

Meet Dr. Torben Rogge, Thieme Chemistry Journals Awardee 2026!



Dr. Torben Rogge carried out his PhD studies at the University of Göttingen (Germany), then continued there as a postdoctoral researcher from 2019 through 2021. He then moved to the University of California, Los Angeles (USA) as a Feodor-Lynen postdoctoral fellow of the Alexander von Humboldt foundation. Since 2023, he is an independent Habilitand/junior group leader at the Technical University Berlin (Germany).

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

Dr. Rogge: I am most interested in synthetic organic chemistry, in particular photocatalysis. Photocatalysis can facilitate a whole range of transformations in a mild and efficient fashion that are very challenging under thermal reaction conditions and can thereby contribute to a “greener” synthetic chemistry. Furthermore, photocatalysis can also enable completely new mechanistic pathways and exciting new transformations. To date, there is still a lot to explore in this research area.

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

Dr. Rogge: In my research group, we are focused on developing new synthetic approaches using user-friendly visible-light photocatalysis. One of our currently ongoing research projects involves the combination of photocatalysis with earth-abundant transition metal catalysis for the introduction of fluorinated functional groups. Although these functional groups are highly relevant for pharmaceuticals and in medicinal chemistry, their installation often requires harsh reaction conditions or precious metal catalysts. We are now investigating photochemical methods as a more sustainable alternative synthetic approach for these transformations.

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

Dr. Rogge: In my opinion, organic chemistry will continue to play a major role in the coming years and will directly or indirectly impact various aspects of our daily life. In light of a variety of current and increasing challenges, such as a limited supply of non-renewable resources, organic chemistry can significantly contribute to solving these issues, e.g. through the development of novel, sustainable synthetic strategies as well as alternatives to problematic substances and materials, for example PFAS.

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

Dr. Rogge: Since I started my independent research group only three years ago, I cannot give a definitive answer. However, I think that it is very important for upcoming younger chemists to identify a research area that they are passionate and curious about and in which they can make substantial contributions. A small, general tip I can give, especially to upcoming independent researchers, is that an efficient use of the typically limited resources (including time!) is key and that focusing on the most interesting research questions can be very helpful.

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

Dr. Rogge: It is very hard for me to select one single contribution. Therefore, I would like to mention two – one from my PhD and one from my postdoc. The first would be my first paper as first author with Lutz Ackermann. Lutz was a great PhD supervisor and taught me a lot about conceptualizing research projects and exploring a research question in detail using various techniques and methods. Even after I left the group, Lutz continued to be available for very helpful tips and discussions. The second contribution I would like to mention is an investigation I performed during my postdoc with Ken Houk. In close collaboration with the group of Prof. Dr. Frances Arnold, we gained detailed insights into the mechanism and selectivity of non-natural *cis*-selective cyclopropanations catalyzed under iron heme enzyme catalysis by using a combination of different computational approaches. Ken was an outstanding mentor for me and gave me a lot of freedom in how to approach a scientific problem, while always being there to provide guidance, if necessary, and critically asking “What can we learn from these results?”.

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

Dr. Rogge: Outside of the lab, I engage in different sport activities, such as running and lifting weights. In particular, after a whole day sitting in the office, it helps me a lot to clear my head and think of new approaches to solve problems. Aside from this, I enjoy reading sci-fi literature. It always amazes me what creative ideas and scenarios some writers come up with.
