

**Mr. Amit Biswas**

**Senior Research Fellow**

**Supervisor- Prof. Swadhin Kumar Mandal**

**Research Interest- *Electron Transfer Catalysis***

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***A brief overview about myself:***

I joined Prof. Mandal's lab in July 2019, after cracking CSIR NET-2017 (Dec), CSIR-NET-2018 (June), CSIR NET-2018 (Dec), CSIR-NET-2019 (June). I completed B.Sc with honors in Chemistry from Rahara Ramakrishna Mission Vivekananda Centenary College, Kolkata, and M.Sc from the University of Hyderabad. I am working on developing the concept of metal-free catalysts with phenylenyl-based molecules and organic dyes. Precisely we have developed catalytic mechanochemical solid-state cross-coupling reactions without solvents and transition metals under radical-mediated pathways and also developed a two-electron reduction with three-photon absorption photocatalyst for the activation of various strong bonds under metal-free conditions. I have expertise in organic, inorganic, and physical organic chemistry. I am well experienced in performing various spectroscopy techniques and catalytic reactions under inert conditions (inside the glovebox and using Schlenk lines). I actively participated in organizing several international conferences, such as the 30th International Conference on ICOMC- 2024, the CRSI 27th National Symposium organized by IISER Kolkata (26th-29th September 2021), the International Conference in Organometallics and Catalysis (ICOC-2023) in Goa and the BRICS international symposium between India, China, and Russia in January 2020 in India during my PhD tenure. Currently, I am going to submit my thesis by March 2025.

***List of publications:***

- A. Biswas, S. Kolb, S. H. Röttger, A. Das, L. J. Patalag, P. P. Dey, S. Sil, S. Maji, S. Chakrabarty, O. S. Wenger, A. Bhunia, D. B. Werz, S. K. Mandal. *Angew. Chem. Int. Ed.*, **2025**, e202416472. (Hot Paper).
- A. Biswas, A. Bhunia, S. K. Mandal. *Chemical Science.*, **2023**, *14*, 2606-2615. (Most popular 2023 catalysis articles by Chemical Science.)
- S. Maji, B. Gope, M. Sharma, A. Das, A. Jose, A. Biswas, K. Bhattacharyya, S. K. Mandal. *Angew. Chem. Int. Ed.*, **2024**, e202418673.
- A. Paik, C. Das, S. Paul, A. Biswas, S. Mehta, A. Mondal, B. Maity, A. Dutta, S. Rana. *ACS Catal.*, **2024**, *14*, 15498–15513.
- S. Chakraborty, A. Biswas, S. K. Mandal. *ChemCatChem*, **2023**, *15*, e202300462. (Special invited Article).
- B. Singh, J. Ahmed, A. Biswas, R. Paira, S. K Mandal. *J. Org. Chem.*, **2021**, *86*, 7242–7255.

- S. Paul, S. Sutradhar, A. Paik, A. Biswas, S. Das, R. Maity, S. P. Midya, B. Maity, S. Rana, *Inorg. Chem.*, **2025**, just accepted.