

Lecture Announcement Winter Semester 2025/26



Raw Materials and Resources

QR Moodle



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Scope: 2 SWS (3 CP)

QR Teams



Dates:

Lecture: Tuesday 14:00– 15:30
Start: Lecture: October 14, 2025
Location: Seminar Room, C4 4

Description:

Raw materials and resources are not just the foundation of material development - they are central to enabling sustainable innovation and a circular economy. In a sustainable context, the importance of raw materials lies in their availability, environmental footprint, and role in circular systems. Understanding the origin, extraction, and lifecycle of materials allows scientists to make informed decisions about which substances to use, how to process them efficiently, and how to minimize waste. The goal is to create closed-loop systems that reduce dependency on finite resources.

Content:

Introduction to Raw Materials and Resources; Global Resource Demand and Supply; Classic Extraction and Processing; Sustainable Sourcing and Resource Management; Role of Raw Materials in Sustainability; Impact Assessment of Raw Materials; Fossil Fuel vs. Biopool

Target group:

Students of master program Sustainable Materials and Engineering, natural science master's programs, doctoral students