

#### GESELLSCHAFT DEUTSCHER CHEMIKER

### Ortsverband Osnabrück

# "Light-driven molecular reactivity in complex scenarios – in cells, at surfaces, in complex electron transfer cascades"

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Light is ubiquitous and light-driven processes are key, *e.g.*, to the perception of the environment by vision and photosynthesis. Furthermore, light-responsive molecules and materials play a quintessential role in addressing central socioeconomic challenges, *e.g.*, transforming our economy towards renewable energies or developing therapeutic approaches to treat cancer. Consequently, research on light-activated molecules and materials, *i.e.*, synthesis as well as functional and mechanistic studies on such systems are intensively researched. This talk will focus on light-driven molecular reactivity of molecules in complex environments, focusing on the excited-state dynamics in molecular intermediates in photocathodes for light-driven hydrogen evolution, in complex electron transfer cascades and photo-activated drugs for cancer therapy. I will discuss our experimental approaches, *e.g.*, combining electrochemistry with ultrafast time-resolved spectroscopy, to investigate the light driven molecular reactivity from new viewpoints and highlight implications for photocatalysis and photodrug design obtained from the spectroscopic-mechanistic studies.

Der Vortrag findet am **Di, 09.04.2024, 16:15 Uhr** im CellNanOs statt: **Raum 38/201**, Barbarastr. 11, 49076 Osnabrück

Besucher sind herzlich willkommen!

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