

THE NATIONAL ACADEMIES

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Space Studies Board

Mailing Address:
500 Fifth Street, NW
Washington, DC 20001
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Committee on Astrobiology and Planetary Science

Space Studies Board
National Research Council

FINAL AGENDA

4-6 September, 2013

Wednesday, 4 September, 2013

Room 100
The Keck Center

500 5th St., NW
Washington, D.C. 20001

OPEN SESSION¹

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| 7:30 a.m. | Meeting room opens | <i>Breakfast available in the meeting room</i> |
| 8:30 a.m. | Welcome and Agenda Review | Philip Christensen and J. Greg Ferry |
| 9:00 a.m. | Mars 2020 Science Definition Team Report:
Introduction, Context, Constraints, Assumptions,
And Objective A ² | Jack Mustard
Brown University |
| 9:45 a.m. | Break | |
| 10:00 a.m. | Mars 2020 Science Definition Team Report:
Objectives B and C ³ | David Des Marais
NASA Ames Research Center |
| 10:45 a.m. | Mars 2020 Science Definition Team Report:
Landing Site Considerations | John Grant
National Air and Space Museum |
| 11:15 a.m. | Mars 2020 Science Definition Team Report:
Objective D, ⁴ Mission-level investigation strategy | Jack Mustard
Brown University |

¹ Dial-in access: 1-(866) 668-0721 / Access Code: 4485609647# WebEx access:

<https://nationalacademies.webex.com/nationalacademies/j.php?ED=217791252&UID=501371157&RT=MIMxMQ%3D%3D>

² **Objective A:** Explore an astrobiologically relevant ancient environment on Mars to decipher its geological processes and history, including the assessment of past habitability.

³ **Objective B:** Assess the biosignature preservation potential within the selected geological environment and search for potential biosignatures.

Objective C: Demonstrate significant technical progress toward the future return of scientifically selected, well-documented samples to Earth.

⁴ **Objective D:** Provide an opportunity for contributed Human Exploration and Operations Mission Directorate or Space Technology Program participation, compatible with the scientific payload and within the mission's payload capacity.

12:00 p.m.	General Discussion <i>(Lunch will be served in the meeting room; discussion will continue)</i>	Committee and Guests
1:00 p.m.	NASA Planetary Science Division Update	James Green NASA/SMD
2:00 p.m.	Europa Clipper Update	Robert Pappalardo and Barry Goldstein Jet Propulsion Laboratory
3:00 p.m.	NASA's Participation in ESA's JUICE mission	Curt Niebur NASA/SMD
3:30 p.m.	Break	
3:45 p.m.	Astrobiology Program Update	Mary Voytek NASA/SMD
4:45 p.m.	General Discussion of Presentations	Committee and Guests
5:30 p.m.	<i>Activities suspended to reconvene in open session for a working dinner</i>	
6:00 p.m.	<i>Working dinner to discuss presentations:</i>	Zengo DC 781 7th St. NW 202-393-2929
8:00 p.m.	Adjourn for the day	

Thursday, 5 September, 2013

OPEN SESSION⁵

7:30 a.m.	Room Opens	<i>Breakfast available in the meeting room</i>
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Remote Access

8:30 a.m.	Welcome	J. Greg Ferry and Philip Christensen
8:45 a.m.	Phosphorus Chemistry of the Early Archean Ocean	Matthew Pasek University of South Florida
9:45 a.m.	Break	
10:00 a.m.	Asteroid Redirect Mission	Michele Gates NASA/HEOMD
11:00 a.m.	The Venus Spectral Rocket Experiment	John Clarke

⁵ Dial-in access: 1-(866) 668-0721 / Access Code: 4485609647# WebEx access:
<https://nationalacademies.webex.com/nationalacademies/j.php?ED=217795337&UID=0&RT=MIMxMQ%3D%3D>

- 12:00 p.m. General Discussion Committee and Guests
(Lunch will be served in the meeting room; discussion will continue)
- 1:00 p.m. Planetary Protection for Mars 2020 Cassie Conley
NASA/SMD
- 2:00 p.m. Context for and General Discussion of Heidi Hammel and
STEM Reorganization Proposals AURA
Martin Storksdieck and Michael Feder
NRC Board on Science Education

3:00 p.m. Break

CLOSED SESSION

3:15 p.m. Committee discussion

6:00 p.m. Adjourn

Friday, 6 September, 2013

CLOSED SESSION

- 7:30 a.m. Room Opens *Breakfast available in the meeting room*
- 8:30 a.m. Committee
- 12:00 p.m. Adjourn
(Lunch available in the Keck Center's refectory)

NOTES

Note to Observers: This meeting is being held to gather information to help the committee conduct its activities. The committee will examine the information and material obtained during open sessions in an effort to inform its work. Although opinions may be stated and lively discussion may ensue, no conclusions are being drawn at this time. Therefore, observers who draw conclusions about the committee's work based on discussions during this meeting will be doing so prematurely. Furthermore, individual committee members often engage in discussion and questioning for the specific purpose of probing an issue and sharpening an argument. The comments of any given committee member may not necessarily reflect the position he or she may actually hold on the subject under discussion, to say nothing of that person's future position as it may evolve in the course of the committee's activities.

Note to Presenters: If your presentation contains unpublished data, ITAR controlled and/or other sensitive information, please be aware that the open sessions at the meeting may be webcast and presentation materials given to the committee may be posted on a publicly accessible website. Please edit your presentations accordingly.

Registration: Please logon to the following site to register to attend the meeting—
<http://www8.nationalacademies.org/EventRegistration/public/Register.aspx?event=492DD3DD>

Keck Center: Is located at 500 Fifth St. NW, in Washington's Penn Quarter district, adjacent to Judiciary Square and the Verizon Center. The closest Metro stations are Gallery Place/Chinatown (Red, Green and Yellow lines; take "7th and F St." exit and turn left) and Judiciary Square (Red line; take National Building Museum exit and turn left). Directions available at the following website: <http://www.nationalacademies.org/about/contact/nax.html>.

Hotel: Blocks of rooms for the use of committee members and guests has been reserved at the Hotel Monaco; 700 F Street, NW, Washington, DC 20004. The telephone number is 202-628-7177. Additional information can be found at: <http://www.monaco-dc.com/penn-quarter-hotel/chinatown.html>. The hotel is less than 0.2 mile from the Keck Center. The Hotel Monaco is immediately adjacent to the Gallery Place/Chinatown stop on Metro's Yellow, Green and Red lines. Exit the station via the "7th and F St." exit and the hotel is diagonally across the intersection to your right. Members and guests flying into and out of Washington National Airport should take the Yellow line to and from Gallery Place/Chinatown. Information about the D.C. Metro can be found at <http://www.wmata.com/>.

Working Dinner: There will be a working dinner at Zengo DC; 781 7th St., NW; Washington, DC 20001-4410. Zengo is near the corner of 7th Street and "H" Street. The telephone number for the restaurant is 202-393-2929. More information can be found at the following website: <http://www.richardsandoval.com/zengodc/index.php>. All meeting participants can attend. The NRC will only pay for members of the committee and guest speakers. Unfortunately, the NRC cannot pay for civil servants. The cost of the dinner is \$50.00. Cheques, payable to the National Academy of Sciences, are preferred.

Parking: There is plenty of free parking for meeting participants in the Keck Center's underground lot. Access is at the F St. end of Sixth St.