



Meteoritical Society

<http://meteoriticalsociety.org>

2017 INCOMING PRESIDENT'S ADDRESS



Trevor Ireland,
President

It is a great honour and a privilege to become President of the Meteoritical Society. I thank Past-President Mike Zolensky for his term and for allowing me to pick up where he left off. Thankfully, Mike will be there for the next two years to help us figure out what he has done. I am also looking forward to working with Meenakshi (Mini) Wadhwa, newly elected Vice President, whom I am sure will sort out both Mike and myself.

I was introduced to meteorites by Paul Sipiera (Planetary Studies Foundation) when we were both students at Otago University in New Zealand. It was my intention to study isotopic anomalies in meteorites with William Compston on the then newly commissioned SHRIMP at the Australian National University (ANU). Paul introduced me to these awful looking rocks called carbonaceous chondrites. After learning igneous and metamorphic petrology as an undergraduate, these rocks were the weirdest things I had ever seen.

Still, I persevered and was then introduced to the strange mineral hibonite by Ernst K. Zinner (1937–2015). I had been working at ANU to try and resolve the +1‰ ⁵⁰Ti anomaly in Allende CV3 calcium-aluminium inclusions (CAIs). While I was successful in doing this by single collector mass spectrometry, and was working on improving the measurements by using multiple ion counters, Ernst revealed that much larger anomalies were present in hibonite grains from CM2 chondrites. That was the end of resolving 1‰.

The scale of the isotopic anomalies in hibonites is similar to that found in pre-solar grains, yet these objects were formed in our Solar System. It is simply the chemical memory of the precursors of these grains that were heated to extreme levels in our Solar System some 4.57 billion years ago.

Meteorites are samples of the Solar System that have largely escaped much of the planetary homogenisation evident on Earth. With the discovery of more and more exoplanets, meteorites also provide the only ground truth of what an evolving planetary system must have looked like and what processes were active. Unfortunately, meteorites lack context. We must infer location within the current Solar System from where they are now, and then the early Solar System from whence the components came.

Two major developments are helping us out. Fireball networks, such as the Desert Fireball Network being run in Australia by my colleague Phil Bland, allow the placement of meteors back into their Solar System neighbourhoods. Recovering the meteorite also allows a compositional fix to be made. Compositional and locational data provide essential context for our current meteorite collections.

ANNUAL MEETING SCHEDULE

- 2017: July 24–28 at Santa Fe, New Mexico (USA)
- 2018: Moscow (Russia), dates TBD
- 2019: Sapporo (Japan), dates TBD
- 2020: Glasgow (Scotland), dates TBD

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The other major development for meteoritics is the operation of asteroid sample return missions. I have been proud to participate in the Japan's JAXA *Hayabusa* sample-return mission from the S-type rubble-pile asteroid of Itokawa. This was an outstanding mission, driving out into the Solar System to visit a small asteroid, and then coming back to Earth, with a few interesting adventures along the way. Over a thousand grains of LL chondrite were recovered from Itokawa. But, they have a surprisingly young age. Some chronometry indicates ages of less than a thousand years from this body. How did this happen, or rather, what is happening now? New missions *Hayabusa 2* (JAXA), and *Osiris REX* (NASA) are now flying to the more common C-type asteroids of Ryugu and Bennu, respectively. Will they find that these really are parent bodies of carbonaceous chondrites? During my presidency, we will go a long way towards finding out answers to that question. And, shortly thereafter, we will have more samples of our Solar System back on Earth.

Trevor Ireland
President 2017–2018

OFFICERS AND COUNCIL MEMBERS

The Meteoritical Society will consist of a number of new officers this year. **Trevor Ireland** (Australian National University, see above) will be transitioning from Vice President to President, and **Meenakshi Wadhwa** (Arizona State University, USA) will be the incoming Vice President. **Mike Weisberg** (City University of New York, USA) will continue as our Secretary for a second term, and **Candace Kohl** (University of California at San Diego, USA) will also stay on for a second term as our Treasurer. **Mike Zolensky** (NASA, Johnson Space Center, USA) will continue to serve, albeit in his new capacity as Past President. We thank this new slate of officers in advance for their efforts to lead the Meteoritical Society through the next two years.



Meenakshi Wadhwa



Mike Weisberg



Candace Kohl



Mike Zolensky

The Meteoritical Society Council will consist of **Cari Corrigan** (Smithsonian Institution, NMNH, Washington DC, USA), **Christine Floss** (Washington University, St. Louis, Missouri, USA), **Keiko Nakamura-Messenger** (NASA Johnson Space Center, Houston, Texas, USA), **François Robert** (Muséum National d'Histoire Naturelle, Paris, France), **Pierre Rochette** (Aix-Marseille University, Marseille, France), **Caroline Smith** (Natural History Museum London, UK), **Mario Trieloff** (Heidelberg University, Germany), and **Maria Eugenia Varela** (Instituto de Ciencias Astronómicas, de la Tierra y del Espacio, Buenos Aires, Argentina).

We would like to take this opportunity to sincerely thank **Monica Grady**, who is rotating off the council as an officer, and **Sasha Krot**, **Jay Melosh**, **Larry Nittler**, **Kevin Righter**, **Maria Schönbacher**, and **Hisayoshi Yurimoto** who are rotating off as councilors, for their years of dedicated service to keeping the Meteoritical Society operating smoothly!



Mineralogical Society of Poland

www.ptmin.agh.edu.pl

2016 SOCIETY FELLOWS



Carl Agee
(University of New Mexico, Albuquerque, New Mexico, USA)



Guy Libourel
(Observatoire de la Côte d'Azur, Nice, France)



Bill Bottke
(Southwest Research Institute, Boulder, Colorado, USA)



Carle Pieters
(Brown University, Providence, Rhode Island, USA)



Nicolas Dauphas
(University of Chicago, Illinois, USA)



Alex Ruzicka
(Portland State University, Portland, Oregon, USA)



Chris Herd
(University of Alberta, Edmonton, Alberta, Canada)



Steve Simon
(University of Chicago, Illinois, USA)



Lindsay Keller (NASA Johnson Space Center, Houston, Texas, USA)

THE BARRINGER FAMILY FUND FOR METEORITE IMPACT RESEARCH

The Barringer Crater Company has established a special fund to support fieldwork by eligible students interested in the study of impact cratering processes. The Barringer Family Fund for Meteorite Impact Research will provide a number of competitive grants in the range of \$2,500 to \$5,000 for support of field research at known or suspected impact sites worldwide. Grant funds may be used assist with travel and subsistence costs, as well as laboratory and computer analysis of research samples and findings. Masters, doctoral and post-doctoral students enrolled in formal university programs are eligible. Application to the fund will be due by 7 April 2017, with notification of grant awards by 9 June 2017. Additional details about the fund and its application process can be found at: http://www.lpi.usra.edu/science/kring/Awards/Barringer_Fund.

THE 23rd SESSION OF THE PETROLOGY GROUP OF THE MINERALOGICAL SOCIETY OF POLAND: "SUBDUCTION SYSTEMS IN THE SUDETES AND RELATED AREAS"



Participants from the conference visit the ultrahigh-pressure eclogite outcrop in Międzygórze (Poland). PHOTO: W. MATYSZCZAK

The 23rd Session of the Petrology Group of the Mineralogical Society of Poland was held 20–23 October 2016 in Stara Morawa (Poland). The meeting was devoted to recent studies on the subduction systems in the Sudetes (northeastern Bohemian Massif, Central Europe) and related areas, examining both ancient and current analogues. The aim of the session was to bring together a wide spectrum of Polish petrologists, including senior researchers, early career scientists, graduates and undergraduate students. The meeting was attended by ~80 participants from Poland and abroad. Invited lectures on the Cadomian and Variscan subduction systems in the Bohemian Massif, as well as on high-pressure mineralogy and fluids activity in the high-pressure rocks, were given by Reiner Klemm (GeoZentrum Nordbayern, Germany), Jana Kotková (Czech Geological Survey), Ulf Linnemann (Senckenberg Natural History Collections of Dresden, Germany) and Hans-Joachim Massonne (Universität Stuttgart, Germany).

An integral part of the proceedings was to award students for the best oral and poster presentations. This year, the best oral presentation award went to Iwona Klonowska (Uppsala University, Sweden) for, "Diamond-bearing Gneisses in the Seve Nappe Complex, Scandinavian Caledonides – What is Known about their *P-T-t* Evolution?"; the best poster presentation award went to Marcin Goleń (University of Wrocław, Poland) for, "Prograde Metamorphic History Preserved in Mica Schists from the Kamieniec Metamorphic Belt (Bohemian Massif, Fore-Sudetic Block) based on Quantitative Pressure–Temperature Path from Garnet Zoning". The meeting was also an occasion to commemorate the former President of the Mineralogical Society of Poland, Ryszard Kryza, who passed away in 2016. Kryza's excellent research on the subduction systems in the Sudetes had been highlighted by several speakers. Oral and poster sessions were followed by the field trip that focused on the metamorphic rocks of the Śnieżnik Massif. Animated discussions at the outcrops made the field trip very stimulating.

In conclusion, the 23rd Session of the Petrology Group was a scientific and social success. Official and unofficial parts of the meeting resulted in many fruitful discussions, including plans for future scientific activities. The organizing team led by researchers from the AGH (University of Science and Technology in Kraków, Poland) would like to thank all the participants for this great experience.

We are already looking forward to the 24th Session of the Petrology Group, which in 2017 will be held in the city of Wrocław.

On behalf of the organizing committee,

Jarosław Majka