Monday, June 16, 2014
LRS APPLICATIONS IN THE FIELD OF CULTURAL HERITAGE AND ARCHAEOLOGY
1:30 p.m. Umrath Lounge

Chairs: **Francesca Casadio**
Peter Vandenabeele

1:30 p.m. Vandenabeele P. * Van Pevenage J. Lauwers D. Coccato A. Rousaki A. Lycke S. Moens L.
In Situ Raman Analysis: The Ultimate Solution for Archaeometry? **[#5020]**
Raman spectroscopy is well established in the field of archaeometry. In situ analysis is an approach where mobile instrumentation is brought on site to perform direct investigation of the artwork.

1:45 p.m. Cianchetta I. * Trentelman K. Maish J. Walton M.
Disclosing the Firing Protocol of Athenian Pottery Production: A Raman and Colorimetric Study of Replicates and Original Samples **[#5014]**
The work presented here examines the technological foundations of Athenian pottery production through the replication of the firing technology. Raman spectroscopy and colorimetry were used to investigate composition and color of ceramics slips.

2:00 p.m. Simsek G. Colomban P. Casadio F. Bellot-Gurlet L. * Faber K. T. Milande V. Zelleke G.
On-Site Identification of Early Meissen Böttger Red Stoneware (Germany) Using Raman and XRF Analyses **[#5083]**
In order to define and precise the technological characteristics of early 18th century Böttger (Meissen) stoneware productions, portable Raman and X-ray fluorescence (pXRF) analyses were performed.

2:15 p.m. Lomax S. Q. * Lomax J. F. De-Luca Westrate A.
The Examination of Synthetic Organic Pigments in Modern Works of Art by Raman Microscopy and Laser Desorption Ionziation Mass Spectrometry **[#5005]**
Raman spectroscopy in combination with laser desorption ionization mass spectrometry was used to examine samples from modern works of art by artists including Mark Rothko, Barnett Newman, and José de Rivera to identify the pigments present.

2:30 p.m. Casadio F. * Pozzi F. Chang L. Kurouski D. Zaleski S. Van Duyne R. P. Shah N. C.
Surface-Enhanced Raman Spectroscopy for the Analysis of Works of Art: Milestones Reached and New Horizons **[#5054]**
This work presents recent case studies drawn from the authors' work in the area of Surface-Enhanced Raman Spectroscopy SERS for the identification of colorants in art including new developments in separation/SERS and Tip-Enhanced Raman spectroscopy (TERS).

2:45 p.m. Edwards H. G. M. *
Some Challenges for Raman Spectroscopy in Art History and the Preservation of Cultural Heritage **[#5031]**
Some challenges for the interpretation of Raman spectroscopic data derived from pigments and materials associated with oil paintings and cultural heritage artworks such as ivories are illustrated with several case studies.