

Lecture Announcement

Winter Semester 2026/27

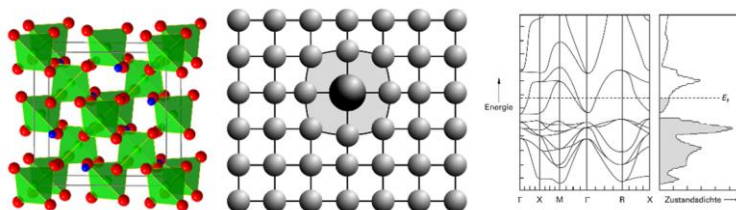
Structural Chemistry and Crystallography

AC10

Lecturers:

Univ.-Prof. Dr. Guido Kickelbick

Priv.-Doz. Dr. Oliver Janka

**Further information:**Scope and Credits: 3 SWS (4 CP)Lecture: Tuesday – 10:15 a.m. - 11:45 a.m.Exercise: Wednesday – 11 a.m. - 12 p.m.Start: October 13, 2026Location: Lecture: Small Lecture Hall II, C4.3
Exercise: Seminar Room, C4.4**QR-Code LSF:****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