DMG Deutsche Mineralogische Gesellschaft
German Mineralogical Society
www.dmg-home.de

THE GEOLOGY OF ORE DEPOSITS – A "GOOD" MEETING

Participants of the 1st GOOD meeting.

The first "Geology Of Ore Deposits" workshop (the "GOOD Meeting") took place 15–17 March 2016 at the Technische Universität Bergakademie Freiberg (TUBF) (Germany). The organisation of this meeting has roots in a discussion in 2015 by the economic geology interest group (Arbeitskreis Rohstoffforschung) of the German Mineralogical Society (DMG) as one way to revitalize research and communication among young researchers. The aim of the GOOD Meeting is to provide a platform by which postgraduate students can present their current research results, and for peers, industry professionals and senior academics to provide a suitable sounding board.

This first GOOD Meeting was entirely organised by a small group of young academics – and with some financial support by DMG and Springer Verlag – and I am happy to say it was a resounding success. It brought together more than 40 registered participants from several universities and research institutions from Germany and Austria. The meeting started with an icebreaker that was hosted in the magnificent ore minerals collection room of the TUBF's Department of Mineralogy, and provided a convenient environment to initiate interaction among the participants. During the next 1.5 days, almost 30 contributions were given, all by young researchers, on a wide range of deposit types and ore-forming environments. These provided ample food for thought and detailed discussion. The meeting was further enriched by two distinguished keynote addresses by Dr. Uta Alisch (Fugro Consult GmbH) and Prof. Hartwig Frimmel (University of Würzburg, Germany). The program was aptly concluded by an optional visit of the university-owned underground mine "Reiche Zeche".

Following its successful launch in Freiberg, the GOOD Meetings will become an annual event that will be hosted by different universities across the German-speaking region. It should be an event that not only attracts young researchers but also should attract an enthusiastic group of industry professionals who might be keen to catch up with relevant developments in the field of ore-deposit research. In 2017, students of the Leibniz University of Hannover (Germany) will organize the 2nd GOOD Meeting, supported by young academics from the Bundesanstalt für Geowissenschaften und Rohstoffe (BGR). Further information will be available at www.dmg-home.org/dmg-home/sektionen-arbeitskreise-kommissionen-und-projektgruppen/ak-rohstoffforschung/aktuelles/.

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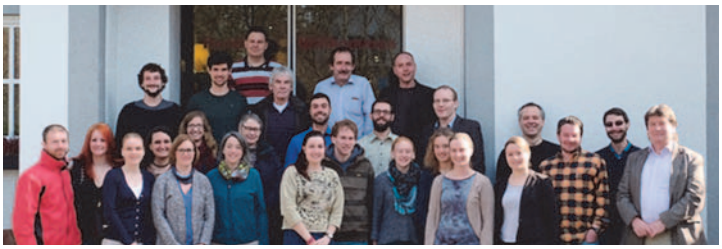
WORKSHOP REPORT

CPKM/AMiTU Workshop 2016



Participants of CPKM/AMiTU 2016 in front of the "Hotel am Kurpark," Bad Windsheim, Bavaria.

The now traditional joint meeting between the DMG sections of Chemistry, Physics and Crystallography in Mineralogy (CPKM) and Applied Mineralogy in Technique and Environment (AMiTU) took place 24–26 February 2016 in Bad Windsheim, a small town in Northern Bavaria.

The meeting was well organized and supervised by Christoph Berthold (Eberhard Karls University, Tübingen) and Stefan Stöber (Martin Luther University, Halle-Wittenberg). In total 28 people attended the workshop and had very fruitful discussions; 21 talks were given by PhD students and more senior scientists.

After the invited talk by Almuth Sax (University Koblenz-Landau, Germany) about refractory materials, the group moved to the traditional icebreaker party, i.e. cooking a three course meal for all participants and chatting about research in a relaxed environment.

Over the next two days, many "applied" mineralogical topics were discussed, including filter ash products, zirconium oxide as an anticorrosive coating, nanotubes, and silver coatings. Pure mineralogy was also discussed: the chemical characterization of tourmalines, the incorporation of fluorine into wavellite, and the elasticity of wadsleyite at high pressures. Other topics included meteorites, opal (which had been found in some old bottles), and bioinspired fluid transport in trees as a new model system for manufacturing anisotropic porous structures. All in all, the meeting was a great success. We all look forward to the next exciting meeting in February 2017.

Melanie Kaliwoda (München)

DMG SHORT COURSES 2016

The DMG has four short courses, all based in Germany, that will run during the fall (Autumn) of 2016, and are these are now open for enrollment. These courses are aimed primarily at advanced-level undergraduate and graduate students but are always open to more senior researchers as well. Non-local student members of DMG are eligible for travel support to the amount of €50. Further information about these courses can be found at www.dmg-home.org/aktuelles/doktorandenkurse.

In situ Analysis of Isotopes and Trace Elements by Laser Ablation ICP-MS, Institute for Mineralogy, Leibniz University, Hannover, 10–14 October 2016. Contact Stefan Keyssner at s.weyer@mineralogie.uni-hannover.de

Introduction to Secondary Ion Mass Spectrometry in the Earth Sciences, Helmholtz-Centre Potsdam – GFZ German Research Centre for Geosciences, October/November 2016; dates to be announced for this 5-day course. Contact Michael Wiedenbeck at michael.wiedenbeck@gfz-potsdam.de

SEM-based Automated Mineralogy, Helmholtz-Zentrum Dresden-Rossendorf, 17–21 October 2016. Contact Axel Renno at a.renno@hzdr.de

Application of Ion Beam Analysis in Mineralogy and Geochemistry, Helmholtz-Zentrum Dresden-Rossendorf, 21–25 November 2016. Contact Axel Renno at a.renno@hzdr.de

OBITUARY

Prof. Dr. Theo Hahn 1928–2016

Theo Hahn
(Photo: IfK, RWTH Aachen)

On 12 February 2016, Prof. em. Theo Hahn of the Institute of Crystallography at the Rheinisch-Westfälische Technische Hochschule (RWTH) Aachen (Germany) passed away only six weeks after his 88th birthday.

Theo Hahn started studying mineralogy, crystallography, physics, chemistry and mathematics at the Universities of Marburg/Lahn and Frankfurt/Main in 1946, obtaining his PhD in 1952 under Herbert O'Daniel in Frankfurt. He then spent the years 1953–1956 as a postdoctoral fellow in the USA at the highly respected Massachusetts Institute of Technology (MIT) with Martin J. Buerger. After accepting an offer to return to Frankfurt in 1956, Theo Hahn became one of the crystallographic pioneers in Germany, using computers for crystal structure determination on a large scale. In 1960, Theo Hahn obtained his "Venia Legendi" in the areas mineralogy and crystallography. In 1963, he accepted the position of Full Professor of Crystallography at RWTH Aachen University, became Chair of the newly founded Institut für Kristallographie, and stayed as head of the institute until 1993, when he became Professor Emeritus.

His dedication to teaching covered a broad range of topics, and did not end with his retirement. For many years, he continued his lectures on "Advanced Crystallography: Symmetry of Molecules and Crystals."

Theo Hahn's special scientific interests were theoretical crystallography and symmetry, the crystal chemistry and crystal physics of oxide phases, as well as phase transitions and twinning phenomena. He was editor of and author for the *International Tables for Crystallography, Vol. A* in 1972–2009, and Chair of the International Tables Commission of the International Union of Crystallography during 1972–1983 and 1993–2003.

As an outstanding academic teacher and scientist, he enjoyed great national and international recognition. Theo Hahn was Chair of the German Mineralogical Society (DMG) 1982–1984 and President of the International Union of Crystallography (IUCr) 1984–1987. He was awarded the Abraham Gottlob Werner Medal of the German Mineralogical Society in 1997 and the Carl Hermann Medal of the German Crystallographic Association (DGK) in 2001, of which he had been an Honorary Member since 1997.

In 2014, a revised and extended version of the review article "Twinning of crystals" was written by Theo Hahn and Helmut Klapper and was published in the *International Tables for Crystallography, Vol. D: Physical Properties of Crystals*. For the United Nations' International Year of Crystallography, Theo Hahn gave a talk at the Goethe University Frankfurt/Main in June 2014 entitled "2500 Years of Symmetry in Arts, Music, and Crystals." We mourn the passing of an inspiring scientist and teacher, and a wonderful person.

All active and former members of the Institute of Crystallography (RWTH Aachen)

SHORT COURSE REPORT

High-Pressure Experimental Techniques and Applications to the Earth's Interior – Impressions

This year, 27 participants from all over the world (e.g. China, Brazil, Italy, Austria, France, Germany) came to Bayreuth (Germany) to attend the short course High-Pressure Experimental Techniques and Applications to the Earth's Interior, which was held 22–26 February 2016 at the Bayerisches Geoinstitut / University of Bayreuth. It was sponsored by the Deutsche Mineralogische Gesellschaft (DMG), the German Research Foundation Priority Program "First 10 Million Years of the Solar System" (DFG SPP 1385), and the Bayerisches Geoinstitut (BGI). The well-organized timetable was packed with lectures in the morning, followed by hands-on training in the laboratories in the afternoon. This allowed the many PhD, MSc and BSc students to receive a vast overview in the state-of-the-art of the experimental high-pressure techniques available at BGI.

The five-day workshop covered topics that are typically adjusted to the research fields of the participants, but also went way beyond. The lectures started with a general scientific background of the mineralogy, geochemistry, and geophysics of the Earth's interior, followed by a theoretical description of high-pressure and high-temperature techniques and their applications to specific research questions. These techniques included high-pressure apparatus, such as the multi-anvil presses (up to 25 GPa, 3,000 K), piston-cylinder presses, diamond anvil cells (up to 100 GPa) for in situ determination of a mineral's properties using X-ray diffraction or Raman spectroscopy, but also scanning and transmission electron microscopy (TEM) for the structural and chemical analysis ex situ. Moreover, computational methods, thermodynamic concepts and the theory and application of equations of state were covered in the lectures. Since the development of many techniques (e.g. multi-anvil press, piston cylinder apparatus, diamond anvil cells, and rock deformation) have been substantially enhanced in Bayreuth, it was delightful to go into the many details of these techniques during the afternoon's practical courses. Real-time experiments were performed using the diamond anvil cells and the multi-anvil or piston cylinder presses in the highly advanced rock deformation laboratories. Samples were analyzed post-experiment using TEM, electron backscatter diffraction, spectroscopic methods and laser ablation inductively-coupled mass spectrometry.

After the successful experiments in the lab, the group was led to the "interior" of Bayreuth, namely the catacombs, which were used by Bavarian breweries to store their beers for many decades, but was also used as a bomb shelter for citizens during WWII. After the tour, the social dinner took place in a typical Franconian restaurant with representative Franconian dishes.

This short course was not only an excellent opportunity to meet young scientists from many countries and establish contacts with the lecturers but also to learn a lot from the expertise of Bayreuth. On behalf of the participants, we would like to thank everyone who very enthusiastically shared their knowledge and the great organization team who has made this course on high-pressure mineralogy such a success.

Xenia Ritter, Dominik Loroch (Münster)