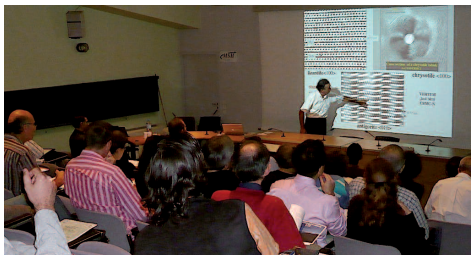
SERPENTINE WORKSHOP, GRENOBLE, FRANCE

The Société Française de Minéralogie et de Cristallographie held a very unique workshop on serpentines in Grenoble on October 10–12, 2007. Organized by Anne-Marie Boullier and Stéphane Guillot, the meeting was supported by the Observatory of Sciences of the Universe (OSUG) of the Joseph Fourier University and the CNRS. It gathered about 45 participants from France, Italy, Switzerland, and Germany.

The two-day scientific program started with a lecture by Annick Loiseau (Aerospace Laboratory ONERA) on the structure and properties of carbon nanotubes and on serpentines showing similarities with such compounds. A series of lectures dealing with remarkable aspects of mineralogical and high-resolution crystallographic investigations provided new insights into the structure of serpentine minerals, particularly the new variety of polyhedral "onion" serpentine.

Françoise Boudier (Université Montpellier) showing a colorful olivine in antigorite schist from Moses Rock kimberlite (Colorado Plateau)

Serpentine rheology and dehydration behavior were discussed for high- to ultrahigh pressure metamorphic conditions and for subduction zone conditions, with examples from recent mountain ranges (Himalayas, Alps) and the Caribbean. Several contributions concerned specific serpentine types found in low-grade conditions and faults in ophiolite suites (e.g. Western Alps, Apennines, Greece). The presentations covered various topics related to serpentization and subduction zone processes: geochemistry, microstructures, large-scale



Alain Baronnet (CRMCN, Marseille) showing beautiful HRTEM images of serpentines

models and others. In addition, lectures were given on the geophysical, petrological, geochemical and isotopic features of serpentinization in oceanic peridotites, with wonderful examples from sites on the Mid-Atlantic Ridge that were investigated during the recent oceanographic cruises ODP-Leg 209, Serpentine and MoMardream. The session ended with talks on experiments and modeling studies related to the current problem of CO_2 budget

Participants at the University of Grenoble meeting place, with A.M. Boullier (front, fifth from right) and Stéphane Guillot (front, sixth from right)

and with a consideration of environmental implications. All contributions offered opportunities for exciting discussions about the dynamic processes, fluids paths and fluxes, and mass transfer involved in serpentine formation and evolution. But the debate was not yet over.

On the third day, a beautiful sunny day, Stéphane Guillot took the group to the impressive 496 Ma Chamrousse ophiolite. Lying on a metamorphic sole, the ophiolite complex displays Fe–Ti-gabbros, plagiogranites, amphibolites, basaltic sills, mylonitic gabbros, serpentinites, and a chromite pod. It was a spectacular spot for more stimulating discussions.

More information and photographs are available at http://www-lgit.obs.ujf-grenoble.fr/Production_scientifique/colloques/serp07/serpentines2007.html.

Related websites: (1) http://www.ifremer.fr/serpentine/, (2) http://interridge.org/node/225

Anne Marie Karpoff

14th MEETING OF THE PETROLOGY GROUP OF THE MINERALOGICAL SOCIETY OF POLAND

The 14th meeting of the Petrology Group was held according to tradition during the third weekend of October (18–21 October) and was organized by Łukasz Karwowski, Justyna Ciesielczuk, and Jolanta Burda from the University of Silesia. The main topic of the meeting was orogenic and platform granitoids. The meeting was held at Bukowina Tatrzańska, a beautiful village in the Podhale area (Carpathians).

The meeting brought together 95 participants, including 20 from abroad (Slovakia, Czech Republic, Austria, Ireland, Egypt, Nigeria). During the two days of the meeting, 27 lectures and 44 posters were presented. The first presentation, given by Wojciech Narębski, was devoted to the memory of Professor Witold Żabiński. The plenary lectures, which were related to the main subject of the meeting, had the following titles: "Orogenic Granitic Magmatism in the Western Carpathians – 500 Ma History: A Review" (Milan Kohút); "Mafic and Felsic Magma Interaction in Granites: The Hercynian Karkonosze Pluton" (Ewa Słaby and Hervé Martin); "The Role of Typomorphic Accessory Minerals in the Variscan Granitic Suites of the Western Carpathians" (Igor Broska and Pavel Uher); "The South Bohemian Pluton: A Review of a Multicomposite Batholith within the Central European Variscan Belt" (Urs Klötzli); "Real Outcrops, Precise Machine Data, and Models for Granite Genesis: Where Does Certainty Come into It" (Pádhraig Kennan).

Field trip participants in the snow on the High Tatra granite

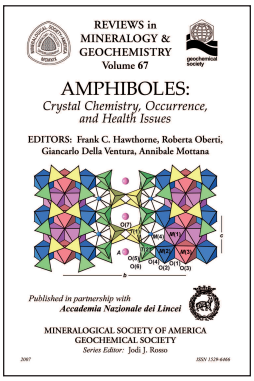
Two field trips held during the third day of the meeting concerned the petrology of the High Tatra granite (led by Jola Burda) and the evolution of the Podhale Basin (led by Jan Środoń). Both field trips ended in a highlander-style restaurant. Extended abstracts of all presentations are contained in volume 31 of *Mineralogia Polonica – Special Papers*.

Organizing Committee at work – From left to right, Jolanta Burda, Łukasz Karwowski, Justyna Ciesielczuk

Next year's meeting will be held in September (please note the change from tradition) because we plan to hold it jointly with the 2nd Central-European Mineralogical Conference. The conference will be accompanied by a workshop and several pre- and post-conference field trips focused on mineralogy, petrology, and the geological evolution of the Sudetes Mountains and the Fore-Sudetic Block (www.cemc.agh.edu.pl).

Zbigniew Sawlowicz

ANL-MSA SHORT COURSE ON AMPHIBOLES



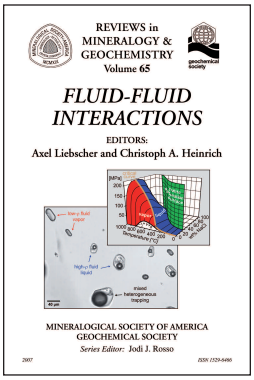
On October 28–31, 2007, the Mineralogical Society of America (MSA) and the Accademia Nazionale dei Lincei (with financial support from the International Union of Crystallography and the European Mineralogical Union) put on a short course entitled Amphiboles: Crystal Chemistry, Occurrence and Health Issues, in Rome, Italy, in the beautiful setting of the Palazzo Corsini, headquarters of the Accademia Nazionale dei Lincei. Forty participants listened to lectures covering all aspects of amphiboles, from their crystallography to their importance in affecting human health. They received a beautifully produced volume of Reviews in Mineralogy & Geochemistry (volume 67, 545 pages) covering the topics of the course. The proceedings ran like clockwork, thanks to the staff of the Accademia Nazionale dei Lincei who provided organizational and logistic support. The course was organized by G. Della Ventura, F.C. Hawthorne, A. Mottana, and R.Oberti, who also edited the accompanying RIMG volume.

The approach taken in this course was somewhat different from that usually taken for mineral groups: the focus was on the properties of amphiboles and the role of amphiboles in geological environments (rather than on experimental techniques), and the results of experimental techniques were integrated into each focus area. Talks were given by C. Cipriani (history of amphibole studies), F.C. Hawthorne (overview of amphibole crystal chemistry, and short-range order with implications for amphibole stability), R. Oberti (amphibole classification and nomenclature, and long-range order), G. Della Ventura (new amphibole compositions), M. Welch and F. Càmara (in situ HP/HT studies of amphiboles and phase transitions), B. Evans (synthesis and stability of some end-member amphiboles), W. Maresch (reaction paths in amphibole synthesis), R.F. Martin (igneous amphiboles, with particular emphasis on tectonic environment), J. Schumacher (composition and coexistence of metamorphic amphiboles), and M. Gunter and A. Mottana (the impact of asbestiform amphiboles on the environment and human health). The final dinner was a gustatory delight and was enlivened by the announcement that three of the lecturers had been honored by MSA: Bernard Evans is to receive the Roebling Medal, and both Mark Welch and Giancarlo Della Ventura were elected Fellows of MSA.

Frank Hawthorne
University of Manitoba

FLUID–FLUID EQUILIBRIA IN THE CRUST

The MSA/GS short course Fluid–Fluid Equilibria in the Crust was held in Cologne, Germany, on August 16 and 17, 2007, prior to the Goldschmidt Conference. Forty-three scientists from academic and government institutions in 13 countries attended the short course; approximately half of them were graduate students. The short course was organized and convened by Axel Liebscher (Berlin, Germany) and Christoph Heinrich (Zürich, Switzerland). They also edited the Reviews in Mineralogy and Geochemistry Series volume 65, entitled *Fluid–Fluid Interactions*, which was handed out to each of the participants. Besides receiving support from the Mineralogical Society of America and the Geochemical Society, the short course was sponsored by the GeoForschungsZentrum Potsdam and the U.S. Department of Energy. Generous financial support from the latter kept student fees low, enabling more students to attend.



Axel Liebscher started the short course with a welcome and a general introduction on the principles of fluid–fluid systems. This was followed by presentations on fluid inclusions (Bob Bodnar) and equations of state (Matthias Gottschalk). The afternoon featured presentations on hydrocarbon systems (Bernd Krooß), liquid immiscibility in anhydrous silicate melt systems (Alan B. Thompson), hydrous melt–HP fluid systems (Alistair Hack), and metamorphic systems (Wilhelm Heinrich). The presentation by Heinrich was one of the most exciting ones. He demonstrated that fluid immiscibility plays a significant role in metamorphic processes, a fact that was and still is more or less ignored in many petrological studies, e.g. on contact metamorphic aureoles. Consequently, a number of earlier studies would need reinterpretation. At the end of the day, dinner in a local brewery gave the participants the chance to observe in situ fluid phase separation processes in the local Kölsch beer.

Insightful presentations on fluid–fluid interaction in oceanic (Dionysis Foustoukos), geothermal (Andri Stefánsson), and volcanic (Jim Webster) systems opened the second day. Of these, Stefánsson's fascinating presentation on geothermal systems in Iceland and elsewhere showed how the scientific understanding of such complex fluid–rock systems is of increasing economic interest. After lunch, Christoph Heinrich and Thomas Driesner made a combined presentation on fluid–fluid interaction in magmatic-hydrothermal ore formation processes and the numerical modeling of fluid flow in such systems. The short course ended with the presentation of useful computer programs for the study of fluid–fluid systems.

I found this two-day short course insightful and exciting, and I was pleased that sufficient time was provided for discussions with experienced colleagues. I also would like to thank the two organizers and their team for giving us two amazing days before attending the Goldschmidt Conference.

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You can read other meeting reports in this issue on pages 51, 53, 55, 57, 62 and 66.