

Thursday, June 19, 2014
LRS APPLICATIONS IN THE FIELD OF GENERAL MINERALOGY,
PETROLOGY, AND GEMOLOGY I
8:30 a.m. Umrath Lounge

Chairs: Andrey Korsakov
Svetlana Buravleva

- 8:30 a.m. Gazquez F. Rull F. * Calaforra J. M. Sanz A. Medina J.
[In Situ Raman Spectroscopy of Cave Minerals: An Analytical Tool Compatible with the Conservation of Subterranean Heritage](#) [#5038]
 In this work we have studied the mineralogy of some peculiar speleothems in El Soplao Cave Northern Spain by in situ Raman spectroscopy. Spectacular helictites, anthodites and huge speleothems are the most relevant aesthetic features of this cave.
- 8:45 a.m. Burllet C. * Vanbrabant Y. Decree S.
[Raman Micro-Spectroscopy as a Tool to Characterise Cobalt—Manganese Layered Oxides \(Heterogenite-Asbolane-Lithiophorite\). Study on Crystalline and Amorphous Phases from the DRC \(Democratic Republic of the Congo\)](#) [#5080]
 This study defines Raman reference spectra for heterogenite, asbolane and lithiophorite. Those three phases are hardly differentiable by XRD. Raman spectroscopy allows comparison of their natural chemical variability with their spectroscopic signatures.
- 9:00 a.m. Buravleva S. Y. * Pakhomova V. A. Fedoseev D. G.
[Use of Raman Spectrometry to Determine the Composition of Primary Inclusions in Sapphires](#) [#5024]
 A new type of sapphire material was investigated by the authors in the Jewish Autonomous Oblast in Russia. The use of Raman spectrometry allows one to determine the composition of primary inclusions in the sapphires of the Sutara goldmine district.
- 9:15 a.m. Petriglieri J. R. Bersani D. * Salvioli-Mariani E. Mantovani L. Tribaudino M. Lottici P. P.
 Laporte-Magoni C.
[Polymorphs of Serpentine: Identification by Means of Raman Spectroscopy](#) [#5064]
 Raman micro-mapping, based on the OH stretching bands, was successfully employed to identify the four main polymorphs of serpentine directly on cross-sections of rocks coming from the Koniambo massif (New Caledonia).
- 9:30 a.m. Cathelineau M. Caumon M.-C. * Massei F. Harlaux M. Brie D.
[A Raman Spectroscopy Study of the Ni-Mg Kerolite Solid Solution: Sensitivity of the O-H Stretching Vibrations to Ni-Mg Substitution](#) [#5030]
 The Raman spectra of natural talc-like Ni-Mg kerolites show a strong evolution of the OH stretching vibration bands with the Ni content, providing a tool for quick evaluation of the Ni content of kerolite and giving new inside kerolite structure.
- 9:45 a.m. Wang P. * Tague T. J. Jr.
[Raman Microanalysis of Meteorites and Other Geological Samples](#) [#5081]
 Raman microanalysis of meteorites and other geological samples are provided in this study. The identification of components and their respective distributions were accomplished using single point measurement and area imaging.
- 10:00 a.m. COFFEE BREAK