

PERALK-CARB WORKSHOP 2011

The international PERALK-CARB 2011 workshop on peralkaline igneous rocks and carbonatites took place on June 16–18, at the Institute of Geosciences at Tübingen University. For everyone working in this field, the PERALK-CARB workshop, initiated by Gregor Markl (Tübingen) and Anatoly Zaitsev (St. Petersburg), was a highlight in this year's conference program. Given the list of invited speakers, from Canada, Australia, and various European countries, it was no surprise that the community responded in style and filled the institute in Tübingen to its limits. Unlike the PERALK meeting of 2005, when the focus was on peralkaline rocks alone, this meeting was broadened by including carbonatites, with a special session dedicated to carbonatitic and associated silicic volcanism in the Gregory Rift. The participation of several representatives of exploration companies from Namibia, Canada, and southern Germany underlined the fact that the genesis of peralkaline and carbonatitic rocks is highly relevant to the mineral exploration industry.

The PERALK-CARB 2011 workshop started on Thursday with an ice-breaker party in an Ethiopian restaurant. The scientific program began the next day with a warm welcome by Gregor Markl, head of the petrology group in Tübingen. The concept of a single oral session and a single poster/coffee location ensured that all participants had opportunities to discuss the more than 60 presentations in a relaxed and friendly atmosphere. The first scientific session on Friday morning dealt with melt generation and magma sources for kimberlites and carbonatites. In the afternoon, the focus of the talks was on the magmatic and postmagmatic evolution of peralkaline rocks. Aspects covered included the roles of water, halogens, and oxygen fugacity in peralkaline melts; stable isotopes in amphiboles; hydrocarbons as tracers for melt and fluid evolution; and experimental studies on phase equilibria and the behavior of metals in peralkaline melts. At the poster session, participants perused the more than 35 posters on the mineralogical and geochemical peculiarities of peralkaline and carbonatitic rocks from around the world.

On the following day, the morning session was dedicated to the Gregory Rift. At this session, the unique natrocarbonatite volcanism of Oldoinyo Lengai and its relationship to associated silicate volcanic rocks was a key theme. The general consensus was that the natrocarbonatite lavas formed by liquid immiscibility from a carbonated silicate parent magma. Even though the spectacular landscape of natrocarbonatite activity was destroyed by explosive eruptions in 2007, recent photographs point towards renewed carbonatite activity in the crater. The afternoon session on carbonatites included experimental studies on liquid immiscibility, computer models, mineral chemistry investigations, structural aspects of metamorphosed carbonatites, and the physical volcanology of carbonatite eruptions. Later, the numerous helpers from Tübingen's petrology group held a barbecue in front of the institute, so that the lively discussions could continue uninterrupted. Even some minor rain showers did not disturb the good mood of the participants.

Without doubt, the PERALK-CARB 2011 workshop was a great success, as evidenced by the participants' enthusiasm on all questions related to peralkaline rocks and carbonatites. Thanks go to Gregor Markl and Anatoly Zaitsev, who, with financial support from the Alexander-von-Humboldt Society, initiated this workshop as part of a partnership between the institutes in Tübingen and St. Petersburg. In particular, Michael Marks is thanked for the perfect organization of the workshop; he and his helpers ensured that everything went smoothly and according to plan. That said, the community assembled in Tübingen is hopeful that a repetition of the PERALK-CARB workshop will be possible in the future!

Ralf Halama, Kiel



Participants of the DMG petrology section meeting. PHOTO: KATHI FAACK

DMG PETROLOGY SECTION MEETING

This year's meeting of the Petrology Section of the DMG was held on July 1–2 at the Ruhr-University in Bochum. Scientists and students from Germany and beyond convened for a scientific program divided into four blocks, each with four to five talks. The talks in the first session focused on field-based petrology and metamorphic reactions. The following blocks dealt with experimental petrology, including processes in the upper oceanic crust, reactions deep in the mantle, the formation of minerals and rocks, the partitioning of elements between minerals and melts, and alteration phenomena. The meeting was also used to present and discuss some new tools and experimental setups, for example, an in situ sampling device for low-pressure and high-temperature experiments and the use of boron nitride as a possible container material. An afternoon poster session allowed young scientists to present their work. After the talks, a guided tour of the laboratories gave participants a closer look at the implementation and sputter facilities at Ruhr-University Bochum. The meeting ended with the traditional Saturday evening BBQ. We thank the organizers for putting on a perfect meeting and we especially thank the backstage helpers. The next meeting will be hosted by the Institute of Mineralogy at the University Münster.

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DMG PhD COURSE: XAFS SPECTROSCOPY

X-ray absorption fine structure (XAFS) provides information on the valence and the local atomic structure of selected elements. XAFS spectroscopy requires synchrotron radiation and therefore the course X-ray Absorption Fine Structure (XAFS) Spectroscopy: Theory, Measurement, Data Evaluation took place at the electron accelerator ANKA of the Karlsruhe Institute of Technology (KIT). On 23–25 November 2010, fifteen students, mainly PhDs and postdocs, participated in this course, held in English. The first day started with an introduction to the generation and properties of synchrotron radiation and to the theory of X-ray near edge structure (XANES) and extended X-ray absorption fine structure (EXAFS) spectroscopy. A tour through ANKA gave participants an overview of the beamlines and their techniques and applications. In the exercises held afterwards, participants measured samples at the three ANKA XAFS beamlines. The day closed with discussions during dinner in a nearby restaurant.

The second day focused on data evaluation. Using different examples and the measurements from the previous day, participants became familiar with processing raw data and evaluating data on individual computers. The third day was reserved for independent data processing and helping participants with their questions. Thanks for insights into the XAFS technique go to the organizer, Joerg Goettlicher, and to the lecturers and supervisors, David Batchelor, Kathy Dardenne, Stefan Mangold, Joerg Rothe, Ralph Steiniger, and Tonya Vitova, from the KIT Institute for Synchrotron Radiation and Institute of Nuclear Waste Disposal.

Financial support from the German Mineralogical Society and KIT enabled this course to be held. The next course takes place at the end of November, 2011, and is announced at www.dmg-home.de/kursprogramm.html and <http://anka.iss.kit.edu/english/622.php>.

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