Dr. Sachinath Bera

1. Personal Details:

Name: Sachinath Bera
Qualification: M.Sc., Ph. D.
Designation: Assistant Professor
Department: Chemistry
Email id: sachinathbera@gmail.com
Teaching Experience [substantive post only]: 3 years

2. Previous work places: N.A.

3. Academic Credentials:

- B. Sc. in Chemistry (Honours) – 2006-2009, CU
- M. Sc. in Chemistry (Inorganic special) – 2009-2011, CU
- Ph.D. on topic "Stabilization Of Organic Radicals In Complexes And Metal Promoted Oxidative Dehydrogenation" - 2012-2017, CU
- CSIR-NET on Chemical Science June, 2011 (Rank 08)
- GATE - 2011 (Rank 46)
- SERB - National Post Doctoral Fellow (NPDF) 2017-2019

4. Courses Taught:

- Honours Courses: C2, C3, C6, C9, C11, C13, DSE1, DSE2, SEC1, GE1, GE2
- General Courses: DSC1A, DSC1D, SEC1, SEC2

5. Administrative Experience (if any): N.A.

6. Specialization and Research Interests:

- Inorganic Chemistry
- Coordination chemistry and redox activity of organic radicals

7. Publications: (Research article, General article, Books, Books chapter etc.)

9. Oxo transfer reaction: Dioxido and monooxidovanadium(V) complexes. Madhusudan Shit, Souvik Mukherjee, Suvendu Maity, Sachinath Bera, Prasanta Ghosh, Journal of the Indian Chemical Society, 2022, 99, 100518-100523. DOI: 10.1016/j.jics.2022.100518. https://www.sciencedirect.com/science/article/abs/pii/S0019452222001807

8. Disclosing Cyclic(Alkyl)(Amino)Carbenes as One-Electron Reductants: Synthesis of Acyclic(Amino)(Aryl)Carbene-Based Kekulé Diradicaloids. Dr. Avijit Maiti,Benedict J. Elvers,Dr. Sachinath Bera, Felix Lindl, Dr. Ivo Krummenacher, Prof. Prasanta Ghosh, Prof. Dr. Holger Braunschweig, Prof. Cem B. Yildiz, Prof. Dr. Carola Schulzke, Dr. Anukul Jana. Chemistry–A European Journal, 2022, 28, e202104567. DOI: 10.1002/chem.202104567.
https://chemistry-europe.onlinelibrary.wiley.com/doi/10.1002/chem.202104567

7. Nickel(II) di-aqua complex containing a water cluster: synthesis, X-ray structure and catecholase activity. Madhusudan Shit, Suvendu Maity, Sachinath Bera, Prafullya Kumar Mudi, Bhaskar Biswas, Thomas Weyhermüller and Prasanta Ghosh. New J. Chem., 2021,45, 2221-2227. DOI: 10.1039/D0NJ05238H
https://pubs.rsc.org/en/content/articlelanding/2021/NJ/D0NJ05238H

6. A Crystallographic Elucidation of Stimuli Controlled Molecular Rotation for Reversible Sol-Gel Transformation. Mehebub Ali Khan, Soumen Ghosh, Sachinath Bera, Anamika Hoque, Ismail Sk, Shagufi Naz Ansari, Shaikh M. Mobin, Md. Akhtarul Alam. *JOC*, 2020, 85, 4019-4025; DOI:10.1021/acs.joc.9b02944
https://pubs.acs.org/doi/10.1021/acs.joc.9b02944

5. Simultaneous formation of non-oxidovanadium(IV) and oxidovanadium(V) complexes incorporating phenol-based hydrazone ligands in aerobic condition. Nirmalendu Biswas, Sachinath Bera, Nayim Sepay, Amrita Pal, Tanmoy Halder, Sudipta Ray, Swarnali Acharyya, Anup Kumar Biswas, Michael G. B. Drew, Tapas Ghosh. *New J. Chem.*, 2020, 44, 3700-3716; DOI:10.1039/C9NJ06114B.
https://pubs.acs.org/doi/10.1021/acs.joc.9b02944

4. Synthesis, characterization, cytotoxic and antimicrobial activities of mixed-ligand hydrazone complexes of variable valence VO^{z+} (z = 2, 3). Nirmalendu Biswas, Sachinath Bera, Nayim Sepay, Titas Kumar Mukhopadhyay, Krishnendu Acharya, Sandipta Ghosh, Swarnali Acharyya, Anup Kumar Biswas, Michael G. B. Drew, Tapas Ghosh. *New J. Chem.*, 2019, 43, 16714-16729; DOI: 10.1039/C9NJ04171K
https://pubs.rsc.org/en/content/articlelanding/2019/nj/c9nj04171k

3. Synthesis and comparative studies of photophysical and electrochemical properties of three different types of new heteroleptic 5-arylazo-8-hydroxyquinoline complexes of rhodium including trans → cis isomerism studies. Amit Maity, Sachinath Bera, Kajal Krishna Rajak. *Journal of Organometallic Chemistry*, 2019, 887, 48-63;
DOI: 10.1016/j.jorganchem.2019.02.012
https://www.sciencedirect.com/science/article/abs/pii/S0022328X19300543

2. Redox Cascades and Making of a C-C Bond: 1,2-Benzodiazinyl Radicals and a Copper Complex of a Benzodiazine. Sandip Mondal, Sachinath Bera, Prasanta Ghosh. *JOC*, 2019, 84, 1871-1881; DOI: 10.1021/acs.joc.8b02858
https://pubs.acs.org/doi/10.1021/acs.joc.8b02858

1. Ortho metalated N-(Benzophenoxazine)-*o*-aminophenol: Phenolato versus Phenoxyl States. Sandip Mondal, Sachinath Bera, Suvendu Maity, Prasanta Ghosh. *ACS Omega*, 2018, 3, 13323-13334; DOI:10.1021/acsomega.8b01983
https://pubs.acs.org/doi/full/10.1021/acsomega.8b01983

8. Patents (if any): Nil

9. Research Project (if any): Nil

10. Research Supervision (Ph.D./M.Phil.) Nil

11. Seminar/Workshop participated:

1. International Seminar on 'Recent Advances in Chemistry and Material Science (RACMS-2021)', 2-3 August, 2021, Organized by Indian Chemical Society, Kolkata.
2. Workshop on 'Mastering the Art of Writing Textbooks: Traditional to Digital', 23.07.2021, organized by Exceller Open, Kolkata-56.
3. Two-day online national workshop on 'Outcome–Based Education (OBE)', 14-15 July, 2021, Organized by Acharya Brojendra Nath Seal College, Cooch Behar, WB-736 101.
4. Online Workshop on 'Career Advancement Scheme (CAS)', 28.06.2021, Gokhale Memorial Girls' College, Kolkata 700 020.
5. Interactive Programme on 'Covid – 19 awareness: Stay Connected' 29.05.2021 organized by Shahid Matangini Hazra Govt General Degree College for Women, Purba Medinipur.
6. One day International Webinar on "Chemistry: The Challenges and Opportunities" 13th October, 2020, organized by Shahid Matangini Hazra Govt. College for Women, Purba Medinipur.

12. Programmes Conducted/Organised as Convenor/Organising Secretary: Nil

13. Achievements/Awards/Membership: Nil

14. Any Other Relevant Information: Nil