



March 2020 Newsletter

Your president and president-elect attended AGU's Council meeting in Washington, D.C., in early March. Planning for Fall Meeting will start soon, and session proposals are already open. The deadline for Union-level award submissions has been extended from 15 March to 15 April. The deadline for Section-level award submissions is also 15 April. Nominate a colleague! Our Fall Meeting again will be in San Francisco, a favorite location for many of us. Hoping to see you there.

Rosaly Lopes, **President**

Michael Mischna, **President-elect**

David Williams, **Secretary**

Sam Birch, **Early Career Representative**

Ashley Schoenfeld, **Student Representative**

Sarah Stewart, **Past President**

Upcoming Deadlines & Events

For the latest Planetary Sciences updates and events, visit the section calendar.

Upcoming Deadlines

- ROSES-2020: Emerging Worlds, Step-1 proposal: Due 3 April 2020
- ROSES-2020: Solar System Observations, Step-1 proposal: Due 8 April 2020
- ROSES-2020: Yearly Opportunities for Research in Planetary Defense, Step-1 proposal: Due 8 April 2020
- ROSES-2020: Development and Advancement of Lunar Instrumentation, Step-1 proposal: Due 17 April 2020
- ROSES-2020: Maturation of Instruments for Solar System Exploration, Step-1 proposal: Due 17 April 2020

- ROSES-2020: Exobiology, NOIs: Due 22 April 2020
- ROSES-2020: Laboratory Analysis of Returned Samples, Step-1 proposal: Due 24 April 2020

Upcoming Conferences (2020)

- **15–17 April:** Mars Exploration Program Analysis Group (MEPAG) Meeting 38, Washington, D.C.
- **14–16 April:** Titan Through Time Workshop V, Boulder, Colo.
- **31 March to 2 April:** Preventing Harassment in Science Workshop, Phoenix, Ariz.
- **16–20 March:** 51st Lunar and Planetary Science Conference (LPSC), The Woodlands, Texas

Planetary Sciences Announcements/Updates

1. NASA Postdoctoral Fellowship: Application Deadline, 1 July 2020

The NASA Postdoctoral Program (NPP) offers U.S. and international scientists the opportunity to advance their research while contributing to NASA's scientific goals. NPP supports fundamental science; explores the undiscovered; promotes intellectual growth; and encourages scientific connections.

Selected by a competitive peer review process, NPP Fellows complete 1- to 3-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 [NPP Planetary Science Research Opportunities](#).

Applicants must have a Ph.D. or equivalent degree in hand before beginning the fellowship, but they 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 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: 1 March, 1 July, and 1 November.

For further information and to apply, please [Click Here](#).

Questions: npphelp@usra.edu

2. Five Postdoctoral Positions, Emirates Mars Mission, Khalifa University, Abu Dhabi, United Arab Emirates

The Emirates Mars Mission (EMM) science team and Khalifa University (KU) are inviting applications for up to five postdoctoral research fellowship positions. We seek candidates interested in spacecraft observations and models of the Martian atmosphere (including the upper atmosphere) relevant to EMM observations. EMM will be launched in July 2020 and arrive at Mars in early 2021 and will carry an imaging system with several visible and UV band passes (EXI), a thermal IR spectrometer (EMIRS), and a UV imaging spectrometer (EMUS). Examples of science topics that postdocs may pursue include, but are not limited to,

- Thermal structure of the lower Martian atmosphere
- Clouds and aerosols in the Martian atmosphere
- Atmospheric variability on diurnal, daily, and seasonal timescales
- Vertical transport in the Martian atmosphere
- Structure and composition of the Martian thermosphere
- The hydrogen and oxygen exosphere of Mars
- Thermal and photochemical escape from the Martian atmosphere
- General circulation modeling of the Martian atmosphere (including upper atmosphere)

The fellowship is initially for 2 years and renewable for up to 1 additional year. Postdocs will split their time each year between a host institution affiliated with the EMM science team (University of Colorado Laboratory for Atmospheric and Space Physics, UC Berkeley Space Sciences Lab, Northern Arizona University, Arizona State University, NASA Goddard Space Flight Center, Space Sciences Institute, Virginia Tech, and Laboratoire de Météorologie Dynamique in Paris), and KU in Abu Dhabi, United Arab Emirates. While at KU, the postdocs will continue their EMM research and participate in the formation of a new space science and technology center. It is anticipated that one or more of the postdocs may be able to transition to a tenure-track faculty position at KU during or after the postdoc period.

Applicants should have met the requirements for a Ph.D. in planetary science, atmospheric physics, or a related field by the end of May 2020. Applications will be considered on a rolling basis, with initial review starting 17 March.

We recognize that the effectiveness and creativity of a group are strengthened by contributions from a broad range of perspectives. As such, we welcome candidates from groups that are historically underrepresented in our field.

For more information about EMM, please [Click Here](#)

For more information about Khalifa University, please [Click Here](#)

For questions, please contact kumarspostdoc@lasp.colorado.edu.

Applicants can submit a letter of interest, a CV, and the names of three references by [Clicking Here](#).

3. Obituary: Edward J. Smith (1927–2019)

The planetary community lost one of its pioneers. An obituary, written by Bruce Tsurutani and Marcia Neugebauer, has been published on Eos.org. Please [Click Here](#) to read the obituary.

4. 2020 International Summer School in Astrobiology: Searching for Life on Mars—Techniques and Challenges

Dates: 15–19 June 2020, Santander, Spain

Application deadline: TBD

During 2020, two Mars spacecraft, one from the United States and the other from Europe, will launch toward Mars. Both are expected to significantly advance our search for life on the Red Planet. The NASA Mars 2020 rover Perseverance is the first step of Mars Sample Return (MSR). Perseverance is based on the Mars Curiosity design and will carry a deep UV Raman mapping spectrometer, named SHERLOC, that will be able to detect organic molecules in a spatial context. In addition, samples will be collected and cached for future return to Earth where they can be analyzed in our laboratories. The European Space Agency's (ESA) Rosalind Franklin rover will carry a drill that can collect samples from depths of up to 2 meters for onboard analysis. The retrieved samples will be analyzed using a Raman spectrometer (the RLS instrument) as well as using a coupled gas chromatograph–mass spectrometer (GCMS) of desorbed materials using the MOMA instrument. Although their results alone cannot prove that biosignatures are present, they will be able to identify carbon-containing compounds and the types of molecular frameworks and functional groups that are present.

The 2020 summer school will review and assess the types of techniques that are necessary for detection of biosignatures on Mars, including Raman spectroscopy, the isotopic and chirality analyses that the ESA and Mars Science Laboratory rovers will perform, and the techniques that can analyze samples both in situ and on Earth-based laboratories for follow-up analysis. The central question will be about how we can unequivocally detect biosignatures on Mars, and the discussions will involve in situ rovers, optimal sample collecting and return, laboratory analyses with returned samples here on Earth, follow-on robotic exploration, and the experiments that future human explorers may be able to perform. The lectures will be focused on instrumentation and techniques. In addition to the lectures, during the summer school the students will participate in discussions about the theme, participate in group projects, and take part in an excursion to a local and relevant geological site near Santander.

The school is aimed primarily at graduate students in science or engineering but is open to anyone interested in the origin of life and astrobiology.

Applicants must be students affiliated with U.S. institutions. The deadline is 16 March, and selections will be made by 15 April.

To apply:

1. Fill out and submit an [application form](#).
2. Have your advisor submit a [letter of recommendation](#).

Questions can be directed to Melissa Kirven at melissa.kirven@nasa.gov.

The participation of students from ESA member states, Canada, and Slovenia can be funded by ESA. Furthermore, students enrolled in universities from the European Union (as well as from other countries belonging to the European Higher Education Area (EHEA); <http://www.ehea.info/page-members>) could also be directly funded by the Universidad Internacional Menéndez Pelayo (UIMP). Interested students please contact J. Miguel Mas-Hesse (mm@cab.inta-csic.es) for further details.

5. SEEC Postbaccalaureate Opportunity, NASA Goddard Space Flight Center

The Southeastern Universities Research Association (SURA) is accepting applications for multiple short-term postbaccalaureate research positions to support the Sellers Exoplanet Environments Collaboration (SEEC) at NASA Goddard Space Flight Center.

The SEEC team develops cross-disciplinary science and instrumentation models and analysis tools to assist in the exploration of exoplanet environments.

Requirements: Recent graduates with a B.S. degree in astronomy, physics, or a related science or engineering discipline and significant scientific coding experience are encouraged to apply for this 1-year opportunity.

To apply: More information is available at

<http://www6.sura.org/wp-content/uploads/2020/03/CRESST-SEEC-Post-Bac.pdf>.