

German Mineralogical Society

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4th GEOLOGY OF ORE DEPOSITS (GOOD) MEETING

23–25 January 2019 • Jacobs University Bremen (Germany)

Following in the tradition of the previous Geology Of Ore Deposits (GOOD) meetings in Freiberg, Hannover and Erlangen (all Germany), the 2019 meeting, which was organized by the Center for Resource and Environmental Studies at Jacobs University, Bremen (Germany), allowed masters and PhD students, as well as early career researchers, to present their cutting-edge studies in mineral deposit research to their peers and more senior researchers. The quality of the presentations was exceptional throughout.

Keynote talks were given by Jens Gutzmer (Helmholtz Institute Freiberg for Resource Technology, Germany) on predictive geometallurgy and by Wolfgang Bach (University of Bremen) who discussed seafloor polymetallic massive sulfide deposits. A public lecture on mining in the 21st century was given by Bernd Lottermoser (RWTH Aachen University). The organizers would like to thank the Deutsche Mineralogische Gesellschaft (DMG), ThermoFisher, and the University Club of the Jacobs University Bremen for their support. The fifth GOOD meeting will be held at the University of Freiburg in 2020. We look forward to seeing you all there.

David Ernst (Bremen)



4th GOOD meeting attendees at the Jacobs University Bremen.



LEFT TO RIGHT: Philip Rieger, Melanie Lorenz and Benjamin Möller are awarded for their excellent contributions.



Meeting of the working group for Mineralogical Museums and Collections in the Hessian State Museum Darmstadt.

WORKING GROUP MEETING

16th Meeting of the Working Group for Mineralogical Museums and Collections

The 16th meeting of the Mineralogical Museums and Collections Working Group of the DMG was held 13–15 March 2019 in the Hessian State Museum in Darmstadt (Germany). The meeting served as a forum for discussing and sharing information on all aspects of mineral collections.

Over the first two days, more than 30 participants, from various museums, universities and public surveys in Germany, listened to contributions that covered a wide range of topics: mineral sites, research methods, temporary exhibitions, current book projects and the latest advances in databases for mineral collections. One of the main issues that the meeting addressed was how to effectively communicate mineralogical concepts to students and teachers. The participants emphasized the importance of teaching the natural sciences in schools as a means of arousing a student's enthusiasm for mineralogy and for collection work. This will require stronger action from all mineralogical institutions, including the development of strategies for gaining more direct contact with primary and secondary schools and for providing training for teachers. One of these strategies is the promotion of newly developed teaching materials for schools, such as the DMG Mineralogical Teaching Kit.

During the third day of the meeting, the participants had the opportunity to get in touch with the different modules of the DMG Mineralogical Teaching Kit. So far, there exist five modules: "Minerals to Touch", "Variety of Rocks: Window to the Earth", "Granite in Parts: Separation of Heterogenous Mixtures", "Raw Materials: From Ore to Metal" and "Symmetry: Colors and Shapes of Nature". Besides minerals and rock samples, the kits also contain tools for mineral determination and experimental guides. The DMG Mineralogical Teaching Kit is designed for giving teachers the opportunity to bring mineralogy into the classroom. The kits can be used in lessons in geography, chemistry, physics or mathematics. Besides discussions on the promotion and improvement of existing modules, ideas for future teaching kits were deliberated by the participants.

During the meeting, the working group also had the opportunity to visit both the mineral collections and the public exhibitions of the Hessian State Museum. The Darmstadt hosts thank all the participants for their contributions and the fruitful discussions that were had over the three days.

Further information on the activities of the DMG working group Mineralogical Museums and Collections are available on the web page http://mineralogische-sammlungen-dmg.userweb.mwn.de/index-eng. htm.

Frank Scholze, Sabine Hahn (Darmstadt)

DMG SHORT COURSES 2019

Fall Courses Open for Enrollment

Two DMG short courses (see below), all based in Germany and which will run during fall 2019, are now open for enrollment. However, two courses (K5, K6) have been postponed until 2020. All courses are aimed primarily at advanced-level undergraduate and graduate students but more senior researchers are also welcome to attend. Non-local student members of DMG are eligible for travel support to the amount of \notin 50. Further information about the courses can be obtained at www. dmg-home.org/aktuelles/doktorandenkurse.

K5 **Basics and Applications of the Rietveld Method**, Max Planck Institute for Solid State Research, Stuttgart, Robert E. Dinnebier, **potsponed until 2020!** (www.fkf.mpg.de/xray).

K6 Radiogenic and Non-Traditional Isotopes: Analytical Methods and Applications, Institute for Geosciences, Geozentrum, Goethe University, Frankfurt, Dr. Axel Gerdes, **postponed until** 2020! (gerdes@em.uni-frankfurt.de).

K7 In situ Analysis of Isotopes and Trace Elements by Femtosecond Laser Ablation ICP-MS (In situ-Analyse von Isotopen und Spurenelementen mit (MC-) ICP-MS gekoppelt mit Femtosekunden-Laserablation), Institute for Mineralogy, Leibniz University, Hannover, Dr. Ingo Horn, Dr. Stephan Schuth, Dr. Marina Lazarov, Dr. Martin Oeser, Prof. Stefan Weyer, 7–11 October 2019 (s.weyer@mineralogie. uni-hannover.de).

K8 **Introduction to Secondary Ion Mass Spectrometry in the Earth Sciences**, Helmholtz Centre Potsdam, GFZ German Research Centre for Geosciences, Dr. Michael Wiedenbeck, 18–22 November 2019 (michael.wiedenbeck@gfz-potsdam.de).

SHORT COURSE REPORTS

Crystal Structure Refinement using JANA2006 Software 11–13 March 2019 • Friedrich Schiller University, Jena (Germany)



Participants of JANA2006 in Jena 2019. PHOTO: A. PLUMHOFF

This three-day short course provided an introduction to the crystallographic software JANA2006, which is used for the refinement of powder and single-crystal data as measured with X-ray or neutron diffraction methods as well as for determining modulated structures that can have up to three modulation vectors.

JANA2006 is a free software (cf. jana.fzu.cz) developed by Václav Petříček and coworkers at the Czech Academy of Sciences, Prague (Czech Republic). Twenty-one participants from four European countries came to Jena to be trained by "Jana experts" Michal Dusek, Jakub Plášil, and Jan Rohlíček (all Prague). The excellent organization by Juraj Majzlan and Alexandra Plumhoff (both from the Friedrich-Schiller-University, Jena, Institute of Geosciences, General and Applied Mineralogy) is highly appreciated.

Exploration Geology

18–21 March 2019 • Albert Ludwigs University, Freiburg (Germany)



Participants of the Exploration Geology course. PHOTO: L. FISCHER

This short course on exploration geology was organized by the Mineralogy and Petrology group at the University of Freiburg (Germany) and was attended by 30 participants from 21 institutes and 11 countries. The short course offered both a theoretical background and some practical training in exploration geology, in whole-rock and alteration geochemistry, and in ore interpretation. Practical training included ore microscopy and geochemical data processing, with a special focus on the visualization and modelling software ioGAS (see https://reflexnow. com/iogas/) and GCDkit (see http://www.gcdkit.org/). Case studies from exploration projects in Scandinavia and Greenland illustrated the need to apply diverse geological and geochemical tools. A poster session gave participants the opportunity to present and discuss their own projects. The short course was concluded by a one-day field trip to the ore deposits of the Black Forest and Kaiserstuhl (Germany).

The exploration geology course instructors were Prof. David Dolejš and Dr. Malte Junge (University of Freiburg), Dr. Kateřina Schlöglová (University of Freiburg/KDS GeoConsult), and Dr. Denis Schlatter (Helvetica Exploration Services GmbH, Switzerland). This course has been endorsed by the European Federation of Geologists (EFG) as a part of their Continued Development Program. We appreciate partial support of the course by the DMG.

More information about the course can be found at http://www. minpetro.uni-freiburg.de/expgeo.

Malte Junge and Kateřina Schlöglová (Freiburg)