

Mars Exploration Science Monthly Newsletter

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

May 2014

Mars Science News

29th MEPAG meeting — 2nd Circular has been posted

May 13-14 at the Crystal City Marriott in the Washington, DC area (followed by the 2020 Landing Site Workshop)

There have been many developments in Mars exploration over the past year: Discoveries by Curiosity and other operating Mars missions, the release of the AO and the receipt of instrument proposals for the 2020 Mars Rover, the launches of NASA's MAVEN and ISRO's MOM missions to Mars, the implications for Mars and Planetary Science of the passage of the FY14 budget and release of the President's proposed FY15 budget, and the developing vision of human exploration at Mars. This meeting will report on the implications of these events as well as the overall status of Mars exploration. Further, there will be a report from the ongoing MEPAG Special Regions Science Analysis Group. The Second Circular has been posted, containing webcast and agenda information:: http://mepag.nasa.gov/meeting/2014-05/MEPAG_2014_May_2nd_circ_VI_ASH_smd_docx.pdf.

Agenda for MEPAG meeting of May 13-14, 2014 in Washington, DC

Day 1 – Tuesday, May 13, 2014		
08:30 AM	Welcome; Desired Outcomes of this Meeting, Introduction to the Agenda	L. Pratt, MEPAG Chair
08:45 AM	NASA: Status & Future of MEP	J. Grunsfeld/J. Green
09:15 AM	Mars science	M. Meyer
10:00 AM	Status of NASA led operating and developmental missions	R. Gibbs
10:30 AM	HEOMD plans, interactions	J. Connolly (TBC)
11:00 AM	Discussion: MEPAG response to NASA directions and budget	L. Pratt to lead
01:00 PM	European Perspective/ExoMars planning	R. de Groot
01:20 PM	India Mars Orbiter Mission	TBD
01:40 PM	Japanese missions	T. Satoh (TBC)
02:00 PM	MAVEN Mission	B. Jakosky et al.
02:20 PM	i-MARS	L. May
03:00 PM	MEPAG Special Regions SAG Report	J. Rummel
05:00 PM	Day 1 discussion and wrap-up	L. Pratt, MEPAG Chair
05:30 PM	Adjourn	
Day 2 – Wednesday, May 14, 2014		
08:00 AM	Agenda and actions for today; follow-up on Special Regions presentation	L. Pratt, MEPAG Chair
08:30 AM	Update from 2020 Rover project	J. McNamee/K. Farley
09:00 AM	Mars Returned Sample Quality Workshop Report	D. Beaty/Y. Liu
09:45 AM	The 2016 InSight Mission & L/S Process	B. Banerdt/M. Golombek
10:10 AM	Preview of 2020 Landing Site Workshop	J. Grant/M. Golombek
10:30 AM	ExoMars landing site process	J. Vago
11:00 AM	MEPAG Items: Next Meetings, future SAG candidates, wrap-up	L. Pratt
11:30 AM	Adjourn / Lunch	
01:00 PM	Start of 2020 Mars Landing Site Workshop	M. Golombek/J. Grant

To make a reservation at the Crystal City Marriott, for MEPAG or Landing Site Wkshp

Call (800) 228-9290 and refer to block "MEPAG Face to Face" or "mffmffa", or reserve online at http://www.marriott.com/meeting-event-hotels/group-corporate-travel/groupCorp.mi?resLinkData=MEPAG%20Face%20to%20Face^wascc%60mffmffa%60224%60USD%60false%605/12/14%605/16/14%604/21/14&app=resvlink&stop_mobi=yes

First Landing Site Workshop for the 2020 Mars Rover Mission

May 14-16 at the Crystal City Marriott in the Washington, DC area (following the 29th MEPAG meeting)

The purpose of the first 2020 Landing Site Workshop will be to: 1) begin to identify and evaluate potential landing sites best suited to achieving science objectives of the 2020 Rover Mission within the constraints imposed by engineering requirements, planetary protection requirements, and the necessity of ensuring a safe landing; and 2) provide input to NASA and the 2020 Project at JPL on the relative importance of including any enhanced EDL capabilities on the mission. For more information, including registration and a full agenda, see: <http://marsnext.jpl.nasa.gov/>. An abbreviated agenda is shown below.

5/14, pm - 2020 Landing Site Workshop

The process for selecting the Mars 2020 mission landing site
Overview of the Mars 2020 Mission
Mars 2020 Engineering Constraints
Overview of the Science

5/15, pm - 2020 Landing Site Workshop

Science presentations & discussion about candidate landing sites: Hypanis Delta, Jezero Delta, Ladon Valles, Sabrina Vallis, Eridania Basin, Kashira Crater, E Margaritifer Terra, Hadriacus Palus

5/15, am - 2020 Landing Site Workshop

Habitable environments in the subsurface
Science presentations & discussion about candidate landing sites: Mawrth Vallis, Oxia Planum, Nili Fossae, NE Syrtis Major, Nili Patera, circum-Hellas region, Valles Marineris, SW Melas Basin, Coprates Chasma

5/16, am - 2020 Landing Site Workshop

Science presentations and discussion about candidate landing sites: Gusev Crater, Columbia Hills, Aeolis
Discussion and Initial Ranking of Sites

Eighth International Mars Conference

July 14-18, 2014 at the California Institute of Technology, Pasadena, CA

As of 2014, we will have completed a remarkable and unparalleled fifteen years of concentrated scientific exploration of the Red Planet. This period includes eight successful missions (1996 Mars Global Surveyor, 1996 Mars Pathfinder, 2001 Mars Odyssey, 2003 Mars Exploration Rovers, 2003 Mars Express, 2005 Mars Reconnaissance Orbiter, 2007 Mars Phoenix, and 2011 Mars Science Laboratory), as well as telescopic observations from Earth, studies of martian meteorites, and a variety of numerical and laboratory modeling activities. Two additional missions will be en-route to Mars at the time of the conference (NASA's 2013 MAVEN and ISRO's 2013 Mars Orbiter Mission), and several other missions are actively under development for launch during the period 2016-2020. The Eighth International Mars Conference will be an ideal time to step back and summarize our current understanding of Mars, to consolidate our primary paradigms for Martian processes and history, and to refocus the primary scientific questions that

remain in front of us. We encourage Mars scientists from all scientific fields to plan to attend. The first four days of the conference will consist of morning and afternoon oral sessions organized around topical themes, along with late afternoon poster sessions of broader scope. The final day will consist of presentations and discussion focused on the synthesis of the ideas presented.

The Second Announcement has been posted: <http://www.hou.usra.edu/meetings/8thmars2014/>. In accordance with new conference guidelines issued by NASA, the meeting will not charge a registration fee. We will have the capability for on-site registration, but we strongly encourage **advance registration by June 13, 2014** — we will base our final logistical preparations, including the printing of conference materials, based on the count at that point.

Special Mars Session at GSA meeting

MicroMars to MegaMars: Integration of Surface and Orbital Investigations

A special session at the Geological Society of America Meeting; October 19-22, Vancouver, BC, Canada

Whereas on Earth the study of geology evolved from one of field work to incorporation of remote sensing, that of Mars is the reverse, with orbital-based data only complemented by surface investigations from rovers in the last 10+ years. The merging of these datasets has yielded profound new understandings of the geologic history and modern processes on Mars. This session seeks abstracts that incorporate data from surface (MSL, MER, etc.) and orbital (MRO, MEX, Odyssey, etc.) missions that have increased our understanding of Martian geology. Session organizers: Nathan Bridges (nathan.bridges@jhuapl.edu), Alfred McEwen (mcewen@lpl.arizona.edu), and David Rubin (geology.dr@gmail.com). **Abstracts are due July 29, 2014.**

Near-term Due Dates (next three months)

Due	Project
May 2, 2014	NASA's Solar System Exploration Research Virtual Institute Exploration Science Forum Abstract deadline
May 6, 2014	European Planetary Science Congress Abstract deadline
May 7, 2014	6th Alfvén Conference: Plasma interaction with solar system objects: anticipating Rosetta, Maven and Mars Orbiter Mission Abstract and early registration deadline
May 16, 2014	48th ESLAB Symposium: New Insights to Volcanism Across the Solar System Late abstract (poster) deadline
May 17, 2014	40th COSPAR 2014 and Associated Events Early registration deadline
May 27, 2014	Workshop on Planetary Volcanism Registration deadline
June 1, 2014	ISC 2014 Sedimentology at the Crossroads of New Frontiers Early registration deadline
June 13, 2014	8th International Conference on Mars Online registration deadline (no-fee; on-site available)
June 30, 2014	Origins 2014 Registration deadline (on-site available)
July 25, 2014	5th Planetary Crater Consortium Meeting Abstract deadline
July 28, 2014	International Workshop on Instrumentation for Planetary Missions (IPM-2014) Abstract deadline
July 29, 2014	Geological Society of America Annual Meeting Abstract deadline

Upcoming Conferences and Workshops

Second Quarter, 2014

	May 12-15, 2014 Madrid, SPAIN	Venus Express VIRTIS and VMC Data Workshop http://www.rssd.esa.int/index.php?project=PSA&page=vex_workshop
	May 13-14, 2014 Washington, DC USA	Mars Exploration Analysis Group (MEPAG) Meeting http://mepag.nasa.gov/meetings.cfm
	May 14-16, 2014 Washington, DC USA	First Landing Site Workshop for the 2020 Mars Rover Mission http://marsnext.jpl.nasa.gov/
	May 17-21, 2014 College Station, TX, USA	Clay Minerals Society Meeting https://cms2014.tamu.edu/ , Special Session - Martian Clays
	May 19-21, 2014 Houston, TX, USA	Venus Exploration Targets Workshop http://www.hou.usra.edu/meetings/venus2014/
	May 20-22, 2014 Bergen, NORWAY	Biosignatures Across Space and Time http://www.nordicastrobiology.net/Biosignatures2014/
	May 26-31, 2014 Nice, FRANCE	International interdisciplinary workshop on: Accretion and early differentiation of the terrestrial planets http://www.accrete.uni-bayreuth.de/?page=workshops
	May 28-30, 2014 Houston, TX, USA	Workshop on Planetary Volcanism http://www.hou.usra.edu/meetings/volcanism2014/
	June 16-21, 2014 Noordwijk, NETHERLANDS	48th ESLAB Symposium: New Insights to Volcanism Across the Solar System http://congrexprojects.com/2014-events/48-ESLAB/
	June 16-20, 2014 Pasadena, CA, USA	Annual Planetary Science Summer School, Session I http://pscischool.jpl.nasa.gov

Third Quarter, 2014

	July 6-11, 2014 Nara, JAPAN	ORIGINS 2014 http://www.origin-life.gr.jp/origins2014/index.html
	July 7-11, 2014 London, UK	6th Alfven Conference: Plasma interaction with solar system objects: anticipating Rosetta, Maven and Mars Orbiter Mission https://www.ucl.ac.uk/mssl/planetary-science/alfven-conference
	July 14-18, 2014 Pasadena, CA, USA	Eighth International Conference on Mars http://www.hou.usra.edu/meetings/8thmars2014/
	July 14-18, 2014 Pasadena, CA, USA	Annual Planetary Science Summer School, Session II http://pscischool.jpl.nasa.gov
New!	July 21-23, 2014 Moffett Field, CA, USA	NASA's Solar System Exploration Research Virtual Institute Exploration Science Forum http://lunarscience.arc.nasa.gov/NESF2014/
	July 21-25, 2014 Lanzhou, CHINA	Eighth International Conference on Aeolian Research (ICAR VIII) http://www.2014icar8.com , Special session - Extra-terrestrial Aeolian research
	August 2-10, 2014 Moscow, RUSSIA	40th COSPAR 2014 and Associated Events http://www.cospar-assembly.org/
	August 6-8, 2014 Flagstaff, AZ, USA	5th Planetary Crater Consortium Meeting http://www.planetarycraterconsortium.nau.edu/PCCMeeting.htm
	August 11-15, 2014 Pasadena, CA, USA	Annual Planetary Science Summer School, Session III http://pscischool.jpl.nasa.gov
	August 18-22, 2014 Geneva, SWITZERLAND	ISC 2014 Sedimentology at the Crossroads of New Frontiers http://www.sedimentologists.org/meetings/isc Session 038 - Extraterrestrial Sedimentology
	September 7-12, 2014 Centro de Congressos do Estoril, Cascais, PORTUGAL	European Planetary Science Congress http://www.epsc2014.eu/
	September 21, 2014	MAVEN Mars Orbit Insertion (MOI)
	September 24, 2014	The Indian Space Research Organisation (ISRO) Mars Orbiter Mission (MOM) Mars Orbit Insertion

Fourth Quarter, 2014

	October 13-16, 2014 Edinburgh, Scotland	EANA 2014 - The 14th European Astrobiology Conference http://www.astrobiology.ac.uk/eana2014/
	October 19-22, 2014 Vancouver, British Columbia, CANADA	Geological Society of America Annual Meeting http://www.geosociety.org/meetings/2014/ Special Session - MicroMars to MegaMars: Integration of Surface and Orbital Investigations
	October 19, 2014	Comet Siding Spring closest approach to Mars

Fourth Quarter, 2014

October 27-29, 2014 St. Louis, MS, USA	ASCE Earth and Space 2014, Engineering for Extreme Environments http://earthspaceconf2014.mst.edu/
November 4-7, 2014 Greenbelt, MD, USA	2nd International Wkshp on Instrumentation for Planetary Missions (IPM-2014) http://ssed.gsfc.nasa.gov/IPM/
November 9-14, 2014 Tucson, AZ, USA	46th Meeting of the American Astronomical Society Division of Planetary Sciences (DPS 2014) http://aas.org/meetings/dps46
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

Seasonal Changes on Mars

	MY32	MY33	MY34
Start of Northern Spring / L_s 0	7/31/2013	6/18/2015	5/05/2017
Start of Northern Summer / L_s 90	2/15/2014	1/03/2016	11/20/2017
Start of Northern Autumn / L_s 180	8/17/2014	7/04/2016	5/22/2018
Start of Northern Winter / L_s 270	1/11/2015	11/28/2016	10/16/2018

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

Good Friday	4/18/2014	4/3/2015	4/6/2016	4/14/2017
Rosh Hashanah	9/25/2014	9/14/2015	9/16/2016	9/20/2017
Yom Kippur	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.	11/27/2014	11/26/2015	11/22/2016	11/23/2017
Thanksgiving Day, Canada	10/13/2014	10/12/2015	10/8/2016	10/9/2017
Christmas Day	12/25/2014	12/25/2015	12/25/2016	12/25/2017

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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>