Welcome
Susan Lammers, Director Cultural Heritage Agency of the Netherlands (RCE)
Boris Pretzel, IRUG Regional Chair Europe, IRUG Board Member
Suzan de Groot (RCE), Conference Committee Chair, IRUG Board Member

Keynote speaker
Standoff mid-Infrared emissive imaging spectroscopy to map artists’ materials in paintings
John Delaney, National Gallery of Art, Washington

14.30-15.10
5 min break

15.10-15.40
ORPI20 – Approaches to explore early 20th century SOPs in historic paint outs with Raman spectroscopy
Rika Pause, Inez van der Werf, Klaas Jan van den Berg

15.40-16.05
Comprehensive IR data analysis methods for the study of paint degradation processes
Joen Hermans

16.05-16.15
10 min break

16.15-16.40
Characterisation of lime-based paints by micro-Raman and external reflection FTIR spectroscopies
Simi Mangani, Gianluca Pastorelli

16.40-17.05
IR and Raman spectroscopy for the restoration of artworks
Barbara Bravo, Kevin Hellemans, Thermo Fisher Scientific

17.05-17.30
The characterization of multi-layered paint chips by means of FT-IR ATR imaging as essential process in art restoration science
Jo d’Herde, PerkinElmer

17.30-17.35
5 min break

17.35-18.00
The hidden secrets beyond a box. ARCAer PROJECT - Conservation and analytical study of antique ensembles of reliquaries
Carolina Barata, Alexandre Pais, Ana Manhita, Ana Margarida Cardoso, Cristina Dias, Diana Cunha, Margarida Nunes, Nuno Camarneiro, Teresa Ferreira

18.00-18.25
Raman, FTIR and SEM mapping of Paul Gauguin’s Poèmes Barbares
K. Eremin, G. Rayner, A. McClelland, T. Cavanaugh, K. Smith, M. Walton

18.25
End day 1
**Program IRUG14**

**Day 2**

**Thursday, June 3, 2021**

**Times in CET**

**14.00-14.25**

The use of polyethylene in conservation and object storage: a spectroscopic investigation into the chemistry of polymer additives

*Barbara Stuart, Sharon Wong, Karina Palmer, Rosemary Goodall, Alice Cannon, Cancy Chu, Alice Beale, Fran Zilio, Petronella Nel, Holly Jones-Amin and Paul Thomas*

**14.25-14.50**

In situ identification of plastics: evaluation, comparison and application of external and diffuse reflectance FTIR accessories

*Eva Mariasole Angelin, Susana França de Sá, Marcello Picollo*

**14.50-14.55**

5 min break

**14.55-15.20**

Preservation of collections: FTIR for testing suitability of self-sealing polyethylene bags for long-term storage and for damage assessment of objects, in particular archeological bone

*Marianne Odlyha, Chloe Pearce, Armelin Fennelly, David Thickett, Perry Higgs, Genoveva Burca, Laurent Bozec*

**15.20-15.45**

Project plastics: the role of FTIR in the development of the Plastic Identification Tool

*Olivia van Rooijen, Carien van Aubel, Suzan de Groot, Henk van Keulen*

**15.50-16.00**

10 min break

**16.00-16.40**

Poster session

**The identification of organic dyes in painting by μFTIR and μRaman- spectroscopies**

*Valentinovna Burtseva, Irina Alexandrovna Balakhnina*

**A discovery of methylene blue in a pictorial art: case study of Portrait of Nicholas Roerich by Svyatoslav Roerich**

*Ekaterina Morozova, Irina Grigorieva, Irina Kuznetsova*

**Tracing the line: Investigating Hans Bellmer’s white drawings using Raman and transmission FTIR spectroscopies**

*Abed Haddad, Chris McGlinchey, Laura Neufeld*

**Pigment identification in frescoes of the church Santa Maria Maggiorre in Sovana**

*Meropi Katsantonis, Theodore Ganetsos, Tina Romantzi, Carmela Crescenzi, Foteini Stringari*

**Evaluation of the condition of cellulose nitrate book bindings by spectroscopic methods**

*Vítězslav Knotek, Petra Vávrová, Nikola Šipošová, Radka Kalousková, Jitka Neoralová*

**Pictorial materials in the mural decoration of a Thracian tomb near Ruen, Bulgaria, identified by the application of combined spectral methods**

*Denitsa Y. Yancheva, Doroteya T. Gyurdjiska-Ivanova*

**16.40-17.05**

Pigments from the legacy of Arnold Böcklin and Edvard Munch studied by synchrotron far-infrared spectroscopy

*Ljiljana Puskar, Irina Sandu, Ulrich Schade, Hartmut Kutzke*
17.05-17.30 A technical study of Chagall’s painting materials: the synergistic use of Raman and FTIR spectroscopy
Inez van der Werf, Suzan de Groot, Henk van Keulen, Madeleine Bisschoff, Meta Chavannes, Klaas Jan van den Berg

17.30-17.40 10 min break

17.40-18.05 Geranium lake pigment: structure and changes during ageing
Victoria Beltran, Andrea Marchetti, Karolien De Wael

18.05-18.30 Mansfieldite (AlAsO₄ · 2H₂O): A new white pigment in Himalayan artwork
Gregory Smith, Claire Hoevel, Patrick Cavanagh, Gregory Druschel

18.30 End of day 2
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<td>New perspectives for Molecular Spectroscopy. The definitive approach for chemical imaging</td>
<td>Diego Sali, Bruker</td>
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<td>14.50-15.15</td>
<td>High performance micro-Raman spectroscopy in a portable platform</td>
<td>Andrew King, Renishaw</td>
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<td>15.20-15.45</td>
<td>Tibetan book covers: An investigation of the materials and techniques</td>
<td>Thorsten Allscher, Simon Mindermann</td>
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<td>16.45-16.10</td>
<td>Characterization of materials in manuscripts by ER-FTIR – strengths and weaknesses of the non-invasive technique</td>
<td>Wilfried Vetter, Federica Cappa, Manfred Schreiner</td>
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<td>16.20-16.45</td>
<td>Advanced vibrational spectroscopy methods for heritage science</td>
<td>Claudia Conti, Alessandra Botteon, Chiara Colombo, Marco Realini, Anna Piccirillo, Francesca Casadio, Jennifer Park, Marc Walton, Stephanie Zaleski, Pavel Matousek</td>
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<td>17.45-17.10</td>
<td>Vibrational spectroscopies for the conservation of silver</td>
<td>David Thickett, Boris Pretzel</td>
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<td>17.10-17.35</td>
<td>From spruce resin to castoreum: Identification of organic residues on ancient projectile weapons</td>
<td>Kate Helwig, Jennifer Poulin, Valery Monahan, Christian Thomas</td>
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<td>17.40-18.05</td>
<td>Near infrared-shortwave infrared fiber optic reflectance spectroscopy as an early warning sensor for glass deterioration</td>
<td>Lynn B. Brostoff, Stephanie Zaleski, Carol Lynn Ward-Bamford, Nicholas Kivi, Andrew C. Buechele, Isabelle S. Muller, Murray H. Loew, Fenella G. France</td>
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<td>18.05-18.30</td>
<td>Submicron simultaneous non-contact IR+Raman microscopy – A new paradigm in vibrational spectroscopy</td>
<td>Mustafa Kansiz, PhotoThermal Spectroscopy</td>
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