October 2018 Newsletter

Upcoming Events & Deadlines
For the latest Planetary Sciences updates and events, visit the section website.

• 9-11 October: Europa Deep Dive 2: Composition, Houston, TX
• 10-12 October: 7th Joint Workshop on High Pressure, Planetary and Plasma Physics (HP4), Berlin, Germany
• 16–18 October: 4th Mars 2020 Landing Site Workshop, Glendale, CA
• 21–26 October: 50th AAS Division for Planetary Sciences Conference, Knoxville, TN
• 4-7 November: 2018 Geological Society of America Annual Meeting, Indianapolis, IN
• 6–8 November: Venus Exploration Analysis Group meeting, Laurel, MD
• 13–15 November: Lunar Exploration Analysis Group meeting, Columbia, MD
• **10-14 December**: AGU Fall Meeting 2018, Washington, DC
• 29–31 January: Small Bodies Assessment Group (SBAG) meeting, Houston, TX
• 29 January–1 February: Mars Extant Life: What’s Next? Carlsbad, NM

Announcements

NASA SMD Statement on Antiharassment: A Letter from Dr. Thomas H. Zurbuchen
I am writing concerning an issue that I am relentlessly passionate about: building effective and innovative teams that achieve amazing results for NASA Science. To achieve excellence, we need focus and commitment from the best and brightest of all backgrounds. This goes hand in hand with my strong belief in the value and imperative of diversity and inclusion. As the associate administrator for Science and as an educator, husband, father, and friend, I have personally experienced the value
of diversity in my life. On the flip side, I have supported many individuals who have been hurt by harassment, and I have seen the devastating consequences it has had on them and on our community.

We are all responsible for addressing harassment in the workplace. All too often, bystanders have failed to intervene, allowing predators to continue harassment for years or even decades.

On 11 September 2018, NASA administrator Jim Bridenstine signed the “NASA Policy Statement on Antidiscrimination in NASA Conducted or Funded Programs, Activities, and Institutions.” Let me reinforce the administrator’s policy that discrimination on the basis of race, color, national origin, sex (including sexual harassment), disability, and age is not acceptable.

Harassment is a serious violation of professional ethics and should be regarded and treated as such within NASA, as well as in our contractor and associated academic communities. I would like to encourage everyone related to NASA Science to report harassment claims directly, using the information provided in the NASA policy statement signed by Administrator Bridenstine. The administrator’s policy can be found here and guidance for filing a harassment complaint can be found here.

As we go forward, I want to be clear that everyone is welcome within NASA Science; however, harassing behavior has no place here. Every scientist, engineer, and mission support contributor have a right to be treated with respect. NASA strives to create a workplace environment that is free of harassment and discrimination, and we expect every university and contractor with whom we do business to strive for the same.

I call on everyone in our community to join me and our team at NASA Science to continually reassert through our words and actions that we are committed to these values.

Job Opportunity: Brown University Department of Earth, Environmental and Planetary Sciences

The Department of Earth, Environmental and Planetary Sciences at Brown University invites applications for a tenure-track faculty appointment in geochemistry. Any analytical, experimental, and theoretical/computational approach to understanding the origin and chemical evolution of the Earth and planets will be considered. Some examples include, but are not limited to, cosmochemistry, planetary petrology, nontraditional stable isotope geochemistry, early Earth evolution, volcanology, and interactions of planetary materials with hydrospheres and atmospheres. Preference will be given to candidates whose strengths complement departmental research expertise in geochemistry and petrology, planetary geoscience, geophysics, and climate and environment. We seek scientists whose research integrates field observations, geochemical analyses, experimental studies, and geochemical theory and/or modeling. We are interested in scientists whose research transcends traditional boundaries in geochemistry, such as between high-temperature and low-temperature geochemistry, geochemistry and geophysics, and terrestrial and planetary. The successful candidate will maintain an active, externally funded research program and enjoy a commitment to teaching at both
undergraduate and graduate levels. Appointment will be at the assistant professor level. A Ph.D. degree is required, and postdoctoral experience is considered important.

Applicants should submit a curriculum vitae, descriptions of research and teaching interests, and a list of at least three potential referees via the website. Inquiries and other communications may be directed to Department of Earth, Environmental and Planetary Sciences. Applications received by 1 November 2018 will receive full consideration, but the search will remain open until the position is closed or filled. The start date for this position is 1 July 2019.

Brown University is committed to fostering a diverse and inclusive academic global community; as an EEO/AA employer, Brown considers applicants for employment without regard to, and does not discriminate on the basis of, gender, race, protected veteran status, disability, or any other legally protected status.

Postdoctoral Job Opportunity: Jet Propulsion Laboratory
The Jet Propulsion Laboratory, California Institute of Technology, invites applications for a postdoctoral research position in the Geophysics and Planetary Geosciences group, which is in the Planetary Sciences section within the Science division. This project focuses on changes in dust devil tracks over time in order to measure dust-settling timescales, amounts, and rates on Mars. In addition, other projects of the candidate’s choosing are also possible, for example, those involving geomorphology and/or active processes (aeolian, impacts, mass wasting, etc.) on planetary bodies, especially Mars. Dr. Ingrid Daubar will serve as JPL postdoctoral advisor to the selected candidate. Candidates should have a recent Ph.D. (within 5 years) in planetary science, geology, astronomy, physics, remote sensing, or a related field. Experience with remote sensing data analysis, geographical information systems (e.g., ArcGIS), and orbital data, including HiRISE and CRISM, is highly desirable. Diverse and enthusiastic candidates with demonstrated collaboration and communication skills are encouraged to apply. Potential applicants are welcome to contact Dr. Ingrid Daubar to discuss the position.

Pluto System After New Horizons Conference
The dates for the Pluto System After New Horizons, an international science conference on the Pluto system and the Kuiper Belt, have shifted to 14–18 July 2019. The venue remains the same: The conference will be held at the Johns Hopkins University Applied Physics Laboratory in Laurel, MD. Please mark your calendars accordingly!

NASA Solar System Exploration Research Virtual Institute Funding Opportunity
The NASA Science Mission Directorate and the Human Exploration and Operations Mission Directorate have released the third Solar System Exploration Research Virtual Institute (SSERVI) Cooperative Agreement Notice (CAN) as NNH18ZDA018C.
SSERVI CAN-3 NNH18ZDA018C invites the submission of multi-institutional team-based proposals for research as participating members of SSERVI. Proposals must clearly articulate an innovative research program addressing basic and/or applied research fundamental to understanding the nature of the Moon, near-Earth asteroids, the Martian moons Phobos and Deimos, and the near-space environments of these bodies, to enable eventual human exploration of these destinations.

Proposal review, selection, and award will be implemented according to the guidelines set forth in sections 5.0 and 6.0 of this funding announcement. While SSERVI will continue to support research addressing potential human exploration destinations, given (1) the current administration’s focus on returning to the Moon and (2) opportunities to be provided by the commercial lunar industry, proposals that address these near-term lunar needs and opportunities will be given preference. Proposed research that complements current CAN-2 Institute Teams, and/or addresses important research areas not currently covered in the institute, will be given strong consideration.

Section 4.0 proposal and submission information provides important information regarding restrictions and deadlines for principal investigator and other key personnel changes and other key dates:

- A mandatory “Step-1 proposal” is due 19 October by 11:59 p.m. ET. See section 4.2.1 for details regarding how a Step-1 proposal differs from an NOI.
- Step-2 full proposals are due 18 December 11:59 p.m. ET.

Email questions no later than 14 calendar days prior to the Step-2 proposal due date to SSERVI. Anonymity of those who submit questions will be preserved. Responses to questions and the full text for this CAN may be downloaded directly from the NNH18ZDA018C page on NSPIRES, or may be reached by searching on NNH18ZDA018C here.

RFI for NASA SMD Strategic Plan for Scientific Data and Computing
The NASA Science Mission Directorate (SMD) requests information, comments, and suggestions to assist in the development of a Strategic Plan for Scientific Data and Computing. This notice is published to solicit input from all stakeholders, including but not limited to members of the scientific community, academic institutions, other agencies, the private sector, professional societies, advocacy groups, the general public, and international collaborators. The objective of the Strategic Plan for Scientific Data and Computing is to articulate a whole-of-SMD 5-year strategy that has four overall goals:

- Improve discovery and access for all SMD data for immediate benefit to science data users and to improve the overall user experience
- Identify large-scale and cross-disciplinary/division science users and use cases to inform future science data system capabilities
- Enable strong theory programs that are firmly based on NASA observations
• Modernize science data and computing systems to improve efficiency and enable new
technology and analysis techniques for scientific discovery and commercial use

The Strategic Plan for Scientific Data and Computing is intended to span the range of activities within the Science Mission Directorate, including opportunities for cross-disciplinary science investigations. Respondents are therefore encouraged to think broadly about future capabilities and needs, and we encourage members of all fields of NASA Science, engineering, industry, and academia to respond to this RFI in order to ensure a range of views.

NASA will use your response to aid in programmatic decisions about future investments for data and computing, including partnerships with private sector and philanthropic organizations. This RFI is not to be construed as a commitment by the government, nor will the government pay for information solicited. No proposals will be awarded funding as a result of this RFI.

This RFI is open to responses from all parties including commercial entities, international organizations, academia, NASA centers, and other government agencies. Responses will be accepted only if submitted via NSPIRES. Responses provided by email, mail, or other means will not be accepted. Questions concerning this RFI should be sent via e-mail and addressed to Kevin Murphy, Science Mission Directorate, NASA and Ellen Gertsen, Science Mission Directorate, NASA.

#AstrobioScience: An Astrobiology Science Strategy for the Search for Life in the Universe
Are we alone in the universe? Astrobiology, the study of the origins of life in the universe and the search for life on other worlds, is a highly interdisciplinary and rapidly changing field at the intersection of biology, chemistry, geology, planetary science, and physics. Recent scientific advances have opened new doors for astrobiological inquiry, and at the request of NASA and Congress, the National Academies of Sciences, Engineering, and Medicine appointed a committee to develop a future research strategy for the field of astrobiology. Please join us for this public briefing event and webcast, 11 a.m. – 12 p.m. ET 10 October, during which committee members Barbara Sherwood Lollar and Alan Boss will discuss the report’s recommendations and take questions from the audience.

New Report: Exoplanet Science Strategy
Is our solar system a cosmic rarity or a galactic commonplace? How do Earth-like planets form, and what determines whether they are habitable? Is there life on other worlds? At the request of NASA and Congress, the National Academies of Sciences, Engineering, and Medicine appointed a committee to develop a science strategy for the study of extrasolar planets and survey the status of the field in preparation for the next decadal survey. The full report, summary, public briefing video, and presentation are now available.
NASA Postdoctoral Fellowship
The NASA Postdoctoral Program offers US and international scientists the opportunity to advance their research while contributing to NASA’s scientific goals. The NPP supports fundamental science, explores the undiscovered, promotes intellectual growth, and encourages scientific connections.

Selected by a competitive peer-review process, NPP Fellows complete one- to three-year Fellowship appointments that advance NASA’s missions in earth science, heliophysics, planetary science, astrophysics, space bioscience, aeronautics and engineering, human exploration and space operations, and astrobiology. Current NPP research opportunities in planetary science can be viewed here.

Applicants must have a Ph.D. or equivalent degree in hand before beginning the Fellowship, but may apply while completing the degree requirements. U.S. citizens, Lawful Permanent Residents, and foreign nationals eligible for J-1 status as a Research Scholar may apply.

Stipends now start at $60,000 per year, with supplements for high cost-of-living areas and for certain academic specialties. Financial assistance is available for relocation and health insurance, and $10,000 per year is provided for professional travel.

Applications are accepted three times each year: March 1, July 1, and November 1. Please direct questions here.

How the Sausage Is Made
The Fall Meeting Program Committee (FMPC) has recently concluded its preparation of the program for Fall Meeting. The Fall Meeting program will be made available shortly, and members of the Planetary Sciences section of the FMPC would like to provide the section with a bit of insight into the complex process of building the program.

You may be surprised to know that building the Fall Meeting program is an exhaustively manual process! By the time of the September meeting of the FMPC, sessions have been confirmed and abstracts have been submitted. On the basis of the fraction of total AGU abstracts (exceeding 26,000 this year!) within each section, a proportional allocation of oral sessions is given to each AGU section. There are vastly more requested sessions than oral slots, so the FMPC evaluates each session proposal for things like number of abstracts, balance of topics, and overlap between session themes. The aim is to select topics that appear well represented, diverse, and engaging. From this evaluation, we identify the “oral” component of the Planetary Sciences program.

Conveners of all oral and poster sessions are then contacted and asked to organize their sessions and to identify session chairs and OSPA liaisons, a task which is completed just prior to the FMPC September meeting.

At the September meeting itself, both the oral and poster sessions are assigned time slots in a deliberative fashion. Multiple sessions on similarly themed topics (e.g., the outer planets) are placed in such a way as to keep them close in time to each other and to avoid having similar topics occur at
opposite ends of the week. Hence, you will find talks on Cassini, Juno, and the ice giants on adjacent
days. The committee also works to minimize the number of concurrent sessions, with typically two or
three concurrent planetary sessions being the norm (occasionally, four sessions must be done
concurrently). All efforts are made to avoid having related topics presented at the same time. To
encourage attendance at the named lectures (Whipple, Shoemaker, and Sagan) and the section
award (Greeley), you will find that there are no other sessions that overlap these lectures.

Rooms are selected to be physically as close as possible to minimize walking between sessions.
Also, rooms can accommodate varying-sized audiences, and so what the committee anticipates will
be the most highly attended sessions are placed in the largest rooms.

With the oral sessions assigned, the committee turns to the poster sessions. For obvious reasons, it
is necessary to avoid having overlapping poster and oral sessions on the same or similar topic. Often,
this is why affiliated poster sessions occur the day prior to, or after, the corresponding oral session.
Second, the overall number of posters each day within the section needs to be approximately equal
to avoid surges in the number of posters on particular days and to simplify the logistics of assembling
the poster hall. The committee places similarly themed poster sessions in proximity to each other to
make it easier for attendees to find all posters of interest. The section has several sessions taking
advantage of the new eLightning format, and these sessions must be deconflicted with sessions on
similar topics as well.

With this completed, the section committee looks outward to identify conflicts with other sections
possibly having sessions on a similar topic where the audience might overlap. The conflicted sections
negotiate how to resolve these conflicts, typically by adjusting session times or days. The Planetary
Sciences section has multiple all-Union sessions as well, for which topical conflicts must be avoided.

At this point, the process is largely complete except for resolving individual, lower-level conflicts.
Occasionally, a speaker in one session may also be chair of another session at the same time, or a
speaker in one session may also be speaking in another session only 15 minutes later. These
individual conflicts must be resolved, again, by adjusting timings or, in some cases, adjusting session
chairs if no other method can avoid a conflict. The committee tries hard to minimize the impact of
these changes on the overall program. Often, resolving one conflict introduces another, and the
program is shuffled and reshuffled until all such conflicts are resolved.

As you can see, preparing the Fall Meeting is a multidimensional matrix of constraints. The end result
is certainly not perfect but is constructed to do the greatest good for the greatest number of
attendees. For this reason, individual and even session requests for specific times or days regrettably
cannot be accommodated, as they would place too great a restriction on the overall program.
Perhaps you are one of the few who will find the Fall Meeting program to be “challenging” this year.
To you, the committee apologizes, but we hope you understand the amount of effort that is
undertaken to minimize disruption to everyone’s week.
AGU Centennial
AGU launched its Centennial and corresponding Centennial website designed to be the go-to destination for all information about Centennial events and activities. To coincide with the launch, AGU introduced the public outreach campaign series “100 Facts and Figures” to highlight aspects of Earth and space science. The campaign calls attention to some of the most meaningful, interesting, and relevant Earth and space science facts and figures from the past 100 years. You can be a part of the Centennial and join the conversation by suggesting an Earth and space science fact to be considered in the campaign.

AGU Instagram Takeover: Share Your Section’s Science
We’re looking for scientists of all career stages and disciplines to take over AGU's Instagram account with photos and videos of your work this summer. Email us if you are interested in taking over our Instagram account this summer during or after your field work, or for a few days while you're working in the lab. While you're out in the field, you can also share pictures of your work and field site with us by submitting a Postcard from the Field via our Tumblr site.

Publicizing Your Work at Fall Meeting
Are you presenting new research findings at the 2018 AGU Fall Meeting or chairing a session at the Fall Meeting where new research will be presented? Do you think the research might be newsworthy? If so, please fill out this publicity form to tell AGU’s press office why your research or research in your session might be of interest to the press and public. Press office staff will contact you if they are interested in publicizing the work at the meeting. If you’re unsure about what makes scientific results newsworthy, check out our handy newsworthiness criteria guide. Please email all questions.

Get Social with Planetary Sciences!
Looking for even more Planetary Sciences happenings? Our section website is packed with updates, employment opportunities, key contacts, and section specific announcements. Be sure to also follow us on Facebook and Twitter for the latest PS activities.

Publish Your Notice in the AGU Planetary Sciences Newsletter
The AGU Planetary Sciences section has more than 6500 scientist members worldwide. Your announcements and notices in the Planetary Sciences newsletter will reach a wide range of professionals and students in precisely the areas in which you should advertise. If you have any job postings, conference announcements, or other planetary-related material, please send it to Michael Mischna to be included in a future newsletter.