

**Thursday, March 15, 2007**  
**POSTER SESSION II: ENGAGING STUDENT EDUCATORS AND**  
**THE PUBLIC IN PLANETARY SCIENCE**  
**6:30 p.m. Fitness Center**

Stockman S. A.

*The Lunar Reconnaissance Orbiter Education and Public Outreach Program* [#2331]

The Lunar Reconnaissance Orbiter E/PO program includes individual instrument E/PO projects, partnerships with organizations that reach formal and informal audiences. There is also an international component that focuses on collaboration with several upcoming international lunar missions.

Runyon C. R. Shipp S. Balch K. Tuthill G. Garver K. Gutbezahl J.

*An Overview of the Moon Mineralogy Mapper/Chandrayaan-1 E/PO Program* [#1812]

A robust education and outreach program is planned for M3. Three themes unify the M3 science, engineering, technology and E/PO: (1) Geology of the Earth-Moon System, (2) Properties of Lunar Materials, and (3) Science and Technology of Lunar Resources. Each theme may stand alone or support the others.

Gulick V. C. Deardorff G. Kanefsky B. Davatzes A.

*Student and Public Participation in Acquiring and Analyzing HiRISE Images* [#2248]

HiRISE provides an innovative education and public outreach program with a variety of educational activities. The centerpiece is HiWeb, which allows the public to submit suggestions for HiRISE images and help to categorize features found in HiRISE images.

Anderson S. W. Libarkin J. C.

*Alternative Planetary Science Conceptions Exhibited by College-Educated Americans: Results from Questionnaires and the Geoscience Concept Inventory* [#1396]

Alternative planetary science conceptions have been revealed through college student testing and questionnaires. Students exhibit non-scientific conceptions about the planets, and many of these ideas persist even after college-level instruction.

Fauerbach M. Mon M. J. Ueda T.

*Understanding Astrobiology Through Realistic Laboratory Experiences* [#1053]

Exploiting the multidisciplinary aspect of astrobiology, we developed a course that focuses on hands on experiences, giving the students a realistic research laboratory environment as part of their general science education.

Roark J. H. Zimbelman J. R. Williams S. H. Masuoka C. M.

*Interactive Education Focused Computer Simulations for the Visualization and Analysis of Topography Data* [#1692]

The goals of the simulations are to provide teaching tools that will aid instructors and be useful to students who are getting their first exposure to topographic mapping and the concepts of contouring and data resolution.

Miller J. P. Davis J. W. Pennypacker C. R. White G. L.

*Asteroid Search Campaign: A Pilot Program for High School & College Students* [#1003]

High school and college students from the United States and Europe participate in an asteroid search campaign. Using real-time images they identify unknown asteroids, make follow-up image requests, report their findings to the Minor Planet Center, and receive official recognition for discoveries.

Croft S. K. Pompea S. M.

*Getting Space Science into the K-12 Curriculum* [#1792]

Description of a practical method for getting space science research into the K-12 classroom, with an ongoing asteroid project as an example.

Valderrama Graff P. Grigsby B. Taylor W. Christensen P. R. Bandfield J. Ferguson R.  
Bender K. C. Klug S. L.

*The Mars Student Imaging Project: Using Distance Learning Strategies to Enhance STEM Education by Connecting Scientists and STEM-focused Content to the Classroom* [#2187]

The Mars Student Imaging Project has evolved since its beginnings in 2002 to now incorporate distance learning opportunities to augment STEM content and classroom connectivity to science experts.

Boice D. C. Asbell H. E.

*A Mentorship Program for Young Engineers & Scientists (YES 2K6)* [#1506]

The YES Program is a community partnership between SwRI and local high schools in San Antonio, Texas, consisting of a three-week summer workshop at SwRI and a year-long mentorship during the academic year to bridge classroom instruction and the real-world, research environment.

Urquhart M. L.

*Outcomes of Embedded Space Science E/PO Workshops in Long-Term Professional Development for Teachers* [#2094]

Results on teacher learning and transfer of NASA E/PO activities into K–12 classrooms are presented for space science E/PO workshops embedded in long-term professional development programs at UT Dallas. Implications for NASA E/PO will be discussed.

Buxner S. R. Keller J. M. Shaner A. J. Bitter C. F.

*MARSFEST (Martian Arctic Regions Science Field Experience for Secondary Teachers) Professional Development Workshop and Teacher Ambassador Program* [#2050]

The MARSFEST workshop took 20 teachers to Alaska to learn about Earth and Mars polar science, experience scientific inquiry, and model Mars mission curriculum. Program planning, enactment, evaluation, and follow-up ambassador program are discussed.

Shaner A. J. Buxner S. R. Keller J. M. Bitter C.

*MARSFEST Workshop Evaluation and Outcomes* [#1865]

This poster discusses the types of evaluation instruments created and used for evaluation of the MARSFEST teacher program and initial findings.

Kadel S. D. Williams D. A.

*Worlds of Fire: A Field- and Classroom-based Educational Outreach Program for High School Teachers* [#2132]

This presentation discusses a new, web-based educational exercise that we are developing that compares volcanism on Earth and Jupiter's moon, Io.

Levine A. S.

*Bringing Lunar and Planetary Science and Exploration to Underrepresented and Underutilized Student Populations* [#1234]

In order to reach the nation's best talent and brainpower, NASA must inform and inspire all populations including those that have been underutilized and underserved in the past, such as females, African-Americans and Native Americans.

Grier J. A. Pierazzo E. Chuang F. C. Osinski G. Crown D. A.

*Exploring Impact Craters Using Interactive Web Tools and Rock Samples* [#2011]

We will display our enhanced interactive website "The Explorer's Guide to Impact Craters" and our "Impact Crater Rock Kits."

Brooks V. Greenwood R. C. Bridges J. Watson J. Pearson V. K.

*The Rocks from Space Initiative and the Space Safari* [#1852]

This paper reports the successes of a new initiative in the UK using electronic resources, such as virtual learning environments and e-classrooms, for planetary and space science public engagement activities.

Gaboardi M. Humayun M. Dixon P.

*Student Teacher Astronomy Resource (STAR) Program: Inspiring the Imagination of Florida Citizens* [#1335]

Our E/PO program, STAR, connects a national research facility (NHMFL) with its North Florida community through a series of outreach efforts created around the Genesis and Stardust missions.

Aubele J. C. Stanley J.

*Informal Science Education + Planetary Missions = Increased Public Support and Space Science Literacy* [#2334]

Planetary missions provide a ready-made audience for successful science education public programming.

Museums/science centers provide informal science education that links the mission to a wide and diverse audience.

Richmond N. C. Van Wijk J. W.

*A Meeting for Young Scientists in Earth and Planetary Sciences: Solar System Magmatism* [#1420]

We propose holding a meeting for young scientists in planetary sciences, covering fieldwork, career development skills and scientific discussion. In this presentation, we describe the key features of the meeting and the motivation behind it.

Williams D. A. Whelley P. L. Bleacher J. E. Cave S. R. Zabala-Aliberto V. A. Zabala A. A. Greeley R.

*Kissing Mars Rocks with the Rover's RATs: An Educational Exercise to Understand Drilling Rocks on Mars* [#1713]

This abstract discusses an E/PO exercise we created for elementary school children that uses Hershey Kisses and straws to simulate the drilling of different rocks on Mars by the MER Rock Abrasion Tool.