

Meet Prof. Hao Wei, Thieme Chemistry Journals Awardee 2024!



Prof. Hao Wei is Full Professor at Northwest University (P.R. China). He received his Ph.D. from Lanzhou University (P.R. China), then became a postdoctoral associate at Peking University (P. R. of China) from 2011 to 2013 and the University of Idaho (USA) from 2013 to 2015. He began his independent academic career as a Lecturer at Northwest University (P.R. China) in 2015 prior to being promoted to his current position in 2016.

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

Prof. Wei: What I am most interested in is heterocyclic chemistry. Heterocyclic compounds are numerous and play important roles in almost every field. However, methodological research has mainly focused on a few major heterocyclic compounds, such as pyridine and indole. While most heterocyclic compounds are considered niche research, they are actually not niche at all. When conducting research on organic materials, I realized that the existing means of synthesizing heterocyclic compounds are very limited, such as the synthesis of tetrazine and pyrazole.

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

Prof. Wei: Our research interests at present mainly center on heterocyclic compounds, including the synthesis of heterocyclic compounds, transformation between heterocyclic compounds, and application in organic materials.

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

Prof. Wei: I believe organic chemistry is the foundation of many disciplines. Its progress can affect many fields such as pharmaceuticals, pesticides, polymer materials, liquid crystal materials, etc. In the new era, research on organic chemistry should be strengthened, and at the same time, it needs to be expanded to other fields based on research in organic chemistry.

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

Prof. Wei: The biggest difficulty is to find problems that interest you and the right starting point. While satisfying your curiosity, you can continue to apply for funding to support your work. I think persistence is very important, not giving up. In addition, active cooperation with enterprises can be carried out, which may result in not only financial support, but also unexpected gains.

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

Prof. Wei: I believe that my most important academic achievement is the development of a series of methods for inserting nitrogen atoms into rings to construct heterocyclic compounds. I am fascinated by this way of constructing heterocyclic compounds, which seems like magic to me. We have proposed different mechanisms for nitrogen insertion depending on the structure. I really enjoy this process and find that it allows me to exercise my creativity and imagination to a great extent. These methods have also demonstrated unparalleled efficiency compared to traditional methods in the construction of some special heterocyclic structures.

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

Prof. Wei: I like cooking very much, including Chinese and western cuisines. I often spend the whole weekend studying the recipe of a dish. In addition, I also like riding motorcycles and will go traveling by motorcycle during holidays.