

FROM THE PRESIDENT



Dear members and friends,

Serving as the chairman of the DMG was a very rewarding experience, in particular because the society is carried by so many shoulders. A crowd of close to 50 individuals of all career stages, different demographic groups, subdisciplines within mineralogy and from all over Germany or even located elsewhere, fulfill their chosen responsibilities and carry the DMG. There is a certain formal hierarchy with a chairman, an executive committee and so forth, but in reality, all of the important decisions are discussed with the advisory board and taken to the members for discussion and voting. This democratic culture within the DMG, where all voices are heard, makes serving the society feel like being a member of a large family. I, therefore, want to thank all the people who make the DMG the great society that it is today and take this opportunity to encourage you, the DMG member, to volunteer for one of the many small or slightly bigger roles within our society. In particular, our student group, the YoungMins, is constantly recruiting new members and happy to welcome you with your dreams and ideas.

My two years of service as the DMG chairman were carried by the unwavering support by the highly experienced Klaus-Dieter Grevel and Gerhard Franz, who have been serving the DMG for so many years (and still are) in various positions including treasurer, secretary, DMG representatives to the EMU (European Mineralogical Union) and BDG (professional association of German geoscientists), editors for *GMIT* and *Elements* and on the managing committee of the *EJM (European Journal of Mineralogy)*, just to name a few. They always had the answers ready to each and every question on the financial or procedural operations of the society and elegantly helped me cover up my own ignorance in board meetings and the Annual General Meetings that we held in Vienna and Dublin. Importantly, we diversified the inner circle a little bit by including PhD student Ina Alt onto the DMG executive board through the last general election, and we hope to keep her for many years to come. I took over the wheel in 2023 from Friedhelm von Blanckenburg, who stayed on throughout that year as the vice-chairman and lent the best support you could wish for. In 2024, newly elected vice-chairman Frank Schilling joined the team and will take over from me in January 2025 as the new chairman. Frank is a down-to-earth person, who is always genuinely curious to learn about the different opinions that might be present in a room; he listens and talks to all humans in the same way, and he presents his views as opinions and possibilities rather than absolute certainties. I am, thus, convinced that he will carry forward the democratic tradition of the DMG and will be a great pleasure to work with. I will support the team for another 12 months as vice-chairman and then step aside to make room for you. Do get involved!

Yours sincerely,

Horst Marschall

ANNUAL DMG MEETING 2025



Geo4Göttingen 2025
GEO4CHANGE
Earth, Life, Climate, Resources, Materials
SAVE THE DATE: 14. - 18. September 2025
Georg-August-Universität Göttingen | www.geo4goettingen2025.de

DGGV Deutsche Gesellschaft für Geochemie und Geochemische Mineralogie
DGGM Deutsche Gesellschaft für Geochemie
DMG Deutsche Mineralogische Gesellschaft
Paläontologische Gesellschaft
Georg-August-Universität Göttingen
Fakultät für Geowissenschaften und Geographie
DVGEO

OPEN DMG WORKSHOP IN CRYSTALLOGRAPHY AND APPLIED MINERALOGY

Save the Date! In spring 2025, the two sections “Applied Mineralogy” and “Crystallography” will organise their joint workshop, which will take place on **26–28 March 2025** in **Bad Windsheim** between Nuremberg and Würzburg.

“Applied Mineralogy” and “Crystallography” cover a broad spectrum of innovative issues. We hereby call for contributions from participants in the form of presentations. The active participation of young scientists is expressly desired. Current scientific developments within the framework of our sections should be presented through contributions from ongoing or recently completed projects, as well as bachelor’s, master’s, and doctoral theses. The workshop, which will be held in English for the first time, should be seen as a platform where ideas and work that are not yet fully developed can also be presented.

We ask for registrations of contributions from all areas of applied mineralogy and crystallography by email by **10 January 2025**. The presentation time for normal contributions should not exceed 20 minutes including discussion. Short contributions are also welcome, which can pose pointed questions/problems from current work to the auditorium in a question and answer session. Participation in the workshop is also possible without registering a contribution.

Coffee breaks and meals during the workshop will allow social exchange on current developments. The workshop will be as informal as possible, leaving plenty of time for discussion.

Some organizational details:

Venue & Accommodation: Hotel Am Kurpark – Familie Späth, Oberntiefer Straße 40, 91428 Bad Windsheim

Costs for the workshop (including two overnight stays with breakfast, as well as a coffee break and dinner on Wednesday, full board on Thursday, lunch on Friday, coffee breaks incl. pastries/cake during the workshop

and conference drinks in the seminar room): Overnight stay in a **single room €342.80** (incl. VAT). Overnight stay in a **double room €284.70** (incl. VAT). **The hotel will be paid by each participant directly at the hotel.**

Members of the DMG and those who become members who are bachelors, masters, or doctoral students receive a subsidy of 100€.

Please state the title and authors and enclose a short description (about 5 lines) of the study presented. Furthermore, please indicate whether it is a thesis, a normal presentation (20 min incl. discussion), or a short presentation for the “Question Time” with approx. 10 min incl. discussion. We look forward to a lively participation and a successful workshop! Please register for the workshop before **10 January 2025: weidenthaler@mpi-muelheim.mpg.de**

**Michael Fischer, Daniel Vollprecht,
Claudia Weidenthaler, Uta Helbig**

DMG SHORT COURSE AT RUHR UNIVERSITY BOCHUM – REPORT

21st DMG Short Course “Solid-state NMR Spectroscopy,” 21–24 May 2024

This year, the short course “Anwendungen der Festkörper NMR Spektroskopie in der mineralogischen und geowissenschaftlichen Forschung” offered by the DMG and DGK took place again from May 21st to 24th, now for the 21st time (although only for two students). The course was conducted under the direction of Dr. Michael Fechtelkord at the Ruhr-University Bochum and offered participants from various disciplines the opportunity to receive an introduction to the basics of NMR spectroscopy, as well as to learn about its diverse applications. In the morning of each course day, theoretical basics were discussed. This was followed by the practical section, in which samples were prepared and measurements were carried out on the device. In the afternoon, the measurements were evaluated.

On the first day, there was a theoretical introduction to NMR spectroscopy. Its strengths and weaknesses, its areas of application, the physical principles, and how it works were discussed, as well as the device structure and historical development. Knowledge of ¹H spin-lattice relaxation was then imparted, which was illustrated using measurements (using the Topspin program) of tetramethylammonium iodide. The dependence of the recorded spectra on the measurement temperature was also shown. The activation energies and correlation times for the signals could be determined when evaluating them on paper. The day ended with a relaxed atmosphere with food and drinks in the “Filou” pub on Buscheyplatz.

The second day dealt with the interactions of magnetic dipolar coupling and chemical shift. The magic angle spinning (MAS) method was also presented, which makes it possible to remove anisotropy effects. This technique was used to measure ²⁹Si, ¹⁹F, and ¹H spectra of synthetic phlogopite. After an introduction to the DmFit2021 program using a few exercises, namely, simple Lorentz and Gaussian line shapes, integration of sidebands and the adaptation of line shapes with anisotropy of the chemical shift, the recorded MAS NMR spectra were evaluated with this software.

The third day of the short course focused on the possible applications of multi-pulse techniques with the Hahn echo and the basics of the cross-polarization experiment (CP). The practical part included a contact time-dependent CP/MAS experiment on kaolinite, in which the atomic distances between Si and H nuclei were determined using an Excel spreadsheet.



Florian Rafalski, Martina Paetsch, and Michael Fechtelkord in front of the Bochum NMR spectrometer. PHOTO: H.-P. SCHERTL.

During the previous days, samples with a nuclear spin of $I = \frac{1}{2}$ were examined, but on the last day, the focus was on quadrupole nuclei (spin quantum number $I > 0.5$). In the theoretical part, various NMR methods such as “double rotation” (DOR), “multi-quantum magic angle spinning” (MQMAS), and “satellite transition spectroscopy” (SATRAS) were presented. In practice, the quadrupole coupling constants of ²³Na in Glauber’s salt and ²⁷Al in corundum were investigated using MAS and SATRAS techniques, and the spectra were then evaluated.

The four days of the course were certainly not enough to fully cover the entire range of NMR solid-state spectroscopy, but thanks to comprehensive explanations, we were able to develop a good idea of what information the method can provide about a material, which will help us to better assess potential applications for future projects. We would therefore like to thank Dr. Michael Fechtelkord for the successful short course and the knowledge we gained.

Martina Paetsch (MPI Stuttgart) and **Florian Rafalski** (FAU Erlangen-Nuremberg)

DMG SHORT COURSES 2025

As before, DMG will support several short courses in 2025. All courses will be aimed primarily at advanced-level undergraduate and graduate students but, as always, are open to more senior researchers as well. Nonlocal student members of DMG will be eligible for travel support to the amount of €100. Further information can be found at www.dmg-home.org/aktuelles/doktorandenkurse/.

(1-25) **High-Pressure Experimental Techniques and Applications to the Earth’s Interior**, Bayerisches Geoinstitut/University Bayreuth, Florian Heidelberg, 17–21 Feb. 2025 (florian.heidelberg@uni-bayreuth.de, www.bgi.uni-bayreuth.de/ShortCourse2025)

(2-25) **FIERCE Isotope Short Course 2025**, FIERCE – the Frankfurt Isotope and Element Research Center, Institute for Geosciences, Goethe University Frankfurt, 11–14 March 2025 (www.fierce.uni-frankfurt.de/FIERCE_Isotope_Short_Course)

(3-25) **Introduction to Secondary Ion Mass Spectrometry in the Earth Sciences**, Helmholtz-Centre Potsdam – GFZ-Deutsches Geoforschungszentrum, Michael Wiedenbeck, TBA spring 2025

(4-25) **Short course in SEM-based automated Mineralogy – Fundamentals and Applications in Geoscience**, TU-Bergakademie Freiberg, 25–27 Feb. 2025 (<https://tinyurl.com/rdt28eem>)

(5-25) **Early Earth Evolution**, Geozentrum, Georg-August-Universität Göttingen, Thomas Müller, 25–28 March 2025 (thomas.mueller@geo.uni-goettingen.de, www.uni-goettingen.de/en/633334.html)

(6-25) **Metal stable isotopes as fingerprints in the Earth and the environment**, GFZ Potsdam and FU Berlin, Fachbereich Geowissenschaften, Friedhelm von Blanckenburg, Patrick Frings, 31 March–5 April 2025 (patrick.frings@gfz-potsdam.de, f.v.b@fu-berlin.de)

(7-25) **Solid State NMR-Spectroscopy**, Institut für Geologie, Mineralogie und Geophysik, Ruhr-Universität Bochum, Michael Fechtelkord, 10–13 June 2025 (michael.fechteltkord@rub.de, www.ruhr-uni-bochum.de/dgk-ak12/workshops/dmgshortcourse)