## **FACULTY MEMBERS' 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: 7+ 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:**

- "Supramolecular Gels with Mouldable Properties from Fatty Acid to make Graphene-Based Nanohybrid Paper", A. Biswas, *Asian J. Chem.*, 2022, 34, 2331-2336 [ISSN 0970-7077; IF: 0.493].
- 2. "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: 14.511**].
- 3. "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: 4.046**].
- 4. "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: 4.568**].
- 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: 1.414**].
- 6. "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: 16.823].



- "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: 4.046].
- 8. "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: 10.38].
- 9. "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: **4.331**].
- 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 **Treasurer** of "*Initiation*", **Inter-college Chemistry Quiz competition** (Nadia and Murshidabad districts), organized by the Department of Chemistry, Krishnagar Government College on 25<sup>th</sup> **January**, 2018.
  - 2. 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.**
- Participated in UGC sponsored Refresher Course in MOOCs Development and Delivery organized by UGC-Human Resource Development Centre, Ranchi University, Ranchi, Jharkhand from 10<sup>th</sup> August – 23<sup>rd</sup> August 2022.