

<http://meteoriticalsociety.org>

2012 ANNUAL MEETING REPORT



Sunrise over the Cairns harbor
PHOTO: CARI CORRIGAN



Conference organizer, Trevor Ireland
PHOTO: MINI WADHWA

The 75th annual meeting of the Meteoritical Society was held in Cairns, Australia, on 7–12 August 2012 at the Cairns Convention Centre. Over 400 abstracts were submitted, creating an exciting program that included new reports on the Sutter's Mill and Tissint meteorites. Oral presentations were accommodated in two parallel sessions through to Friday afternoon, with poster sessions on Tuesday and Thursday evenings.

There were 370 attendees, including 240 member and nonmember participants, 70 students, and a further 60 guests. Forty-four students and five professionals from low-income countries were awarded travel funds totaling ~\$40,000, primarily through the support of the Barringer Crater Company, NASA Cosmochemistry, and the Meteoritical Society Endowment Fund.

The scientific program covered a wide range of topics, including the formation of the Solar System; samples from Mars and Vesta; impacts and shock processes; chondrules and refractory inclusions; carbonaceous, ordinary, and enstatite chondrites; differentiated meteorites; isotopes; IDPs and micrometeorites; secondary processes; and organic matter. Special sessions were dedicated to Jim Arnold, Brian Mason, John de Laeter, and David Wark.

The Barringer Invitational Lecture, on the origin of planetary systems, was delivered by Prof. Ross Taylor to an enthusiastic audience. Ross is a stalwart of the Meteoritical Society and his presence in Cairns was a highlight.

On Wednesday afternoon, participants were transported to the Skyrail station for a trip over the rainforest canopy, ending at the Rainforestation Nature Park. Guests attended an Aboriginal concert, traveled through the forest and lagoon on Army Ducks, and visited a native zoo with everything from a 6-meter crocodile to cuddly koalas, before enjoying a barbecue dinner.

Many attendees also participated in cruises to the Great Barrier Reef to view the Earth's largest living organism. Following the meeting were two field trips to craters in central Australia; the trip out of Alice Springs was organized by Craig O'Neill, and the one out of Perth in Western Australia was organized by Alex Bevan.

The abstract volume and program are available online at www.lpi.usra.edu/meetings/metsoc2012/pdf/program.pdf.



Field Trips to the Impact Craters of Australia

After the Cairns meeting, 26 meteoriticists enjoyed a five-day field trip to see the geology, impact craters, and scenery of central Australia. The trip, which was led by Craig O'Neill (Macquarie University), included spectacular visits to the western Macdonnell Ranges, the Finke River, the majestic Palm Valley and Cycad Gorge, Gosses Bluff, Kings Canyon, Kata Tjuta (The Olgas), Henbury Crater, Amelia Creek Crater, and Kelly West Crater. A 10-day field trip, led by Alex Bevan (Western Australia Museum), took participants to impact craters including the Yallalie, Dalgara, Yarrabubba, Shoemaker, Glikson, and Hickman structures in Western Australia.

2012 SOCIETY AWARD WINNERS

The Society gives four major awards each year. For more information on individual awards, see the Society web page.



The LEONARD MEDAL, which is the Society's highest and oldest award, is given to individuals who have made outstanding original contributions to the science of meteoritics or closely allied fields. It is named for Frederick C. Leonard, who was a founder and the first president of the Society. The 2012 winner is **Donald S. Burnett**, of Caltech, for his outstanding

contributions to our understanding of the composition of the Solar System through study of meteorites, noble gases, the lunar surface neutron flux, and CAIs, and through his leadership in the Genesis mission, which led to a marked increase in the understanding of the isotopic and elemental composition of the Sun and the terrestrial planets. The citation was given by Kevin McKeegan.



The BARRINGER MEDAL AND AWARD, sponsored by the Barringer Crater Company, were created in memory of D. Moreau Barringer Sr. and his son D. Moreau Barringer Jr. The award is given for outstanding work in the field of impact cratering. This year, the Barringer Award is given to **Jan Smit** (Vrije Universiteit, Amsterdam) for his fundamental contributions to impact crater studies, including playing a major role in the confirmation that the K-T boundary layer has an impact origin, and for characterization of the many deposits that resulted from this impact.

The citation was given by Phillippe Claeys.



The NIER PRIZE recognizes young scientists in the field of meteoritics. This year's winner is **Frédéric Moynier** of the University of Chicago. Frédéric receives this award for his excellent work in pioneering the use of the isotopic composition of the transition metals (Fe, Ni, Cu, and Zn) in geochemistry and cosmochemistry to search for new constraints on

the accretion and differentiation processes of planets (and planetesimals). The citation was given by Marc Chaussidon.



International Mineralogical Association

www.ima-mineralogy.org



The METEORITICAL SOCIETY SERVICE AWARD is given this year to **Ursula Marvin**. Ursula receives this award for her excellent service toward documenting the history of the Meteoritical Society. Ursula was also instrumental in establishing personal histories of some of the most influential people in meteoritics and planetary science. The citation was given by Derek Sears.



The GORDON MCKAY AWARD, for the best oral presentation by a student at the annual meeting of the Meteoritical Society, is given to **Maartje Hamers** of Utrecht University, the Netherlands, for her talk in Cairns entitled "Shocked quartz in the SEM: Distinction between amorphous and healed PDFs." The award comes with a prize of US\$1000 and a certificate.

WILEY-BLACKWELL AWARDS, worth US\$500 each and provided by Wiley-Blackwell, publishers of *Meteoritics and Planetary Science*, were given for outstanding presentations by students at the 75th annual meeting of the Society in Cairns. The four winners (left to right, below) were **Evan Groopman** (Washington University, St. Louis) for his talk entitled "Ti-XANES and EELS of presolar TiC subgrains within low-density supernova graphite," **Matthew Huber** (University of Vienna) for his talk entitled "Distribution of meteoritic material in Sudbury ejecta," **Reto Trappitsch** (University of Chicago) for his talk entitled "Solar cosmic-ray irradiation of the solar nebula," and **Kelsey Young** (Arizona State University) for her talk entitled "The age of Haughton Impact Structure as determined by zircon (UTh)/He thermochronology."



CALL FOR AWARD NOMINATIONS

Please consider nominating a colleague for one of the Society's awards. Nominations should be sent to Secretary Greg Herzog (herzogsec@rutchem.rutgers.edu) by January 15 (January 31 for the Pellas-Ryder Award and the Service Award). For more information and details on how to submit a nomination for any of these awards, please see the latest Newsletter at the Society website or e-mail the secretary.

ANNUAL MEETING SCHEDULE

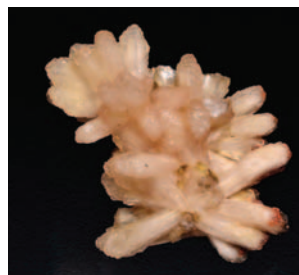
- 2013: Edmonton, Alberta, Canada, July 29–August 2
- 2014: Casablanca, Morocco, September 7–14
- 2015: Berkeley, California, USA, July 27–31
- 2016: Berlin, Germany, dates to be announced

RENEW YOUR MEMBERSHIP NOW!

Please renew by March 31, 2013; after that date, a \$15 late fee will be assessed. You can renew online at <http://metsoc.meteoriticalsociety.net>.



MINERALOGICAL ACTIVITIES IN SOUTH AFRICA



The South African mineral poldervaartite, a hydroxyl nesosilicate, associated with red andradite garnet, from the Wessels mine, Kalahari manganese field, South Africa. Specimen width 2.6 cm. BRUCE CAIRNCROSS COLLECTION AND PHOTOGRAPH

In 2014, the quadrennial International Mineralogical Association conference will be held in South Africa and hosted by the Mineralogical Association of South Africa (see call for session proposals on page 479). MINSA, as the Association is more commonly called, was formed in 1979 as a specialist division of the Geological Society of South Africa (GSSA) with the primary aim of promoting interaction amongst mineralogists, particularly in the fields of mineralogy, petrology and geochemistry. Applied mineralogy is a current strong focus. MINSA organises various

ad hoc lectures by local and overseas experts, symposia, short courses, workshops, conferences, laboratory visits and ever-popular field excursions. Regular visits to laboratories based mainly in the Gauteng region of South Africa enable local mineralogists to keep abreast of the latest instrumentation and techniques available in the country. One-day and weekend excursions to mines and other areas of geological, palaeontological or archaeological interest are popular. Such trips have included visits to the caves of the Cradle of Humankind, site of many important palaeoanthropological fossil finds; the Mapungubwe historical site; and chrome, diamond, gold and platinum mining operations. Longer excursions have been undertaken to regions further afield in southern Africa, such as the Richtersveld, Namibia and Lesotho. Field excursions to other countries, such as Tanzania, where the mining operations around tanzanite were a highlight, and the French volcanic island of Réunion in the Indian Ocean, have also been a success.

Ongoing education for mineralogists is provided in the form of courses and workshops on such subjects as coal petrology, metallurgy for geologists, mineralogy for metallurgists, X-ray diffraction and Rietveld refinement, fluid inclusions, sulfide mineralogy, clay mineralogy, optical mineralogy, acid mine drainage and applied mineralogy.

The planning and organisation of all events are undertaken by a committee made up of a chair, vice-chair, secretary and three elected members, together with usually 20–25 co-opted committee members drawn from industry and academia throughout South Africa, all of whom give of their time on a voluntary basis. The Association currently consists of more than 100 members, and includes students as well as mineralogists outside South Africa's borders. Anyone interested in joining MINSA can do so by downloading a membership form from the website www.minsoc.org.za.

Dr Jill Richards, MINSA Secretary
(jill.richards@exxaro.com)