理工学研究所 国際交流・公開研究セミナー

Prof. Eric A. B. Kantchev (Hefei University of Technology, China)が来日される機会に、最近その応用が注目されているロジウム触媒による不斉 1,4-付加反応について、計算機化学を駆使した反応機構の解明や、より有効な配位子の合理的デザインに関してご講演をお願いしました。是非ご参集ください。

題 目: Understanding the Rh-catalyzed asymmetric

1,4-addition by computational chemistry

講演者: Prof. Eric A. B. Kantchev

(Hefei University of Technology, China)

日 時: 2016年 11月 9日(水) 16:00-17:30

場 所: 中央大学後楽園キャンパス 3号館 3階 3300 号室

アブストラクト:

Chiral compounds are of great interest to society due to their use for manufacturing of pharmaceuticals. Among various methods for making such chemicals, asymmetric catalysis is conceptually the most advanced because it also imparts synthetic efficiency and environmental friendliness to the process. The Rh-catalyzed asymmetric 1,4-addition, first developed by Hayashi group, has become one of the most important catalytic asymmetric C-C bond forming reactions. Computational studies have the potential to reveal important details for the nature of the enantioselection process and aid new ligand design. In this lecture, modeling of the enantioselectivity, including the computational design of new ligands, and investigation of the turnover-determining transmetallation step by density functional theory calculations will be presented.

講演終了後、懇談会を予定しております.

連絡先:中央大学理工学部応用化学科

石井 洋一

email: yo-ishii@kc.chuo-u.ac.jp 電話: 03-3817-1901