

## **Carbon-carbon bonding using enzymes for fine chemistry**

Data: 23/05/17 a 27/05/17

Horário de início: 8:30 h

Duração: 20 horas

Local: Auditório I do EQA

The pivotal importance of carbon-carbon bond forming reactions is the motif of the increasing attention devoted by organic and pharmaceutical chemists to the thiamine diphosphate-dependent enzymes. The catalysis of such enzymes has been exploited for the preparation of a number of optically pure intermediates whose chemical synthesis would be inaccessible or extremely complicated. The more significant applications of these enzymes will be discussed together with some aspects of their catalytic mechanisms that have inspired innovative synthetic strategies with bio-mimetic organocatalysts.

### **Prof. Dr. Pier Paolo Giovannini - Professor da Universidade de Ferrara – Itália**

#### Curriculum summary

Prof. Pier Paolo Giovannini obtained the PhD in Biochemistry in 1999. Now he is a researcher in the field of Industrial Chemistry at the University of Ferrara. His research is focused on the development of biocatalytic strategies for the production of optically active fine chemicals. From the initial interest for the dehydrogenases catalysis, his research moved in the last years to the study of thiamine diphosphate-dependent enzymes. He is also involved in projects targeted to the production of enzymatic and organocatalytic micro-reactors for the continuous-flow synthesis.