

Meteoritical Society

http://meteoriticalsociety.org



2017 ANNUAL MEETING REPORT

The 80th Annual Meeting of the Meteoritical Society was held 23–28 July 2017 in the Santa Fe Convention Center in Santa Fe, the New Mexico (USA) state capital. With 410 registered participants, this annual meeting was an average size for a North American Meteoritical Society (MetSoc) meeting. In total, 418 abstracts were accepted for 264 oral and 154 poster presentations. Oral presentations were scheduled in three parallel sessions from Monday (24 July) to Friday (28 July), and all posters were on display for the entire duration of the conference. Of the 410 registrants, 370 were scientists, 84 were student participants, 34 were guests, and 6 were one-day registrants. A total of 284 registrants were MetSoc members.

A total of 41 travel awards were allocated to student members, early career scientists, and scientists from low-income countries through generous sponsorships donated by the Barringer Crater Company, the NASA Cosmochemistry Program, the International Meteorite Collectors Association (IMCA), the Planetary Studies Foundation (PSF), Elsevier, and the Meteoritical Society Endowment and the Travel for International Members Fund.

The conference kicked off on Sunday (23 July) with registration in the La Fonda Hotel and two pre-conference workshops: Recognizing the Criteria for Ancient Impact Structures (Drs. Aaron Cavosie and Shawn Wright); and Mars Sample Return: Sample Priorities, Investigations and Measurements (Drs. Dave Beaty and Hap McSween). The day concluded with the Welcome Function held in the Ballroom of the La Fonda Hotel, and with Spanish Flamenco entertainment.

The scientific program covered 26 topics: these were organized under the themes of achondrites, carbonaceous chondrites, ordinary chondrites, chondrules, sample return analyses, volatiles, Solar System chronology, impacts, Mars, 40 seasons of ANSMET [Antarctic Search for Meteorites], geochemistry of lunar meteorites, organic matter, presolar grains, interplanetary dust particles, and differentiated bodies.

The Annual Barringer Invitational Lecture on Monday evening was presented by Harrison "Jack" Schmitt, the only geologist to have ever walked on the Moon. His outstanding and entertaining lecture about his adventures as a lunar astronaut and the geology of the Moon received minutes of standing ovations, and was one of the highlights of the conference.

The Special Annual Lecturer, sponsored by MetSoc, on Thursday morning was Dr. Mark Boslough (Sandia National Laboratories, University of New Mexico). He presented a fascinating and captivating story entitled, "Explosions in the Sky: The Science of Airbursts".

The society's Award Ceremony, and the Leonard Medal and Barringer Award medalist talks by Profs. Mark Thiemens and Akira Fujiwara, respectively, were presented on Wednesday morning (July 26). Following

RENEW YOUR MEMBERSHIP NOW!

Please renew by 31 March 2018; after that date, a \$15 late fee will be assessed. You can renew online at: http://metsoc.meteoriticalsociety.net the award ceremony, most conference attendants enjoyed exploring the beautiful city of Santa Fe. Two separate field trips to the Santa Fe Impact Structure were offered and were highly popular.

Later that evening, the annual Conference Banquet was held at the La Fonda Hotel. Following drinks and live Mariachi entertainment, the delicious buffet was opened. However, THE big hit of the banquet was the following Karaoke session! You have never seen so many meteorite-, cosmo-, planetary scientists enjoy and sing and dance away their souls!! Everybody seemed to have the times of their lives! [Note to future MetSoc organizers: please let this become a "tradition".]

To conclude on the topic of festivities, both poster sessions on Tuesday and Thursday evenings were well catered for, were very well attended, and hopefully many good discussions were made over drinks and posters – the beautiful setting of the poster rooms opening up into the sunny courtyard certainly helped encourage exchanges between young and old.

We also had, during Tuesday lunch, for the first time at MetSoc, a "student meet & greet" at the beautiful terrace of the La Fonda. We offered this as a free event to encourage student participation, and we supplied sandwiches and beer. It was a success! I received plenty of very positive feedback from both students and the "senior scientists", and I urge future MetSoc organizers to keep this type of event in mind.

The conference concluded on Friday afternoon with a Farewell function, where we were entertained and enchanted by a Native American flute trio.

Two post-conference field-trips were offered, both of which were well attended:

- 1. A 3-day trip to the Meteor Crater & Northern Arizona; Saturday, July 29 Monday 31, 2017 (Dr. David Kring)
- Rio Puerco Volcanic Field (Roots of Volcanoes, Mantle Nodules, Marine Sediments, and Western Rio Grande Rift); Saturday, July 29, 2017 (Drs. Larry Crumpler, Jayne Aubele)

The post-conference workshop Martian Meteorites Under the Microscope (Dr. Tony Irving) was very successful and was held on the UNM campus in the Institute of Meteoritics on Saturday.

The conference program and abstract volume can be accessed on the website of the Lunar and Planetary Institute: https://www.hou.usra.edu/meetings/metsoc2017/pdf/program.pdf, and on the dedicated conference website: http://metsoc2017-santafe.com/.

This report would not be complete without thanking the numerous colleagues and students, whose tireless efforts made it all possible. We want to emphasize the dedicated support from the members of the Local Organizing Committee, the Scientific Program Committee, and the Travel Award Committee, and from all those who made themselves available as judges of student presentations, guides on conference tours, student assistants, and in many other functions.

The MetSoc 2017 Chair of the Local Organizing Committee

Karen Ziegler

ELEMENTS 430 DECEMBER 2017

SOCIETY AWARD WINNERS

The society gives four major awards each year. For more information see the Call for Nominations and the MetSoc's webpage.



The LEONARD MEDAL. This is the society's highest and oldest award and 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 of the MetSoc and its first president. This year the award was presented to **Mark Thiemens** (University of California, San

Diego, USA), for the fundamental insight that local chemical fractionation processes can explain oxygen isotope systematics in the early Solar System, a seminal breakthrough in understanding one of the most important observations in meteoritics. The citation was given by François Robert.



The BARRINGER MEDAL AND AWARD. Both these are sponsored by the Barringer Crater Company and 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 **Akira Fujiwara** (Institute of Space and Astronautical Science, and

the Japan Aerospace Exploration Agency) for his pioneering work in the investigation of the collisional disruption of small bodies in the Solar System. The citation was given by Masanao Abe.



The NIER PRIZE. This prize is awarded to a young scientist in the field of meteoritics, and the 2017 winner is **Francis McCubbin** of the NASA Johnson Space Center (Houston, Texas, USA). Francis receives this award for his significant contributions to our understanding of lunar volatiles, and the cosmochemical implications for both lunar and Solar System evolution. The citation was given by Carl Agee.



The SERVICE AWARD. **Cecilia Satterwhite** of Jacobs, Inc. (at NASA Johnson Space Center), in Houston, Texas, is the winner of this year's Meteoritical Society Service Award. Cecilia receives this award for her effort in curatorial work that is critical to implementation of essentially all research on the US Antarctic Meteorite (ANSMET) Collections. The citation was given by Kevin Righter.



The GORDON MCKAY AWARD. This award is given for the best oral presentation by a student at the annual meeting of the 80th Annual Meeting of the Meteoritical Society. The 2017 award goes to **Jennika Greer** of the University of Chicago (Illinois, USA) for her talk entitled "Atom Probe Tomography of Lunar Regolith Ilmenite Grain Surfaces."

CALL FOR AWARD NOMINATIONS

Please consider nominating a colleague for one of the MetSoc awards. Nominations should be sent to Secretary Michael Weisberg (metsocsec@gmail.com) by 15 January 15 2018 (31 January 2018 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 *Meterorical Society Newsletter* at the society's website, or email the secretary.









The WILEY-BLACKWELL AWARDS. Wiley-Blackwell, publishers of *Meteoritics and Planetary Science*, sponsored four awards of \$500 (USD) each for outstanding presentations by students at the 80th Annual Meeting of the Society in Santa Fe. The winners and their talks were as follows: **Daniel Dunlap** (Arizona State University, Tempe, Arizona, USA) for his talk entitled "²⁶Al-²⁶Mg Systematics of the Ungrouped Achondrite Northwest Africa 11119: Timing of Extraterrestrial Silicarich magmatism"; **Maximilien Verdier** (Muséum National d'Histoire Naturelle, Paris, France) for the presentation, "Temperature Precipitation of Ca-Carbonates in CM Chondrites Inferred from in-situ Oxygen Isotopes"; **Jonas Pape** (University of Bern, Switzerland) for the presentation, "In-Situ ²⁶Al-²⁶Mg Dating of Single Chondrules by Secondary Ion Mass Spectrometry"; and **Lionel Vacher** (Université de Lorraine, France) for his presentation, "Petrographic and Isotopic C and O Survey of the Earliest Stages of Aqueous Alteration of CM Chondrites."

ANNUAL MEETING SCHEDULE

2018: 23–27 July, Moscow (Russia) 2019: 8–12 July, Sapporo (Japan) 2020: Dates TBD, Glasgow (Scotland) 2021: Dates TBD, Chicago (Illinois, USA)

IN MEMORIAM: FARA LINDSAY



Fara Lindsay, an astute petrologist, inspiring teacher, and talented dancer, died 14 June 2017 from cancer. A native of Bayonne (New Jersey, USA) she received her BA in 1983 from the State University of New York, Brockport, specializing in movement analysis. Fara went on to dance professionally in the US with the Alvin Ailey American Dance Theater and in Europe with the Broadway Musical Company. In the late

1990s, she returned to college, this time enrolling at Rutgers University (New Jersey) where she earned a second bachelor's degree, a BS this time, with a double major in chemistry and geology. This was followed in 2009 by a PhD under the direction of volcanologist Michael J. Carr.

From 2009 through 2017, Fara did research on extraterrestrial materials with our group at Rutgers, where she was a superb mentor for undergraduates. She was equally at home with the electron microprobe, the petrographic microscope, or a centrifuge tube, although if given her preference she'd always choose the probe. She brought her considerable skills to bear on problems relating to the Moon, meteorites, and micrometeorites. Her main focus was ⁴⁰Ar/³⁹Ar dating of microsamples of meteorites, by means of which she examined a rich chronological landscape not readily accessible from analyses of bulk materials or mineral separates. She presented the results of her work at many international conferences, and had 42 publications to her name. In 2016, Fara joined the MoonDB program at Lamont–Doherty Geological Laboratories (New York, USA) with Kerstin Lehnert.

Fara leaves behind many friends among whom we are glad to count ourselves. The echo of her laughter resonates in the halls of Rutgers Geology Department.

Gail Ashley, Jerry Delaney, Gregory Herzog, Jisun Park, Carl Swisher, Brent Turrin

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