

Organic Chemistry CHIM/06

Academic year: 2016/2017
Faculty: Chemistry Department
Study courses: Master Degree
Study plans/Curricula: Sintesi e Reattività
Type: optional courses
Total Credits: 4
Didactic Methods: lectures in class
Didactic Period: spring semester
Exam type: Oral
Professor in charge: Lucia D'Accolti

Training objectives: Covers a variety of green catalytic techniques including organocatalysis, supported catalysis, biocatalysis, fluororous catalysis, and catalytic direct C-H bond activation reactions with application in industrial synthesis

Prerequisites: bachelor in chemistry, material chemistry, chemical engineering

Didactic Methods: lecture with .ppt presentation, case study in the industry

Course programme

Lectures: (32 h)

supported catalysis, , fluororous catalysis, and catalytic direct C-H bond activation reactions.

Green Synthetic Techniques: Presents a series of new techniques, assessing the green chemistry aspects and limitations (i.e. cost, equipment, expertise). Techniques include reactions in alternative solvents, solid-supported synthesis, fluororous and ionic liquid-based recycling techniques, and flow reactors.

Reference Texts (available online)

Green Techniques for Organic Synthesis and Medicinal Chemistry Editors WEI ZHANG Center for Green Chemistry, Department of Chemistry, University of Massachusetts Boston, Massachusetts, USA BERKELEY W. CUE JR. BWC Pharma Consulting, LLC, Green Chemistry and Pharmaceutica Sciences , Ledyard, Connecticut, USA