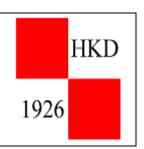


Institut Ruđer Bošković Kolokvij Zavoda za organsku kemiju i biokemiju i Sekcije za organsku kemiju Hrvatskog kemijskog društva



Ilija Čorić

Max-Planck-Institut für Kohlenforschung Mülheim an der Ruhr, Germany E-mail: Ilija.Coric@gmail.com Ponedjeljak, 1. srpnja 2013. Predavaonica III krila 15:00 – 16:00 h

Asymmetric Brønsted Acid Catalysis: Acetals & Confined Catalysts

Asymmetric Brønsted acid catalysis, in particular with chiral phosphoric acid type catalysts, is one of the most successful fields of organocatalysis.^{1,2} We present a rational design and development of confined chiral acids featuring extremely tight chiral pockets, and demonstrate their application in asymmetric catalysis.³ These catalysts are designed to tackle current challenges with reactions that include transitions states of small volume and/or loosely organized transition states. The development of several acid catalyzed reactions for asymmetric synthesis of acetals will be described.

- 1. T. Akiyama, Chem. Rev. 107 (2007) 5744.
- 2. M. Terada, Synthesis (2010) 1929.
- 3. **I. Čorić**, B. List, *Nature* **483** (2012) 315.