

Friday, November 10, 2017
MORNING SESSION
10:00 a.m.

Chairs: Timothy Jull
Akos Kereszturi

- 10:00 a.m. Gucsik A. * Nishido H. Ninagawa K. Nakmura T. Tsuchiyama A.
[Space Weathering of Asteroid Itokawa: Micro-Raman Spectroscopy of a Plagioclase Particle from the Hayabusa-1 Sample Return Mission](#) [#6013]
This study describes Raman spectral properties of plagioclase from asteroid Itokawa that can be used for the astromineralogical study of the space weathering effects in asteroids.
- 10:15 a.m. Gyollai I. * Kereszturi A. Fintor K. Kereszty Zs. Szabo M. Walter H.
[IR-Raman Correlation of Shocked Minerals in Csátalja Meteorite — Clues for Shock Stages](#) [#6004]
The analyzed meteorite called Csátalja is an H chondrite (H4, S2, W2), and based on the differences between its certain parts, probably it is a breccia. The aim of methodological testing is characterizing shock deformation and heterogeneity.
- 10:30 a.m. Simonia I. * Gucsik A.
[Luminescence of Cometary Substance](#) [#6016]
We studied possible photoluminescence and cathodoluminescence of the cometary mineral dust. Obtained results are presented. Different aspects of the problem are discussed.
- 10:45 a.m. Simonia I. * Cruikshank D. P.
[Complex Organics in the Icy Bodies in Planetary Systems — Accepted Notions and New Ideas](#) [#6017]
We considered physical properties of frozen hydrocarbon substance and refractory organic of icy bodies of the solar system. We proposed main physical properties of potential self-organized substance of icy bodies. Obtained results are presented.
- 11:00 a.m. *Break*
- 11:30 a.m. Gyollai I. * Polgári M. Bérczi Sz. Gucsik A. Pál-Molnár E.
[Biosignatures in the Recrystallized Shock Melt Pocket of ALH-77005 Shergottite — Clues to Martian Life](#) [#6001]
In the spinifex textured, recrystallized shock melt portion in ALH 77005 shergottite mineralized microbially produced texture (MMPT) - in form of pearl necklace-like, vermiform inner signatures - was measured, which we propose to have Martian origin.
- 11:45 a.m. Gucsik A. *
[In-Situ Cathodoluminescence Microscopy and Spectroscopy for the Robotic Missions on Mars: A Review](#) [#6019]
The purpose of this study is to summarize the potential how to use the Cathodoluminescence microscopy and spectroscopy, which may be applied to the planetary sciences, especially to the robotic explorations on Mars.
- 12:00 p.m. Jull A. J. T. * Kontul I. Creager E. R. Cheng L. Gucsik A. Molnar M. Janovics R. Povinec P. P.
[Terrestrial Ages of Meteorites Determined by \$^{14}\text{C}\$ and \$^{14}\text{C}/^{10}\text{Be}\$ Using Accelerator Mass Spectrometry](#) [#6006]
Terrestrial ages of meteorites can be determined from the measurement of the concentration of ^{14}C , ^{10}Be and other radionuclides. We will discuss these applications in this presentation.

12:15 p.m. Góbi S. * Frigge R. Abplanalp M. J. Gillis-Davis J. Kaiser R. I.
[Radiolysis of Murchison Samples — A Photoionization Reflectron Time-of-Flight Study](#) [#6010]
Murchison samples were irradiated at 5 K in an ultra-high vacuum simulation chamber. The changes upon irradiation were monitored *in situ* with FT-IR, UV-VIS, and EI-QMS, whereas the subliming volatile products were detected by the PI-ReTOF-MS method.

12:30 p.m. *Lunch*