

# Mars Exploration Science Monthly Newsletter

A publication of the Mars Program Office and the Mars Exploration Program Analysis Group (MEPAG)

May 2019

## Mars Science News

### Next MEPAG Virtual Meeting (VM5) scheduled: June 6, 2019, 11am-1pm EDT

The 1st Informational Circular for the 5th MEPAG Virtual Meeting (VM5) is posted at <https://mepag.jpl.nasa.gov/meetings.cfm>. This meeting will be held Thursday, June 6th, 2019, at 11:00 am-1:00 pm EDT. Agenda items are expected to include an update from NASA HQ, a final report from the Ice and Climate Evolution Science Analysis Group (ICE-SAG), information about the upcoming Ninth International Conference on Mars and subsequent MEPAG Meeting 37 (July 22-25 and July 26, respectively), and reports about other Mars-relevant meetings. Additionally, we will formally welcome in the incoming MEPAG Chair, Dr. R. Aileen Yingst (PSI). The current agenda and WebEx connectivity information are included in the 1st Informational Circular. Updates to the agenda and presentations will be posted to the [MEPAG meeting website](#). All members of the Mars science community including our international colleagues are welcomed to attend.

### Welcome to the incoming MEPAG Chair

Dr. R. Aileen Yingst (PSI) has agreed to serve as the next MEPAG Chair. Dr. Yingst is a planetary geologist whose research focuses on the texture and morphology of rock outcrops and clasts. She is currently the Deputy Principal Investigator for the Mars Hand Lens Imager instrument (MAHLI), a science team member for the Mars Science Laboratory (MSL) imaging science team, and a Co-Investigator on the SHERLOC/WATSON instrument on the Mars 2020 rover.

Dr. Yingst will be formally welcomed as the new MEPAG Chair at the next MEPAG virtual meeting (VM5, see above), taking the reins from Dr. Jeffrey R. Johnson, who stepped in as MEPAG Chair in March, 2016 (at [MEPAG meeting 31](#)) – many thanks for his 3 years of service and extensive work for this community and Committee! Dr. Johnson will remain a member of the MEPAG Executive Committee as “Past Chair.” A full listing of MEPAG Committee members can be found here: <https://mepag.jpl.nasa.gov/about.cfm>.

### Ninth International Conference on Mars – Call for Abstracts posted

The Ninth International Conference on Mars will be held at the California Institute of Technology (Caltech) in Pasadena, California, beginning the morning of Monday, July 22, and ending after a full day on Thursday, July 25. (It will be followed on Friday by [MEPAG Meeting 37](#), see below.) The 2<sup>nd</sup> announcement, which includes the Call for Abstracts and hotel block information, has been posted at <https://www.hou.usra.edu/meetings/ninthmars2019/>. We draw your attention to a few upcoming deadlines:

- Abstract and MPO Student Travel award applications are due on **May 7**.
- If you need to forecast conference travel, please do so ASAP: NCTS# 31488-19.
- Hotel room blocks are open for July 21-26 (nights), through **June 9** (Hotel Constance) and **June 21** (Sheraton and Westin), or until they fill, whichever occurs first. Booking links are provided on the [Logistics page](#).
- The Registration Deadline is **July 11**.

### MEPAG Meeting 37 after Ninth International Conference on Mars

As announced by MEPAG Chair Jeff Johnson during the MEPAG virtual meeting on February 25 ([VM4](#)), a face-to-face MEPAG meeting is scheduled at Caltech on Friday, July 26, following the Ninth International Conference on Mars (above). The MEPAG meeting is separate from the Ninth International Conference on Mars and should be forecast separately for NASA conference forecasting purposes (NCTS# 38468-19 for the MEPAG meeting). Further information on MEPAG Meeting 37 will be posted to the MEPAG web site, <https://mepag.jpl.nasa.gov>, as it becomes available.

## Mars-relevant Special Issues Welcoming Paper Submissions

- The joint *JGR* special issue, "Studies of the 2018/Mars Year 34 Planet-Encircling Dust Storm", is accepting submissions until June 1, 2019. Papers pertaining to observations and atmospheric modelling of this particular storm, its influence on the atmosphere and surface of Mars and the physics of Martian dust storms are encouraged. Submissions are sought from mission and instrument teams and the broader scientific community. The editor is Scott Guzewich. Papers can be submitted through the *GRL*, *JGR-Planets*, or *JGR-Space Physics* submission websites shown below:

[https://grl-submit.agu.org/cgi-bin/main.plex?form\\_type=home](https://grl-submit.agu.org/cgi-bin/main.plex?form_type=home)

[https://jgr-planets-submit.agu.org/cgi-bin/main.plex?form\\_type=home](https://jgr-planets-submit.agu.org/cgi-bin/main.plex?form_type=home)

[https://jgr-spacephysics-submit.agu.org/cgi-bin/main.plex?form\\_type=home](https://jgr-spacephysics-submit.agu.org/cgi-bin/main.plex?form_type=home)

**Submission deadline: June 1, 2019**




- The journal *Life* (ISSN 2075-1729) is currently running a special issue titled "Planetary Exploration of Habitable Environments." Prof. Dr. Dirk Schulze-Makuch, Technical University of Berlin (Germany), and Dr. Alberto G. Fairén, Centro de Astrobiología (Madrid, Spain) and Cornell University (Ithaca, N.Y.), are serving as guest editors for this issue. For more information:



[https://www.mdpi.com/si/life/Planetary\\_Exploration](https://www.mdpi.com/si/life/Planetary_Exploration)

**Submission deadline: 15 October 2019**

## Near-term Due Dates (next three months)


Due	Project
May 7	Ninth International Conference on Mars - Abstract and MPO Student Travel Grant Application Deadline
May 8	Joint Meeting: 51st Meeting of the AAS Division for Planetary Sciences - joint with the European Planetary Science Congress (EPSC) - Abstract Deadline
	Japan Geoscience Union (JpGU) 2019 - Early Registration Deadline
May 8	Pluto System After New Horizons – Abstract Deadline (extended)
May 9	The First Billion Years: Habitability: Producing Conditions Conducive to Life - Indication of Interest Deadline
May 10	Ocean Worlds 4 - Standard Registration Deadline
	International Venus Conference 2019 - Final Registration Deadline
May 14	The Humans to Mars Summit - Late Registration Deadline
May 15	2019 Astrobiology Science Conference (AbSciCon) - Early Registration Deadline
	The Planetary CubeSats Symposium - Registration Deadline
May 17	234th Meeting of the American Astronomical Society - Late Registration Deadline
May 20	4th Planetary Data Workshop - Early Registration Deadline
	Royal Astronomical Society 2019 National Astronomy Meeting - Registration Deadline for Presenting Authors
	Planetary Exploration Horizon 2061: Synthesis Workshop - Registration Deadline
May 21	16th Annual Meeting of the Asia Oceania Geosciences Society (AOGS) - Early Registration Deadline
May 25	Planetary Dynamics 2019 - Deadline for General Participation
May 30	13th IAA Low-Cost Planetary Missions Conference - Online Registration Deadline
	International Association of Sedimentologists (IAS) 2019 - Early Registration Deadline
May 31	Titan after Cassini-Huygens Workshop - Abstract and Registration Deadline
June 3	Annual Meeting of Planetary Geologic Mappers - Registration Deadline
June 6	4th Planetary Data Workshop - Registration Deadline
June 7	10th Joint Meeting of the Space Resources Roundtable (SRR) and the Planetary and Terrestrial Mining Sciences Symposium (PTMSS) - Late Registration Deadline
June 14	NASA Exploration Science Forum 2019 - International Registration Deadline
	The Pluto System After New Horizons (PSANH) - Early Registration Deadline
	Royal Astronomical Society 2019 National Astronomy Meeting - Registration Deadline
June 22	2019 Astrobiology Science Conference (AbSciCon) - Registration Deadline
	European Week of Astronomy and Space Science (EWASS 2019) - Registration Deadline
June 24	10th Planetary Crater Consortium - Abstract Deadline
June 25	2019 GSA Annual Meeting - Abstract Deadline
	16th Annual Meeting of the Asia Oceania Geosciences Society (AOGS) - Late Registration Deadline
	70th International Astronautical Congress (IAC) - Registration Deadline

Second Quarter, 2019		
	May 13-17, 2019 Los Angeles, CA, USA	<b>Applied Space Environments Conference (ASEC) 2019</b> , NCTS 35845-19 <a href="https://sti.usra.edu/ASEC2019/">https://sti.usra.edu/ASEC2019/</a>
	May 13-17, 2019 Victoria, British Columbia, Canada	<b>AAS New Horizon in Planetary Systems with ALMA</b> , NCTS 36777-19 <a href="http://www.cvent.com/events/new-horizons-in-planetary-systems/event-summary-b476735da0c34d4fa62e81bf27668214.aspx">http://www.cvent.com/events/new-horizons-in-planetary-systems/event-summary-b476735da0c34d4fa62e81bf27668214.aspx</a>
	May 14-16, 2019 Washington, DC, USA	<b>The Humans to Mars Summit</b> , NCTS 37163-19 <a href="https://h2m.exploremars.org/">https://h2m.exploremars.org/</a>
	May 20-21, 2019 Berlin, Germany	<b>2nd European Physics Conference</b> <a href="https://www.meetingsint.com/conferences/europhysics">https://www.meetingsint.com/conferences/europhysics</a>
	May 21-22, 2019 Houston, TX, USA	<b>Ocean Worlds 4</b> , NCTS 37400-19 <a href="https://www.hou.usra.edu/meetings/oceanworlds2019/">https://www.hou.usra.edu/meetings/oceanworlds2019/</a>
	May 21-23, 2019 Manchester, United Kingdom	<b>European Lunar Symposium</b> , NCTS 37167-19 <a href="https://els2019.arc.nasa.gov">https://els2019.arc.nasa.gov</a>
	May 26-30, 2019 Makuhari Messe, Chiba, Japan	<b>Japan Geoscience Union (JpGU)</b> , NCTS 37098-19 <a href="http://www.jpгу.org/meeting_2019/">http://www.jpгу.org/meeting_2019/</a>
	May 31-June 3, 2019 Niseko, Japan	<b>International Venus Conference 2019</b> , NCTS 36941-19 <a href="https://www.cps-jp.org/~akatsuki/venus2019/">https://www.cps-jp.org/~akatsuki/venus2019/</a>
	June 3-5, 2019 Toulouse, France	<b>13th IAA Low-Cost Planetary Missions Conference</b> , NCTS 37764-19 <a href="http://lcpm.iaaweb.org/">http://lcpm.iaaweb.org/</a>
	June 3-7, 2019 Heidelberg, Germany	<b>Planetary Dynamics 2019</b> <a href="http://www2.mpia-hd.mpg.de/homes/dynamics2019/">http://www2.mpia-hd.mpg.de/homes/dynamics2019/</a>
	June 5-7, 2019 Toulouse, France	<b>Planetary Exploration Horizon 2061: Synthesis Workshop</b> <a href="https://h2061-tlse.sciencesconf.org/">https://h2061-tlse.sciencesconf.org/</a>
	June 9-13, 2019 St Louis, MO, USA	<b>234th Meeting of the American Astronomical Society</b> , NCTS 36771-19 <a href="https://aas.org/meetings/aas234">https://aas.org/meetings/aas234</a>
	June 10-13, 2019 Boulder, CO, USA	<b>50th Annual Meeting of the Division of Dynamical Astronomy (DDA) of the AAS</b> , NCTS 37161-19 <a href="https://dda.aas.org/meetings/2019">https://dda.aas.org/meetings/2019</a>
	June 11-14, 2019 Golden, CO, USA	<b>10th Joint Meeting of the Space Resources Roundtable (SRR) and the Planetary and Terrestrial Mining Sciences Symposium (PTMSS)</b> , NCTS 37406-19 <a href="https://www.csmospace.com/events/srr/">https://www.csmospace.com/events/srr/</a>
	June 12-14, 2019 Flagstaff, AZ, USA	<b>Annual Meeting of Planetary Geologic Mappers</b> <a href="https://www.hou.usra.edu/meetings/pgm2019/">https://www.hou.usra.edu/meetings/pgm2019/</a>
	June 18-19, 2019 Coimbra, Portugal	<b>International Meeting on Paleoclimate: Changes and Adaptation</b> <i>* Research Topic T1: Paleoclimates in the Solar System: external forcing and divergent evolutions</i> <a href="https://paleoclimate2019.wixsite.com/paleoclimate2019">https://paleoclimate2019.wixsite.com/paleoclimate2019</a>
	June 18-20, 2019 Flagstaff, AZ, USA	<b>4th Planetary Data Workshop</b> , NCTS 37520-19 <a href="https://www.hou.usra.edu/meetings/planetdata2019/">https://www.hou.usra.edu/meetings/planetdata2019/</a>
<b>NEW!</b>	June 20-22, 2019 Tucson, AZ USA	<b>Building the NASA Citizen Science Community Workshop</b> , NCTS 38030-19 <a href="https://meeting.psi.edu/citizen-science-conference-agenda-and-schedule/">https://meeting.psi.edu/citizen-science-conference-agenda-and-schedule/</a>
<b>NEW!</b>	June 24-25, 2019 Washington DC, USA	<b>21st Meeting of the NASA Small Bodies Assessment Group</b> <a href="https://www.lpi.usra.edu/sbag/">https://www.lpi.usra.edu/sbag/</a>
	June 24-28, 2019 Bellevue, WA, USA	<b>2019 Astrobiology Science Conference (AbSciCon)</b> , NCTS 36103-19 <a href="https://connect.agu.org/abscicon/home">https://connect.agu.org/abscicon/home</a>
	June 24-28, 2019 Lyon, France	<b>European Week of Astronomy and Space Science (EWASS 2019)</b> <a href="http://eas.unige.ch/EWASS2019/call.jsp">http://eas.unige.ch/EWASS2019/call.jsp</a>
	June 27-28, 2019 Greenbelt, MD, USA	<b>The Planetary CubeSats Symposium</b> <a href="https://cubesats.gsfc.nasa.gov/symposium.php">https://cubesats.gsfc.nasa.gov/symposium.php</a>
	June 30-July 4, 2019 Lancashire, England	<b>Royal Astronomical Society 2019 National Astronomy Meeting</b> <a href="https://nam2019.org/">https://nam2019.org/</a>

Third Quarter, 2019		
	July 7-12, 2019 Sapporo, Japan	<b>82nd Annual Meeting of The Meteoritical Society (MetSoc 2019)</b> <a href="https://www.metsoc19-sapporo.com/">https://www.metsoc19-sapporo.com/</a>
	July 8-12, 2019 Oxford, United Kingdom	<b>International Planetary Probe Workshop 2019</b> , NCTS 36747-19 <a href="https://ippw2019.uk/">https://ippw2019.uk/</a>
	July 14-18, 2019 Laurel, MD, USA	<b>The Pluto System After New Horizons (PSANH)</b> , NCTS 31320-19 <a href="https://www.hou.usra.edu/meetings/plutosystem2019/">https://www.hou.usra.edu/meetings/plutosystem2019/</a>
	July 15-17, 2019 Columbia, MD, USA	<b>Lunar ISRU 2019 - Developing a New Space Economy through Lunar Resources and Their Utilization</b> <a href="https://www.hou.usra.edu/meetings/lunarisru2019/">https://www.hou.usra.edu/meetings/lunarisru2019/</a>
	July 22-26, 2019 Pasadena, CA, USA	<b>Ninth International Conference on Mars</b> , NCTS 31488-19 <a href="https://www.hou.usra.edu/meetings/ninthmars2019/">https://www.hou.usra.edu/meetings/ninthmars2019/</a>
	July 23-25, 2019 Moffett Field, CA, USA	<b>NASA Exploration Science Forum 2019</b> , NCTS 36800-19 <a href="https://nesf2019.arc.nasa.gov/">https://nesf2019.arc.nasa.gov/</a>
	July 28-August 2, 2019 Singapore	<b>16th Annual Meeting of the Asia Oceania Geosciences Society (AOGS)</b> , NCTS 36817-19 <a href="http://www.asiaoceania.org/aogs2019/public.asp?page=home.htm">http://www.asiaoceania.org/aogs2019/public.asp?page=home.htm</a>
	August 7-9, 2019 Flagstaff, AZ, USA	<b>10th Planetary Crater Consortium</b> <a href="http://www.planetarycraterconsortium.nau.edu/">www.planetarycraterconsortium.nau.edu/</a>
	September 8-12, 2019 Big Sky, MT, USA	<b>The First Billion Years: Habitability: Producing Conditions Conducive to Life</b> , NCTS 28519-20 <a href="https://www.hou.usra.edu/meetings/habitability2019/">https://www.hou.usra.edu/meetings/habitability2019/</a>
	September 10-12, 2019 Irvine, CA, USA	<b>NASEM's Committee on Astrobiology and Planetary Science (CAPS)</b> <a href="http://sites.nationalacademies.org/SSB/SSB_067577#Meetings_and_Events">http://sites.nationalacademies.org/SSB/SSB_067577#Meetings_and_Events</a>
	September 10-13, 2019 Rome, Italy	<b>International Association of Sedimentologists (IAS)</b> <i>* Session 7.14 Planetary Sedimentary Geology: from remote sensing and in-situ</i> <a href="http://iasroma2019.org/">http://iasroma2019.org/</a>
	September 15-20, 2019 Geneva, Switzerland	<b>Joint Meeting: 51st Meeting of the AAS Division for Planetary Sciences (DPS), joint with the European Planetary Science Congress (EPSC)</b> , NCTS 37080-19 <a href="https://www.epsc-dps2019.eu/">https://www.epsc-dps2019.eu/</a>
	September 22-25, 2019 Phoenix, AZ, USA	<b>2019 GSA Annual Meeting</b> , NCTS 37526-19 <a href="https://www.geosociety.org/GSA/Events/Annual_Meeting/GSA/Events/gsa2019.aspx">https://www.geosociety.org/GSA/Events/Annual_Meeting/GSA/Events/gsa2019.aspx</a>
<b>NEW!</b>	September 23-25, 2019 Madrid, Spain	<b>Titan after Cassini-Huygens Workshop</b> , NCTS 37783-19 <a href="https://www.cosmos.esa.int/web/titan-after-cassini-huygens/home">https://www.cosmos.esa.int/web/titan-after-cassini-huygens/home</a>
	September 30-October 3, 2019 Brasilia, Brazil	<b>Large Meteorite Impacts and Planetary Evolution VI (LMI VI)</b> <a href="https://www.hou.usra.edu/meetings/lmi2019/">https://www.hou.usra.edu/meetings/lmi2019/</a>

Fourth Quarter, 2019		
	October 21-25, 2019 Washington, DC, USA	<b>70th International Astronautical Congress (IAC)</b> , NCTS 36775-20 <a href="https://www.iac2019.org/">https://www.iac2019.org/</a>
<b>NEW!</b>	October 28-30, 2019 Saratoga Springs, NY, USA	<b>2nd RPI Space Imaging Workshop</b> <a href="http://seal.rpi.edu/workshop/2019">http://seal.rpi.edu/workshop/2019</a>
<b>NEW!</b>	October 28-30, 2019 Washington, DC USA	<b>Lunar Exploration Analysis Group (LEAG) meeting</b> <a href="https://www.lpi.usra.edu/leag/">https://www.lpi.usra.edu/leag/</a>
	November 4-8, 2019 Herzliya, Israel	<b>The 4th COSPAR Symposium: Small Satellites for Sustainable Science and Development</b> , NCTS 37773-20 <a href="http://www.cospar2019.org/">http://www.cospar2019.org/</a>



Fourth Quarter, 2019 continued		
	November 5-8, 2019 Carlsbad, NM, USA	<b>Mars Extant Life: What's Next?</b> <a href="https://www.hou.usra.edu/meetings/lifeonmars2019/">https://www.hou.usra.edu/meetings/lifeonmars2019/</a>
<b>NEW!</b>	November 5-7, 2019 Tucson, AZ, USA	<b>Asteroid Science in the Age of Hayabusa 22 and OSIRIS-REX</b> <a href="https://corex.lpl.arizona.edu/international-workshop">https://corex.lpl.arizona.edu/international-workshop</a>
	December 9-12, 2019 Sugar Land, TX, USA	<b>First International Orbital Debris Conference (IOC)</b> <a href="https://www.hou.usra.edu/meetings/orbitaldebris2019/">https://www.hou.usra.edu/meetings/orbitaldebris2019/</a>
	December 9-13, 2019 San Francisco, CA, USA	<b>2019 AGU Fall Meeting, NCTS 37409-20</b> <a href="https://fallmeeting.agu.org/2018/future-meetings/">https://fallmeeting.agu.org/2018/future-meetings/</a>

## Seasons on Mars

	MY34	MY35	MY36
<b>Start of Northern Spring / L<sub>s</sub> 0</b>	03/23/2019	02/07/2021	12/26/2022
<b>Start of Northern Summer / L<sub>s</sub> 90</b>	10/08/2019	08/25/2021	07/13/2023
<b>Start of Northern Autumn / L<sub>s</sub> 180</b>	04/08/2020	02/24/2022	01/24/2024
<b>Start of Northern Winter / L<sub>s</sub> 270</b>	09/02/2020	07/21/2022	06/07/2024

## Special holidays to consider when scheduling conferences/workshops/meetings

Good Friday	4/19/2019	4/10/20	4/2/2021	04/15/2022
Rosh Hashanah	9/30/2019	9/19/20	9/7/2021	09/26/2022
Yom Kippur	10/09/2019	9/28/20	9/16/2021	10/05/2022
(Note that Jewish holidays start at sundown the previous evening)				
Thanksgiving Day, Canada	10/14/2019	10/12/20	10/11/2021	10/10/2022
Thanksgiving Day, U.S.	11/28/2019	11/26/20	11/25/2021	11/24/2022
Christmas Day	12/25/2019	12/25/20	12/25/2021	12/25/2022

## Editors

David Beaty	<a href="mailto:David.Beaty@jpl.nasa.gov">David.Beaty@jpl.nasa.gov</a>	818-354-7968
Serina Diniega	<a href="mailto:Serina.Diniega@jpl.nasa.gov">Serina.Diniega@jpl.nasa.gov</a>	818-354-1487
Barbara Saltzberg	<a href="mailto:Barbara.A.Saltzberg@jpl.nasa.gov">Barbara.A.Saltzberg@jpl.nasa.gov</a>	818-354-0226

Please send Mars Community Announcements and calendar items for inclusion in next month's newsletter to:

Barbara Saltzberg at [Barbara.a.Saltzberg@jpl.nasa.gov](mailto:Barbara.a.Saltzberg@jpl.nasa.gov)

This newsletter (and all previous months') is also posted on the MEPAG website: <http://mepag.jpl.nasa.gov>

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