Tuesday, March 15, 2005
POSTER SESSION I: MARS:
INSTRUMENTS AND DATA INTERPRETATION TECHNIQUES
7:00 p.m. Fitness Center

Bue B. D. Stepinski T. F.
Automated Classification of Landforms in Terra Cimmeria, Mars **[#1195]**
We present an automated method for identification of landforms on Mars. Application to the Terra Cimmeria region yields 20 landform types whose spatial distribution is shown using a thematic map. Future application includes automated crater counting.

Blair M. W. Kalchgruber R. Deo S. McKeever S. W. S.
Developing OSL Geological Dating Techniques for Use on Future Missions to Mars **[#1317]**
The basic principles of OSL dating are outlined and some of the challenges to developing OSL dating for use on Mars are addressed.

Cord A. Martin P. Foing B. H. Jaumann R. Hauber E. Hoffman H.
Neukum G. HRSC Co-Investigator Team
Macroscopic Texture of the Martian Surface: Application of a Filtering Method Using Mars Express HRSC Data **[#1615]**
We quantify the texture of Martian surface at the scale of a few pixels using images from HRSC (Mars Express). This can be linked with the relative thickness of dust deposit and then with some geological and geomorphological properties of the surface.

Glotch T. D. Bandfield J. L. Christensen P. R.
Factor Analysis and Target Transformation of Mini-TES Spectra: Recovery of Scene Endmembers at Meridiani Planum **[#2174]**
Factor analysis and target transformation techniques have been applied to Mini-TES data at Meridiani Planum. Four spectral components are present in the scene, including hematite, basalt, dust, and a sulfate and silica-rich rock.

Seshadri S. Buehler M. G. Anderson R. C. Kuhlman G. Keymeulen D. Cheung I. W. Schaap M. G.
Applicability of Electrical and Electroanalytical Techniques to Detect Water and Characterize the Geochemistry of Undisturbed Planetary Soils **[#2195]**
Electrical and electroanalytical measurements performed directly in undisturbed soils to identify water-bearing soils and to investigate aqueous soil geochemistry are shown to be feasible in soils with moisture levels expected on Mars.

Lee J. B. Sahai S. K. Paxton S. T. Hadaway S.
Ground Penetrating Radar in Sedimentary Rocks **[#1057]**
This abstract is about how Ground Penetrating Radar (GPR) works, the difficulties in using GPR, and the possibilities of which GPR can be used for.

Burt D. M.
Using an Inexpensive Digital Camera to Photograph Mars-Analog Materials at the Scale of the MER Microscopic Imager, and at Other Scales **[#1705]**
Using the right techniques, many consumer-level digital cameras can be used to take photos analogous to those sent back from Mars by the MER Microscopic Imager.