

Tuesday, April 22, 2008
**UNDERSTANDING THE EVOLUTION OF MARS: CORE,
MANTLE, CRUST, SURFACE, AND ATMOSPHERE**
1:30 p.m. Alvarado ABC

Chairs: J. Farquhar
D. A. Papanastassiou

- Valley J. W. * Ushikubo T. Kita N. T. [INVITED] (20 minutes)
Two Generations of Carbonate in ALH 84001: Three Oxygen Isotopes and OH [#4023]
- Greenwood J. P. * (15 minutes)
Evolution of Water on Mars: Mars Sample Return Considerations for Hydrogen Isotope Measurements [#4030]
- Farquhar J. * (15 minutes)
Mars Sample Return: Stable Isotope Targets with Return Samples [#4057]
- Bogard D. D. * [INVITED] (20 minutes)
Martian Chronology and Atmospheric Composition: In Situ Measurements Versus Sample Return [#4003]
- Nyquist L. E. * Shih C.-Y. Reese Y. D. [INVITED] (20 minutes)
Prospects for Chronological Studies of Martian Rocks and Soils [#4014]
- Swindle T. D. * Tornabene L. L. McEwen A. S. Plescia J. B. (15 minutes)
Using Recent Impact Craters as a Sampling Mechanism for a Mars Sample Return Mission [#4029]
- Papanastassiou D. A. * (15 minutes)
Why an "Early" Mars Sample Return: Lessons from Apollo [#4009]
- Draper D. S. * Agee C. B. (15 minutes)
Fundamental Importance of Returned Samples to Understanding the Martian Interior [#4021]
- Nishiizumi K. * Caffee M. W. Herzog G. F. Reedy R. C. (15 minutes)
Measurements of Cosmogenic Nuclides In and Their Significance for Samples Returned from Mars [#4028]
- Ballentine C. J. Burgess R. Edwards S. Gilmour J. D. * (15 minutes)
Science Payoff from Noble Gas and Associated Halogen Analysis: Towards a Sample Wish List [#4044]
- Weiss B. P. * Garrick-Bethell I. Kirschvink J. L. (15 minutes)
Magnetic Studies of Returned Samples from Mars [#4024]