

Meet Dr. Biswajit Mondal, Thieme Chemistry Journals Awardee 2025!



Dr. Biswajit Mondal joined the Indian Institute of Technology Gandhinagar (India), Department of Chemistry in 2021. He received his M.Sc. from the Indian Institute of Technology Kharagpur in 2011, and his Ph.D. from the Indian Association for the Cultivation of Science in 2017. He then moved to the University of Wisconsin, Madison (USA), for postdoctoral studies (2017–2020) and held a second postdoctoral position at Ben-Gurion University of the Negev, Israel (2020–2021).

Thieme: Which field of organic chemistry are you interested in the most and why?

Dr. Mondal: I am mostly fascinated by the recent advances in electro-organic synthesis. This offers a sustainable and modular approach to carrying out crucial and selective redox reactions in organic molecules without generating stoichiometric waste from the commonly used redox reagents.

Thieme: Following that, what is the focus of your current research activity?

Dr. Mondal: The current focus of our group's research is the electro-oxidative upgradation of biomass and waste plastic to small aromatics and useful chemicals.

Thieme: What do you think about the modern role and prospects of organic chemistry?

Dr. Mondal: Organic chemistry plays a crucial role in various industries, including pharmaceuticals, agriculture, and materials science. The modern advancement of organic chemistry is beneficial in addressing environmental challenges and promoting sustainability. With the integration of computational tools and artificial intelligence, the field is poised for even greater breakthroughs.

Thieme: Which difficulties are there for young upcoming chemists in your field? Do you have any tips?

Dr. Mondal: Securing funding for research can be a significant hurdle. Young chemists may find it challenging to obtain grants or financial support, which is essential for conducting experiments and advancing their work. (Tip: one should look for industrial funding and support from local government schemes.)

Networking is also a critical component that can be difficult for newcomers. Building connections with established professionals in the field can open doors to collaboration opportunities and career advancement. (Tip: attend conferences and seminars; present posters, if not selected for oral talks.)

Thieme: What is your most important scientific achievement to date and why?

Dr. Mondal: An important milestone was reached by our group when we successfully showed the electro-oxidative upgrading of mixed waste plastic to value-added chemicals. India faces a problem with waste-plastic management, and the research findings support the Swachh Bharat Mission.

Thieme: Could you tell us something about yourself outside the lab, such as your hobbies or extra-work interests?

Dr. Mondal: Outside of the lab, I can be found conducting experiments in the kitchen, exploring the great outdoors, and enjoying time with friends.
