

CONFERENCES

The 9th Czech-Polish-Slovak Palaeontological Conference

The ongoing series of Czech-Polish-Slovak Palaeontological Conferences provide a forum in which Palaeontologists from Central Europe can present and discuss their most recent work and in which they can freely exchange data and ideas. The most recent 9th in this series was organized by Institute of Palaeobiology of the Polish Academy of Science and was held over two days between October 10 and 11, 2008, in Warsaw, Poland. The conference was jointly sponsored by the Palaeobiology Institute of the Polish Academy of Science, the Polish Geological Institute, National Geographic - Poland, and the Precoptec Company. Notably, this was the first time that one of these conferences had been held in Poland.

The 9th Czech-Polish-Slovak Palaeontological Conference was attended by more than 100 scientists, had a scientific program comprising some 43 oral and 33 poster presentations, and was accompanied by a 109-page English-language volume of abstracts. The presentations were divided into 7 sessions, each session having ~2 hours each of oral and poster presentations. The presentations themselves were either of a theoretical nature or ones that provided new data and interpretations from different parts of Central Europe. Mixed in with the Central European theme were seven presentations that discussed fossils from areas as remote as Mongolia, Canada, Spitsbergen, and Antarctica; however, only two presentations dealt specifically with Sudetes Palaeontology. Overall, the participants talked on a broad range of topics relating to evolution and fossil systematics, as well as offering qualitative and quantitative environmental reconstructions and Palaeoclimatic inferences.



Participants of the 9th Czech-Polish-Slovak Palaeontological Conference. (Photo by Marian Dziewiński)

The conference organisers are particularly grateful to National Geographic - Poland for providing a number of travel grants by which young scientists and PhD students were able to participate. That this group of researchers attend the conference was an important goal of the organisers.

In summary, the 9th Czech-Polish-Slovak Palaeontological Conference was a great success and we thank all those who worked so hard to make it such. Everyone benefitted from the opportunities to engage in both formal and informal discussions, and we now look forward to the 10th Czech-Polish-Slovak Palaeontological Conference.

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Report on "Accessory Minerals as Petrogenetic Indicators": The joint 15th Meeting of the Petrology Group of the Mineralogical Society of Poland and the 2nd Central-European Mineralogical Conference at Szklarska Poręba, September 10-14, 2008

More than 130 participants from Poland and abroad attended the 15th Meeting of the Petrology Group of the Mineralogical Society of Poland and the 2nd Central-European Mineralogical Conference (CEMC), for which the general theme was to investigate how accessory minerals can provide insight into petrogenetic problems. The joint meeting took place 10th-14th September, 2008, in Szklarska Poręba (SW Poland) and was organized by the Mineralogical Society of Poland, together with the Committee on Mineralogical Sciences of the Polish Academy of Sciences, the Institute of Geological Sciences of the Jagiellonian University (Kraków), the Department of Mineralogy, Petrography and Geochemistry of the University of Science and Technology (Kraków), the Faculty of Earth

Sciences of the University of Silesia (Katowice), the Institute of Geological Sciences of the University of Wrocław, and the Karkonosze National Park. The meeting was preceded by a two-day pre-conference workshop, held 10th-11th September, on powder diffraction Rietveld refinement methods, and meeting participants were offered a choice of two pre-conference field trips on 11th September and three post-conference fieldtrips on 14th September.

Around 50 of the conference participants were either from Polish universities or from other Polish research centres, including the Polish Academy of Sciences (Institute of Geological Sciences in Kraków, Warsaw and Wrocław, and the Space Research Centre), the Polish Geological In-



Participants of the joint meeting during the post-conference field trip to the Strzegom-Sobótka Massif. (Photo B. Zych-Habel)

stitute, University of Science and Technology - AGH in Kraków, the Adam Mickiewicz University in Poznań, the Jagiellonian University, the University of Silesia, the Warsaw University, the University of Wrocław, the Oil and Gas Institute in Kraków, the University of Technology and Life Sciences in Bydgoszcz and the Pedagogical University in Kraków. The other 80 participants came from a wide range of countries: Austria (University of Vienna), the Czech Republic (Academy of Sciences of the Czech Republic, Czech Geological Survey, Charles University in Prague, Masaryk University in Brno, Moravian Museum in Brno, Palacký University in Olomouc, Institute of Chemical Technology in Prague), Hungary (University of Miskolc, Herman Ottó Museum in Miskolc), Iran (Islamic Azad University), Italy (Sapienza Università di Roma), Romania (University of Bucharest, Babes-Bolyai University in Cluj), Russia (Russian Academy of Sciences), Slovakia (Slovak Academy of Science, Comenius University in Bratislava, State Geological Survey of the Slovak Republic), Ukraine (The National Academy of Sciences of Ukraine, Kiev Taras Shevchenko University) and Ireland (Trinity College, Dublin).

Although the title of the meeting was "Accessory Minerals as Petrogenetic Indicators", a wide spectrum of problems concerning basic research in mineralogy and its applications in petrology, geochemistry and environmental sciences was covered in both oral and poster sessions. The conference opened with the Plenary Session. The first three scientific talks were given, respectively, by Prof. Fritz Finger ('Accessory Minerals and Variscan Plate Tectonics'), Prof. Ryszard Kryza ('The Variscides in the West Sudetes: Geological Setting and Review of Tectonic Models') and Prof. Diego Perugini ('Replenishment of Felsic Magma Chambers by Continuous Inputs of Mafic Magmas: Field Evidence and Fluid Mechanics Experiments').

During the first day of the conference, a total of 18 talks and 40 posters were presented. The lectures were divided into two separate sessions - one devoted to the magmatic and metamorphic petrology and geochemistry of the Bohemian Massif, and the second one to selected aspects of mineralogical research in Poland and abroad. Presentations on the first morning were, firstly, concerned with various aspects of magma chamber evolution: evidence

from titanosilicates melting experiments, felsic segregations within the eclogites of the Śnieżnik Metamorphic Unit in the West Sudetes and the evolution of physical processes in an actively deforming magma chamber in the Izera granite of the Bohemian Massif. Secondly, they dealt with a range of mineralogical problems: Cathodoluminescence (CL) and Raman study of Si-Al order in K-feldspar in the context of the dynamics of their growth from mingled magmas, Si-deficient vesuvianite from jade-like rodingite from Eastern Sayan in Russia and olivine with perfect cleavage from the Yoko-Dovyren Massif in Russia.

The afternoon sessions on the first day contained a wide range of topics in metamorphic petrology (new evidence of the very low-grade metamorphism from the Kaczawa Complex in the Sudetes and P-T conditions of extreme metamorphism of the Śnieżnik unit eclogites within the Orlica-Śnieżnik Dome) and in igneous petrology (origin of a syenitic dike in the Modra Massif of the Western Carpathians, self-affine fractal statistics of igneous feldspar growth pattern, petrology and geochemistry of the Neogene rhyolites from the Central Slovakia Volcanic Field in the Western Carpathians). New evidence for episodic continental crust formation was also discussed. Mineralogical sessions covered a great diversity of aspects like the genetic history of britholite from the Azov Zr-REE deposit in Ukraine, the first geochronological and isotopic geochemistry data of the detrital zircons from Ediacaran sandstones of the Engane-Pe uplift of the Western Polar Urals, detailed mineralogy of the gadolinite-group minerals, unusual mineral assemblages in pockets of Ca-skarns at Moravské Bránice near Brno in the Czech Republic, lazulite and Sr-, Ba-, Ca-, and K-rich phosphates-sulphates from quartz veins in the Tribec metaquartzites in Slovakia, and structural interactions between minerals during mineralogenesis.

The "Powder Diffraction Rietveld Refinement Methods Workshop", held by John Rakovan and Olaf Borkiewicz from the Department of Geology, Miami University, Oxford (Ohio, U.S.A.), offered a combination of lectures and computer-based practical sessions. The workshop, which was attended by some 20 participants, was especially designed for novices in the analysis of powder diffraction data by the Rietveld method: topics addressed included sample preparation, data collection and the use of the Rietveld method for crystal structure refinement. Participants got to use professional computer software that had been supplied by Rakovan and Borkiewicz. Upon completing the workshop, all the participants were given special certificates to confirm their participation.

At the end of the first day, everyone had the opportunity to share their impressions and ideas during an excellent open air barbecue prepared by the organizing team.

During the second day of the meeting, two plenary sessions took place: the first, given by Prof. Mariusz O. Jędrysek ('General Trends in HCNOS Stable Isotope Geochemistry') and the second given by Prof. Juraj Majzlan ('The Fate of Arsenic and Antimony at Polluted Sites: An X-ray Absorption View'). Afterwards, 40 posters were presented and 27 talks were given, conducted in two separate sessions. The diversity of topics covered during the second

day was very impressive, ranging from petrology and structural geology, through environmental research, mineralogical studies, to ore-deposit formation processes. Among the presentations devoted to petrology and structural geology were the following topics: an investigation into two types of ultrapotassic magmatic rocks from the Bohemian Massif; the isotopic signature of the Siberian flood basalts and alkaline magmatism of Polar Siberia; an opal breccia from Dobrica Hill in Central Slovakia; sorption of volatile hydrocarbon compounds by Oligocene clay; the tectonic meaning of the jadeite-blueschist, ophiolite, and radiolarite exotics from the flysch-mélange succession of the Western Kaczawa Complex in the Sudetes; and amphibole compositional trends in alkaline rocks from the Polish Western Carpathians.

The second day also saw a variety of interesting talks on environmental research, covering such topics as the use of Hydrogen/Carbon/Nitrogen/Oxygen/Sulphur (HCNOS) stable isotopes for environmental reconstructions, environmental aspects of the berlinite substitution in clinkers, differences in dry and wet deposition dominated environments based on example of gypsum-rich black crust on the Libiąż dolomite in Kraków, pyro-metallurgical slags as analogs of natural geological materials, and potential hazards for the environment. The mineralogical sessions on the second day dealt with a fascinating array of subjects: complex crystal face control of nitrogen uptake during high temperature-high pressure (HT-HP) diamond crystallization, monazite as a tracer of metamorphic events in migmatitic granulites of South-Western Lithuania, crystal structure and physical properties of the new platinum-group mineral Pašavaite, tourmalines from the contact aureole of the Karkonosze granite in the Sudetes, mineral and chemical composition of aeolian dust from a fall in March 2007 in the Tatra Mountains in Southern Poland, morphological changes in quartz crystals during leaching at higher temperatures and pressures in aqueous fluids, dissolution of vanadinite at pH = 2.0-6.0 and 25°C and synthesis of mimetite-vanadinite and pyromorphite-vanadinite solid solution series. A few talks were devoted to aspects of laboratory methods applied to mineralogy and geochemistry. These included the effects of structural radiation damage on cathodo- and photo-luminescence emissions of minerals; 3D characteristics of pore space using X-ray microtomography; molecular modelling simulations; and the application of the sequential extraction procedure for speciation of selected heavy metals in airborne particulate matter). The session concerning ore-deposit formation had talks on the mineralogy and alteration patterns of the Biely Vrch Au-porphyry deposit in Slovakia; two contrasting fluids controlling the strong mobility of U, Zr and REE, and their implication to the origin of the Rožná U-deposit in the Bohemian Massif; the evidence of Pb-Zn mineralization and origin willemite and montroseite in the Rožná Deposit; iron arsenates from Dlouhá Ves near the Havlíckuv Brod deposit in the Czech Republic; and bismuth sulphosalts from Kutná Hora in the Czech Republic.

The conference ended with a memorable ceremonial dinner.

There were two pre-conference field trips, which were held 11th September.

1. 'Strzegom-Sobótka Massif (SW Poland) - An Example of a Complex Late-Variscan Granitic Intrusion and its Pegmatitic Mineralization', jointly lead by Justyna Ciesielczuk (University of Silesia), Justyna Domańska-Siuda (Polish Academy of Sciences), Adam Szuszkiewicz (University of Wrocław) and Krzysztof Turniak (University of Wrocław). This trip summarized the current thinking on the magmatic and postmagmatic evolution of the intragranitic miarolitic and vein pegmatites and the host granites of the Strzegom-Sobótka Massif.

2. 'Inverted Metamorphic Zonation, Contact Metamorphism and Ore Deposits in the Eastern Envelope of the Karkonosze Granite', which was lead by Ryszard Kryza (University of Wrocław). During this excursion the participants visited some outcrops of the medium pressure-medium temperature Izera-Kowary Unit (orthogneisses, mica schists), and the HP-HT South Karkonosze unit (blueschists) and Leszczyńiec unit (bimodal igneous complex).

After the conference, participants could choose between one of three post-conference field trips, held 14th September.

1. 'Variscan Lower-Crustal HP-HT Granulites and Migmatitic Country Rocks of the Góry Sowie Massif. Ślęza Ophiolite: Petrology and Geotectonic Context', which was jointly lead by Ryszard Kryza, Alfred Majerowicz and Piotr Gunia (all from the University of Wrocław). Participants examined the HP-HT granulites, ultramafics and surrounding migmatites of the Góry Sowie Massif and Central-Sudetic ophiolites and were informed about the petrology, geochemistry, age, palaeotectonic setting, and structural and metamorphic evolution of these HP-HT rocks. Particular attention was given to the tectonic position of the ophiolites in the Variscan context.

2. 'Northern Contact Aureole of the Karkonosze Granite (+/- Intra-Sudetic Fault Zone)', which was lead by Eligiusz Szełęg and Irina Gałuska (both from the University of Silesia). Participants examined the contact zone between the Karkonosze and the Izera massifs, both massifs containing metamorphic and metasomatic rocks. Participants visited the typical metasomatic skarn mineralization that occurs in what is the highest active mine in Europe - the "Stanisław" quartz mine, located on the Izerskie Garby. The skarns display a wide variety of minerals: wollastonite, the grossular-andradite garnet series, the diopside-hedenbergite series, vesuvianite, calcite, fluorite, stilbite, laumontite and apophyllite. The Zakręt Śmierci ("Death Bend") and Zbójeckie Skały ("Brigands' Rocks") as the more typical contact metamorphic rocks and comprise a mineral assemblage of andalusite, cordierite, quartz, micas and magnetite. The last stop of the tour was of the rather picturesque adit of an inactive pyrite mine, which occurs within hornfels near Zbójeckie Skały. Here, participants could collect unique mineralogical samples of hornfels and pyrite.

3. A walking geotour around Szklarska Poręba, which was lead by Marta Strycharczyk (Jagiellonian University). During this walk, the participants visited the local Mineral-

ological Museum, the Karkonosze Centre for Ecological Education, and the beautiful Kamińczyk waterfall.

The 15th Meeting of the Petrology Group of the Mineralogical Society of Poland and the 2nd Central-European Mineralogical Conference was a successful joint scientific event, with many high-quality presentations and a large number of participants from many countries. The atmosphere during the scientific sessions and during the infor-

mal evening gatherings was excellent and generated many opportunities to share new ideas. The abstracts of all talks, posters and field trips were published as a special issue (volume 32) of *Mineralogia - Special Papers* (www.mineralogia.pl).

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