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Corn derived glucose is fermented to propane diol and then polymerized to the polymer polytrimethylene ether glycol.

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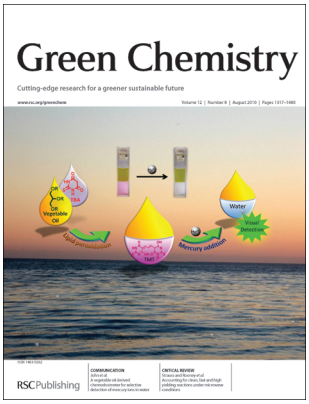

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Detecting toxic mercury in water using vegetable oil.

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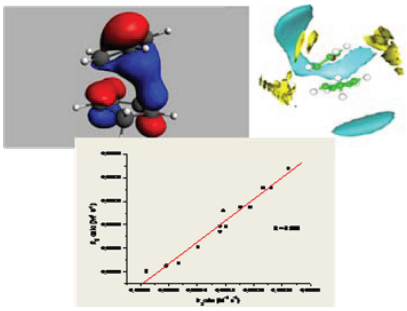

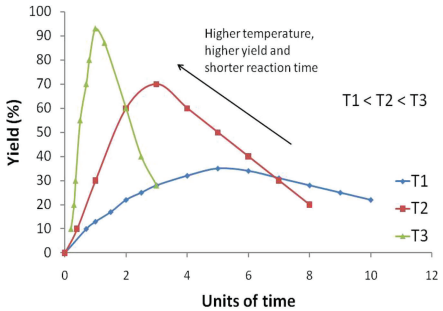

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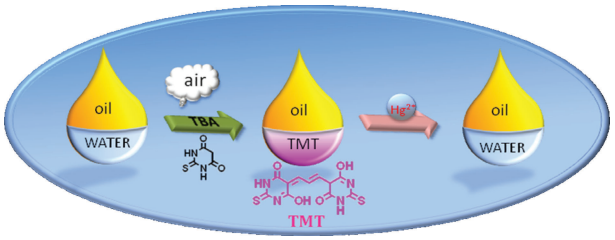

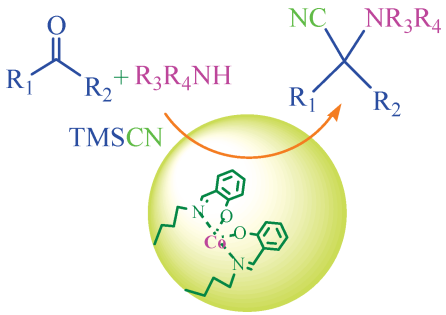

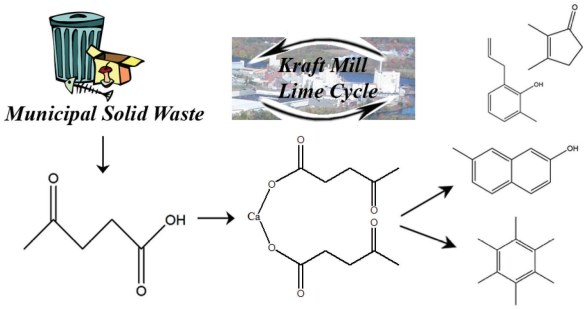

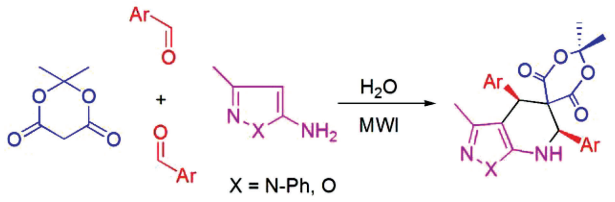

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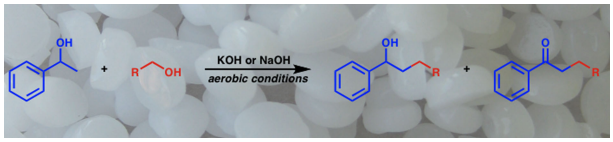

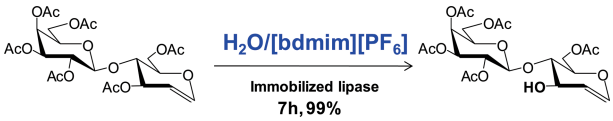

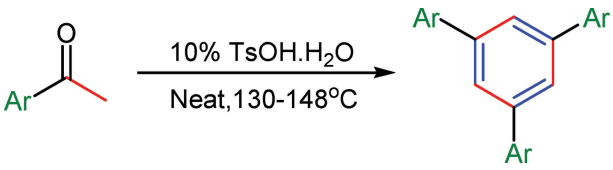

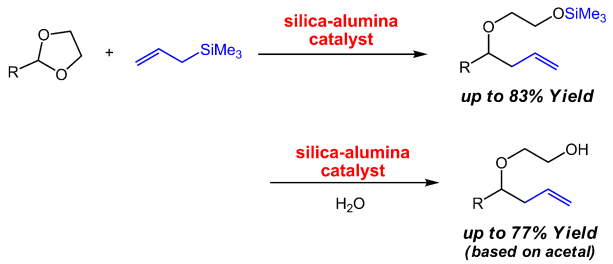

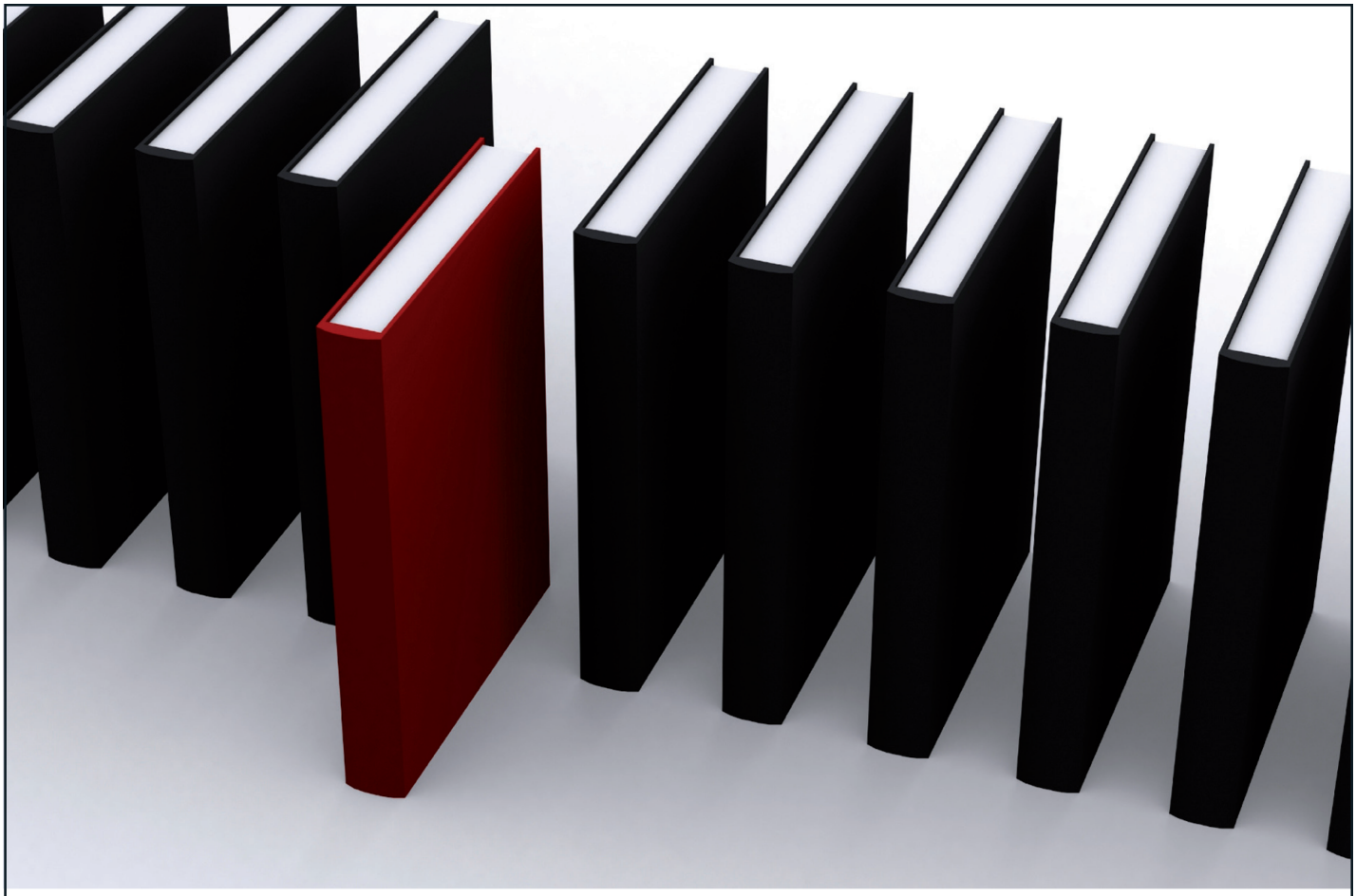

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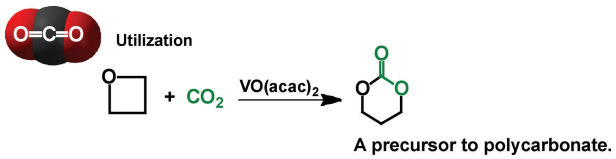

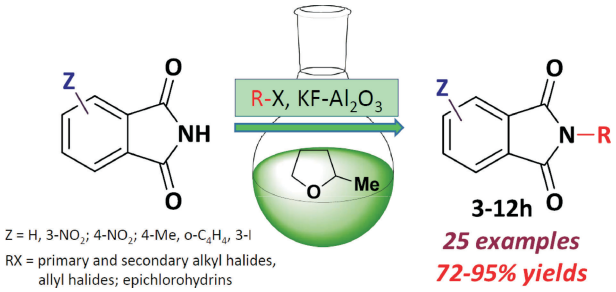

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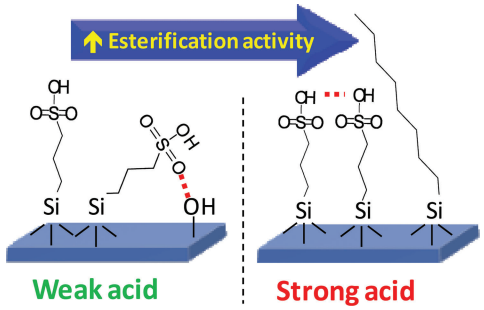
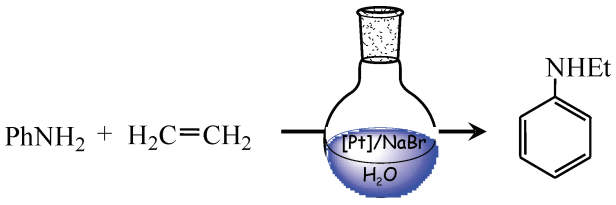
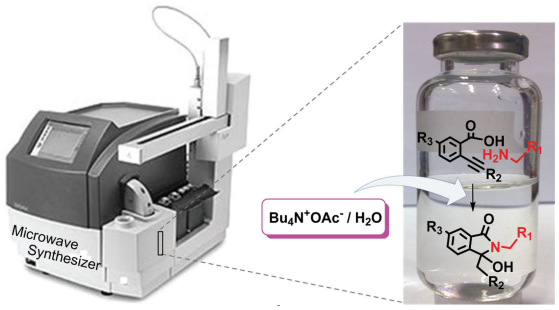


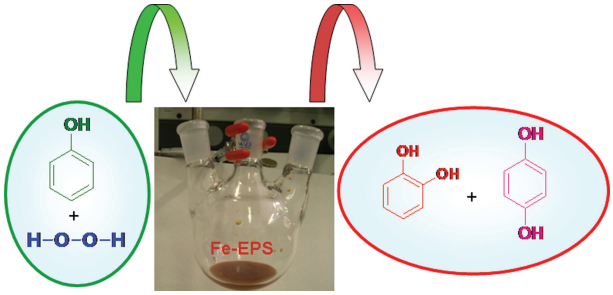




Metal-free tandem reaction in water: An efficient and regioselective synthesis of 3-hydroxyisoindolin-1-ones

Yu Zhou, Yun Zhai, Jian Li, Deju Ye, Hualiang Jiang and Hong Liu*

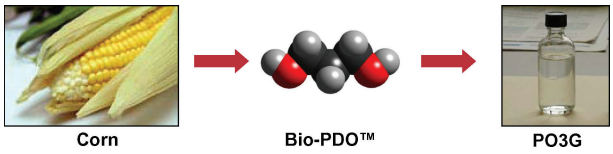
A mild and effective method was developed for the one-pot construction of 3-hydroxyisoindolin-1-ones *via* a metal-free tandem transformation with excellent regioselectivity. This strategy presents an atom-economical and environmentally friendly transformation, in which two new C–N bonds and one C–O bond are formed in water from two simple starting materials.



A bio-generated Fe(III)-binding exopolysaccharide used as new catalyst for phenol hydroxylation

Franco Baldi,* Davide Marchetto, Davide Zanchettin, Elisabetta Sartorato, Stefano Paganelli and Oreste Piccolo*

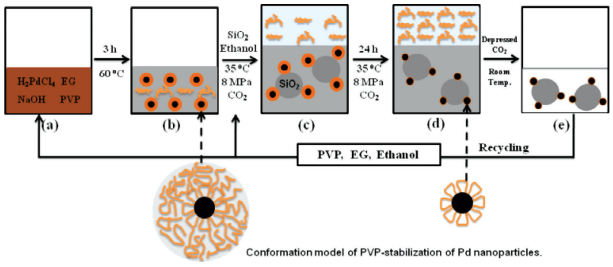
The catalytic and selective hydroxylation of phenol is carried out under environmentally benign reaction conditions in the presence of a Fe(III)-EPS (EPS = exopolysaccharide) catalyst. This work introduces a novel approach to the field of green catalysis, showing how a naturally occurring organism may produce a useful catalyst for organic transformations.



Renewably sourced polytrimethylene ether glycol by superacid catalyzed condensation of 1,3-propanediol

Mark A. Harmer,* David C. Confer, Christian K. Hoffman, Scott C. Jackson, Ann Y. Liauw, Aaron R. Minter, Edward R. Murphy, Rupert E. Spence and Hari B. Sunkara

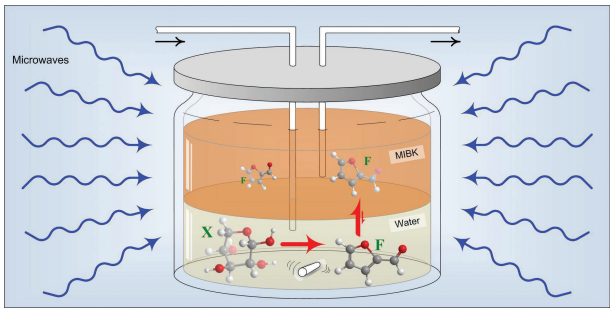
In this paper we describe the synthesis of a new 100% renewably sourced polymer, polytrimethylene ether glycol (polyol) which is derived from a renewably sourced monomer, 1,3-propanediol (PDO).

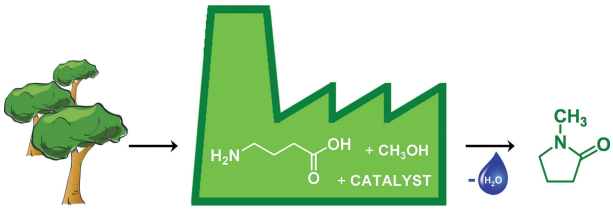


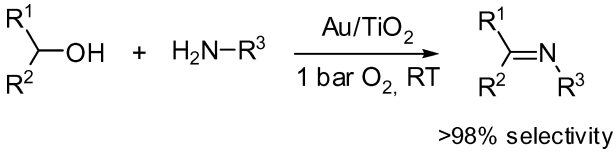
A green and efficient route for preparation of supported metal colloidal nanoparticles in $scCO_2$

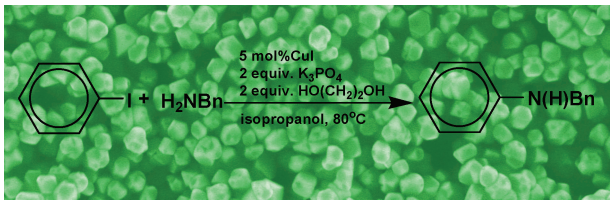
Qiang Wang, Haiyang Cheng, Ruixia Liu, Jianmin Hao, Yancun Yu and Fengyu Zhao*

A green and efficient method for dispersing active metal colloidal nanoparticles onto supports uniformly was developed in mixed solvent of ethanol and ethylene glycol in the presence of $scCO_2$.









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