



BiophysTO Lunchtime Seminar Series

Date

Thursday, Jan. 14, 2021
12:00 – 1:00 pm

Location

Virtual via zoom

Jörg Matysik
Universität Leipzig

Nuclear spins acting in natural electron transfer observed by Photo-CIDNP solid-state NMR

NMR is one of the few spectroscopic methods allowing for multi-dimensional experiments exploring connectivities and allowing for separation of signals. For efficient multi-dimensional spectroscopy, intensity of signals needs to be boosted by so-called hyperpolarization methods. One of these hyperpolarization techniques relies on the solid-state photo-CIDNP effect. The term “photo-CIDNP” (photochemically induced dynamic nuclear polarization) means that a photochemical process pumps nuclear spin-states and therefore the NMR signal. Not many systems are able show this amazing effect. Remarkably, all photosynthetic reaction centers studied have been demonstrated to undergo light-driven pumping. Recently, some flavoproteins were successfully probed paving the way for the design of artificial systems..

Zoom Link

<https://us02web.zoom.us/j/89407663380?pwd=OFBMcZlhWVZKbUswQzk3VXNkLzhGdz09>

Host: James Otis



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