

FACULTY MEMBERS' ACADEMIC PROFILE

- 1. Name of the Faculty member:** SURAJIT SAHA
- 2. Designation:** ASSISTANT PROFESSOR (W.B.E.S)
- 3. Qualification:** M.Sc (Chemistry), CSIR NET qualified
- 4. Specialization:** Physical Chemistry (Computational Chemistry)
- 5. E-mail address:** surajitsaha.to.91@gmail.com
- 6. Date of Joining in W.B.E.S.:** 10th December 2019 (10/12/2019)
- 7. Date of Joining in this College:** 18th May 2026 (18/05/2026)
- 8. Previous Colleges Served :** Darjeeling Government College
- 9. Total Teaching experience at the college level:** 6 years 6 months
- 10. Research interests:** Computational chemistry - CO₂ activation, Photodynamics of solar cell(Dye sensitized solar cell , perovskite solar cell), Quantum Dynamics ,Nanoscale Systems, Organic-inorganic nanohybrid material ,bio nanocomposite, transport properties of molecules and materials – DFT study
- 11. Title of thesis (Ph.D.) with year:** Ph.D pursuing from CBPBU
- 12. Research guidance:** NA
- 13. Research Projects (Completed and ongoing):** NA
- 14. List of publications:**
 - A) Published papers in Journals:**
 - i) Extraction, isolation and characterization of bioactive compounds derived from *Sanchezia oblonga* plant extract , Tanmoy Mazumdar, Mainak Banerjee, Tanmoy Dutta, **Surajit Saha**, Swapan Kumar Chowdhury* Int. J. of Pharm. Sci., **2025**, Vol 3, Issue 9, 608-624 ISSN: 0975-4725; CODEN(USA): IJPS00
 - ii) Delivery of Mavacamten and Olutasidenib Drugs by β -Cyclodextrin through Supramolecular Host-Guest Inclusion Complex Formation: A Theoretical Study
Somanika Basu, Sibasish Deb, Debadrita Roy, Delwar Ansary, Prosenjit Choudhury, **Surajit Saha**, Gulbuddin Hekmotiar, Niranjan Kumar Mridha, Subhankar Choudhury*, Mahendra Nath Roy Int. J. of Pharm. Sci., **2025**, Vol 3, Issue 11, 3798-3810, ISSN: 0975-4725; CODEN(USA): IJPS00
 - iii) Electronic and transport properties of a sulfur chain encapsulated carbon nanotube
Sourav Mazumdar, Nabajyoti Baildya, **Surajit Saha** ,Narendra Nath Ghosh, Soma Mitra, Subrata Sarkar* Journal of Computational Electronics ,**2026**, Vol 25, article no.15
(Springer Nature , Published in Nov 2025)



- iv) Theoretical study of PTB7-Pb-chalcogenides nanohybrid and tuning via surface capping for high efficiency solar cell application: an insight from first principle Sandip Ghosh, **Surajit Saha***, Narendra Nath Ghosh, Ranajit Saha, Dilip Debnath* Theoretical Chemistry Accounts, **2026**.145,29 (Springer Nature)
- v) Fabrication of Smart Organic Green Light Photodetector Using Highly Symmetric Novel PDI-Based Organic Nanomaterials , Soumyadeep Mitra*, Sudipta Ray, **Surajit Saha**, Arnab Mukherjee, Dilip K.Maiti* ChemNanoMat, **2026**, Vol12, Issue 4, (Wiley)
- vi) Theoretical study of CO₂ activation on transition metal decorated TiS₂ monolayer **Surajit Saha**, Sandip Ghosh, Narendra Nath Ghosh, Dilip Debnath , 2026 (communicated)
- vii) Molecular engineering of xanthenes dyes and grapheme oxide-TiO₂ nanocomposite for high-performance dye-sensitized solar cell applications Prosenjit Choudhury, **Surajit Saha**, Narendra Nath Ghosh, 2026 (communicated)
- viii) An extensive study on antimicrobial peptides as antiviral therapeutic agents Manab Mandal, Palas Mandal, **Surajit Saha**, Prosenjit Choudhury, Nabajyoti Baildya, Swapan Kumar Chowdhury, Narendra Nath Ghosh, 2026, (communicated)
- vii) Preparation of 2D-Halide Perovskite for Optoelectronic Applications Prosenjit Choudhury, Ekramul Kabir, Sudipta Chowdhury, Subhankar Choudhury, Poulami Jana, Nabajyoti Baildya, **Surajit Saha**, Biswajit Sinha and Narendra Nath Ghosh; CRC Press, Taylor and Francis, 2025, (Book Chapter)
- viii) Charge Separation and Recombination in Dye-Sensitized Solar Cells Prosenjit Choudhury, Ekramul Kabir, Sudipta Chowdhury, Subhankar Choudhury, Poulami Jana, Nabajyoti Baildya, **Surajit Saha**, Biswajit Sinha , Narendra Nath Ghosh* Wiley 2026 (Book Chapter)
- ix) Catalytic Degradation of Organic Pollutants Using Functionalized Magnetic Nanomaterials (FMNs) Ekramul Kabir, Sourav Mazumdar, Prosenjit Choudhury, Poulami Jana, Nabajyoti Baildya, **Surajit Saha**, and Narendra Nath Ghosh Springer 2025

B) Conference Proceedings:

15. **Membership of Learned Societies/ Editorial Boards, etc.:** NA
16. **Patents:** NA
17. **Awards:** NA
18. **Other notable activities:**
19. **Participation in**

A) Seminars/Symposia/Conferences/Workshops (poster/oral presented):

- i) Theoretical study of CO₂ activation to value added fuel on transition metal doped

Mg₁₂O₁₂ hollow clusters, Surajit Saha, Narendra Nath Ghosh, Dilip Kumar Debnath*, Emerging trends in science and sustainability on 11th February 2025, Sripat Singh College, Jiaganj, Murshidabad, West Bengal, India (Offline poster presented)

ii) “Supramolecular host-guest interaction of β-Cyclodextrin with drug molecules in formation of inclusion complexes – A theoretical approach” Surajit Saha, International Seminar on Recent Advancement in Chemistry and Biology (ISRACB-2025) scheduled to be held on 14th August 2025 at Darjeeling Govt. College, Darjeeling, West Bengal, India (Offline oral presentation)

iii) “Carbon dioxide activation and reduction on transition metal nanoclusters- A theoretical study” Surajit Saha, Dilip Kumar Debnath, International Conference- Frontiers in Science: An Integrative Approach in Solving Global Challenges, 2025, 10th -11th September 2025 at Krishnagar Government College in association with IQAC Krishnagar Government College (Offline poster presented) **Best Poster award Chemistry**

iv) “Enhancement of carbon dioxide sensing ability , activation and reduction on doped magnesium oxide nanocages- A theoretical investigation” Surajit Saha, Dilip Kumar Debnath, International Conference on Green Technologies, Environment and Drug discovery, 3rd-5th September 2025 at Akal University, Talwandi Sabo, Bathinda, Punjab (Online oral presentation) **Best oral presentation award(3rd prize from De Gruyter publisher)**

B) Seminars/Symposia/Conferences/Workshops (attended):

1. ‘Advances in optical microscopy and its biomedical applications’ organized by the Department of Chemistry, School of Basic and Applied Sciences, Adamas University on 26th February 2022.
2. Two day online national workshop entitled “Outcome based education on 14-15 July 2021 organised by IQAC ABN Seal College Coach Behar, WB
3. “Fight against Covid 19” one day national webinar organized by Dept of Chemistry, Botany and Zoology , S.B.S Govt College Hili on 19th October 2020
4. “National webinar on concepts, innovations and methods when chemistry meets biology” one day national webinar organized by Kharagpur College and NASI India on 17th July 2020
5. Perovskite Nanocrystals:Photoluminescence and Charge Carrier Dynamics’, one day webinar organized by the Dept. of Chemistry, School of Basic and Applied Sciences, Adamas University, on 4th July 2020

B) Faculty Induction programme/Orientation Programme, Refresher Course:

Sl No	Programme	Duration	Organised by
1	Faculty Induction Programme (9 th FIP)	30 th May 2022 to 28 th June 2022	UGC-HRDC North Eastern Hill University, Shillong, Meghalaya
2	Refresher Course (Chemistry – new frontiers of chemical science)	23 rd August 2023 to 5 th September 2023	UGC-HRDC University of North Bengal, WB