NANYANG TECHNOLOGICAL UNIVERSITY

CBC SEMINAR ANNOUNCEMENT

Professor Kazushi Mashima
Osaka University

Direct Amination of Allylic Alcohols and Benzyl Alcohols by Pt and Au

Transition metal-catalyzed amination of allylic compounds via π-allylmetal intermediate is one of the most powerful and useful methods for the synthesis of allylamines. From an environmental and economical point of view, a direct catalytic substitution of allylic alcohols, which forms water as the sole coproduct, has recently caught much attention. In this lecture, our recent results on the development of a versatile direct catalytic amination of allylic alcohols and benzylic alcohols with various amines using Pt and Au catalyst systems.

(1) Platinum-Catalyzed Direct Amination of Allylic Alcohols with Aqueous Ammonia for Selective Synthesis of Primary Allylamines.
K. Das, Y. Nakahara, R. Shibuya, N. Germain, T. Ohshima, and K. Mashima, *Angew. Chem. Int. Ed.*, **51**, 150-154 (2012).

(2) Direct substitution of the hydroxy group with highly functionalized nitrogen nucleophiles catalyzed by Au(III).
T. Ohshima, Y. Nakahara, J. Ipposhi, Y. Miyamoto, and K. Mashima, *Chem. Commun.*, **47**, 8322-8324 (2011).

(3) Platinum-Catalyzed Direct Amination of Allylic Alcohols under Mild Conditions: Ligand and Microwave Effects, Substrate Scope, and Mechanistic Study
T. Ohshima, Y. Miyamoto, J. Ipposhi, Y. Nakahara, M. Utsunomiya, and K. Mashima, *J. Am. Chem. Soc.*, **131**, 14317-14328 (2009).

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Date:	**30th January 2012 (Monday)**
Time:	**11:00am – 12:30pm**
Venue:	**NTU SPMS CBC Building Level 2, Conference Room**
Host:	**Professor Leung Pak Hing**