

AVVISO DI SEMINARIO

*Il Prof. Tom F. A. de Greef
Laboratory of Macromolecular and Organic Chemistry
Eindhoven University of Technology*

Lunedì 22 maggio ore: 12:00

Nell'aula seminari del Dipartimento di Scienze e Tecnologie
Chimiche

Terrà un seminario dal titolo:

Engineering Bioinspired Molecular Networks

Proponente; Prof. F. Ricci

ABSTRACT

Complex signalling networks enable living cells to process information from their environment using an intricate network of regulatory interactions. These biochemical circuits function by converting an input signal (stimulus) through spatiotemporal interplay of signalling molecules (transduction) to an output response (function). Inspired by biology, we engineer a wide range of minimalistic, artificial signalling circuits by employing a cell-free bottom-up strategy. Such simplified model systems composed of fewer species each with well-defined interactions could help isolate key molecular parameters and thus have the potential to uncover generalizable concepts. Examples will include autocatalytic, bistable and oscillatory systems.