



GESELLSCHAFT DEUTSCHER CHEMIKER  
*Ortsverband Osnabrück*

## **“Tools to Image and Cross Membranes”**

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The true passion in my group is to translate underrecognized, at best new principles in supramolecular chemistry to address more general challenges in science and society. Current examples include the discovery of 1) catalysis with anion- $\pi$  interactions, chalcogen bonds, pnictogen bonds, and oriented electric fields on carbon nanotubes in electromicrofluidic devices, 2) dynamic covalent cascade exchange networks to enable and prevent cellular entry and motility for drug delivery and drug discovery (thiol-mediated uptake, TMU), and 3) mechanosensitive probes to image physical forces in living systems (fluorescent flippers).

This lecture will focus on ongoing efforts to decode TMU networks and control cellular entry for any substrate of interest (probes, proteins, genes, quantum dots, viruses), and to FLIM image membrane tension in any membrane of interest (plasma membrane leaflets, endosomes, lysosomes, nuclear envelope, ER, Golgi) - with small-molecule probes, commercialized, that change their color like lobsters during cooking.

Der Vortrag findet am **Di., 21.05.2024, 16:15 Uhr** im CellNanOs statt:  
**Raum 38/201**, Barbarastr. 11, 49076 Osnabrück

Besucher sind herzlich willkommen!

**Der Ortsverbandsvorsitzende:**

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