NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

School of Physical and Mathematical Sciences
College of Science

CBC SEMINAR ANNOUNCEMENT

Professor Hideki Yorimitsu
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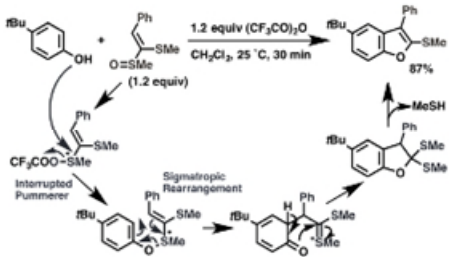
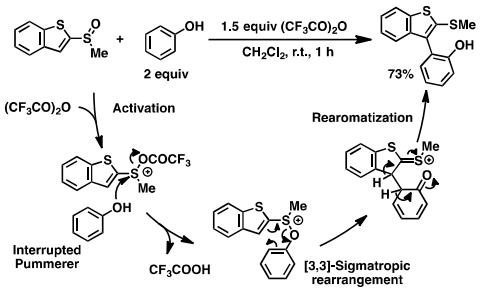
Cascades of Interrupted Pummerer Reaction and Sigmatropic Rearrangement

A new class of Pummerer chemistry has emerged as a powerful tool in organic synthesis. The new technology consists of a beautiful cascade of an interrupted Pummerer reaction and the subsequent [3,3] sigmatropic rearrangement. The following two topics, along with some very recent results, will be discussed to showcase the high synthetic potential of classical yet revitalizing organosulfur chemistry.[1)] The reactions are unique and game-changing because they are efficient, robust, redox-neutral, regioselective, and metal-free, which perfectly fits the need of modern organic synthesis.

(1) Practical and modular synthesis of benzofurans from phenols and alkenyl sulfoxides[2]



(2) Metal-free approach to biaryls from aryl sulfoxides and phenols by temporarily sulfur-tethered regioselective C–H/C–H coupling[3)]



1) H. Yorimitsu, *Chem. Rec.* **2017**, *17*, 1156.

2) K. Murakami, H. Yorimitsu, A. Osuka, *Angew. Chem. Int. Ed.* **2014**, *53*, 7510.

T. Yanagi, S. Otsuka, Y. Kasuga, K. Fujimoto, K. Murakami, K. Nogi, H. Yorimitsu, A. Osuka, *J. Am. Chem. Soc.* **2016**, *138*, 14582.

Date: **4th January 2019 (Friday)**
Time: **11.00am to 12.30pm**
Venue: **SPMS Research & Graduate Studies Office Conference Room**
Host: **Professor Shunsuke Chiba**