

HUMBOLDT-UNIVERSITÄT ZU BERLIN

Institut für Chemie

Special Colloquium

Thursday, June 8 @ **16:15 h**

IRIS Adlershof, Raum 2.049

“Taming and Unleashing the Reactivity of Nanographene π -radicals”



Prof. Michal Juríček



Universität
Zürich^{UZH}

Abstract: Open-shell nanographenes are envisioned as promising future materials, in which spin interactions between unpaired electrons enable control of quantum information or induce magnetism, features sought-after in spintronics and quantum molecular science. With my research team, we design and develop methods to make synthetic nanographene π -radicals and explore the fundamental aspects of their properties and reactivity. We utilize the presence of unpaired electrons in conceptually two different ways. We use it to create function, which requires development of synthetic strategies to suppress the reactivity of these systems. On the other hand, we use π -radical reactivity—typically considered an undesired feature—as a synthetic tool to access complex graphene-based nanostructures. I will share with you our most recent exciting results in this context.