# Mars Exploration Science Monthly Newsletter

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

November 2013

### Mars Science News

# **UPDATED:** Mars 2020 Announcement of Opportunity

Mars 2020 AO Amendment 2: Due dates have been changed.

The Mars 2020 Investigations AO solicits flight investigations for which each Principal Investigator is responsible for a complete space flight investigation, including instrument hardware, mission operations, and data analysis. Investigations comprised of individual instruments or multiple instruments (suites) may respond to the overall Mars 2020 objectives to explore and quantitatively assess Mars as a potential habitat for life, to search for signs of past life, to collect carefully selected samples for possible future return to Earth, and to prepare for future human exploration of Mars.

This amendment changes the date for the Pre-Proposal Conference (PPC) to October 28, 2013, the due date for required Notices of Intent (NOIs) to November 4, 2013, the due date for proposals to January 15, 2014, the due date for letters of commitment to January 15, 2014, the deadline for receipt of proposals on CD-ROM to January 21, 2014, the target date for selection announcements to April 2014 and the target date for instrument Phase A contracts to May 2014.

On October 21, 2013, this Amendment to the NASA Announcement of Opportunity "Mars 2020 Investigations" (NNH13ZDA018O) will be posted on the NASA research opportunity homepage at <a href="http://solicitation.nasaprs.com/Mars2020">http://solicitation.nasaprs.com/Mars2020</a>.

Questions concerning this amendment and the Mars 2020 AO, may be directed to Mitchell Schulte, Planetary Science Division, Science Mission Directorate, NASA Headquarters, Washington, DC 20546-0001. Telephone: (202) 358-2127; E-mail: mars2020-ao@lists.nasa.gov

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#### **General Information:**

Solicitation Number: NNH13ZDA018O
Release Date: September 24, 2013
Revision Date: October 21, 2013

Pre-proposal Conference: November 4, 2013 (amended)
Proposal Due Date: January 15, 2014 (amended)
Letter of Commitment due: January 15, 2014 (amended)

The National Aeronautics and Space Administration (NASA) Science Mission Directorate (SMD) is releasing an Announcement of Opportunity (AO) entitled Mars 2020 Investigations to solicit proposals for investigations for a space flight mission to Mars, to be launched in July/August 2020.

The full text of the AO and any appendices are available electronically at the NASA Solicitation and Proposal Integrated Review and Evaluation System (NSPIRES) website (<a href="http://solicitation.nasaprs.com/Mars2020">http://solicitation.nasaprs.com/Mars2020</a>). Links to the AO and additional information about the intent and the capabilities of the Mars 2020 rover are located at the Mars 2020 Acquisition Website (<a href="http://soma.larc.nasa.gov/mars2020">http://soma.larc.nasa.gov/mars2020</a>).

Investigations comprised of individual instruments or multiple instruments (suites) may respond to the overall Mars 2020 objectives to explore and quantitatively assess Mars as a potential habitat for life, to search for signs of past life, to collect carefully selected samples for possible future return to Earth, and to prepare for future human exploration of Mars.

The Mars 2020 Investigations AO solicits flight investigations for which each Principal Investigator is responsible for a complete space flight investigation, including instrument hardware, mission operations, and data analysis. Although individual PI-managed instrument science investigations do not have a predetermined cost cap, the total allocated cost for all the SMD-funded investigations selected is approximately \$100M in Real Year (RY) dollars for Phases A through D. Additional funding of approximately \$60M RY is allocated for investigation in Phase E. Additionally, exploration technology investigations, jointly funded by the Human Exploration and Operations Mission Directorate (HEOMD) and Space Technology Mission Directorate (STMD) may be selected at a total cost of approximately \$30M in RY dollars, including Phase E costs. The total payload resources, including mass, power, and data for the instrument complement, will be provided in a Payload Information Package (PIP) posted to the Mars 2020 Acquisition Website. Note that the Mars 2020 Investigations AO may contain provisions that differ from this notice, in which case those in the AO will take precedence.

Participation in this AO is open to all categories of organizations (U.S. and non-U.S.), including educational, industrial, and not-for-profit organizations, Federally Funded Research and Development Centers, University Affiliated Research Centers, NASA centers, the Jet Propulsion Laboratory, and other Government agencies. Principal Investigators are responsible for, and may assemble their investigation teams from, any of these organizations.

#### **Contracting Office Address:**

NASA Goddard Space Flight Center, NASA Headquarters Acquisition Branch, Code 210.H, Greenbelt, MD 20771

# **UPDATED:** Dynamic Mars from long-term observations

Dear Co-authors,

The deadline for manuscripts submitted to the Icarus special issue "Dynamic Mars from long-term observations" is postponed from November 15 to December 20, 2013, reflecting down time associated with recent government shutdown that affected many authors. The focus and guidelines associated with the special issue remain the same (see below).

Nathan Bridges and Leslie Tamppari

We are well into the 2<sup>nd</sup> decade of continuous Mars observations that began with MGS and have continued with ODY, MEX, MRO, and our landed spacecraft. Bridged to earlier times by spacecraft observations from the 1960s onwards, and a continuous telescopic campaign, our view of Mars is now one of a planet on which surface and atmospheric changes occur at frequencies of days, years, and decades, a testament to long-term monitoring that continues to this day. At this time, it is appropriate that this record, with implications for Martian geology, climate, atmospheric dynamics, and other processes, be integrated into a journal special section, submitted to *Icarus* by December 20, 2013.

#### This special issue is for for papers that:

- Include surface, sub-surface, and atmosphere observations, or model results, that are new and a unique outcome of the longterm data acquisition provided by Mars spacecraft and telescopes
- Highlight the long-term implications of processes that are observed and ongoing now
- Are not reviews of previous work

#### **Submission Format:**

The submitted papers must be written in English and describe original research which is not published nor currently under review by other journals or conferences. Author guidelines for preparation of manuscript can be found at <a href="http://www.elsevier.com/wps/find/journaldescription.cws">http://www.elsevier.com/wps/find/journaldescription.cws</a> <a href="http://www.elsevier.com/wps/find/journaldescription.cws">home/505620/authorinstructions</a>

For more information, please contact the editorial office at <a href="mailto:icarus@astro.cornell.edu">icarus@astro.cornell.edu</a>

#### **Guest Editors:**

Nathan Bridges: <a href="mailto:nathan.bridges@jhuapl.edu">nathan.bridges@jhuapl.edu</a> Leslie Tamppari: <a href="mailto:leslie.tamppari@jpl.nasa.gov">leslie.tamppari@jpl.nasa.gov</a>

#### **Internal Editor:**

Jeffrey Moersch: jmoersch@utk.edu

#### **Important Dates:**

Paper submission Deadline: December 20, 2013 Acceptance notification: June 20, 2014

Publication: 2014

#### **Submission Guidelines:**

Manuscripts and any supplementary material should be submitted through Elsevier Editorial System (EES). The authors must select "Dynamic Mars" when they reach the "Article Type" step in the submission process. The EES website is located at <a href="http://ees.elsevier.com/icarus/">http://ees.elsevier.com/icarus/</a>

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

Due	Project
November 8th	AGU Fall Meeting Early Registration Deadline
November 15th	IEEE Aerospace Conference Paper Submission Deadline (extended)
December 1st	Science and Challenges of Lunar Sample Return Workshop Abstract Deadline
December 31st	Humans To Mars Summit 2014 Early Registration Deadline
December 31st	International interdisciplinary workshop on: Accretion and early differentiation of the terrestrial planets Pre-registration and Abstracts deadline
January 10th, 2014	Science and Challenges of Lunar Sample Return Workshop Presenter Registration Deadline
January 31st, 2014	Origins 2014 Early Registration Deadline

# Upcoming Conferences and Workshops in 2013

Fourth Quarter, 2013				
New!	November 5, 2013 Virtual Meeting	NASA Planetary Science Subcommittee Meeting https://www.federalregister.gov/articles/2013/10/25/2013-25179/nasa-advisory-council-science-committee-planetary-science-subcommittee-meeting  I 1:00 a.m. to 3:00 p.m Eastern Time, Online		
	November 11-15, 2013 Bangkok, THAILAND	First COSPAR Symposium on "Planetary Systems of Our Sun and Other Stars, and the Future of Space Astronomy" http://www.cospar2013.gistda.or.th/		
	November 18, 2013	MAVEN Launch Period Opens		
	November 19-21, 2013 Washington, DC, USA	Venus Exploration Analysis Group (VEXAG) Meeting  http://www.lpi.usra.edu/vexag/  http://www.cvent.com/events/vexag-meeting/event-summary- Ifbaf7d9d48f47a4b25499139371edb2.aspx?i=b6024020-67fe-4a9d-9369-7745c399ccac  Registration in-advance is strongly encouraged		
	December 9-13, 2013 San Francisco, CA, USA	AGU Fall Meeting http://fallmeeting.agu.org/2013/		

## Future Conferences and Workshops

2014				
New!	January 2014	Mars Express Science Working Team Meeting Contact: Olivier Witasse (owitasse@rssd.esa.int)		
	January 13-16, 2014 Oxford, ENGLAND	5th International Workshop on the Mars Atmosphere : Modelling and Observations <a href="http://www-mars.lmd.jussieu.fr/oxford2014">http://www-mars.lmd.jussieu.fr/oxford2014</a>		
	February 9-14th Davos, SWITZERLAND	Exoclimes III  http://www.exoclimes.org  Registration deadline November 1st		
New!	February 18-19, 2014 Noordwijk, NETHERLANDS	Science and Challenges of Lunar Sample Return Workshop <a href="http://congrexprojects.com/2014-events/14c05/">http://congrexprojects.com/2014-events/14c05/</a> Abstract deadline is December 1, 2013; Presenter registration deadline is January 10, 2014		
Updated	February 19, 2014 Pasadena, CA, USA	2001 Mars Odyssey PSG		
	March 1-8, 2014 Big Sky, MT, USA	IEEE Aerospace Conference http://www.aeroconf.org/		
	March 17-21, 2014 Woodlands, TX, USA	45th Lunar and Planetary Science Conference http://www.hou.usra.edu/meetings/lpsc2014/		

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Second Quarter, 2014			
	April 22-24, 2014 Washington, DC	Humans to Mars Summit http://spaceref.com/calendar/calendar.html?pid=8221	
New!	May 13-14, 2014 Washington, DC	Mars Exploration Analysis Group (MEPAG) Meeting	
	May 19-21, 2014 Houston, TX, USA	Venus Exploration Targets Workshop  http://www.hou.usra.edu/meetings/venus2014/	
New!	May 26-31, 2014 Nice, FRANCE	International interdisciplinary workshop on: Accretion and early differentiation of the terrestrial planets <a href="http://www.accrete.uni-bayreuth.de/?page=workshops">http://www.accrete.uni-bayreuth.de/?page=workshops</a> Pre-registration and Abstracts deadline is December 31, 2013	
	June 16-21, 2014 Noordwijk, NETHERLANDS	48th ESLAB Symposium: New Insights to Volcanism Across the Solar System <a href="http://congrexprojects.com/2014-events/48-ESLAB/">http://congrexprojects.com/2014-events/48-ESLAB/</a>	

Third Quarter, 2014			
	July 6-11, 2014 Nara, JAPAN	ORIGINS 2014  http://www.origin-life.gr.jp/origins2014/index.html	
	July 14-18, 2014 Pasadena, CA, USA	8th International Conference on Mars	
	July 21-25, 2014 Lanzhou, CHINA	Eighth International Conference on Aeolian Research (ICAR VIII)  Special session on extra-terrestrial Aeolian research	
	August 2-10, 2014 Moscow, RUSSIA	40th COSPAR 2014 and Associated Events http://www.cospar-assembly.org/	
	September 22, 2014	MAVEN Mars Orbit Insertion (MOI)	

Fourth Quarter, 2014			
October 19-22, 2014 Vancouver, British Colum- bia, CANADA	Geological Society of America Annual Meeting		
November 9-14, 2014 Tucson, AZ, USA	46th Meeting of the American Astronomical Society Division of Planetary Sciences (DPS 2014) <a href="http://dps.aas.org/meetings">http://dps.aas.org/meetings</a>		
December 15-19, 2014 San Francisco, CA, USA	AGU Fall Meeting		

2015			
March 2015	46th Lunar and Planetary Science Conference		
November 1-4, 2015 Baltimore, MD, USA	Geological Society of America Annual Meeting		

2016			
	January 7, 2016	20-Day ExoMars Launch Period Opens	
	March 8, 2016	20-Day Insight Launch Window Opens	
	September 20, 2016	Insight Arrival at Mars	
	October 16, 2016	ExoMars Arrival at Mars	

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

Good Friday	3/29/2013	4/18/2014	4/3/2015	4/6/2016	4/14/2017			
Rosh Hashanah	9/5/2013	9/25/2014	9/14/2015	9/16/2016	9/20/2017			
Yom Kippur	9/14/2013	10/4/2014	9/23/2015	9/25/2016	9/29/2017			
(Note that Jewish holidays start at sundown the previous evening)								
Thanksgiving Day, U.S.	11/28/2013	11/27/2014	11/26/2015	11/22/2016	11/23/2017			
Thanksgiving Day, Canada	10/14/2013	10/13/2014	10/12/2015	10/8/2016	10/9/2017			
Christmas Day	12/25/2013	12/25/2014	12/25/2015	12/25/2016	12/25/2017			

### **Editors**

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

Carla de la Paz at paz@jpl.nasa.gov, 818-354-3160.

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

http://mepag.jpl.nasa.gov