Thursday, March 16, 2006
POSTER SESSION II: MOON MISSIONS: PAST, PRESENT, FUTURE
7:00 p.m. Fitness Center

Haruyama J. H. Ohtake M. O. Matsunaga T. M. Morota T. M. Yoshizawa A. M. LISM Working Group
Planned Digital Terrain Model Products from SELENE Terrain Camera Data **[#1132]**
The Terrain Camera (TC) is a stereo imager that will be launched on SELENE in 2007. The DTM from TC data will cover the entire surface of the Moon with 10 m spatial resolution. In this paper, we will introduce the planned TC DTM products.

Kato M. Takizawa Y. Sasaki S. SELENE Project Team
SELENE, the Japanese Lunar Orbiting Satellites Mission: Present Status and Science Goals **[#1233]**
Present status and science goals of the SELENE project will be reported. Final integration test will be started in April 2006 to target a launch of 2007 summer.

Ohtake M. Haruyama J. Mastunaga S. Morota T. Kodama S. LISM Team
Observation and Data Analyses Plan of the SELENE Multiband Imager **[#1536]**
MI is a high-resolution multiband imaging camera being developed for the SELENE project that will be launched in 2007. Manufacturing and integration of MI flight model have been completed and pre-flight test as SELENE satellite is underway.

Ogawa K. Okada T. Shirai K. Yamamoto Y. Arai T. Shiraishi H. Hosono K. Inoue T. Inoue T. Maruyama Y. Arakawa M. Kato M.
Development of X-Ray Fluorescence Spectrometer Onboard SELENE **[#2244]**
An X-ray fluorescence spectrometer (XRS) onboard SELENE, a Japanese lunar polar orbiter that will be launched in 2007, is being developed for lunar X-ray exploration. We would like to present instruments and current development status of XRS.

Foing B. H. Grande M. Huovelin J. Josset J. L. Keller H. U. Nathues A. Malkki A. Noci G. Kellett B. Beauvivre S. Almeida M. Frew D. Volp J. Heather D. Schwehm G. Koschny D. Zender J. McMannamon P. Camino O. Racca G. D.
ESA's SMART-1 Mission: Lunar Science Results After One Year **[#1920]**
We summarise one year of SMART-1 lunar science results with the optical camera (polar and colour high res imaging), infrared spectrometer (mineralogy), and X-ray spectrometer (elemental composition). We describe the plan for operations until end of mission impact in August 2006.

Kellett B. J. Grande M.
X-Ray Fluorescence Observations of the Moon — Highlights from the First Year of Observations from D-CIXS on SMART-1 **[#1897]**
Highlights from the first year of D-CIXS observations of the Moon include a big flare over Mare Crisium, seven smaller flares across the nearside southern highlands (including Apollo 12 site) and a big flare on the farside including the South-Pole Aitken basin.

Josset J. L. Beauvivre S. Cerroni P. De Sanctis M. C. Pinet P. Chevrel S. Langevin Y. Barucci M. A. Plancke P. Koschny D. Almeida M. Sodnik Z. Mancuso S. Hofmann B. A. Muinonen K. Shevchenko V. Shkuratov Y. Ehrenfreund P. Foing B. H.
SMART-1/AMIE Camera System **[#1847]**
The Advanced Moon micro-Imager Experiment (AMIE), on board ESA SMART-1, the first European mission to the Moon (launched on 27th September 2003), is a camera system with scientific, technical and public outreach oriented objectives.

Cerroni P. De Sanctis M. C. Josset J.-L. Beauvivre S. Koschny D. Pinet P. Chevrel S. Langevin Y. Barucci M. A. Plancke P. Almeida M. Hofmann B. A. Muinonen K. Shevchenko V. Shkuratov Yu. Ehrenfreund P. Foing B. H.
Preliminary Analysis of Colour Information from AMIE on Smart-1 **[#1831]**
The Advanced Moon micro-Imager Experiment (AMIE) is the imaging system on board the ESA mission to the Moon SMART-1. We present a preliminary assessment of push-broom data acquired during the first push-broom orbital phase of Smart-1 mission.

Heldmann J. L. Moore J. M. Lee P. C. Girten B. McKay C. P.
Return to the Moon: Site Selection Process and Considerations for NASA's Robotic Lunar Exploration Program (RLEP) **[#2066]**
Site selection drives the lunar program in terms of both near-term and long-term planning. We consider site selection criteria for both robotic and human landings to determine optimal landing sites and implications for lunar architecture.

Chin G. Bartels A. Brylow S. Foote M. Garvin J. Kaspar J. Keller J. Mitrofanov I. Raney K. Robinson M. Smith D. Spence H. Spudis P. Stern S. A. Zuber M.
Lunar Reconnaissance Orbiter Overview: The Instrument Suite and Mission **[#1949]**
The Lunar Reconnaissance Orbiter (LRO) is first in this series of missions under NASA's Robotic Lunar Exploration Program. This presentation will give an introduction to the instruments and objectives of the LRO mission.

Sanin A. B. Mitrofanov I. M. Sagdeev R. Z. Boynton W. Evans L. Harshman K. Litvak M. L. Kozyrev A. S. Milikh G. Mokrousov M. Schvetsov V. Shevchenko V. Starr R. Tret'yakov V. I. Trombka J.
Searching for Water Ice in the Moon Cold Traps by LEND Instrument Onboard the NASA LRO Mission **[#1690]**
In this paper we focus on identification of prospective lunar polar cold traps, as targets for LEND investigation onboard LRO mission. We also present the results of numerical studies of the LEND detection limits of hydrogen deposits for these traps.

Greenhagen B. T. Paige D. A.
Mapping Lunar Surface Petrology Using the Mid-Infrared Emissivity Maximum with the LRO Diviner Radiometer **[#2406]**
Diviner is scheduled to launch in 2008 on LRO. Diviner will map petrologic variations in the lunar surface by determining the location of the mid-infrared emissivity maximum (Christiansen feature), which is a good compositional identifier.

Carpenter P. Sibille L. Wilson S.
Development of Standardized Lunar Regolith Simulant Materials **[#2279]**
Lunar exploration requires standardized testing procedures that ultimately support flight certification of technologies and hardware. We discuss standardized lunar regolith simulant (SLRS) materials that are traceable interlaboratory standards for technology development.

Battler M. M. Richard J. Boucher D. Spray J. G.
Developing an Anorthositic Lunar Regolith Simulant **[#1622]**
The Moon's bedrock is dominated by anorthosite-norite-troctolite rocks. We report the results of developing an anorthositic regolith simulant so as to better understand regolith evolution and assist industry with drilling and excavation protocols.

Martirosyan K. S. Luss D.
Combustion Synthesis of Ceramic Composites from Lunar Soil Simulant **[#1896]**
The process for rapid production of dense ceramics from lunar soil simulant by using combustion synthesis is presented. A reaction between Ti, B, JSC-1 generates a temperature front that propagates through reactants converting it to a solid product.

Pieters C. Boardman J. Buratti B. Clark R. Green R. Head J. W. III McCord T. B. Mustard J. Runyon C. Staid M. Sunshine J. Taylor L. Tompkins S.
Global Mineralogy of the Moon: A Cornerstone to Science and Exploration **[#1630]**
The Moon Mineralogy Mapper (M3) will fly on the Chandrayaan-1 mission to the Moon and will return unprecedented compositional information at high resolution, providing a foundation for decades of scientific exploration.

Gaddis L. R. Skinner J. A. Jr. Hare T. Tanaka K. Hawke B. R. Spudis P. Bussey B. Pieters C. Lawrence D.
The Lunar Geologic Mapping Program and Status of Copernicus Quadrangle Mapping **[#2135]**
We are mapping a lunar quadrangle at 1:2.5M scale that centers on Copernicus crater.

Williams D. R. Grayzeck E. J. Jr.
The Lunar Data Project — Restoration of Apollo Data for Future Lunar Exploration **[#1187]**
The Lunar Data Project is an effort to restore Apollo data sets and make them available for use by the lunar scientific and exploration communities. This poster will outline the project and show some examples of data being restored.