

## Meet Dr. Milan Bera, Thieme Chemistry Journals Awardee 2026!



**Dr. Milan Bera** received his PhD from IIT Kharagpur (India) in 2011. After postdoctoral studies at Kyushu University (Japan) and IIT Mumbai (India) and industrial research at Sun Pharma (India), he joined Chung-Ang University (South Korea) as a research professor. In 2023, he returned to India and is now a Ramanujan Faculty Fellow at Amity University, Noida, Uttar Pradesh.

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

**Dr. Bera:** Photocatalysis and selective  $\pi$ -bond functionalization of small molecules. Photocatalysis has revived radical and photochemical synthesis, enabling new reaction development. It helps solve challenges in medicinal chemistry and natural product synthesis, with broad applications in organic chemistry, catalysis, biomedicine, pollution control, and water purification. Selective  $\pi$ -bond functionalization using cost-effective transition-metal catalysts offers a sustainable solution to many challenges and enables the synthesis of a wide range of complex molecular structures.

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

**Dr. Bera:** Our group, the photocatalysis and synthetic methodology lab (PSML group), focuses on photocatalysis, including photoredox and energy-transfer catalysis. In parallel, we investigate nickel-catalyzed selective allene  $\pi$ -functionalization to sustainably synthesize novel and complex molecular structures.

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

**Dr. Bera:** The modern role of organic chemistry lies in constructing complex molecules with high efficiency and precision. It plays a key part in the development of pharmaceuticals, agrochemicals, and advanced functional materials, while its future is shaped by green chemistry, renewable feedstocks, and AI-assisted synthesis.

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

**Dr. Bera:** Addressing specific synthetic challenges in a sustainable way should be a primary goal for researchers. Thinking creatively and beyond conventional approaches can lead to effective and novel solutions. Scientists should stay focused, be patient, and rely on smart work to achieve meaningful innovations.

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

**Dr. Bera:** Our group has developed a method that exploits the enhanced reactivity of simple hexafluoroisopropanol for H-bonding-mediated selective C–H functionalization of heteroarenes, enabling sustainable and atom-economical synthesis of diverse organic molecular architectures (*Org. Lett.* **2025**, 27, 2053–2059; *Green Chem.* **2025**, 27, 8972–8979). While expensive transition-metal catalysts are typically used for C–H functionalization of arenes and heteroarenes, our work demonstrates that a simple organic molecule can be more effective for such transformations.

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

**Dr. Bera:** I enjoy reading scientific literature, watching cricket, and spending quality time with family and friends.

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