

Monday, June 16, 2014

LRS APPLICATIONS IN THE FIELD OF PLANETARY SCIENCES AND SPACE EXPLORATION II

10:30 a.m. Umrath Lounge

Chairs: **Fernando Rull**  
**Frederic Foucher**

- 10:30 a.m. Hooijschuur J. H. \* Davies G. R. Ariese F.  
[Raman Spectroscopy of \*Deinococcus Radiodurans\* and  \$\beta\$ -Carotene on a Mineral Background](#) [#5068]  
“Is there life on other planets?” is one of the key questions in space exploration. Resonance Raman (RRS), Time Resolved Raman (TRRS) and Spatially Offset Raman (SORS) are Raman spectroscopic tools to find microorganisms hidden in minerals.
- 10:45 a.m. Martinez-Uriarte L. \* Dubessy J. Bihannic I. Boulet P. Robert P.  
[Reference Raman Spectra of  \$\text{CaCl}\_2 \cdot n\text{H}\_2\text{O}\$  Solids \( \$n = 0, 2, 4, 6\$ \)](#) [#5069]  
Reference Raman spectra of  $\text{CaCl}_2 \cdot n\text{H}_2\text{O}$  crystals (100–3800  $\text{cm}^{-1}$ ), identified by XRD, are given with a preliminary band assignment. This will help fluid inclusionists for the interpretation of phase changes in  $\text{CaCl}_2$ -rich aqueous fluid inclusions.
- 11:00 a.m. Gomez-Nubla L. Aramendia J. Fdez-Ortiz de Vallejuelo S. Castro K. \* Alonso-Olazabal A. Zuluaga M. C. Ortega L. A. Murelaga X. Madariaga J. M.  
[Raman Analysis for the Research of Impact Glasses: Searching for Traces that Could Elucidate Their Formation](#) [#5033]  
In the present work, two different types of glasses (LDGs and Darwin glass) from the meteorites collection of the Basque Country University (UPV/EHU) were analyzed combining different techniques as Raman spectroscopy and image.
- 11:15 a.m. Haenecour P. \* Floss C. Wang A. Yada T.  
[Coordinated Analysis of Isotopic Anomalies in Antarctic Micrometeorites](#) [#5017]  
We carry out coordinated analysis (NanoSIMS 50, Auger Nanoprobe, Raman spectroscopy) of presolar grains (silicates, oxides, SiC) and  $^{15}\text{N}$ -enriched carbonaceous matter in fine-grained Antarctic micrometeorites.
- 11:30 a.m. Ling Z. C. \* Wang A.  
[Secondary Minerals in Martian Meteorite MIL 03346 as Detected by Raman Imaging Spectroscopy](#) [#5089]  
We report a preliminary study of MIL 03346, 168 thin section by using the Raman imaging spectroscopy. Our goal is to get the spatial relationship of secondary hydrated minerals in this meteorite and to seek evidences that may hint their origins.
- 11:45 a.m. Jaret S. J. \* Glotch T. D. Johnson J. R.  
[Characterizing Shock Metamorphism in Feldspar Using Micro-Raman Spectroscopy](#) [#5095]  
Here we present preliminary results from our work to use micro-Raman spectroscopy as a tool for refining shock classification schemes. Micro-Raman spectroscopy may provide higher pressure resolution than traditional petrographic techniques.
- 12:00 p.m. 11th GeoRaman Group Photo with all Attendees and Exhibitors
- 12:20 p.m. LUNCH