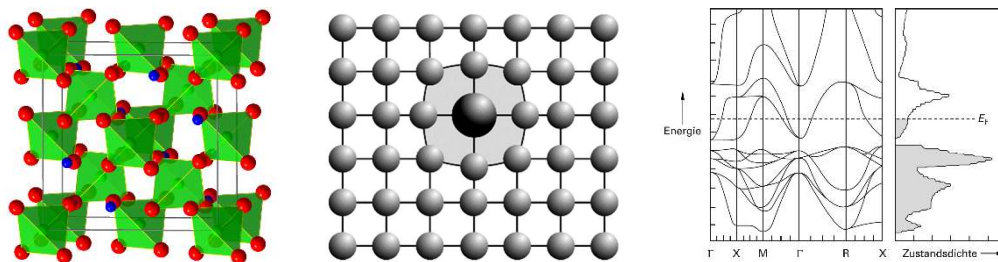


Lecture Announcement Winter Semester 2024/25



Structural Chemistry and Crystallography (AC10)

Univ.-Prof. Dr. Guido Kickelbick

PD Dr. Oliver Janka

Scope: 2 SWS (3 CP) + 1 SWS exercise (1 CP)

QR Moodle



QR Teams



Dates:

Lecture: Tuesday 10:15 – 11:45 a.m.

Exercise: Wednesday 11:00 – 12:00 a.m.

Start: Lecture: October 15th 2024; Exercise: November 13th 2024

Location: Lecture: Small Lecture Hall II, C4 3; Exercise: Seminar Room, C4 4

Description:

The structural description of solids enables the systematic understanding of structure-property relationships in three-dimensional space. The chemical reactivity as well as the electronic and magnetic properties of solids are direct results of the atomic arrangement in these structures. In this course, students will be introduced to the structural analysis of primarily crystalline solids, with an emphasis on symmetry considerations. It also examines how atomic arrangement affects the macroscopic properties of these materials.

Content:

Structure, chemical bonding and properties of solids, simple structural types in crystallographic consideration, description of special phases (intermetallic and Zintl phases), ideal and real structure, electronic structure of solids, magnetic and electrical properties of solids

Target group:

Students of natural science master's programs, doctoral students