

Meteoritical Society

http://meteoriticalsociety.org

REPORT OF THE METEORITE NOMENCLATURE COMMITTEE



Audrey Bouvier

The purpose of the Meteoritical Society's Nomenclature Committee (NomCom) is to approve new meteorite names and to establish guidelines and make decisions regarding the naming and classification of meteorites. New meteorites, dense collection areas, type-specimen repository collections, and revisions are published through the *Meteoritical Bulletin* and the Meteoritical Bulletin Database (MBDB) (https://www.lpi.usra.edu/meteor/).

I would like to thank Laurence Garvie (Arizona State University, USA) for his service as Chair of NomCom from 2016 to 2018, as well as Knut Metzler (Universität Münster, Germany) and Mini Wadhwa (Arizona State University) for their service on the committee. Special thanks go to Jérôme Gattacceca (Editor; CEREGE, France) and Francis McCubbin (Deputy Editor; NASA's Johnson Space Center, Texas, USA) who are handling hundreds of annual submissions and revisions of meteorites, and Jeff Grossman (NASA, USA) for maintaining the MBDB website. The annual number of approved meteorites continues to grow significantly.

The current membership of NomCom is as follows, with nine appointed members: Audrey Bouvier (Chair; Universität Bayreuth, Germany), Emma Bullock (Carnegie Institution of Washington, USA), Hasnaa Chennaoui Aoudjehane (Université Hassan II de Casablanca, Morocco), Vinciane Debaille (Université Libre de Bruxelles, Belgium), Tasha Dunn (Colby College, Maine, USA), Massimo D'Orazio (Università di Pisa, Italy), Mutsumi Komatsu (Sōkendai, Japan), Francis McCubbin (NASA Johnson Space Center), and Bengkui Miao (Guilin University of Technology,

China); and three ex-officio NomCom members: Jérôme Gattacceca (*Meteoritical Bulletin* Editor; CEREGE), Jeff Grossman (Database Editor; NASA) and Brigitte Zanda (MetSoc Vice President; Muséum national d'histoire naturelle, Paris, France).

Meteorites The 2017 entries of the MBDB are published in the *Meteorite Bulletin* (No. 106) and in *Meteoritics & Planetary Science* (2019, v54, pp 469-471). The full write-ups and supplementary tables can be found online as supporting information and in the MBDB Archive. Remember to reference the corresponding *Meteorite Bulletin* when using these data.

Meteoritical Bulletin No. 107 is currently in preparation and will include all meteorites approved in 2018. These will comprise 2,714 meteorites (compared to 1,868 in 2017), including 1,145 non-Antarctic meteorites. Over 200 submissions from South America (made after the publication of Meteoritical Bulletin Nos 102 and 106) were approved. Notable entries include 7 meteorites from fall events reported in 2018: Hamburg (Michigan, USA, 16 January), Ablaketka (Kazakhstan, 16 February), Aba Panu (Nigeria, 19 April), Mangui (China, 1 June), Ozerki (Russia, 21 June), Renchen (Germany, 10 July), and Gueltat Zemmour (Morocco, 21 August).

Dense Collection Areas There are currently 400 named dense collection areas (DCAs). Twenty-four were created in 2018, including 13 new DCAs in China. A list of all DCAs with their corresponding coordinates and KMZ files with map locations that are viewable in Google Earth© can be found at https://www.lpi.usra.edu/meteor/DenseAreas.php.

Type-Specimen Repositories Eight new type-specimen repositories were approved: **CUB** (Mineralogical Museum of Comenius University, Bratislava, Slovakia), **GSI** (Geological Survey of India in Calcutta), **IGCAS** (Institute of Geochemistry, Chinese Academy of Sciences,

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LATEST RELEASE IN OUR TOPICS IN MINERAL SCIENCES, FORMERLY SHORT COURSE, SERIES

Applied Isotope Geochemistry

Topics in Mineral Sciences, volume 48

Short course delivered at the Research for Future Generations, June 2018, Vancouver (British Columbia, Canada)

Editors: Bruce Eglington, Mostafa Fayek

and Kurt Kyser

Series Editor: Robert Raeside

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200 pages, soft cover, 2019

Isotope geochemistry is an integral part of the Earth sciences. This subdiscipline reveals the fourth dimension of our science (time), as well as revealing the processes involved in natural systems

Applied Isotope
Geochemistry

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and the means by which to trace the flux of elements through the geosphere–hydrosphere–biosphere. As such, isotope geochemistry is built on a platform of pure and theoretical science, but is primarily an applied science that adds value to mineral exploration, environmental stewardship, whole Earth ecology, the timing and causes of evolution, paleoclimate and even food authentication.

Therefore, the aim of this short course was to introduce to the greater geoscience community the utility of using isotopes to understand the processes that govern mass transport in the geosphere. Although whole books, and chapters within books, have been written on the application of isotopes, this particular short course volume is dedicated to both radiogenic and stable isotope applications for the geosciences.

The concept of this book was envisioned by Professor Kurt Kyser (1951–2017), formerly of Queen's University (Ontario, Canada). The volume begins with the application of isotopes to the exploration of volcanic massive sulfide deposits. The next three chapters focus on the application of radiogenic isotopes to mineral and fluid systems, and chapter 5 introduces current approaches to data assessment, primarily for detrital zircon samples, and introduces some new approaches which aid in the simultaneous treatment of large sets of data. Chapter 6 applies noble gas isotopes to geothermal systems, and in Chapter 7 heavy metal isotopes are used to trace anthropogenic contaminants in the environment. The final chapter is about the application of clumped isotopes and their utility in obtaining information about paleo-environments.

This volume does have some glaring omissions, however, including transition metal isotopes and the application of isotopes to understanding clay minerals and the hydrosphere. It is our hope that other researchers will be inspired by this work and, as techniques continue to evolve, a complementary volume will be organized in the future.

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Guiyang, China), **FMMR** (Fersman Mineralogical Museum, Moscow, Russia), **SNM** (Natural History Museum of the Slovak National Museum, Bratislava, Slovakia), **UND** (University of North Dakota, USA), **UNIL** (Mineralogy and Petrography Department, Musée cantonal de géologie, Lausanne, Switzerland), **HMG** (Hunan Provincial Museum of Geology, China).

In accordance with §7.1f of the *Guidelines for Meteorite Nomenclature*, type specimens of all new meteorites "... must be deposited in institutions that have well-curated meteorite collections and long-standing commitments to such curation." The minimum mass of a type specimen should be 20% of the total mass, or 20 g, whichever is the lesser amount. However, for larger meteorites, type specimens are recommended (but not required) to be at least 5% of the total mass for 0.4–10 kg, and at least 500 g for meteorites >10 kg.

Website The *Meteorite Bulletin*'s website has been updated with additional resources for the Nomenclature Committee – see https://www.lpi.usra.edu/meteor/metbull.php.

I encourage meteorite researchers and enthusiasts to check out the NomCom resources on the Meteoritical Bulletin Database webpage. Submitters of new meteorites will find the FAQ webpage particularly useful when preparing their submissions to the *Meteoritical Bulletin*. A well-prepared submission helps the editors to open these for subsequent review by 12 voting members. Sufficient details about the finding history and petrographic and geochemical information should be included.

Guidelines NomCom guidelines in §4.2c have recently been updated to handle the submissions of large pairing groups encompassing one or more dense collection areas. Field information when recovering tens or hundreds of stones is particularly important for researchers. We would like to ensure that stones can be adequately paired and tracked, not only for naming but also for future curation, research, publication, and in particular cases such as heterogeneous falls (e.g., Almahata Sitta, Nubian Desert, Sudan). Only stones submitted with coordinates and masses of such large pairing groups will be named and entered in the database.

In relation to this, *strewnfield* data can now be plotted into Google Earth. For example, the Sutter's Mill (California, USA) meteorite strewnfield is shown in Figure 1. Data are available in the Meteoritical Bulletin Database by following the strewnfield link on the meteorite page or search tool. We encourage submission of location coordinates for past and future strewnfields.

Use of official meteorite names in abstracts and publications Names of meteorites have to be approved by NomCom and published in the Meteoritical Bulletin Database to be used in abstracts and publications. It is critical to give correct meteorite names, any collection numbers when available, and also acknowledge meteorite loan sources. Such information can be used to track samples and data, to ensure that research on meteorites is reproducible, and to prevent confusion in the literature. The 2019 article "Best Practices for the Use of Meteorite Names in Publications" by Heck et al. (*Meteoritics & Planetary Science*, 10.1111/maps.13291) provides recommendations that should become the standard for meteorite research.

Finally, please do not hesitate to contact us with questions or concerns about the NomCom, especially with suggestions for improvement.

Audrey Bouvier

Chair of the Nomenclature Committee

Reference

Jenniskens P and 70 coauthors (2012) Radar-enabled recovery of Sutter's Mill meteorite, a carbonaceous chondrite regolith breccia. Science 338: 1583-1587

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. These include 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 Endowment Fund which can support one-time activities that are not part of the normal society business. The endowment fund also has specific named funds: the Nier Fund, the Gordon A. McKay Fund, and the Travel for International Members Fund. Specific details on the activities supported by these funds can be found on the society's website under Activities Supported.

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

CALL FOR NEW MEETING LOCATION PROPOSALS

The society is currently accepting proposals for future annual meeting locations. The next meeting location to be chosen will be for the year 2023. Please submit questions and/or proposals to metsocsec@gmail.

ANNUAL MEETING SCHEDULE

2019 Sapporo (Japan)	7–12 July
2020 Glasgow (Scotland)	9–13 August
2021 Chicago (Illinois, USA)	16–20 August
2022 Perth (Australia)	Dates TBD

RENEW YOUR MEMBERSHIP NOW!

Please don't forget to renew your membership for 2019. Students, this is particularly important if you are interested in applying for one of our student presentation awards, because you must be a member to be eligible. You can renew online at:

http://metsoc.meteoriticalsociety.net.