

Bappaditya Naskar, Ph. D., Post-doc (France)

Assistant Professor (Stage III)

Department of Chemistry

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Professional Experiences

- ❖ **Assistant Professor** - Department of Chemistry, Sundarban Hazi Desarat College, University of Calcutta. Since **March, 2015**
- ❖ **Guest Faculty**- Department of Chemistry, Presidency University, 2017-2018
- ❖ **Post Doctoral Fellow** - Institut de Chimie Séparative de Marcoule, CEA Marcoule, France, from **September, 2013 to December, 2014**. Advisors: Prof. O. Diat and Prof. P. Bauduin

Education

- ❖ **Ph. D. (Science)**: Thesis: **Physicochemical Studies on Polymers and Surfactants in Solution and their Mutual Interaction**. Jadavpur University, Kolkata, India. May, 2013. Advisor: Prof. S. P. Moulik
- ❖ **M. Sc. in Chemistry** with specialization in **Physical Chemistry**, Jadavpur University, August, 2008
- ❖ **B. Sc. in Chemistry** with major and minor in Physics and Mathematics, Jadavpur University, August, 2006.
- ❖ **Higher Secondary** W. B. C. H. S. E., July, 2003
- ❖ **Secondary** W. B. B. S. E., June, 2001

Fellowships and Awards

- Post Doctoral Fellowship - '**ANR Grant**' Funded by Govt. Of France
- Post Doctoral Fellowship – Konan University, Japan (not availed)
- Best oral presentation awards in 20th Ostwald-Colloquium at MPI, Mainz, Germany
- Best oral presentation awards by ACS in Int. Conf. on Adv. Materials & Manufacturing at JIS University, Kolkata, India
- Qualified Joint CSIR - UGC, Govt. of India, December 2007, National Eligibility Test in **CHEMICAL SCIENCES**
- Qualified Graduate Aptitude Test in Engineering, 2008 organized by Indian Institute of Technology, Kanpur, India.
- Junior Research Fellowship from UGC, Govt. of India in 2008-2010
- Senior Research Fellowship from UGC, Govt. of India in 2010-2013

Professional Service

- **Associate Editor**- Journal of Surfactants and Detergents published by Wiley, USA since November, 2025
- **Guest Editor**- Journal of Surfactants and Detergents of Special Issue Commemorating Prof. S. P. Moulik
- Invited Judge for Poster Presentation Evaluation Panel- **Trends in Surface Science and Related Areas** organized by Department of Chemistry, Rani Rashmoni Green University, Singur, Hooghly and Indian Society for Surface Science and Technology, February 25, 2026.
- Organizing Convener - International Seminar cum Workshop on "Molecular Frontiers of Chemistry, Biology and Colloidal Science" supported by ANRF at Sundarban Hazi Desarat College on November 21, 2025.
- Organizing Convener - Special awareness programme on "Food Habit and Cancer: Knowing it Existence is not Enough" (04.03.2024)
- Teachers' Council Secretary –SHD College (August, 2022-July, 2025)
- RUSA Project Monitoring Unit Convener – SHD College (Since October, 2020)
- Sports Sub-committee Convener- SHD College (Since July, 2018)
- Joint NAAC Steering Committee Coordinator- SHD College (2015-16)
- Boys' Hostel Superintendent- SHD College (2017-18)

Outreach

- Life member of Indian Society for Surface Science and Technology (Member ID: L/M-N-20)
- General member of Association Française des Utilisateurs de Rayonnement Synchrotron et XFEL since 2014 (French Association of Synchrotron Radiation Users and XFEL)
- Executive Committee member of Indian Society for Surface Science and Technology from January, 2020 to June, 2025
- Ordinary member of American Chemical Society since June, 2020 (Member ID: 30702236)
- Co-ordinating Editor of J. Surf. Sci. Tech. from February, 2021 to June, 2025
- Reviewer of JACS, Langmuir, JPC, Biomacromolecules, Colloids Surface A, J. Ionic Liquid, J Surf. Det., MDPI published scientific journals.

Teaching

- Atomic structure
- Gaseous/liquid/solid State
- Chemical Kinetics
- Colloid Chemistry
- Chemical Thermodynamics
- Electrochemistry
- Quantum Chemistry, Photochemistry & Spectroscopy

Research Highlights and Interests

- ❖ Multidisciplinary background in **colloids, polyoxometalates (POMs), interfacial chemistry and materials science**.
- ❖ **Extensive knowledge and hands-on experience in** Polymers, Surfactants and Polyoxometalates
- ❖ Knowledge and hands-on experience on **ion-separation by flotation** (foaming)
- ❖ Preparation of vesicles and their application for drug delivery and their antimicrobial effects
- ❖ Synthesis of **coacervates** and their interaction with polymers at the air-water interface
- ❖ **Langmuir monolayer and Thin film preparation** by Langmuir-Blodgett (LB) technique
- ❖ **Nanomaterials and nanocomposite materials:** Synthesis, characterization and applications

Sponsored project

Serial No	Title	Funding agency	Status	Amount (Rs.)
1	A Seasonal Pattern of Hydrographical Parameters of Sundarbans River Systems, West Bengal, India	IQAC, SHD College	Completed (2023-24)	35,000/-
2	Physicochemical Studies on Surfactant-Based Catanionic Coacervates and Their Diverse Applications	ANRF (erstwhile SERB), DST, Govt. of India	Ongoing (2024-27)	42,97,832/-
3	Stimuli-Sensitive Amphiphilic Block Copolymers in Aqueous Solution: Thermodynamics of Self-aggregation, Drug Solubilization, and Release Behavior	UGC-DAE CSR, Govt. of India	Ongoing (2026-28)	14,52,120/-

Ph.D. students

Serial No	Name	Thesis Title	Supervisor/s	Year of Awarding
1	Dipali Roy	Investigation of surface and solution behavior of amphiphiles exploring the scopes towards synthesis of nanoparticles	Jointly with Prof. Tanushree Bala (C.U.)	12/2025
2	Nidali Bondyopadhyaya JRF (Project Fellow)
3	Mili Naskar, JRF		

Past research scholars

1. Debadyuti Mahapatra, JRF (Project Fellow)

Publications in International Peer Reviewed Journals (*corresponding author)

<https://scholar.google.co.in/citations?bappadityanaskar>

ORCID: 0000-0001-9417-296X

36. D. Roy, T. Bala*, **B. Naskar***, Ion-Specific Thermodynamics Govern Dual-Mode Binding of Keggin-type Polyoxometalates to Thermo-Responsive Tetronic Block Copolymers, (Submitted)

35. D. Roy, **B. Naskar***, T. Bala*, Thermodynamics of Phase Separation and Micellization Behaviours of Star Block Copolymer Tetronics in Aqueous Solutions in Presence of Inorganic Salts, **Chemistry-An Asian Journal**, submitted (I.F. 3.3)

34. D. Roy, **B. Naskar***, T. Bala*, A Thermodynamic Approach Towards the Phase Separation Phenomena and Micellization of Tetronic 701 and Tetronic 90R4 in Aqueous Solutions, **J. Mol. Liquids**, 435, **2025**, 128092 (I.F. 5.2)

33. **B. Naskar*** Micellization and Physicochemical Properties of CTAB in Aqueous Solution: Interfacial Properties, Energetics, and Aggregation Number at 290 to 323 K, **Colloids and Interfaces**, 9, **2025**, 4. (I.F. 3.2) [Feature Article]

32. D. Roy, **B. Naskar***, T. Bala*, Catalytically Active Gold Nanoparticles on Star Block Co-polymer Matrix: Synthesis of Nanocomposite Film Exploring Langmuir Blodgett Technique, **Langmuir**, 40, **2024**, 23324-23326. (I.F. 3.9)

31. D. Roy, **B. Naskar***, T. Bala*, Effect of Hofmeister Anions Series on the Langmuir film of Tetronic 90R4 and Tetronic 701 Block Copolymers, **Langmuir**, 40, **2024**, 20927-20937. (I.F. 3.9)

30. A. K. Rakshit, **B. Naskar***, S. P. Moulik, Post Centennial of Micelles: An Overview. **Current Science**, 127, **2024**, 406-422. (I.F. 1.1) [Appeared as front cover article] (I.F. 1.0)

29. D. Roy, B. Roy, **B. Naskar***, T. Bala*, Detailed study on interfacial interaction between different polyoxometalates and tetronic copolymers exploring Langmuir-Blodgett technique, 40, **Langmuir**, 2024, 16030-16047. (I.F. 3.9) [Appeared as front cover article]

28. S. P. Moulik, A. K. Rakshit, **B. Naskar***, Physical Chemical Properties of Surfactants in Solution and their Applications: A Comprehensive Account. **J. Surfactants and Detergents**, 27, **2024**, 895-925. [Invited Article for Special Issue] (I.F. 1.8)

27. S. P. Moulik, A. K. Rakshit, A. Pan*, **B. Naskar***, An Overview of Coacervates: The Special Disperse State of Amphiphilic and Polymeric Materials in Solution. **Colloids and Interfaces**, 6, **2022**, 45. [Invited Article for Special Issue, among top cited and viewer article for 2022-2024 (24 months from publication)] (I.F. 3.2)

26. A. K. Rakshit, **B. Naskar**, S. P. Moulik*, Colloid stability and Schulze – Hardy rule: Its origin and new inputs. **Acc. Chem. Edu. Research** 1, **2022**, 11. [Invited Article for First Issue]

25. A. K. Rakshit, **B. Naskar***, S. P. Moulik, Performance of Modified Schulze-Hardy Rule on the Stability of Nano, Micro, and Macro Colloidal Dispersions: A Comprehensive Account. *Colloids Surfaces A* 626, **2021**, 127084. (I.F. 5.4)
24. D. Roy, **B. Naskar***, T. Bala*, Exploring Langmuir-Blodgett Technique to Investigate Effect of Various Subphase Conditions on Monolayers Formed by Amphiphilic Block Co-polymers Tetronic 701 and Tetronic 90R4. *Colloids Surfaces A* 625, **2021**, 126924. (I.F. 5.4)
23. S. P. Moulik, A. K. Rakshit, **B. Naskar***, Evaluation of Non-Ambiguous Critical Micelle Concentration of Surfactants in Relation to Solution Behaviors of Pure and Mixed Surfactant Systems: A Physicochemical Documentary and Analysis. *J. Surfactants and Detergents* 24, **2021**, 535. [Invited Article for Special Issue, Top Cited Article 2021-22] (I.F. 1.8)
22. A. K. Rakshit, **B. Naskar***, S. P. Moulik, Stability of Hydrophobic Colloids: Perspectives and Current Opinion. *J. Disp. Sci. Tech.* 42, **2021**, 503. (I.F. 1.9)
21. L. Girad*, **B. Naskar**, J. F. Dufreche, J. Lai, O. Diat, P. Bauduin, A Thermodynamic Model of Non-Ionic Surfactants' Micellization in the Presence of Polyoxometalates. *J. Mol. Liquids* 293, **2019**, 111280. (I.F. 5.2)
20. S. P. Moulik, **B. Naskar**, A. K. Rakshit, A Brief Account of the Current Status of Enthalpy Entropy Compensation Phenomenon. *Current Science* 117, **2019**, 1286. (I.F. 1.1)
19. A. K. Rakshit, **B. Naskar**, S. P. Moulik*, Commemorating 75 years of Microemulsion: A Journey Forward, *Current Science* 116, **2019**, 898. [Appeared as front cover article] (I.F. 1.1)
18. T. Bucheker, X. L. Goff, **B. Naskar**, A. Pfitzner, O. Diat, P. Bauduin*, Polyoxometalate/Polyethylene Glycol Interactions in Water: From Nanoassemblies in Water to Crystal Formation by Electrostatic Screening. *Chem. European J.* 23, **2017**, 8434. [Appeared as back cover article] (I.F. 3.7)
17. **B. Naskar**, O. Diat, V. Nardello-Rataj, P. Bauduin*, Nanometer-size Polyoxometalate Anions Adsorb Strongly on Neutral Soft Surfaces. *J. Phys. Chem. C* 119, **2015**, 20985. (I.F. 3.2)
16. **B. Naskar**, S. Ghosh, S.P. Moulik*, Interaction of Normal and Reverse Pluronic (L44 and 10R5) and their Mixtures with Anionic Surfactant Sodium N-Dodecanoyl Sarcosinate. *J. Colloid Interface Sci.* 414, **2014**, 82. (I.F. 9.7)
15. D. Sardar, **B. Naskar**, A. Sanyal, T. Bala*, S. P. Moulik*, Organic-Inorganic Hybrid: A Novel Template for Synthesis of Nanostructured Ag. *RSC Advances* 4, **2014**, 3521. (I.F. 4.6)
14. S. Majumder, **B. Naskar**, S. Ghosh, C.-H. Lee, C.-H. Chang, S. P. Moulik, and A. K. Panda*, Synthesis and Characterization of Surfactant stabilized Nanocolloidal Dispersion of Silver Chloride in Aqueous medium. *Colloids and surfaces A* 443, **2014**, 156. (I.F. 5.2)
13. A. Pan, **B. Naskar**, et al., Micellization and Related Behavior of Sodium Dodecylsulfate in Mixed Binary Solvent Media of Tetrahydrofuran (Tf) and Formamide (Fa) with Water: A Detailed Physicochemical Investigation. *Soft Matter* 10, **2014**, 5682. (I.F. 2.8)
12. S. Das, **B. Naskar**, S. Ghosh*, Influence of Temperature and Organic Solvents (isopropanol and 1,4-dioxane) on the Micellization of Cationic Gemini Surfactant (14-4-14). *Soft Matter* 10, **2014**, 2863. (I.F. 2.8)
11. **B. Naskar**, S. Mandal, S. P. Moulik*, Amphiphilic Activities of Anionic Sodium Cholate (NaC), Zwitterionic 3-[[3-cholamidopropyl]dimethylammonio]-1-propanesulfonate (CHAPS) and their Mixtures: A Comparative Study. *Colloids Surfaces B* 112, **2013**, 155. (I.F. 5.6)
10. **B. Naskar**, A. Dey, S. P. Moulik*, Counter-ion Effect on Micellization of Ionic Surfactants: A Comprehensive Understanding with Two Representatives. Sodium Dodecylsulfate (SDS) and Dodecyltrimethylammonium Bromide (DTAB). *J. Surfactants and Detergents* 16, **2013**, 785. (I.F. 1.8)
9. I. Mukherjee, S. Mukherjee, **B. Naskar**, S. Ghosh, S. P. Moulik*, Interfacial and Bulk Behavior of two Phosphonium Based Ionic Liquids. *J. Colloid Interface Sci.* 395, **2013**, 135. (I.F. 9.7)
8. A. Pan, S. S. Mati, **B. Naskar**, S. C. Bhattacharya, S. P. Moulik*, Self-Aggregation of MEGA-9 (N-nonayl-N-methyl-D-glucamide) in Aqueous Medium: Physicochemistry of Interfacial and Solution Behaviors with Special Reference to Formation Energetics and Micelle Microenvironment. *J. Phys. Chem. B* 117, **2013**, 7578. (I.F. 2.9)
7. **B. Naskar**, A. Dan, S. Ghosh, V. K. Aswal, S. P. Moulik*, Revisiting the Self-aggregation Behavior of Cetyltrimethylammonium Bromide in Aqueous Sodium Salt Solution with Varied Anions. *J. Mol. Liquids* 170, **2012**, 1. (I.F. 5.2)

6. **B. Naskar**, S. Ghosh, S. P. Moulik*, Solution Behavior of Normal and Reverse Triblock Co-polymers (Pluronic L44 and 10R5) individually and in Binary Mixture. *Langmuir* 28, 2012, 7134. (I.F. 3.9)
5. M. Chakraborty, F. -W. Hsiao, **B. Naskar**, C. -H. Chang, A. K. Panda*, Surfactant-Assisted Synthesis and Characterization of Stable Silver Bromide Nanoparticles in Aqueous Media. *Langmuir* 28, 2012, 7282. (I.F. 3.9)
4. A. Pan, **B. Naskar**, et al., Amphiphile Behavior in Mixed Solvent Media I: Self-aggregation and Ion-association of Sodium Dodecylsulfate in 1, 4-Dioxane - Water and Methanol - Water Media. *Langmuir* 28, 2012, 13830. (I.F. 3.9)
3. **B. Naskar**, S. Ghosh, G. Sugihara, S. P. Moulik*, Behavior of the Amphiphile CHAPS Alone and in Combination with the Biopolymer Inulin in Water and Isopropanol - Water Media. *Langmuir* 27, 2011, 9148. (I.F. 3.9)
2. **B. Naskar**, A. Dan, S. Ghosh, S. P. Moulik*, Characteristic Physicochemical Features of the Biopolymer Inulin in Solvent Added and Depleted States. *Carbohydrate Polymers* 81, 2010, 700. (I.F. 12.5)
1. **B. Naskar**, A. Dan, S. Ghosh, S. P. Moulik*, Viscosity and Solubility Behavior of the Polysaccharide Inulin in Water, Water + Dimethyl Sulfoxide, and Water + Isopropanol Media. *J. Chem. Eng. Data* 55, 2010, 2424. (I.F. 2.1)

Editorial Article

1. B. Naskar*, D. Mitra, * D. G. Hayes*, A Builder, Researcher, and Pioneer of Colloidal and Interfacial Chemistry: The Life of Satya Priya Moulik, *J. Surfactants and Detergents* 16, 2026, 785.

Book Chapter

1. Physicochemical and thermodynamic aspects of Langmuir monolayer and Langmuir-Blodgett film, **B. Naskar** and S. P. Moulik, in *Langmuir-Blodgett Films: Fundamentals to Application*, Edited by Prof. S. A. Hussain, **Publisher:** Elsevier, ISBN-100323857868: / ISBN-13: 978-0-323-85786-4 **2025**, Pages 133-168 (Invited Contribution).

Conference Proceedings

2. Self-aggregation of the of the Amphiphile CHAPS and its interaction with the Biopolymer Inulin in Water and Isopropanol-Water Media, **B. Naskar**, S. Ghosh, S.P. Moulik in *Trends in Surface Science and Related areas by Indian Society for Surface Science and Technology*, November 19, 2010.
1. Self-aggregation and Related Properties of Ionic Surfactant in Aquo-organic Solvent Media, A. Pan, **B. Naskar**, S. C. Bhattacharya, S.P. Moulik in *Trends in Surface Science and Related areas by Indian Society for Surface Science and Technology*, November 19, 2010.

Selected Conference/Seminars/ Meeting Contribution

23. **International Conference on Chemical Synthesis and Advanced Materials (ICCSAM-2026)** organized by Department of Chemistry, Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, India & Department of Chemical and Biological Engineering, University of Saskatchewan, Canada, March 6-7, 2026. **Invited Speaker** on *Molecular-Level Interfacial Assembly of Tetronic-Gold Nanocomposite Films for Architecture-Controlled Catalysis*
22. **Trends in Surface Science and Related Areas** organized by Department of Chemistry, Rani Rashmoni Green University, Singur, Hooghly and Indian Society for Surface Science and Technology, February 25, 2026. **Special Lecture** on *Tribute to the Legacy of Prof. Satya Priya Moulik: A Pioneer in Colloidal and Interfacial Science*.
21. **International Conference on Advance Materials and Manufacturing 2.0** organized by JIS University & CSIR, Sout Africa at Kolkata, India on 8-9 January, 2026. **Oral Presentation** on *Surfactant-Mediated Hydrophobic Cargo Transport: From Nanoparticle Phase Transfer to Polyaromatic Hydrocarbon Solubilization*.

20. **International Seminar on Frontiers of Chemistry: Redefining Molecules, Redesigning the Future (FCRMR-2025)** organized by Department of Chemistry, New Alipore College, Kolkata, WB, December 10, 2025. **Oral Presentation** *Benzalkonium chloride self-aggregation and phase-transfer-mediated nanoparticle synthesis.*
19. **International Conference on Emerging Trends in Chemical Sciences Towards Sustainability & Interdisciplinary (ETCSTI-2025)** organized by Bhawanipur Education Society College & Indian Photobiology Society on 10-11 January 2025. **Poster Presentation** on *Synthesis of Catalytically Active Gold Nanocomposite Films: Exploring the Langmuir-Blodgett Technique.*
18. **International Conference on Advance Materials and Manufacturing** organized by JIS University & CSIR, South Africa at Kolkata, India on 18-19 December, 2024. **Oral Presentation** on *Effect of Polyoxometalates on Interfacial Properties of Star Block Co-polymer Exploring Langmuir Blodgett Technique.*
17. **International Conference on Composite Materials for Environmental Protection & Remediation (ICCMEPR-2024)**, Organized by Gram Bharati College and Chemical Research Society of India, Bihar, July 2-3, 2024. **Invited Speaker** on *Study of Langmuir Blodgett Technique in the Synthesis of Catalytically Active Gold Nanoparticles Nanocomposite Film by Star Block Co-polymer Mediated Synthesis.*
16. **International Seminar on Pollution and Biosafety: Issues and Concerns** organized by Department of Chemistry, Raja Rammohun Roy Mahavidyalaya, Hooghly, WB, August 3, 2022. **Oral Presentation** on *Evaluation of Non-ambiguous Critical Micelle Concentration of Surfactants and Applicability of Cloud Point Extraction of Metal Ions from Waste Water.*
15. **International Seminar on Sundarbans: Science to Society** organized by Sundarban Hazi Desarat College, January 26, 2020. **Oral Presentation** on *Ion Flotation: A Cost-Effective Process for Waste Water Treatment.*
14. **International Seminar on Itinerary of Classical to Modern Era of Chemistry** organized by Department of Chemistry, The Bhawanipur Education Society College, Kolkata, November 4, 2019. **Poster Presentation** on *Hybrid Inorganic-Organic Materials Based on Salting in Property.*
13. **International Conference on Emerging Materials** organized by Department of Chemistry and Chemical Technology, Vidyasagar University, April 20-21, 2017. **Poster Presentation** on *Polyoxometalate-Organic Hybrid Assemblies by Adsorption.*
12. **Trends in Surface Science and Related Areas** organized by Indian Society for Surface Science and Technology, and Department of Chemistry, Ramkrishna Mission Vivekananda Centenary College, Rahara, July 28, 2017. **Invited Speaker** on *Interaction of Polyoxometalate with Non-ionic Surfactant/Polymer in Water.*
11. **National Symposium on Recent Advances in Chemistry and Industry 2016** organized by Indian Chemical society, August 2-3, 2016. **Oral Presentation** on *Nanometersize Polyoxometalate (POM) Anions Adsorb Strongly on Neutral Soft Surfaces.*
10. **20th Ostwald-Colloquium "Particles_@_Interfaces"** organized by Max Planck Institute of Mainz, Germany, September 17-19, 2014. **Oral Presentation** on *Physico-chemical and Catalytic Properties of Polyoxometalate Surfactants.*
9. **ANR Meeting at UPMC, Paris, France: Solution Behaviors of Native POMs**, 13th March, 2014 (Oral presentation)
8. **Trends in Surface Science and Related Areas** organized by Indian Society for Surface Science and Technology, and Department of Pharmaceutical Science, Jadavpur University, 3rd May, 2013. **Invited Speaker** on *Interaction of Anionic Surfactant with Block Co-polymer.*
7. **Fifteen National Conference on Surfactants, Emulsions and Biocolloids-2011**; organized by Indian Society for Surface Science and Technology and Tripura University, December 27-29, 2011. **Oral Presentation** on *Temperature Dependent Physicochemical Properties of Triblock Co-polymer Pluronic in Aqueous Solution.*
6. **Trends in Surface Science and Related Areas** organized by Indian Society for Surface Science and Jadavpur University, November 08, 2011. **Invited Speaker** on *Counter-ion Effect on Micellization of Ionic Surfactants: A*

Comprehensive Understanding with Two Representatives, Sodium Dodecyl Sulfate (SDS) and Dodecyltrimethylammonium Bromide (DTAB).

5. **National Conference on Trends in Surface Science and Related Areas** organized by Indian Society for Surface Science and Technology and Centre for Surface Science, Jadavpur University, November 19, 2010. **Poster Presentation** *Self-aggregation of the Amphiphile CHAPS and its interaction with the Biopolymer Inulin in Water and Isopropanol-Water.*

4. **National Seminar on Membranes, Microemulsions and Self-Assembled Systems (MMSAS-2010)**; Organized by Sikkim Manipal Institute of Technology, Sikkim, September 28-30, 2010. **Oral presentation** on *Solution Behavior of Zwitterionic Biosurfactant and its Interaction with Biopolymer.*

3. **National Conference on new Arena in Photosciences** organized by Department of Chemistry and Indian Photobiology Society, Jadavpur University, August 28, 2010. **Oral Presentation** on *Micellar Aggregation Number Determination by Fluorescence.*

2. **14th National Conference on Surfactants, Emulsions and Biocolloids (NATCOSEB-XIV)**; Indian Society for Surface Science and Technology -and University of Kashmir, July 28-30, 2009. **Poster Presentation** on *Salt Effect on the Self-aggregation of Cetyltrimethylammonium Bromide (CTAB): A Physicochemical Assessment of the Process Parameters and their Correlation in the Light of Hofmeister (or Lyotropic) Series.*

1. **National Conference on Frontiers of Colloids, Surface and Nanostructured Systems**; Organized by Manipur University, North East Chapter, ISSST, February 28-30, 2009. **Oral presentation** on *Physicochemical Studies of Inulin: Assessment of its Solution Properties in Aqueous Organic Media and Salt Environment.*

Technical Skills

- **Scattering:** Small Angle X-ray and Neutron (SAXS and SANS), Light scattering
- **Microscope:** TEM, AFM and SEM
- **Thermal properties:** Isothermal Titration Calorimetry & Differential Scanning calorimetry
- **Interfacial properties:** Tensiometry and Langmuir Film Balance (LB)
- **Bulk properties:** Conductometry, Densimetry, Viscometry, Vapor Pressure Osmometry, etc.
- **Spectroscopy:** Micro Raman, Spectrophotometry, Fluorimetry, X-ray Fluorimetry and IR
- **Flotation:** Separation technique by foaming

Computer skills

- **Software:** Excel, Origin, Msoffice, Adobe, Fit2D, Sas View, Chemdraw, WinLB, Motic Images Advanced, DTS Nano, etc.
- **Web resources:** Sci Finder, SCOPUS, Web science, Google scholar, etc.

Orientation/ Refreshers Course/ Work Shop Attended

- ❖ **Refresher Course:** UGC- Sponsored Refresher Course participated in the Inter-disciplinary Refresher Course on Chemical Sciences and Technology at Department of Chemistry, University of Calcutta, September 8-21, 2025.
- ❖ **Short term training programme** on “Chemical Science: Molecules to Materials” organized by Ashutosh Mukhopadhyay School of Educational Sciences, Assam University, Silchar under the aegis of UGC-MMTTC, Assam University, Silchar, from 9-14 September, 2024.
- ❖ **Workshop on AI for Everyone** at Department of Chemistry, The Bhawanipur Education Society College, Kolkata, April 2025, 2024.
- ❖ **NEP 2020 ORIENTATION & SENSITIZATION PROGRAMME** under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by Malaviya Mission Teacher Training Centre (MMTTC), Jadavpur University from 04-14 February, 2025.

- ❖ **Faculty Development Programme** “on Emerging Areas in Biological and Chemical Sciences” Department of Biosciences & Department of Chemistry, JIS University, Kolkata, September 31- October 04, 21.
 - ❖ **Refresher Course:** UGC- Sponsored Refresher Course participated in the Inter-disciplinary Refresher Course on Recent Trends in Chemical Sciences at Department of Chemistry, University of Calcutta, March 16-31, 2021.
 - ❖ **Workshop on** “e-Workshop on Online Teaching, Learning and Evaluation” organized by New Alipore College and K. K. Das College, July 18-19, 2020.
 - ❖ **5 days FDP on Recent Advances in** “Materials Science” organized by Amity University, Kolkata, July 8-12, 2020.
 - ❖ **Workshop on** “Maths and Computation for UG Chemistry” organized by Bankim Sardar College, February 12-13, 2020.
 - ❖ **Workshop on MOOCs, e-content Development and Open Educational resources-**UGC sponsored– at Centre for Microprocessor Applications for Training, Education and Research, Jadavpur University from 11.02.20-17.02.20.
 - ❖ **Refresher Course:** UGC- Sponsored Refresher Course participated in the Inter-disciplinary Refresher Course on Modern Methods in Earth System Science from 18th September, 2018 to 11th October, 2018 at HRDC - Jadavpur University.
 - ❖ **Orientation Programme:** UGC- Sponsored Orientation Programme participated at HRDC-University of Calcutta from 30th January, 2018 to 26th February, 2018.
 - ❖ **Workshop on Electron Microscopes:** Instrumentation and Their Applications in Material Science & Biological Science, November 23-25, 2009.
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