The Chemist's Interactions

Seminars @ the Chemistry Department

Room G23 h 14.30

Friday, 29th November 2024

Franca Zanardi

Department of Food and Drug, University of Parma

Jumping from Heterocycles to Peptides in Search for New Chemical Connections and Molecular Functions

Organic synthesis may continue to be a key driver of innovation in drug discovery programs if new chemical bond connections and consolidated practical transformations are pursued, which may significantly widen the realm of accessible drug-like molecules. In this context, sought-after objective of research is the realization of synthesis routes with essential prerogatives (i.e. efficiency, environment respectfulness, general applicability, selectivity), which enable the streamlined access to nature-inspired yet new-to-nature chemical entities to be assayed for their potential health-improving activity. These concepts will be exemplified by two recent case studies from our laboratories: *i*) the synthesis of polymyxin-inspired medium-sized peptidomimetics targeting the SARS-CoV-2 Spike: hACE2 interface, and *ii*) the asymmetric synthesis of uracil-based small molecule heterocycles en route to SARS-CoV-2 RdRp inhibition.

The event will be streamed on MS Teams for external participants!

For registrations: seminari.dipchi@unimi.it

UNIVERSITÀ DEGLI STUDI DI MILANO