

# Mars Exploration Program Analysis Group (MEPAG)

chartered by NASA HQ to assist in planning the scientific exploration of Mars



## *MEPAG Preparations for the Planetary Decadal Survey*

- MEPAG will fully support any requests from the Decadal Survey (DS) chairs and subject panels
- Based on the current DS task statements, MEPAG has the following activities underway:
  - MEPAG White Papers
  - Mars community support and coordination
- This MEPAG meeting will be devoted to obtaining broad community consensus on the MEPAG position papers and introducing Mars community-generated topical whitepapers.
- Important Mars dates for the Decadal Survey
  - September 9-11, 2009      First meeting of Mars Panel
  - September 15              Deadline for White Papers
  - November 4-6, 2009      Second meeting of Mars Panel
  - February/March, 2010      MEPAG Meeting, Monrovia, CA

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**MEPAG Inputs to the Decadal Survey**

This site contains descriptions and links to the current activities by the MEPAG and the associated Mars community in support of the Planetary Decadal Survey (<http://www7.nationalacademies.org/ssb/SSEdecadal2011.html>).

Updated materials for this page can be sent directly to: [Charles J. Budney@jpl.nasa.gov](mailto:Charles.J.Budney@jpl.nasa.gov)

Date	Title	Letter
14 April 2009	To the Mars Community	Doc ( <a href="#">28 KB</a> ) PDF ( <a href="#">13 KB</a> )

**MEPAG White Papers**

MEPAG's current plans are to prepare the following list of white papers on behalf of MEPAG. Drafts will be circulated to the community in July, discussed at the next MEPAG meeting (July 29-30, 2009; all members of the community welcome to attend), revised as needed, and then submitted to the NRC.

Title/comments	Task Description	Authorship	Draft Report	Final Report
Science Goals, Objectives, Investigations, and Priorities: 2009	Input to Task #3 in NRC	MEPAG Goals		
High-level summary of the 2009 state of knowledge in Mars science and the formulation of the top Mars-related science objectives for the next decade.	Designed to provide inputs to Tasks #2 and #3 of the Decadal Survey	MEPAG Executive Committee		
The importance of a program of strategically linked, partially interdependent missions to achieve the top science objectives for Mars exploration	Input to Task #4 in NRC Statement of Task.	MEPAG Executive Committee		
Strategic technology development needs/ opportunities for future Mars exploration	Input to Task #5 in NRC Statement of Task.	Doc ( <a href="#">65 KB</a> ) PDF ( <a href="#">31 KB</a> )		
2018 science and mission definition (MRR-SAG)		MRR-SAG		

## MEPAG Decadal Survey Website

- Provides an overview to the community of MEPAG's specific contributions as well as community white papers
- Provides a mechanism for community input and review
- <http://mepag.jpl.nasa.gov/decadal/index.html>

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- Program-level position papers:
  1. Seek Signs of Life: Mars Exploration Program Science Overview for Decadal Survey
    - Authors: **Zurek**, Budney, Jakosky, Meyer, Mustard and others
    - Importance of a *program* of strategically-linked, partially-interdependent Mars missions to achieve top science objectives for Mars exploration
  2. Mars Science Goals, Objectives, Investigations, and Priorities:
    - Existing MEPAG “Goals Document” updated in 2009
    - Authors: **Johnson**, Amend, Steele, Bouger, Rafkin, Withers, Plescia, Hamilton, Tripathi, Westall
  3. State of Knowledge of Mars Science and Next Decade Objectives
    - Executive summary of current state of knowledge and extension to top science objectives realistically achievable during next 10 years
    - Authors: **MEPAG Executive Committee** and supporting experts

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4. Strategic Technology Developments for 2011-2020 Period to Enable Future Mars Missions
  - Authors: **Hayati**, Lavery, May, Munk, Powell, Gershom, Wolf, Lin, Spry, Stephenson, Anderson, Allen, Pearson, Backes, Reidel, Rivellini, Nesnas, Bolotin
5. Report from the Mars Mid-Range Rover Science Analysis Group (MRR-SAG)
  - Authors: **McSween, Pratt, Beaty, Crisp**, and the MRR-SAG
6. Report from the Mars Geophysical Network Science Analysis Group (NET-SAG)
  - Authors: **Banerdt, Spohn** and the NET-SAG
7. Mars Sample Return Overview
  - Authors: **Mattingly, Buxbaum** and others
8. Report from the Mars Science Orbiter SAG
  - Authors: Mike **Smith** and the MSO-SAG

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- Current identified community topical white papers:
  1. Mars Polar Science
    - Authors: Hecht, Fishbaugh and others
  2. Mars Atmospheric Science
    - Authors: Mischna and others
  3. Landing site characterization and selection
    - Authors: Golombek, Grant
  4. Mars crustal magnetism and dynamo history
    - Authors: Lillis and others
  5. In-situ geochronology
    - Authors: Conrad and others
  6. Investigation of the interior of Mars
    - Authors: Banerdt and others
  7. Astrobiology
    - Authors: Coordinated by NAI

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## *Endorsement of Mars White Papers*

- **The DS has called for white papers of relevance to planetary exploration**
  - The involvement of multiple members of the community in each white paper is encouraged to reflect important consensus positions;
  - Format and limitations (up to 7 pages plus cover) are on DS website
- **It is most appropriate to list as authors the folks who have substantively contributed to a document's formulation**
- **Proposed process for community endorsement:**
  - Some formal MEPAG white papers will be presented under the authorship of the MEPAG Chair on behalf of the entire organization.
    - *These will be discussed at this meeting*
  - For Mars white papers, members of the community are invited to sign up as “endorsers”. The endorsement list will be carried on the cover sheets of the various white papers.
  - The MEPAG web site (<http://mepag.jpl.nasa.gov/decadal/index.html>) will be used to help make white papers under preparation available to the community, and to facilitate the mechanics of identifying endorsers, and making them known to the authors.
    - *For credibility, please read the paper (not just title!) before endorsing*