

FACULTY MEMBER ACADEMIC PROFILE

1. **Name of the Faculty member:** Dr. ABHIJIT BISWAS
2. **Designation:** Assistant Professor in Chemistry (W.B.E.S.)
3. **Qualification:** M.Sc. (IIT Bombay),  
Ph.D. (Indian Association for the Cultivation of Science)
4. **Specialization:** Organic Chemistry
5. **E-mail address:** biswas.abhijit5@gmail.com
6. **Date of Joining in W.B.E.S.:** 14.12.2015
7. **Date of Joining in this College:** 14.12.2015
8. **Total Teaching experience in College level:** 8+ years
9. **Research interests:** Interdisciplinary area of supramolecular chemistry and nanotechnology involving smart materials, nanoscale building blocks.
10. **Title of thesis (Ph.D.) with year:** “Synthesis of Nanohybrids, Nanodots and Core-Shell Nanomaterials and their Applications” (2015)
11. **Research guidance:** Nil
12. **Research Projects (Completed and ongoing):** Nil
13. **List of publications:**

**Published papers in Journals:**

1. “Graphene oxide-based supramolecular hydrogels for making nanohybrid systems with Au nanoparticles”, B. Adhikari, **A. Biswas** and A. Banerjee, *Langmuir*, **2012**, 28, 1460-1469 [[ISSN 1520-5827 \(Web Edn\)](#); **IF: 3.7**].
2. “Graphene Oxide-Based Hydrogels to Make Metal Nanoparticle-Containing Reduced Graphene Oxide-Based Functional Hybrid Hydrogels”, B. Adhikari, **A. Biswas** and A. Banerjee, *ACS Appl. Mater. Interfaces*, **2012**, 4, 5472-5482 [[ISSN 1944-8252\(Web Edn\)](#); **IF: 8.456**].
3. “Single amino acid based thixotropic hydrogel formation and pH-dependent morphological change of gel nanofibers”, J. Nanda, **A. Biswas** and A. Banerjee, *Soft Matter*, **2013**, 9, 4198-4208 [[ISSN 1744-6848](#); **IF: 3.399**].
4. “A Gel-Based Trihybrid System Containing Nanofibers, Nanosheets, and Nanoparticles: Modulation of the Rheological Property and Catalysis”, J. Nanda, **A. Biswas**, B. Adhikari and A. Banerjee, *Angew. Chem. Int. Ed.*, **2013**, 52, 5041-5045 [[ISSN 1521-3773](#); **IF: 12.257**].
5. “Peptide stabilized Ag@ Au Core-shell Nanoparticles: Synthesis, Variation of Shell Thickness, and Catalysis”, **A. Biswas**, S. Roy and A. Banerjee, *Z. Anorg. Allg. Chem.*, **2014**, 640, 1205-1211 [[ISSN 1521-3749 \(Web Edn\)](#); **IF: 1.337**].
6. “Tailored Synthesis of Various Nanomaterials by Using a Graphene-Oxide-Based Gel as a Nanoreactor and Nanohybrid-Catalyzed C-C Bond Formation”, **A. Biswas** and A. Banerjee, *Chem. – Asian J.*, **2014**, 9, 3451-3456 [[ISSN 1861-471X](#); **IF: 3.698**].

7. "Sunlight induced unique morphological transformation in graphene based nanohybrids: appearance of a new tetra-nanohybrid and tuning of functional property of these nanohybrids", **A. Biswas** and A. Banerjee, *Soft Matter*, April, **2015**, 11, 4226-4234 [ISSN 1744-6848; IF: 3.399].
8. "Carbon nanodots, Ru nanodots and hybrid nanodots: preparation and catalytic properties", **A. Biswas**, S. Paul and A. Banerjee, *J. Mater. Chem. A*, June, **2015**, 3, 15074-15081 [ISSN 2050-7488; IF: 10.733].
9. "Supramolecular Gels with Mouldable Properties from Fatty Acid to make Graphene-Based Nanohybrid Paper", **A Biswas**, *Asian J. Chem*, August 2022, 34, 2331-2336 [ISSN 0970-7077].
10. "Graphene Oxide-based Gel as Potential Nanomaterial for Sustained Release of an Anticancer Drug". *Asian J. Chem*, October 2023, 35, 2733-2738 [ISSN 0970-7077].

14. **Membership of Learned Societies/ Editorial Boards, etc.:** Life Member of Indian Association for the Cultivation of Science

15. **Patents:** Nil

16. **Awards:** Nil

17. **Other notable activities:**

1. Acted as a Jt. Convenor of "Science Academis' Lecture Workshop on "Understanding the 'Nuts and Bolts' of Chemistry" organized by the Department of Chemistry, Krishnagar Government College on 18<sup>th</sup> – 19<sup>th</sup> January, 2019.

18. **A) Participation in Seminars/Symposia/Conferences/Workshops:**

1. Participated in the 22<sup>nd</sup> **Annual General Meeting of Material Research Society** of India (MRSI) on '*Lightweight Materials: Monolithic to Composites (MRSI-2011)*' organized by CSIR-AMPRI, Bhopal, on 14-16<sup>th</sup> February, 2011.
2. Participated in the **International Symposium** on '*Chemistry and Complexity*', organized by Indian Association for the Cultivation of Science, Kolkata, on 6-8<sup>th</sup> December, 2011.
3. Participated in the '*ACS on Campus*' organized by Indian Association for the Cultivation of Science, Kolkata on 12<sup>th</sup> October, 2012.
4. Participated in the '*RSC India Road Show*' organized by Indian Association for the Cultivation of Science, Kolkata on 5<sup>th</sup> February, 2013.
5. Participated in the 4<sup>th</sup> **Indian Peptide Symposium** (IPS-2013), organized by S.N. Bose National Centre for Basic Sciences on 21<sup>st</sup> -22<sup>nd</sup> February, 2013.
6. Participated in the **National Symposium** on '*Perspective and Challenges in Organic Chemistry*' organized by Indian Association for the Cultivation of Science, Kolkata on 18<sup>th</sup> October, 2014.
7. Participated in the **International Symposium** on '*Polymer Science and Technology (MACRO-2015)*' organized by Indian Association for the Cultivation of Science, Kolkata held from 23<sup>rd</sup> -26<sup>th</sup> January, 2015.
8. Participated in the **Asian Academic Seminar and School 2015** on '*Spectroscopy, Theoretical Chemistry and Chemistry of Materials*' organized by Indian Association for the Cultivation of Science, Kolkata from 6<sup>th</sup> -10<sup>th</sup> March, 2015.
9. Participated in **One Day Awareness Workshop** on '*National Mission on Education through ICT (NMEICT)*' jointly organized by NIT Durgapur and Ministry of Higher Education, Govt. of W.B. on 3<sup>rd</sup> September, 2016.

10. Participated in **One Day National Seminar** on '*Recent Advances in Life Science in the Light of Chemistry*' organized by Dept. of Chemistry, Bethune College in collaboration with Royal Society of Chemistry held on **9<sup>th</sup> September, 2016**.
11. Participated in the **National-Level Seminar** on 'Recent Development in Chemical Science' organized by Dept. of Chemistry, Barrackpore Rastraguru Surendranath College on **14<sup>th</sup> February, 2017**.
12. Participated in the **Science Academies' Lecture Workshop** on '*Basic Chemistry for Advanced Future*' organized by Dept. of Chemistry, Chakdah College on **19<sup>th</sup> - 20<sup>th</sup> January, 2018**.

**B) Participation in OP/RC:**

1. Participated in UGC sponsored **Orientation Programme** (OP-NBU-31), organized by UGC-HRDC, University of North Bengal from **2<sup>nd</sup> -29<sup>th</sup> August, 2017**.
2. Participated in UGC sponsored **Refresher Course** in "Application of Nano Sciences in modern day research and technology" organized by UGC-HRDC, The University of Burdwan from **25<sup>th</sup> June-8<sup>th</sup> July, 2019**.
3. Participated in UGC sponsored **Refresher Course** in "MOOCs development and delivery" organized by UGC-HRDC, Ranchi University from **10<sup>th</sup> -23<sup>rd</sup> August, 2022**.