



# COSPAR Update

Dr. Gerhard Kminek  
Chair, COSPAR Panel on Planetary Protection

NASA Planetary Protection Subcommittee Meeting  
1-2 June 2016, NASA-HQ

# Special Section in ASR



Special Planetary Protection Section in Advances in Space Research, Vol. 57, Issue 9, 1 May 2016



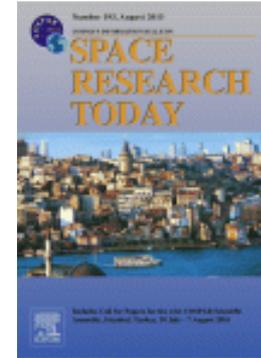
The papers in this special section present acceptable implementation measures demonstrating compliance with planetary protection requirements, and offer implementation approaches for future missions:

- Mars impact probability analysis for the Hayabusa-2 NEO sample return mission
- PROCYON's probability analysis of accidental impact on Mars
- Planetary protection for Europa radar sounder antenna
- Hydrazine vapor inactivates *Bacillus* spores
- Assessment of bioburden encapsulated in bulk materials

# COSPAR Planetary Protection Policy



COSPAR Planetary Protection Policy published in COSPAR's Information Bulletin, Space Research Today, Number 193, August 2015



- Describes in the introduction the process how the COSPAR Planetary Protection Policy is updated
- Is the currently approved version (dated March 2011) and the basis for a number of national and international planetary protection standards
- Represents the reference for any future updates

Future updates to the COSPAR Planetary Protection Policy will be published in Space Research Today

# Planetary Protection Forum Discussion



Planetary Protection Forum Discussion “Planetary Protection-an Enabling Capability and Contributor to Sustainable Space Exploration”, published in COSPAR’s Information Bulletin, Space Research Today, Number 194, December 2015



Identifies three areas that would benefit from further discussions and actions:

1. Regulatory aspects not properly covered by some States that are signatories of the UN Outer Space Treaty
2. Assessment of the current planetary protection knowledge gaps, taking into account some recent scientific findings, the increased number of missions, and the preparation of human Mars exploration
3. Investments, harmonized with the overall exploration roadmaps, to further develop planetary protection as an enabling capability

Responses to these issues are considered necessary in order to ensure that planetary protection measures continue to protect our investment in space science, exploration and utilisation of space

# Planetary Protection Colloquium



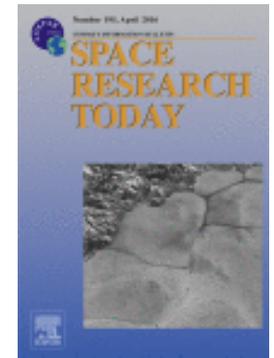
## Planetary Protection

---

Colloquium organised in consultation with the COSPAR Scientific Commissions B and F at the International Space Science Institute, Switzerland, in September 2015 (NASA participation: chair and members of PPS, MEP Lead Scientist, PPO, additional experts from JPL)

- Recommended that the current categorisation and requirements for Europa be extended to Enceladus
- Recommended updates on Mars Special Regions

Report published in COSPAR's Information Bulletin, Space Research Today, Number 195, April 2016, will be the basis for submitting an updated COSPAR Planetary Protection Policy to the COSPAR Bureau in August 2016



Results of the colloquium have been presented to the joint NASA-PPS/ESA-PPWG meeting in October 2015 and to the NASA-PPS meeting in December 2015

The ESA-PPWG has endorsed the recommendations of the colloquium

In case the PPS would like to voice their opinion about the proposed updates, please reflect this in the meeting minutes or write me a letter by 15 July 2016

# COSPAR Scientific Assembly



## Planetary Protection

### Panel on Planetary Protection:

- Three half-day planetary protection sessions
  - **PPP.1** Planetary Protection Policy and Implementation  
Guidelines: 2 August, 14:00, room 3B11
  - **PPP.2** Planetary Protection Mission Implementation Status: 2 August, 09:30, room 3B11
  - **PPP.3** Planetary Protection Research and Development  
Activities: 1 August, 14:00, room 3B11
  - **Business Meeting:** 2 August, 18:30, room 3B11
- Joint session with Scientific Commission B and F
  - B0.6 Life Signature Detection for Astrobiological Targets and Planetary Protection for Icy Body Sample Returns: 4 August, 14:00, Üsküdar Hall



### Proposed topics for COSPAR workshops/colloquia until next COSPAR Scientific Assembly in 2018

- Planetary protection categorization and requirements for one-way and return missions to Phobos, Deimos, and asteroids
- Planetary protection protocol for restricted Earth return missions

In case the PPS would like to voice their opinion about the proposed topics or identify other topics, please reflect this in the meeting minutes or write me a letter by 15 July 2016