FACULTY OF SCIENCE Charles University School of Chemistry, Faculty of Science, Charles Univertsity invites for the lecture

## **Quo Vadis Chemistry**

Palladium Complexes as Catalysts for Carbonylation Reactions of Nitroarenes. Understanding the Mechanism to Improve Performance



which will be delivered by

## **Professor Fabio Ragaini**

Department of Chemistry, University of Milan, Italy

## on October 17, 2022 at 15:40

the Lecture Hall CH2 at the School of Chemistry, Faculty of Science, Hlavova 8

Isocyanates, carbamates and ureas are key commodity chemicals. However, their industrial production still relies on the use of highly toxic phosgene. The reductive carbonylation of nitroarenes constitutes a cleaner and safer alternative, but high reaction rates and selectivities need to be reached to compete with the phosgene technology. Such goals cannot be reached without an in depth understanding of the reaction mechanism. In this talk, it will be illustrated how kinetic and theoretical studies have been coupled to coordination chemistry studies in order to get a deeper understanding of the reactions involved and how the gained knowledge was employed to further increase the performance of the catalytic system.

