

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

DIVISION ON ENGINEERING AND PHYSICAL SCIENCES
SPACE STUDIES BOARD

Committee on Planetary Protection

Fall 2022 Meeting

November 7-8, 2022

NAS Building Room 120, 2101 Constitution Ave. NW, Washington, DC 20418

Hybrid Meeting

ALL TIMES IN US EASTERN STANDARD TIME (UTC-4:00)

This agenda is a draft, subject to change, and was last updated on 10/26/2022 4:35 PM

AGENDA

MONDAY, NOVEMBER 7, 2022

OPEN SESSION

Livestream Link: <https://vimeo.com/event/2522700>

10:00 AM	Welcome and Introductions	<i>Mr. Joseph K. Alexander, CoPP Co-Chair / Dr. Amanda Hendrix, CoPP Co-Chair</i>
10:05 AM	Current State and Concerns of NASA Planetary Protection Office and Response to Previous CoPP Reports* (30 minute presentation & 40 minute discussion period)	<i>Dr. Elaine Seasly, Deputy Planetary Protection Officer, NASA-HQ</i>
11:15 AM	Discussion with Office of Science and Technology Policy (OSTP) on Planetary Protection Regulatory Gap* (10 minute presentation & 15 minute discussion period)	<i>Dr. Ezinne Uzo-Okoro, Asst. Director for Space Policy, OSTP</i>
11:45 AM	<i>Break for Lunch</i>	
12:45 PM	<i>Hayabusa2 Sample Return Results</i> (25 minute presentation & 20 minute discussion period)	<i>Dr. Amanda Hendrix, Senior Scientist, Planetary Science Institute</i>
1:30 PM	<i>Short Break</i>	
1:50 PM	Planetary Protection Measures and the Mars2020 Mission* (30 minute presentation & 30 minute discussion period)	<i>Dr. Moogega Cooper, Planetary Protection Lead, Mars2020 Mission, JPL/CalTech</i>
2:50 PM	<i>Short Break</i>	

* Placeholder Title – To Be Updated by Speaker

3:10 PM	Planetary Protection Measures and Mars Samples* (30 minute presentation & 30 minute discussion period)	<i>Dr. Andrea Harrington, Mars Sample Curation Lead, NASA-JSC</i>
4:10 PM	<i>Short Break</i>	
4:30 PM	Planetary Protection Knowledge Gaps for Human Extraterrestrial Missions (30 minute presentation & 30 minute discussion period)	<i>Dr. Bette Siegel, Program Executive, NASA</i>
5:30 PM	Planetary Protection for Human Missions to Mars* (25 minute presentation & 20 minute discussion period)	<i>Dr. J. Andy Spry, Senior Scientist, SETI</i>
6:15 PM	<i>Meeting Adjourns for the Day</i>	

TUESDAY, NOVEMBER 8, 2022

9:00 AM *Committee Meets in Closed Session*

3:15 PM *Meeting Adjourns*

The following information is provided for any members of the general public who may be in attendance:

This meeting is being held to gather information to help the committee in its charge. This committee will examine the information and material obtained during this, and other public meetings, in an effort to inform its work. Although opinions may be stated and lively discussion may ensue, no conclusions are being drawn nor will recommendations be made. Observers who draw conclusions about the committee's work based on this meeting's discussions 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 project. Any inference about an individual's position are therefore also premature.

STATEMENT OF TASK

Committee Organized on 21 July 2020

The National Academies of Sciences, Engineering, and Medicine will appoint the Committee on Planetary Protection (CoPP) to operate as a long-term ad hoc committee. The disciplinary scope of CoPP includes the study of those aspects of planetary environments, the life sciences, spacecraft engineering and technology, and science policy relevant to the control of biological cross-contamination arising from the robotic spacecraft missions and the human exploration and utilization of solar system bodies. CoPP will have two primary tasks:

1. To monitor progress in implementing the planetary protection guidelines associated with priority missions and programs identified in the planetary science decadal survey—Vision and Voyages for Planetary Science in the Decade 2013-2022--and in successor planetary science decadal surveys, and other relevant reports issued by the National Academies; and
2. To serve as a source of information and advice on those measures undertaken by robotic spacecraft and human exploration missions to protect the biological and environmental integrity of extraterrestrial bodies for future scientific studies and the means to preserve the integrity of Earth's biosphere when spacecraft return potentially hazardous extraterrestrial materials to Earth.

The committee will carry out its charge at its in-person and virtual meetings by gathering evidence from experts, deliberating, and, when necessary, by preparing short assessment reports detailing progress in areas relating to NASA's planetary protection guidelines or new scientific and technical developments. Such reports may include findings and discussion of key activities undertaken by NASA as well as the status of its actions that relate to the state of implementation of priority missions and programs.

For other advisory activities that require a more in-depth review than is possible through the normal operation of the CoPP, Space Studies Board, Board on Life Sciences, Aeronautics and Space Engineering Board, and NASA will negotiate a task for a separate ad hoc committee, taking advantage, as appropriate, of the expertise in the CoPP.

Through its regular meetings, the CoPP will also serve the secondary functions of:

1. Providing an independent, authoritative forum for the scientific community, the federal government, international space agencies, relevant private-sector entities and organizations, and the interested public to identify and discuss emerging issues in the scientific, technical, and engineering aspects of planetary protection policies and guidelines;
2. Identifying and prioritizing necessary research and development activities required to advance the development of planetary protection guidelines designed to ensure that the exploration and utilization of extraterrestrial environments is conducted responsibly; and,
3. Providing a forum for interactions with the International Science Council's Committee on Space Research and other national and international organizations through the addition of international participants when appropriate and in coordination with the SSB.