catalysis for dye degradation, ACS Omega, Under review
3. N. Kashyap, B. K. Sharma, J. Kim, **P. Gogoi\***, Innovative Optical Chemosensors for Ions and Small Molecules, Chemistry Select, Accepted. (I. F: 2.3)

4. D. J. Deuri, J. Mahanta, B. Saikia, B. K. Das, B. K. Sharma, J. Kim, **P. Gogoi\***, Hardwood-Derived Lignin as a Tribo-Positive Filler in Electrospun PVDF Nanofibers for Efficient Triboelectric Energy Harvesting, *New J Chemistry*, Accepted (I. F: 2.5)
5. A. L. Nagare, A. Dhadage, P. Ghare, R. Naval, A. Athare, **P. Gogoi**, M. Navgire, Carbon coated MoO<sub>3</sub>-SnO<sub>2</sub> nanocomposite based gas sensing room temperature activity for acetone, *Journal of Materials Science: Materials in Electronics*, Accepted 2025. (**I. F: 2.8**)
6. N. Sut, D. J. Deuri, N. K. Brahma, S. Hazarika, D. J. Kalita, B. Barman, B. K. Sharma, J. Kim, **P. Gogoi\***, CuS-MIL-53(Fe) - framework as a heterogeneous Fenton catalyst for the removal of Organic Contaminants, *Langmuir*, Accepted. 2025. (**I. F: 3.9**)
7. X. Liu, K. Cai, Z. Zhong, J. Sha, X. Ji, **P. Gogoi**, H. Song, S. Wang, J. Guo, Electron bridging enhanced Peroxydisulfate activation and 4-chlorophenol degradation enabled by doping carbon into graphitic carbon nitride, *Journal of Industrial and Engineering Chemistry*, 148 (2025) 679-689 (**I. F: 5.2**)
8. P. M. Bhuyan, C. Goswami, D. J. Deuri, K. K. Senapati, **P. Gogoi\***, CuS/Nitrogen-biomass derived carbon composites for heterogeneous Fenton like degradation of dyes: C, N and S mediated electron transfer mechanism for redox cycling of Cu(I)/Cu (II) couple, *Journal of the Iranian Chemical Society*, 22 (2025) 699-716. (**I. F: 2.2**)
9. J. K. Sarmah, R. Deka, S. Khound, **P. Gogoi** and A. A. Ali, Extraction of Lignin from Duabanga grandiflora and its Valorization for Nanocomposite Development with Enhanced Mechanical and UV Shielding Properties, *Functional Composites and Structures*, December 4 (2024).
10. P. M. Bhuyan, N. Sut, S. Borah, S. Hazarika, B. K. Sharma, J. Kim, **P. Gogoi\***, Synthesis of  $\alpha$ -NiS decorated Fe<sub>3</sub>S<sub>4</sub> nanohybrid composite and its heterogeneous Fenton catalysis for dye degradation, *Chemistry Select*, 9 (2024) e202402115, 1 -11. (**I.F: 2.3**)
11. S. Borah, R. M. Kalita, P. M. Bhuyan, B. Sarma, S. Hazarika, **P. Gogoi\***, Application of Tectona grandis leaf extract for efficient and stabilized colouration of mulberry silk fabric, *Fibers and Polymers*, 25 (2024) 4755–4770. (**I.F: 2.2**)
12. N. Sut, P. M. Bhuyan, S. Hazarika, B. K. Sharma, J. Kim, **P. Gogoi\***, Enhanced Dye Degradation Using MIL-53(Fe)-Modified Kraft Lignin as a Heterogeneous Fenton Catalyst, *Chemical Physics*, 588 (2025) 112492 (**I. F: 2.0**)
13. S. Borah, R. Kalita, S. Hazarika, **P. Gogoi\***, Colouration and functionalisation of mulberry silk fabrics with laccase-catalysed oxidation products of catechin and gallic acid, *Industrial & Engineering Chemistry Research*, 63, 35, (2024) 15351-15364. (**I.F: 3.8**)
14. A. Nagare, A. Dhadage, P. Ghare, R. Naval, A. Athare, **P. Gogoi**, A. Datir, M. Navgire, Room temperature acetone sensing activity of  $\beta$ -Cyclodextrin coated MoO<sub>3</sub>-ZrO<sub>2</sub> nanocomposite, *Surface and Interface* 53 (2024) 105068. (**I.F: 5.7**)
15. A. Dhadage, A. Nagare, M. Baithy, **P. Gogoi**, A. Athare, M. Navgire, Ultrasonic wave assisted synthesis of CeO<sub>2</sub>-MoO<sub>3</sub> nanocomposite for photo-fenton degradation of Rhodamine-B dye, *Chemical papers*, 78, (2024) 5833–5850. (**I.F: 2.2**)
16. A. Nagare, A. Dhadage, M. Baithy, P. M. Bhuyan, **P. Gogoi**, A. Athare, M. Navgire, Sol-Gel Assisted  $\beta$ -Cyclodextrin Coated MoO<sub>3</sub>-Fe<sub>2</sub>O<sub>3</sub> Nanocomposite for Photodegradation of Methylene Blue Dye, *J. Sol-Gel Science and Technology*, March 11, (2024). (**I.F: 2.5**)
17. N. Baruah, N. Gogoi, S. Roy, P. Bora, J. Chetia, N. Zahra, N. Ali, **P. Gogoi**, M. Farooq, Phytotoxic responses and plant tolerance mechanisms to cadmium toxicity, *Journal of Soil Science and Plant Nutrition*, 23 (2023) 4805–4826. (**I.F. 3.4**)
18. A. Gogoi, M. Baithy, M. Navgire, N. Gogoi, C. Borgohain, K. K. Senapati, J. K. Sarmah, J. Kim, **P. Gogoi\***, Development of Highly Efficient Heterogeneous Fe<sub>3</sub>O<sub>4</sub>
19. -Biochar Nanocomposite as Fenton-like Catalysts for Degradation of Fast Green, *Chemistry Select*, 8, no. 41 (2023): e202302553. (**I.F: 2.3**)
20. M. Baithy, A. Gogoi, C. Borgohain, A. Nagare, S. Bhitre, **P. Gogoi** and M. Navgire, Design of visible light-assisted Fenton-like Ni-Fe oxide nanocomposites for photodegradation of rhodamine-B, *Bulletin of Materials Science*, 46 (2023) 137 (**I.F: 1.983**)
21. S. Borah, P. M. Bhuyan, B. Sarma, S. Hazarika, A. Gogoi, **P. Gogoi\***, Sustainable dyeing of mulberry silk fabric using extracts of green tea (*Camellia sinensis*): Extraction, mordanting,

- dyed silk fabric properties and silk-dye interaction mechanism, *Industrial Crops & Products*, 205 (2023) 117517. (I.F: 5.6)
22. P. M. Bhuyan, S. Borah, B. K. Bhuyan, S. Hazarika, N. Gogoi, A. Gogoi, **P. Gogoi\***, Fe<sub>3</sub>S<sub>4</sub>/biochar catalysed heterogeneous Fenton oxidation of organic contaminants: Hydrogen peroxide activation and biochar enhanced reduction of Fe (III) to Fe (II), *Separation & Purification Technology*, 312 (2023) 123387. (I.F: 9.135)
  23. S. Bandalla, V. K. Dosarapu, G. B. Bathula, M. Ravula, J. Yadagiri, **P. Gogoi**, M. Baithy, S. B. Jonnalagadda, C. S. Vasam, Highly efficient solvent-free oxidation of cyclohexanol to cyclohexanone over nanocrystalline CaO–MgO binary metal-oxide catalysts, *Molecular Catalysis*, 533(2022) 112759. (I.F: 5.089)
  24. R. Deka, P. Boruah, A. A. Ali, R. Dutta, **P. Gogoi**, J. K. Sarmah, Smart hydrogel with rapid self-healing and controlled release attributes for biomedical applications, *Smart Materials and Structures*, 31 (2022) 095039 (I.F: 4.131)
  25. X. Du, A. W. Tricker, W. Yang, R. Katahira, W. Liu, T. T. Kwok, **P. Gogoi**, Y. Deng, Oxidative Catalytic Fractionation and Depolymerization of Lignin in a One-Pot Single-Catalyst System, *ACS Sustainable Chemistry & Engineering*, 9 (2021) 7719–7727. (I.F: 9.224).
  26. M. Lei, K. Zhou, Q. Gao, **P. Gogoi**, J. Liu, J. Wang, H. Song, S. Wang, X. Liu, Highly efficient and novel H<sub>3</sub>PMo<sub>12</sub>O<sub>40</sub>/H<sub>2</sub>O<sub>2</sub> catalyst system for oxidative degradation of adsorbable organic halogen, *Separation & Purification Technology*, 15 (2021) 117933. (I.F: 9.135).
  27. R. Deka, S. Sarma, P. Patar, J. Sarmah, **P. Gogoi**, Highly stable silver nanoparticles containing pH responsive dual network hydrogel for catalytic and biomedical applications. *Carbohydrate Polymer*, 248 (2020) 116786 (I.F: 10.723).
  28. Z. Zhang, **P. Gogoi\***, X. Liu, X. Du, Low temperature lignin depolymerization to aromatic compounds with a redox couple catalyst. *Fuel* 281 (2020) 118799. (I.F: 8.035)
  29. X. Du, H. Zhang, **P. Gogoi**, Y. Deng, "Electrochemical Lignin Conversion and Upgrading", *ChemSusChem* 13 (2020) 1–27. (I.F: 9.14).
  30. W. Liu, **P. Gogoi**, C. Liu, Y. Deng Overview of Biomass Conversion to Electricity and Hydrogen and Recent Developments in Low-Temperature Electrochemical Approaches, *Engineering* 12 (2020) 1351-1363. (I.F: 12.834).
  31. W. Yang, X. Wang, **P. Gogoi**, H. Bian, H. Dai, Highly transparent and thermally stable and efficient cellulose nanofibril films functionalized with colored metal ions for UV-blocking. *Carbohydrate polymer* 213 (2019) 10–16. (I.F: 10.723).
  32. A. Gogoi. M. Navgire M. E., K. C. Sarma, **P. Gogoi\***, Highly efficient heterogeneous Fenton activities of magnetic  $\beta$ -cyclodextrin (Fe) framework for Eriochrome black T degradation, *Materials Chemistry and Physics*, 231 (2019) 233-243. (I.F: 4.778).
  33. Z. Zhang, A. Mulyadi, X. Kuang, W. Liu, V. Li, X. Liu, **P. Gogoi** and Y. Deng, Lignin-polymer-composite foams through high internal phase emulsion polymerization, *Polymer Engineering & Science*, 59, 5 (2019) 1-9. (I.F: 2.573).
  34. **P. Gogoi**, Z. Zhang, Z. Geng, W. Liu, W. Hu, Y. Deng, Novel low temperature, low energy and high efficiency wood pretreatment technology with a redox couple catalyst. *ChemSusChem* 11 (2018) 1-12 (I.F: 9.14)
  35. A. Gogoi. M. Navgire M. E., K. C. Sarma, **P. Gogoi \***, Adsorptive separation of tea catechins from aqueous solutions using magnetic nanocomposite of Fe<sub>3</sub>O<sub>4</sub>-carbon coated with  $\beta$ -cyclodextrin. *Indian Journal of Chemical Technology*, 24(5) (2017) 498-507. (I.F: 0.491)
  36. A. Gogoi. M. Navgire M. E., K. C. Sarma, **P. Gogoi\***, Novel highly stable  $\beta$ -cyclodextrin fullerene mixed valent Fe-metal framework for quick Fenton degradation of alizarin, *RSC Advances*, 2017, 7, 40371-40382. (I.F: 4.036)
  37. A. Gogoi. M. Navgire M. E., K. C. Sarma, **P. Gogoi\***, Fe<sub>3</sub>O<sub>4</sub>-CeO<sub>2</sub> metal oxide nanocomposite as a Fenton-like heterogeneous catalyst for degradation of catechol, *Chemical Engineering Journal*, 311 (2017) 153-162. (I.F: 16.744)
  38. M. Navgire, **P. Gogoi**, M. Baithy, B. M. Reddy,  $\beta$ -Cyclodextrin Doped MoO<sub>3</sub>-CeO<sub>2</sub> Nano-Composite Material As A Heterogeneous Catalyst For Degradation Of Phenol, *RSC Advances*, 2016, 6, 28679-28687. (I.F: 4.036)

39. J. K. Sarmah, A. Goswami, S. Kumar, B. Nath, P. Tassa, G. Gogoi, M. Borthakur, R. Mohan, **P. Gogoi**, Nanoparticulate systems for improved drug delivery: Preparative methods and Characterizations, Delve, December (2014) 76-83. **(ISSN-2278-7402)**.
40. A. Gogoi, **P. Gogoi**, Laccase: A potential biocatalyst for industrial applications, Delve, December (2014) 94-103. **(ISSN-2278-7402)**.
41. **P. Gogoi**, M. D. Saikia, N. N. Dutta, & P. G. Rao, Adsorption affinity of tea catechins onto polymeric resins: Interpretation from molecular orbital theory, *Biochemical Engineering Journal*, 52 (2010) 144-150. **(I.F: 4.446)**
42. **P. Gogoi**, S. Hazarika, N. N. Dutta and P. G. Rao, Kinetics and mechanism on laccase catalysed synthesis of Poly (allylamine) catechin conjugate. *Chemical Engineering Journal*, 163(2010) 86-92. **(I.F: 16.744)**
43. **P. Gogoi**, S. Hazarika, N. N. Dutta and P. G. Rao, Laccase catalysed conjugation of catechin with poly (allylamine): Solvent effect, *Chemical Engineering Journal* 155 (2009) 810-815. **(I.F: 16.744)**
44. **P. Gogoi**, N.N. Dutta, P.G. Rao, Adsorption of catechin from aqueous solutions on polymeric resins and activated carbon, *Indian Journal of Chemical Technology*, 17 (2009)337-345. **(I.F: 0.491)**

## Patents

1. Enhancing Triboelectric Nanogenerator Performance through Sustainable Lignin-Based Nanofibers: Fabrication, Characterization, and Application, **Indian Patent application No: 202431042106 (Docket No 21546, Date/Time 2024/05/30 17:21:29 )**
2. Copper and Iron Framework as Heterogeneous Fenton catalyst for treatment of Organic Contaminants in aqueous solutions, **Indian Patent application No.: 202531040555 dated 26-04-2025.**

## Publications (Books)

1. J. B. Baruah, **P. Gogoi**, A. M. Baruah, Foundations of Experimental Chemistry, PharmaMed Press, Hyderabad, India, 2010, ISBN No: 978-81-88449-24-8.
2. **P. Gogoi**, M. L. Das and P.G. Rao, Enzymatic Synthesis of tea polyphenolic derivatives: Kinetic and Mechanistic Studies, Lambert Academy Publishing, Germany, 2013, ISBN: 978-3-659-40051-3.
3. J. C Kalita, D. Sharma (Chief Editors), D. Medhi, J. Sharma (Editors), **P. Gogoi**, B. Saha (Associate Editors), Bio-Resources of North East India, Purbayan Publication, Guwahati, India, February 2019, ISBN: 978-93-88593-27-4.
4. P. Saikia, J. K. Sharma, P. Gogoi, Bimetals: Formation, Properties and Applications, Nova Science Publishers, New York, USA, 2024, ISBN: 979-8-89113-496-6 DOI: <https://doi.org/10.52305/CYXG2831>.

## Publications (Book chapters)

1. S. Borah, R. M. Kalita, P. Gogoi, Silk colouration: Innovations in sustainable and functional dyeing, Science and Technology of Silk - Volume II' to be published by Springer Nature Switzerland AG. Accepted, 2025.
2. R. Kemprai, **P. Gogoi**, B. K. Bhuyan, A Brief Review on Isolation of Lignin, In Editors: M. Sharma, N. Baruah, B. Das, Frontiers in Interdisciplinary Approaches to Modern Science, November 30, 2024, DOI 10.5281/zenodo.14337104.
3. N. Sut, **P. Gogoi**, Metal-Organic Framework (MOF) Composites as Heterogeneous Catalysts for Fenton-Like Reactions in the Remediation of Organic Pollutants, In Editors: M. Sharma, N. Baruah, B. Das, Frontiers in Interdisciplinary Approaches to Modern Science, November 30, 2024, DOI 10.5281/zenodo.14337104
4. **P. Gogoi**, S. Hazarika, N. N. Dutta\* and P.G. Rao, Tea polyphenols: Technological Perspectives, In: Editors: Jubaraj Bikash Baruah, Chemistry of Phenolic Compounds State of the Art, Nova Science Publishers, New York, USA, 2010, ISBN: 978-1-61761-335-7.
5. A. Sarkar, A. Gogoi, **P. Gogoi\***, Natural dyes of North East India: Processing and sustainable Perspectives, In Editors: J. C Kalita, D. Sharma, D. Medhi, J. Sharma, P. Gogoi, B. Saha, Bio-

Resources of North East India, Purbayan Publication, Guwahati, India, February 2019, ISBN: 978-93-88593-27-4.

6. A. Gogoi, X. Liu, X. Du, K. C. Sharma, M. Navgire, **P. Gogoi\***, Nanostructured Iron oxide hybrid composites as heterogeneous Fenton-like catalyst for remediation of persistent organic pollutants, In: Editors: Putla Sudarsanam, Yusuke Yamauchi, Pankaj Bharali, Heterogeneous Nanocatalysis for Energy and Environmental Sustainability, Wiley, November 11, 2022.

#### **Publications (Conference Proceedings, National/International)**

1. **P. Gogoi**, A. Gogoi, Medicinal Properties of Phenolics in Turmeric, In: Editors: K. K. Medhi and F. Yashmin, Proceedings of **National Conference** on Biological Science Education (Expansion and issues in North East India), Nowgong College, India, March, 2015, ISBN: 978-81-924066-1-4.
2. M. E. Navgire, **P. Gogoi**, B. Malleshram, A. Rangaswami, B. M. Reddy, M. K. Lande,  $\beta$ -Cyclodextrin Doped MoO-CeO Nano-Composite Material as Heterogeneous Catalyst For Degradation Of Phenol, In: proceedings of **National Conference** NCMABF, Jijamata College of Science and Arts, Maharashtra, India, 2015, ISBN No. 978-93-83870-20-2.
3. A. Sarkar and **P. Gogoi**, Natural Antioxidant and its Technical Form: Future Prospect, Proceeding of **National Conference** on Coproduction of Science with social order: Social Science Perspectives on gifts of Science to Society for overall development, organized by Nowgong College, Nagaon, 17-18, August, 2018.
4. Y. Bai, C. Wei, S. Nie, **P. Gogoi**, C. Qin, S. Wang, X. Liu, The mechanism study on oxidizing the surface of cellulose fiber by ultrasonic-assisted TEMPO, Proceedings of the 5th **International Conference** on Pulping, Papermaking and Biotechnology, November 12-14, 2018, Nanjing Forestry University, Nanjing, China
5. R. Deka, J. K Sarmah\*, G. Gogoi, **P. Gogoi**, Stability study of alginate based w/o emulsion system with aqueous extract of okra (bhindi) as stabilizer: A sustainable approach for emulsion preparation, Proceeding of ASTEC, DST, Govt of Assam Sponsored **National Conference**, 4<sup>th</sup> & 5<sup>th</sup> October 2018, Nowgong College.
6. R. Deka, A. A. Ali, **P. Gogoi**, and J. K Sarmah, Development of polyvinyl alcohol-based hybrid hydrogel for biomedical applications, Proceedings of the National Conference on Progresses in Material Science Research (PMSR-2020), Dibrugarh University, Assam, India.

#### **Invited talks**

1. Invite talk, Emerging trends in chemistry research, scope and opportunities, CHEMTALK 1.0, JB University, Jorhat, September 15, 2025.
2. Invited talk, (keynote speech) Potentials of Biomass for Fuels and Chemicals: Opportunities and challenges in NE India ICSSR-sponsored National Conference on "Bio-resources and Sustainable Development of North-East India," held on March 19–20, 2025, and organized by Dhakuakhana College (Autonomous).
3. Invited talk, National conference on Material Chemistry and Catalysis, on Lignocellulosic Biomass for Fuels and Chemicals: Overcoming Challenges and Unlocking Opportunities, organized by Tezpur University, March 7-8, 2025.
4. Invited talk, Departmental Seminar Series, Chemistry and Biochemistry, Kennesaw State University, Georgia, USA on Lignocellulosic biomass-based fuels and chemicals: challenges and opportunities, Tuesday, April 23, 2024 2:00 pm in MS 118 funded by Fulbright Outreach lecturing award, IIE, US Department of State.
5. Invited talk (online) in International Conference on 'Current Trends of Research in Chemistry towards Sustainability, Health Care, and Forensic Analysis' organized by Department of Chemical Sciences, Tezpur University, Assam on 14-15<sup>th</sup> March 2024.
6. Resource Person in Online FDP on "ML and AI applications in the flow of hydrocarbons in underground reservoirs" from 5<sup>th</sup> to 16<sup>th</sup> December, 2022 organized by AICTE Training and Learning (ATAL) Academy and Dibrugarh University.
7. Resource Person in Online FDP on "Recent Trends in Upstream Petroleum Technology" from 07/03/2022 to 11/03/2022 organized by AICTE Training and Learning (ATAL) Academy and Dibrugarh University.
8. Nanostructured Iron oxide hybrid composites as heterogeneous catalyst for waste water treatment, International Conference on Water Management in the Department of Petroleum Technology, Dibrugarh University, 7<sup>th</sup> to 8<sup>th</sup> Feb 2022

9. Online workshop on Capacity building for Administrative staff, Resource person, organized by Nowgong College (3-4 July 2021)
10. Biomass conversion to fuel and chemicals with redox couple catalysts, SSD-2020, organized by B. Borooah College, Guwahati-7 & ASTEC, India.(25-26 September 2020)
11. Novel technologies for lignocellulosic biomass to biofuel and value added chemicals with redox couple catalysts, National workshop on Renewable Resources & Sustainable Technologies, Natural Products Processing, ASTU Guwahati (04-05 September 2019).
12. Green tea polyphenols: Technological innovations, ASTEC, DST, Govt of Assam Sponsored National Conference, Nowgong College (4-5 October 2018).
13. Polyphenols for Enhanced Antioxidant Properties: Synthesis and Its Applications, NCMABF, Jijamata College of Science and Arts Bhende, Maharashtra, India, 2015.
14. Seven Billion Dreams. One Planet. Consume with care, Celebration of World Environment Day 5<sup>th</sup> June 2015, organized by Pollution Control Board, Nagaon, Assam.

#### Seminar attended

1. Attended Fulbright Scholar Enrichment Seminar on Introduction to Scientific Manuscript Publishing & Peer Review, Spring 2024, March 7, 2024 organized by IIE and Fulbright commission, USA.
2. Attended Fall 2023 Cleveland Fulbright Scholar Enrichment Seminar on Public Health: Cleveland's Creative Approach to Improving the Health of Our Community, Marriott Key Tower Downtown, Cleveland, Ohio, December 5-8, 2023 organized by IIE and Fulbright commission, USA.
3. Attended a seminar on Climate Change, organized by Raj Bhawan, Assam, 12th September 2022.
4. **P. Gogoi**, Y. Deng, Low-temperature and low-energy biomass conversion to fuel and chemicals, poster presentation, North East Research Conclave 2022, organized by IIT Guwahati, 20-22 May, 2022.
5. **P. Gogoi**, Fe-metal frameworks: Fenton activities toward organic pollutant remediation, Oral Presentation, International conference on Materials Chemistry and catalysis (virtual mode) organized by Department of Chemical Sciences, Tezpur University, Assam, 4-5 March 2021.
6. **P. Gogoi**, Tea polyphenols and its medicinal properties, Oral Presentation, e-International Conference on Nutrients acquisition by plant based remedies against viral diseases, Nowgong College, Nagaon, Assam, 7th & 8th August, 2020.
7. S. Bora, **P. Gogoi**, Natural colourants for cotton and wool dyeing, 1st International e-conference on Current Trends in Chemical Research, Nowgong College, Nagaon-782001, Assam, India, 22<sup>nd</sup> August, 2020.
8. **P. Gogoi**, Zhe Zhang, Yulin Deng, Novel pretreatment technology for lignocellulosic biomass to biofuel and value added chemicals with a redox couple catalyst, Oral Presentation, GSES-2019, 64<sup>th</sup> Annual Technical Session of ASS, Cotton University, June 28-29, 2019.
9. A. Gogoi and **P. Gogoi**, Natural dyes of North Eastern Region of India: Processing and sustainable perspectives, Oral Presentation, Coproduction of Science with social order: Social Science Perspectives on gifts of Science to Society for overall development, Organized by Nowgong College, Nagaon, 17-18, August, 2018.
10. **P. Gogoi**, Zhe Zhang, Yulin Deng, Novel low temperature, low energy and high efficiency wood pretreatment technology with a redox couple catalyst, Poster presentation, Green Chemistry & Engineering Conference, Making Our Way to a Sustainable Tomorrow, June 13-15, 2017, Reston, Virginia, USA.
11. Attended RBI Annual executive conference on “Growing Resources Today for a Sustainable Tomorrow: People, Technologies & Ideas”, March 7-8, 2017 at the Global Learning Center in Midtown, Georgia Institute of Technology, Atlanta, USA.
12. A. Gogoi. K. C. Sarma\*, **P. Gogoi**, Functionalized  $\beta$ -cyclodextrin Fe<sub>3</sub>O<sub>4</sub> Nano- Adsorbent For Separation Of Certain Amino Acids From Aqueous Solutions, In: proceedings of NCMABF, Jijamata College of Science and Arts Bhende, Maharashtra, India, 2015.
13. **P. Gogoi**, N. N. Dutta, Laccase catalysed conjugation of tea polyphenols for enhanced antioxidant properties, 24<sup>th</sup> Enzyme Mechanism Conference 4-8 January, 2015 at Galveston, Texas, USA.(Published in abstract book, Unable to attend due to VISA issues)



14. M. E. Navgire, B. M. Reddy, **Parikshi Gogoi**,  $\beta$ -Cyclodextrin Doped MoO<sub>3</sub>-CeO<sub>2</sub> Nano-Composite Material As A Heterogeneous Catalyst For Degradation Of Phenols, Poster presentation, FICS, Department of chemistry, IIT Guwahati, 4-6 December, 2014.
15. **P. Gogoi**, First Annual TCIS Summer Research Symposium, TIFR centre for Interdisciplinary Sciences, Hyderabad, 26<sup>th</sup> June 2014
16. **P. Gogoi**, Aniruddha Gogoi, Medicinal Properties of Phenolics in Turmeric, Oral Presentation, UGC sponsored National conference on Sustainable Quality of Biological Science Education, Department of Botany, Nowgong College, Nagaon, Assam on December 9-10, 2013.
17. P. Bhuyan, P. Das, A. Baruah, N. Bora, N. Brahma, **P. Gogoi**, Prospects of green chemicals for synthesis and qualitative analysis of Inorganic materials in Laboratory, DST Sponsored National seminar, RACER' 2012, Gauhati University on February 24-25, 2012.
18. **P. Gogoi**, N. N. Dutta, P. G. Rao, CLEC laccase catalyzed conjugation of catechin with poly(allylamine): Kinetic and mechanistic studies, Poster presentation, International Symposium on Advances in Chemical Sciences" at IIT Guwahati & RSC, UK, January 30, 2012.
19. **P. Gogoi**, N. N. Dutta, P. G. Rao, Kinetics and mechanism on laccase catalyzed synthesis of poly (allylamine) catechin conjugate, Poster presentation, 18<sup>th</sup> International Conference on "Perspective and Challenges in Chemical and biological Sciences Innovation Cross Roads", IASST Guwahati, January 28-30, 2012.
20. **P. Gogoi**, D. Kalita, A. K. Hazarika, H. P. Sarmah, N. C. Gogoi and P. G. Rao. Characterization of Tea Polyphenolic Components in Tea Extracts, Oral Presentation, National Conference on "Current Trends of Research in Science and Technology", Gauhati University, January 2005.
21. Attended the National Seminar on "Membrane Science & Technology: Challenges and Opportunities" at RRL (CSIR), Jorhat, Assam on February 12-13, 2004.

#### **Workshop attended**

1. MHRD sponsored two days' workshop on "I.C.T. in Management of Education" organized by TLC, Tezpur University in collaboration with Nowgong College, May 22 & 30, 2019.
2. National workshop on Rashtriya Uchchar Shiksha Abhijan: A Paradigm Shift for Quality Education and Financing Higher Education, Nowgong College & Assam College Teachers' Association, May 10, 2014.
3. UGC sponsored national workshop on Modern Concept of Career Counselling organized by Jorhat College, Jorhat, April 20-21, 2012.
4. Workshop on GC-MS organized by Directorate of Forensic Science & Fischer Scientific, Kahilipara, Guwahati, Assam.

#### **Professional training attended**

1. RUSA 2.0/PM-USHA Assam Sponsored Teachers' Training Programme on Mentoring Cutting Edge Research in the Light of NEP 2020, organized by UGC-MMTTC, Gauhati University in collaboration with Nagaon University. (19.09.2025 to 20.09.2025).
2. Online Laboratory safety training, University of Illinois Urbana Champaign, October 10, 2023.
3. Online SWAYAM, UGC-approved short-term professional development programme on 'Implementation of NEP-2020 for University and College Teachers', 6 days (12-20 June, 2023)
4. Online FDP on "Research methodology for basic sciences" organized by UGC-HRDC, NEHU Shillong, 7 days (14-20 February 2023)
5. Certificate course on Python Programming organized by iHUB DivyaSampark, IIT Roorkee, Department of Science & Technology, Govt. of India at Nowgong College (Autonomous), 25-29 December 2022.
6. Online FDP on "Online Evaluation Systems" organized by TLC, Tezpur University & Nowgong College (Autonomous), 7 days (22-28 June 2021)
7. Online FDP, Mentoring Pedagogy and Teaching for Higher Education, Electronics & ICT Academy IIT Guwahati and Nowgong College (8-15 June 2020).
8. Online FDP, IIT Bombay & Nowgong College, Remote training on "LaTeX and Moodle Learning Management System" (24<sup>th</sup> April to 7<sup>th</sup> May, 2020)
9. Refresher course, UGC HRDC Gauhati University, "Winter School on Bioresources of North East India", 21 days (30 January 19 February 2019).



10. FDP, IIE Guwahati, 11 days (28 March to 8 April 2019) sponsored by NSTEDB, DST, New Delhi.
11. Online tutorial on Lab Safety 101, Georgia Tech., Atlanta, USA (23 February 2017)
12. Online tutorial on receipt of Hazardous Materials, Georgia Tech., Atlanta, USA (23 February 2017)
13. Orientation Programme-23, UGC-ASC, Kumaun University, Nainital, 28 days (26 August to 26 September 2013).
14. Twenty five days training at IOCL, Guwahati on Petroleum Refining. (6-30 May 2003)

#### **Membership and activities in professional associations**

1. Life member, Assam Science Society, Assam, India
2. Life member, Assam college Teachers Association, Assam
3. Life member, Chemical Research Society of India
4. Life member, Ellora Viyan Mancha, Assam

#### **Professional honors, awards, and fellowships**

1. Vice-Chancellor's Excellence Award-2025 in the category of Teacher for contribution to Scientific research and teaching, Nagaon University, December 1, 2025.
2. Fulbright OLF award offered by Fulbright Commission, Washington DC to deliver a talk at Chemistry, Kennesaw State University, Kennesaw, Georgia, 23<sup>rd</sup> April 2024.
3. Fulbright-Nehru Academic and Professional Excellence Award (Research), 2023-24 at Prairie Research Institute at University of Illinois at Urbana-Champaign, IL. (9 months, Start date September 15, 2023- June 15, 2024)
4. Dulal Ch. Goswami memorial research award 2021 offered by DCGMCT, Nowgong College (Autonomous)
5. Raman Research Fellowship for Post-Doctoral Research for India Scholars in USA offered by UGC, India for one year (2015-16) at ChBE & RBI, Georgia Institute of Technology, Atlanta, USA
6. UGC Travel Grants to attend 24<sup>th</sup> Enzyme Mechanism Conference 4-8 January, 2015 at Galveston, Texas, USA. (Not able to attend the conference due to late issuance of US VISA)
7. DST Travel Grants to attend 24<sup>th</sup> Enzyme Mechanism Conference 4-8 January, 2015 at Galveston, Texas, USA. (Not able to attend the conference due to late issuance of US VISA)
8. Indian National Science Academy (INSA) Summer Research Fellowship for Teachers 2014

#### **Community service**

- Secretary, Assam Science Society, Nowgong Kolongpar branch, Nagaon (from 2020)  
Organizing Science awareness programme for school children, celebration of World Environment day, Science day etc.
- Prepared hand sanitizer based on WHO protocols and distributed among the students and common people of Nagaon (Highlighted in TV Channels, State & National Newspapers)

#### **Declaration**

I, hereby declare that all the statements made above are true, complete and correct to the best of my knowledge and belief.

Place: Nagaon, Assam

(PARIKSHIT GOGOI)