

Meet Prof. Chao Shu, Thieme Chemistry Journals Awardee 2024!



Prof. Chao Shu obtained his PhD at the Central China Normal University (P.R. China) in 2017 and carried out postdoctoral studies at the University of Bristol (UK) prior to beginning his independent career at the Central China Normal University (P.R. China) in 2021 as a Full Professor.

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

Prof. Shu: The development of new methods and strategies for organic chemical synthesis, incorporating transition-metal, photoredox, and metallaphotoredox catalysis, is essential. As modern drug discovery demands greater complexity and productivity, medicinal chemistry has shifted towards more sophisticated approaches in drug design and synthesis. Hence, the innovation of strategies is vital in addressing the evolving needs of the industry and ensuring success in drug discovery.

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

Prof. Shu: The primary focus of my research group's work lies in the advancement of innovative chemical transformations. We are dedicated to exploring new reactions and reagents that enable us to create chemical bonds in unique ways, with a particular emphasis on their application in the total synthesis of natural products and pharmaceuticals.

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

Prof. Shu: I believe that organic chemistry will continue to play a crucial and increasingly important role in the pharmaceutical and biotechnology industries, as well as in maintaining ecological balance and protecting the environment in human society. One big challenge in organic synthesis is how to achieve the targeted goal with the most convergent procedures, high overall reaction yield and atom economy, and maximized safety and efficacy, as modern small-molecule

drug discovery involves the pursuit of more challenging therapeutic targets and the use of a wider variety of more sophisticated in vitro assays and in vivo models, which make new discoveries in organic synthesis invaluable for human society and the natural world.

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

Prof. Shu: In my view, young aspiring chemists in organic chemistry may encounter challenges such as restricted access to resources and intense competition in the field. To overcome these obstacles, collaborating with experienced researchers and exploring funding opportunities can be of great benefit.

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

Prof. Shu: I think it may be too early to draw conclusions, but my team has discovered several innovative ideas for both creating and breaking bonds, opening up new and complementary possibilities in chemical synthesis, particularly in the field of sultine chemistry.

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

Prof. Shu: Outside of the lab, I enjoy spending time outdoors hiking, camping, and practicing photography, and trying new cooking recipes with my wife at home. I also love to travel and explore new places to expand my horizons and learn about different cultures.
