

**Meteoritical Society** 

### http://meteoriticalsociety.org

# **REPORT OF THE METEORITE NOMENCLATURE COMMITTEE**



The Nomenclature Committee (NomCom) continues to receive submissions at an increasing rate each year, so we are happy to report that Earth's supply of meteorites continues to grow. Furthermore, many of the meteorite-collecting efforts that were postponed or paused since the start of the COVID-19 pandemic have since resumed (e.g., ANSMET).

Many individuals are responsible for the success

of NomCom, including all the NomCom members, scientists, and engineers that improve our ability to find and detect meteorites, meteorite finders and classifiers, and repository curators. I would like to thank everyone mentioned above for their tireless efforts to ensure that the global inventory of meteorites continues to grow and that meteorites remain a rich, valuable, and accessible scientific resource for studying the Solar System rock record. I also want to acknowledge the positive impacts on the study of meteoritics from the global community of meteorite collectors. Their interests and resources help to drive the demand to find new meteorites, and the scientific community continues to benefit from those efforts.

NomCom is currently composed of nine appointed members: Francis McCubbin (Chair; NASA JSC, USA), Camille Cartier (Université de Lorraine, France), Cyrena Goodrich (Lunar and Planetary Institute, USA), Ansgar Greshake (Museum für Naturkunde, Germany), Juliane Gross (Rutgers University, USA), Katherine Joy (The University of Manchester, UK), Bingkui Miao (Guilin University of Technology, China), Devin Schrader (Deputy Editor, Arizona State University, USA), and Bidong Zhang (UCLA, USA); and three ex-officio NomCom members: Jérôme Gattacceca (*MetBull* Editor; CEREGE, France), Jeff Grossman (Database Editor, NASA, USA), and Guy Consolmagno (MetSoc Vice President; Vatican Observatory, Italy).

The NomCom is a committee of The Meteoritical Society; its purpose is to approve new meteorite names and classifications, and to establish guidelines and make decisions regarding the naming and classification of meteorites. New meteorites, dense collection areas (DCAs), typespecimen repository collections, and revisions are published through the *Meteoritical Bulletin* and the Meteoritical Bulletin Database (MBDB) (https://www.lpi.usra.edu/meteor/).

As of this writing, there are 73,953 approved meteorites in the Meteoritical Bulletin Database, including 15,653 with a full classification description.

**Meteorites and Dense Collection Areas:** The 2022 entries of the MBDB, totaling 3904 meteorites, have been published in the *Meteorite Bulletin*, No. 111 by Gattacceca et al. (2023). The full write-ups of 1307 non-Antarctic meteorites and supplementary tables can be found online as supporting information and in the MBDB archive. The *MB* 111 includes 11 approved falls as well as 31 new DCAs. *Meteoritical Bulletin* No. 112, containing new meteorites, DCAs, and type-specimen repositories approved in 2023, is in preparation and will be submitted later this year to *Meteoritics & Planetary Science*.

**Meteorite naming:** remember to send your write-ups for new and provisional names to NomCom at least four weeks before submitting your conference abstract or manuscript to journals to avoid potential issues with naming and classification, which can delay publication. The release of the write-up to the database may be held on request if there is an embargo from publishers.

Finally, please do not hesitate to contact us with questions or concerns about the NomCom, especially with suggestions for improvement (metbulleditor@gmail.com).

**Francis McCubbin** Chair of the Nomenclature Committee NASA Johnson Space Center

#### REFERENCE

Gattacceca J and 11 coauthors (2023) The Meteoritical Bulletin, No. 111. Meteoritics & Planetary Science 58: 901-904, doi: 10.1111/maps.13995

### PAUL PELLAS / GRAHAM RYDER AWARD WINNER

The Pellas-Ryder Award for the best student paper in planetary sciences is jointly sponsored by the Meteoritical Society and the Planetary Geology Division of the Geological Society of America. It is awarded to an undergraduate or graduate student who is first author of the best planetary science paper published in a peer-reviewed scientific journal during the year prior to the award. The award has been given since 2001 and honors the memories of meteoriticist Paul Pellas and lunar scientist Graham Ryder.

Congratulations to the 2024 winner for this highly deserved honor and for leading this impressive study! We also thank everyone who submitted nomination packages and the Pellas-Ryder Award Committee for their work to make this award possible.

### **12 NEW ENDOWMENT GRANTS AWARDED**

The Meteoritical Society Endowment Fund (https://meteoritical. org/grants/general-endowment-fund) supports a variety of activities through grants that advance the goals of the society, with selections made twice a year. The recently selected grant efforts are:

Community Grants - more details on the Meteoritical Society website

Samanta Aravena (Universidad de Chile, Chile) – Meteorites: Human Heritage

**Nicholas Gessler** (*Duke University (retired), USA*) – EL ALI in Contemporary Somali Media (Translated into English)

**Richard Greenwood** (*The Open University, UK*) – A New Meteorite Gallery at the Open University: A Community Science Outreach Resource

**Kuljeet Kaur Marhas** (*Physical Research Laboratory, India*) – 4<sup>th</sup> Symposium on "Meteoroids, Meteors and Meteorites: Messengers from Space" (MetMeSS-2024)

**Peng Ni, Bidong Zhang** (*UCLA, USA*) – Meteorite Information Digitization and Archiving (MIDiA) at UCLA

**Lee Franci White** (*The Open University, UK*) – Engaging Local Schools at the European Lunar Symposium (ELS)

**Mehmet Yesiltas** (*Kirklareli University, Turkey*) – Turkish All-Sky Fireball Network

**Research Grants** – more details on the Meteoritical Society website **Luke Alesbrook** (University of Kent, UK) – Impacting Exotic Ices

**Mayssa Daldoul** (University Tunis El Manar, Tunisia) – Mapping Martian Craters

**Yeimmy Alexandra Gutierrez Pardo** (Universidade de Brasília, Brazil) – Genesis of the Mafic Granophyre Impact Melt Rock, Vredefort Impact Structure, South Africa

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### SOCIETY NEWS



## European Mineralogical Union

**Sadeeda Marjan** *(University of Kerala, India)* – Hydraulic Modelling and CRN Dating of Inlet and Outlet Valleys on Terrestrial and Martian Craters

Ran Zhao (University of Bayreuth, Germany) – Meteoroid Impacts

Additionally, one proposal submitted for consideration of a Community Grant was recommended by the Membership Committee to be supported out of the society's operating budget rather than the endowment fund went to **Thomas Burbine** (*Mount Holyoke College, USA*) – Information Booth at AGU.

### **GIFTS AND GRANTS GUIDELINES**

The stated mission of the Meteoritical Society is "to promote research and education in planetary science with emphasis on studies of meteorites and other extraterrestrial materials that further our understanding of the origin and history of the solar system." Besides the Society's publications, the annual scientific meetings, establishing official names for newly found meteorites, and the awards sponsored by the Society, there are other ways by which we work toward furthering our mission. This includes supporting student travel to conferences and workshops, supporting student research, assisting scientists from economically disadvantaged countries, supporting classes or field schools, especially those that bring meteoritics and planetary science to developing countries, compiling oral histories from prominent members of the Society, and supporting outreach to the broader public community on meteoritics and planetary science.

To support these activities, the Society has created an Endowment Fund. The majority of the Endowment consists of the *General Fund* which can support one-time activities that are not part of the normal Society business. The Endowment Fund also has named funds, the *Nier Fund*, the *McKay Fund*, and the *TIM Fund*, which were established for specific purposes. Details about activities supported by all of these Funds can be found under Activities Supported on the society website (https:// meteoritical.org).

For those who wish to assist in this mission, donations can be made to the General Fund or to any of the specific Funds (see Ways to Contribute on the society website).

### **ANNUAL MEETING SCHEDULE**

2024	July 28–Aug 2	Brussels, Belgium (EU)
2025	July 14–18	Perth, WA (Australia)
2026	August 9–14	Frankfurt, Germany (EU)
2027	Dates TBD	Flagstaff, Arizona (USA)

### **RENEW YOUR MEMBERSHIP NOW!**

Please don't forget to renew your membership for 2024. Students, this is particularly important if you are interested in applying for one of our student presentation awards, as you must be a member to be eligible. You can renew online at https://meteoritical.org/membership/join.

www.eurominunion.org

#### MEDAL FOR RESEARCH EXCELLENCE 2023: JOSÉ ALBERTO PADRÓN-NAVARTA

One of the means by which the European Mineralogical Union (EMU) fosters and encourages research in the mineralogical sciences is to present a silver medal each year. The **"EMU Research Excellence Medal**" is presented to early career scientists (no more than 15 years since completion of PhD) who have made significant contributions to research and who are active in strengthening European scientific links.



The 2023 EMU Research Excellence Medal has been awarded to **Dr. José Alberto Padrón**-

**Navarta** from the Andalusian Earth Science Institute (IACT), Granada (Spain).

Dr. Padrón-Navarta has achieved remarkable success in the fields of mineralogy and petrology, offering groundbreaking insights into the cycle and fate of volatiles through Earth's subduction zones.

Dr. Padrón-Navarta completed his PhD at the University of Granada, Spain. After undertaking postdoctoral research fellowships in Australia and France, he joined the French National Center for Scientific Research (CNRS) at Géosciences Montpellier. In 2021, he returned to IACT (Granada) under the prestigious Ramón y Cajal Fellowship.

Dr. Padrón-Navarta has made outstanding contributions to mineralogy and petrology by providing novel and detailed insights into the cycle and fate of volatiles on planet Earth through subduction zones into the deep mantle. He has integrated methods from several disciplines to discover "invisible" oceans within Earth's deep interior. He has published several landmark papers on the mineralogy, phase relations, experimental petrology, rheology, microstructure, and the geochemical consequences of subducting hydrated mafic-ultramafic lithologies. He played an instrumental role in significant papers on the importance of serpentinite in the cycling of water, sulfur, and carbon, and in the thermodynamic modelling of chromite alteration.

Dr. Padrón-Navarta published a pioneering experimental and thermodynamic study on the critical role of Tschermak's solubility in antigorite, related to the stability of serpentinites. His research also encompasses the mechanisms and thermodynamic modelling of hydrogen in nominally anhydrous minerals (NAMs) and their role in recycling water in the deep Earth. In this emerging field, he has made essential contributions on site-specific hydrogen diffusion rates and hydrogen incorporation in forsterite.

Dr. Padrón-Navarta has been invited as a keynote speaker to many prestigious international meetings (e.g., American Geoscience Union, European Geosciences Union, Goldschmidt, International Geological Conference) and has convened many sessions on the cycling of volatiles and NAMs (e.g. EGU meetings, Goldschmidt, IMA). He has established collaborations with leading researchers and institutions in these fields in Europe and worldwide. He is the recipient of prestigious European research funds, such as Marie Curie and ERC Consolidator (2022) grants, reflecting the significance, excellence, and European embeddedness of his research and achievements. He leads the IACT high-pressure experimental research group, equipped with FTIR facilities to track oxygen, water, or hydroxyls and assess volatile recycling at subduction zones.

Dr. Padrón-Navarta's research achievements are game-changers in mineralogy and petrology, providing fundamental contributions to our understanding of volatile cycles at subduction zones. This makes him a highly deserving recipient of the 2023 Research Excellence Medal of the European Mineralogical Union.