

SECOND CENTRAL-EUROPEAN MINERALOGICAL CONFERENCE AND 15th MEETING OF THE PETROLOGY GROUP OF THE MINERALOGICAL SOCIETY OF POLAND

This joint meeting took place in Szklarska Poręba (Sudety, Poland) between September 9 and 14, 2008. It was organized by the Mineralogical Society of Poland, the Committee on Mineralogical Sciences of the Polish Academy of Science, the Institute of Geological Sciences of the Jagiellonian University, the Department of Mineralogy, Petrography and Geochemistry of the AGH University of Science and Technology, the Faculty of Earth Sciences of the University of Silesia, the Institute of Geological Sciences of the Wrocław University, and the Karkonosze National Park.

The meeting was a perfect occasion to present new research, exchange opinions, and further develop contacts between central-European scientists. One hundred twenty-seven oral communications and posters were presented during the meeting, which included a plenary session with five invited lecturers: Fritz Finger (University of Salzburg) – “Accessory minerals and Variscan plate tectonics”; Mariusz O. Jędrysek (Wrocław University) – “General trends in HCNOS stable isotope geochemistry”; Ryszard Kryza (Wrocław University) – “The Variscides in the West Sudetes: Geological setting and review of tectonic models”; Juraj Majzlan and Sonia Ackermann (Albert-Ludwig University, Freiburg), Bronislava Lalinska and Martin Chovan (Comenius University, Bratislava), and Jörg Göttlicher and Ralph Steininger (Forschungszentrum Karlsruhe) – “The fate of arsenic and antimony at polluted sites: An X-ray absorption view”; Diego Perugini and Gianpiero Poli (University of Perugia) – “Replenishment of felsic magma chambers by continuous inputs of mafic magma: Field evidence and fluid-mechanics experiments.”



John Rakovan (first row, second from left) and participants in the Rietveld method workshop



Visit to the granite quarry during a field trip to the Strzegom-Sobótka massif

A very fruitful Powder Diffraction Rietveld Refinement Methods Workshop, consisting of lectures and computer-based practical sessions, preceded the meeting. It was organized and led by Professor John Rakovan in collaboration with Olaf Borkiewicz (Miami University).

Two pre- and three postconference field trips took place in the Sudety Mountains: “Strzegom-Sobótka Massif (Sudetes, SW Poland) – An example of a complex late-Variscan granitic intrusion and its pegmatitic mineralization” (Justyna Ciesielczuk, Justyna Domańska-Siuda, Adam Szuskiewicz, and Krzysztof Turniak, leaders); “Inverted metamorphic zonation, contact metamorphism, and ore deposits in the E-envelope of the Karkonosze granite: The Intrasudetic Fault Zone” (Ryszard Kryza, leader); “Variscan lower-crustal HP-HT granulite and migmatitic country rock of the Góry Sowie Massif; Ślęza ophiolite: Petrology and geotectonic context” (Ryszard Kryza, Alfred Majerowicz, and Piotr Gunia, leaders); “N-contact aureole of the Karkonosze granite” (Eligiusza Szełęg, Irina Gałuskina, leaders); “Geotouristic tour in Szklarska Poręba” (Irena Jerzykowska, leader).

Over 150 participants, mainly from central Europe, attended the conference (Austria 5, Czech Republic 29, Ireland 2, Slovakia 23, Russia 6, Italy 2, Romania 4, Hungary 5, Ukraine 4, Germany 1, USA 2, Poland 68); 25 scientists (from Poland, Ukraine, Czech Republic, Slovakia, Ireland, Russia, Austria) participated in the workshop.

During the opening ceremony, Marek Michalik (president of the Mineralogical Society of Poland) and Ewa Słaby (chairperson of the Petrology Group of the Mineralogical Society of Poland) presented a special diploma to Dr. Padhraig Kennan (University College, Dublin), who was chosen as an Honorary Member of the Mineralogical Society of Poland during its general meeting in December 2007. The



Alfred Majerowicz, Professor Emeritus of the Wrocław University, explaining the petrology of the Ślęza ophiolite

Society recognized the great contribution of Dr. Kennan to the development and popularization of the mineralogical sciences, his invaluable help to students and scientists through international exchanges, and his warm hospitality in Dublin. For years Dr. Kennan has also been engaged in the editorial activities of the Mineralogical Society of Poland.



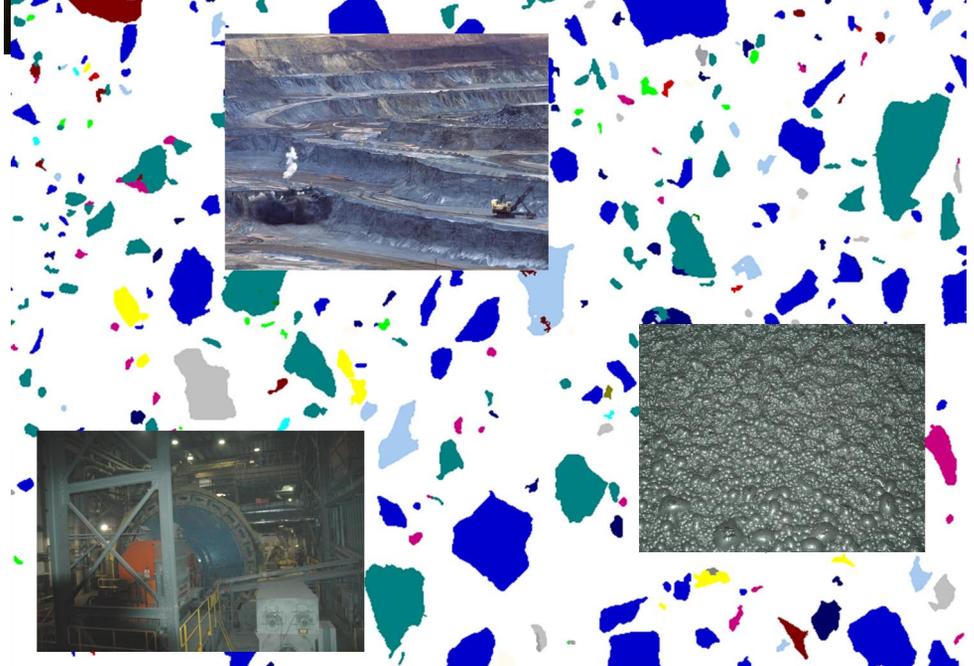
Padhraig Kennan (left), Honorary Member of the Mineralogical Society of Poland, receiving his diploma from Marek Michalik

The Central-European Mineralogical Conference in Szklarska Poręba was the second in the series. The first was hosted by Slovak mineralogists in 2006 in Vysna Boca (Slovakia). The next conference will take place in the Czech Republic in 2011. On behalf of the Czech organizers, Milan Novak (Masaryk University, Brno) presented plans for this conference.

QUANTITATIVE MINERALOGY WORKSHOP

A workshop on quantitative mineralogy, sponsored by the International Mineralogical Association Commission on Applied Mineralogy, was held on September 6, 2008, in Brisbane, Australia, during the 9th International Congress for Applied Mineralogy. The workshop brought together 31 experts and professionals in mineralogy, mineral processing and metallurgy for a review of the applications, current state, progress and challenges in the fast-emerging field of quantitative mineralogy. The workshop included plenary presentations by Johan de Villiers (University of Pretoria), Ying Gu (JK Tech/JKMRC, Brisbane), Paul Gottlieb (Intellection Pty Ltd., Brisbane), Steve Walters (JKMRC and University of Tasmania) and Dogan Paktunc (CANMET, Ottawa), followed by group discussions on instrumentation and tools, automation and approaches, standardization of techniques, development of protocols, quality control and reference materials, needs in geometallurgy and process control.

Quantitative mineralogy can be defined as an area of study dealing with measurable and predictable quantitative aspects of mineralogy. One of the main application areas of quantitative mineralogy is the characterization of ores, rocks, concentrates, tailings and residues, which has important implications for increasing recoveries, reducing costs and complying with environmental protection issues in mineral processing and extractive metallurgical operations. The most common mineral-



ogical parameter routinely measured is mineral quantities in rock, ore, concentrate, tailings and soil. Another important parameter is the quantification of mineral associations, liberation and textural features. Mineral liberation, which can be broadly defined as the percentage of an ore mineral in a particle, is one of the most important parameters being measured for mineral processing applications. Elemental distributions are important in diagnostic metallurgy, such as the distribution of gold in arsenopyrite and pyrite, which is crucial for the recovery of gold from refractory gold ores. Elemental distributions are also important in hydrometallurgy, pyrometallurgy and environmental applications in terms of determining minerals and compounds hosting unwanted elements as impurities for process efficiency, product quality (e.g. avoiding smelter penalties) and environmental protection measures. The predictable aspects of quantitative mineralogy deserve attention as they represent an area where opportunities exist for development. For instance, the ability to predict the metallurgical response of a certain ore type from its mineralogical properties provides significant advantages to mine-development projects and existing mining/milling operations. Prediction of mineral behaviour has profound implications for improved mineral/metal recoveries.

These mineralogical parameters can be measured by automated image analyzers interfaced to SEMs and microprobes, and to a certain extent by XRD, optical microscopy and mass/material balance techniques. Rapid developments in technology and automation with resultant powerful mineralogical tools have enabled mineralogists to extract huge amounts of quantitative mineralogical data at speeds surpassing our ability to make full use of the collected data. Furthermore, development of protocols including variability and uncertainty issues related to sampling and automated measurements lags behind. These issues form the main needs in quantitative mineralogy today.

The workshop culminated with an action plan addressing the key gaps and future needs in this field and the establishment of a network of expertise in quantitative mineralogy with special focus groups such as comminution, flotation and hydrometallurgy. The workshop re-emphasized the critical and central role applied mineralogists play among geologists, mining engineers and metallurgists in the development of holistic mine models, sampling plans, flow sheets and production plans. The details of the workshop notes can be obtained from www.ima-mineralogy.org//com-wg/CAM/CAM.html.

Dogan Paktunc
Chairman, IMA Commission
on Applied Mineralogy

ANOTHER CONFERENCE IN 2009 IN POLAND

The seventh meeting of the Mineralogical Society of Poland and sixteenth meeting of the Petrology Group of the Mineralogical Society of Poland will be held in the beautiful countryside of the Holy Cross Mountains (Poland) from September 24 to 27, 2009. The theme of the meeting will be "Magmatism and Metamorphism in the Holy Cross Mountains." A number of interesting field trips will take advantage of the fantastic geology; they will focus on (1) magmatic and metamorphic rocks, (2) Paleozoic sedimentary environments, (3) geochemistry as a tool for environmental protection, and (4) geotourism in the Holy Cross Mountains. More detailed information on travel, accommodation, the scientific program, and field trips will be available soon on the conference website (www.prac.us.edu.pl/~ptmin2009), or you may write to ptmin2009@us.edu.pl. Looking forward to seeing you in our mountains!