

# Mars Exploration Science Monthly Newsletter

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

June 2015

## Mars Science News

### **Call for Applications for Returned Sample Science Board for Mars 2020**

Individuals are invited to apply for membership on the Returned Sample Science (RSS) Board for the 2020 Mars science rover mission (hereafter Mars 2020). This strategic mission is intended to investigate an astrobiologically relevant ancient environment on Mars to decipher its geological processes and history, including the assessment of its past habitability and potential for preservation of biosignatures within accessible geologic materials. The rover also has an objective to collect a set of scientifically compelling samples for possible return to Earth by a potential future mission. Mission details are available at: <http://mars.nasa.gov/mars2020/mission/overview/>. Preparation of the most scientifically compelling samples for possible future analysis on Earth necessitates careful inputs and community engagement, and to this end, the Mars 2020 project will create a board of scientists drawn from the diverse array of disciplines likely to be involved in the study of returned samples.

To apply submit a 2-page (11-point font, 1-inch margins) Letter of Application and a CV by July 15, 2015 to [michael.a.meyer@nasa.gov](mailto:michael.a.meyer@nasa.gov) with the subject line "Mars 2020 Science Team RSS Board" after having read the instructions at [http://mepag.jpl.nasa.gov/announcements/2020DearColleague\\_RSS-F.pdf](http://mepag.jpl.nasa.gov/announcements/2020DearColleague_RSS-F.pdf)

### **Pre-Meteoritical Society meeting, The First Billion Years of Impact Records**

*July 25-26, 2015 (Meteoritical Society Annual Meeting: July 27-31)*

*Sproul Rooms in International House, Berkeley, CA*

This workshop will be aimed at a review and free-wheeling discussion of the current state of empirical evidence for the 4-decade old concept of "terminal cataclysm" or "late heavy bombardment" (LHB) as applied either to the Moon or the entire Solar System. We will approach the discussion primarily from the direction of the radiometric dating evidence, but with awareness of crater-count results and dynamical models. The workshop reflects our interest in the extent to which the radiometric dating and geological evidence is or is not consistent with a spike in impacts around 3.8-4.0 Ga, and the embedded but often vague concepts and terminology regarding the LHB that are often invoked in geological, dynamical, astrophysical, and even biological literature. There is a \$50 early registration fee for the workshop (until June 29). Depending on participation, a poster session may be arranged on Saturday evening. Contact: Audrey Bouvier ([audrey.bouvier@uwo.ca](mailto:audrey.bouvier@uwo.ca)).

Webpage: <http://metsoc2015.ssl.berkeley.edu/program/workshops/>

### **GSA session T132: Mineralogy of Diagenesis on Earth and Mars: In Honor of Nicolas J. Tosca, 2015 MSA Awardee**

*Abstract submission deadline: August 11, 2015*

*GSA meeting: November 1-4, 2015*

*Baltimore, MD*

This session honoring Nick Tosca, winner of the 2015 MSA Award, will be devoted to recent experimental, theoretical, and observational advances in characterizing and interpreting the mineralogical relationships developed during aqueous diagenesis on both Earth and Mars. Abstracts are due August 11. <http://www.geosociety.org/meetings/2015/sessions/topical.asp>.

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## **Training Opportunity: Photogrammetric Processing of Planetary Stereo Imagery using ISIS and SOCET SET®**

July 27-29, 2015

Astrogeology Science Center of the U.S. Geological Survey, Flagstaff, AZ

The Planetary Photogrammetry Guest Facility at the Astrogeology Science Center of the U.S. Geological Survey would like to announce its Call for Participation for a training opportunity on July 27-29, 2015. This training will cover photogrammetric processing of planetary stereo imagery using ISIS and SOCET SET® software developed by BAE Systems. The training is free to participants, and will cover end-to-end, hands-on photogrammetric procedures for surface extraction (i.e., digital elevation model generation) from Mars Reconnaissance Orbiter HiRISE image pairs.

To indicate interest, send an email to Dr. Robin Fergason ([PlanetaryPhotogrammetry@usgs.gov](mailto:PlanetaryPhotogrammetry@usgs.gov)), including: Your name and title; Affiliation; Address, phone number, and email address; Brief statement describing your interest in the training. Seating for this session is limited to 12 individuals; Once the class is full, we will maintain a wait-list in case of cancellations, and to notify interested individuals of future training opportunities. For more information: <http://astrogeology.usgs.gov/facilities/mrctr/planetary-gis-training-for-mappers>, <http://isis.astrogeology.usgs.gov/IsisWorkshop/index.php/IsisWorkshop>

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## **Second Landing Site Workshop for the Mars 2020 Rover**

August 4-6, 2015

DoubleTree, Monrovia, CA

The Second Landing Site Workshop for the Mars 2020 Rover will be held August 4-6, 2015 at the [DoubleTree by Hilton in Monrovia, CA](#). This workshop will focus on further evaluation of candidate sites introduced at the first workshop (May 2014) as well as new candidate sites. The candidate landing sites emerging from this workshop will then be considered in more detail by the 2020 Project, Mars Program, and the Science Community. John Grant and Matt Golombek, Co-Chairs of the Mars Landing Site Steering Committee, encourage all members of the scientific community to participate in this activity, as robust input from the science community is critical to identifying the optimal landing site for the 2020 rover.

A room block has been made available at GSA rate (\$138/night; rate expires July 21, 2015). To make a reservation, call the hotel direct at 626-357-1900 or toll-free at 877-361-5743 (group name "Mars 2020 Landing Site Workshop"); or visit: <http://doubletree.hilton.com/en/dt/groups/personalized/L/LAXMVDT-MLW-20150801/index.jhtml>. Additional workshop information will be posted on the Mars 2020 landing site website: <http://marsnext.jpl.nasa.gov>

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## **Applications open for European Astrobiology Campus Summer School**

August 21-30, 2015

Moletai, LITHUANIA

The summer school will present an overview of the pathways of formation of habitable planets both in our and extrasolar planets. It is co-organised by the Nordic Network of Astrobiology, the Erasmus+ Strategic Partnership "European Astrobiology Campus" and the EU COST Action "Origins and Evolution of Life on Earth and in the Universe". The programme includes:

- Lectures by internationally leading scientists covering a broad range of astrobiology
- Observations of star transits as well as other interesting astronomical objects at the Moletai Observatory and remote observations using other telescopes in Europe
- 2 Poster sessions for students and early career scientists, and participant-led discussions about forefront-topics

Applications are due 15 June 2015. Further information can be found at: <http://www.nordicastrobiology.net/Moletai2015/>

## A note about “conferences” and this calendar of events

Many more events are now being classified as “conferences” (including –AG meetings), and thus necessitate forecasting by NASA/JPL employees and contractors whose funds flow through a NASA Center/JPL. In response to this, we will try to note (within the event calendar item) NCTS identifying numbers for events classified as conferences.

- “Conference” organizers: we are still figuring out how to look up this information; if we do not have it listed and you know this information, please forward the NCTS# (along with forecasting deadline) to Meredith Cosby.
- Forecasters: when no deadline is noted, it is usually (and never less than) 90days in advance. Also, do not assume our noting of NCTS# is complete. If you are unsure if an event is a conference or not, or when the forecasting deadline may be, please consult with your NASA Center conference forecasting/travel unit.

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

Due	Project
June 5	<b>6th Annual Lunar and Small Bodies Graduate Conference (LunarGradCon 2015)</b> Abstract deadline
June 15	<b>Missions to Habitable Worlds</b> Abstract deadline
June 16	<b>Goldschmidt 2015</b> Early registration deadline
June 28	<b>European Astrobiology Network Association (EANA15)</b> Abstract and registration deadline
June 29	<b>Annual Meetings of the Meteoritical Society</b> Early registration deadline
July 1	<b>IEEE Aerospace Conference</b> Abstract due date
July 9,	<b>The Bridging the Gap III: Impact Cratering in Nature, Experiments and Modeling</b> Abstract deadline
July 31	<b>2nd Symposium of the Committee on Space Research (COSPAR 2015)</b> Early registration deadline
August 6	<b>2nd International Planetary Caves Conference</b> Abstract deadline
August 11	<b>Geological Society of America Annual Meeting</b> Abstract deadline

## Upcoming Conferences and Workshops

Second Quarter, 2015		
	June 9-11, 2015 Berlin, GERMANY	<b>11th IAA Low-Cost Planetary Mission Conference (LCPM-11)</b> <a href="http://www.dlr.de/LCPM11">http://www.dlr.de/LCPM11</a>
	June 15-19, 2015 Cologne, GERMANY	<b>12th International Planetary Probe Workshop (IPPW-12)</b> <a href="http://www.planetaryprobe.eu/">http://www.planetaryprobe.eu/</a>
	June 15-19, 2015 Chicago, IL, USA	<b>Astrobiology Science Conference 2015 (Abscon)</b> <a href="http://www.hou.usra.edu/meetings/abscon2015/">http://www.hou.usra.edu/meetings/abscon2015/</a>
	June 29-July 1, 2015 Washington, DC, USA	<b>13th Meeting of the NASA Small Bodies Assessment Group</b> <a href="http://www.lpi.usra.edu/sbag/">http://www.lpi.usra.edu/sbag/</a> NCTS code #22158-15

### Third Quarter, 2015

	July 19-23, 2015 Graz, AUSTRIA	<b>2nd International Congress on Stratigraphy</b> <a href="http://strati2015.uni-graz.at/">http://strati2015.uni-graz.at/</a> Session S 09: Planetary Stratigraphy
<b>New!</b>	July 20, 2015 Moffett Field, CA, USA	<b>6th Annual Lunar and Small Bodies Graduate Conference (LunarGradCon 2015)</b> <a href="http://impact.colorado.edu/lungradcon/2015/">http://impact.colorado.edu/lungradcon/2015/</a>
	July 21-23, 2015 Moffett Field, CA, USA	<b>2nd annual NASA Exploration Science Forum (ESF)</b> <a href="http://sservi.nasa.gov/NESF2015/">http://sservi.nasa.gov/NESF2015/</a>
	July 27-31, 2015 Berkeley, CA, USA	<b>Annual Meetings of the Meteoritical Society</b> <a href="http://metsoc2015.ssl.berkeley.edu/">http://metsoc2015.ssl.berkeley.edu/</a>
	August 4-6, 2015 Pasadena, CA, USA	<b>2nd Landing Site Workshop for the Mars 2020 Rover</b> <a href="http://marsnext.jpl.nasa.gov/">http://marsnext.jpl.nasa.gov/</a>
	August 10-12, 2015 Pasadena, CA, USA	<b>27th Annual Planetary Science Summer School</b> <a href="http://pscischool.jpl.nasa.gov">http://pscischool.jpl.nasa.gov</a>
	August 12-14, 2015 Flagstaff, AZ, USA	<b>6th Planetary Crater Consortium</b> <a href="http://www.planetarycraterconsortium.nau.edu/">www.planetarycraterconsortium.nau.edu/</a>
	August 16-21, 2015 Prague, CZ	<b>Goldschmidt 2015</b> <a href="http://goldschmidt.info/2015/">http://goldschmidt.info/2015/</a>
<b>New!</b>	August 27, 2015 Pasadena, CA	<b>Mars 2001 Odyssey PSG</b>
	September 8-11, 2015 Moffett Field, CA, USA	<b>Comparative Climates of Terrestrial Planets II: Understanding how climate systems work</b> <a href="http://cctp2.arc.nasa.gov/">http://cctp2.arc.nasa.gov/</a> NCTS code #22053-15
	September 16-17, 2015 Irvine, CA, USA	<b>NRC's Committee on Astrobiology and Planetary Science (CAPS)</b>
	September 21-26, 2015 Freiberg, GERMANY	<b>The Bridging the Gap III: Impact Cratering in Nature, Experiments and Modeling</b> <a href="http://www.hou.usra.edu/meetings/gap2015/">http://www.hou.usra.edu/meetings/gap2015/</a>
	September 27-October 2, 2015 Nantes, FRANCE	<b>European Planetary Science Congress</b> <a href="http://www.epsc2015.eu/home.html">http://www.epsc2015.eu/home.html</a>

### Fourth Quarter, 2015

<b>New!</b>	October 6-9, 2015 Noordwijk, NETHERLANDS	<b>European Astrobiology Network Association (EANA15)</b> <a href="http://www.eana-net.eu/Conferences/EANA2015.html">http://www.eana-net.eu/Conferences/EANA2015.html</a>
<b>New!</b>	October 20-22, 2015 Columbia, MD	<b>2015 Meeting of Lunar Exploration Analysis Group</b> <a href="http://www.hou.usra.edu/meetings/leag2015/">http://www.hou.usra.edu/meetings/leag2015/</a>
	October 20-23, 2015 Flagstaff, AZ, USA	<b>2nd International Planetary Caves Conference</b> <a href="http://www.hou.usra.edu/meetings/2ndcaves2015/">http://www.hou.usra.edu/meetings/2ndcaves2015/</a>
	October 27-29, 2015 Washington DC, USA	<b>13th Meeting of the Venus Exploration Analysis Group</b> <a href="http://www.lpi.usra.edu/vexag/meetings/upcoming/">http://www.lpi.usra.edu/vexag/meetings/upcoming/</a> NCTS code #22676-16
<b>New!</b>	October 28-29, 2015 Budapest, HUNGARY	<b>Missions to Habitable Worlds</b> <a href="http://life-origins2015.csfk.mta.hu/">http://life-origins2015.csfk.mta.hu/</a>
	November 1-4, 2015 Baltimore, MD, USA	<b>Geological Society of America Annual Meeting</b> <a href="http://community.geosociety.org/gsa2015/home">http://community.geosociety.org/gsa2015/home</a>
	November 8-13, 2015 National Harbor, MD, USA	<b>47th Meeting of the American Astronomical Society Division for Planetary Sciences (DPS 2015)</b> <a href="http://aas.org/meetings/dps47">http://aas.org/meetings/dps47</a>
	November 9-13, 2015 Foz do Iguacu, BRAZIL	<b>2nd Symposium of the Committee on Space Research (COSPAR 2015): Water and Life in the Universe</b>
	December 14-18, 2015 San Francisco, CA, USA	<b>AGU Fall Meeting</b>

### 2016

	January 7, 2016	<b>20-Day ExoMars Launch Period Opens</b>
	March 4, 2016	<b>20-Day Insight Launch Window Opens</b>
	March 5-12, 2016 Big Sky, MT, USA	<b>IEEE Aerospace Conference</b> <a href="http://www.aeroconf.org/">http://www.aeroconf.org/</a>
	March 29-31, 2016 Washington DC, USA	<b>NRC's Committee on Astrobiology and Planetary Science (CAPS)</b>
	April 4-8, 2016 Oxford, UK	<b>International Venus Conference</b> <a href="http://venus2016.uk/">http://venus2016.uk/</a>
	July 30-August 7, 2016 Istanbul, TURKEY	<b>41st Scientific Assembly of the Committee on Space Research (COSPAR 2016) and Associated Events</b> <a href="http://www.cospar-assembly.org">http://www.cospar-assembly.org</a>
	August 7-12, 2016 Berlin, GERMANY	<b>Annual Meetings of the Meteoritical Society</b>
	September 14-15, 2016 Irvine, CA, USA	<b>NRC's Committee on Astrobiology and Planetary Science (CAPS)</b>
	September 28, 2016	<b>Insight Arrival at Mars</b>
	October 16-21, 2016 Pasadena, CA, USA	<b>Joint DPS-EPSC Meeting</b>
	October 19, 2016	<b>ExoMars 2016 (TGO and EDM) Arrival at Mars</b>

## Seasons on Mars

	MY33	MY34	MY35
Start of Northern Spring / L <sub>s</sub> 0	6/18/2015	5/05/2017	3/23/2019
Start of Northern Summer / L <sub>s</sub> 90	1/03/2016	11/20/2017	10/08/2019
Start of Northern Autumn / L <sub>s</sub> 180	7/04/2016	5/22/2018	4/08/2020
Start of Northern Winter / L <sub>s</sub> 270	11/28/2016	10/16/2018	9/02/2020

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

Good Friday	4/3/2015	3/25/2016	4/14/2017	3/30/2018
Rosh Hashanah	9/14/2015	9/16/2016	9/20/2017	9/10/2018
Yom Kippur	9/23/2015	9/25/2016	9/29/2017	9/19/2018
(Note that Jewish holidays start at sundown the previous evening)				
Thanksgiving Day, Canada	10/12/2015	10/8/2016	10/9/2017	10/8/2018
Thanksgiving Day, U.S.	11/26/2015	11/22/2016	11/23/2017	11/22/2018
Christmas Day	12/25/2015	12/25/2016	12/25/2017	12/25/2018

## Editors

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

Meredith Cosby at

[Meredith.A.Cosby@jpl.nasa.gov](mailto:Meredith.A.Cosby@jpl.nasa.gov), 818-354-0226.

All announcements listed in this newsletter will be posted on the MEPAG website, available at:

<http://mepag.jpl.nasa.gov>

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