

## PRELIMINARY PROGRAM

(Presenting author only; see abstracts for full author listing)

All presentations will be held at the Art Gallery of NSW in the Domain Theatre, Lower Level 3.

Morning, afternoon tea & lunches with poster sessions and trade displays will be held in Function Space, Ground Level.

### Day 1 – Wednesday 5 December 2018

8:30-9:15 Registration & poster installation

9:15-9:25 Welcome to country

9:25-9:40 Welcome to Art Gallery of NSW

9:40-10:20 Keynote speaker  
Dale Harding, Artist

10:20-11:00 Session I

**Non-destructive characterisation of Aboriginal Australian mineral pigments by near-IR HyLogger™ colour and mineral analysis**

Rachel Popelka-Filcoff, College of Science & Engineering, Flinders University, Australia

**The identification of blue pigments on artefacts in the Sydney University Museums collections**

Elizabeth Carter, Sydney Analytical Vibrational Spectroscopy Facility, University of Sydney, Australia

11:00-11:40 Morning tea & poster display

Sponsored by Sydney Analytical Vibrational Spectroscopy Core Research Facility, The University of Sydney

11:40-13:00 Session II

**New insights into the material culture of the American Southwest**

Christina Bisulca, Detroit Institute of Arts, USA

**Characterizing the Physical and Chemical Alterations in Asian Lacquer Films**

Herant Khanjian, Getty Conservation Institute, USA

**The application of FTIR microspectroscopy to the study and conservation of excavated textiles**

Christina Margariti, Centre for Textile Research, Denmark

**Analysis of textile fibres using ATR-FT-IR spectroscopy, reflectance IR spectroscopy and chemometric methods**

Pilleriin Peets, University of Tartu, Estonia

13:00-14:00    **Lunch**  
Sponsored by Renishaw PLC

14:00-14:30    **Quick poster presentations**

**Neutron techniques for Heritage materials**

Filomena Salvemini, Australian Institute of Neutron Scattering, Australian Nuclear Science and Technology Organisation, Australia

**Optimising an FTIR Analysis Methodology for Identifying Polymers in Cultural Heritage Collections**

Julianne Bell, Grimwade Centre for Cultural Materials Conservation, University of Melbourne, Australia

**An FTIR survey of contemporary pre-primed artist canvases**

Gillian Osmond, Queensland Art Gallery|Gallery of Modern Art

**Investigating Chinese tradeware ceramics from Angkor with FTIR Spectroscopy**

Lorraine Leung, Department of Archaeology, University of Sydney, Australia

**Examination of chalcolithic Jordanian beads using Raman and Infrared Spectroscopy**

AM Welsch, Sydney Analytical Vibrational Spectroscopy Facility, University of Sydney, Australia

**Spectroscopic Analysis of pigments from the coffin of the 2500-year-old Egyptian mummy Mer-Neith-it-es for digital recolouration**

James Fraser, The Nicholson Museum, University of Sydney

14:30-14:50    **Developing the IRUG DB Spectral Search Feature**

Beth Price, Philadelphia Museum of Art, USA; Suzanne Lomax, National Gallery of Art, Washington, USA; Jeff Levi, DLS Solutions, Inc., USA

14:50-15:30    **Session III**

**Analysis of naturally- and artificially- aged paper using variable angle ATR infrared spectroscopy**

Karin van der Pal, School of Molecular and Life Sciences, Curtin University, Australia

**ALD Coatings to Protect Metal Art Objects from Atmospheric Corrosion**

Rita Wiesinger, Institute of Science & Technology in Art, Academy of Fine Arts, Austria

15:30-16:00    **Afternoon tea & poster display**  
Sponsored by Bruker Pty Ltd

16:00-16:40    **Session IV**

**Characterisation of contents from the coffin of the 2500-year-old Egyptian mummy Mer-Neith-it-es**

Therese Harrison, Sydney Analytical Vibrational Spectroscopy Facility, University of Sydney, Australia

**Identification and characterisation of faience beads from the coffin of the 26<sup>th</sup> dynasty Egyptian mummy Mer-Neith-it-es**

Michelle Wood, Sydney Analytical Vibrational Spectroscopy Facility, University of Sydney, Australia

**18:00-19:30 Welcoming drinks**  
Sponsored by ThermoFisher Scientific  
(Art After Hours continues to 22:00)

**Day 2 – Thursday 6 December 2018**

**9:30-10:10 Keynote speaker**  
**Materials and techniques of traditional Aboriginal bark paintings**  
Narayan Khandekar, Straus Center for Conservation, Harvard University

**10:10-10:50 Session V**

**Project plastics: How to identify plastics without a lab**

Suzan de Groot, Cultural Heritage Agency of the Netherlands (RCE), The Netherlands

**Reassessing Reference Materials: Surprises Encountered When Building a Spectral Library**

Gregory Smith, Indianapolis Museum of Art at Newfields, USA

**10:50-11.30 Morning tea**

**11.30-12:30 Session VI**

**Assessment of chemical ageing of cellulose acetate**

Sue Gatenby, Museum of Applied Arts and Sciences, Australia

**Application and advantages of external reflection in the material determination of photographic materials, negatives and film for a fast material testing via FTIR spectroscopy**

Thorsten Allscher, Institute for Conservation and Restoration, Bayerische Staatsbibliothek, Munich, Germany

**A Spectroscopic Investigation of Paraloid Blends for Use as Archaeological Adhesives**

Barbara Stuart, Centre for Forensic Science, University of Technology Sydney, Australia

**12:30-13:00 Lunch**  
Function space, Ground Level

**13:00-17:00**    **Excursions**  
Derivan Paint factory, Rhodes  
ANSTO, Lucas Heights  
iCinema, University of NSW, Randwick  
Sydney Observatory, The Rocks

**18:00-21:00**    **Conference dinner**  
Athol Hall, Mosman

**Day 3 – Friday 7 December 2018**

**9:30-10:50**    **Session VII**

**A Case Study: Two Newly Discovered Jackson Pollock Paintings?**  
John Knowles, MicroVisionLabs Inc, USA

**Macro-X-ray fluorescence in combination with micro-Raman spectroscopy in the battle against forged paintings: a powerful synergy**  
Steven Saverwyns, Royal Institute for Cultural Heritage, Belgium

**Handheld FTIR spectroscopy for non-invasive screening and identification of varnishes in painting collections. A pilot study on six works by Edvard Munch**  
Thierry Ford, The National Museum of Art, Norway

**Raman Spectroscopy and Laser Desorption Ionization Mass Spectrometry (LDI-MS) as Complementary Editors of Structures of Historical and Novel Azo-Pigments**  
Suzanne Lomax, National Gallery of Art, USA

**10:50-11:30**    **Morning tea & Trade exhibition**  
Sponsored by Agilent Technologies Australia Pty Ltd

**11.30-13:00**    **Session VIII**

**Study of metal soaps protrusions in Georgia O’Keeffe oil paintings by FESEM-EDX and FTIR spectroscopy**  
Annette Ortiz, Center for Scientific Studies in the Arts, Northwestern University, USA

**Investigation into the Behaviour of Hydrogenated Castor Oil in Modern Oil Paints**  
Kim Vernon, Grimwade Centre for Cultural Materials Conservation, University of Melbourne, Australia

**Surface Analyses for Conservation**  
David Thickett, English Heritage, UK

**A Spectroscopic Look at Indian Yellow pigment and Related Compounds**  
Aaron Shugar, Patricia H. and Richard E. Garman Art Conservation Department, SUNY Buffalo State, USA

**13:00-14:10**    **Lunch & trade exhibition**

14:10-15:30    Session IX

**THz IR spectra of artists oil paint and their application to the study of artworks under authentication assessment to Claude Monet and Vincent van Gogh**

David Thurrowgood, Applied Conservation Science Pty Ltd, Australia

**Terahertz Spectroscopy Applied to Pigment Identification**

Andrew Squires, Institute for Superconducting and Electronic Materials and School of Physics, University of Wollongong, Australia

**Infrared Chemical Imaging of Degradation Products in Cross-Sections from Paintings and Painted Objects**

Eric Henderson, Canadian Conservation Institute, Canada

**Infrared Microspectroscopy of Cultural Heritage Materials at the Australian Synchrotron**

Mark Tobin, Australian Synchrotron

15:30-16:10    Afternoon tea & trade exhibition

Sponsored by Perkin Elmer Life and Analytical Sciences

16:10-16:50    Session X

**FTIR and Raman Spectroscopy in Combination with XRF for the Characterization of Medieval Manuscripts on Parchment**

Manfred Schreiner, Institute of Science & Technology in Art, Academy of Fine Arts, Austria

**Salvator Mundi: An Investigation of the Materials and Techniques**

Nica Gutman Rieppi, Art Analysis & Research, New York, USA

16:50-17:00    Closing

**Posters:**

(Presenting author only; see abstracts for full author listing)

**Optimising an FTIR Analysis Methodology for Identifying Polymers in Cultural Heritage Collections**

Julianne Bell, Grimwade Centre for Cultural Materials Conservation, University of Melbourne, Australia

**Characterisation of an Early 1940's Rubber Anti-Gravity Suit and Implications for Museum Storage and Conservation**

Elizabeth Carter, Sydney Analytical Vibrational Spectroscopy Facility, University of Sydney, Australia

**Rapid Identification of Cellulose Nitrate Film in the Historic Photograph Collection of Sydney University Museums**

Elizabeth Carter, Sydney Analytical Vibrational Spectroscopy Facility, University of Sydney, Australia

**An Overview of the Use of Raman Microspectroscopy for the Identification of Gemstones in Museum Objects**

Michele Derrick, Museum of Fine Arts Boston, USA

**Spectroscopic Analysis of pigments from the coffin of the 2500-year-old Egyptian mummy Mer-Neith-it-es for digital recolouration**

James Fraser, The Nicholson Museum, University of Sydney

**Problems with obtaining good quality degradation spectra on three dimensional museum items**

Rosemary Goodall, Museums Victoria

**Assessing portable Raman spectroscopy for testing ethanol content in specimen jars of the natural history collection**

Therese Harrison, Sydney Analytical Vibrational Spectroscopy Facility, University of Sydney, Australia

**Investigating Chinese tradeware ceramics from Angkor with FTIR Spectroscopy**

Lorraine Leung, Department of Archaeology, University of Sydney, Australia

**Application of ATR/FTIR to case studies in preventive conservation and novel conservation treatments**

Marianne Odlyha, Birbeck, University of London, U.K.

**An FTIR survey of contemporary pre-primed artist canvases**

Gillian Osmond, Queensland Art Gallery|Gallery of Modern Art

**Vibrational analysis of  $\beta$ -naphthol colorants: a comparative study through IR and Raman spectroscopy**

Marcello Picollo, IFAC-CNR, Sesto Fiorentino, Italy

**Japanese Sugito in the Philadelphia Museum of Art: Investigation of Painted Decorations and Soluble Nylon Coatings**

Beth Price and Katie Shulman, Philadelphia Museum of Art, USA

**The IRIS beamline: Applications to cultural heritage materials**

Ljiljana Puskar, Helmholtz-Zentrum for materials and energy, Berlin

**An Indigo We Didn't Know: Characterization and First Identification of 5,5'-Dibromoindigo Dye in a Japanese Yukata**

Gregory Smith, Indianapolis Museum of Art at Newfields, USA

**Neutron techniques for Heritage materials**

Filomena Salvemini, Australian Institute of Neutron Scattering, Australian Nuclear Science and Technology Organisation, Australia

**Characterisation and quantification study of lacquer materials by FTIR analysis**

Shuya Wei, Institute of Cultural Heritage and History of Science & Technology, Beijing University of Science and Technology, Beijing, China

**A spectroscopic investigation of sculptural modelling clay materials for conservation purposes**

Barbara Stuart, Centre for Forensic Science, University of Technology Sydney, Australia

**Examination of chalcolithic Jordanian beads using Raman and Infrared Spectroscopy**

AM Welsch, Sydney Analytical Vibrational Spectroscopy Facility, University of Sydney, Australia

**The Potential of IR and Raman Spectroscopy to Determine Pigment and Binder Concentration in Modern Paint Samples**

Rita Wiesinger, Institute of Science & Technology in Art, Academy of Fine Arts, Austria

This conference is proudly funded by the NSW Government in association with ThermoFisher Scientific, Renishaw PLC, Sydney Analytical Vibrational Spectroscopy Core Research Facility The University of Sydney, Agilent Technologies Australia Pty Ltd, Bruker Pty Ltd, Perkin Elmer Life and analytical Sciences and the John Morris Group

