

Friday, July 27, 2018
**DEVELOPMENTS IN ANALYTICAL TECHNIQUE FOR METEORITE
 AND RETURNED SAMPLE ANALYSIS**
 10:15 a.m. Blue Room

Chairs: Michael Oshtrakh
 Alexandre Simionovici Pr.

- 10:15 a.m. Kita N. T. * Hertwig A. T. Defouilloy C. Kitajima K. Spicuzza M. J.
[SIMS Mg Isotope Analyses for Meteorites and Cometary Samples](#) [#6328]
 SIMS Mg isotope ratio measurements were improved for lateral resolution and uncertainty by using a RF Plasma oxygen ion source, multicollector EMs, and FC amplifiers with E12 ohm resistors, to study comet particles and chondrules.
- 10:30 a.m. Abdu Y. A. *
[A new Interpretation of Anomalous "Type B" Near-Infrared Spectra of Ca-Rich Clinopyroxenes: Implications for Remote Sensing of Inner Solar System Bodies](#) [#6235]
 We present a new interpretation of anomalous "type B" near-infrared spectra of Ca-rich clinopyroxenes, and assign the absorption band near 2 μm to Fe^{2+} in a local environment that is similar to Fe^{2+} in high pigeonite.
- 10:45 a.m. Oshtrakh M. I. * Maksimova A. A. Goryunov M. V. Petrova E. V.
[Application of Mössbauer Spectroscopy in the Study of Meteorites](#) [#6092]
 In the present review we consider the results obtained using Mössbauer spectroscopy in the numerous studies of iron, stony-iron and stony meteorites during the last decade mainly.
- 11:00 a.m. Simionovici A. S. * Lemelle L. Beck P. Tucoulou R. Schoonjans T. Fihman F. Kiryukhina K. Courtade F. Viso M.
[QESA - Quarantine Extraterrestrial Sample Analyses for Returned Samples](#) [#6337]
 Nondestructive atomic/molecular analyses for returned samples in quarantine are shown. They are fielded using a triple container BSL4 sample holder optimized to assess biohazard capabilities of sample return missions and characterize life if present.