

Curriculum vitae

Dr. Biswajit Sarma, M.Sc., Ph. D.

Associate Professor, Department of Chemistry, Royal School of Applied & Pure Sciences, Royal Global University
Betkuchi, Opp. TirupatiBalaji Temple, NH 37, Guwahati (Assam) 781035

Permanent address:

Dr. Biswajit Sarma

S/O Dr. Prafulla Chandra Sarma
H/No. 2, BorashaUpo path, Back Side AG Colony
Beharbari, P.O.:Beltola, Guwahati-781028
Assam

Personal details:

Date of birth: 01/04/1980
Gender: Male
Marital Status: Married
Nationality: Indian
Religion: Hindu
E-mail: biswa0104@gmail.com, Biswajit.Sarma@rgi.edu.in
Mobile: 9706129693

Education:

- ❖ **Ph.D.** (2018) from Gauhati University.
- ❖ **M.Sc.** (2005) in Chemistry with specialization in Organic Chemistry from Gauhati University, Assam with a percentage of 70%.
- ❖ **B.Sc.** (2002) with Chemistry as Major subject from Jorhat Science College under Dibrugarh University with 64%.
- ❖ **CLASS XII** (1998) in Science from JB College, Jorhat under Assam Higher Secondary Education Council(AHSEC) with 68%.
- ❖ **CLASS X** (1996) from Milan High School, Nalbari under the Secondary Education Board of Assam (SEBA) with 73%.

Ph.D. Thesis:

Thesis Title: Studies on antidiabetic activity of a few medicinal plants
Supervisor: Prof. Bhabesh Chandra Goswami, Gauhati University

Languages known:

Assamese, English, Hindi

Technical skills:

- ❖ Operating Systems: Windows, Linux.
- ❖ Softwares Familiar: MS-Office, Microsoft Excel, power point, ChemBioDraw, ISIS draw, Origin.

Instrument handled:

FT-IR, HPLC, UV spectrometer, Biotagecoulomn, CombiFlash automated column, Microwave reactor, Autoclave reactor, Lyophilizer etc.

Research Interest:

- ❖ Multi-step Organic Synthesis
- ❖ Library Synthesis
- ❖ Medicinal Chemistry,
- ❖ Natural Product Chemistry

Research skills:

- ❖ Knowledge of handling air, moisture sensitive reagents and dry reactions
- ❖ Experiences in handling various coupling reactions like Suzuki, Buchwald, Mitsunobu, Sonogashira reactions etc.
- ❖ Synthesis of scaffolds/building blocks including complex structure involving multi-step synthesis in milligram to kilogram scale with complete characterization
- ❖ Experiences of Library Synthesis
- ❖ Analysis of spectroscopic data viz., ¹H NMR, ¹³C NMR, IR, LCMS, GCMS etc.
- ❖ Knowledge of purification of compounds through various chromatographic techniques
- ❖ Experiences of handling catalytic hydrogenation reaction in high pressure Hydrogenation reactor
- ❖ Experiences of handling and maintenance of laboratory Mice used in biomedical research

Industrial experience:

4 Years of Industrial experience (from 2005 to 2009) in TCG Lifesciences Pvt. Limited (formerly “Chembiotek ResearchInternational”) as a Senior Research Chemist.

TCG Lifesciences is a leading global Contract Research and Manufacturing Services (CRAMS) company in the area of drug discovery and development. Their services span chemistry, in vitro and in vivo pharmacology, analytical development and validation, and specialty chemicals. TCGLS offers integrated Medicinal Chemistry services to clients across multiple therapeutic areas encompassing oncology, CNS, pain and inflammation, metabolic disorders, and infectious diseases.

Teaching Experience:

13 Years (August 2009 to Till date)

Institution: Royal Global University, Guwahati

Designation: Associate Professor

Responsibilities: Teaching Chemistry to UG (B. Sc. & B. Tech.) and PG (M. Sc.) students.
Handling lab for both UG and PG students. Guidance of project work for the UG & PG students.

Research Experience:

- ❖ Research Fellow in "Gauhati University"
- ❖ Research Fellow in "Chembiotek Research International"

Research Paper Published in Journals:

1. Biswajit Sarma and Bhabesh Ch. Goswami. "Qualitative elemental analysis of some selected antidiabetic medicinal plants of Assam using X-ray Fluorescence (XRF) technique", *Asian Journal of Plant Science and Research*, **2016**, 6(3):71-79.
2. Biswajit Sarma and Bhabesh Ch. Goswami. "Study on element content of some Antidiabetic medicinal plants grown in North East India by Atomic Absorption Spectroscopy (AAS) and Flame Photometry", *International Journal of ChemTech Research*, **2017**; Vol.10; 644 – 652.
3. Biswajit Sarma and Bhabesh Ch. Goswami. "Evaluation of Hypoglycemic effect of Ethanol extract of *Musa paradisiaca* unripe fruit pulp on normal and alloxan induced diabetic mice", *Research Journal of Pharmacy and Technology (RJPT)*, **2018**, 11(3), 1048-1052.
4. Biswajit Sarma. "Survey of medicinal plants with potential antidiabetic activity used by villagers in lower Assam districts of North-East, India"; *International Journal of Herbal Medicine*, **2020**; 8(2): 01-06.
5. Biswajit Sarma. "Trace Element Analysis of Some Indigenous Antidiabetic Medicinal Plants of Assam"; *International Journal of Scientific Research in Chemical Sciences*; **2020**; 7(6): 21-30.
6. Biswajit Sarma. "Phytochemical analysis of few selected medicinal plants used for the treatment of diabetes in Assam, India"; *Research Journal of Chemical Sciences*; **2021**; 11(1), 34-41.
7. Biswajit Sarma. "Study of the effect of *Garcinia pedunculata* fruit pulp on normal and alloxan induced diabetic mice"; *Research Journal of Chemistry and Environment*; **2021**; 25(6), 142-147.

8. Biswajit Sarma. "Study of Antidiabetic activity of Aqueous Extract of Clerodendrumcolebrookianum Leaves"; *International Journal of Pharmaceutical Sciences Review and Research*; **2022**; 75(1): 155-159.
9. Biswajit Sarma. "Medicinal plants used for the treatment of Jaundice in lower Assam districts of North East India"; *Asian journal of Pharmacy and Technology*; **2023**; 13(2).

Presentations in Seminars/Conferences:

1. Poster presentation in **National Seminar on Chemistry Education And Research and National Convention Of Chemistry Teachers (NCCT-12)**; held on November 1-4, 2012 at Department of Chemistry, Gauhati University, Guwahati-14, organized jointly by the Department of Chemistry, Gauhati University and the Association of Chemistry Teachers (ACT).
2. Poster presentation in a **National Seminar on Emerging Trends in Chemical Sciences 2016 (ETICS-2016)**, held on May 27, 2016 at the Department of Chemistry, Gauhati University, Guwahati-14, organized by the Department of Chemistry, Gauhati University.
3. Poster presentation in "**20th CRSI National Symposium in Chemistry**" held on 3rd to 5th February, 2017 at Department of Chemistry, Gauhati University, organized by the Department of Chemistry, Gauhati University and supported by IIT, Guwahati and Tezpur Central University.

Conferences/ Seminars/Symposiums Attended:

1. Attended **2ND Indian National Seminar "Plants In Diabetes : Prospects and Challenges"**; held on April 08-09, 2011 at Gauhati University, Guwahati-14, organized by the Asian Network of Research on Antidiabetic Plant (ANRAP), Dhaka, Bangladesh and co-organized by North East Institute of Science and Technology (NEIST), Jorhat, India ERD Foundation, Guwahati, India.
2. Attended **National Seminar on Frontiers in Science and technology (58th Annual Technical Session)**; held on March 8-9, 2013 at Gauhati University, Guwahati-14, Assam, organized by Assam Science Society.
3. Attended National Seminar on **Frontiers in Nanotechnology (FNT)**, held on November 16, 2013 at Royal Group of Institutions, Guwahati-35, organized by Department of Basic Sciences and Humanities, Royal School of Engineering & Technology, Guwahati.
4. Attended One day National Seminar on **Non-Conventional Sources Of Energy: Prospect and Challenges**, held on January 30, 2016 at Royal Group of Institutions, Guwahati-35, organized by Department of Basic Sciences and Humanities, Royal School of Engineering & Technology, Guwahati.
5. Attended **UGC –SAP National Seminar on Emerging Trends in Chemical Sciences-2015** held on November 5-6, 2015 at the Department of Chemistry, Gauhati University, Guwahati-14, organized by the Department of Chemistry, Gauhati University.

6. Attended **LECTURE SERIES: MATERIALS SCIENCE** held on March 29, 2019 at the Gauhati University organized by the Department of Applied Sciences, GUIST, Gauhati University, Guwahati-14.
7. Attended **International Conference on Emerging areas of Science & Technology (EAST 2021)** at Royal Global University; organized by RSAPS, RGU on 1st & 2nd June, 2021.

Trainings& Short Term Course Attended:

1. Faculty Development Programme on “**Testing & Quality Control of Plastic Product**” at Central Institute of Plastics Engineering & Technology (CIPET), Guwahati from 10/3/2014 to 21/3/2014.
2. Faculty Development Programme on “**Entrepreneurship: A journey to the concept**” at Royal Group of Institution, Guwahati from 16/2/2015 to 27/2/2015.
3. Faculty Development Programme on “**Recent Advances in Materials Science**” organized by Department of Chemistry, Amity Institute of Applied Sciences, Amity University, Kolkata from 8/7/2020 to 12/7/2020.
4. Department Lecture series titled “**The rechargeable world with Li-ion Batteries (LIBs)**” organized by Department of Chemistry, SRM University –AP, Andhra Pradesh held on 14th July 2020.
5. Department Lecture series titled “**Molecular Docking and Repurposing of Drug molecules for SARS-CoV-2**” organized by Department of Chemistry, SRM University – AP, Andhra Pradesh held on 21st July 2020.
6. Department Lecture series titled “**Optoelectronic Properties of perovskite Semiconductor Nanocrystals**” organized by Department of Chemistry, SRM University – AP, Andhra Pradesh held on 7th July 2020.
7. Attended National Level Workshop on **Artificial Intelligence and Machine Learning** at Royal Global University; organized by Department of Mathematics, RSAPS, Royal Global University from 7/3/2022 to 11/3/2022.
8. Faculty Development Programme on “**Recent Trends in Material Frontiers: Chemical and Biological Aspects**” organized by Amity Institute of Applied Sciences, Amity University, Kolkata from 1/8/2022 to 5/8/2022.

Lists of journals of repute where served as reviewer:

1. Asian Journal of Advances in Medical Science
2. Chemical Science International Journal

Involvement in the conduction of Conferences/ Seminars:

1. Member of organizing committee of National Seminar on **Frontiers in Nanotechnology (FNT)**, held on November 16, 2013 at Royal Group of Institutions, Guwahati-35,

organized by Department of Basic Sciences and Humanities, Royal School of Engineering & Technology, Guwahati.

2. Member of organizing committee of National Seminar on **Non-Conventional Sources Of Energy: Prospect and Challenges**, held on January 30, 2016 at Royal Group of Institutions, Guwahati-35, organized by Department of Basic Sciences and Humanities, Royal School of Engineering & Technology, Guwahati.
3. Member of organizing committee of **International Conference on Emerging areas of Science & Technology (EAST 2021)** at Royal Global University; organized by RSAPS, RGU on 1st & 2nd June, 2021.

Research Guidance:

S No.	Degree	No. of Students enrolled	Status	Degree
1	M.Sc.	16	Completed	Awarded
2	B.Sc.	5	Completed	Awarded

Institutional funded projects:

- ❖ Student's Research Project; **Title:** Synthesis of Biodegradable Bioplastic Films from Agricultural wastes.

Academic position within RGU

- ❖ Head of the department, Department of Chemistry, RSAPS, RGU (July, 2020-June, 2022)
- ❖ Member of Board of Studies (BOS), Department of Chemistry, RSAPS, RGU
- ❖ Member of Academic Council, Department of Chemistry, RSAPS, RGU
- ❖ Member of Departmental Research Committee (DRC), Department of Chemistry, RSAPS, RGU

Awards and achievements:

- ❖ Institutional recognition award for the research activities carried out in the year 2020 from the Assam Royal Global University, Guwahati.

Membership of Professional/Scientific Societies:

- ❖ Life member of Assam Science Society
-