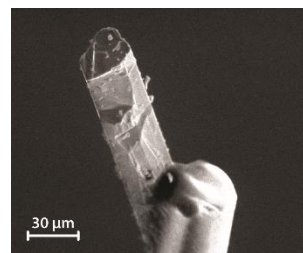
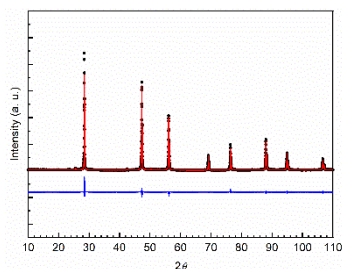


Announcement of lab class Winter semester 2024/25



Structure elucidation by diffraction methods (ACK)

PD Dr. Oliver Janka
Dr. Bernd Morgenstern
Dr. Robert Haberkorn

scope: 6 SWS

QR Moodle



QR Teams



Dates:

Seminar & lab: Monday, Tuesday, Wednesday and Thursday, each 13:30 – 17:30 h
Duration: to be discussed
Location: room 0.09, building C4₁
Initial assessment: Friday, October 18, 2024 – 13:00 h – Seminar 0.04, building C4₁

Description:

The investigation and structural description of solids in three-dimensional space is a fundamental basis for understanding the chemical and physical properties of matter. Chemical reactivity as well as electronic and magnetic properties of solids are consequences of the three-dimensional arrangement of atoms. As part of the course, participants are introduced to basic crystallographic concepts and the description of mainly crystalline solids. In addition, crystal growth, powder and single-crystal diffraction methods and thermal investigations are covered.

Content:

Crystallographic basics: basic concepts, symmetry principles, space groups; growth of single crystals in theory and practice, X-ray diffraction (powder and single crystal) in theory and practice, evaluation of diffraction data, quantitative phase analysis & real structure, other diffraction methods, combination of methods, pair distribution function

Target group:

Students of the natural sciences Master's programs, AC05 & AC10 form the basis for this internship.

Registration:

Registration is possible until Friday, 18.10.2024, 12:00 h (noon) and takes place via the LSF. The number of participants is limited to 8 persons.