

**Characterization of micro- and nano-materials, Key aspect:
 “Advanced methods for materials characterization”**
12th – 16th September 2022, Cottbus, LG 1A, R. 304

Summer School 2022 / Compact Course

(LV: 130760, Module: 13016; CP: 6)

Language: English

	Monday, 12/09/2022 Synthesis & Characterization	Tuesday, 13/09/2022 Photoelectron Spectroscopy	Wednesday, 14/09/2022 X-ray Diffraction Techniques	Thursday, 15/09/2022 Electron Diffraction and Microscopy	Friday, 16/09/2022 Electron Microscopy
9:00-10:30	Lecture Ehrenfried Zschech BTU/deepXscan GmbH <i>X-ray tomography</i>	Lecture Carlos Morales BTU <i>Quantitative x-ray photoelectron spectroscopy</i>	Lecture Vedran Vonk DESY Hamburg <i>(Nano) x-ray diffraction</i>	Lecture Joachim Wollschläger Uni Osnabrück <i>Electron diffraction</i>	Lecture Michal Mazur Wroclaw University of Science and Technology <i>Transmission and scanning electron microscopy</i>
10:30-11:00	Coffee Break				
11:00-12:30	Lecture Małgorzata Kot BTU <i>Atomic layer deposition</i>	Lecture David Starr Helmholtz-Zentrum Berlin <i>Near-ambient pressure photoelectron spectroscopy</i>	Lecture Thomas Schmidt Uni Bremen <i>Dynamical x-ray diffraction and x-ray standing waves</i>	Lecture Thomas Schmidt Fritz-Haber-Institut Berlin <i>Low-energy and photoemission electron microscopy</i>	Lecture Niklas Nilius Uni Oldenburg <i>Scanning tunneling microscopy and spectroscopy</i>
12:30-14:00	Lunch Break				Concluding remarks
14:00-15:00	Tutorial Paul Plate Sentech <i>In-situ ellipsometry</i>	Experiments: X-ray photoelectron spectroscopy	Conference Outing/BBQ	Experiments: Electron diffraction and photoemission electron microscopy	
15:30-18:00	Experiments: Atomic layer deposition				