

Czech Chemical Society Lecture

Thursday, April 25, 2024, 14:00

University Campus Bohunice, Kamenice 5, Building A11 / room 132

Photoinitiators/Redox Reactions/Nanocomposites/Photo-NMR

Georg Gescheidt
Institute of Physical and Theoretical Chemistry
TU Graz, A-8010 Graz Austria

In my talk, I will present our work on photoinitiators for radical polymerizations. I will indicate how a closer look on mechanisms paved the way for using photoinitiators as electron-transfer agents and their application to produce nanocomposites.

Moreover, a short overview on the applications of photo-NMR will be presented.

1. "Bis(acyl)phosphine Oxides as Stoichiometric Photo-Reductants for Copper Nanoparticle Synthesis: Efficiency and Kinetics": M. Schmallegger, H. Grützmacher, G. Gescheidt, *Chemphotochem* **2022**, 6. DOI: <https://doi.org/10.1002/cptc.202200155>
2. "The "Dark Side" of Germanium-Based Photoinitiators-Connecting Redox Properties and Optical Absorption": P. Fruhwirt, A. Liska, P. Wasdin, A. M. Kelterer, M. Haas, J. Ludvik, G. Gescheidt, *Organometallics* **2020**, 39, 2257-2268. DOI: <https://doi.org/10.1021/acs.organomet.0c00219>