

Green Chemistry Seminar



Thursday, February 18, 2016, 13:00
Burnside 1B45

Everyone is Welcome

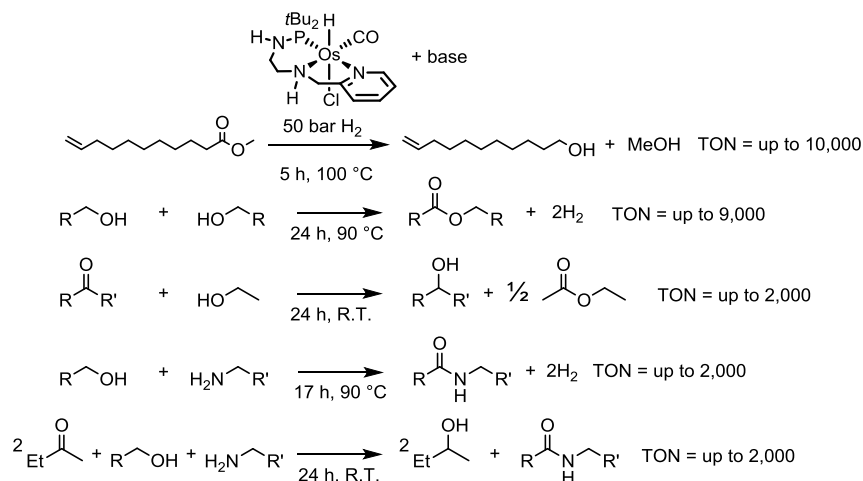
Prof. Dmitri Goussev

Selective hydrogenation of esters and dehydrogenative coupling of alcohols and amines.

Dmitry G. Gusev

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The NNP osmium complex $\text{OsHCl}(\text{CO})[\text{PyCH}_2\text{NHC}_2\text{H}_4\text{NHP}t\text{Bu}_2]$ ^[1,2] is a state-of-the-art catalyst for a manifold of green transformations including selective ester hydrogenation and dehydrogenative coupling of alcohols and amines to give esters and amides, under mild reaction conditions. The mechanism of these reactions remains unclear and will be discussed together with the recent DFT work and the results of new catalyst development from our laboratory.



References:

[1] D. Goussev, D. Spasyuk, PCT Patent Application WO 2014/139030.

[2] Spasyuk, D.; Vicent, C.; Gusev D. G. *J. Am. Chem. Soc.* **2015**, *137*, 3743-3746.

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Centre for Green
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