



The Chinese University of Hong Kong
Department of Chemistry
Research Seminar Series

Speaker: Professor Kazuaki Ishihara
 Graduate School of Engineering
 Nagoya University

Title: Rational Design of High Performance Catalysts Based on
 Acid–Base Combination Chemistry

<< Abstract >>

We have studied on rational design of high performance catalysts based on acid–base combination chemistry. In this lecture, two topics are focused. One is “Cooperative catalytic system of chiral Lewis base catalysts and Lewis acids for enantioselective halocyclizations.”¹ The other is “Highly active chiral strong Brønsted acid–base salt catalysts for several enantioselective reactions.”²

References

1. (a) Sakakura, A.; Ukai, A.; Ishihara, K. *Nature* **2007**, *445*, 900. (b) Sawamura, Y.; Nakatsuji, H.; Sakakura, A.; Ishihara, K. *Chem. Sci.* **2013**, *4*, 4181. (c) Nakatsuji, H.; Sawamura, Y.; Sakakura, A.; Ishihara, K. *Angew. Chem. Int. Ed.* **2014**, *53*, 6974. (d) Lu, Y.; Nakatsuji, H.; Okumura, M.; Yao, L.; Ishihara, K. to be submitted.
2. (a) Hatano, M.; Maki, T.; Moriyama, K.; Arinobe, M.; Ishihara, K. *J. Am. Chem. Soc.* **2008**, *130*, 16858. (b) Hatano, M.; Hattori, Y.; Furuya, Y.; Ishihara, K. *Org. Lett.* **2009**, *11*, 2321. (c) Hatano, M.; Sugiura, Y.; Akakura, M.; Ishihara, K. *Synlett* **2011**, 1247. (d) Hatano, M.; Ozaki, T.; Sugiura, Y.; Ishihara, K. *Chem. Commun.* **2012**, *48*, 4986. (e) Hatano, M.; Ozaki, T.; Nishikawa, K.; Ishihara, K. *J. Org. Chem.* **2013**, *78*, 10405. (f) Hatano, M.; Ishihara, K. *Asian J. Org. Chem.* **2014**, *3*, 352. (g) Hatano, M.; Nishikawa, K.; Ishihara, K. *J. Am. Chem. Soc.* **2017**, *139*, 8424. (h) Hatano, M.; Mochizuki, T.; Nishikawa, K.; Ishihara, K. *ACS Catal.* **2018**, *8*, 349.

Date: May 28, 2018 (Monday)

Time: 10:30 a.m.

Venue: L3, Science Centre



ALL ARE WELCOME

Contact Person:
 Prof. Y.Y. Yeung