

DMG-Short Course/“Doktorandenkurs“, March 9-12, 2026, Jena

Geochemical modeling and reactive transport with Geochemist’s Workbench

The four-day course provides an introduction to the thermodynamic description of aqueous systems using the geochemical software Geochemist's Workbench®. It introduces the various modules of the geochemical code through practical examples such as the calculation of aquatic speciation, mixing of solutions, solubilities (gases/solids), application of the Pitzer activity model for saline systems and sorption using surface complexation modeling. More complex examples address thermodynamics and kinetics of natural systems (soils, aquifers, sediments) to the construction of stability diagrams, reaction pathways, and reactive transport models.

Requirements: The course is aimed primarily at advanced-level undergraduate and graduate students but is also open to postdoctoral researchers. Participants should have basic background in mineralogy, geochemistry; knowledge of basics of thermodynamics is helpful. The number of participants is limited to 18. The tuition language is English or German, depending on the language skills of the participants.

Location: Friedrich Schiller University Jena, Institute for Geosciences, Burgweg 11, 07749 Jena

ECTS (European Credit Transfer System): Participants may obtain 3 ECTS credit points after completion of the course and after passing a written examination. For students who do not wish to obtain an ECTS certificate, the examination is not required.

Costs: There is no fee for the course. Teaching materials and software licenses are provided by the Institute of Geosciences in Jena. Participants are expected to identify and book the accommodation on their own. The course receives financial support by German Mineralogical Society (Deutsche Mineralogische Gesellschaft - DMG). Non-Jena student members of DMG are eligible for travel support to the amount of Euro 100,-.

Information: Further information can be obtained from www.dmg-home.org/aktuelles/doktorandenkurse or Dr. Juraj Majzlan, email: Juraj.Majzlan@uni-jena.de (organizer) or Dr. Frank Bok, email: f.bok@hzdr.de (instructor). Tel.: +49-3641-948700.

Applications should be sent to Dr. Juraj Majzlan, email: Juraj.Majzlan@uni-jena.de.

Registration requests will be accommodated on the first-come, first-serve basis. They will be accepted until the full course capacity is reached.

