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## FROM THE PRESIDENT



François Holtz

The preparations for the GeoBerlin meeting, to be held 4–7 October 2015, are heating up. More than 600 abstracts have been submitted and will be arranged into 9 parallel sessions ([www.geoberlin2015.de/programme.html](http://www.geoberlin2015.de/programme.html)). The meeting is jointly organized by the German Geological Society (DGGV) and the German Mineralogical Society (DMG). Most of the submitted abstracts are from members of the two societies, but there are also a high number of international contributions. Four plenary lecturers will introduce the main focus of the meeting, which is “Dynamic Earth.”

I invite all DMG members to participate in the annual business meeting on 5 October. There will be at least four important topics, including a necessary revision of our bylaws. The DMG board will also propose some honorary members, which has to be approved by at least 4/5 of the members present. I will report on the objectives of the new amalgamated geological society DV-Geo (an association of geologists, geophysicists, mineralogists and palaeontologists). Finally, we will prepare the nominations for the 2016 elections. The board has prepared a list of persons who are willing to take responsibilities, but we are still open for nomination of other candidates. The full list of candidates was published in the GMIT ([www.gmit-online.de](http://www.gmit-online.de)) of June 2015.

The GeoBerlin meeting will offer an opportunity to attend the talk given by Oliver Nebel (Australian National University, Canberra; now at Monash University), who received the Victor Moritz Goldschmidt award in 2014, and to congratulate the new 2015 suite of DMG medalists: Albrecht Hoffman (former director of the Max Planck Institute for Chemistry, Mainz), who receives the Abraham Gottlob Werner medal; and Eva Stüeken (University of Washington), who receives the Victor Moritz Goldschmidt award. Eleanor Berryman (Technische Universität Berlin) received the Paul Ramdohr prize in 2014 and will also be on the podium of the DMG medalists.

Most of the members of the board will be at GeoBerlin for the entire meeting. Don't hesitate to contact me or another member of the board for any question relevant to DMG. Our role is to serve the interests of DMG members, and we are keen to hear your suggestions or concerns. As usual, the society will be continuously present at the DMG booth, which will be under the kind and efficient supervision of Heidi Höfer and Klaus-Dieter Grevel. And, new student members can benefit from reductions for the meeting fees. See you in Berlin!

**François Holtz** (DMG President)

## HIGH-PRESSURE EXPERIMENTAL TECHNIQUES AND APPLICATIONS TO THE EARTH'S INTERIOR (Short Course Report)

The short course “High-Pressure Experimental Techniques and Applications to the Earth's Interior” took place 23–27 February 2015, in Bayreuth (Germany). The course was organized by the Bayerisches Geoinstitut/University of Bayreuth and 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).

Each morning, 29 Masters and PhD students from all over the world attended interesting, and even humorous, lectures on what we currently know about the Earth's internal structure and composition. This included information on cutting-edge high-pressure–high-temperature experimental techniques. Afternoon classes comprised hands-on



**FIGURE CAPTION:** Participants at the 2015 high-pressure short course in Bayreuth.

practical demonstrations on how to use the various experimental and analytical (in situ or ex situ) techniques of the BGI. Among the practical demonstrations was the piston cylinder and multi-anvil press, where the participants were delighted that samples sizes of up to 1 mm can now be studied, as well as the possibility of reaching up to 25 GPa (equal to the Transition Zone between the upper and lower mantle). Pressures up to 100 GPa (equal to the lower mantle) can be achieved by the diamond anvil cell, but only for samples of ~250  $\mu\text{m}$ . However, this is no problem: today's spectrometers, mass-spectrometers and electron microscopes allow scientists to analyze small sample sizes and concentrations barely dreamt of several decades ago. Analytical techniques that were demonstrated in the short course included infrared, optical and Mössbauer spectroscopies, plus X-ray diffraction, laser ablation inductively coupled plasma mass spectrometry and scanning and transmission electron microscopy.

Attendees also saw the rock deformation laboratory, with its 6-ram multi-anvil press that can reproduce strain rates from  $10^{-4}$  to  $10^{-6} \text{ s}^{-1}$  (in nature this value is from  $10^{-11}$  to  $10^{-15} \text{ s}^{-1}$ ). Laboratory experiments approximate the rheology and appropriate flow laws under pre-determined  $P/T$  conditions, phase stability and grain growth. Over all, the new technologies invented at the BGI (the newest design of sample holder for the diamond anvil cell) and the rare instruments such as the 5000 ton multi-anvil press also amazed the participants and made some of us feel like we had just jumped into the latest sci-fi movie.

An appropriate social event for scientists trying to understand the Earth's interior was a “field trip” to the deep underworld of Bayreuth's catacombs. This visit was followed by a typical Frankonian buffet dinner, with Haxe (hock; meat from an animal's lower leg), Rinderroulade (roll of beef), and the local beer with its 150 years of brewing tradition.

On behalf of the participants, I would like to thank the BGI, the DMG, the DFG, and all the lecturers and demonstrators for sharing their knowledge with our generation of young scientists. The five days were a very nice opportunity not only to establish contacts between the participants but also between students and lecturers. What remains for us now is to go back to our own labs, apply the new experiences, and...

- start to pressure up!
- den Druck zu erhöhen!
- aumentar a pressão!
- faisons monter la pression!
- iniziamo ad aumentare la pressione!
- πάμε να ανεβάσουμε την πίεση!
- давайте начнем компрессию!
- Bo nale et hlachats!
- 让我们开始增加压力(Ràng wǒmen kāishǐ zēngjiā yālì)!
- 加压を始めよう!
- πάμε να ανεβάσουμε την πίεση!

This 5-day course is offered annually, and the next will take place in February 2016. More information is available at [www.dmg-home.de/kursprogramm.html](http://www.dmg-home.de/kursprogramm.html) and <http://www.bgi.uni-bayreuth.de/>.

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