Monday Morning, December 11, 2000

8:00    Continental Breakfast and Registration

THE SCIENTIFIC CASE FOR SAMPLE RETURN

Chairs:  D. W. G. Sears
         C. M. Pieters

9:00    INVITED REVIEW  Sears D. W. G.*  Pieters C. M.  Brownlee D. E.  Lindstrom M. M.  Britt D.
        The Case for Near-Earth Asteroid Sample Return [#8025]

        Near Earth Asteroid Sample Return: How, When and Why? [#8019]

9:45    Rietmeijer F. J. M.*  Nuth III J. A.
        The Scientific Case for Sample Return from a Primitive Near-Earth Asteroid [#8005]

10:00   Nishiizumi K.*  Herzog G. F.  Reedy R. C.
        Measurements of Cosmogenic Nuclides in and Their Significance for Samples Returned from
        Asteroids [#8001]

10:15   Glavin D. P.*  Ehrenfreund P.  Botta O.  Cooper G.  Bada J. L.
        Amino Acid Chemistry as a Link Between Small Solar System Bodies and Carbonaceous
        Chondrites [#8003]

10:30   Franchi I. A.*  Baker L.  Wright I. P.  Pillinger C. T.
        High Precision Light Element Characterisation of Asteroidal Material [#8018]

10:45   Pieters C. M.*
        Choosing for Maximum Value: The Aladdin Experience [#8030]

11:00   Fujiwara A.*  Mukai T.  Abe M.  Yano H.  Kawaguchi J.  Uesugi K.
        MUSES-C: Mission Scenario and Science [#8012]

11:15   Brownlee D. E.*
        Stardust: Lessons Learned for NEA Sample Return

11:30   Lindstrom M. M.*
        The Importance of Education, Public Outreach, and Risk Communication in Asteroid and Comet
        Sample Return Missions [#8028]

11:45   LUNCH
Monday Afternoon, December 11, 2000

THE NATURE OF ASTEROID SURFACES AND IMPLICATIONS FOR SAMPLE RETURN

Chairs: D. E. Brownlee
A. F. Cheng

2:00  INVITED REVIEW  Cheng A. F.*
Surface Properties of 433 Eros: Results from NEAR [#8029]

2:30  Chapman C. R.*  NEAR MSI-NIS Team
Implications from NEAR-Shoemaker Imaging of Eros for Small-scale Structure and Surface Sampling [#8024]

2:45  Britt D. T.*
Surface Processes and Sample Return: What Can We Learn About Asteroid Regoliths? [#8007]

3:00  Kochan H. W.*  Feibig W.  Kretschmer M.  Möhlmann D.  Arnold W.  Gebhardt W.  Licht R.
Investigation of Planetary Surfaces by Acoustic Sounding [#8008]

3:15  Economou T. E.*
Sample Characterization on Asteroid Sample Return Missions by the Alpha X-Ray Spectrometer [#8017]

3:30  Whiteley R. J.*  Tholen D. J.  Bell J. F.  Hergenrother C. W.
Sample Return from Small Asteroids: Mission Impossible? [#8026]

3:45  Kochan H.*  Feibig W.  Möhlmann D.  Horneck G.  Gerasimov M. V.  Speth B.  Köhler U.
The Planetary Simulation Facility of DLR — Design, Operational Performance, Perspectives [#8011]

4:00  Hoffman J. H.*  Hedgecock J.  Nienaber T.  Cooper B.  Allen C.  Ming D.
Regolith Evolved Gas Analyzer for Asteroid Mineralogy Studies [#8016]

5:00 – 6:30  RECEPTION
Tuesday Morning, December 12, 2000

SAMPLE COLLECTION DEVICES, SAMPLE CONTAINMENT, AND PLANETARY PROTECTION ISSUES

Chairs: M. Lindstrom
       B. H. Wilcox

9:00 INVITED REVIEW  Clark B. C.*
Sample Containment Options for Planetary Protection [#8032]

9:30 INVITED REVIEW  Race M. S.*
Planning for NEA Sample Return: Planetary Protection Controls and Non-Scientific Factors [#8038]

10:00 Sears D. W. G.*
Sample Collection Devices for Near-Earth Asteroid Sample Return [#8036]

MUSES-C’s Impact Sampling Device for Small Asteroid Surfaces [#8021]

Development of Small Sampling Systems for the Investigation of Planetary Surfaces [#8010]

10:45 Nygren W. D.*
Rapid Remote Sample Collection Mechanism for Near-Earth Asteroid Sample Return [#8031]

11:00 Rafeek S.  Gorevan S.*
NEA Touch-and-Go Surface Sampler (TGSS) [#8033]

11:15 Rafeek S.*  Kong K. Y.  Shadick S.  Porter C. C.
NEA Multi-Chamber Sample Return Container with Hermetic Sealing [#8034]

11:30 Garry J. R. C.*
Generalised Cutting Tool Temperatures for a Spacecraft Payload [#8022]

11:45 Allen C. C.*  Lindstrom M. M.
Near-Earth Asteroid Sample Curation [#8027]

12:00 LUNCH
Tuesday Afternoon, December 12, 2000

SPACECRAFT MANEUVERS IN THE VICINITY OF SMALL ASTEROIDS

Chair: D. K. Yeomans


Orbit Operations at 433 Eros: Navigation for the NEAR Shoemaker Mission [#8037]

2:30 INVITED REVIEW Scheeres D. J.*

Trajectories in Close Proximity to Asteroids [#8009]

IMPLICATIONS OF NEA SAMPLE RETURN FOR RESOURCE UTILIZATION, IMPACT HAZARD MITIGATION, AND HUMAN EXPLORATION AND DEVELOPMENT OF SPACE

Chairs: B. C. Clark
D. T. Britt

3:00 INVITED REVIEW Lewis J. S.*

Utilization of Resources from NEA [#8035]

3:30 INVITED REVIEW Speaker to be determined

Implications of NEA Sample Return for Human Exploration and Development of Space

4:00 Dahlstrom E. L.*

Initiating Exponential Growth in NEA Exploration with NEA Science Missions [#8023]

OPEN DISCUSSION

Chairs: J. Preble
L. Gefert

5:30 CLOSE OF WORKSHOP

PRINT-ONLY PRESENTATIONS

Ipatov S. I. Mardon A. A.

Delivery of Trans-Neptunian Objects to the Earth [#8004]

Vid’machenko A. P. Steklov A. F. Primak N. V.

Space Technospheres [#8006]

Mardon A. A. Greenspon J. A.

Near Earth Asteroid Sample Return and Threat Mitigation Within a Comprehensive Global Defense System [#8013]