



# Meteoritical Society

<http://meteoriticalsociety.org>

## 2023 ANNUAL MEETING REPORT

The 85<sup>th</sup> Annual Meeting of the Meteoritical Society was held in August 2023 on the campus of the University of California – Los Angeles (UCLA) in Westwood, California, USA. MetSoc2023 was the fifth time the Society has met at UCLA, the most recent prior meeting being in 2002.

Scientific talks were presented in two parallel sessions at the Luskin Conference Center, either live or streamed via Zoom; there were also two in-person poster sessions held on Tuesday and Thursday evenings. There were 332 scientific contributions, approximately equally split between talks and posters. A very large majority (~94%) of the 342 meeting attendees made the trip to Los Angeles, and most were housed on campus (at the Luskin Hotel, the UCLA Guest House, or student dormitories). All events during the conference were hosted on the UCLA campus including a welcome party at the Sculpture Garden; the annual banquet, held outdoors in front of Royce Hall; and the Barringer Invitational Lecture, held at the Fowler Museum on Monday evening. Amy Mainzer of the University of Arizona, USA presented the Barringer Lecture to an attentive audience of conference attendees and the public; her talk was entitled “Earth-Approaching Asteroids and Comets: Opportunity and Risk.” A pre-conference town-hall was organized by the Impact Cratering Committee of the Meteoritical Society to discuss “Goals, Perspectives, and Challenges” in Earth-based crater research. Conference attendees also had opportunity to learn about the Astromaterials Data System at a luncheon and town-hall.

As usual, Wednesday morning witnessed the presentation of Society Awards and distinguished lectures. The Leonard Medal Lecture, “Pallasites to Presolar Grains: Looking Inside Asteroids, the Solar Nebula, and Stars with Isotopes and Trace Elements,” was given by Andy Davis; and the Barringer Medal Lecture, “Spinels in Sediments and the Astronomical Perspective on Earth’s History — What Can 20 Tons of Rock and 40,000 Litres of Hydrochloric Acid Tell Us?” was presented by Birger Schmitz. In lieu of the semi-traditional Wednesday afternoon “boat trip” (or equivalent local cultural exploration), the conference organizers collaborated with the UCLA SPACE Institute to sponsor a plenary symposium about current and planned exploration missions and sample return from inner Solar System bodies. Excellent talks and discussions were presented by planetary scientists leading these efforts, including Laurie Leshin, Nancy Chabot, Linda Elkins-Tanton, Hal Levison, Shogo Tachibana, Lindsay Keller, Tomohiro Usui, and Meenakshi Wadhwa. UCLA’s Dean of Physical Sciences, Miguel Garcia-Garibay, welcomed the public to the event, which was followed by a garden reception and, soon afterward, the banquet. Guests enjoyed a lovely SoCal evening, so typical for this time of year that meeting organizers had earlier confidently quipped that “we have arranged for it to not rain.” Those same folks (i.e., us) were simultaneously sobered and amused when five days later, tropical storm Hillary soaked LA, the first such storm to hit Los Angeles in 84 years! And, in case you’re wondering, there really was no “plan B” for the banquet (but perhaps Frederick Leonard was looking out for us?). With the conference ending at noon on Friday, a few dozen folks stayed around to take advantage of some post-meeting excursions: to the Jet Propulsion Laboratory (courtesy of Director Leshin), to the Getty Museum, and to the Hollywood Bowl for the “Tchaikovsky Spectacular with Fireworks.”

The meeting was hosted by UCLA’s Department of Earth, Planetary, and Space Sciences (EPSS) and by the Lawrence Livermore National Lab (LLNL). The local organizing committee included Gerardo Dominguez



(CSSM), Yang Liu (JPL), Chi Ma (CIT), Alan Rubin (UCLA), Paul Warren (UCLA), François Tissot (CIT), Frank Kyte (UCLA), Nozomi Matsuda (UCLA), Ed Young (UCLA), and Bidong Zhang (UCLA). Ed Young chaired the program committee, which included James Day, Steve Desch, Philipp Heck, Devin Schrader, Quinn Shollenberger, and Myriam Tellus in addition to members of the local organizing committee. Gerardo Dominguez and François Tissot ably chaired the committee, which allocated nearly \$80k in travel awards. We are very grateful to those institutions who provided financial support, especially the Barringer Crater Company, Elsevier, Planetary Studies Foundation, O. Richard Norton Fund, The Macovich Meteorite Collection, The David B. Ghesling Trust, The Maine Mineral and Gem Museum, International Meteorite Collectors Association, JPL, the Meteoritical Society, NASA PSD, CAMECA Instruments, and the UCLA Division of Physical Sciences. This meeting would not have been possible without the professional support from the LPI staff. We also greatly appreciate help from student (and postdoc) and UCLA Meteorite Gallery volunteers, as well as the support of the EPSS department staff and the Meteoritical Society leadership.

**Ming-Chang Liu and Kevin McKeegan**

Co-chairs of the MetSoc2023 Local Organization Committee

## SOCIETY AWARD WINNERS

The Society gives five major awards each year. For more information on individual awards, please see the Call for Nominations and the Society webpage. Congratulations to the highly deserving awardees, and thank you to all our members who took the time to nominate your colleagues for consideration and who serve on award committees.



The Leonard Medal is given to individuals who have made outstanding original contributions to the science of meteoritics or closely allied fields. The Meteoritical Society presents the 2023 Leonard Medal to **Andrew M. Davis** for his profound contributions to deciphering early Solar System processes by improving the chronology, constraining the differentiation of planetesimals, exploring diffusion and condensation/evaporation processes, and revealing stellar nucleosynthetic pathways; and for advancing the chemical and isotopic microanalysis of meteoritic materials. *Full citation: <https://doi.org/10.1111/maps.14044>*



The Barringer Medal is given for outstanding work in the field of impact cratering and/or work that has led to a better understanding of impact phenomena. The Meteoritical Society presents the 2023 Barringer Medal to **Birger Schmitz** for his groundbreaking use of micrometeorites in the sedimentary record to discern the history of impact processes; and to understanding the effects of impact bombardments on Earth’s systems. *Full citation: <https://doi.org/10.1111/maps.14037>*



The Nier Prize is given for significant research in the field of meteoritics and closely related fields by an early career scientist under the age of 35 or whose PhD was awarded <7 years ago. The Meteoritical Society presents the 2023 Alfred O. Nier Prize for a distinguished young scientist to **Jessica Barnes** for her contributions to volatiles in astromaterials and their use in advancing understanding of the inventory, origin, and



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evolution of volatiles in the inner solar system; and for developing advanced NanoSIMS methods for analysis. *Full citation:* <https://doi.org/10.1111/maps.14038>



The Service Award honors members who have advanced the goals of the Society to promote research and education in meteoritics and planetary science in ways other than by conducting scientific research. The Meteoritical Society presents the 2023 Service Award to **Hasnaa Chennaoui Aoudjehane** for her initiatives in support and promotion of meteoritics and planetary science in African and Arabic countries; for

her untiring mentoring of students; and for her service to the Meteoritical Society, scientific community, and public outreach efforts. *Full citation:* <https://doi.org/10.1111/maps.14029>



The Jessberger Award is given for outstanding research in the field of isotope cosmochemistry by a female scientist in the middle of her career who has received her doctorate at least 10 years and not more than 20 years before. The Meteoritical Society presents the 2023 Elmar K. Jessberger Award to **Jamie E. Elsil** for her influential role and strong leadership in isotope cosmochemistry; and for determining compound-

stable isotopes of organic compounds in meteorites and lunar rocks. *Full citation:* <https://doi.org/10.1111/maps.14039>

The GORDON MCKAY AWARD and WILEY-BLACKWELL AWARDS from the 2022 meeting in Glasgow will be announced in a later issue of *Elements*.

### CALL FOR AWARD NOMINATIONS

Please consider nominating a colleague for one of the Society's awards. Nominations should be sent to the society secretary at ([metsec@gmail.com](mailto:metsec@gmail.com)) by 15 January (31 January 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 email the secretary.

### UPDATED ANNUAL MEETING CALENDAR

2024	(86 <sup>th</sup> Annual Meeting) 28 July–2 August Brussels, Belgium (EU)
2025	(87 <sup>th</sup> Annual Meeting) 14–18 July Perth, Australia
2026	(88 <sup>th</sup> Annual Meeting) July/August TBD Frankfurt, Germany (EU)
2027	(89 <sup>th</sup> Annual Meeting) July/August TBD Flagstaff, Arizona, USA

### RENEW YOUR MEMBERSHIP NOW!

Please renew by 31 March 2024; after that date, a \$15 late fee will be assessed. You can renew online at <https://meteoritical.org/society/membership>.

### THE IAGC INTERNATIONAL CONFERENCE

The 2<sup>nd</sup> IAGC International Conference took place on August 17–22, 2023 in Sendai, Japan. The conference was a success! Participants enjoyed a series of great scientific talks including the Jin Jingfu Lecture presented by **Yuan Mei** (CSIRO, Australia) and the Ingerson Lecture presented by **Martine Savard** (Geological Survey of Canada).



The 2nd International Association of Geochemistry (IAGC) Conference

## Water-Rock Interaction WRI-17 Applied Isotope Geochemistry AIG-14 in SENDAI 2023

The IAGC also presented 2020–2022 awards in person. Award presentations included the Vernadsky Medal (2020) to **Yousif Kharaka**, the Ebelmen Award (2020) to **Zimeng Wang**, the IAGC Fellow Award (2021) to **Yanxin Wang**, and the Harmon Distinguished Service Award (2022) to **Neus Otero**. The IAGC would like to thank Secretary General **Noriyoshi Tsuchiya** (Tohoku University, Japan) and the local organizing committee for hosting the joint WRI-17 and AIG-14 meeting!

We are also excited to announce that the 3<sup>rd</sup> IAGC International Conference will be held in Cagliari, Italy in June 2025. This conference will be hosted by **Giovanni De Giudici** at the University of Cagliari, Italy. More information about the joint Water-Rock Interaction (WRI-18) and Applied Isotope Geochemistry (AIG-15) meeting will be available in 2024.