

List of accepted works with corresponding authors

PL: Plenary Lecture

OP: Oral Presentation

TS: Trendsetting Speech

P: Poster Presentation

**Tuesday, September 1st, 2015**

Mobile Raman Spectroscopy in Art and Archaeology: Challenges and Opportunities	Peter Vandenabeele	<b>10:00 - 10:50</b>	<b>PL1</b>
<b>Chair</b>	Peter Vandenabeele		
From past to future possibilities on the Application of Raman spectroscopy in Art and Archaeology	Juan Manuel Madariaga	<b>11:20 - 12:00</b>	<b>TS1</b>
An Insight into the spectroscopic properties and metal coordination of artistic logwood inks	Silvia A. Centeno	<b>12:00 - 12:20</b>	<b>OP1</b>
Application of Raman Microscopy to Analysis of Paper in Documents and Works of Art	Enrico Pigorsch	<b>12:20 - 12:40</b>	<b>OP2</b>
A Comprehensive Investigation of Paul Gauguin's Graphic Works on Paper	Celine Daher	<b>12:40 - 13:00</b>	<b>OP3</b>
<b>Chair</b>	Alberto Sánchez		
Lead chromate pigments and minerals: Raman identification	Danilo Bersani	<b>14:00 - 14:40</b>	<b>TS2</b>
Micro-Raman Spectroscopy for the Archaeology of the Iberians	Alberto Sánchez	<b>14:40 - 15:00</b>	<b>OP4</b>
Spectroscopic characterization of carbon based pigments used for decoration of prehistoric ceramic	Barbara Łydzba-Kopczyńska	<b>15:00 - 15:20</b>	<b>OP5</b>
Characterization of natural, synthetic and imitation opals	Armida Sodo	<b>15:20 - 15:40</b>	<b>OP6</b>
Discovery and characterization of challacolloite, an uncommon chloride on a fifteenthcentury polychrome terracotta relief by Michele da Firenze	Jens Stenger	<b>15:40 - 16:00</b>	<b>OP7</b>
<b>Chair</b>	Danilo Bersani		
Revealing the chemistry of ancient medicinal or cosmetic preparations containing heavy metals	Marlene Aubin	<b>16:30 - 16:50</b>	<b>OP8</b>
Studying the degradation of arsenic sulfide pigments by the use of tandem Raman spectroscopy-electrochemistry	Marc Vermeulen	<b>16:50 - 17:10</b>	<b>OP9</b>
The green paints in the paradise wing of the triptych The Last Judgement by Hieronymus Bosch in the Paintings Gallery of the Academy of Fine Arts Vienna	Federica Cappa	<b>17:10 - 17:30</b>	<b>OP10</b>

Comparative Pallet Characterization in easel paintings of Two Well-Known 19th Century Colombian Artists by Confocal Raman Spectroscopy	Diego Badillo	17:30 - 17:50	OP11
Raman microspectroscopy and laser ablation of old paper samples with foxings	Irina Balakhnina	17:50 - 18:10	OP12

### Wednesday, September 2nd, 2015

<b>Chair</b>	Ludovic Bellot-Gurlet		
Raman spectroscopy for Art and Archaeology: 30 years of pushing the envelope in cultural heritage studies	Francesca Casadio	9:00 – 9:40	TS3
FT-Raman analyses of dyes and lac pigments in folk arts and crafts in the interiors of Decorative Farmhouses of Hälsingland, Sweden, UNESCO World Heritage	Ingalill Nyström	9:40 - 10:00	OP13
New frontiers of Raman spectroscopy in conservation science	Agnieszka Sozańska	10:00 - 10:20	OP14
<b>Chair</b>	Juan Manuel Madariaga		
Raman spectroscopy: from Museum to archaeological excavations	Sandrine Pagès-Camagna	11:00 - 11:40	TS4
Multi-analytical approach to the study of archaeological iron corrosion products	Nick Schiavon	11:40 - 12:00	OP15
A new insight into polyurethane foams degradation – the use of Raman spectroscopy for the evaluation of long-term storage conditions	Susana França de Sá	12:00 - 12:20	OP16
Multidisciplinary approach to characterize an unusual blackish patina on the Neang Khmau temple- Archaeological Khmer area (Cambodia)	Annalaura C. Municchia	12:20 - 12:40	OP17
<b>Chair</b>	Bruno Brunetti		
Extension of Spatially Offset Raman Spectroscopy to the Microscale for Conservation Science	Claudia Conti	13:40 - 14:20	TS5
Combined spectroscopic analysis of beads from the tombs of Kindoki, MbanzaNsundi, Lower Congo	Alessia Coccato	14:20 - 14:40	OP18
Combined spectroscopic and paleobiologic approach to the provenance investigation of painting materials	Monika Czarnecka	14:40 - 15:00	OP19
Micro-Raman analysis of prehistoric rock art in Patagonia (Argentina)	Anastasia Rousaki	15:00 - 15:20	OP20
Famous Historic Chrysoprase Deposit in Szklary, Poland: Raman Characterisation of Nibearing Minerals	Zdeňka Čermáková	15:20 - 15:40	OP21

**Thursday, September 3rd, 2015**

<b>Chair</b>	Francesca Casadio		
Exploiting Raman abilities: from spectra recording to advanced data treatment. Focuses on natural organic substances involved in cultural heritage studies	Ludovic Bellot-Gurlet	<b>9:00 - 9:50</b>	<b>PL2</b>
Automatic Classification System of Raman Spectra Applied to Pigments Analysis	J. J. González-Vidal	<b>9:50 - 10:10</b>	<b>OP22</b>
Suitability of DFT Modelling for Raman spectral Interpretation of Copper Complexes	Elena Platania	<b>10:10 - 10:30</b>	<b>OP23</b>
<b>Chair</b>	Silvia A. Centeno		
Going beyond single colorant identification with surface-enhanced Raman spectroscopy (SERS): a systematic study of natural red dyes in mixtures	Francesca Casadio	<b>11:00 - 11:40</b>	<b>OP24</b>
Multi-analytical approach combining conventional Raman and SERS with fluorescence lifetime spectroscopy and HPLC for the study of twenty historical lake pigments	Francesca Gabrieli	<b>11:40 - 12:00</b>	<b>OP25</b>
Portable Raman and Raman imaging usefulness in emergency analyses to detect decaying on building materials from Punta Begoña Galleries (Getxo, North of Spain)	Maite Maguregui	<b>12:00 - 12:20</b>	<b>OP26</b>
SERS identification of orchil and folium mixtures on purple codices: a methodological approach on model samples	Monica Gulmini	<b>12:20 - 12:40</b>	<b>OP27</b>
<b>Chair</b>	Nick Schiavon		
Raman for bronze characterization: case studies and treatments	Polonca Ropret	<b>13:40 - 14:10</b>	<b>TS6</b>
Raman investigation of surface layers on copper cargo from XV c. ship wreck excavated in the Gdańsk Bay - contribution to study of the trade routing in medieval Europe	Katarzyna Schaefer	<b>14:10 - 14:30</b>	<b>OP28</b>
Deterioration of Iron Nails from Historical Structures Exposed to Coastal Town Atmosphere: Investigation of Corrosion Layers by Micro-Raman Spectroscopy	Nurdan Yucel	<b>14:30 - 14:50</b>	<b>OP29</b>

Identification of salts from deteriorated stone of historical monuments using microRaman spectroscopy, X-ray diffraction and SEM-EDS	Mariola Marszałek	<b>14:50 - 15:10</b>	<b>OP30</b>
<b>Chair</b>	Polonca Ropret		
Vitruvius' recipe for Egyptian Blue and the Analysis of samples from the Italian territory	Pietro Baraldi	<b>15:40 - 16:20</b>	<b>TS7</b>
Smalt characterization with Raman spectroscopy	Sylwia Pawełkiewicz	<b>16:20 - 16:40</b>	<b>OP31</b>
Raman and infrared spectroscopy of megafauna and human ancient bones recovered from submerged caves in Yucatan, Mexico	María A. Mondragón	<b>16:40 - 17:00</b>	<b>OP32</b>

### **Friday, September 4th, 2015**

<b>Chair</b>	Piotr Targowski		
Investigation of unique group of painted silk banners from Polish collection	Anna Klisińska-Kopacz	<b>9:00 - 9:20</b>	<b>OP33</b>
Degradation of Cu-pigments of medieval wall paintings in the chapel of Vipperow	Martin A. Ziemann	<b>9:20 - 9:40</b>	<b>OP34</b>
Raman Spectroscopy Analysis of Terra Sigillata: the Yellow Pigment of Marbled Sigillata	Tian Wang	<b>9:40 - 10:00</b>	<b>OP35</b>
LA-ICP-MS and Raman spectroscopy as the complementary instrumental methods in historic wall-paintings analysis	Olga Syta	<b>10:00 - 10:20</b>	<b>OP36</b>
Raman analysis of color minerals from the Stone-Age sites at Gubs gorge (North-West Caucasus)	Alexander Pakhunov	<b>10:20 - 10:40</b>	<b>OP37</b>

### **Round Table**

<b>Chair</b>	Sandrine Pagès-Camagna		
The integrating activity project IPERION_CH: a further step toward a European research infrastructure in heritage science	Bruno Brunetti	<b>11:10 - 12:40</b>	<b>PL3</b>
Prospective European research infrastructure E-RIHS and its Polish partner E-RIHS PL	Piotr Targowski	<b>11:10 - 12:40</b>	<b>TS8</b>

## Poster Session

### Chairs

Claudia Conti, Pietro Baraldi

Comparisons of the signal to background ratio of Raman spectra acquired for the identification of pigments by different instrumental setups for measurements on samples and in-situ	Cristina Aibéo	<b>P1</b>
Colombian or Not Colombian: a Confocal Raman Spectroscopy comparative study of Miniature Paintings on Ivory	Diego Badillo	<b>P2</b>
An approach to the identification of ambers from different archaeological sites	Baraldi Pietro	<b>P3</b>
Characterization of the Sicilian amber by micro Raman Spectroscopy	Germana Barone	<b>P4</b>
Red gemstones characterization by micro-Raman spectroscopy: identification, genesis and treatments in rubies and their imitations	Germana Barone	<b>P5</b>
Lead chromate pigments and minerals: Raman identification	Danilo Bersani	<b>P6</b>
In-situ studies of inks, pigments and parchment in manuscripts by portable Raman spectroscopy	Federica Cappa	<b>P7</b>
Multimethod studies on document ageing: time-induced changes in composition of triarylmethane ballpoint ink dyes	Rafał Cieśla	<b>P8</b>
Raman database of green pigments	Alessia Coccato	<b>P9</b>
Raman spectroscopy of the works of Rafał Hadziewicz (1803-1886) from the collection of the National Museum in Kielce	Ewa Doleżyńska-Sewerniak	<b>P10</b>
A comparison of pigments applied in two gothic wall paintings in Slovenia using Raman microspectroscopy	Maja Gutman	<b>P11</b>
Potentialities and Limitations of Raman spectroscopy in the analysis of iron gall inks	Emanuel Kindzorra	<b>P12</b>
Micro-Raman and other spectral studies on dinosaur fossils	Rafał Kuzioła	<b>P13</b>
A novel concept towards in-situ Raman mappings using a portable Raman spectrometer.	Debbie Lauwers	<b>P14</b>
Wrocław-Partynice amber depots - the application of the comprehensive spectral database of succinite and fossil and subfossil resins	Barbara Łydzba-Kopczyńska	<b>P15</b>
Micro-Raman study of the carbonation depth of a lime paste produced by a traditional technology	Petra Mácová	<b>P16</b>

Comparison of semi-quantification experimental methodologies using micro-Raman spectroscopy: PALME software as an alternative tool for the study of salts efflorescence	Juan Manuel Madariaga	<b>P17</b>
The role marine aerosol in the formation of sulphate and double sulphate nitrate salts in gypsum based materials of plasters from the inner areas of the Igueldo Lighthouse (San Sebastian, Basque Country, north of Spain)	Juan Manuel Madariaga	<b>P18</b>
Portable Raman and Raman imaging usefulness in emergency analyses to detect decaying on building materials from Punta Begoña Galleries (Getxo, North of Spain)	Maite Maguregui	<b>P19</b>
Analysis of the Raman spectra of various inks on the documents from the court cases	Magdalena Malik	<b>P20</b>
Red organic dyestuff analyses of the Jan Matejko (1839-1893) preserved historical paints from tubes by means of HPLC-DAD-MS broadened by XRF and SEM-EDX techniques	Olga Otlowska	<b>P21</b>
Investigating the use of pink and violet hues on Greek figurines	Sandrine Pagès-Camagna	<b>P22</b>
Libs and microscopy analyses of five 17th century oil paintings from the king Jan III's palace museum in Wilanow	Agnieszka Pawlak	<b>P23</b>
Influence of UV light on the stability of synthetic ultramarine blue pigment in modern and contemporary art	Valentina Pintus	<b>P24</b>
Optimisation and characterisation of HPC-based photoreduced SERS active substrate and its use for analysis of organic colorants present on cultural heritage objects	Klara Retko	<b>P25</b>
On "Viridis color cum sale". New approach on its composition	Margarita San Andrés	<b>P26</b>
Application of Raman spectroscopy to investigate the Bohemian medieval panel painting 'Votive Panel of Jan Očko of Vlašim'	Radka Šefců	<b>P27</b>
Non-invasive XRF research of the evolution of the 19th century pigments, identified in situ on more than hundred representative Polish painters' paintings	Mirosław Wachowiak	<b>P28</b>