

Asymmetric Organocatalysis: Principles and Applications

Luca Bernardi
University of Bologna

Viernes, 8 de marzo 2019

12:00

Sala de Grados de la Facultad de Ciencias

CICLO CONFERENCIAS ISQCH 2019

Asymmetric Organocatalysis: Principles and Applications

Luca Bernardi

Department of Industrial Chemistry "Toso Montanari"

Alma Mater Studiorum – University of Bologna E-mail: luca.bernardi2@unibo.it



In this seminar, first a short perspective on the establishment of organocatalysis as an industrially viable tool in the manufacture of active pharmaceutical ingredients will be showed.¹ Recent studies will be highlighted, showing that catalyst turnover numbers and frequencies are important but not exclusive factors determining the viability of such approach. Then, some catalytic asymmetric reactions developed in our laboratory will be presented,² such as a stereodivergent formal hydrogenation of dehydro-amino acids, and few new entries in the chemistry of hydroxyridines and tetrahydro(iso)quinolines. Mechanistic principles (i.e. how the catalysts work) will be discussed throughout the seminar.

Personal Web Page

<https://www.unibo.it/sitoweb/luca.bernardi2/>

¹ A. Carlone, L. Bernardi, "Enantioselective organocatalytic approaches to active pharmaceutical ingredients – selected industrial examples", under review.

² <https://www.unibo.it/sitoweb/luca.bernardi2/publications>