



# COSPAR Report

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Chair, COSPAR Panel on Planetary Protection

Prof. John D. Rummel  
Past-Chair, COSPAR Panel on Planetary Protection

NASA Planetary Protection Subcommittee Meeting  
17-18 November 2014, NASA-HQ

# COSPAR Scientific Assembly



## Planetary Protection



### Panel on Planetary Protection:

- Three half-day planetary protection sessions
  - PPP.1 Planetary Protection Policy and Implementation Guidelines
  - PPP.2 Planetary Protection Mission Implementation Status
  - PPP.3 Planetary Protection Research and Development Activities
- Included reports of previous COSPAR Planetary Protection Workshops
- Reports and discussions about on-going and upcoming missions mainly by ESA, JAXA, NASA and Roscosmos

### Statistics:

- 2349 registered participants in total
- 36 accepted contributions to the planetary protection sessions; 30 talks, 6 withdrawals

### Panel Leadership:

- Extension of vice-chairs: Dr. C. Conley (NASA), Dr. V. Hipkin (CSA)
- Appointment of new vice-chair: Dr. H. Yano (JAXA)
- Appointment of new chair: Dr. G. Kminek (ESA)

### Preparation for 41th COSPAR Scientific Assembly:

- Two workshop proposals submitted and approved
  - Planetary protection requirements for Mars Special Regions
  - Planetary protection requirements for human mission
- Scientific event proposals submitted with one additional joint (Panel on Planetary Protection, Scientific Commissions B and F) “Life detection for astrobiological targets and planetary protection for icy bodies sample return”, scientific program adoption in March 2015



COSPAR leadership considered the United States' proposal for COSPAR 2018 in Pasadena, and later accepted it

# Special Issue of ASR



Planetary Protection

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Special Issue of Advances in Space Research on  
**"New Challenges for Planetary Protection"**



This special issue is supposed to provide a forum to document how missions are implementing planetary protection constraints today, for proposing approaches how to meet planetary protection objectives in future sample return missions from moons in the outer solar system and human missions, and for describing results of research and development activities in support of future missions

Deadline for submissions: 28 February 2015

Questions can be directed to Dr. Gerhard Kminek (Gerhard.kminek@esa.int), Guest Editor for this special issue, or to the ASR Co-Editor for Special Issues, Dr. Peggy Ann Shea (sssrc@msn.com)

# 2<sup>nd</sup> COSPAR Symposium



Planetary Protection



Location: Foz do Iguaçu, Brazil

Date: 9-13 November 2015

Abstract submissions: 2 March-31 May 2015

## Contribution from Panel on Planetary Protection:

- Represented in the Scientific Organising Committee
- Presentation "Planetary Protection for Water Worlds", with a focus on planetary protection requirements for sample return missions from bodies that may involve liquid water (i.e., Enceladus and Europa)

## Sessions:

- Space astronomy missions to detect ingredients for life and exoplanets in the universe
- Water and life in the universe and on Earth: impact on human consciousness and societies
- Satellite and probe missions for water remote sensing on Earth, planets, and other celestial bodies
- Water and Life in the Solar System
- Water from chemical, biological, and physical perspectives
- Role of water from the ground to the upper atmosphere
- Astrobiology: habitability, synthesis of organics in ice, and prebiotic chemistry in liquid water
- Water, organics and life support for human exploration in low Earth orbit, the Moon and beyond

Pre-Symposium Capacity Building Workshop: Planetary Missions Data Analysis

# Pertinent Panel Issues



## Planetary Protection

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### Update of planetary protection requirements

- Review of requirements for Mars Special Regions (→ ESF/NRC review, COSPAR workshop)
- Refinement of requirements for human missions (→ NASA workshop, COSPAR workshop)
- Requirements for sample return from outer planet satellites (→ COSPAR symposium)

### Involvement in Panel activities

- Included Japan in the panel leadership (confirmed) and proposed MSO for joint panel in 2016
- Invited Russia to join the Scientific Organising Committee for the 2016 Panel sessions (two positive responses)
- Continued effort to get participation and representation from China and India

### Reaching out

- Communicating the message – i.e., planetary protection to benefit science and an enabling capability
- Simplify process to submit relevant planetary protection documentation to COSPAR
- Discussions about holding planetary protection courses in China and India
- On-going communications with Mars-1
- Started communications with the United Arab Emirates (UAE)