



WORLD MEETING  
PARIS 2019

## Heritage Sciences and Technologies

Scientific Symposium | Frontiers in Heritage Science

Thursday 14 February 2019

9:00 > 9:45 Welcome of Participants

**Xavier Darcos**, Chancellor of the Institut de France, France

**Catherine Bréchnac**, Secrétaire perpétuel honoraire of the Académie des sciences, Ambassador of science, technology and innovation, France

**Laurent Petitgirard**, Secrétaire perpétuel of the Académie des beaux-arts, France

**Nicolas Grimal**, Secretary General, Commission consultative des recherches archéologiques à l'étranger du ministère de l'Europe et des Affaires étrangères, Member of the Académie des Inscriptions et Belles-Lettres, France

**Laurent Bili**, Director General for Globalization, Culture, Education and International Development, ministère de l'Europe et des Affaires Étrangères, France

10:15 > 10:30 Introduction

**Loïc Bertrand**, Director, IPANEMA laboratory (CNRS, MiC, UVSQ) and Scientific Director of the European Research Infrastructure for Heritage Science (preparatory phase), Saint-Aubin, France

**Denis Gratias**, Emeritus Research Director, Institut de Recherche de Chimie Paris (Chimie ParisTech, CNRS), Corresponding Member of the Académie des sciences, France

**Philippe Janvier**, Emeritus Research Director, Centre de recherche sur la paléobiodiversité et les paléo-environnements (CNRS, MNHN, Sorbonne Université), Member of the Académie des sciences, France

### MICRO-SYMPIOSIUM - ARCHAEOLOGY

10:30 > 10:50

**Thilo Rehren**, A.G. Leventis Professor in Archaeological Sciences and Director of Science and Technology, Archaeology Research Centre, The Cyprus Institute, Nicosia, Cyprus

10:50 > 11:10

**Mélanie Roffet-Salque**, Royal Society Dorothy Hodgkin Fellow, School of Chemistry, University of Bristol, The United Kingdom

11:10 > 11:30

**Philippe Dillmann**, CNRS Research Director, Laboratoire Métallurgie et Cultures, Institut de Recherche sur les Archéo-MATériaux (CNRS, Université Bordeaux Montaigne, Université d'Orléans, Université de Technologie de Belfort-Montbéliard) and Nanosciences et Innovation pour les Matériaux, la Biomédecine et l'Énergie (CEA, CNRS), Saclay, France

11:30 > 11:50

**Safaa Ahmed Abd El Salam**, Professor, Head of the Department of Paintings, Faculty of Fine Arts, University of Alexandria, Egypt

11:50 > 12:05

#### Chairs' Conclusions

**Hany Helal**, Professor, Faculty of Engineering, Cairo University and President of Senghor University, Alexandria, Egypt

**Anne Lehoërff**, Professor, Archéologie et Littérature des Mondes Anciens (Université de Lille, CNRS, MiC), and Vice-chair of the Conseil national de la Recherche archéologique, Lille, France

**Jean-Denis Vigne**, CNRS Research Director, Deputy managing director for Research, Expertise, Innovation and Education at the Muséum national d'histoire naturelle, Archéozoologie, archéobotanique : sociétés, pratiques et environnements laboratory (CNRS, MNHN), Paris, France

12:05 > 13:45

Lunch Break  
and Poster Display

## MICRO-SYMPOSIUM - METHODS

13:45 > 14:05

**Uwe Bergmann**, Distinguished Staff Scientist, SLAC National Accelerator Laboratory and Principle Investigator, Stanford PULSE Institute, Stanford, USA

14:05 > 14:25

**Ilaria Bonaduce**, Associate Professor, Department of Chemistry and Industrial Chemistry, University of Pisa, Italy

14:25 > 14:45

**Caroline Tokarski**, Professor, Protéome Platform, Institut de Chimie et Biologie des Membranes et des Nano-objets (CNRS, Université de Bordeaux, Bordeaux INP), Bordeaux, France

14:45 > 15:05

**Paul Tafforeau**, Researcher, European Synchrotron Research Facility, Grenoble, France

15:05 > 15:20

### Chairs' Conclusions

**Andrew King**, Researcher, Synchrotron SOLEIL, Saint-Aubin, France

**Anita Quiles**, Head of the Archaeometry department, IFAO, Cairo, Egypt

15:20 > 15:50 **Coffee Break**

## MICRO-SYMPOSIUM - THE OBJECT IN ITS HISTORY

15:50 > 16:10

**Jean-Philippe Échard**, Curator, Cité de la Musique – Philharmonie de Paris and Centre de recherche sur la conservation, Paris, France

16:10 > 16:30

**Charlotte Guichard**, CNRS Research Director, Institut d'histoire moderne et contemporaine (CNRS, ENS, Université Panthéon-Sorbonne), Paris, France

16:30 > 16:50

**Dominique Pieri**, Director, Département Archéologie et Histoire de l'Antiquité, Institut français du Proche-Orient, Beirut, Lebanon

16:50 > 17:05

### Chairs' Conclusions

**Étienne Anheim**, Directeur d'études, Centre de recherches historiques (CNRS, EHESS), Paris, France

**Sergey Sirro**, Head of the Scientific department, The State Russian museum, Saint Petersburg, Russia

**Dominique Vingtain**, Director, Musée du Petit Palais, Avignon, France

## ROUND TABLE - HERITAGE AND RESEARCH INFRASTRUCTURES

17:05 > 17:20

### Setting the scene

**Webber Nodoro**, Director General, International Centre of the Study of the Preservation and Restoration of Cultural Property, Rome, Italy

17:20 > 18:20

### Panellists

**Alison Heritage**, Heritage Science Officer, International Centre for the Study of the Preservation and Restoration of Cultural Property, Rome, Italy

**Johanna Leissner**, German Research Alliance Cultural Heritage, Fraunhofer Sustainability Network, Brussels, Belgium

**Costanza Miliani**, Senior Researcher and Scientific Coordinator of the mobile laboratory MOLAB, ISTM, CNR, Perugia, Italy

**Laurent Romary**, Inria Research Director, Team ALMAnaCH, Inria, Paris, France and Former Director general of DARIAH ERIC

**Véronique Sorano-Stedman**, Head of Restoration Department, Musée national d'Art moderne – Centre Georges Pompidou, Paris, France

18:20 > 18:35

### Chairs' Conclusions

**Loïc Bertrand**, Director, IPANEMA laboratory (CNRS, MiC, UVSQ) and Science Director of the European Research Infrastructure for Heritage Science (preparatory phase), Saint-Aubin, France

**Marei Hacke**, Conservation Scientist, Swedish National Heritage Board, Visby, Sweden

**Aliz Simon**, Division of Physical and Chemical Sciences, International Atomic Energy Agency, Vienna, Austria

18:35 > 18:45

Intervention of **Luca Pezzati**, Interim Director General, European Research Infrastructure for Heritage Science (E-RIHS)

19:00 > 21:30 **Reception**

Piano Recital by Julie Alcaraz

Cocktail Reception until 21:30

8:30 > 9:00

Welcome of Participants

## MICRO-SYMPOSIUM - CULTURAL HERITAGE

9:00 > 09:20

**Katrien Keune**, Associate Professor, Van 't Hoff Institute for Molecular Sciences, University of Amsterdam and Painting Research Scientist, Rijksmuseum Amsterdam, The Netherlands

9:20 > 09:40

**Piero Baglioni**, Professor, Director, Centre for Colloid and Surface Science, University of Florence, Italy

9:40 > 10:00

**Tarek Tawfik**, Director General, The Grand Egyptian Museum, Giza, Egypt

10:00 > 10:20

**Jean-Marc Vallet**, Research Engineer, Head of Research, Centre Interdisciplinaire de Conservation et Restauration du Patrimoine, Marseille, France

10:20 > 10:35

**Chairs' Conclusions**

**Anne Bouquillon**, Research Engineer, Centre de recherche et de restauration des musées de France (MiC) and Institut de Recherche de Chimie Paris (Chimie ParisTech, CNRS), Paris, France

**Robert van Langh**, Head of the Department of Conservation and Science, Rijksmuseum Amsterdam, The Netherlands

**Philippe Walter**, CNRS Research Director, Director of Laboratoire d'Archéologie Moléculaire et Structurale (CNRS, Sorbonne Université), Paris, France

10:35 > 11:00

Coffee Break

## MICRO-SYMPOSIUM - DATA

11:00 > 11:20

**Rob Erdmann**, Senior Research Scientist, Rijksmuseum Amsterdam, The Netherlands

11:20 > 11:40

**Paul Messier**, Head of Lens Media Lab, Institute for the Preservation of Cultural Heritage, Yale University, New Haven, USA

11:40 > 12:00

**Patrice Abry**, CNRS Research Director, Signaux, systèmes et physique, Laboratoire de physique (ENS Lyon, CNRS, Université Claude Bernard), Lyon, France

12:00 > 12:15

**Chairs' Conclusions**

**Agnès Desolneux**, CNRS Research Director, Centre de mathématiques et leurs applications (CNRS, ENS Paris-Saclay), Cachan, France

**David Donoho**, Professor, Department of Statistics, Stanford University, USA

12:15 > 13:45

Lunch Break  
and Poster Display

## ROUND TABLE - WORKING IN HERITAGE SCIENCE

13:45 > 14:00

### Setting the scene

**Claire Barbillon**, Director, École du Louvre, Paris, France

14:00 > 15:00

### Panellists

**Djillali Benouar**, Professor and Director of research, Faculty of Civil Engineering, Université des Sciences et de la Technologie Houari Boumediene (USTHB), Algiers, Algeria

**Sigrïd Mirabaud**, Conservation Scientist, Institut national d'histoire de l'art, Paris, France

**Matija Strlic**, Professor, UCL Institute for Sustainable Heritage, Faculty of the Built Environment, University College London, The United Kingdom

15:00 > 15:15

### Chairs' Conclusions

**Denis Gratias**, Emeritus Research Director, Institut de Recherche Chimie Paris (CNRS, Chimie ParisTech) and Corresponding member, Académie des sciences, Paris, France

**Nicolas Grimal**, Secretary General, Commission consultative des recherches archéologiques à l'étranger du ministère de l'Europe et des Affaires étrangères, Member of the Académie des Inscriptions et Belles-Lettres, Paris, France

**Michèle Gendreau-Massaloux**, former Rector of the Academy of Paris, Councillor in charge of institutional relations, Interacademic Group for Development, France

15:15 > 15:45 **Coffee Break**

## MICRO-SYMPOSIUM - PALAEOLOGY

15:45 > 16:05

**Isabelle Kruta**, Senior Lecturer, Centre de recherche sur la paléobiodiversité et les paléoenvironnements (MNHN, CNRS, Sorbonne Université), Paris, France

16:05 > 16:25

**Ludovic Orlando**, CNRS Research Director, Anthropobiologie Moléculaire et Imagerie de Synthèse (CNRS, Université Toulouse III Paul Sabatier), Toulouse, France, and Centre for GeoGenetics, Natural History Museum of Denmark, Copenhagen, Denmark

16:25 > 16:45

**Sophie Sanchez**, Associate Senior Lecturer, Department of Organismal Biology, University of Uppsala, Sweden

17:20 > 18:00

### Adoption of the solemn declaration "Heritage, Sciences and Technologies: an Opportunity for our Societies and the Global Economy"

**François Guinot**, President of the Interacademic Group for Development, France

**Catherine Bréchnignac**, Secrétaire perpétuel honoraire of the Académie des sciences, Ambassador of science, technology and innovation, France

**Loïc Bertrand**, Director, IPANEMA laboratory (CNRS, MiC, UVSQ) and Science Director of the European Research Infrastructure for Heritage Science (preparatory phase), Saint-Aubin, France

16:45 > 17:05

**Emily Rayfield**, Professor, Department of Earth Sciences, University of Bristol, The United Kingdom

17:05 > 17:20

### Chairs' Conclusions

**Philippe Janvier**, Emeritus Research Director, Centre de recherche sur la paléobiodiversité et les paléoenvironnements (CNRS, MNHN, Sorbonne Université), Member of the Académie des sciences, France

**Jeremy Martin**, Research Fellow, Laboratoire de Géologie de Lyon: Terre, Planètes et Environnement (CNRS, ENS Lyon, Université Claude Bernard), Lyon, France

**Isabelle Rouget**, Senior Lecturer, Centre de recherche sur la paléobiodiversité et les paléoenvironnements (CNRS, MNHN, Sorbonne Université), Paris, France

18:15 > 18:30 **Closing Remarks**

**Valérie Péresse**, President, Région Île-de-France, France

**Antoine Petit**, Chairman and Chief Executive Officer, CNRS, France