

2 September, Monday

16:00 - 18:00 Registration Bildungsforum, Am Kanal 47, 4th floor, Wissenschaftsetage

DAY 1 - 3 September, Tuesday

Conference site Campus Griebnitzsee

8:00-9:30 Registration

09:30 - 10:00 **Opening of the RAA2019**

Session 1 - Material characterization and degradation processes

10:00 - 10:40 KL1 **Keynote lecture** Kepa Castro (Spain)
Unexpected degradation mechanisms in cultural heritage

10:40 - 11:00 OP1 Lucile Brunel-Duverger (France)
A Study of Copper Greens found on Yellow Coffins from the Egyptian Antiquities Department of the Louvre Museum

11:00 - 11:30 **Coffee break**

Session 2 - Material characterization and degradation processes

11:30 - 11:50 OP2 Thorsten Allscher (Germany)
Glass or gemstone? – A systematic review of the jewelled bindings from the collections of the Bayerische Staatsbibliothek

11:50 - 12:10 OP3 Danilo Bersani (Italy)
Nondestructive investigation on the 6th century Lombard jewelry collection

12:10 - 12:30 OP4 Zoltan Pal (Romania)
From naturally occurring aragonite to Art Nouveau decorative objects: Corund deposit, Romania and it's Aragonite Museum seen by multi-laser micro-Raman spectroscopy

12:30 - 12:50 OP5 Simona Raneri (Italy)
Raman spectroscopy as a tool for provenancing black limestones (bigi morati) used in antiquity

12:50 - 14:00 **Lunch break**

Session 3 - Raman spectroscopy in archaeology and paleoenvironment

14:00 - 14:40 KL2 **Keynote lecture** Alessandro Vergara (Italy)
On the production from furnaces in archaeological sites

14:40 - 15:00 OP6 Thomas Schmid (Germany)
Raman band widths of anhydrite II reveal the burning history of high-fired medieval gypsum mortars

15:00 - 15:20 OP7 Martin Ziemann (Germany)
Raman spectroscopic investigation of mechanisms of calcite-aragonite transitions of a Holocene high-alpine stalagmite from Central Switzerland

15:20 - 15:40 OP8 Juan Manuel Madariaga (Spain)
The influence of sediments on some extracted iron nails from the recovered Urbieta shipwreck (Gernika, North of Spain)

15:45 End

17:00 - 19:00 Welcome reception

Old Town Hall (Altes Rathaus) of Potsdam

Session 4 - Development of Raman techniques, new Raman instrumentation

09:30 - 10:10 KL3 **Keynote lecture** Peter Vandenabeele (Belgium)
*Comparison of Mobile State-of-the-Art Raman Instruments and New Perspectives
in Cultural Heritage Studies*

10:10 - 10:30 OP10 Elmar Schmälzlin (Germany)
*Ultrafast Raman imaging of large-area samples without stepwise scanning
applying an integral field spectrograph from astronomy*

10:30 - 10:50 OP11 Anastasia Rousaki (Belgium)
*In or out the laboratory: A direct comparison of micro- and portable Raman
spectroscopy on the analysis of Patagonian rock art (Argentina)*

10:50 - 11:20 **Coffee break**

Session 5 - Presentations by Exhibitors and Sponsors

11:20 - 11:40 OP12 Marc Richter, Exhibitor and Sponsor Renishaw GmbH (Germany)
Renishaw InVia Raman microscopy - From Basics to Applications

11:40 - 12:00 OP13 Bernd Bleisteiner, Exhibitor and Sponsor HORIBA Jobin Yvon GmbH (Germany)
*HORIBA Jobin Yvon an archaeological company?
Celebration of 200 Years History*

12:00 - 12:20 OP14 Anke Oehler, Daniel Barchewitz, Exhibitor and Sponsor B&W Tek (USA)

12:20 - 12:40 OP15 Thomas Olschewski, Exhibitor and Sponsor WITec GmbH (Germany)

12:40 - 14:00 **Lunch break**

14:00 - 16:00 **Poster Session with coffee and soft drinks**

Session 6 - Chemometrics in Raman spectroscopy and Material characterization

16:00 -16:40 KL4 **Keynote lecture** Barbara Łydźba-Kopczyńska (Poland)
Fading in the spectroscopic determination of the age of ballpoint ink

16:40 -17:00 OP16 Enrico Pigorsch (Germany)
New Insights into Paper. Chemical Paper Analysis by Raman Microscopy

17:00 -17:20 OP17 Oana Florescu (Romania)
*Determining the archaeometric and chemometric characteristics of the old documents.
Paper and writing support*

17:20 -17:40 OP18 Adele Bosi (Italy)
*Identification of synthetic organic pigments in Gebrüder Schmidt printing inks
by Raman spectroscopy – A case study*

17:40 -18:00 OP19 Marta Manso (Portugal)
The colours of the Power plant in Levada de Tomar

18:00 End

Session 7 - Material characterization and Conservation issues

- 09:30 - 10:10 KL5 **Keynote lecture** Dalva L. A. de Faria (Brasil)
An unlikely Modigliani?
- 10:10 - 10:30 OP20 Anna Rygula (Poland)
The conservation of 18th century gun-powder horn with amber decoration: a top-down approach
- 10:30 - 10:50 OP21 Danuta Stępień (Poland)
Raman Spectroscopy in the Restoration of an Our Lady of Czestochowa Icon
- 10:50 - 11:20 **Coffee break**

Session 8 - Material characterization and degradation processes

- 11:20 - 11:40 OP22 Camila Mortari (Portugal)
Micro-Raman and X-ray fluorescence spectroscopy applied to the characterization of glazes from Portuguese azulejos
- 11:40 - 12:00 OP23 Javier Pinto (Spain)
Investigating glass beads and the funerary rituals of ancient Vaccaei culture (s. IV-II BC) by Raman Spectroscopy
- 12:00 - 12:20 OP24 Kepa Castro (Spain)
Raman investigation for the understanding of a blackening phenomenon on late Gothic wall paintings

12:30 **Lunch break**

Session 9 - Material characterization, Development of Raman techniques, SERS

- 14:00 - 14:40 KL6 **Keynote lecture** Stephanie Zaleski (USA)
Characterization of the degree of crystallinity in zinc soaps with variable-temperature Raman spectroscopy
- 14:40 - 15:00 OP26 Klara Retko (Slovenia)
SERS-procedure in the heritage science by utilising photoreduced substrates based on HPC and silver nanoparticles
- 15:00 - 15:20 OP27 Daniela Reggio (Spain)
Multipurpose SERS substrates for nanodestructive detection of small molecules in collections
- 15:20 - 15:40 OP28 María Vega Cañamares (Spain)
FT-Raman, SERS and DFT analysis of safflower red dyed Japanese paper
- 15:40 - 16:10 **Coffee break**

Session 10 - Material characterization and degradation processes

- 16:10 - 16:50 KL7 **Keynote lecture** Armida Sodo (Italy)
Spectroscopic investigation of Cappadocia proto-Byzantine paintings
- 16:50 - 17:10 OP29 Ana I. Giraldo Ocampo
Micro-Raman Spectroscopy and Complementary Analytical Techniques for Material Characterization of Archaeological Mural Paintings at El Alto del Aguacate, Tierradentro Cauca, Colombia
- 17:15 End

19:00-23:00 Conference dinner

Restaurant in the Arcona hotel Potsdam

DAY 4 - 6 September, Friday

8:15 - 16:15 Excursion day

DAY 5 - 7 September, Saturday

Conference site Campus Griebnitzsee

Session 11 - Material characterization, commercial pigments

09:30 - 10:10 KL8 **Keynote lecture** Danilo Bersani (Italy)

Analysis of pigments by Raman spectroscopy

10:10 - 10:30 OP31 Christoph Herm (Germany)

Early 20th century commercial pigments from a manufacturer's sample collection analyzed with Raman spectroscopy

10:30 - 10:50 OP32 Lavinia de Ferri (Norway)

Characterization of powdered pigments for pictorial retouching by Raman spectroscopy

10:50 - 11:20 **Coffee break**

Session 12 - Material characterization and degradation processes

11:20 - 11:40 OP33 Stefano Legnaioli (Italy)

New evidence for the intentional use of calomel as a white pigment

11:40 - 12:00 OP34 Teresa Madeira (Germany)

*Tubes of paint used by Vieira da Silva (1908-1992):
Application of Raman spectroscopy and complementary techniques*

12:00 - 12:20 OP35 Eva Mariasole Angelin (Portugal)

A closer look at red in Portuguese historical plastics: a Raman microscopy study

12:20 - 13:00 **Discussion and concluding remarks**

13:00 - 14:00 **Coffee**

14:00 End