



Il Dipartimento di Scienze Chimiche accoglie il dott. Giulio Goti che terrà un seminario dal titolo:

"Chemical mimics": a journey across life sciences and catalysis

Martedì 21 marzo 2023, ore 16.30 Aula H, Dipartimento di Scienze Chimiche, Via Marzolo, 1.

In Nature organisms can mimic other species to receive a selective advantage. Likewise, in Chemistry, compounds can be used to mimic other structures in order to achieve a desired effect or function. This talk will spot the use of mimics in different areas of organic chemistry, from carbohydrate chemistry, to catalysis and medicinal chemistry.

Specifically, 1) it will be shown how sugar mimics enable to achieve potent ligands able to interfere with protein-carbohydrate interactions. Then, 2) the use of radical intermediates able to "mimic" the behaviour of highly reactive species in the development of enantioselective transformations will be presented. Finally, 3) the role of bioisosteres as a fundamental tool in medicinal chemistry will be discussed. Particularly, the use of difluorinated bicycloalkanes as structural surrogates of para- and meta-substituted aryl ketones and aryl ethers able to tune the physicochemical properties of drugs will be detailed.

Il Direttore del Dipartimento Michele Maggini