

IGCP-486 Field Workshop

The International Geoscience Program (IGCP) Project 486 “Au-Ag-telluride-selenide deposits” (2003–2008) focuses on studies of Au-Ag-telluride-selenide mineralisation of all types (hydrothermal, magmatic, metamorphic). The project bridges the gap between the research of scientists working in the laboratory, on either experimental or microanalytical aspects of deposit mineralogy, and the work of geologists interested in exploration for and genetic modelling of ore deposits. The goal of IGCP-486, as for all IGCP projects, is to provide scientists from across the globe with a multidisciplinary platform to exchange knowledge and methodology.

IGCP-486 has sponsored sessions at a number of scientific meetings, such as the International Geological Congress, Florence, Italy (2004), the 8th Biennial SGA Meeting, Beijing, China (2005) and the 12th IAGOD Quadrennial Symposium, Moscow, Russia, (2006). The project has also held a number of field workshops, including in the ‘Golden Quadrilateral’ of Romania (2004), in Bulgaria (2005) and a joint workshop with IGCP-473 in the Chatkal-Kurama area of Uzbekistan (spring 2006). Most recently, around 60 participants took part in the third field workshop of the project, held at the Dokuz Eylul University, Geochemistry and Ore Deposits Division, Izmir, Turkey, 24–29 September 2006.



Participants at the 3rd IGCP-486 Field Workshop, Dokuz Eylul University, Izmir, Turkey, September 24–29, 2006

The workshop, superbly organised by Prof. İsmet Özgenc, Dr. Tolga Oyman and their team, included three days of excursions to the gold deposits of Kışladağ, Ovacik and Efemçukuru in western Turkey, and a two-day scientific symposium at the field study centre of Dokuz Eylul University. Although the deposits visited during the field excursions have not yet been shown to contain tellurides and/or selenides, the symposium included 29 papers dealing with different aspects of Au-Ag ore deposits containing tellurides and/or selenides in Bulgaria, Canada, Finland, Greece, Romania, Kyrgyzstan, Macedonia, Sardinia, Slovakia, Russia, Serbia, Turkey and Uzbekistan.

The Kışladağ deposit is an epithermal, latite porphyry-hosted gold deposit containing 214.8 Mt of ore reserves at an average grade of 1.04 g/t Au. The Ovacik gold ore is hosted in four quartz veins, up to 20 m in width, within andesitic volcanic rocks. Proven ore reserves are 4.15 Mt at an average grade of 7.6 g/t Au; indicated reserves are 1.24 Mt at a grade of 13.1 g/t Au. The ore is mined both from an open pit and underground. The Efemçukuru vein deposit, where future mining is planned as a totally underground operation for environmental reasons, is hosted by rhodonite–rhodochrosite–quartz veins, with phyllite and hornfels as wall rocks. Ore reserves in the vein are 1.8 Mt at an average grade of 13.4 g/t Au. The thickness of the vein varies from 1.5 to 20 m, the length is 1200 m, the depth 250 m and the dip 60° to the NNW. The vein is of



The open pit at the Ovacik deposit



Workshop participants inspect drillcore at the Ovacik deposit

low-sulphide, epithermal type and includes late-stage hydrothermal breccia. The field workshop showed clearly that Turkey has a significant gold potential.

IGCP-486 plans to hold several events in 2007, including a five-day workshop in southern Finland in August 2007; a scientific session and a one-day field trip to Cripple Creek at the fall GSA meeting in Denver, Colorado, 28–31 October 2007; and a fieldtrip to northern Peru in November 2007. A final summary symposium for the project will take place at the International Geology Congress in Oslo, Norway, 5–14 August 2008.

See the project website for details of future events and project publications: www.nhm.uio.no/geomus/homepages/cook/IGCP.html. Further information on the International Geoscience Programme (IGCP) can be found at www.unesco.org/science/earth/igcp.shtml.

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The 16th Annual V.M. Goldschmidt Conference, Melbourne, Australia

The 16th Annual V.M. Goldschmidt Conference, 'Geochemistry Downunder', was held between August 27 and September 1, 2006, in the Melbourne Convention Centre, Australia. The supporting societies were the Geochemical Society, the European Association for Geochemistry, the Geological Society of Australia and the Geochemical Society of Japan. In addition, the conference was generously supported by 18 sponsors and exhibitors, with Nu Instruments as the principle sponsor. Underwriting was provided by the conference organisers, Tour Hosts, and Macquarie University.

The conference received 1515 abstracts and had 1341 registrants, including delegates from 37 countries, the largest demographic (326) being Australia, followed by the USA (284), the UK (117), Japan (104), Germany (77), China (63), France (59) and Canada (54). Attendees were greeted with a complimentary bottle of Coopers Pale Ale and a cooler bag containing a bottle opener (courtesy of Melbourne University); the bag was selected as the conference satchel so that it would have future utility!

The conference organisers were Simon Turner (Macquarie University), Hugh O'Neill and Greg Yaxley (Australian National University), Janet Hergt (University of Melbourne) and John Foden (University of Adelaide). From the outset, we wished to achieve a number of objectives, which were based on observations and feedback from previous Goldschmidt Conferences. In particular, we wanted to host the meeting in a state-of-the-art venue and

under a single roof to keep delegates together and networking. To this end, morning coffee, lunches and afternoon drinks were provided daily in the main exhibition hall amongst the posters and exhibitors' booths. In order to provide a daily focus, plenary talks were held immediately after lunch. All 320 posters were exhibited for the duration of the meeting and given a scheduled presentation time between 4:30 and 5:30 p.m., during which time beverages were served. The conference program was designed as a pocket book for easy use, and the conference abstracts were provided on a CD, which included a delegate list and history of V.M. Goldschmidt. The abstracts were also published as a special issue of *Geochimica et Cosmochimica Acta*.

The conference was organised into 11 themes, which attracted more than 90% of the abstracts; an additional 16 general sessions covered other geochemical topics. Each theme was divided up into between five and nine sessions. The oral program consisted of 12 parallel sessions. Because the conference was held in a single venue, participants could move between sessions easily. Many sessions included one or more keynote speakers, whose talks occupied double time slots. Social events included the conference dinner and tours around Melbourne, to Philip Island to watch penguins and to the vineyards of the Yarra Valley.

At an early stage in planning it was recognised that a field trip program might be an added incentive to attract overseas registrants. Accordingly we put together a program of trips that highlighted some of the many iconic

geological features of Australia and its environs. Of the initial eight proposed trips, four received the necessary support from registrants and were very successfully run with ~110 participants in all. The organising committee recognises that the success of the tour program was almost entirely due to the efforts of the trip organisers and thanks them for their efforts. The four excursions were:

- The Great Barrier Reef: A Record of Holocene Environmental Change, organised and led by Andrew Christian and Malcolm McCulloch (23–27 August)
- A Geological Tour of Western Victoria, organised and led by Jon Woodhead and Janet Hergt (22–26 August). This excursion highlighted Cenozoic basalts and their mantle xenoliths.
- Proterozoic Mineralisation and Metamorphism at Broken Hill, organised and led by Ian Plimer (2–6 September)
- The Pilbara Region of Western Australia: Early Archaean Environments and Evidence for Early Life, organised and led by Martin Van Kranendonk and John Lindsay (2–9 September)

Feedback from delegates has been overwhelmingly positive, and many seemed reluctant to leave at the end of the final day of the meeting. The Goldschmidt Conferences are clearly 'the' annual event in the geochemical calendar. See you next year in Cologne!

**Simon Turner, Janet Hergt,
Hugh O'Neill and John Foden**

GERMAN MINERALOGICAL SOCIETY ANNUAL MEETING, HANNOVER, GERMANY, 25–27 SEPTEMBER 2006

For its 84th annual meeting, the German Mineralogical Society returned to Hannover for the third time, after previous visits in 1923 and 1965. The venue was the Welfenschloss, a historical building belonging to the Leibnitz University of Hannover. An excellent choice for the meeting, the building offered plenty of well-equipped rooms for the lectures. The spacious atrium served as a meeting point and poster display area and, with its tables and coffee facilities, as an ideal place for scientific discussions.

The German Mineralogical Society covers a broad range of fields in Earth and materials science. This fact is traditionally reflected by the conference sessions. This year the three days covered the whole field of mineralogy and petrology, from mineral deposits to metamorphic rocks, clay minerals to archeometry, glass to Mars to museums. Each session was opened by a keynote lecture given by a leading scientist in the respective field. The keynote speakers came from all over the world, as did the invited speakers at the plenary lectures. The six plenary lectures were held without any parallel sessions, thus providing a unique chance to hear state-of-the-art science from fields other than that one's own. This year's speakers were Prof. Jeffrey A. Karson (Syracuse, USA), Prof. Scott D. King (Indianapolis, USA), Prof. Ekhard Salje (Cambridge, UK), Prof. A. Stein (Minnesota, USA), Dr. James D. Webster (New York, USA), and Dr. Art F. White (Los Angeles, USA). They covered themes including the Earth's mantle and oceanic crust, weathering and fluids, mineral

physics, and synthetic minerals. The Goldschmidt Prize winner, Dr. Mario Trieloff (Heidelberg, Germany), delivered an exciting lecture entitled "The Formation of the Terrestrial Planets."

Extraterrestrial topics were further covered by three sessions and four keynote speakers: Prof. Martin Bizzarro (Copenhagen, Denmark) in the cosmochemistry session, Prof. Tim Swindle (Tucson, USA) in the session "Mars and the Terrestrial Planets" and Prof. Frances Westall (Orléans, France) in the session "Environments on Early Earth and Astrobiology." The fourth extraterrestrial keynote lecture was given in the session on mineralogical museums and collections and was delivered by Dr. Beda Hofmann (Bern, Switzerland). Another tradition is the public lecture held in German and aimed at an interested lay audience. In Hannover Prof. B. Stribrny (Hannover, Germany) got a lot of attention speaking about minerals as raw materials and their use in everyday products such as toothpaste.

The meeting was international in scope and attended by many young scientists. Twenty percent of the attendees travelled to Hannover from outside Germany, and 122 out of 350 participants signed in as students. Finally, and very importantly, the Hannover team did a great job organizing the meeting and made it the success it was.

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