

Meet Dr. Kjell Jorner, Thieme Chemistry Journals Awardee 2026!



Dr. Kjell Jorner is an assistant professor at ETH Zurich (Switzerland) since 2023. Before joining ETH Zurich, he was a postdoctoral researcher at the University of Toronto (Canada) and Chalmers University of Technology (Sweden), and at AstraZeneca UK. Kjell obtained his PhD from Uppsala University (Sweden) in 2018.

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

Dr. Jorner: I'm trained as a physical organic chemist and like to understand organic reactivity and properties in terms of physical equations and principles. In line with that, we want to use machine learning not only to predict, but also to understand. In terms of applications, we are highly interested in reactivity and catalysis and occasionally organic electronic materials.

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

Dr. Jorner: The mission of our group is to accelerate discovery using digital tools. We want to work with experimental groups to translate advances in AI and machine learning into experimental reality. We focus on making synthesis more efficient through reaction outcome prediction and optimization, and we use AI to design new catalysts and functional molecules.

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

Dr. Jorner: As many functional molecules of interest and most of the building blocks of life are organic, there is no doubt that organic chemistry will continue to play an important role. Together with advances in automation and digitalization, the potential is even greater to accelerate the development of new materials and medicines. But organic chemistry must remain a discipline that renews itself to stay relevant in a changing world.

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

Dr. Jorner: The rate of development in AI for science is simply staggering, and it is difficult to keep up with the latest tools and papers. It is important to have a broad network, an interdisciplinary mindset and be ready to embrace change. Learn from your students.

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

Dr. Jorner: In a recent collaboration with Prof. Frank Glorius, we suggested a candidate photocatalyst using generative AI that was then actually synthesized and tested in the lab with excellent catalytic performance. It is important that the predictions don't just remain in the computer. On the research software side, we have developed the Morfeus code that is used by many experimental groups as well as companies to calculate stereoelectronic descriptors for machine learning and visualization in organic chemistry.

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

Dr. Jorner: I like to do go running or biking in the Swiss countryside. I'm also a keen brewer of both coffee and beer and a fan of classical music and Wagner operas.
