

Course: Metal-, organo- and photocatalysis: Recent Developments and Synthetic Applications

Duration: 24 hours

Teacher(s): DELL'AMICO Luca, COMPANYÓ Xavier, SARTOREL Andrea, CARRARO Mauro

Curriculum: Chemical Sciences

Description: The course will focus on the most recent developments of catalysis spanning from stereoselective metal- and organocatalysis to photosynthetic catalysis. Particular attentions will be paid to the different activation modes and reaction mechanisms involved in the diverse catalytic transformations. A green chemistry perspective will be also presented, with a special attention to the conversion of renewable feedstocks. The potential future developments of the different fields will be discussed.

Additional information: Possible guest speakers are:

Paolo Melchiorre, ICIQ, Tarragona, Spain (synthetic photo-organocatalysis); Karl Anker Jørgensen, Center for Catalysis, Aarhus University, Aarhus, Denmark (Stereoselective Organocatalysis); Franca Zanardi, Università degli Studi di Parma, Parma, Italy (Stereoselective Vinylogous metal- and organocatalyzed Reactions); Prof Albert Moyano (Organoautocatalysis, emergence and amplification of chirality); Jordi Bures, The Manchester University, UK (Kinetic and mechanistic studies of catalytic reaction).