



Seminarankündigung

**Donnerstag, 8. März 2018
11:00 Uhr**

WSI, Seminarraum S 101

“In situ/operando electron spectroscopies at BESSY II: The BEIChem facility”

Ambient pressure X-ray photoelectron spectroscopy has proven itself a useful technique for the characterization of surfaces, buried solid/solid junctions and, more recently, for accessing solid/gas and solid/liquid interfaces in an in-situ/operando fashion. The major strength of photoelectron spectroscopies (PEs) is that they can be used to simultaneously measure both chemical composition and electronic structure, allowing correlations between the two to be developed. In addition, being a photon in-electron out technique, PE allows to measure electric potentials built up at solid/solid and solid/liquid interfaces. The Helmholtz-Zentrum Berlin (HZB) and the Fritz-Haber-Institute (FHI) have recently established the Berlin joint lab for ElectroChemical interfaces (BEIChem). This user-oriented facility combines soft and hard X-ray ambient pressure photoelectron spectroscopies, AP-XPS and AP-HAXPES, respectively, to study interfaces important for (photo)electrochemical and sensing devices. An overview of this facility and examples of the application of AP-XPS and AP-HAXPES to study interfaces in realistic water splitting devices will be presented.

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