Volume 11

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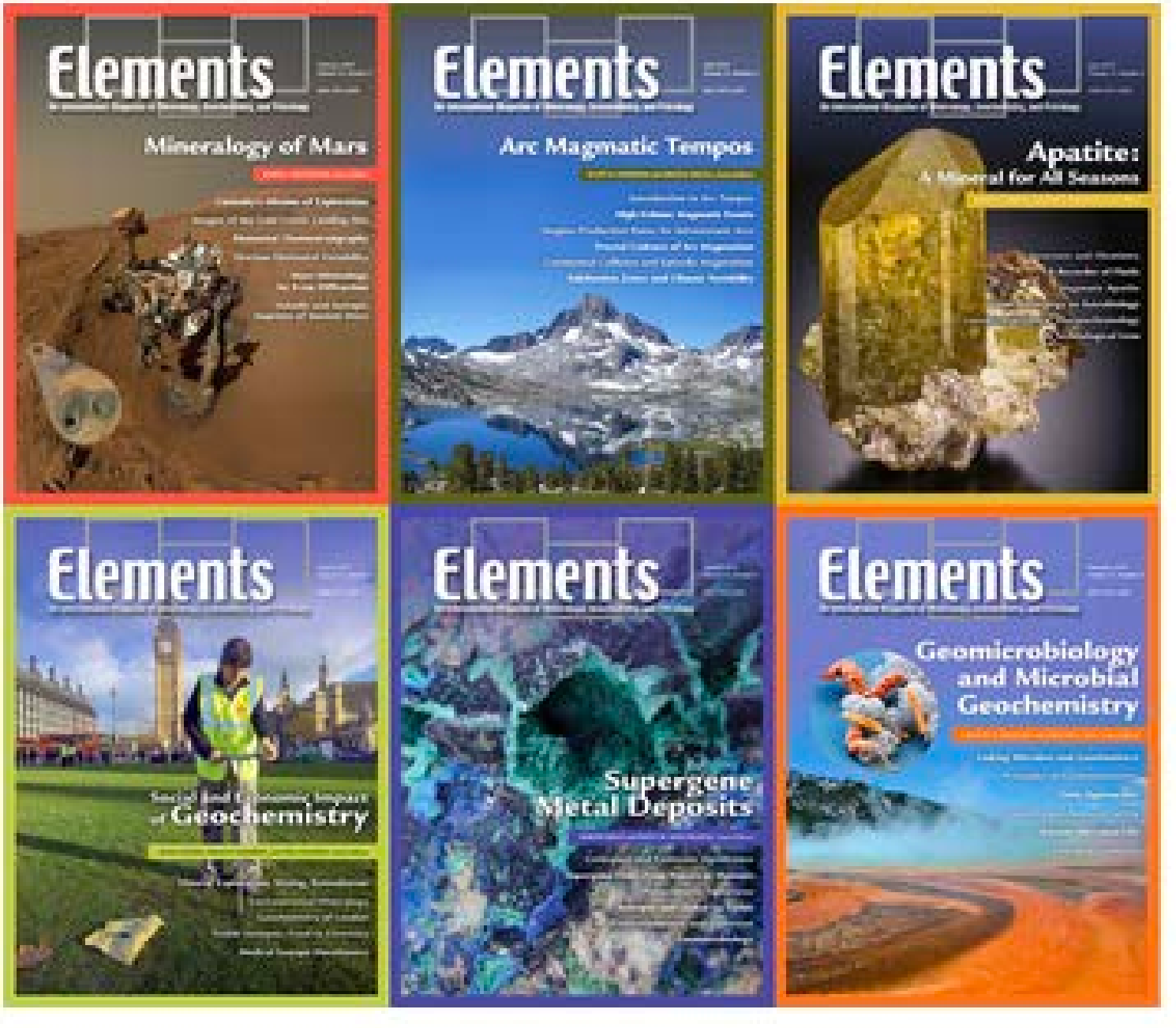


Meteoritical Society

http://meteoriticalsociety.org

INCOMING PRESIDENT'S ADDRESS

Michael Zolensky

It is with great pleasure that I take over as president of the Meteoritical Society. I thank Professor Monica Grady, CBE, for her wise presidency over the past two years, which successfully led our Society to new levels of prosperity. I will endeavor to not screw this up.

I attended my first Met Soc annual meeting in 1985 as a new postdoc, coming from the field of nuclear waste disposal and containment. I note that nearly all my best friends in grad school were working on meteorite geochemistry, ore deposits research, igneous and metamorphic petrology, and other fascinating topics. I was fantastically lucky to transition to meteoritics, and I found that all my old grad school buddies went in the opposite direction and are now working on nuclear waste disposal and containment. At that 1985 Met Soc meeting, I was amazed at how combative the meteoriticists were, compared to what I had experienced at, say, GSA and rad waste meetings. It took some time to realize that the fierce arguments I saw masked great friendships (though not always, of course). Several of the scientists who told me in no uncertain terms that my talk was really stupid later became great friends of mine. Over the succeeding 30 years I have collaborated with a great many Met Soc members, and the Society has always been an extended family for me. Met Soc is still small enough to be intimate, which means that even new members can have a major, positive impact. I look forward to my two years as president of the Society, and I especially look forward to meeting the many students who attend Society meetings and usually give the very best presentations.

There are a few initiatives I would especially like to foster. There is a great future in using radar data to quickly locate new meteorite falls—to complement the new camera networks that are being implemented—and it should be possible for Met Soc to help make this a worldwide effort. The Society is financially healthy, and we invite proposals for how some of our funds could be usefully utilized. In addition, there should be a database of meteorite sample images (BSE mosaics, element maps, etc.) that all could contribute to and draw from. Please don't be shy about telling us how to make the Society work better for you.

Michael Zolensky, President 2015–2016
NASA Johnson Space Center
michael.e.zolensky@nasa.gov

OFFICERS AND COUNCIL MEMBERS

The Meteoritical Society will welcome a number of new officers this year. Mike Zolensky (see above) will be transitioning from vice president to president, and Trevor Ireland (Australian National University) will be the incoming vice president. Mike Weisberg (City University of New York, USA) will be our new secretary, and Candace Kohl (University of California–San Diego, USA) will be the treasurer. Monica Grady (Open University, UK) will continue to serve, albeit in her new capacity as past president. We thank these new officers in advance for their efforts to lead the Meteoritical Society through the next two years.

Trevor Ireland

Mike Weisberg

Candace Kohl

Monica Grady

The Meteoritical Society Council will consist of Jay Melosh (Purdue University, West Lafayette, USA), Larry Nittler (Carnegie Institution, Washington, DC, USA), Maria Schönbächler (ETH, Zürich, Switzerland), Kevin Righter (NASA Johnson Space Center, Houston, USA), Hisayoshi Yurimoto (Hokkaido University, Sapporo, Japan), Alexander Krot (Hawai'i Institute of Geophysics and Planetology, USA), Keiko Nakamura-Messenger (NASA Johnson Space Center, Houston, USA), François Robert (Muséum National d'Histoire Naturelle, Paris, France), and Caroline Smith (Natural History Museum, London, UK).

We would like to sincerely thank Greg Herzog (secretary), Rhian Jones (treasurer), and Ed Scott (president / past president) for their years of dedicated service devoted to keeping the Meteoritical Society operating smoothly!

Cont'd on page 69

THE BARRINGER FAMILY FUND FOR METEORITE IMPACT RESEARCH

The Barringer Crater Company has established a special fund to support field work 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 $2500 to $5000 in support of field research at known or suspected impact sites worldwide. Grant funds may be used to assist with travel and subsistence costs, as well as the costs of laboratory and computer analysis of research samples and findings. Master's, doctoral, and postdoctoral students enrolled in formal university programs are eligible. Application to the Fund will be due by April 3, 2015, and awardees will be notified by June 5, 2015. Additional details about the Fund and the application process can be found at http:/www.lpi.usra.edu/science/kring/Awards/Barringer_Fund.

International Association of GeoChemistry

www.iagc-society.org

OUR FLAGSHIP JOURNAL – *APPLIED GEOCHEMISTRY*

Just about every president of every society has, at one time or another, written an opinion piece about the importance of reviewing in the publication process. However, this is a special appeal to our members, from three current officers of the IAGC and our executive editor.

We are sure you are all aware that *Applied Geochemistry* is the flagship journal of IAGC and is published by Elsevier. Our relationship with Elsevier gives *Applied Geochemistry* good exposure via online publication alongside related journals. In turn, IAGC agrees to support *Applied Geochemistry* by encouraging its members to publish high-quality papers in the journal and to provide reviews in a timely manner. What you may not know is that Elsevier supports IAGC financially through this contract by means of an annual payment to IAGC, and that these royalties represent the financial backbone of our Society. IAGC uses this money to support our working groups and to fund the Elsevier Student Research Grant Program.

Thus, we as IAGC members should have a keen interest in the success of *Applied Geochemistry*, and we should do all that we can to advance its standing among geochemical journals. One of the most important ways we support our journal is by providing colleague reviews. While many of us feel a sense of dread when we receive tons of e-mails asking for reviews of manuscripts from a whole range of journals, we would like to point out the positive aspects of reviewing for *Applied Geochemistry*:

- Reviewing gives us an in-advance look at new research in the field of applied geochemistry before it is published.
- Having to look critically at the work of others forces us to look critically at our own work, thus improving the quality of both.
- New collaborative opportunities sometimes arise from the review process by establishing new connections within our Society.
- The review process is a learning process: both reviewers and authors learn by exchanging ideas and providing feedback.
- Reviewing is our way of recognizing the importance of our journal: by agreeing to provide a colleague review, we ensure and maintain the high standards of our journal.
- By agreeing to do a review for our journal, we acknowledge our obligation to our scientific association. Each paper that we publish requires two or three reviewers, so it stands to reason that we should do two or three reviews for each *AG* paper that bears our name.

Therefore, the next time you receive an e-mail from *Applied Geochemistry* offering you the opportunity to do a review, please make all possible effort to accept the review, and then, of course, complete it in a timely manner! Though this is a demanding, unpaid, extra job, please remember that when you do a review for our society journal, *Applied Geochemistry*, you in fact make an in-kind donation to your association! The IAGC lives off the royalties we receive for our journal. We would need to increase the membership fees several times over if we lost these royalties. And then, of course, please also submit your excellent papers to our journal!

Rich Wanty, IAGC Past-President
Ian Cartwright, IAGC President
Michael Kersten, *Applied Geochemistry* Executive Editor
Clemens Reimann, IAGC Outgoing Past-President

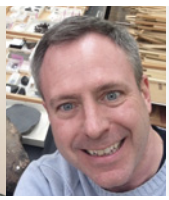
Cont'd from page 68

2014 SOCIETY FELLOWS

The Meteoritical Society congratulates its new Fellows. **Gretchen Benedix** (Curtin University, Perth, Australia), **Fred Ciesla** (University of Chicago, Chicago, USA), **Harold Connolly** (City University of New York / American Museum of Natural History, New York, USA), **Matthieu Gounelle** (Muséum National d'Histoire Naturelle, Paris, France), **Munir Humayun** (Florida State University, Tallahassee, USA), **Dante Lauretta** (University of Arizona, Tucson, USA), **Marc Norman** (Australian National University, Canberra, Australia), **Ian Sanders** (Trinity College, Dublin, Ireland), **Rhonda Stroud** (Naval Research Laboratory, Washington, DC, USA), and **Andrew Westphal** (University of California at Berkeley, Berkeley, USA).


Gretchen Benedix


Fred Ciesla


Harold Connolly


Matthieu Gounelle


Munir Humayun


Dante Lauretta


Marc Norman


Ian Sanders


Rhonda Stroud


Andrew Westphal

ANNUAL MEETING SCHEDULE

2015 – Berkeley, California, USA, July 27–31

2016 – Berlin, Germany, August 7–12

2017 – New Mexico, USA, dates to be determined

2018 – Moscow, Russia, dates to be determined

RENEW YOUR MEMBERSHIP NOW!

Please renew by March 31, 2015; after that date, a $15 late fee will be assessed. You can renew online at http://metsoc.meteoriticalsociety.net.

Japan Association of Mineralogical Sciences

http://jams.la.coocan.jp

HAYABUSA2: THE LONG JOURNEY TO A PRIMITIVE ASTEROID HAS BEGUN

Launch of H-IIA F26 with Hayabusa2 on board. IMAGE CREDIT: JAXA

The sampler horn extended in space. IMAGE CREDIT: JAXA

The Japanese asteroid explorer Hayabusa2 has begun its six-year round trip to return surface samples of the near-Earth carbonaceous-type asteroid 1999 JU_3.

The rocket that propelled Hayabusa2 was a H-IIA F26 and it was launched at 1:22:04 pm on 3 December 2014 (JST), from the Tanegashima Space Center after being delayed twice because of bad weather. Hayabusa2 separated from the launch vehicle approximately 1 hour, 47 minutes, and 21 seconds after liftoff. Shortly after separation, the Japan Aerospace Exploration Agency (JAXA) announced that the critical operation phase after the launch had been completed, including the deployment of the sampler horn through which samples of the asteroid's surface will be collected. The deployment of the sampler horn was confirmed by a small onboard monitor camera camera that had been made by public donation to the mission. A check of Hayabusa2's onboard instruments revealed that they are currently in good condition.

The spacecraft will do an Earth flyby in 2015 to pick up speed and will then head to asteroid 1999 JU_3. Hayabusa2 will arrive at the asteroid in mid-2018 when the spacecraft will take three samples during its 18-month stay. After that, Hayabusa2 will return to Earth in December 2020 with its precious samples.

Shogo Tachibana, Hokkaido University, Japan

JOURNAL OF MINERALOGICAL AND PETROLOGICAL SCIENCES

Vol. 110, No. 1, February 2015

XAFS study on the Zr local structures in tektites and natural glasses. Tsubasa TOBASE, Akira YOSHIASA, Ling WANG, Hidetomo HONGU, Hiroshi ISOBE and Ritsuro MIYAWAKI

Jadeite–bearing metaigneous rocks from the Northern Chichibu belt, SW Japan: implications for the lowest–grade Sanbagawa metamorphism. Shunsuke ENDO

Accessory priderite and burbankite in multiphase solid inclusions in the orogenic garnet peridotite from the Bohemian Massif, Czech Republic. Kosuke NAEMURA, Ichiko SHIMIZU, Martin SVOJTKA and Takao HIRAJIMA

Roweite from the Fuka mine, Okayama Prefecture, Japan. Tamami ANDO, Akiko KANAYAMA, Shoichi KOBAYASHI, Ritsuro MIYAWAKI, Shigetomo KISHI, Mitsuo TANABE and Isao KUSACHI

Petrogenesis and geotectonics of the Mikame ultramafic body, western Shikoku, Japan. Yuji ICHIYAMA

Meteoritical Society

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STUDENT PAPER PRESENTATION AWARDS FROM 2014 ANNUAL MEETING IN CASABLANCA

The GORDON McKAY AWARD for the best oral presentation by a student at the annual meeting of the Meteoritical Society was given to **Romy Hanna** of the University of Texas (USA) for her talk in Casablanca (Morocco) entitled "Impact-induced chondrule deformation and aqueous alteration of CM2 Murchison." The award comes with a prize of US$1000 and a certificate.

Four WILEY-BLACKWELL AWARDS, each worth US $500 and provided by Wiley-Blackwell (publishers of *Meteoritics and Planetary Science*), were given for outstanding presentations at the 76th annual meeting of the society in Casablanca (Morocco). The four winners, left to right below were **Carolyn Crow** (University of California Los Angeles) for her talk entitled "Impact shock microstructures in Apollo 14 zircons," **Ingrid Daubar** (University of Arizona) for her talk "New dated impacts on Mars and the current cratering rate," **Christopher Hamann** (Museum für Naturkunde Berlin and Freie Universität Berlin, Germany) for his talk "Silicate liquid immiscibility in young impact glasses," and **Nicole Lunning** (University of Tennessee, USA) for her talk "CM chondrite impact melt clast identified in a regolithic howardite."

REDUCED MEMBERSHIP RATES

IN DEVELOPING COUNTRIES

The Meteoritical Society invites membership applications at reduced rates ($24/year) from people who live in countries on the Health InterNetwork Access to Research Initative (HINARI) list: visit http://www.who.int/hinari/eligibility/en/. This rate includes printed copies of *Elements* and the society's journal, *Meteoritics & Planetary Science*, as well as electronic access to these journals. Please send requests to the chair of the Membership Committee, Erin Walton (ewalton@ualberta.ca).

ANNUAL MEETING SCHEDULE

- 2015 Berkeley, California, USA, July 27–31
- 2016 Berlin, Germany, August 7–12
- 2017 Santa Fe, New Mexico, USA, Last week of July
- 2018 Moscow, Russia, dates to be decided

RENEW YOUR MEMBERSHIP NOW!

Please don't forget to renew your membership for 2015. 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 http://metsoc.meteoriticalsociety.net.

THANKS TO OUR SOCIETY COMMITTEE MEMBERS

The Meteoritical Society would like to extend its sincere thanks to all those members who are serving on society committees this year. We have listed their names below, with the names of the committee chairs in **bold**. Without the generous help of these members, the society could not function. We greatly appreciate their help!

2015	Affiliation	Ends
Leonard Medal and Nier Prize • 5 members; 3-year term		
Floss, Christine (chair)	Washington University	2017
Bland, Phil	Curtin University	2018
Binzel, Richard	Massachusetts Institute of Technology	2019
Russell, Sara	Natural History Museum, London	2018
Kita, Noriko	University of Wisconsin, Madison	2016
Barringer Award • 4 members, 4-year term		
Burchell, Mark	University of Kent	2016
Deutsch, Alex	University of Münster	2017
Spray, John	University of New Brunswick	2018
Crosta, Alvaro (chair)	University of Campinas – UNICAMP	2015
Pellas/Ryder Award • 3 MetSoc, 3 GS, 3-year term		
Buczkowski, Debra (chair)	Johns Hopkins University, APL	2016
Burr, Devon (PGD past-chair)	University of Tennessee	2017
Wyrick, Danielle (1st vice-chair)	University of Tennessee	2017
Bland, Phil	Curtin University	2015
Schwenzer, Susan	Open University	2016
Korotev, Randy	Washington University	2014
McKay Award • 6-8 members, 1-year term		
Dunn, Tasha (chair)	Illinois State University	2015
Filiberto, Justin	Southern Illinois University	2015
Nishiizumi, Kuni (vice-chair)	University of California, Berkeley	2015
Gross, Juiliane	Rutgers University	2015
Beck, Andrew	Johns Hopkins University, APL	2015
Bell, Mary Sue	ARES, JSC	2015
Nominating (tentative)		
Mikouchi, Takashi	University of Tokyo	2015
Chennaoui, Hasnaa (invited)	Universite Hassan II	2015
Scorzelli, Rosa	Centro Brasileiro de Pesquisas Fisicas	2015
Ivanova, Marina	Vernadsky Institute	2015
Scott, Ed	University of Hawaii	2015
Lin, Yangting	Chinese Academy of Sciences	2015
Nomenclature Editor • MetBull • Editor Database 12 members, 3-year term, 3 ex officio		
Agee, Carl	University of New Mexico	2015
Grossman, Jeff	NASA	
Bouvier, Audrey	University of Western Ontario	2016
Metzler, Knut	University of Münster	2015
Ruzicka, Alex	Portland State University	2015
Welzenbach, Linda	Planetary Science Institute	2015
Herd, Chris (chair) (rotating off in March)	University of Alberta	2016
Mikouchi, Takashi	University of Tokyo	2016
Dunn, Tasha	Colby College	2016
Smith, Caroline	Natural History Museum, London	2016
Gattacceca, Jerome	CEREGE (CNRS)	2016
Debaille, Vinciane	Université Libre de Bruxelles	2017
Welten, Kees	University of California, Berkeley	2017
Bullock, Emma	Smithsonian Institution	2017
Endowment • 5 members, 3-year terms		
Huss, Gary	University of Hawaii	2017
Reimold, Uwe (cochair)	Leibniz Institute @ Humboldt-Universitaet Berlin	2017
Treiman, Allan	Lunar and Planetary Institute	2016
Barringer, Drew (cochair)	The Barringer Crater Company	2017
Warren, Paul	University of California, Los Angeles	2017
Kohl, Candace (ex officio)		
Audit • 3 members, 3-year terms		
Hofmann, Beda	Natural History Museum, Bern	2017
Taylor, Susan	CRREL	2016
Connolly, Harold (chair)	CUNY	2016
Publications • 6 members + Treas, 3-year terms		
Lyon, Ian	University of Manchester	2017
Tsuchiyama, Akira	Kyoto University	2017
Nakamura-Messenger, Keiko	Johnson Space Center	2016
Ebel, Denton	American Musum Natural History	2016
Flynn, George (chair)	SUNY-Plattsburgh	2014
Engrand, Cecile	CNRS	2017
Joint Publications • 6 members, 3-year terms		
Davis, Andy (MetSoc)	University of Chicago	2016
Koeberl, Chris (MetSoc)	University of Vienna	2016
Jeremy, Fein (GS)	Florida State University	2016
Freeman, Kate (GS)	Pennsylvania State University	2014
Hilton, David (GS) (chair) (extended)	Scripps Institution of Oceanography	2015
Rushmer, Tracy (MetSoc)	Macquarie University	2015
Canuel, Liz	Virginia Institute of Marine Science (William & Mary)	2017
Zolensky, Mike	Ex Officio	
Sherwood Lollar, Barbara	Ex Officio	
Norman, Mark	Ex Officio	
Jull, Tim	Ex Officio	
Membership and Service Award		
Walton, Erin	Grant MacEwan University	2015
Itoh, Shoichi	Kyoto University	2016
Ferriere, Ludovic	Natural History Museum, Vienna	2017
Mayne, Rhiannon	Texas Christian University	2017
Dyl, Katie	Curtin University	2016
Kohout, Tomas	University of Helsinki	2017

Meteoritical Society

http://meteoriticalsociety.org

METEORITE NOMENCLATURE COMMITTEE REPORT

Chris Herd

The purpose of the Nomenclature Committee (NomCom) is to approve new meteorite names and to establish guidelines and make decisions regarding the naming of meteorites. The committee also keeps the community apprised of new meteorites through the *Meteoritical Bulletin* and the *Meteoritical Bulletin Database* (www.lpi.usra.edu/meteor/metbull.php). While the yearly publication of the *Meteoritical Bulletin* (e.g. MB103 = 2014, MB104 = 2015) lags behind the database entries, new meteorites are automatically added to the next issue of the bulletin by the database editor. The contents of the bulletin are accessible using the "Publication" dropdown window in the database. MB103 contains 2593 meteorites (1082 non-Antarctic), and MB104, so far, has 1138 meteorites (385 non-Antarctic).

As of January 1, we welcome Emma Bullock, Vinciane Debaille, and Hasnaa Chennaoui-Aoudjehane as new members. Special thanks to Kees Welten, Henning Haack, Smail Mostefaoui, and Caroline Smith, who have completed their terms on the committee. I thank Caroline in particular for serving as committee secretary, a position she has held since 2008.

In order to assist in preventing a backlog of new meteorite submissions requiring revision, a 90-day limit on revisions has been implemented. Any submitter that does not revise their submission after 90 days will have the submission rejected and they will need to resubmit the file. This is not a change in our procedures because the editor has always had this power. However, we found it necessary to implement this editorial policy in order to manage old jobs where the submitter does not make revisions in a timely fashion.

The NomCom has been considering the issue of naming of meteorites found in Morocco. It has determined that there should be no special treatment of meteorites found in Morocco and the surrounding areas for which location information is made known after a northwest Africa (NWA) name has already been assigned. It is a longstanding tradition in meteoritics that formal meteorite names should not be changed once they are established in the literature or in public use.

Further to this topic, the NomCom has revised the Guidelines for Meteorite Nomenclature. The most significant changes are as follows:

1. Eliminating the special rules for meteorites recovered from Morocco and surrounding areas. In the past, for meteorites from these areas to receive location-specific names, a photograph of the meteorite in place with a GPS unit next to it was required. This requirement was found to be onerous and difficult to enforce. Recognizing the large numbers of meteorites found in any given area within this region, we eliminated the special rules and established a dense collection area (DCA) grid for all of Morocco and Western Sahara. DCA sizes are consistent with those from other desert areas (e.g. Saudi Arabia, Oman, etc.) and are approximately 1 to 1.5 square degrees. From now on, any meteorites found in these areas will be given DCA names that better reflect the general area in which they were recovered.
2. Redefining the use of NWA (northwest Africa) and NEA (northeast Africa) prefixes. NWA will apply to meteorites thought to be found in Morocco, Western Sahara, Mauritania, Mali, Algeria, Tunisia, or Niger. NEA will apply to meteorites thought to be found in Libya, Chad, Egypt, or Sudan.
3. Rebooting the numbering system for NWA meteorites to start at 10001, to reflect the implementation of the new use of the prefix.

The guideline changes were met with some consternation from the meteorite collector/dealer community, as well as some members of the Meteoritics Society. In response, I have established a DCA subcommittee to examine the implications of the revised guidelines for meteorites found in Morocco and surrounding areas, to make any recommendations for change, and to review the outlines of DCAs in this part of the world.

A new categorization scheme for falls and finds has been implemented to better express the varying level of confidence as to whether a given meteorite was actually an observed fall. The five categories are the following: confirmed fall; probable fall; find, possible fall; find, doubtful fall; and find. A document explaining the new scheme can be found at www.lpi.usra.edu/meteor/docs/falls-finds.pdf.

As of March 2015, I stepped down as chair, having served in that capacity for five years. It has been an excellent learning experience for me, and I am pleased that a number of significant initiatives have been brought to completion in that time. NomCom is one of the hardest-working and most active committees in the Meteoritical Society, the rewards of involvement in which far outshine the challenges.

Please do not hesitate to contact us with questions or concerns about NomCom, especially with suggestions for improvement. Essential information on meteorite nomenclature, instructions and the template for reporting new meteorites, and NomCom membership can be found at meteoriticalsociety.org/?page_id=106.

Chris Herd
Chair of Nomenclature Committee

IN MEMORIAM

Dr. Bernard Ray Hawke
passed away on 24 January 2015, in Honolulu (Hawaii). Dr. Hawke, known as "Ray" to family and childhood friends and as "B. Ray" to most of his planetary science colleagues, was a renowned lunar scientist, valued mentor, devoted brother and uncle, and cherished friend to many. He was born on 22 October 1946, in Louisville (Kentucky) and grew up in Elizabethtown, where he attended public schools. He participated in Future Farmers of America and 4-H activities [4-H is a US-based youth development program]. His 4-H leader worked for the US Geological Survey. This sparked an interest in geology in young Ray and later led to an internship doing field mapping in central Kentucky. He also was inspired by US President Kennedy's speech calling for a manned Moon landing.

B. Ray earned a BS in geology at the University of Kentucky. He then entered the army and served with the 173rd Airborne Brigade and N Company, 75th Rangers, in Vietnam during 1970–1971. After leaving the army, he returned to the University of Kentucky where he earned a MS in geology. He continued his geology studies at Brown University (Rhode Island) where he earned another MS and a PhD.

Dr. Hawke joined the small group of planetary geologists at the University of Hawaii in 1978. That group grew and later became part of the Hawaii Institute of Geophysics and Planetology. In 1983, he established the Pacific Regional Planetary Data Center, one of NASA's Regional Planetary Image Facilities, and remained director until his death. Dr. Hawke's lunar geology interests included impact craters and volcanic deposits. He was a pioneer in advocating the use of the resources associated with pyroclastic deposits by future inhabitants of the Moon. His scientific studies involved active collaborations with colleagues in Hawaii and around the world, and their success was due to his generosity. He shared his ideas and knowledge and gave his time to help others.

Dr. Hawke is survived by his brother Stephen, Stephen's wife Nancie, and their children David and Michael of Columbia (Missouri).

Meteoritical Society

http://meteoriticalsociety.org

2015 METEORITICAL SOCIETY TREASURER'S REPORT

Candace Kohl

The society's finances continue to be on a sound footing, and both the Operating Fund and our Investment Fund are currently very healthy. A large portion of the operating budget relates to the publication of *Meteoritics and Planetary Science* (*MAPS*), our international monthly journal of planetary science, which covers topics including the origin and history of the Solar System, planets and natural satellites, interplanetary dust and the interstellar medium, lunar samples, meteors, meteorites, asteroids, comets, craters, and tektites. The *MAPS* journal has been published by Wiley since 2010, and our income from Wiley closely matches the expenses of the Editorial Office at the University of Arizona, which is managed by Editor Tim Jull.

Society memberships include subscriptions to *MAPS* and *Elements*. Membership with subscription to only the electronic version of *MAPS* has become a popular option, although more than half of our membership still purchases the printed version. Collection of membership dues for 2016 will begin in October 2015. Please pay your dues on time as this greatly helps with financial planning. Healthy finances depend on a stable number of memberships.

Our Investment Fund, which includes four separate endowed funds, continues to do as well as we can expect with the current market situation. Many society members contribute generously to support all of these funds, and your donations are always greatly appreciated. The Nier Fund supports the annual Nier Prize, which recognizes outstanding research by young scientists in meteoritics and closely allied fields. The 2015 recipient is Prof. Pierre Beck (Institut de Planétologie et d'Astrophysique de Grenoble, France). The Gordon A. McKay Fund supports an award to the student who gives the best oral presentation at the annual meeting of the society: the 2014 fund was given to R. D. Hanna (University of Texas at Austin, USA). During the past year we have established the Travel for International Members (TIM) Fund to support travel to Meteoritical Society meetings for professional members of the society from low-income countries. The TIM Fund was initiated through the generosity of Prof. Tim Swindle who has made a commitment to fund it over a total of 10 years. Council has agreed to support the program during this time. This year it will be used to fund travel to our 2015 meeting in Berkeley, California.

The General Endowment Fund supports a variety of outreach projects. Over the last year, this fund has been used to provide travel support for students to attend the 2015 Gordon Conference on Origins of Solar Systems. Funds have also been allocated to support a meteoritics outreach and lecture tour program in Brazil under the direction of Dr. Klaus Keil. Endowment funds were also used to support travel for scientists from low-income countries and for students from North Africa and the Middle East to attend the Meteoritical Society meeting in Casablanca (Morocco). This year, endowment funds will be used to fund students and postdoctoral scholars to attend the meeting in Berkeley. Some of the money used has been contributed directly as part of the annual membership renewal. Thirty-seven members responded to this request this year. Your contributions directly help strengthen our international community. We always welcome suggestions and ideas for ways in which the General Endowment Fund can be utilized to promote the goals of the society and enrich its activities.

Candace Kohl, Treasurer

2015 MEMBERSHIP REPORT

As of May 2015, the Meteoritical Society is made up of 677 regular members, 94 student members, 154 retired members, 26 life members, and 8 members from developing countries, making a total of 968 members. Many thanks to Erin Walton for providing these statistics. We can be proud that we have members in 46 countries, but statistics show that we still have a lot to do to gain members in many other countries. The society does, however, have a mechanism to subsidize annual dues for members in low-income countries, though prior approval is required from the Membership Committee to obtain this rate. Please see our website for more information.

Country	Regular Member	Student Member	Life Member	Retired Member
Australia	14	10		4
Austria	6			3
Belgium	8	1		1
Brazil	4	1		1
Canada	21	3	1	10
Chile	2			
China	3			
Czech Republic	2			1
Denmark	2	2	1	1
Finland	2	1		1
France	29	2	2	5
Germany	79	9	4	13
Hungary	3			
India	3			2
Italy	9	1		
Japan	75	7		12
Korea, Republic of	5			
Netherlands	2	1		2
Norway	3			
Poland	6	1		1
Russian Federation	6	3		1
South Africa	3			
Spain	4			1
Sweden	4			
Switzerland	18	4	1	8
United Kingdom	37	14		4
United States	317	33	16	82
Subtotals	**677**	**94**	**26**	**154**

The following 17 countries have one member at this time: Algeria, Argentina, Egypt, Estonia, Greece, Vatican City State, Islamic Republic of Iran, Ireland, Latvia, Luxembourg, Malaysia, Mexico, Morocco, New Zealand, Oman, Romania, Slovak Republic

For those wishing to avoid the hassle of paying dues every year, consider becoming a life member! For more information and details on how to become a member of the Meteoritical Society, please see our society web page at www.meteoriticalsociety.org.

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.

The winner of the 2015 Pellas–Ryder Award is **Steven Battaglia** of the University of Illinois at Urbana-Champaign (USA; advisor Dr. Susan Kieffer). Mr. Battaglia's paper, "Io's theothermal (sulfur) – Lithosphere cycle inferred from sulfur solubility modeling of Pele's magma supply," was published in *Icarus* in 2014. Mike, and his coauthors M. A. Stewart and S. W. Kieffer, modeled the role of sulfur in Ionian magmas and suggested that the excess sulfur on Io's surface comes from two sources: (1) an insoluble sulfide liquid phase in the magma and (2) from theothermal (sulfur-dominated thermal system) near-surface recycling.

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2016 ANNUAL MEETING INVITATION

You are cordially invited to attend the 79th Annual Meeting of the Meteoritical Society, which will take place 7–12 August 2016 in Berlin (Germany). The annual meeting is jointly organized by the Museum für Naturkunde (MfN) Berlin and the Geosciences Department of Freie Universität Berlin (FUB). It will be held on the Dahlem Campus of FUB in the modern Henry-Ford-Bau conference center. Oral sessions will take place in the state-of-the-art auditoria; plenary sessions will be in the main auditorium, which seats 1,000 and where the public Barringer Invitational Lecture will be presented. Poster sessions will also take place on the Dahlem Campus. Conference registration starts Sunday, 7 August 2016, and will be arranged at the historic Thaer Saal of the Humboldt Universität zu Berlin in Berlin-Mitte, directly adjacent to the Museum für Naturkunde. From 6 p.m. that Sunday, the welcome party will be held at the MfN itself. Participants who attended the 1996 MetSoc meeting in Berlin will be able to judge how this museum, which was situated in the former GDR, has changed since Germany's reunification. Like the museum, the city of Berlin has also dramatically changed since reunification and has become one of the premium travel destinations worldwide.

One of the highlights will take place on Wednesday (10 August) when the awards ceremonies will take place. That will be followed by several enjoyable excursions (e.g. "Historical Potsdam" or "Cultural Berlin") before the conference banquet. The banquet will take place in the Wasserwerk, and although this was the former location of Berlin's sewage works, participants are assured that this venue lacks for nothing when it comes to comfort and has a distinct, somewhat unique, charm.

The conference program will include two scientific workshops, both of which will precede the conference. A two-day workshop on "Shock Metamorphism and High-Pressure Phases in Meteorites and Terrestrial Impactites" will be organized by Tom Sharp, Dieter Stoeffler, and Oliver Tschauner; and a one-day workshop entitled "Microstructure and Geochronology of Shocked Accessory Phases" will be organized by Aaron Cavosie and Nicholas Timms. This latter workshop will comprise a day of preconference presentations on the state-of-the-art in this field, covering everything from sample preparation to data reduction. This will be followed-up by SEM sessions scheduled during the week for live data collection.

There are a number of excursions being prepared, including a 5-day postconference excursion to the Gardnos and Ritland impact structures in Norway. Other excursions include the Nördlinger, Ries, and Steinheim impact craters in southern Germany (3 days); a two-day excursion to the Morasko impact-crater field near Poznan in Poland. There also will be two excursions dedicated to historical geology and mining in the scenic parts of the Ore Mountains: the first will be to the Reiche Zeche mine and the Terra Mineralia in Freiberg, plus the Zinnwald visitors' mine; the second to the Harz Mountains for an unforgettable World Heritage experience where participants will visit the Rammelsberg mine, the historic city of Goslar, and the exceptionally preserved medieval town of Quedlinburg.

Our official housing agency for the 79th Annual Meeting of the Meteoritical Society has reserved hotel rooms in different price categories either close to the conference venue or in the Western and Eastern parts of the city center, with easy access to the public transportation system. Reservations will soon be possible via the conference website.

The city of Berlin is vibrant and internationally renowned for its cultural attractions. Both airports (Tegel and Schönefeld) are located close to the city, and there are excellent public transport options to access the hotels. The weather in early August in Berlin is likely to be hot: 25–30°C during the day and 15–18°C at night; some humidity may occur, and summer thunderstorms cannot be ruled out. Further information about Berlin and its environs can be obtained at www.berlin.de/en/ or at www.visitberlin.de/en.

The conference website is www.metsoc-berlin.de, which will be updated as further information becomes available. For specific information please contact the Organizing Committee at MetSoc2016@mfn-berlin.de

IN MEMORIAM – JOE GOLDSTEIN

Dr. Joseph I. Goldstein passed away at home on Saturday, 27 June 2015. He was born 6 January 1939 in Syracuse, New York and obtained his bachelor's, master's, and doctorate degrees from the Massachusetts Institute of Technology in 1960, 1962, and 1964, respectively. Upon completing his doctorate, he worked for NASA at the Goddard Space Flight Center in Greenbelt (Maryland, USA) until 1968. From 1968–1993, he was a professor of metallurgy and materials science at Lehigh University (Pennsylvania, USA). Dr. Goldstein provided research and teaching leadership for over 20 years as Vice President for Research at Lehigh (1983–1990) and as Dean of Engineering at the University of Massachsetts (UMass) in Boston (1993–2004). He led the development of several major research and applied research centers, including two National Science Foundation engineering research centers and a Ben Franklin center at Lehigh University, and he improved the undergraduate engineering curriculum at UMass. In addition, he played a major role in increasing diversity in the College of Engineering at UMass. After ending his term as Dean of Engineering at UMass, Joe remained on the UMass faculty until his retirement in 2014.

Dr. Goldstein received a great many awards during his career, including the Presidential Science Award of the Microbeam Analysis Society in 1991; the Leonard Medal of the Meteoritical Society in 2005 for outstanding contributions to the science of meteoritics and closely allied fields; and the Chancellor's Medal at UMass in 2007. In 2000, an asteroid was named Joegoldstein in honor of his research work. In 2015, the Microbeam Analysis Society and the Meteoritical Society together established an early career development award in honor of Dr. Goldstein "to recognize his exceptional contributions to training multiple generations of microanalytic experts."

Joe was an active member of Congregation B'nai Israel of Northampton, where he served on the board of directors. He was also on the board at UMass Hillel and sang in Mak'hela, the Jewish Chorus of Western Massachusetts. He is survived by his wife of 52 years, Barbara; his daughter, Anne Goldstein-Factor; and his grandchildren, Sophie and Dov.

Donations in Dr. Goldstein's memory can be sent to Congregation B'nai Israel, 253 Prospect St., Northampton, MA 01060, USA; the Meteoritical Society, care of Candace Kohl, 294 Torrey Pines Terrace, Del Mar, CA 92014, USA; or the ALS Association, www.alsa.org. Obituaries can be found at the *Daily Hampshire Gazette* and the UMass websites*.

* www.legacy.com/obituaries/gazettenet/obituary.aspx?n=joseph-goldstein&pid=175216254&fhid=15522#sthash.T1TCDb19.dpuf
www.umass.edu/newsoffice/article/obituary-joseph-i-goldstein-distinguished

TRAVEL AWARDS

This year, 44 of the students and researchers who attended the annual meeting of the society in Berkeley (California, USA) received travel grants. 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), the National Institute for Polar Research (NIPR)/Japan Polar Research Association (JPRA), and the Japan Aerospace Exploration Agency (JAXA)/Institute of Space and Astronautical Science (ISAS). On behalf of the students and researchers, we thank all these institutions and organizations for their generosity. Persons who received specific grants or awards are noted below:

Meteoritical Society Endowment Fund

POST-DOCTORAL AWARD

Edivaldo Dos Santos (Centro Brasileiro de Pesquisas Físicas, Rio De Janeiro, Brazil)
Noriyuki Kawasaki (Hokkaido University, Japan)
Agata Krzesinska (Polish Academy of Sciences, Poland)
Millarca Valenzuela (Pontificia Universidad Católica De Chile, Chile)
Mehmet Yesiltas (State University of New York at Stonybrook, USA)

LOW-INCOME COUNTRY AWARD

Houda El Kerni (Hassan II University, Morocco)
S. V. S. Murty (Physical Research Lab, India)

Barringer Crater Company Fund

Natasha Vasiliki Almeida (Natural History Museum, London, UK)
Moritz Barth (University of Jena, Germany)
Helene Breton (University of Glasgow, UK)
Y. Chang (University of Tokyo, Japan)
Daniel Dunlap (Arizona State University, USA)
Matthias Ebert (Museum of Natural History – Berlin, Germany)
Lucy Forman (Curtin University, Australia)
Cosette Gilmour (University of Alberta, Canada)
Timothy Hahn (University of Tennessee, USA)
Christopher Hamann (Museum für Naturkunde Berlin, Germany)
Sakawat Hossain (Technical University Munich, Germany)
Christine Jilly-Rehak (University of Hawaii, USA)
Emily Pringle (Institut de Physique du Globe de Paris, France)
My Riebe (Eidgenössische Technische Hochschule (ETH) Zürich, Switzerland)
Ratiba Sahoui (University of Science and Technology Houari Boumediene/ Mouloud Mammari University of Tizi-Ouzou, Algiers, Algeria)
Epifanio Vaccaro (Natural History Museum, London, UK)

NASA Award

Carolyn Crow (University of California, Los Angeles, USA)
Brendan Haas (Washington University in St. Louis, USA)
Pierre Haenecour (Washington University in St. Louis, USA)
Romy Hanna (University of Texas, USA)
Jonathan Lewis (University of New Mexico, USA)
Josiah Lewis (Washington University in St. Louis, USA)
Nicole Lunning (University of Tennessee, USA)
Prajkta Mane (Arizona State University, USA)
Morgan Martinez (University of California, San Diego, USA)
Christopher Snead (University of California, Los Angeles, USA)
Michelle Thompson (University of Arizona, USA)
Reto Trappitsch (University of Chicago, USA)
Chris Wetteland (University of Tennessee, USA)

NASA Mars Program Award

Jennifer Caseres (California Institute of Technology, USA)

International Meteorite Collectors Association – Brian Mason Award

Ellen Crapster-Pregont (Columbia University/American Museum of Natural History, USA)

Planetary Studies Foundation

Emilie Dunham (Arizona State University, USA)
Steven Jaret (State University of New York at Stonybrook, USA)

NIPR/JPRA Award

Junko Isa (University of California, Los Angeles, USA)
Atsushiß Takenouchi (University of Tokyo, Japan)

JAXA/ISAS Award

Sayuri Yamashita (Tohoku University, Japan)
Daiki Yamamoto (Hokudai University, Japan)

International Meteorite Collectors Association: 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 but spent the majority of his career as a curator at the Smithsonian Institution. The award is given to a student attending the annual meeting of the Meteoritical Society who submits an abstract that clearly explains some exciting results that are 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 Berkeley (California) meeting selected **Ellen Crapster-Pregont** to win the Brian Mason Award. Ellen is a graduate student at Columbia University. She submitted an abstract entitled "Insights on Chondrule Formation from Electron Backscattered Diffraction of Chondrule Metal Layers in Acfer 139 (CR2)." The full author list was E J Crapster-Pregont, W H Towbin, and D S Ebel.

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 (31 January for the Service Award and for the Paul Pellas–Graham 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 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 in meteoritics and closely allied fields by young scientists (under 35). 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.

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2015 ANNUAL MEETING REPORT

The 78th Annual Meeting of the Meteoritical Society was held in Berkeley (California, USA) 26–31 July 2015 at the University of California, Berkeley (UCB) campus. In total, 395 abstracts were submitted for 271 oral and 124 poster presentations. A program committee assigned 218 oral presentations that were accommodated in two parallel sessions from Monday (27 July) morning through Friday afternoon, and 167 poster presentations that were on display the entire week in the Hearst Memorial Mining Building.

There were 389 registered participants, including 237 members, 40 nonmembers, 66 student members, 17 nonmember students, 21 guests, and 8 complimentary participants. Thirty-nine students, and 7 postdoctoral researchers and senior researchers were selected for travel awards totaling ~$55,400 through generous support of the Barringer Crater Company, NASA, Japan Aerospace Exploration Agency (JAXA), National Institute for Polar Research (NIPR, Japan) International Meteorite Collectors Association (IMCA), Planetary Studies Foundation (PSF), and the Meteoritical Society Endowment Fund.

The scientific program covered 18 topics featuring the following: processes and evolution of Solar System materials, including interplanetary dust particles, chondrites, achondrites, asteroids, and Mars; chronology, mineralogy, and chemical compositions of those materials; and impact cratering. There were two special sessions, one dedicated to Ian Hutcheon, "Early Solar System chronology," and the other to Joe Goldstein, "Iron and stony-iron meteorites: composition, isotopes, shock, ages."

The program included three workshops, "Results from NASA's Stardust Mission" (65 participants, 24–25 July), "The first 1 Ga of impact records: evidence from lunar samples and meteorites" (42 participants, 25–26 July), and "Seeking input to the Mars 2020 landing site selection from the sample community" (lunch time, 28 July).

The meeting started with an opening ceremony on Sunday evening, July 26, followed by a welcome reception. The Barringer Invitational Lecture "Searching for habitable planets and intelligent life in the universe" was given by Geoff Marcy, Professor of Astronomy at University of California, Berkeley, on the evening of Monday, 27 July.

Award presentations and the award talks by Leonard medalist Jeffrey Cuzzi and Barringer award recipient Natalia Artemieva were given on Wednesday morning.

On Wednesday afternoon, 50 participants went to AT&T Park to enjoy a major-league baseball game between San Francisco Giants and Milwaukee Brewers. One-hundred-and-ten people took a San Francisco city tour, including cable car rides, 75 participants took mini-lab tours at Lawrence Berkeley National Laboratory (LBNL) and Space Sciences Laboratory (SSL), while 12 participants displayed their soccer skills next to Memorial Stadium until they got "kicked off" by the girls lacrosse team. The annual banquet was held at Campanile Esplanade, in the center of the UC Berkeley campus from 7 pm on Wednesday (29 July). Guests enjoyed a four-course dinner with 5 different wines and some of them stayed until midnight.

Guests enjoyed a bus trip to Muir Woods National Monument on Monday and a ferry ride to Sausalito on Thursday.

For this meeting, a "Green" program of eight pages was provided to participants instead of the traditional 83-page full program. The abstract volume, full program, and some E-posters are available online at http://www.hou.usra.edu/meetings/metsoc2015/. The MetSoc2015 meeting website is still open at http://metsoc2015.ssl.berkeley.edu.

The meeting was sponsored by the Barringer Crater Company, NASA, JAXA/Institute of Space and Astronautical Science, NIPR/Japan Pole Research Association, SSL-UCB, Universities Space Research Association's Lunar and Planetary Institute (USRA-LPI), Agilent Technologies, CAMECA, Lockheed Martin Space System Company, National Electrostatics Corporation, TESCAN, an anonymous meteorite dealer, International Meteorite Collectors Association, John Wiley & Sons, Planetary Studies Foundation and the Meteoritical Society.

The postconference "field trip" was a one-day excursion to Napa Valley, led by Professor Ken Verosub of UC Davis on Saturday, 1 August. Thirty-seven participants tasted five single-vineyard Pinot Noirs from five different locations followed by paella lunch at Ancient Wines. After tasting five varieties of wines at Chateau Montelena, they enjoyed a vineyard tour and wine tasting at the world famous Opus One vineyards.

Thanks to an alcoholic beverage permit from the university's police department, over 550 bottles of 13 different California wines and 600 bottles of California beers were provided at social events on the Berkeley campus during the meeting. Members of the local organizing committee served wine and beer at the welcome, poster, and farewell receptions and received a total of $302 in "tips" that were donated to the Meteoritical Society Endowment Fund.

CALL FOR AWARD NOMINATIONS

Please consider nominating a colleague for one of the society's awards. Nominations should be sent to Secretary Michael Weisberg (metsocsec@gmail.com) by 15 January (31 January 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

- 2016 August 7–12, Berlin (Germany)
- 2017 Last week of July, Santa Fe (New Mexico, USA)
- 2018 Dates TBD, Moscow (Russia)
- 2019 Dates TBD, Sapporo (Japan)

SOCIETY AWARD WINNERS

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

LEONARD MEDAL. This is the society's highest and oldest award, and 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 first president of the society. The 2014 winner is **Jeffrey Cuzzi**, for his fundamental contributions to the theory of particle movements in the solar nebula. With his calculations for particle growth and coagulation he attempts to bridge the gap between meteorite research and astrophysical modeling. The citation was given by Steve Desch.

BARRINGER MEDAL AND AWARD. These are sponsored by the Barringer Crater Company and were created in memory of D. Moreau Barringer, Sr. and his son D. Moreau Barringer, Jr. The award is given for outstanding work in the field of impact cratering. This year, the Barringer Award is given to **Natalia Artemieva** (Planetary Sciences Institute, Tucson, Arizona, USA) for her fundamental contributions to the understanding of dynamic impact cratering physics and chemistry. The citation was given by Kai Wünnemann.

SERVICE AWARD. Ralph Harvey is the winner of this year's Meteoritical Society Service Award. Ralph receives this award for his indispensible service to the community as the leader of the Antarctic Search for Meteorites (ANSMET) Program. The citation was given by Kevin Righter.

NIER PRIZE. This year's winner of the Nier Prize for young scientists in the field of meteoritics is **Pierre Beck.** Pierre receives this award for his significant contributions to the mineralogy and geochemistry of extraterrestrial materials and spectroscopic studies of the surfaces of planetary bodies in the Solar System. The citation was given by Frederic Moynier.

GORDON MCKAY AWARD. This award, which is given for the best oral presentation by a student at the annual meeting of the Meteoritical Society, is awarded to **Carolyn Crow** of the University of California, Los Angeles (USA) for her talk at the 78th Annual Meeting in Berkeley entitled "U-Xe degassing ages of terrestrial and lunar impact zircons." The award comes with a prize of (USD)$1,000 and a certificate.

WILEY-BLACKWELL AWARDS. Wiley-Blackwell, publishers of *Meteoritics and Planetary Science*, sponsored four awards of (USD) $500 for outstanding presentations by students at the 78th Annual Meeting of the Meteoritical Society in Berkeley. The winners were **Lucy Forman** (Curtin University, Perth, Australia) for her presentation, "Recovering the primordial impact history of chondrites in unprecedented detail using massive EBSD datasets"; **Levke Kööp** (University of Chicago, USA) for her presentation, "^{26}Al depletions in anomalous and solar PLAC-like CAIs suggest high degrees of processing in the early solar nebula"; **My Riebe** (ETH, Zürich, Switzerland) for her presentation, "A regolith origin of 'pre-irradiation' of Murchison chondrules"; and **Michelle S. Thompson** (University of Arizona, USA) for the presentation, "Simulation of micrometeorite impacts through in situ dynamic heating of lunar soils."

Lucy Forman

Levke Kööp

My Riebe

Michelle S. Thompson