

CatLab Lecture Series hosted by FHI and HZB

Friday, December 15th 2023, 10:30-12:00

BESSY II, Seminar Room at the Entrance, Albert-Einstein-Straße 15, Berlin Adlershof

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Understanding surfaces using probe molecules and in situ spectroscopies

Spectroscopic techniques represent a “Swiss Army Knife” in modern chemistry, given their capability to shed light on the intimate nature of molecules and materials, as well as on their mutual interactions. Though some spectroscopic tools (e.g. IR or UV-vis) are nowadays broadly available, their fundamentals are often not fully handled by the final user, sometime leading to gross error in their application and reporting of results. The present contribution aims to illustrate potentialities and limits of IR, Raman, UV-Visible and XAS in zeolites and Metal organic Frameworks characterization. Case studies will be selected in respect to the use of zeolites and MOFs as heterogeneous catalysts or selective adsorber.