

**Thursday, March 15, 2007**  
**POSTER SESSION II: LUNAR ATMOSPHERE**  
**6:30 p.m. Fitness Center**

Berezhnoy A. A.

*Meteorite Bombardment as a Source of Lunar Atmosphere* [#1047]

Based on quenching theory the chemical composition of gas-phase species released to the lunar atmosphere during micrometeorite impacts has been estimated. NaOH, KOH, Ca, Mg, Al, Fe, and Ti oxides are produced during such collisions.

Larignon B. L. Pierazzo E. Goldstein D. B.

*Simulation of Low Density Atmospheric Flow on the Moon Following a Comet Impact* [#2121]

The present work examine the flow of expanding gaseous material after a comet impact on the Moon by coupling the Direct Simulation Monte Carlo (DSMC) code to the output of a SOVA hydrocode simulation of an impact event.

Wilson T. L.

*The Lunar Atmosphere as a Cosmic-Ray Detector* [#1790]

The recent discovery of an Na atmosphere on the Moon raises the question of its use as a fluorescent spectrometer for the detection of cosmic rays. Though tedious and technically demanding, the feasibility of such a concept is addressed.

Starukhina L. V.

*Meteorite Swarm Encounters as a Source of Magnetic Anomalies on the Lunar and Mercurian Surfaces* [#1299]

The impact of a dense meteorite swarm on an airless body can produce swirl-like albedo patterns and magnetic anomalies over them. Surface material is magnetized due to compression and enhancement of interplanetary magnetic field between impact plasma clouds.