TOPIC: Unraveling the Catalytic Mechanism of Enzymes by Structural and Computational Biology

SPEAKER: Jiahai Zhou, State Key Laboratory of Bio-organic Chemistry and Natural Products, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences

TIME: 2:00pm-3:00pm, December 14, 2016

VENUE: Room 264, Geography Building, Zhongbei Campus

ABSTRACT OF THE TALK

In this seminar, I will talk about the structural basis and catalytic mechanism of several enzymes in microbial catalysis and natural product biosynthesis. We determined the crystal structure (especially the enzyme-ligand complex structure) and conducted computational calculations. The results were merged for mechanistic studies and engineering guidance.

BIOGRAPHY

Jiahai Zhou is Professor of State Key Laboratory of Bio-organic Chemistry and Natural Products, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences. He received his Ph.D. from Shanghai Institute of Organic Chemistry in 2000, and did postdoctoral research at University of Michigan during 2001-2006. The research in Zhou laboratory is mainly focused on the structural mechanism and protein engineering of key enzymes in biocatalysis and biosynthesis. Their approaches include a variety of biochemical and biophysical methods, particularly the high-resolution x-ray crystallography and molecular dynamics.