

Quo Vadis Chemie

Chemigenetic Probes for Imaging and Sensing in Live Cells



which will be delivered by

Prof. Dr. Pablo Rivera-Fuentes

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on 4. 3. 2024 at 14:50

the Lecture Hall CH2, the School of Chemistry Building, FoS CU, Hlavova 8, Praha 2

Abstract:

A large diversity of genetically encoded and chemical probes has been developed to study biological processes. Each category of probe has its own advantages and limitations, thus making hybrid probes appealing. Our lab has recently developed probes for imaging and sensing in live cells that combine a genetically encoded part with a synthetic ligand for added functionality. Two examples will be presented in this talk: a quantitative sensor to measure the concentration of glutathione in subcellular organelles, and a new family of fluorogenic dyes that display excellent brightness, photostability, specificity, and long wavelengths.

