



**Davide Ravelli**

University of Pavia

<https://photogreenlab.unipv.it/persona/davide-ravelli/>

**21** May **2026** **11:00**

Thursday

Lab Building West  
Heinzel Seminar Room

The functionalization of aliphatic C–H bonds remains a central challenge in synthetic chemistry. In this field, photocatalysis has emerged as a powerful manifold for the controlled generation of C-centered radicals, enabling efficient C–H bond cleavage through diverse mechanisms, including Hydrogen Atom Transfer (either direct – dHAT – or indirect – iHAT –) or Proton-Coupled Electron Transfer (PCET). Recent advances have expanded the scope of both homogeneous and heterogeneous photocatalytic strategies by taking advantage of the merging with electrochemistry, metal-based catalysis and biocatalysis, and of the integration with continuous-flow processing. This seminar will present recent contributions from the PhotoGreen Lab at the University of Pavia, focusing on the use of tetrabutylammonium decatungstate and carbon nitride materials for aliphatic C–H bonds elaboration.

**Prof. Davide Ravelli** is currently an associate professor at the PhotoGreen Lab of the University of Pavia, where he obtained his PhD in Chemistry in 2012. His research primarily focuses on photochemical and photocatalytic reactions, with particular emphasis on their applications in sustainable organic synthesis. A central aspect of his work is the development of methods for the efficient generation and use of valuable reactive intermediates, especially radicals, and their subsequent trapping. In recent years, his research has increasingly explored hydrogen atom transfer (HAT) processes promoted by excited molecules and materials. DR has also gained international research experience as a visiting scientist in the Knowles group at Princeton University (USA, 2017) and in the Waldvogel group at Mainz University (Germany, 2019).

