

# Mars Exploration Science Monthly Newsletter

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

December 2017

## Mars Science News

### Mars Missions Concepts for the Next Decade – a MEPAG Pre-Decadal Survey Forum

Forum: April 3, 2018 (preceding the regular meeting April 4-5)  
@ MEPAG meeting venue [TBC], Washington DC area

In preparation for the next Planetary Science Decadal Survey, MEPAG seeks to enable opportunities for identifying concepts in all mission classes that could make significant progress on compelling Mars science questions during 2023-2032. While the return of samples to be prepared by NASA's Mars 2020 rover continues to be a priority, there is a strong pool of concepts for (1) competed missions (including possible New Frontiers candidates), (2) small satellite missions enabled by strategic mission launch capabilities, and/or (3) follow-on flagship capabilities. These build on the extraordinary discoveries of past and ongoing missions, as well as new technological developments. MEPAG's goal is to generally support scientific mission concepts with enough detail to enable their serious consideration by the next Planetary Decadal Survey. The first event related to this aim will be a forum set aside on the first day of the next face-to-face MEPAG meeting (April 3-5, 2018). **The main goal of this forum will be to identify mission objectives and concepts that address high-priority Mars science questions, with an emphasis on the science that can be achieved** over the next two decades. These concepts would be presented (poster or short oral presentations) and discussed, with a summary overview and discussion included also in the regular meeting.

#### What do you need to do?

- To help us help gauge interest and scope, and to aid in planning this part of the MEPAG meeting, **please submit an expression of interest by end-of-day January 10, 2018, at <https://docs.google.com/forms/d/e/1FAIpQLSd7njskPVmtSxggbowL1wrZYvwIjmfA29W6cT87IBBOhMpgIQ/viewform>**. This webform requests your name, institution, email, and a tentative presentation title. (There is also room for additional comments about what you'd like to speak about and/or about the workshop itself.) Based in part on community response, we plan to distribute further instructions for actual concept submissions (e.g., a 0.5-1 page abstract) as well as more information about the aim and structure of the workshop by the end of January.
- Note that this forum is part of the MEPAG meeting. So, if applicable, be sure to **forecast your attendance** (see notice below).

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#### Forecasting reminder for Spring 2018 MEPAG meeting (April 3-5, 2018):

This is a reminder for all NASA/US Government employees and contractors to **forecast for the 2018 Spring MEPAG meeting (NCTS# 32452-18) before January 15** (and sooner is better). This 3-day MEPAG meeting will start with a one-day forum (April 3, see notice above). To be clear: if you wish to attend any portion of this MEPAG meeting (including the April 3 forum) and if you typically forecast your attendance at conferences such as LPSC, you must forecast before January 15.

## ISRU Technology Solicitation Notice and Virtual Forum

Please be aware of a recently posted NASA synopsis/solicitation notice describing the release of a new Appendix to the Next Space Technologies for Exploration Partnerships-2 (NextSTEP-2) Broad Agency Announcement (BAA). The In-Situ Resource Utilization (ISRU) Technology BAA Appendix seek proposals for trade studies, and for design, fabrication, and testing of ISRU component and subsystem technology. Note that minimum cost-sharing thresholds are required.

This ISRU Technology BAA solicitation was issued on Dec 4, 2017. A virtual Industry Forum is planned for Dec 11 at 1:00 pm EST. Details about the Industry Forum will be posted to the NextSTEP website (<https://www.nasa.gov/nextstep>). Additional background about NASA's ISRU activities is available at the following website: <https://www.nasa.gov/isru>.

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

Due	Project
December 10	<b>Franco-Australian Astrobiology and Exoplanet School and Workshop</b> , Registration Deadline
December 15	<b>Indication of Interest to serve on MEPAG Executive and Goals Committees</b>
December 17	<b>The Prebiotic Milieu Building the Evolution of Early Life</b> Registration Deadline
January 9, 2018	<b>49th Lunar and Planetary Science Conference</b> , Abstract Deadline
January 9	<b>NRC's Committee on Astrobiology and Planetary Science (CAPS)</b> , Abstract Deadline
January 9	<b>Planetary Science Deep Space SmallSat Studies</b> , Abstract Deadline
January 10	<b>MEPAG Forum</b> , Expression Of Interest
January 10	<b>European Geosciences Union General Assembly 2018</b> , Abstract Deadline
January 16	<b>2018 Southeastern Sectional Meeting of the Geological Society of America</b> , Abstract Deadline
January 19	<b>Asia Oceania Geosciences Society</b> , Abstract Deadline
January 20	<b>Diversis Mundi (OPS-III): The Solar System in an Exoplanetary Context</b> , Registration Deadline
February 9	<b>COSPAR 2018</b> , Abstract Deadline
February 28	<b>9th Workshop on Catastrophic Disruption in the Solar System (CD9)</b> , Abstract Deadline, Early Registration Deadline

## Upcoming Conferences and Workshops

A note about "conferences" and this calendar of events

- Missing NCTS#s (and forecasting deadline, if anomalous) can be sent to James Ashley ([James.W.Ashley@jpl.nasa.gov](mailto:James.W.Ashley@jpl.nasa.gov)).
- If no deadline is noted: it is usually 90 days in advance — sometimes further in advance if the conference is "Heavily Attended."
- Please do not assume our noting of NCTS# is complete. If you are unsure whether an event is a conference or not, or when the forecasting deadline may be, please consult with your NASA Center conference forecasting/travel unit.

### Fourth Quarter, 2017

December 11-15, 2017 Pasadena, CA, USA	<b>JWST Proposal and Planning Workshop</b> <a href="#">JWST Proposal and Planning Workshop</a>
December 11-15, 2017 New Orleans, LA, USA	<b>AGU Fall Meeting</b> NCTS# 28919-18 <a href="https://fallmeeting.agu.org/2017/">https://fallmeeting.agu.org/2017/</a>
December 16-20, 2017 Canberra, Australia	<b>Franco-Australian Astrobiology and Exoplanet School and Workshop</b> <a href="http://faabexo.anu.edu.au/">http://faabexo.anu.edu.au/</a>

## Upcoming Conferences and Workshops 2018

First Quarter 2018		
	January 9-11, 2018 Tokyo, Japan	<b>Building Bridges from Earth to Life: From Chemical Mechanism to Ancient Biology</b> <a href="https://elsi6sympo.com/">https://elsi6sympo.com/</a>
<b>Updated!</b>	January 10-12, 2018 Moffett Field, CA, USA	<b>Lunar Science for Landed Missions Workshop</b> NCTS# 31661-18 <a href="https://lunar-landing.arc.nasa.gov/">https://lunar-landing.arc.nasa.gov/</a>
	January 14-19, 2018 Galveston, TX, USA	<b>The Prebiotic Milieu Building the Evolution of Early Life</b> <a href="https://www.grc.org/origins-of-life-conference/2018/">https://www.grc.org/origins-of-life-conference/2018/</a>
<b>New!</b>	January 17-18, 2018 Moffett Field, CA, USA	<b>18th Small Bodies Assessment Group Meeting</b> <a href="https://www.lpi.usra.edu/sbag/meetings/">https://www.lpi.usra.edu/sbag/meetings/</a>
	February 12-16, 2018 Zurich, Switzerland	<b>Water During Planet Formation and Evolution</b> <a href="https://waterzurich.github.io/">https://waterzurich.github.io/</a>
	February 17-18, 2018 Ontario, Canada	<b>Women in Planetary Science and Exploration</b> NCTS# 31744-18 <a href="http://wpse2018.ca/">http://wpse2018.ca/</a>
	February 27-28, 2018 Madrid, Spain	<b>From Mars Express to Exomars</b> <a href="http://upwards.iaa.es/content/mars-express-exomars">http://upwards.iaa.es/content/mars-express-exomars</a>
<b>Updated!</b>	February 27-28, 2018 Houston, TX, USA	<b>2<sup>nd</sup> COSPAR Workshop on Planetary Protection for Human Missions</b> <a href="https://planetaryprotection.nasa.gov/COSPARHumans2018">https://planetaryprotection.nasa.gov/COSPARHumans2018</a>
	March 3-10, 2018 Big Sky, Montana, USA	<b>IEEE Aerospace Conference</b> NCTS#30394-18 <a href="http://www.aeroconf.org/">http://www.aeroconf.org/</a>
	March 5-9, 2018 Santiago, Chile	<b>Diversis Mundi (OPS-III): The Solar System in an Exoplanetary Context</b> <a href="http://www.eso.org/sci/meetings/2018/ops2018.html">http://www.eso.org/sci/meetings/2018/ops2018.html</a>
	March 18, 2018 The Woodlands, TX, USA	<b>Planetary Science Deep Space SmallSat Studies</b> , NCTS# 32277-18 <a href="https://www.hou.usra.edu/meetings/smallsat2018/">https://www.hou.usra.edu/meetings/smallsat2018/</a>
	March 19-23, 2018 The Woodlands, TX, USA	<b>49th Lunar and Planetary Science Conference</b> NCTS# 30582-18 <a href="https://www.hou.usra.edu/meetings/lpsc2018/">https://www.hou.usra.edu/meetings/lpsc2018/</a>
	March 27-29, 2018 Washington, DC, USA	<b>NRC's Committee on Astrobiology and Planetary Sciences (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>

## Second Quarter, 2018

	April 3-5, 2018 Washington, DC, USA	<b>MEPAG Face-to-Face Meeting</b> , NCTS # 32452-18 <a href="https://mepag.jpl.nasa.gov">https://mepag.jpl.nasa.gov</a>
<b>New!</b>	April 8-13, 2018 Vienna, Australia	<b>European Geosciences Union General Assembly 2018</b> <a href="https://egu2018.eu/home.html">https://egu2018.eu/home.html</a>
<b>New!</b>	April 9-12, 2018 Cleveland, OH, USA	<b>ASCE International Conference on Engineering, Science, Construction and Operations in Challenging Environments</b> <a href="http://earthspaceconf.mst.edu/">http://earthspaceconf.mst.edu/</a>
<b>New!</b>	April 12-13, 2018 Knoxville, TN, USA	<b>2018 Southeastern Sectional Meeting of the Geological Society of America</b> <a href="https://www.geosociety.org/GSA/Events/Section_Meetings/GSA/Sections/se/2018mtg/techprog.aspx">https://www.geosociety.org/GSA/Events/Section_Meetings/GSA/Sections/se/2018mtg/techprog.aspx</a>
	April 13-16, 2018 Reno, NV, USA	<b>SoCIA 2018: Social and Conceptual Issues in Astrobiology</b> <a href="http://spaceref.com/calendar/calendar.html?pid=9490">http://spaceref.com/calendar/calendar.html?pid=9490</a>
	April 24-26, 2018 St. Louis, MO, USA	<b>Planetary Science Informatics and Data Analytics</b> <a href="https://psida.rsl.wustl.edu/">https://psida.rsl.wustl.edu/</a>
	April 25-27, 2018 Berlin, Germany	<b>2nd International Mars Sample Return Conference</b>
	April 29-30, 2018 Paris, France	<b>iCubeSat 2018 - The 7th Interplanetary CubeSat Workshop</b> <a href="https://icubesat.org/">https://icubesat.org/</a>
	May 1-3, 2018 Columbia, MD, USA	<b>Mercury Conference</b> <a href="https://www.hou.usra.edu/meetings/mercury2018/">https://www.hou.usra.edu/meetings/mercury2018/</a>
	May 5, 2018 Vandenberg AFB, CA, USA	<b>Insight launch window opens</b>
	May 7-11, 2018 San Gabriel Valley, CA, USA	<b>Differentiation: Building the Internal Architecture of Planets</b> , NCTS# 28518-18 <a href="https://www.hou.usra.edu/meetings/differentiation2018/">https://www.hou.usra.edu/meetings/differentiation2018/</a>
	May 14-17, 2018 Toulouse, France	<b>2018 European Lunar Symposium</b> <a href="https://els2018.arc.nasa.gov/">https://els2018.arc.nasa.gov/</a>
	May 14-17, 2018 Kobe, Japan	<b>9th Workshop on Catastrophic Disruption in the Solar System (CD9)</b> <a href="http://www.impact-res.org/CD2018/Catastrophic_Disruption_2018/Welcome.html">http://www.impact-res.org/CD2018/Catastrophic_Disruption_2018/Welcome.html</a>
<b>New!</b>	May 21-24, 2018 Houston, TX, USA	<b>Ocean Worlds 3: Water-silicate Interactions</b> <a href="https://www.hou.usra.edu/meetings/oceanworlds2018/">https://www.hou.usra.edu/meetings/oceanworlds2018/</a>
	June 3-8, 2018 Honolulu, HI, USA	<b>Asia Oceania Geosciences Society</b> <a href="http://www.asiaoceania.org/aogs2018/public.asp?page=home.htm">http://www.asiaoceania.org/aogs2018/public.asp?page=home.htm</a> Session Title: <i>New views of ancient Mars</i>
	June 11-15, 2018 Boulder, CO, USA	<b>15th International Planetary Probe Workshop (IPPW-15)</b> <a href="https://www.colorado.edu/event/ippw2018/">https://www.colorado.edu/event/ippw2018/</a>
<b>New!</b>	June 12-15, 2018 Golden, CO, USA	<b>Space Resources Roundtable</b> <a href="http://www.isruinfo.com/">http://www.isruinfo.com/</a>
<b>New!</b>	June 12-15, 2018 Golden, CO, USA	<b>Planetary &amp; Terrestrial mapping Science Symposium</b> <a href="https://www.deltion.ca/ptmss">https://www.deltion.ca/ptmss</a>
<b>New!</b>	June 12-14, 2018 Knoxville, TN, USA	<b>Planetary Geologic Mappers Annual Meeting</b> <a href="https://www.hou.usra.edu/meetings/pgm2018/">https://www.hou.usra.edu/meetings/pgm2018/</a>
<b>New!</b>	June 12-15, 2018 Pasadena, CA, USA	<b>Geobiology 2018</b> <a href="http://web.gps.caltech.edu/GBcourse/">http://web.gps.caltech.edu/GBcourse/</a>
	June 18-22, 2018 Lakewood, CO, USA	<b>Amazonian Climate Workshop</b> <a href="https://www.hou.usra.edu/meetings/amazonian2018/">https://www.hou.usra.edu/meetings/amazonian2018/</a>

## Second Quarter, 2018

<b>New!</b>	June 19-22, 2018 Kharkiv, Ukraine	<b>Atmosphereless Solar System Bodies in the Space Exploration Era</b> <a href="http://www.astron.kharkov.ua/conference/ssb/18/index.php">http://www.astron.kharkov.ua/conference/ssb/18/index.php</a>
	June 23– July 1, 2018 Chamonix, France	<b>EUCOP 2018: 5th European Conference on Permafrost</b> <a href="https://eucope2018.sciencesconf.org/">https://eucope2018.sciencesconf.org/</a>
<b>New!</b>	June 23– July 1, 2018 Petnica, Serbia	<b>Workshop in Geology and Geophysics in the Solar System</b> <a href="http://petnica.rs/planetary2017/">http://petnica.rs/planetary2017/</a>
	June 24-29, 2018 Rotorua, New Zealand	<b>Astrobiology Australasia Meeting</b> <a href="#">Astrobiology Australasia Meeting</a>
<b>New!</b>	June 26-28, 2018 Houston, TX, USA	<b>NASA Exploration Science Forum 2018</b> <a href="https://nesf2018.arc.nasa.gov/">https://nesf2018.arc.nasa.gov/</a>

## Third Quarter, 2018

	July 1-9, 2018 Denham, Australia	<b>Astrobiology Grand Tour</b> <a href="#">Astrobiology Grand Tour</a>
	July 14-22, 2018 Pasadena, CA, USA	<b>COSPAR 2018</b> NCTS# 28500-18 <a href="https://www.cospas-assembly.org/">https://www.cospas-assembly.org/</a>
	July 22-27, 2018 Moscow, Russia	<b>81st Annual Meeting of The Meteoritical Society</b>
	August 7-9, 2018 Laurel, MD, USA	<b>Lunar Polar Volatiles</b> <a href="https://www.hou.usra.edu/meetings/lunarvolatiles2018/">https://www.hou.usra.edu/meetings/lunarvolatiles2018/</a>
<b>Updated!</b>	August 27-30, 2018 Houston, TX, USA	<b>Comparative Climatology of Terrestrial Planets III</b> <a href="https://www.hou.usra.edu/meetings/climatology2018/">https://www.hou.usra.edu/meetings/climatology2018/</a>
	September 11-14, 2018 Niseko, Japan	<b>International Venus Conference 2018</b> <a href="https://www.cps-jp.org/~akatsuki/venus2018/">https://www.cps-jp.org/~akatsuki/venus2018/</a>
	September 12-13, 2018 Irvine, CA, USA	<b>NRC'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>
	Sept. 30-Oct. 3, 2018 Flagstaff, AZ, USA	<b>Bombardment: Shaping Planetary Surfaces and Their Environments,</b> NCTS# 28520-18 <a href="http://www.lpi.usra.edu/first-billion-years/">http://www.lpi.usra.edu/first-billion-years/</a>

## Fourth Quarter, 2018

	October 1-3, 2018 Houston, TX, USA	<b>Late Mars Workshop</b> <a href="https://www.hou.usra.edu/meetings/latemars2018/">https://www.hou.usra.edu/meetings/latemars2018/</a>
	November 4-7, 2018 Indianapolis, IN, USA	<b>2018 GSA Annual Meeting</b> <a href="https://www.geosociety.org/GSA/Events/Annual_Meeting/GSA/Events/gsa2018.aspx">https://www.geosociety.org/GSA/Events/Annual_Meeting/GSA/Events/gsa2018.aspx</a>
	November 26, 2018	<b>Insight landing</b>

## Seasons on Mars

	MY34	MY35	MY36
Start of Northern Spring / L <sub>s</sub> 0	5/05/2017	3/23/2019	2/07/2021
Start of Northern Summer / L <sub>s</sub> 90	11/20/2017	10/08/2019	8/25/2021
Start of Northern Autumn / L <sub>s</sub> 180	5/22/2018	4/08/2020	2/24/2022
Start of Northern Winter / L <sub>s</sub> 270	10/16/2018	9/02/2020	7/21/2022

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

Good Friday	4/14/2017	3/30/2018	4/19/2019	4/10/20
Rosh Hashanah	9/21/2017	9/10/2018	9/30/2019	9/19/20
Yom Kippur	9/30/2017	9/19/2018	10/09/2019	9/28/20
(Note that Jewish holidays start at sundown the previous evening)				
Thanksgiving Day, Canada	10/09/2017	10/08/2018	10/14/2019	10/12/20
Thanksgiving Day, U.S.	11/23/2017	11/22/2018	11/28/2019	11/26/20
Christmas Day	12/25/2017	12/25/2018	12/25/2019	12/25/20

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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>

- If you wish to withdraw from the electronic mailing list this newsletter is sent out to, please send an email from your email account to [mepag-removesignup@jpl.nasa.gov](mailto:mepag-removesignup@jpl.nasa.gov).
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