

CBC SEMINAR ANNOUNCEMENT

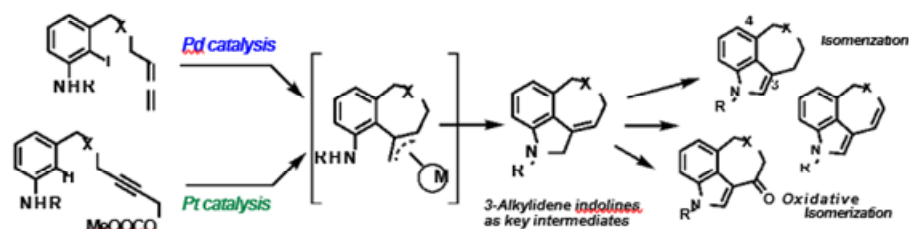


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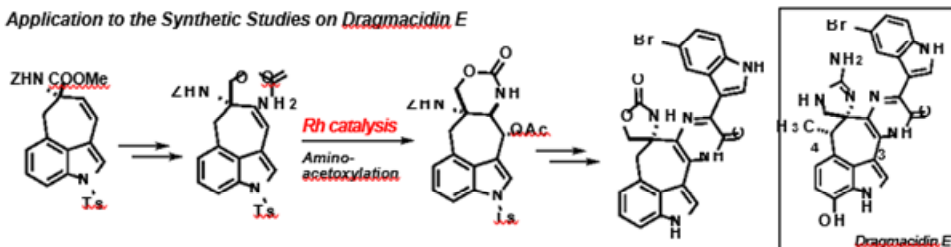
Synthesis of 3,4-Fused Tricyclic Indoles Using Transition Metal Catalysis

3,4-Fused tricyclic indole skeletons are found in various bioactive natural products and pharmaceuticals. Most of these molecules possess a functionalized medium-size ring bridging the C3 and C4 positions of the indole. This class of compounds is an attractive target in synthetic organic chemistry due to the ubiquity of the structural motif in bioactive molecules, as well as their characteristic structures. In this presentation, two-types of synthetic method of this structural motif based on Pd catalysis [1] and Pt catalysis [2] will be discussed. The developed Pd catalysis could be applied to the synthetic studies on Dragmacidin E.[3]

Synthetic Methods of 3,4-Fused Tricyclic Indoles/



Application to the Synthetic Studies on Dragmacidin E



References:

- 1) S. Nakano, N. Inoue, [Y. Hamada, T. Nemoto](#), *Org. Lett.* **2015**, *17*, 2622–2625
- 2) Y. Suzuki, Y. Tanaka, Y. Hamada, T. Nemoto, et al. *Chem. Eur. J.* **2016**, *22*, 4418–4421.
- 3) N. Inoue, S. Nakano, S. Harada, Y. Hamada, [T. Nemoto](#), *J. Org. Chem.* **2017**, *82*, 2787–2793

Date: 25th November 2019 (Monday)
Time: 2.30pm to 4.00pm
Venue: SPMS Research and Graduate Studies
Office Conference Room
Host: Associate Professor Naohiko Yoshikai