Seminars at the Department of Chemistry and Industrial Chemistry

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Stefano Crespi
Stratingh Institute for Chemistry
University of Groningen, The Netherlands
e-mail: s.crespi@rug.nl

CV

Stefano Crespi received his MSc degree under Prof. Dr. Angelo Albini's guidance at the University of Pavia (Italy). He gained experience in synthetic organic photochemistry, computational chemistry, and physical organic chemistry during his doctoral studies. He obtained his PhD degree in 2017 in the same University under Prof. Dr. Maurizio Fagnoni's supervision.
After spending two years as a postdoctoral research fellow in the PhotoGreen Lab in the same university working on novel heteroaryl azobenzenes, he moved to Regensburg to join Prof. Dr. Burkhard König's group. He continued the research line focused on developing novel azoswitches and in the mechanistical study of photocatalytic reactions.
In 2019, after winning an Individual Fellowship from the Marie Skłodowska-Curie Actions, he moved to the Netherlands to join Ben Feringa's lab. He is currently developing novel molecular motors and switches aided by computational design. He is interested in studying the excited state and thermal processes involved in the molecular motion of photoactuators and the involvement of supramolecular interactions to tune their mechanistic features.
He is the recipient of the Mention of Merit of the Premio Levi 2018 from the Italian Chemical Society.

Tuesday March 2, 2021
online on TEAMS
at 15.00

Mechanistic insights into the rotational behaviour of novel molecular motors and photoswitches

Abstract
Photochemically driven molecular switches and unidirectional molecular motors represent a fascinating fundamental research topic. These artificial molecular machines can drive the dynamics of molecular systems, materials and devices at the nanoscale, a peculiar feature that has found applications in smart materials and biomedical sciences.
Classic photoactuators like azobenzene or the Feringa molecular motor have been known since decades, and since then, significant advances in their respective designs have been achieved. However, the neverending quest to synthesize molecules tuned for a specific task requires a deep understanding of their motion
This seminar will focus on the design of novel photoactuators applying the entire toolbox offered by physical organic chemistry. This approach allows us to predict and understand the behaviour of novel structures and discover the mechanisms underlying their movement at the molecular scale.

To connect to the TEAM, if members of UNIGE, use the following code: lziywqi. If you are not a UNIGE member, please ask in advance Prof. Luca Banfi to add you as a guest to the team. For further informations on this specific seminar or in order to ask for an appointment with the speaker after or before the seminar, contact **Prof. Luca Banfi**, room 811 ☎ +39 010 3566111 e-mail: banfi@chimica.unige.it