

<http://meteoriticalsociety.org>

## 2017 ANNUAL MEETING INVITATION

You are cordially invited to attend the 80<sup>th</sup> Annual Meeting of the Meteoritical Society, which will take place 24–28 July 2017 in Santa Fe (New Mexico, USA). The annual meeting is organized by the Institute of Meteoritics of the University of New Mexico in Albuquerque. It will be held at the Santa Fe Convention Center, which stays true to Santa Fe's historic adobe architecture. Oral sessions, plenary sessions, and the public Barringer Invitational Lecture will take place in state-of-the-art auditoria of various sizes. Poster sessions will take place on-site throughout the week in dedicated rooms that open up to the beautiful courtyard of the convention center.



The conference registration and the welcome party will be held Sunday, 23 July 2017, in the historic La Fonda hotel, situated on the famous Santa Fe Plaza, only minutes away from the convention center. On the afternoon of the Wednesday conference day, several excursions will be offered by which to explore the city of Santa Fe and the surrounding areas (including the Santa Fe impact structure). The conference banquet on Wednesday evening will again be held in the beautiful La Fonda hotel.

The conference program will contain workshops that will precede the conference. A number of postconference excursions are also being prepared, including a 3-day trip to the Petrified Forest, Walnut Canyon, Sunset Volcanic Crater, Wupatki Pueblo, Grand Canyon, and the Barringer Meteorite Crater itself (led by David Kring of the Lunar and Planetary Institute in Houston, Texas, USA).

We have reserved blocks of rooms in multiple hotels, offering a range of price categories and distance from the convention center. Most are within walking distance of the center; others offer regular shuttles. One offers apartments of different sizes, making it ideal for families and students.



The Carrizozo Malpais lava flow in New Mexico (USA) will be visited during a 2-day post-conference field-trip.

The city of Santa Fe is the state capital of New Mexico. It was founded by Spanish colonists in 1610 and is the oldest state capital city in the USA. It is located at 2,194 m (7,199 feet) above sea level, making it also the highest state capital in the USA. Santa Fe (meaning “holy faith” in Spanish) has a population of 70,000. It experiences a dry steppe climate, with an average temperature in July/August of 25 °C (77 °F), and monthly rainfall of 6.5 cm (2.5”) due to the arrival of the North American monsoon at this time. The city is well-known as a center for arts that reflect the multicultural character of the city: it has been designated as a UNESCO Creative City in Design, Crafts and Folk Art.



The Barringer Meteorite Crater in Arizona (USA) will be visited during a 3-day post-conference field-trip.

Santa Fe and the surrounding areas have a high concentration of artists who have come over the decades to capture the natural beauty of the landscape, flora and fauna. Canyon Road has the highest concentration of art galleries in the city, and is a major destination for international collectors, tourists, and locals.

Further information about Santa Fe and environs can be obtained at [www.santafe.org](http://www.santafe.org). Santa Fe can be reached by air directly from Dallas (Texas, USA) and Denver (Colorado, USA); through the nearby (106 km, 66 miles) Albuquerque airport, which offers 30 shuttles daily to Santa Fe; and via numerous car rental companies.

For specific information please contact the Organizing Committee at [kziegler@unm.edu](mailto:kziegler@unm.edu).

## 2016 ANNUAL MEETING STUDENT TRAVEL AWARDS

On behalf of the Meteoritical Society, we would like to thank the organizations whose generous sponsorships provided student travel grants, postdoc travel grants and travel grants for scientists from countries with limited financial resources. The sponsoring organizations, and the recipients of the travel awards, are listed below.

This year, 63 travel grants were given to students and researchers who attended the annual meeting of the society in Berlin (Germany). Student travel grants and travel grants for scientists from countries with limited financial resources are generously sponsored by the Barringer Crater Company, the Planetary Studies Foundation, NASA, the Meteoritical Society Endowment Fund, the International Mineral Collectors Association (Brian Mason Award), and Elsevier publishers.

### *Meteoritical Society Endowment Fund*

- Moritz Barth (Friedrich-Schiller-University Jena, Germany)
- Hasnaa Chennaoui Aoudjehane (Hassan II University Casablanca, Morocco)
- Eivaldo Dos Santos (Universidade Federal dos Vales do Jequitinhonha e Mucuri, Brazil)
- Atmane Lamali (Centre de Recherche en Astronomie Astrophysique et Géophysique, Algeria)
- Jane MacArthur (University of Leicester, UK)
- Jayanta Pati (University of Allahabad, India)
- Dwijesh Ray (Physical Research Laboratory, Allahabad, India)
- Ratiba Sahoui (The University of Science and Technology – Houari Boumediene, Algeria)

Jinia Sikdar (Physical Research Laboratory, Allahabad, India)  
 Sheryl Singerling (University of New Mexico, USA)  
 Natasha Stephen (Plymouth University, UK)  
 Atsushi Takenouchi (The University of Tokyo, Japan)  
 Marcos Vasconcelos (University of Bahia, Brazil)  
 Yuchen Xu (Chinese Academy of Sciences, China)

### **Barringer Crater Company Fund**

Natasha Almeida (Natural History Museum, London, UK)  
 Jitse Alsemgeest (University of Potsdam & German Aerospace Center Berlin, Germany)  
 Thomas Barrett (The Open University, UK)  
 Candice Bedford (The Open University, UK)  
 Enrica Bonato (Natural History Museum, London, UK)  
 Grace Goncalves de Oliveira (Campinas State University, Brazil)  
 Houda El Kerni (Hassan II University, Faculty of Science, Morocco)  
 Kohei Fukuda (The University of Tokyo, Japan)  
 Soogyong Goh (Seoul National University, South Korea)  
 Hikari Hasegawa (The University of Tokyo, Japan)  
 Patrick Hill (University of Western Ontario, Canada)  
 Aureore Hutzler (Natural History Museum, Vienna, Austria)  
 Hwayoung Kim (Seoul National University, South Korea)  
 Mizuho Koike (The University of Tokyo, Japan)  
 Prajkta Mane (Arizona State University, USA)  
 Mariana Maziviero (University of Campinas, Brazil)  
 Nassima Meftah (Université d'El-Oued, Algeria)  
 Josefina Nanne (Durham University, UK)  
 Wladimir Neumann [German Aerospace Center (DLR) Berlin, Germany]  
 Seda Ozdemir (Vienna University, Austria)  
 Hamed Pourkhorsandi (Aix - Marseille University, France)  
 Jan Render (University of Münster, Germany)  
 Åke Rosén (University of Bern, Switzerland)  
 Quinn Shollenberger (University of Münster, Germany)  
 Martin Suttle (Imperial College London, UK)  
 François Tissot (Massachusetts Institute of Technology, USA)  
 Epifanio Vaccaro (Natural History Museum, London, UK)  
 Patrizia Will (Eidgenössische Technische Hochschule Zürich, Switzerland)  
 Tianqi Xie (University of Western Ontario, Canada)  
 Masahiro Yasutake (Sokendai, Japan)  
 Mehmet Yesiltas (Stony Brook University, New York, USA)

### **NASA Award**

Patrick Boehnke (University of California, Los Angeles, USA)  
 Emilie Dunham (Arizona State University, USA)  
 Daniel Dunlap (Arizona State University, USA)  
 Roger Fu (Columbia University, USA)  
 Crystlynda Fudge (Arizona State University, USA)  
 Brendan Haas (Washington University, USA)  
 Pierre Haenecour (Washington University in St. Louis, USA)  
 Levke Kööp (University of Chicago, USA)  
 Josiah Lewis (Washington University in St. Louis, USA)  
 Nan Liu (Carnegie Institution for Science, Washington DC, USA)  
 Kelly Miller (University of Arizona, USA)  
 Alice Stephant (Arizona State University, USA)  
 Myriam Telus (Carnegie Institution for Science, Washington DC, USA)

### **Planetary Studies Foundation**

Sky Beard (Lunar and Planetary Laboratory, University of Arizona, USA)  
 Emilie Dunham (Arizona State University, USA)

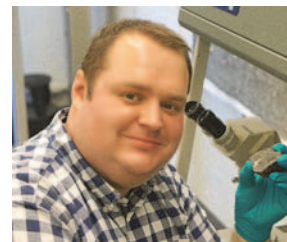
### **Elsevier**

Evan Groopman (U.S. Naval Research Laboratory, Washington DC, USA)

### **International Collectors Association: the Brian Mason Award**

In 1997, Joel Schiff, the first editor of the popular *Meteorite* magazine, created a travel award in honor of Brian Mason, who was born in New Zealand and spent the majority of his career as a Curator at the Smithsonian Institution (Washington DC, USA). The award is given to a student attending the annual meeting of the society who submits an abstract that presents exciting results of particular interest to readers of *Meteorite* magazine. The recipient is required to write a popular account of their work for the magazine. Since 2008, the award has been generously funded by the International Meteorite Collectors Association.

This year, the Program Committee for the Annual Meeting of the Meteoritical Society, held in Berlin (Germany), selected Luke Daly and Pierre Haenecour to win the Brian Mason Award. **Luke Daly** is a graduate student at Curtin University in Perth (Australia). His abstract was entitled "Atom probe tomography and its application to refractory metal nuggets" and authors were L. Daly, P. Bland, L. Forman, S. Reddy, W. Rickard, D. Saxey, A. La Fontaine, L. Yang, P. Trimby, J. Cairney, S. Ringer and B. Schaefer. **Pierre Haenecour** is a graduate student at Washington University in St. Louis (Missouri, USA). His abstract was entitled "Auger spectroscopy analysis of submicron-sized silicate grains in chondrites: Insight into their aqueous and thermal alteration history" and authors were P. Haenecour, C. Floss, T. Zega and R. Ogliore.



### **CALL FOR AWARD NOMINATIONS**

Please consider nominating a colleague for one of the society's awards. Nominations should be sent to Secretary Mike Weisberg (metsocsec@gmail.com) by 15 January 2017 (31 January 2017 for the Service Award and the Pellas–Ryder 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's website or email the secretary.

The society gives a number awards each year. The **Leonard Medal** honors outstanding contributions to the science of meteoritics and closely allied fields. The **Barringer Medal and Award** recognize outstanding work in the field of impact cratering and/or work that has led to a better understanding of impact phenomena. The **Nier Prize** recognizes outstanding research by young scientists in meteoritics and closely allied fields. The **Service Award** honors members who have advanced the goals of the Meteoritical Society to promote research and education in meteoritics and planetary science in ways other than by conducting scientific research. The **Paul Pellas–Graham Ryder Award** is given for the best student paper in planetary science and is awarded jointly by the Meteoritical Society and the Planetary Geology Division of the Geological Society of America.

## IN MEMORIAM – GERALD WASSERBURG

Gerald J. (Jerry) Wasserburg passed away 13 June 2016 at the age of 89. Jerry Wasserburg was a giant in geochemistry and planetary science communities, a relentless figure in the Apollo Program and hugely influential in the field of isotope geochemistry. At the time of his death, he was the John D. MacArthur Professor of Geology and Geophysics, Emeritus, at the California Institute of Technology.

Jerry Wasserburg was born in New Brunswick, New Jersey (USA) in 1927. He served in the army during World War II (enlisted by lying about his age). After his service in the military, he earned his high school degree and enrolled in college at Rutgers University (New Jersey, USA). With Henri Bader as his advisor and mentor at Rutgers, he transferred to the University of Chicago (Illinois, USA), where he earned a BSc degree in physics in 1951 and a MSc in geology in 1952. While still at Chicago, he got a job running a mass spectrometer in Harold Urey's lab and, under the guidance of Professors Urey and Mark Inghram, in 1954 earned a PhD with a thesis on the new technique of potassium-argon dating. After a year as a postdoctoral research fellow at the University of Chicago, he joined the faculty at the California Institute of Technology (USA) as an Assistant Professor in Geology and Geophysics. He was promoted to full Professor in 1962, and appointed the John D. MacArthur Professor of Geology and Geophysics in 1982. He retired in 2001, but remained active until the end.

Wasserburg's research spanned a wide range of topics both terrestrial and extraterrestrial, including Earth's interior, Apollo lunar samples, the earliest Solar System, and stellar nucleosynthesis. The focus invariably was on isotopic properties, especially those related to chronology. His PhD thesis basically invented the  $^{40}\text{K}$ - $^{40}\text{Ar}$  age dating method. Along with many students and research associates (among the latter most notably being Dimitri Papanastassiou, Fouad Tera, and Jack Chen) Jerry made major contributions to age-dating other systems, including U-Pb,  $^{87}\text{Rb}$ - $^{87}\text{Sr}$ ,  $^{234}\text{U}$ - $^{230}\text{Th}$ ,  $^{40}\text{K}$ - $^{39}\text{Ar}$ ,  $^{187}\text{Re}$ - $^{187}\text{Os}$  and  $^{147}\text{Sm}$ - $^{143}\text{Nd}$ . His work with Typhoon Lee and Dimitri Papanastassiou led to the discovery that the short-lived radionuclide  $^{26}\text{Al}$  was present in the earliest Solar System,



and (with William Kelly) the discovery that another short-lived isotope ( $^{107}\text{Pd}$ ) was also present at that time. Jerry made major contributions to the study of refractory inclusions in the Allende CV3 chondrite, including the discovery of FUN inclusions, named for their unusual mass-dependent Fractionation and Unidentified Nuclear (now known to be nucleosynthetic) isotopic effects.

Jerry—along with Jim Arnold, Bob Walker and Paul Gast (“The Four Horsemen”)—was instrumental in convincing NASA to include a major science component as part of the Apollo program, namely the collecting of Lunar samples for return to Earth and the building of a special laboratory to receive, describe, and eventually distribute them to the world science community.

The awards and honors Jerry received during his career were numerous: he was a member of the US National Academy of Sciences, the American Philosophical Society, the American Academy of Arts and Sciences, and the Norwegian Academy of Science and Letters. He received the Arthur L. Day Medal in 1970, the J. F. Kemp Medal (with Paul Gast) in 1973, the Meteoritical Society's Leonard Medal in 1975, the V. M. Goldschmidt Medal of the Geochemical Society in 1978, the Arthur L. Day Prize & Lectureship of the National Academy of Sciences in 1981, the Wollaston Medal in 1985, the Harry H. Hess Medal of the American Geophysical Union in 1985, the J. Lawrence Smith Medal of the National Academy of Sciences in 1985, the Holmes Medal of the European Union of Geosciences in 1986, the Gold Medal of the Royal Astronomical Society in 1991, and the Bowie Medal in 2008. The work on Sr-Nd isotope correlations on terrestrial basalts culminated in the award of the Crafoord Prize in Geosciences, which was awarded by the Royal Swedish Academy of Sciences in 1986 (corecipient with C. J. Allègre).

Jerry Wasserburg was a larger-than-life figure whose impact on the world geoscience community has rarely been equaled. He truly was one of those giants on whose shoulders so many others now stand. He will be greatly missed. (Full obituary available on the Meteoritical Society website).

## IN MEMORIAM – ANDREI VALERIEVICH IVANOV

On 7 July 2016, Andrei Valerievich Ivanov passed away after a struggle with cancer. Andrei was a distinguished scientist, Doctor of Geological and Mineralogical Sciences, member of the Meteoritical Society, and a leading researcher at the Laboratory of Meteoritics division of the Vernadsky Institute of Geochemistry and Analytical Chemistry in Moscow (Russia).

Andrei Valerievich graduated from the Department of Geochemistry of the Geology Faculty of Moscow State University (MGU) (Russia) in 1960. He joined the Laboratory of Isotope Geochemistry at the Vernadsky Institute of Geochemistry (GEOKHI) in 1962 and worked there for eight years. From 1969 to 1975, Dr. Ivanov worked at the USSR Institute for Space Research (IKI), then returned to the Vernadsky Institute in 1975 and remained there for the rest of his career.

Andrei's scientific career focused on investigations of extraterrestrial materials. His work on the fine-grained (>10  $\mu\text{m}$ ) spherical deposits of probable extraterrestrial origin found in the peat and salt deposits from the region of the Tunguska explosion became widely known. Beginning in the late 1960s, Andrei was a major participant in the receiving and study of the first lunar samples returned to Earth by the Soviet robotic moon landers. He told wonderful stories of opening the sample-return capsules in the vacuum glove chamber and seeing the lunar soil emerge before his eyes.

Andrei's lunar research focused on the effects of space environmental factors on the formation conditions of the lunar regolith. In 1980, this became the foundation of his major scientific report, “Anti-oxidative



properties of ultradispersed, simple materials on the surfaces of extraterrestrial bodies” (Vinogradov AP, Barsukov VP, Urusov VS, Ivanov AV, Number of discovery #219, April 15, 1980.).

Andrei Valerievich committed nearly 30 years to the study of the unique Kaidun meteorite. Through his investigations, he identified new types of meteorite material and discovered a series of new mineral phases, including the new mineral florenskyite, an unusual phosphide (FeTiP) found in Kaidun. Andrei's colleagues later identified an even rarer isomorph (FeCrP) and named it andreyivanovite in his honor. Andrei's studies were the first to find traces of fluid metasomatic changes in the components of Kaidun. Andrei defended his Doctoral dissertation in 2003 based on his work with the Kaidun meteorite.

Dr. Ivanov was the author of over 200 scientific publications, and in 1977 was awarded the USSR's Medal “For Labor Valor”. The asteroid 5761 Andreivanov was named in Andrei's honor.

In recent years, Andrei Valerievich worked on systematizing and cataloging the Vernadsky Institute's collection of lunar samples. He saw this as his personal duty to future generations of lunar investigators. Andrei's passing is an irreplaceable loss for the Laboratory of Meteoritics and the whole Vernadsky Institute. His personality naturally combined professionalism, broad interests, highest ethics, and openness to people. All of us could always count on his kind words, advice, and help! His wisdom in life and broad knowledge were always available. (Full obituary available on the Meteoritical Society website).