Newsletter 17-48

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REMINDER: RENEW YOUR AAS/DPS MEMBERSHIP TODAY

AAS emailed members in early September announcing the start of membership renewal season, and many took notice. Online renewals are arriving at a steady pace. If you have already paid your dues, thanks for your continued support.

As many of you saw during the Members meeting in Provo, the AAS regularly purges the DPS membership list early in the year and we lose 200-300 members.

Please renew your membership today so this does not happen to you!

To help reduce costs and the Society's carbon footprint, we encourage you to renew online today for fast, easy self-service. Simply log in to pay your dues, to confirm or update your journal subscriptions and Division memberships, and to lock in savings for 2018 by renewing for two years at the current rate.

(Note: That last option isn't available to junior members, who instead get two...
years for the price of one — currently $84 — when first joining the Society, then renew annually thereafter.)

Renew before 31 December to maintain your benefits and receive additional savings: the AAS will extend a one-time 15% discount off your portion of the author charges for one paper published in the *Astronomical Journal*, the *Astrophysical Journal*, *ApJ Letters*, or *ApJ Supplement*. Eligible members can double their savings: if you renew by 31 December for two years, you will receive the 15% author discount on one paper each in 2018 and 2019.

The Society has much planned for 2018 — including the 231st meeting of the AAS in National Harbor in January — so you won't want to miss out on the latest science, member communications, and career and networking opportunities.

Supporting the AAS is supporting your discipline. Renew today!

If you have any questions about your dues or benefits, or need assistance when logging in, please contact the membership team by email at membership@aas.org [1] or by phone at 202-328-2010 [2]. Thank you!

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**GEO SCIENCES SPECIAL ISSUE: RECENT ADVANCES IN LUNAR STUDIES**

Dear Colleagues,

The journal Geosciences is accepting papers for a Special Issue related to recent advances in studies of the Moon. Since the Apollo era, sample studies, remote analyses, and dynamical models continue to tease out details related to the Moon’s formation and evolution. Additionally, the international lunar
The science community is eager to continue its presence on the Moon, as evidenced by recent, upcoming, and future lunar missions. All of these topics are of great interest to the broader geoscience community.

The Special Issue welcomes papers that describe studies related to any of the above topics and will be an outlet for rapid, accessible, and peer-reviewed publications. The editors especially welcome papers from young investigators.

Additional details are available at:

http://www.mdpi.com/journal/geosciences/special_issues/lunar_studies

Dr. Nicolle E. B. Zellner
Dr. Karen R. S. Cahill

Guest Editors

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CALL FOR LETTERS OF APPLICATION FOR MEMBERSHIP ON NASA’S SCIENCE DEFINITION TEAM FOR CERES MISSION STUDIES

The Planetary Science Division of NASA’s Science Mission Directorate plans to conduct a generic study of mission options, including science and technology options, for future exploration of the dwarf planet Ceres. The study will build upon, but not be limited to, the National Research Council’s Planetary Science Decadal Survey, entitled “Visions and Voyages for Planetary Science in the Decade 2013-2022” (available at http://solarsystem.nasa.gov/docs/Vision_and_Voyages-FINAL.pdf); the intent of this study is to provide information for the deliberative process for
the next Decadal Survey. The study also will build upon results from
previous ground-based studies and the Dawn mission. Important to this
study will be the establishment of a Science Definition Team to guide the
technical study team. NASA invites scientists and other qualified and
interested individuals at U.S. institutions to apply for membership on
the Ceres Science Definition Team (SDT).

Members of the Ceres SDT will provide the technical team and NASA
with scientific assistance and direction during preliminary architecture
assessment of missions to the dwarf planet Ceres. Near-term activities
of the SDT will include the establishment of prioritized science
objectives and a realistic scientific concept of operations, development
and assessment of alternative architectures, including model
payload/instrument suites for proof of concept, and suggestions for
threshold science objectives/measurements for viable missions
within resource constraints provided by NASA. NASA will use the
products of this study for planning purposes. The SDT will be formed
in January 2018 and will be disbanded after the work is complete,
approximately 8 months later.

The Ceres SDT will:

1. Identify and prioritize science objectives to be addressed by spaceflight
mission(s) based upon recommendations from the 2013-2022 Decadal Survey,
but also account for recent information and current state of the science.

2. Participate in mission studies designed to address those science objectives.
Aspects of this participation will include:

- Science traceability, identification of measurements, and specification of model payload
- Science concept of operations
- Participation in tradeoffs among scientific value, cost, and risk
- Ranking of alternative architectures
- Identification of enabling/enhancing technologies

3. Assist in the preparation of study reports.

All reports and output materials of the study will be made publicly available.

Participation in the Ceres SDT is open to all qualified and interested individuals.

SDT member selection will be coordinated with the Chairs. The selected members will have demonstrated expertise and knowledge in areas highly relevant to Ceres science and related technologies and instrumentation.

NASA anticipates the selection of approximately eight to ten SDT members. Representative(s) from the NASA Planetary Science Division, and possibly other Agency representatives, may serve as ex officio members of the SDT.

DETAILS REQUESTED FOR SDT MEMBERSHIP SELECTION

Responses to this Call for Membership in the Ceres SDT shall be in the form of a Letter of Application. The Letter of Application should provide clearly defined evidence of the candidate’s relevant demonstrated experience and background. The Letter of Application may also contain a brief list of references to scientific or technical peer-reviewed papers the applicant has
published that formally establish their position of scientific leadership in the community. References are not included in the page limit (given below).

The letter should also contain a statement confirming the applicant’s time availability during the next twelve months to participate on the SDT, particularly if there are any major schedule constraints that may restrict engagement at critical times. The expected time commitment would include the following:

- A kick-off teleconference the first week after selection
- One face-to-face meeting in the later winter to early spring 2018
- Availability via phone and E-mail during mission study activities (at JPL) to address any science questions that arise and that cannot be handled by local scientists; We expect ~2-3 detailed mission studies to be done as part of this effort
- Teleconferences to follow each mission study
- Preparation and review of materials for the final report (draft due August 2018, TBC)
- Additional teleconferences and face-to-face meetings as the SDT deems appropriate

Note that a significant amount of the interaction among the SDT is anticipated to be via E-mail and WebEx.

Letters of Application are invited only from individuals. Group applications will not be considered. In addition, collaborations and teams will not be considered.

Each Letter of Application, limited to one page with 11-point Times font and 1-inch margins, must be received by Dr. Michael Kelley via E-mail no later
than December 21, 2017 (5:00 p.m. EST) at the address below. The subject line of the E-mail should read "Ceres pre-decadal SDT application".

The issuance of this Call for Letters of Application does not obligate NASA to accept any of the applications. Any costs incurred by prospective investigators in preparing submissions in response to this Call are incurred completely at the submitter's own risk.

Dr. Michael Kelley
Planetary Sciences Division
Science Mission Directorate
E-mail: michael.s.kelley@nasa.gov [5]
Phone: 202-358-0607 [6]

JOBS, POSITIONS, OPPORTUNITIES

A) NASA JOB OPENING ANTICIPATED IN LABORATORY ASTROCHEMISTRY

A NASA civil-servant position is anticipated for early 2018 in the NASA Goddard Space Flight Center’s Astrochemistry Laboratory in Greenbelt, Maryland. The new employee's work will be in the Cosmic Ice group on problems relevant to low-temperature, low-pressure chemical changes and physical properties related to solar-system and interstellar materials. The successful candidate will have laboratory experience in cryogenic, vacuum, and infrared spectral measurements, and preferably some familiarity with radiation-chemical or photochemical studies. Duties in this research position will include investigating astrochemical problems connected to past, current, and future NASA missions and projects. Opportunities for collaborations with other NASA science teams exist.

Applicant should have a PhD or equivalent in chemistry, physics, or a closely related field, with post-doctoral experience desired. Good oral and written communications skills, such as experience writing papers and proposals, are required.

It is anticipated that this position will be at the GS-13 level or, depending on the applicant's qualifications, GS-14. Interested persons
should watch for the official announcement, with additional details, on the USAJOBS website. Note that US citizenship at the time of the application is a requirement for this position.

For more information about this opportunity, please contact Jason Dworkin (jason.p.dworkin@nasa.gov [7]), Reggie Hudson (reggie.hudson@nasa.gov [8]), or Perry Gerakines (perry.a.gerakines@nasa.gov [9]).

See also the Cosmic Ice Laboratory’s website at https://science.gsfc.nasa.gov/691/cosmicice/ [10] for information on the group’s recent work.

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Send submissions to:

Anne Verbiscer, DPS Secretary (dpssec@aas.org [11])

To unsubscribe visit http://aas.org/unsubscribe [12] or email unsubscribe@aas.org [13]. To change your address email address@aas.org [14]