

Meteoritical Society

http://meteoriticalsociety.org

2018 ANNUAL MEETING REPORT

The 81st Annual Meeting of the Meteoritical Society (MetSoc) was held 22–27 July 2018 in Moscow (Russia). The conference was hosted in the Presidium of the Russian Academy of Sciences building, also called the "Golden Brains". Some 302 participants from 28 different countries registered for the meeting, including 213 professionals (scientists plus exhibitors), 71 student participants, and 18 guests. A total of 164 registrants were MetSoc members. The MetSoc exhibition area also played host to the booths of publisher Springer, the journal *Nature*, and the analytical manufacturers of CAMECA and Textronica. In total, 358 abstracts were accepted for 204 oral and 154 poster presentations. Oral presentations were scheduled in three parallel sessions from Monday (22 July) to Friday (27 July), and all posters were on display for the entire duration of the conference.



The MetSoc 2018 conference group photo. Photo: 2018 Local Organizing Committee

A total of 38 travel awards were allocated to student members, early career scientists, and scientists from low-income countries through generous sponsorships donated by the Barringer Crater Company, the NASA Cosmochemistry Program, the International Meteorite Collectors Association (IMCA), the Planetary Studies Foundation (PSF), publisher Elsevier, and the Meteoritical Society's Endowment Fund and its Travel for International Members Fund. In addition, Russian sponsors supported 79 Russian participants.

Two pre-congress tours to St Petersburg and Yaroslavl were organized prior to the conference. Seventeen participants visited St Petersburg on 18–21 July 2018, including the main sights and a visit to the A. P. Karpinsky Russian Geological Research Institute (VSEGEI) with its impressive geological museum and a special exhibition dedicated to the Popigai impact structure (a visit led by Dr. Victor L. Masaitis). On 20–22 July, Dr. Natalia Artemieva led a two-day tour to Yaroslavl, the capital of the Russian Golden Ring: the group of 12 participants visited the repository of the Russian superdeep drilling cores, including the 5 km drill core of the Puchezh–Katunki impact crater and the superdeep Kola borehole.

The conference proper kicked off on Sunday (23 July) with a pre-conference workshop entitled NEOs Hazard: Multidisciplinary Approach, which was convened by Drs. Olga Popova, Vladimir Svetsov and Valery Shuvalov. This was followed by participant's registration and Welcome Reception at the V.I. Vernadsky State Geological Museum, just next to the legendary National hotel and in front of Red Square. Several participants and guests went to see the ballet at the Bolshoi Theater on Saturday and Sunday.

The official opening ceremony took place on Monday July 23, with greetings by Erik Galimov (the head of the Meteoritics Committee of Russia), Dr. Yuri Kostitsy (Director of Vernadsky Institute of the Russian Academy of Sciences), and Dr. Danis Nurgaliev (the Vice-Rector of the Kazan Federal University), and a talk by Dr. Dmitry Badyukov, the head of the meteoritics laboratory of the Vernadsky Institute. The opening

ceremony was followed by the Award Ceremony and the Special Annual Lecture, which was sponsored by MetSoc and presented by Dr. Artem Oganov (Skolkovo Institute of Science and Technology, Russia), the title of which was, "High-Pressure Chemistry and Geochemistry: New Results and Ideas". Awardees' lectures were given on Monday afternoon, by Dr. Sasha Krot (Leonard Medal) and Dr. Thomas Kenkmann (Barringer Medal), respectively, and were followed by two special sessions: "Evolution of the Solar Nebular: Origin of the Moon and Planets" and a special session dedicated to famous meteorite falls in Russia (notably Tunguska and Chelyabinsk).

The scientific program covered 26 topics: these were organized under the themes of achondrites, carbonaceous chondrites, ordinary chondrites, chondrules, methods and analytical technique, volatiles, solar system chronology, impacts, Mars, geochemistry of lunar meteorites, organic matter, pre-solar grains, interplanetary dust particles, and differentiated bodies. The mid-week workshop entitled Experiment and Modelling in Investigation of Extraterrestrial Material was organized on Thursday (26 July) and convened by Drs. Ruslan Mendybaev and Kevin Righter.

The Annual Barringer Invitational Lecture on Monday evening was entitled, "The Philosophy of Meteoritics: Awe, Faith and Data" and was presented by Brother Guy Consolmagno SJ. This lecture attracted a lot of external listeners and was one of the highlights of the conference.

Regular scientific sessions on Tuesday (July 24) were followed by a 'day off' on Wednesday (July 25), which allowed the meeting participants to explore Moscow via a Moscow city tour, Moscow boat tour, three consecutive guided tours to the Kremlin and the Fersman Mineralogical Museum (FMM). The free FMM excursion was organized for several groups of participants.

The conference gala dinner took place on Wednesday from 5 PM to 11 PM at the gorgeous Korston Club Hotel, close to the conference venue, in the magnificent Place de Paris banquet hall. Participants enjoyed traditional Russian cuisine and Russian folk dancers/singers who got the crowd on their feet.

Both poster sessions on Tuesday and Thursday evenings were very well attended, and many good discussions were had over drinks and posters. The beautiful poster foyer area around the session halls were open the whole working week and certainly promoted useful discussions between scientists young and 'old'.

The conference concluded on Friday afternoon (July 27) with a Farewell party, where participants met each other in the Winter Garden, had a lunch, and discussed again different scientific topics. About 40 participants attended the Planetarium excursion on Friday night to see the Star Hall and to try and observe the lunar eclipse.

Three post-conference excursions were organized:

- 1. A three-day tour to St. Petersburg, which was attended by 16 participants. The tour program was similar to that of the pre-conference tour.
- 2. Drs. Danis Nurgaliev and Dilyara Kuzina led a tour to Kazan City on 28–30 July, which was taken by 7 participants who visited the famous historical places of the city and attended a field trip to the Karla crater, one of the biggest craters in Russia.
- 3. Drs. Viktor Grokhovsky and Evgeniya Petrova led a tour to Ekaterinburg and Chelyabinsk on July 28–31; 6 participants visited interesting sights of these cities, including the main mass of the Chelyabinsk meteorite which had been recovered from Chebarkul Lake in 2013.

The conference program and abstract volume can be accessed on the website of the Lunar and Planetary Institute: https://www.hou.usra.edu/meetings/metsoc2018pdf/program.pdf, and on the dedicated conference website http://metsoc81-moscow.ru/.

We would like to thank the numerous colleagues, students, and volunteers whose tireless efforts made it all possible. We also thank the Trialogue company which helped participants with visa, accommodation, transport, and excursions. We want to emphasize the great support from the members of the Bureau of the Organizing Committee, the Local Organizing Committee, the Scientific Program Committee, and the Travel Award Committee, and from all those who made themselves available as conveners of the sessions, judges of student presentations, student assistants, guides on conference tours and everyone who made this conference possible.

Marina Ivanova and **Natalia Bezaeva** MetSoc 2018 Chairs of the Local Organizing Committee

METSOC SOCIETY AWARD WINNERS

The MetSoc gives four major awards each year. For more information on individual awards see the Call for Nominations and the society's webpage.



The **LEONARD MEDAL** is the society's highest and oldest award. It is given to individuals who have made outstanding original contributions to the science of meteoritics or closely allied fields. It is named for Frederick C. Leonard who was a founder and the first president of the society. The 2018 winner is **Alexander (Sasha) N. Krot** (University of

Hawai'i, USA) for his fundamental contributions to understanding the role of oxygen isotopes in early solar system processes and aqueous alteration processes on asteroids. The citation was given by Kevin McKeegan.



The **BARRINGER MEDAL AND AWARD** were created in memory of D. Moreau Barringer Sr. and his son D. Moreau Barringer Jr and is now sponsored by the Barringer Crater Company. The award is given for outstanding work in the field of impact cratering. This year, the Barringer Award is given to **Thomas Kenkmann** (University of Freiburg, Germany) for

his fundamental contributions to our understanding of the structure mechanics and tectonics of rock displacement associated with the formation of hypervelocity impact craters. The citation was given by Kai Wünnemann.



The **NIER PRIZE** is awarded to a young scientist in the field of meteoritics. This year's winner is **Lydia Hallis** (University of Glasgow, Scotland, UK). Lydia receives this award for her significant contributions to our understanding on the origin of volatiles in planets. The citation was given by Martin Lee.



The **SERVICE AWARD**. The 2018 winner is **Linda Martel** (University of Hawai'i, USA). Linda receives this award for her effort in advancing the goals of the society and the far-reaching impact of her work. Her contribution to the society's goals is accomplished through the *Planetary Science Research Discoveries* (PSRD) online magazine. The citation was given by Jeff Taylor.



The **GORDON MCKAY AWARD** honors the memory of Gordon A. McKay and is supported by the McKay Fund, established in 2008 as a part of the Meteoritical Society's endowment. The award is given each year to the student who gives the best oral presentation at the annual meeting of the society. The McKay Award for the 81st Annual Meeting of the Meteoritical

Society in Moscow goes to **Timothy Gregory** (University of Bristol, UK) for his talk "Using Refractory Forsterite Grains to Test Models of ²⁶Al/²⁷Al Heterogeneity". The award comes with a prize of US\$1,000 and a certificate.

The WILEY-BLACKWELL AWARDS. Wiley-Blackwell are the publishers of Meteoritics and Planetary Science and they sponsored five awards, each of US\$500, for outstanding presentations by students at the 81st Annual Meeting of the Society in Moscow. The winners are Brendan Haas (Washington University, St. Louis, USA) for his presentation, "FIB-TEM Study of Six Submicron Craters from Stardust Foil C2113N-A"; Jan Hellmann (Universität Münster, Germany) for his presentation, "Thermal and Impact History of Ordinary Chondrite Parent Bodies inferred from Hf-W Chronometry"; Jane MacArthur (University of Leicester, UK) for her presentation, "Constraining the Thermal History of Martian Breccia Northwest Africa 8114"; Doreen Schmidt (Friedrich-Schiller Universität Jena, Germany) for her presentation, "Laser Simulated Hypervelocity Micrometeoroid Impacts: Orientation-Dependent Shock Effects in Enstatite Single Crystals"; and Malgorzata Sliz (University of Bern, Switzerland) for her presentation, "Terrestrial Ages of Meteorites using in situ ¹⁴C and ¹⁰Be Measurements".







Brendan Haas

Jan Hellmann

Jane MacArthur





Doreen Schmidt Malgorzata Sliz

CALL FOR AWARD NOMINATIONS

Please consider nominating a colleague for one of the society's awards. Nominations should be sent to Secretary Munir Humayun (metsocsec@gmail.com) by 15 January 2019, or 31 January 2019 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's website; or e-mail the secretary.

ANNUAL MEETING SCHEDULE

2019 (82 nd Annual Meeting)	Sapporo (Japan)	8–12 July
2020 (83 rd Annual Meeting)	Glasgow (Scotland, UK)	9–14 August
2021 (84 th Annual Meeting)	Chicago (Illinois, USA)	dates TBD
2022 (85 th Annual Meeting)	Perth (Australia)	dates TBD

RENEW YOUR MEMBERSHIP NOW!

Please renew by 31 March 2019; after that date, a \$15 late fee will be assessed. You can renew online at: http://metsoc.meteoriticalsociety.net