

# short course EXPLORATION GEOLOGY

# Ore deposit models, alteration geochemistry and ore textures

#### **COURSE TOPICS**

- exploration geology: objectives, approaches and methods
- sampling, analytical methods and data processing
- geochemical discrimination
- alteration geochemistry and vectoring
- visualization of geochemical data: ioGAS software
- ore microscopy
- exploration case studies

#### **COURSE STRUCTURE**

- 3 days of lectures (50 %) and practical sessions (50%)
- poster session of participants
- 1 day field trip (optional)

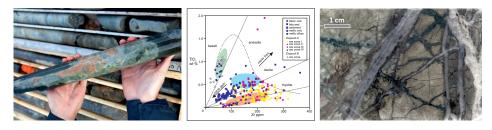
#### **PRACTICAL INFORMATION**

- participants may use their own or university-provided PC
- geochemical visualization softwarewill be provided
- participants my obtain 2 ECTS credits after succesful completion of the course and written examination

#### **OVERVIEW**

This short course offers theoretical foundations and practical training in exploration geology, alteration geochemistry and ore interpretation. We welcome participants from universities, research institutions as well as exploration or industrial companies wishing to further their professional development. In addition, the short course will host a poster session for participants who wish to present and discuss their own projects. The course contents are aimed at master and doctoral students but the course is open to early career scientists and participants from industry and private sector as well. The official language will be English.

An optional one-day excursion to ore deposits in Schwarzwald (Black Forest) is planned for March 21, 2019. The field trip will demonstrate various styles of mineralization related to rifting of the Upper Rhine graben.



#### INSTRUCTORS

**Prof. David Dolejš (lectures and practical sessions)** holds chair of mineralogy and petrology at the University of Freiburg. He conducts research on magmatic and hydrothermal systems, including field and theoretical approaches to geochemical processes and hydrothermal fluid flow during the formation of mineral deposits.

**Dr. Kateřina Schlöglová (software sessions and field trip)** is an assistant at the University of Freiburg and a consultant for mineral exploration. She gained her industry experience as an exploration geologist for Dragon Mining Ltd. She is interested in physico-chemical processes responsible for formation of magmatic-hydrothermal deposits and exploration methods.

**Dr. Malte Junge (ore microscopy)** is a lecturer in mineralogy and mineral resources at the University of Freiburg, with previous employment at the Federal Institute for Geosciences and Natural Resources (BGR) in Hanover. His research interest focuses on ultramafic-mafic, granitic and VMS-type ore deposits.

**Dr. Denis Schlatter, EurGeol (exploration models and case studies)** is the CEO of the Helvetica Exploration Services GmbH. He has over 20 years of experience in mineral exploration in industry, academia and government, particularly gold and base metal exploration in the Arctic with 15 field seasons in Archean provinces of Greenland.

## March 18-21, 2019

### Institute of Earth and Environmental Sciences, University of Freiburg, Germany

Albertstrasse 23b, 79104 Freiburg im Breisgau www.minpetro.uni-freiburg.de/expgeo

**COSTS** include registration, course materials, coffee breaks, social

- 50 EUR students and early career scientists\*
- 400 EUR non-academic and industry atendees
- 30 EUR excursion fee

\*non-resident student members of the DMG are eligible for travel support of 50  $\in$ 

**REGISTRATION** deadline January 10, 2019

- for registration, see: www.minpetro.uni-freiburg.de/expgeo
- for further inquiries contact: Dr. Katerina Schlöglova katerina.schloglova@minpet.uni-freiburg.de