

# **Meteoritical Society**

# http://meteoriticalsociety.org



## **2014 ANNUAL MEETING INVITATION**

You are cordially invited to attend the 77<sup>th</sup> Annual Meeting of the Meteoritical Society, to be held on 7–13 September 2014, in Casablanca, Morocco. Casablanca is Morocco's largest city. Located in the northwest of Morocco on the Atlantic Ocean, Casablanca is known all over the world. Besides being the economic capital of a fast-developing country, "Casa" is a prestigious center of art and architecture, showing a unique blend of traditional Moorish architecture and Art Deco. To be immersed in this atmosphere, the meeting will be held in the Hyatt Regency Casablanca in the city center, within walking distance of hotels and the railway station. For tourist information, visit the website **www.tourisme.gov.ma**/.

Plenary, oral, and poster sessions will be held in the conference center at the Hyatt Regency Casablanca, which will also provide accommodation for meeting attendees. Scheduled events include an icebreaker during registration, a banquet, an award ceremony, and several excursions. Two preconference workshops will be held the weekend before the meeting, and a 5–6 day postconference field trip will be held in the south of Morocco. The 3<sup>rd</sup> Arab Impact Cratering and Astrogeology Conference (AICAC III) will take the form of a special impact symposium during the Meteoritical Society conference.

This meeting will be a unique opportunity for researchers from Africa and the Middle East to meet planetary science experts for discussions on the most advanced techniques for studying meteorites, cosmic dust, asteroids, and comets, and their implications for the origin and evolution of the Solar System. The conference will also outline the importance of such extraterrestrial research in countries adjacent to the Sahara and Arabia, in which meteorites abound and impact craters exist or are yet to be discovered. Morocco, the site of most Northwest Africa (NWA) meteorites, including some rare specimens, is indeed one of the most important countries in the world for meteorite finds.

# Conference information and announcements, as well as details about Morocco, are posted on the conference website: www.metsoc2014casablanca.org.

Hasnaa Chennaoui Aoudjehane (h.chennaoui@fsac.ac.ma) Conference Chair

#### **ANNUAL MEETING SCHEDULE**

- 2014 Casablanca, Morocco, September 7-14
- 2015 Berkeley, California, USA, July 27-31
- **2016** Berlin, Germany, August 7-12
- 2017 New Mexico, USA, dates and exact location TBD

# **IN MEMORIAM**

#### JOHN KERRIDGE (1937–2013)



John Kerridge passed away on March 25, a few weeks after his 76<sup>th</sup> birthday, losing his battle with mesothelioma. John was a fellow of the Meteoritical Society, and members remember him well for his service to the Society in initiating and then editing the first volume of *Meteorites and the Early Solar System* (1988). In this impressive volume, John assembled the collective visions of 69 coauthors to assess the progress and discuss options regarding the use of meteorite data in studying the environment and processes in the early

solar nebula. He put emphasis on a requirement that solar nebular properties must be placed in the appropriate astrophysical context, an issue that is still central in our research approaches a quarter of a century later.

John received his undergraduate degree in metallurgy from the University of Birmingham and obtained his PhD in crystallography at the University of London in 1968. Following graduation, John was a research associate at NASA/Ames. Shortly thereafter, he joined the University of California, Los Angeles (UCLA), as a research geophysicist and later was appointed adjunct professor in the Department of Earth and Space Sciences (UCLA) and research associate at the California Space Institute, University of California, San Diego, positions that he held until his retirement. John also served in NASA's exobiology program for many years, and he was involved in the planning stage of an exobiology program for Mars. John is well known for his extensive work on the isotopic abundances of gases in the lunar regolith, and in particular for his attempts to understand the striking variability of implanted nitrogen. With the help of several colleagues, John carried out extensive studies of the isotopic abundances and origins of the elements H, C, and N in the organic matter of carbonaceous chondrites. In several papers, Kerridge and coworkers pointed out that the isotopic compositions of kerogen-like molecules most likely require a currently unknown environment. These papers suggested a possible origin in a molecular cloud environment, a model being actively investigated today.

In retirement, John kept abreast of developments in work on the solar compositions and on the currently unknown origin of the abundant nonsolar nitrogen component. He also enjoyed competing in vintage car races with his lovingly rebuilt 1926 Frazer-Nash. John is survived by his wife, Carol.

#### Kurt Marti and Kevin McKeegan

#### Peter Eberhardt (1931–2013)



Peter Eberhardt received his PhD in 1956 from the University of Bern. As part of his thesis work on the decay products of natural technetium in molybdenite, Peter designed and built the first mass spectrometer at the Physics Institute. Peter became interested in meteorites, and after finishing his PhD, he did postdoctoral research in Chicago and La Jolla with Harold Urey. There he met his future wife, Anita. Back in Bern, he led, together with Johannes Geiss, the meteorite and lunar-sample research program and the work on the aluminum foils deployed

on the lunar surface by the astronauts of Apollo 11 to 16. A more complete outline of Peter's scientific achievements can be found in the Leonard Medal citation by Edward Anders in *Meteoritics* 26, page 70 (1991).

Peter Eberhardt was an exceptionally good experimental physicist. Under his guidance, six more mass spectrometers for noble gas research were built. He was very systematic and careful, and he never published results that were not absolutely correct. He had a sixth sense for things that could go wrong in the laboratory. For example, he would rush into the lab, and his first words might be: "Why is the emission not on 200 mA?" And the student might say: "Oh, yes, I did not see!" Or a power failure could occur in the building, and within seconds he would be in the lab, ordering what to do to avoid damage to the mass spectrometers.

Later in his career, space research became important at the Physics Institute. Under Peter's guidance, mass spectrometers for high-altitude rockets, satellites, and space probes were designed, such as for the mission to the comet Giotto and the ongoing mission to the comet Churyumov-Gerasimenko. Unfortunately he will not experience the encounter, in 2014, of the Bernese ROSINA instrument with this comet. The research community thanks Peter Eberhardt for his commitment and devotion to our scientific goals.

**Otto Eugster** 

## **STUDENT TRAVEL AWARDS**

This year, 40 students attending the annual meeting of the Society in Edmonton, Alberta, Canada, received travel grants. Student travel grants and travel grants for scientists from countries with limited financial resources are generously sponsored by the Barringer Crater Company, the Planetary Studies Foundation, NASA (Cosmochemistry Program), The Meteoritical Society Endowment Fund, the International Mineral Collectors Association (Brian Mason Award), and the Royal Astronomical Society of Canada, Edmonton Centre.

#### Barringer Crater Company Awardees

Moritz Barth, Universität Münster Jean-David Bodénan, The Open University Edivaldo dos Santos Filho, Centro Brasileiro de Pesquisas Físicas Lauren Flor Tores, Universidad del Valle Christopher Fry, Carleton University Alexandre Garenne, Université Joseph Fourier Marian Horstmann, Universität Münster Melinda Krebsz, Hungarian Academy of Science Agata Krzesińska, Polish Academy of Sciences Haruka Kusuno, Rissho University Kuljeet Kaur Marhas, Physical Research Laboratory Annemarie Pickersgill, Western University My Riebe, ETH Zürich Jared Shivak, University of Western Ontario Katrina van Drongelen, University of Toronto Niel Williams, The University of Manchester Yakovlev Grigoriy Alekseevica, Ural Federal University

#### Planetary Studies Foundation Awardees

Katherine Armstrong, Portland State University Nicole Lunning, University of Tennessee

#### NASA Cosmochemistry Program Awardees

Evan Groopman, Washington University Pierre Haenecour, Washington University in St. Louis Jangmi Han, University of New Mexico Romy Hanna, University of Texas in Austin Ellen Harju, University of California, Los Angeles Junko Isa, University of California, Los Angeles Christine Jilly, University of Hawai'i at Mānoa Josiah Lewis, Washington University in St. Louis Prajkta Mane, Arizona State University Myriam Telus, University of Hawai'i at Mānoa Reto Trappitsch, University of Chicago Curtis Williams, Arizona State University Mahmet Yesiltas, University of Central Florida Tianhon Yu, Clemson University

#### Meteoritical Society Endowment Fund Awardees

Mahaveer Sisodia, J. N. Vyas University, India Hasnaa Chennaoui Aoudjehane, Hassan II University, Morocco

#### Royal Astronomical Society of Canada, Edmonton Centre Awardees

Daniel Applin, University of Winnipeg Michael Bramble, Western University Maxim Ralchenko, Carleton University Diego Uribe, Western University

#### International Collectors Association – Brian Mason Award

In 1997, Joel Schiff, the first editor of the popular Meteorite magazine, created a travel award in honor of Brian Mason, who was born in New Zealand. The award is given to a student attending the annual meeting of the Society who submits an abstract that presents clearly explained, exciting results of particular interest to readers of Meteorite magazine. The recipient is required to write a popular account of his or her work for the magazine. Since 2008, the award has been generously funded by the International Meteorite Collectors Association.



This year the program committee for the Edmonton meeting selected Jinping (Joseph) Hu as the winner of the Brian Mason Award. A third-year graduate student at Arizona State University in Tempe, Arizona, USA, Jinping submitted an abstract entitled "Shock Metamorphism in L Chondrites above Shock Stage S6"; authors J. Hu, T. G. Sharp, and P. S. DeCarli. The paper discusses the effects of high postshock

temperature and the annealing of high-pressure evidence in highly shocked ordinary chondrites ranging from shock stage S6 through whole-rock melting.

# HANDBOOK OF IRON METEORITES NOW ONLINE

Electronic versions of volumes 1 and 2 of the Handbook of Iron Meteorites, by Vagn F. Buchwald, are now available at the University of Hawai'i website (http://evols.library.manoa.hawaii.edu/handle/10524/33750), or you can Google Handbook of Iron Meteorites. Volume 3 is still being scanned and will be up soon. Permission for scanning was granted by the copyright holder, Mini Wadhwa (Arizona State University Center for Meteorite Studies), and the NASA Cosmochemistry Program funded the project. Jeff Grossman and Ed Scott (University of Hawai'i) and John Wasson (UCLA) launched the website, which will be hosted by the University of Hawai'i.

The Handbook of Iron Meteorites was published in 1975 and, although no longer in print, is still an extraordinarily valuable resource. This monumental book contains 1426 pages, 2124 figures, eight appendices, and a supplement. Volume 1 provides a general introduction to meteorites, fireballs, and impact craters and to the mineralogy, composition, and properties of iron meteorites. It also contains appendices of information about iron meteorites. Volumes 2 and 3 contain descriptions of about 600 iron meteorites-nearly all those that were known and accessible in 1975. These descriptions include information about the structure, mineralogy, and composition of each iron meteorite, its discovery and subsequent history, and a list of museum holdings. A guide for users can be found on page 245 at the beginning of volume 2. At the end of volume 3, on pages 1376–1418, a supplement contains information about eleven meteorites studied by Vagn Buchwald after 1973, plus additional notes and photographs for a few other iron meteorites.

#### **CALL FOR AWARD NOMINATIONS**

Please consider nominating a colleague for one of the Society's awards. Nominations should be sent to Secretary Greg Herzog (metsocsec@ gmail.com) by January 15 (January 31 for the Service Award and the Pellas-Ryder 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.

The Society gives a number of awards each year. The Leonard Medal honors outstanding contributions to the science of meteoritics and closely allied fields. The Barringer Medal and Award recognize outstanding work in the field of impact cratering and/or work that has led to a better understanding of impact phenomena. The Nier Prize recognizes outstanding research in meteorites and closely allied fields by scientists who are under 35 or within 7 years of the PhD. The **Service** Award honors members who have advanced the goals of the Meteoritical Society to promote research and education in meteoritcs and planetary science in ways other than by conducting scientific research. The Paul Pellas-Graham Ryder Award is given for the best student paper in planetary science and is awarded jointly by the Meteoritical Society and the Planetary Geology Division of the Geological Society of America.