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INTERNATIONAL CONFERENCE ON SCIENCE AND TECHNOLOGY IN ARCHAEOLOGY AND CONSERVATION

**12-18 AUGUST 2002, QUEEN RANIA'S INSTITUTE OF TOURISM AND
HERITAGE, THE HASHEMITE UNIVERSITY ZARQA – JORDAN**

Under The Patronage of Her majesty Queen Rania Al Abdullah of Jordan

Queen Rania's Institute for Tourism and Cultural Heritage has been established to meet the rising demands for skilled human resources and research in Sustainable Tourism and Cultural Heritage Management in Jordan. The conference has the multifold purpose of exposing as many specialists as possible to the Institute's activities and research interests, enhancing international cooperation between Jordan and other Institutions all over the world, and allowing for Technology Transfer in a rapidly growing field of specialization, namely Conservation and Management of Cultural Heritage.

Please visit the site: <http://www.hu.edu.jo/conferences/confer.htm>

If you are interested kindly note that the dead line for the abstracts is on April 30th 2002. If you are interested please fill the participation form as soon as possible. We are getting an excellent response and delaying your application might force us to regretfully decline accepting your paper.

With all my best Regards.

Dr. Talal Akasheh

Main Topics to be covered

- Archaeology
- Tourism
- Cultural Heritage Management
- AIS: Archaeological Information System
- GIS: Geographical Information System
- Information Technologies
- Stone Weathering
- Restoration of Monuments and Historical Artifacts
- Policies and Strategies in Conservation
- Archaeometry
- Museology
- Imaging And Non-Destructive Techniques Applications
- Ancient Art and Technologies
- Landscape Archaeological Conservation

Suggested Topics

- Archaeological Excavation
- Archaeological Survey
- Bioarchaeological Analytical Techniques
- Osteoarchaeology
- Lithic Analysis
- Non-Destructive Methods in Archaeological Studies
- New Techniques in Archaeological Geophysics
- Resistivity Survey
- Magnetometer Survey
- Magnetic Susceptibility Survey
- Ground Penetrating Radar (GPR)
- Geophysical Diffraction Tomography (GDT)
- Soil Science in Prospection
- Aerial Photography in Archaeology
- Remote Sensing in Archaeology
- Imaging Radar
- Non-Destructive Testing Using Imaging
- Thermographic Infrared Multispectral Scanner (TIMS)
- Computed Tomography and Archaeology
- Virtual Reconstructions in Archaeology
- Artificial Intelligence in Archaeology
- Restoration
- Historic Buildings
- Restoration of Archaeological Artworks
- Restoration of Fragile Remains
- Preservation of Ancient Art
- Ancient Art of Technology in Conservation
- Geoarchaeology
- Reconstruction of Archaeological Landscape
- Site Formation Processes
- Technology & Provenance Studies
- Palaeoenvironmental Studies
- Planning and Management of Archaeological Sites
- Mitigation Investigations
- Archaeological and Natural Park Management
- Cultural Aspects in Ancient Societies
- Economic History in Material Production

33rd INTERNATIONAL SYMPOSIUM ON ARCHAEOMETRY

22-26 APRIL 2002 AMSTERDAM, THE NETHERLANDS

SESSIONS

The symposium has seven sessions (no parallel sessions). Six of them are regular, while a seventh theme session is selected by the local organizing committee.

In an attempt to achieve greater coherence and to generate more serious discussion, a part of each session will be allocated to papers on more focussed topics. In selecting papers for oral presentation, convenors will therefore give some preference to those papers that are relevant to the focussed topic. However, some 50 per cent of the oral presentations in each session will still be devoted to other topics related to that session.

- **Field archaeology**
Topic: The application of ground probing radar in archaeology
Convenor: Ron Farquahar and Larry Pavlish
- **Technology and provenance of stone, pigments, and plasters**
Topic: Pigments and paints in the Roman and Byzantine periods
Convenor: Yannis Maniatis
- **Technology and provenance of ceramics (including ceramic pigments) and glass**
Topic: Post-depositional alteration of ceramics
Convenor: Michael Tite and Gerwulf Schneider
- **Technology and provenance of metals**
Topic: Origins of tin - what is new?
Convenor: Pieter Meyers and Ernst Pernicka
- **Dating**
Topic: Chronology of the Middle to Upper Palaeolithic transition in Europe
Convenor: Gunther Wagner
- **Biomaterials**
Topic: Migration and mobility as detected from the analysis of biological materials
Convenor: Mark Pollard
- **Conservation science**
Topic: Science and the in situ preservation of archaeological heritage
Convenor: Henk Kars

PROGRAM

Sunday 21st of April

16.00-19.00 Registration and reception at Novotel, Amsterdam

Europaboulevard 10, Amsterdam, Tel: +31 (0)20 - 541 11 23

Monday 22 nd of April

9.30 Opening Session

Aula, Vrije Universiteit, Boelelaan 1105, Amsterdam, Tel: +31 (0)20 444 77 77
Opening address by Henriette van der Linden, Director of the Rijksdienst voor het Oudheidkundig Bodemonderzoek (National Service for Archaeological Heritage), and Pier Vellinga, Dean of the Faculty of Earth and Life Sciences, Vrije Universiteit.

Field Archaeology: The Application of Ground Probing Radar in Archaeology

9.50 002 - Large Scale GPR Survey to Locate the Forum of the Roman Colonia Carnuntum

A. Eder-Hinterleitner, W. Neubauer, S.S. Seren, M. Kandler & P. Melichar

10.10 004 - Large Scale GPR Surveys on Roman Buildings

W. Neubauer, A. Eder-Hinterleitner & S.S. Seren

10.30 Coffee break

10.50 003 - Ground Penetrating Radar Survey over a Suspected Roman Amphitheatre at Richborough Castle, Kent, UK

N. Linfoord

Field Archaeology: General session

11.10 019 - Multi-Electrode Resistivity Method and the Geophysical Research of Mediaeval Archaeological Localities

J. Valenta

11.30 010 - New Scale of Cooperation of Aerial and Geophysical Prospection in Archaeological Projects in Bohemia

R. Křivánek & M. Gojda

Technology and Provenance of Ceramics (including ceramic pigments) and Glass: Post-Depositional

Alterations of Ceramics

11.50 076 - Chemical Alteration of Ceramic Made from Calcareous and Non-Calcareous Clays

G. Schneider

12.10 070 - The Role of Chemical, Micromorphological and Archaeological Evidence in Determining Site-Specific Production Provenance of Archaeological Ceramics, and Post-Depositional Alteration of their Composition

D. Adan-Bayewitz, M. Wieder, F. Asaro & R.D. Giaouque

12.30 Lunch and Poster session I

14.00 071 - Roman Amphorae from the Julia Felix Shipwreck: Alteration and Provenance

J. Buxeda i Garrigós, M.A. Cau Ontiveros, M. Madrid Fernández & A. Toniolo

14.20 077 - Direct Evidence of Alteration in Pottery During Burial by Neutron Activation Analyses of Surface Samples

A. Schwedt, H. Mommsen & N. Zacharias

14.40 Presentation of future venues

M. Tite and others

15.00 Coffee break

Technology and provenance of metals: Origin of Tin-What is New?

15.30 166 - Origin of Tin-What is New?

E. Pernicka

15.50 162 - Feasibility Criteria for the Use of Tin Isotopes in Provenance Studies

R.E. Clayton, C. Gillis & E. Pernicka

16.10 164 - First Indication of Tin at the Ancient Mining Site Near Deh Hosein, West Central Iran: a Possible Source for Luristan Bronze.

M. Momenzadeh, N. Nezafati & E. Pernicka

16.30 200 - The Occurrence and Interpretation of Tin-Rich Intermetallic Phases and Oxides in Archaeological Materials

Th. Rehren & J.P. Northover

18.30 Reception Town Hall Amsterdam, given by the Municipality of Amsterdam Tuesday 23 th of April

Dating: General session

9.00 220 - Comparison of The Age of Individuals from the Avar Period Determined by Anthropological Methods and Amino Acid Racemisation

J. Csapó, Zs. Csapó-Kiss, Zs. Bernert, Zs. Csapó, G. Pohn, L. Költő & J. Csapó Jr.

9.20 223 - The History of Soil Erosion in the Phlious Basin, NE-Peloponnese, Greece: Application of OSL-Dating Techniques Using Small Aliquots to Detect Insufficient Bleaching

M. Fuchs & G.A. Wagner

9.40 233 - The Potential Archaeological Impact of Large Scale Variation in the Marine Reservoir offset through Time

K.R. Ward, S.P.E. Blockley, M. Pollard, E. Donahue & P. Richards

10.00 231 - Radiocarbon Dating of Cremated Bones

J. van der Plicht, A.T. Aerts & J.N. Lanting

10.20 Coffee break

Technology and Provenance of Ceramics (including ceramic pigments) and Glass

10.50 088 - Mineralogy of Ceramics from Tell Beydar (NE-Syria)

T. Broekmans, A. Adriaens & E. Pantos

11.10 143 - Pottery Traditions in Early Bronze Age West Crete: Investigating Technology and Style at Nopigeia, Kissamou.

E. Nodarou, P.M. Day, & V. Kilikoglou

11.30 160 - Provenancing Bronze Age Pottery from Ialysos, Rhodes, by Means of Neutron Activation Analysis

N. Zacharias, E. Karanzali, V. Kilikoglou, T. Marketou, H. Mommsen & A. Schwedt

11.50 096 - Continuity and Change in Pottery Making from Mesolithic to Islamic Periods in Region of 4 th Nile's Cataract (Sudan)

M. Daszkiewicz & E. Kosowska

12.10 137 - Trade and Industry at Qal'at Halab: Petrographic Analysis of Medieval Pottery from the Recent Excavations at the Aleppo Citadel, Syria

R. Mason

12.30 Lunch and Poster session I

Technology and Provenance of Stone, Plasters and Pigments: General session

14.00 065 - Archaeometrical Applications of Raman Spectroscopy: Pigment Identification and Beyond

P. Vandenabeele & L. Moens

14.20 054 - Pictorial Uses, Quality and Provenance of Red And Yellow Ochres Applied on Late Classical and Early Hellenistic Paintings from Macedonia, Greece

V. Perdikatsis & H. Brecolaki

14.40 271 - The History of Odontolite

I. Reiche, C. Vignaud, G. Morin, C. Brouder & M. Menu

15.00 049 - The Juice of the Pomegranate: Quality Control for the Processing and Distribution of Alumen in Antiquity

A. Hall & E. Photos-Jones

15.20 Coffee break

Technology and Provenance of Ceramics (including ceramic pigments) and Glass: General session

15.50 122 - Technological Aspects of Black Gloss Production from Etruria

E. Gliozzo, E. Pantos & I. Memmi Turbanti

16.10 139 - Production of Lustre Decoration: a Comparison Between Ancient and Modern Traditional Techniques

J. Molera, T. Pradell, J. Pérez-Arantegui & M. Vendrell

16.30 086 - Italian Renaissance Lustre Pottery: Nanostructured Composition and Physical Properties

I. Borgia, B. Brunetti, F. Cariati, A. Giulivi, I. Mariani, M. Mellini & A. Sgamellotti

16.50 Presentation Philips Analytical

17.10 Reception at venue given by Philips Analytical

Wednesday 24 th of April

Biomaterials: Human Migration and Mobility as Detected by the Analysis of Biological Materials

9.00 240 - Isotopic Tracing of the Neolithic Alpine Iceman – Clues to his Origin and Migration

W. Müller, H. Fricke & A.N. Halliday

9.20 237 - Strontium Isotopes and Europe's First Farmers: Migration and the Linearbandkeramik in Central Europe

T.D. Price & R.A. Bentley

9.40 238 - Mobility, Diet, and Diagenesis Trace Elemental Analyses of Faunal Remains from Southern Germany

C. Knipper

10.00 239 - Strontium Isotope Analysis and Migration in the South Central Andes: Tiwanaku Colonization of the Osmore Drainage

K. Knudson, T.D. Price, J.E. Buikstra & D.E. Blom

10.20 Coffee break

Technology and Provenance of Stone, Plasters and Pigments: Pigments and Paints in the Roman Byzantine Period

10.50 023 - The Production Technology of Egyptian Blue

G.D. Hatton, M.S. Tite & A.J. Shortland

11.10 022 - White Pigments in Roman Wall Paintings: Literature Review and New Data

D. Daniele

11.30 020 - Characterisation of Organic Pigments on Funerary Paintings in Greece (Macedonia) and Pre-Roman Italy

A. Carmignani, M.P. Colombini, H. Breccoulaki, F. Frezzato & A. Olchini

11.50 038 - Roman Frescoes: Characterization and Provenance of Pigments and Plasters

D. Damiani, E. Gliozzo, M. de Vos, I. Turbanti Memmi & J. Spangenberg

12.10 Introduction to Excursion to Lelystad

Th. Maarleveld

12.30 Lunch

13.30 Departure to the Laboratories for Maritime and Ship Archaeology

16.30 Reception at the Batavia Yard in Lelystad, given by the Rijksdienst voor het Oudheidkundig Bodemonderzoek

Thursday 25 th of April

Conservation Science: *In situ* Preservation of Archaeological Heritage

9.00 280 - *In situ* Preservation – Something to Worry About?

H. Kars

9.20 283 - Evaluating Preservation *In-situ*: Current Research in Archaeological Diagenesis via Integrated Experimentation and Geochemical Modelling

L. Wilson & A.M. Pollard

9.40 278 - Towards a Rational Approach to Archaeological Bone Preservation *In situ*

M.M.E. Jans, M.J. Collins & H. Kars

10.10 282 – Deterioration of Archaeological Material in Soil

A.G. Nord & K. Tronner

10.20 Coffee

Technology and Provenance of Metals: General session

10.50 183 - A Complete Iron Age Copper Smelting Furnace from Cyprus

A. Fasnacht

11.10 174 - Smelting of Chalcopyrite During Chalcolithic Times: Some Have Done It in Ceramic Pots as Vase-Furnaces

D. Bourgarit, B. Mille, A. Burens & L. Carozza

11.30 214 - The Emergence and Development of Brass-Smelting Techniques in China

W. Zhou

11.50 207 - On Pins and Needles: Tracing the Evolution of Copper-Base Alloying at Tepe Yahya, Iran, via ICP-MS Analysis of Common-Place Items

C.P. Thornton, C.C. Lamberg-Karlovsky, M. Liezers & S.M.M. Young

12.10 192 – Technology of the Kushana Coinage

F. Khademi Nadooshan

12.30 Lunch and Poster session II

Technology and Provenance of Metals: General session

14.00 190 - The material of Ingot Torques and its Properties?

M. Junk

14.20 169 - Notes on the Wire Production During the Viking Age

B. Armbruster

14.40 184 - Central Asian Crucibles for Crucible Steel Production: Characteristics and Context (Including Evidence for Local Traditions, Recycling, and as Stone-Paste Forerunner)

A. Feuerbach

15.00 208 - Smelting and Forging High Phosphorus Iron. A study of Archaeological and Reconstituted Artefacts

E. Vega, P Dillmann, P. Fluzin & P. Crew

15.20 Coffee break

15.50 187 – Development of the PIXE–PIGE-PIXRF Association for the Analysis of the Gold from the First Empire of the Steppes

M.F. Guerra, T. Calligaro, J.-C. Dran, C. Moulherat & J. Salomon

Technology and Provenance of Stone, Plasters and Pigments: General session

16.10 069 – Provenance of the White Marble Building Stones in the Monuments of the Ancient Troy

J. Zöldöldi, M. Tóth, B. Székely, M. Satir, P. Árkai

16.30 063 – Comprehensive Source Analysis and the Socioeconomic Role of Obsidian Trade in Northern Italy: New Data from the Middle Neolithic Site of Gaione

R.H. Tykot, A.J.Ammerman, M.B. Brea & M.D. Glascock

16.50 026 - A New Source of Obsidian on the Aegean Island of Yali

Y. Bassiakos, V. Kilikoglou & A. Sampson

17.10 027 - Atlas of Prehistoric (non-metallic) Raw Materials in Hungary

K.T. Biró G. Szakmány, P. Scharek & E. Babinszki

19.00 Symposium Diner at venue with the Savoy Jazz Band

Friday 26 th of April

Biomaterials: General session

9.00 256 - A Gene from the Past

W. Haak, J.Burger & K. Alt

9.20 253 - DNA Preservation in 500,000 Years-old Fossils: Hibernation in Molecular Niches ?

E.M. Geigl

9.40 245 - Carbon Isotopic Analysis of Individual Collagenous Amino Acids and Coastal Diets in the Late Stone Age of South Africa

L.T. Corr, J. Sealy, V. Jones & R.P. Evershed

10.00 249 - Evidence for Widespread Dairying in Prehistoric Britain

R.P. Evershed, M.S. Copley, S.N. Dudd, R. Berstan, G. Docherty, V. Straker & S. Payne

10.20 Coffee break

10.50 246 - Chemical characterisation of Plant Commodities in Archaeological Ceramic Vessels

O. Decavallas, N. Garnier & M. Regert

11.10 263 – Archaeological Resins on Southeast Asian Ceramics: Characterisation and Radiocarbon Dating

C.D. Lampert, I.C. Glover, C.P. Heron, B. Stern, R. Shoocongdej & G.B. Thompson

Technology and Provenance of Ceramics (including ceramic pigments) and Glass: General session

11.30 149 - The Provenance of Antimony and its Implications for the Study of Early Glass

A. Shortland

11.50 151 - Sources of Raw Materials for 9th Millennium BC Glasses from Hasanlu, Iran

C.P. Stapleton, S.E. Swanson & A.M. Ghazi

12.10 117 - Primary Glass Production and Distribution in the Mid-First Millennium AD

I.C. Freestone, Y. Gorin-Rosen, M.J. Hughes, K. Leslie & S. Wolf

12.30 Lunch and Poster session II

14.00 123 – Archaeometric Evidence of A Possible Relationship Between Carolingian Lead-Glass Smoothers and the Glassy Slag Produced by the Lead-Silver Mines Of Melle (France)

B. Gratuze, K.H. Wedepohl, J. Bayley, F. Tereygeol, J. Lancelot & D. Foy

14.20 129 - Glass by Design? Raw Materials, Recipes and Compositional Data

C.M. Jackson & J.W. Smedley

14.40 135 - Oxygen Isotopes in Ancient Glass by Laser Fluorination - Results and Potential

K.A. Leslie, I.C. Freestone & D. Lowry

15.00 Coffee break

15.30 Aitken prize, Venue 2004 and Closing address

Poster session I: Field Archaeology, Dating, Technology and Provenance of Metals and Technology and Provenance of Stone, Pigments and Plasters - Monday and

Tuesday, April 22-23.

Poster session II: Technology and Provenance of Ceramics (including ceramic pigments) and Glass, Biomaterials, Conservation Science and Miscellaneous – Thursday and Friday, April 25-26.

Please visit the site: <http://www.archaeometry.vu.nl/>

XVIII ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ ΦΥΣΙΚΗΣ ΣΤΕΡΕΑΣ ΚΑΤΑΣΤΑΣΗΣ - ΕΠΙΣΤΗΜΗΣ ΥΛΙΚΩΝ

15 - 18 ΣΕΠΤΕΜΒΡΙΟΥ, 2002, ΗΡΑΚΛΕΙΟ ΚΡΗΤΗΣ

Κύριος σκοπός του συνεδρίου είναι η προβολή νέων Ελλήνων επιστημόνων που δραστηριοποιούνται σε καινούριους ερευνητικούς τομείς και η συνάντηση των Ελλήνων επιστημόνων στο συγκεκριμένο τομέα για τη γνωστοποίηση νέων αποτελεσμάτων και τη δημιουργία νέων συνεργασιών.

Πρώτη Ανακοίνωση

Το XVIII Πανελλήνιο Συνέδριο Φυσικής Στερεάς Κατάστασης - Επιστήμης Υλικών θα συνδιοργανωθεί από τα τμήματα Φυσικής και Επιστήμης & Τεχνολογίας Υλικών του Πανεπιστημίου Κρήτης και το Ινστιτούτο Ηλεκτρονικής Δομής και Λείζερ του Ιδρύματος Τεχνολογίας και Έρευνας στις 15-18 Σεπτεμβρίου 2002 στις εγκαταστάσεις του Ι.Τ.Ε. στα Βασιλικά Βουτών, Ηράκλειο Κρήτης.

Το πρόγραμμα θα περιλαμβάνει προσκεκλημένες ομιλίες, προφορικές παρουσιάσεις και συνεδρία αφίσσας. Ορισμένες από τις υποβληθείσες περιλήψεις θα επιλεγούν για προφορικές παρουσιάσεις.

Η καταληκτική ημερομηνία για την υποβολή περιλήψεων είναι 15 Μαΐου 2002.

ΕΠΙΤΡΟΠΕΣ

Οργανωτική Επιτροπή

Πρόεδρος:	Ε. Οικονόμου
Αντιπρόεδρος:	Π. Κελίρης
Γραμματέας:	Ι. Γιαπιντζάκης
Ταμίας:	Π. Τζανετάκης
Μέλος:	Σ. Αναστασιάδης
Μέλος:	Α. Ανδριώτης
Μέλος:	Ν. Παπανικολάου
Μέλος:	Ν. Πελεκάνος
Μέλος:	Η. Περάκης

Συμβουλευτική Επιτροπή

Π. Ευθυμίου (ΠΑ)
Γ. Θεοδώρου (ΑΠΘ)
Π. Λαμπρόπουλος (ΠΚ)
Ε. Λιαροκάκης (ΕΜΠ)
Γ. Παπαβασιλείου (ΕΙΕ)
Ι. Παπαδόπουλος (ΠΑ)
Β. Παπαευθυμίου (ΠΙ)
Γ. Πρίφτης (ΠΠ)
Α. Σιμόπουλος (ΕΚΕΦΕ)
Κ. Σούκουλης (ΠΚ)

Επιτροπή Προγράμματος

Π. Κελίρης (ΠΚ) *Πρόεδρος*
Ι. Γιαπιντζάκης (ΙΤΕ)
Δ. Θεοδώρου (ΕΜΠ)
Ε. Καξίρας (ΠΙ)
Σ. Λογοθετίδης (ΑΠΘ)
Ε. Μανουσάκης (ΠΑ)
Κ. Μουλόπουλος (Π Κύπρου)
Ε. Οικονόμου (ΠΚ)
Κ. Πρασσίδης (ΕΚΕΦΕ)
Ι. Υάκινθος (ΔΠΘ)

Ι. Στοϊμένος (ΑΠΘ)

Παρακαλούμε επισκεφθείτε το δικτυακό τόπο:
<http://www.iesl.forth.gr/pcssp-ms/index.html>

ART 2002
**7TH INTERNATIONAL CONFERENCE ON NON-
DESTRUCTIVE TESTING AND MICROANALYSIS FOR
THE DIAGNOSTICS AND CONSERVATION OF THE
CULTURAL AND ENVIRONMENTAL HERITAGE**
**2 – 6 JUNE 2002, CONGRESS CENTRE ELZENVELD,
ANTWERP, BELGIUM**

Introduction

art 2002 is the next in a series of prestigious conferences on non-destructive testing and microanalysis for cultural heritage. The previous ones took place in Rome (1999), Budapest (1996), Berlin (1994), Viterbo (1992), Perugia (1988), Rome (1984), etc. The latest conference drew 282 participants and included 180 oral and poster presentations, and resulted in proceedings with over 2000 pg.

More than 160 abstracts have been submitted for either oral or poster presentation.

Scope of the conference

The conference will deal with all analysis and testing techniques that are non-destructive or micro-analytical in nature, and with their applications to cultural and environmental heritage items; both diagnostics and conservation aspects will be treated. Reputed scientists will give five plenary lectures, but most of the time, there will be two or three parallel sessions. Also, a round table on education and testing in this field will be organised.

The last day of the conference will be reserved optionally for a visit to a scientific institute for cultural heritage restoration and diagnostics (KIK-IRPA) and museums in Brussels, or for an excursion to the medieval art city of Bruges (2002 Cultural Capital of Europe).

In an effort to cover the various fields of *art 2002* as widely as possible, the following lecturers have been invited:

Plenary lectures:

A. Balis (BE), P. Brimblecombe (GB), M. Marabelli (IT), L. Moens (BE) and H. Römich (DE).

Invited lectures:

N. Baer (US), E. Bulska (PL), D. Camuffo (IT), R. Cesareo (IT), Y. Chryssoulakis (GR), G. Demortier (BE), M.F. Guerra (PT), P. Jacobs (BE), R. Lefèvre (FR), N. Maravelaki-Kalaitzaki (GR), R. Mazzeo (IT), A. Moropoulou (GR), C. Neelmeijer (DE), C. Saiz-Jimenez (ES) and M. Schreiner (AT).

PRELIMINARY PROGRAMME

Sunday 2 June 2002

16:00 - 18:00 Guided visit to the Royal Museum of Fine Arts (KMSKA)

18:00 - 20:00 Informal welcome get-together in the KMSKA
Conference registration

Monday 3 June 2002

08:30 Registration

PLENARY

09:00 Welcome and opening address

09:15 Plenary lecture:

Helping the eye and the brain: aspects of 17th-century art made visible.

Arnout Balis (University of Antwerp (UFSIA), Department of History, Antwerp, Belgium)

PARALLEL SESSION I

10:00 Invited lecture:

How advanced diagnostic technologies could contribute to the interpretation of the inner meaning expressed through Byzantine iconography.

Yannis Chryssoulakis (National Technical University of Athens, Chemical Engineering Department, Athens, Greece) and Sister Daniilia

10:35 MRM (mobile Raman microscopy) in situ in 4 national museums.

D.C. Smith (Muséum National d'Histoire Naturelle, Laboratoire de Minéralogie, Paris, France)

10:55 – 11:25 Coffee break

11:25 Study of the composition of the pigments used in the Christ “Maiestas Domini” painting of the Ename Church by means of micro-Raman spectroscopy.

V. Hayez (Free University of Brussels (VUB), Department of Metallurgy, Electrochemistry and Materials Science, Brussels, Belgium), A. Zoppi, H. Terryn, L. Van Dijck and E.M. Castellucci

11:45 A new scanning device for high-resolution IR-colour reflectography of paintings.

L. Marras, M. Materazzi (INOA – Istituto Nazionale di Ottica, Firenze, Italy), L. Pezzati and P. Poggi

12:05 New non-destructive FTIR-spectroscopic investigations on works of art.

R. Fuchs (Fachhochschule Köln, Restaurierung und Konservierung von Schriftgut, Graphik und Buchmalerei, Köln, Germany)

12:25 Towards a taxonomy of pigments.

N. Eastaugh (The Pigmentum Project, London, Great Britain), V. Walsh, R. Siddall, T. Chaplin and H. Herman

12:45 – 14:00 Lunch break

PARALLEL SESSION II

10:00 Invited lecture:

NDT as a tool for materials characterisation, environmental impact assessment, conservation, evaluation and strategical planning regarding the protection of cultural heritage.

Antonia Moropoulou (National Technical University of Athens, School of Chemical Engineering, Athens, Greece)

10:35 xxx.

N.N.

10:55 – 11:25 Coffee break

11:25 A methodological approach to link the conservation and environmental interventions.

G. Accardo, E. Giani (ICR – Istituto Centrale per il Restauro, Laboratorio di Fisica e Controlli Ambientali, Rome, Italy), A. Giovagnoli and M.P. Nugari

- 11:45 Research and developments of innovative systems for assisted investigations and diagnosis.
L. Moltedo (Consiglio Nazionale delle Ricerche, Istituto per le Applicazioni del Calcolo, Rome, Italy), R. Picco and P. Salonia
- 12:05 Web-based exchange of infrared and Raman spectra: a new IRUG initiative.
B. Price (Philadelphia Museum of Art, Philadelphia, Pennsylvania, U.S.A.), B. Pretzel, J. Carlson, K. Ehrman and A. Lins
- 12:25 Image processing: a helpful tool in the art conservation.
V. Kokla (University of Westminster, Harrow School of Computer Science, Harrow, Great Britain), A. Psarrou and V. Konstantinou
- 12:45 – 14:00 Lunch break

PLENARY

- 14:00 Invited lecture:
 Current status on education and training activities in the field of conservation science.
Rocco Mazzeo (ICCROM – International Centre for the Study of the Preservation and Restoration of Cultural Property, Rome, Italy)
- 14:35 Round-table discussion on education and testing.
 organised by Giovanni E. Gigante (University of Rome “La Sapienza”, Dipartimento di Fisica, Rome, Italy)
- 15:15 – 16:15 Poster session I / Tea break

PARALLEL SESSION III

- 16:15 Invited lecture:
 Modern and ancient glass in the polluted atmosphere: what is the prevailing phenomenon? Lixiviation, corrosion, soiling, encrusting, ... ?
Roger A. Lefèvre (Université Paris XII, Laboratoire Interuniversitaire des Systèmes Atmosphériques, Créteil, France)
- 16:50 Infrared and ion beam analysis of 15th century stained glass.
M. Vilarigues (Universidade Nova de Lisboa, Dep. Conservação e Restauro, Lisbon, Portugal), P. Redol, L.C. Alves and R.C. da Silva
- 17:10 XVIIIth century glasses analysed by FTIR spectroscopy.
E. Greiner-Wronowa (University of Mining and Metallurgy, Department of Materials Science and Ceramics, Krakow, Poland), C. Paluskiewicz and L. Stoch
- 17:30 An application of non-destructive- and micro-analysis for the characterisation of a large set of glass vessels.
J. Kunicki-Goldfinger (University of Warsaw, Institute of Nuclear Chemistry and Technology, Warsaw, Poland), J. Kierzek and P. Dzierzanowski
- 17:50 Analysis of archaeological objects formed in Constanta (Romania) by X-ray fluorescence and neutron activation analysis methods.
I.V. Popescu (Valahia University, Science Faculty, Research Centre of Applied Physics, Targoviste, Romania), V. Cojocaru, M. Belc, T. Badica and C. Besliu

PARALLEL SESSION IV

- 16:15 Invited lecture:
 Non-destructive ion beam techniques for the depth profiling of elements in Amerindian gold jewellery artefacts.

- Guy Demortier (Facultés Universitaires Notre-Dame de la Paix (FUNDP), L.A.R.N. - Laboratoire d' Analyses par Réactions Nucléaires, Namur, Belgium) and J.-L. Ruvalcaba-Sil
- 16:50 Alteration at the gold/substrate interface for mercury-gilded copper-based items from cultural heritage.
M. Aucouturier (C2RMF - Centre de Recherche et de Restauration des Musées de France, Paris, France), A. Zymła, B. Mille, A. Texier and D. Bourgarit
- 17:10 Microanalytical characterisation of ancient Syrian bronze artefacts originating from Tell Beydar.
I. De Ryck (University of Antwerp (UIA), Department of Chemistry, Antwerp-Wilrijk, Belgium), A. Adriaens, M. Debruyne and F. Adams
- 17:30 The application of LA-ICP-MS in the identification of the plating method used in the production of Roman coins (250 – 350 AD).
C. Vlachou (University of Bradford, Department of Archaeological Sciences, Bradford, Great Britain), J.G. McDonnell, R.C. Janaway and B. Stern
- 17:50 Understanding a bronze age weapon hoard.
J.P. Northover (University of Oxford, Department of Materials, Yarnton, Great Britain) and S.D. Bridgford

Tuesday 4 June 2002

08:30 Registration

PLENARY

- 09:00 Plenary lecture:
Effect of the cultural environment.
Peter Brimblecombe (University of East Anglia, School of Environmental Sciences, Norwich, Great Britain)

PARALLEL SESSION V

- 09:45 Invited lecture:
Investigation of iron-gall ink corrosion of ancient manuscript by non-destructive and microanalytical methods.
Ewa Bulska (University of Warsaw, Department of Chemistry, Warsaw, Poland) and B. Wagner
- 10:20 Characterisation of iron gall inks in historical manuscripts and music compositions using X-ray fluorescence spectrometry.
O. Hahn (Bundesanstalt für Materialforschung und –prüfung (BAM), Berlin, Germany), W. Malzer and B. Kanngiesser
- 10:40 – 11:10 Coffee break
- 11:10 Non-destructive detection of iron gall inks by means of multispectral imaging.
J.B.G.A. Havermans (TNO Institute of Industrial Technology, Department Paper and Board, Delft, The Netherlands), H.A. Aziz and H.A. Scholten
- 11:30 Non-destructive investigations of Dürer's silver point drawings by PIXE and SR-XRF.
I. Reiche (Staatliche Museen zu Berlin Stiftung Preussischer Kulturbesitz, Rathgenforschungslabor, Berlin, Germany), A. Berger, A. Duval, W. Görner, H. Guicharnaud, S. Merchel, M. Radtke, J. Riederer and H. Riesemeier
- 11:50 Non-destructive analysis of the Codex Egberti.
D. Oltrogge (Fachhochschule Köln, Restaurierung und Konservierung von Schriftgut, Graphik und Buchmalerei, Köln, Germany), O. Hahn and R. Fuchs

- 12:10 Non-destructive mechanical testing of samples of historic parchment using micro-thermal analysis (Micro-TA).
M. Odlyha (University of London, Birbeck College, School of Biological and Chemical Sciences, London, Great Britain) and E. Verdonck
- 12:30 – 14:00 Lunch break

PARALLEL SESSION VI

- 09:45 Invited lecture:
 Can X-ray computer tomography contribute to cultural heritage and stone conservation through the non-destructive monitoring of deterioration and restoration processes ?
Patric Jacobs (University of Ghent (RUG), Department of Geology, Ghent, Belgium)
- 10:20 Spatially-resolved and non-resolved magnetic resonance techniques in the study of high surface-to-volume ratio systems.
G.C. Borgia (Università di Bologna, Department ICMA, Bologna, Italy) and P. Fantazzini
- 10:40 – 11:10 Coffee break
- 11:10 3D assessment of historic roofing slabs using optical systems.
R. Drewello (Otto-Friedrich Universität, Restaurierungswissenschaft in der Baudenkmalpflege, Bamberg, Germany), U. Knapp, Th. Eissing and H. Lechner
- 11:30 3D modelling of statues: the Minerva of Arezzo.
R. Fontana (INOA – Istituto Nazionale di Ottica Applicata, Firenze, Italy), M.C. Gambino, M. Greco, E. Pampaloni, L. Pezzati and C. Rocchini
- 11:50 The Fornarina by Raphael. Comparison of the results from ND-analyses executed at a distance of 18 years.
 R. Bellucci, M. Cetica, P. Poggi, C. Silvestri, R. Coppola, P. Moiola and C. Seccaroni (E.N.E.A. - Ente per le Nuove Tecnologie, l'Energia e l'Ambiente, Rome, Italy)
- 12:10 Contribution of the non-destructive testing to the study, documentation and conservation of four icons of the Ionian Islands.
A. Koutsouris (Technological Educational Institution of Athens, Dept. of Conservation of Works of Art & Antiquities, Egaleo, Athens, Greece), A. Alexopoulou, V. Kokla, P. Mariolopoulou, D. Constandios and E. Anapliotou
- 12:30 – 14:00 Lunch break

PARALLEL SESSION VII

- 09:45 Invited lecture:
 Heating in historic buildings: a manifold problem.
Dario Camuffo (Consiglio Nazionale delle Ricerche, Istituto di Scienze dell'Atmosfera e del Clima, Padova, Italy), G. Sturaro, E. Pagan, A. Bernardi and F. Becherini
- 10:20 Indoor air quality in the National Gallery of Umbria (Italy): monitoring of microclimates, air pollutants and microbial contamination.
F. Sciurpi (Università di Firenze, Dipartimento di Tecnologie dell'Architettura e Design "Pierluigi Spadolini", Firenze, Italy), C. Miliani, L. Pitzurra and T. Bellezza
- 10:40 – 11:10 Coffee break

- 11:10 Monitoring moisture-induced deformations of panel paintings: reasons, requirements and suggested equipment.
P. Dionisi Vici (Università di Firenze, Istituto di Assestamento e Tecnologia Forestale, Firenze, Italy) and L. Uzielli
- 11:30 Analysis and non-destructive testing of the great wooden crucifix in the Cathedral of Chieri, Italy.
C. Bertolini Cestari (Politecnico di Torino, Dipartimento di Progettazione Architettonica, Turin, Italy)
- 11:50 Changes in the chemical composition of historical objects determined by FTIR microscopy.
C. Paluskiewicz (Jagiellonian University, Regional Laboratory of Physicochemical Analyses and Structural Research, Krakow, Poland) and J. Dominik
- 12:10 Characterisation towards conservation of a fragment of Italian embroidered upholstery.
L. D’Orazio (Consiglio Nazionale delle Ricerche, Istituto di Ricerca e Tecnologia delle Materie Plastiche, Pozzuoli, Italy), G. Gentile, C. Mancarella, E. Martuscelli and C. Polcaro
- 12:30 – 14:00 Lunch break

PLENARY

- 14:00 Plenary lecture:
 Non-destructive testing for metals. Some case studies.
 G. D’Ercoli, G. Guida, Maurizio Marabelli (ICR - Istituto Centrale per il Restauro, Rome, Italy) and V. Santin

PARALLEL SESSION VIII

- 14:45 Invited lecture:
 Innovative techniques for the characterisation of encrustation on Pentelic marble from the Parthenon.
Noni Maravelaki-Kalaitzaki (Ministry of Culture, 12th Department of Prehistoric and Classical Antiquities, Chania, Greece)
- 15:20 Roman theatre of Aosta – a case study.
 L. Appolonia, P. Crivello (Consiglio Nazionale delle Ricerche, IRITI – Istituto di Ricerca sull’Ingegneria delle Telecomunicazioni e dell’Informazione, Turin, Italy), A. Negri and P. Salonia
- 15:40 – 16:40 Poster session II / Tea break
- 16:40 Study on the deterioration of sandstone due to simulated acid rain and wet SO₂ gas.
B. Holynska (University of Mining and Metallurgy, Fac. Physics and Nuclear Techniques, Krakow, Poland), J. Gilewicz-Wolter, B. Ostachowicz and M. Bielewski
- 17:00 ¹H-MR imaging – a diagnostic technique for use in the conservation of historical stone artefacts.
 G.C. Borgia, V. Bortolotti, M. Camaiti (Consiglio Nazionale delle Ricerche, Centro Studi sull’Cause di Deperimento & Metodi Conservazione delle Opere d’Arte, Firenze, Italy), F. Cerri, P. Fantazzini and F. Piacenti
- 17:20 ESR and petrographic identification of classical marbles.

D. Attanasio (Consiglio Nazionale delle Ricerche, Istituto Struttura della Materia e Istituto Metodol. Inorg. e Plasmi, Monterotondo, Italy), R. Platania and P. Rocchi

PARALLEL SESSION IX

- 14:45 Invited lecture:
The use of gas chromatography-mass spectrometry and pyrolysis techniques for assessing the nature of stone yellowing produced after laser cleaning.
M. Gavino, B. Hermosin, V. Verges-Belmin, W. Novik and Cesareo Saiz-Jimenez (Instituto de Recursos Naturales y Agrobiologia, Sevilla, Spain)
- 15:20 Proteomics approach of binding media in art painting.
C. Tokarski (Université de Lille I, UFR de Chimie, UPRESA 8009, Chimie Organique et Moléculaire, Villeneuve d'Ascq, France), C. Cren-Olive, C. Rolando and E. Martin
- 15:40 – 16:40 Poster session II / Tea break
- 16:40 Limitations of fluorescence spectroscopy as a tool for non-destructive in situ identification of organic pigments, dyes and inks.
M. Clarke (ICN – Netherlands Institute for Cultural Heritage, Amsterdam, The Netherlands)
- 17:00 Analysis of copal resins in 19th century oil paints and resin/oil varnishes.
J. Ossebaar, H. Van Keulen and K.J. van den Berg (ICN – Netherlands Institute for Cultural Heritage, Amsterdam, The Netherlands)
- 17:20 Microspectrofluorometry applied to the analysis of binding media and varnishes in colour samples from paintings.
B. Masala (Consiglio Nazionale delle Ricerche, Centro di Studio per l'Istoichimica, Pavia, Italy), A. Gallone and G. Bottioli

PARALLEL SESSION X

- 14:45 Invited lecture:
Dyes and pigments: ten open questions for conservation science.
Norbert S. Baer (New York University, Conservation Center of the Institute of Fine Arts, New York, U.S.A.)
- 15:20 Non-destructive study of lustre decorations in Italian renaissance pottery: composition and optical properties.
G. Battaglin, I. Borgia, B. Brunetti (Università di Perugia, I.N.S.T.M. & Dipartimento di Chimica, Perugia, Italy), F. Cariati, F. D'Acapito, A. Giulivi, I. Mariani, G. Mattei, P. Mazzoldi, S. Padovani, C. Sada and A. Sgamellotti
- 15:40 – 16:40 Poster session II / Tea break
- 16:40 Ageing of high-lead glazes in XVI-XVII century tiles.
M.O. Figueiredo (Universidade Nova de Lisboa, Crystal. Mineralogy Centre, IICT & CENIMAT, Caparica, Portugal), J.P. Veiga and T. Pereira da Silva
- 17:00 A technique for age determination of quartz artefacts.
O. Dersch, J. Wallenwein, F. Rauch (J.W. Goethe Universität, Institut für Kernphysik, Frankfurt am Main, Germany) and J.E. Ericson
- 17:20 Use of XRF and image analysis videomicroscopy portable instruments for the study of mosaic materials. Preliminary experiments.
S. Lorusso (Università di Bologna, sede di Ravenna, Dipartimento di Storie e Metodi per la Conservazione dei Beni Culturali, Ravenna, Italy), C. Fiori, G. Lanterna, D. Pinna, M. Vandini and A.M. Giovagnoli

Wednesday 5 June 2002

08:30 Registration

PLENARY

09:00 Plenary lecture:

Pigments and binders, a study of artists' materials based on Raman spectroscopy and total-reflection X-ray fluorescence analysis (TXRF).

Luc Moens (University of Ghent (RUG), Department of Analytical Chemistry, Ghent, Belgium) and P. Vandenabeele

PARALLEL SESSION XI

09:45 Invited lecture:

Non-destructive (micro)analysis of artistic materials by means of X-ray techniques.

Manfred Schreiner (Akademie der Bildende Künste, Institut für Chemie, Vienna, Austria)

10:20 Chemical changes in lead-pigmented oil paints: on the early stage of formation of protrusions.

K. Keune (FOM Institute for Atomic and Molecular Physics, Amsterdam, The Netherlands), P. Noble and J. Boon

10:40 – 11:10 Coffee break

11:10 Morphology of the blue artist's pigment smalt using scanning electron microscopy.

A.R. Burnstock (University of London, Courtauld Institute of Art, Dept. Conservation and Technology, London, Great Britain), C.G. Jones and A.D. Ball

11:30 Determination of natural and synthetic medieval pigments by SR-XRD.

N. Salvadó, T. Pradell, M. Pantos (Daresbury Laboratory, SRS, Science Division, Archaeometry Unit, Warrington, Great Britain), M.Z. Papiz, J. Molera and M. Vendrell

11:50 Authentication of an historic painting at the Santa Inés Mission, California.

A.L. Watchman (James Cook University, School of Anthropology, Townsville, Queensland, Australia) and A. Padgett

12:10 An XRF study on the pigments in wood carving of Jesuit Missions of Argentina.

A. Germanier, R.D. Pérez, R. Badini, M. Ravera, J. Piana, A.M. Peiretti, A. Avila and M. Rubio (CEPRECOR, Cordoba, Argentina)

12:30 – 14:00 Lunch break

PARALLEL SESSION XII

09:45 Invited lecture:

Portable equipments for energy-dispersive X-ray fluorescence analysis.

Roberto Cesareo (University of Sassari, Istituto di Matematica e Fisica, Sassari, Italy), A. Castellano, G. Buccolieri, S. Quarta, M. Marabelli and P. Santopadre

10:20 X-ray fluorescent analyser for investigation of art works.

A.S. Serebrjakov, E.A. Fedkov, E.L. Demchenko, V.I. Koudrjachov and A.D. Sokolov ("BSI Ltd." Baltic Scientific Instruments, Riga, Latvia)

10:40 – 11:10 Coffee break

11:10 The scientific conservation of cultural materials: a study of Australian Aboriginal bark paintings.

- D.C. Creagh (University of Canberra, Division of Science & Design, Cultural Heritage Research Centre, Canberra, ACT, Australia), V. Otieno-Alego, K. Roth and N. Smith
- 11:30 A.S.T.E.A.: a computerised archive for ancient architectures and building techniques documentation.
F. Dentamaro (Università di Bari, Centro Interuniversitario di Documentazione per lo Studio degli Insediamenti Urbani e Rurali della Puglia, Bari, Italy)
- 11:50 Coding techniques for image databases in virtual monitoring of cultural heritage.
R. Picco and D. Ponzio (Consiglio Nazionale delle Ricerche, IRITI - Ist. Ricerca sull'Ingegneria delle Telecomunicazioni e dell'Informazione, Turin, Italy)
- 12:10 Multispectral digital analysis of artistic objects.
S. Ferriani, G. Maino (E.N.E.A. - Ente per le Nuove Tecnologie, l'Energia e l'Ambiente, Applied Physics Division, Bologna, Italy), A. Musemecci and D. Visparelli
- 12:30 – 14:00 Lunch break

PARALLEL SESSION XV

- 09:45 Invited lecture:
Tools for monitoring bronze corrosion.
Susan Sherwood (Binghamton, New York, U.S.A.)
- 10:20 Non-destructive metallurgical analysis of astrolabes utilising synchrotron radiation.
B. Newbury (Lehigh University, Dept. Materials Science & Engineering, Archaeometallurgical Laboratory, Bethlehem, Pennsylvania, U.S.A.), B. Stephenson, J. Almer, M. Notis, D. Haeffner, B. Stephenson and G.S. Cargill
- 10:40 – 11:10 Coffee break
- 11:10 Energy-dispersive X-ray fluorescence (EDXRF) as applied to the investigation of big bronze works.
G.E. Gigante (Università di Roma "La Sapienza", Dipartimento di Fisica, Rome, Italy), S. Ridolfi, M. Marabelli and G. Guida
- 11:30 Computed tomographic investigation of the Victorious Athlete with further observations on square patching and other features.
J.P. Maish (The J. Paul Getty Museum, Antiquities Conservation, Los Angeles, California, U.S.A.), B. Illerhaus, W.D. Heilmeyer and J. Goebbels
- 11:50 Raman and IR micro-spectroscopy for the study of corrosion products on archaeological bronze objects.
G. Di Lonardi (Università di Bologna, Dipartimento di Chimica Fisica e Inorganica, Bologna, Italy), C. Martini, F. Ospitali, G. Poli, D. Prandstraller and F. Tullini
- 12:10 Comparative test of protective coating systems for outdoor bronze sculpture with NDT field measurements.
P. Letardi (Consiglio Nazionale delle Ricerche, Istituto per la Corrosione Marina dei Metalli, Genua, Italy), M. Marabelli and G. D'Ercoli
- 12:30 – 14:00 Lunch break

PLENARY

- 14:00 Plenary lecture:

Micro-computer tomography (mCT) as a new non-destructive tool for the characterisation of archaeological glasses.

Hannelore Römich (Fraunhofer Institute for Silicate Chemistry, Research for Conservation, Wertheim-Bronnbach, Germany), E. López, F. Mees, P. Jacobs, E. Cornelis, D. Van Dyck and T. Doménech Carbó

PARALLEL SESSION XIII

14:45 Invited lecture:

Endangered glass objects identified by ion beam analysis.

Christian Neelmeijer (Forschungszentrum Rossendorf eV, Institut für Ionenstrahlphysik und Materialforschung, Dresden, Germany) and M. Mäder

15:20 Archaeological and experimental stained glass: a non-destructive Raman microscopic (RM) study.

M. Bouchard (Muséum National d'Histoire Naturelle, Laboratoire de Minéralogie, Paris, France) and D.C. Smith

15:40 Red colour caused by nanoparticles in historical glass fragments.

P. Fredrickx (University of Antwerp (RUCA), Department of Physics, EMAT, Antwerp, Belgium), D. Schryvers and K. Janssens

16:00 Estimation of degradation of glass decorated by eglomisé technique in altar dated from the XVIIth century.

E. Greiner-Wronowa, C. Paluskiewicz (Jagiellonian University, Regional Laboratory of Physico-chemical Analyses and Structural Research, Krakow, Poland) and A. Pusoska

PARALLEL SESSION XIV

14:45 Invited lecture:

Ancient gold and modern techniques: identification of gold supplies from Croesus to Mahomet using accelerators and ICP-MS.

Maria F. Guerra (C2RMF - Centre de Recherche et de Restauration des Musées de France, Paris, France)

15:20 X-ray fluorescence of metal objects of art for their restoration.

T. Cechák, I. Kopecká, L. Musílek (Czech Technical University, Faculty of Nuclear Physics and Physical Engineering, Prague, Czech Republic), A. Sumbera and T. Trojek

15:40 Analysis of archaeological tin spoons from Amsterdam.

H.A. Ankersmit (ICN – Netherlands Institute for Cultural Heritage, Amsterdam, The Netherlands), P. Hallebeek, J. Veerkamp and W. Krook

16:00 Authenticating ancient gold using the U-He radiogenic clock.

A.J. Kossolapov (The State Hermitage Museum, Department of Scientific Examination of Works of Art, St. Petersburg, Russia) and X.S. Chugunova

PLENARY

16:35 Concluding remarks

16:45 End of conference programme

Poster contributions

Study of “darkening spots” induced by PIXE irradiation.

J. Absil, H.-P. Garnier, D. Strivay, C. Oger and G. Weber (Université de Liège (Ulg), I.P.N.A.S., Groupe interdisciplinaire d'Archéométrie, Sart Tilman, Belgium)

Reflectance, luminescence and vibrational spectroscopies in characterising gemmological materials used in handicraft and art works.

D. Ajo (Consiglio Nazionale delle Ricerche, Istituto Chimica e Tecnologie Inorganiche e dei Materiali Avanzati, Padua, Italy), M. Nardone, S. Nunziante Cesaro, U. Perrone, M. Picollo, L. Prosperi, B. Radicati and A. Sodo

Use of non-destructive methodology in the identification of old inks.

A. Alexopoulou (Technological Educational Institution of Athens, Dept. of Conservation of Works of Art & Antiquities, Egaleo, Athens, Greece), V. Kokla, A. Psarrou and V. Konstantinou

Electrode potential measurements for the identification of active pitting corrosion on bronze monuments.

C. Bartuli (Università di Roma "La Sapienza", Dept. of Chemical Engineering & Material Technology, Rome, Italy), L. Fedrizzi, G. D'Ercoli, M. Marabelli and P. Letardi

Comparative study of the degradation processes on renaissance bronze statues.

G.P. Bernardini, C. Emiliani (Università di Firenze, Dipartimento di Scienze della Terra, Firenze, Italy), M.C. Squarzialupi and R. Trosti-Ferroni

Trace element characterisation of bones from ancient Roman burials.

A. Brandone (Consiglio Nazionale delle Ricerche, Centro Radiochimica e Analisi per Attivazione, Pavia, Italy), C. Cattaneo and M. Sturini

Image processing and multimedia databases for diagnostics of the cultural heritage.

S. Bruni, S. Ferriani, G. Maino (E.N.E.A. - Ente per le Nuove Tecnologie, l'Energia e l'Ambiente, Applied Physics Division, Bologna, Italy), L. Moretti, A. Musemecci and D. Visperelli

The ink composition study of the Piran Ledger Codices.

M. Budnar (Institute Jozef Stefan, Ljubljana, Slovenia) and J. Vodopivec

A multispectral scanning device for reflectance and colour measurements: an application to the Croce di Rosano.

A. Casini, B. Radicati (Consiglio Nazionale delle Ricerche, IROE - Istituto di Ricerca sulle Onde Elettromagnetiche "N.Carrara", Firenze, Italy), L. Stefani and R. Bellucci

Mixed or superimposed pigments ? An FTIR-Raman approach.

K. Castro (University of The Basque Country (EHU/UPV), Department of Analytical Chemistry, Leioa, Spain), M. Pérez, Ma.D. Rodriguez, L.A. Fernández and J.M. Madariaga

Laser and luminescence of calcareous stones from Bordeaux historical patrimony.

R. Chapoulie (Université Michel de Montaigne - Bordeaux 3, CRPAA - Centre de Recherche en Physique Appliquée à l'Archéologie, Pessac, France) and S. Cazenave

Application of analytical pyrolysis to the diagnostics in the artistic field.

G. Chiavari and S. Prati (Università di Bologna, sede di Ravenna, Laboratorio di Chimica Ambientale, Ravenna, Italy)

TXRF analysis of inorganic pigments used in some old Albanian icons.

N. Civici (Academy of Sciences, Institute of Nuclear Physics, Tirana, Albania)

Preliminary results of the use of X-ray computed microtomography as a new technique in stone conservation and restoration.

V. Cnudde (University of Ghent (RUG), Department of Geology and Soil Science, Ghent, Belgium), P. Jacobs and F. Mees

Characterisation of pictorial pigments by Raman microscopy.

A. Cosentino (Università di Catania, Dipartimento di Fisica e Astronomia, Catania, Italy), A.M. Gueli, A. Manera, S.O. Troja and A. Zuccarello

Image manipulation of climatic and environmental parameters for building decay studies.

R. Cossu (Consiglio Nazionale delle Ricerche, Istituto per le Applicazioni del Calcolo, Rome, Italy) and L. Moltedo

Feasibility of three-dimensional XRF spectrometry and its application to the study of Japanese art crafts.

F. Delalieux (Tohoku University, Institute for Materials research, Aoba, Sendai, Japan) and K. Tsuji

Chemical analysis of particulate matter for the conservation of works of art in the Royal Museum of Fine Arts, Antwerp (Belgium).

F. Deutsch (University of Antwerp (UIA), Department of Chemistry, Antwerp-Wilrijk, Belgium), K. Gysels and R. Van Grieken

Non-contact ultrasonic sensor defect detection on works of art.

E. Esposito (Università di Ancona, Dipartimento di Meccanica, Ancona, Italy) and B. Marchetti

Study of a 9th century illuminated manuscript from Saint Amand by PIXE, spectrophotometry and X-ray diffraction.

M. Eveno (Bibliothèque Nationale de France, Service Restauration, Paris, France), A. Duval, M. Dubus and M. Elias

Reconstruction of the original tonality of a blue degraded smalt from the measurement of the relationship Co/Pb with a portable XRF spectrometer.

J.L. Ferrero (Universitat de València, Institut de Ciència deis Materials, Unitat d'Arqueometria, Valencia, Spain), C. Roldán, D. Juanes, J. Carballo, J. Pereira, J.L. Lluch and C. García

The restoration of the “Madonna del Cardellino” by Raffaello: comparison among optical techniques supporting its repair.

R. Fontana (INOA – Istituto Nazionale di Ottica Applicata, Firenze, Italy), M.C. Gambino, M. Greco, E. Pampaloni and L. Pezzati

Investigation of paintings on parchment by a multiple method approach.

P. Fredrickx (University of Antwerp (RUCA), Department of Physics, EMAT, Antwerp, Belgium), P. Vandenabeele, J. Wouters, L. Moens and D. Schryvers

Raman studies of medieval wall paintings.

F. Froment (C.N.R.S., LADIR - Laboratoire de Dynamique Interactions et Réactivité, Thiais, France), C. Coupry and J. Rollier-Hanselman

Towards informed conservation: characterising the state of deterioration of weighted silk.

P. Garside (University of Southampton, Department of Chemistry, Southampton, Great Britain) and P. Wyeth

Infrared thermography and archaeology of the architecture.

E. Gerardi (Consiglio Nazionale delle Ricerche, Istituto Internazionale di Studi Federiciani, Potenza, Italy), F.T. Gizzi and N. Masini

Detection by raman spectrometry of transformation in copper acetates. Applications on Venetian illuminations from the 15th century.

B. Gilbert, S. Denoël (Université de Liège (Ulg), Service d'Historie & Technologie de l'Art, Liège, Belgium) and D. Allart

An innovative high-resolution survey based on integrated non-destructive analyses applied to marble decorated sculptures.

G. Giunta (EniTecnologie SpA, Physical Chemistry Department, San Donato Milanese, Italy), E. Di Paola and P.G. Corda

Study of cotton paper in bleaching and ageing processes.

N.G. Guerassimova, D.A. Sukhov and O.Yu. Derkacheva (State Technological University of Plant Polymers, St. Petersburg, Russia)

Analysis of paint layer specimen by synchrotron induced micro X-ray diffraction.

B. Hochleitner (Akademie für Bildende Kunst, Institut für Chemie, Vienna, Austria), M. Schreiner, M. Drakopoulos, I. Snigireva and A. Snigirev

Salinity and dampness in monumental brick buildings – diagnosis, testing methods, rehabilitation techniques.

J. Jasienko (Technical University of Wrocław, Institute of Building Science, Civil Engineering Dept., Wrocław, Poland) and Z. Matkowski

Structural tests of old wooden banded beams strengthened with CFRP and steel plates.

J. Jasienko (Technical University of Wrocław, Institute of Building Science, Civil Engineering Dept., Wrocław, Poland)

Some aspects of the technique and materials used for mordant gilding on Byzantine icons and wall paintings.

O. Katsibiri (University of Northumbria, Conservation of Fine Art, Newcastle-upon-Tyne, Great Britain), B. Singer and J. Devenport

Application of non-destructive quantitative X-ray fluorescence spectrometry to ancient non-ferrous alloys.

S. Koloskov, R. Mitoyan and N. Eniova (Moscow State University, Department of archaeology, Moscow, Russia)

Characterisation of air pollutants in museum showcases.

V. Kontozova (University of Antwerp (UIA), Department of Chemistry, Antwerp-Wilrijk, Belgium), F. Deutsch, R. Godoi, A.F. Godoi, P. Joos and R. Van Grieken

Preliminary studies on chemical and phase composition of bricks and mortars from historic church buildings in Wielkopolska (Central Poland).

I. Kraczkowska (University of Mining and Metallurgy, Fac. Geology, Geophysics and Environmental Protection, Krakow, Poland)

Provenance study of baroque glass using EDXRF.

J. Kunicki-Goldfinger (University of Warsaw, Institute of Nuclear Chemistry and Technology, Warsaw, Poland), J. Kierzek, A.J. Kasprzak and B. Malozewska-Bucko

Mass spectrometry as a micro-analytical method to study Kassel earth (Vandyke brown) pigments in oil paint.

G.M. Languri (FOM Institute for Atomic and Molecular Physics, Unit for Mass Spectrometry of Macromolecular Systems, Amsterdam, The Netherlands) and J.J. Boon

Neutron radiography and tomography investigations of samples of archaeological and natural historical importance.

E.H. Lehmann (Paul Sherrer Institute, Spallation Neutron Source Department, Villigen, Switzerland), P. Vontobel and G. Frei

Microchemical analysis of inorganic materials used in Romanian 16th – 19th century icons – Part II.

M.I.A. Lupu (National Art Museum of Romania, Conservation Department, Bucharest, Romania)

A prototype system for the restoration of damaged frescoes.

G. Maino (E.N.E.A. - Ente per le Nuove Tecnologie, l'Energia e l'Ambiente, Applied Physics Division, Bologna, Italy) and D. Biagi Maino

A fingerprint model for inhomogeneous ink paper layer systems measured with micro X-ray fluorescence analysis.

W. Malzer (Technische Universität Berlin, Institut für Atomare und Analytische Physik, Berlin, Germany), O. Hahn and B. Kanngiesser

Deterioration of Jurassic limestone – mineralogical and chemical analyses.

M. Marszalek (University of Mining and Metallurgy, Department of Mineralogy, Petrography and Geochemistry, Krakow, Poland)

The study of corroded glass objects by high-resolution X-ray computed tomography.

F. Mees (University of Ghent (RUG), Department of Geology and Soil Science, Ghent, Belgium), E. Cornelis, T. Doménech Carbó, P. Jacobs and H. Römich

Microanalysis for stratigraphical studies in art objects.

A. Mendoza (Havana's Historian Office, Archaeometry Laboratory, Havana, Cuba), E. China, U. Admon, D. Wegrzynek and M. Markowicz

Secondary target portable XRF spectrometer for archaeometry applications.

A. Mendoza (Havana's Historian Office, Archaeometry laboratory, Havana, Cuba), A. Markowicz, E. China and P.R. Danesi

Non-destructive optical and elemental (XRF) analyses for the study of painting layers.

M. Milazzo, N. Ludwig (Università di Milano, Istituto di Fisica Generale e Applicata, Milan, Italy), G. Poldi, G.C.F. Villa and M. Mucco

Role of protolytic interactions in photo-ageing processes of carminic acid and carminic lake solution and painted layers.

C. Miliani (Consiglio Nazionale delle Ricerche, C.S.C.I.S.M., Perugia, Italy), A. Romani, M. Vagnini and G. Favaro

Additions to lead-tin-antimony yellow – recent researches and results.

P. Moiola (E.N.E.A. - Ente per le Nuove Tecnologie, l'Energia e l'Ambiente, Dipt. Innovazione, Unità Salvaguardia del Patrimonio Artistico, Rome, Italy) and C. Seccaroni

Characterisation of iron based pigments through XRF analysis.

P. Moiola (E.N.E.A. - Ente per le Nuove Tecnologie, l'Energia e l'Ambiente, Dipt. Innovazione, Unità Salvaguardia del Patrimonio Artistico, Rome, Italy) and C. Seccaroni

NDT methodology for the protection of mosaics.

A. Moropoulou (National Technical University of Athens, School of Chemical Engineering, Athens, Greece), M. Kouli, N.P. Avdelidis, E.T. Delegou, E. Aggelakopoulou, M. Karaglou, P. Karmis, A. Aggelopoulos, S. Griniezakis, E.A. Karagianni and N.K. Uzunoglou

NDT planning methodology of conservation interventions on historic buildings.

A. Moropoulou (National Technical University of Athens, School of Chemical Engineering, Athens, Greece), E.T. Delegou and N.P. Avdelidis

Evaluation of the protective effect of commercially available aluminium alkoxides on vegetable tanned leather deteriorated through oxidation.

A.P. Moutsatsou (Aristotele University of Thessaloniki, Department of Chemistry, Thessaloniki, Greece), T. Rauff, R. Larsen, D.V. Poulsen and E. Varella

Identification of the dyes in the coating of leather handbag dated second quarter of the XXth century.

D.P. Nikolova and I.G. Goshev

PIXE analyses on easel paintings and research in history of art.

C. Oger (Université de Liège (Ulg), History and Technology of Art, Liège, Belgium), D. Allart and G. Weber

Investigation of banner silver embroidery degradation.

C. Paluszkiwicz (Jagiellonian University, Regional Lab. of Physicochemical Analyses & Structural Research, Krakow, Poland), E. Nosek, A. Kowalska and M. Bilka

Venetian paintings. Nuclear techniques prior to their conservation.

E. Pánczyk (University of Warsaw, Institute of Nuclear Techniques and Technology, Warsaw, Poland), L. Walis, A. Kalicki and L. Rowinska

A critical analysis of commercial pigments.

M. Pérez (University of The Basque Country (EHU/UPV), Department of Analytical Chemistry, Leioa, Spain), K. Castro, Ma.D. Rodriguez, Ma. Olazabal and J.M. Madariaga

Environmental monitoring of the microclimates, air pollutants and microbial contamination in the National Gallery of Umbria.

L. Pitzurra (Università di Perugia, Dept. Experimental Medicine & Biochemical Sciences, Perugia, Italy), C. Miliani, A. Nocentini, R. Selvaggi and F. Bistoni

The analysis of eight manuscripts and fragments from the 5th / 6th century to the 12th century, with particular reference to the use of and the identification of real purple in manuscripts.

C.A. Porter (London, Great Britain), G. Chiari and A. Cavallo

A survey on public libraries in Rome.

F. Prestileo (Consiglio Nazionale delle Ricerche, Centro di Studio sulle Cause di Deterioramento e sui Metodi di Conservazione delle Opere d'Arte, Rome, Italy)

Chemical characterisation with microanalytical techniques of blue panels of the XVIth century.

E. Princi, S. Vicini, M. Cataldi Gallo and E. Pedemonte (Università di Genova, Dipartimento di Chimica e Chimica Industriale, Genua, Italy)

Study of building through diagnosis for an intervention aimed to repair. Case of the Precettoria of S. Antonio of Ranverso (Turin, Italy).

C.R. Romeo (Politecnico di Torino, sede di Mondovi, Facoltà di Architettura II, Mondovi, Italy)

Non-destructive in situ identification of gemstones on two “Navaratna” jewels by MRM (mobile Raman microscopy).

B. Rondeau (Muséum National d'Histoire Naturelle, Laboratoire de Minéralogie, Paris, France) and D.C. Smith

Microclimate monitoring assures the long lasting preservation of frescoes.

E. Rosina (Politecnico di Milano, Dipt. di Conservazione e Storia dell'Architettura, Milan, Italy) and G. Roche

An information system and dissemination of knowledge tools regarding heterogeneous data in the recovery of historical buildings: from ARKIS to ARKIS-NET.

P. Salonia (Consiglio Nazionale delle Ricerche, ITABC - Istituto per le Tecnologie Applicate ai Beni Culturali, Monterotondo, Italy) and A. Negri

Non-destructive pigment analysis by Raman spectroscopy of a Flemish polyptych (Master of the Holy Blood).

C. Sandalinas (Museu Frederic Marès, Conservation-Restoration Department, Barcelona, Spain) and S. Ruiz-Moreno

Analysis by X-ray diffraction of the Roman sigillata ceramics originating from La Graufesenque.

Ph. Sciau (C.N.R.S., CEMES, Toulouse, France), L. Vendier, P. Martinetto and E. Dooryhee

Oxygen-free display cases for conservation in museums: remarks and considerations.

F. Sciurpi (Università di Firenze, Dipartimento di Tecnologie dell'Architettura e Design "Pierluigi Spadolini", Firenze, Italy), R. Boddi and C. Danti

Realisation of standards for ancient pigments.

C. Seccaroni (E.N.E.A. - Ente per le Nuove Tecnologie, l'Energia e l'Ambiente, Dipt. Innovazione, Unità Salvaguardia del Patrimonio Artistico, Rome, Italy) and C. Sanipoli

Bronze disease: non-destructive distinction of three polymorphs of $\text{Cu}_2\text{Cl}(\text{OH})_3$ by Raman microscopy (RM).

D.C. Smith (Muséum National d'Histoire Naturelle, Laboratoire de Minéralogie, Paris, France) and M. Bouchard

On the XRF detection of Ti in white spots of paintings.

Z. Szökefalvi-Nagy (Hungarian Academy of Sciences, KFKI - Research Institute for Technical Physics and Materials Science, Budapest, Hungary), A. Kocsonya, I. Demeter and I. Kovács

Identification of modern organic artists' pigments with micro-Raman spectroscopy.

P. Vandenberghe (University of Ghent (RUG), Laboratory of Analytical Chemistry, Ghent, Belgium) and L. Moens

A compact micro-XRF spectrometer for in-situ analyses of artistic materials.

G. Vittiglio (Spectro Analytical Instruments GmbH & Co. KG, Kleve, Germany), S. Bichlmeier, P. Klinger, J. Heckel, W. Fuzhong, L. Vincze, K. Janssens, P. Engström, A. Rindby, K. Dietrich, D. Jembrih-Simbürger, M. Schreiner, D. Denis, L. Attar and A. Lamotte

Identification of inks and pigments in ancient Egyptian Book of Death by SEM-EDS.

B. Wagner (University of Warsaw, Department of Chemistry, Warsaw, Poland), M.L. Donten, E. Bulska, A. Jackowska and W. Sobucki

On the use of Mössbauer spectroscopy for the investigation of Fe(II)/Fe(III) in ancient manuscripts.

B. Wagner (University of Warsaw, Department of Chemistry, Warsaw, Poland), E. Bulska, B. Stahl, M. Heck and H.M. Ortner

Investigation of gold tissues from sarcophagi and thin layers of gold on a smalt.

A.V. Zazhigalov (National Reserve Kiev-Pecherk Lavra, Department of Archaeology, Kiev, Ukraine), S.A. Balakin, V.A. Zazhigalov and J. Stoch

Chemical composition and morphology of ancient Kiev glazes.

A.V. Zazhigalov (National Reserve Kiev-Pecherk Lavra, Department of Archaeology, Kiev, Ukraine), S.I. Klimovsky, V.A. Zazhigalov, I.V. Bacherikova, J. Stoch and A. Kowal

Thursday 6 June 2002

EXCURSION TO BRUGES

A full day visit to the historic city of Brugge (Bruges) is planned. After coach transfer from Antwerp, a boat ride on the canals will show us Bruges, also called 'Venice-of-the-North', in all its splendour. We will explore the medieval city centre and visit the 'Gruuthuuse' Museum under the direction of a city guide. Also, a visit will be paid to the exhibition entitled "Jan van Eyck and the Flemish primitives", held in the framework of the "Bruges 2002 Cultural Capital of Europe".

Lunch included. Number of participants limited to 50 persons. Cost of this excursion is 50.00 EUR.

EXCURSION TO KIK-IRPA AND MUSEUMS IN BRUSSELS

The Royal Institute for Cultural Heritage (KIK-IRPA) was established in 1948 to study and preserve Belgium's cultural heritage, and has a mission of research and public service. It houses art historians, photographers, chemists, physicists and conservators. We will have a guided tour of the famous labs and of two restoration workshops, namely for paintings and sculptures (www.kikirpa.be).

We will then proceed to the exciting and novel Belgian Museum of Musical Instruments. It exhibits a unique collection of musical instruments and houses an exhaustive panorama of ancient, modern and traditional music. Its mission implies conservation, restoration, scientific research, information, education and entertainment (www.mim.fgov.be). Participants are free to follow a guided tour in the Musical Instruments Museum.

Alternatively or additionally, a visit can be made, across the street, to the Museum of Ancient Art (www.kmskb.be/site/EN/frames/F_museeanc.html), housing a vast collection of paintings, sculptures and drawings from the 15th to the 18th century. Paintings of Flemish Primitive masters represent the bulk of the collection, and include Rogier van der Weyden, Dirk Bouts, Hans Memling and Hieronymus Bosch. Visitors then discover the rich panorama of the numerous artistic movements that developed in the 16th century, culminating in the Bruegel room where four important paintings of the master are exhibited. Finally, the 17th and 18th centuries are brilliantly illustrated by, in particular, the retables and sketches by Pieter-Paul Rubens, the paintings by Jacob Jordaens and the striking portraits by Anthony van Dyck.

A further possibility allows participants to wander off in the nearby historical centre of Brussels.

Lunch included. Number of participants limited to 50 persons. Cost of this visit is 35.00 EUR.

Please visit the site: <http://chem-www.uia.ac.be/art2002/>

21ST ANNUAL MEETING ON DYES IN HISTORY AND ARCHAEOLOGY

OCTOBER 10 - 12, IN AVIGNON AND LAURIS, FRANCE

On October 10 - 12, in Avignon and Lauris, France, the above mentioned meeting on dyes will be held. The first two days will take place in the Hotel du Palais des Papes in Avignon (paper sessions). The 12th of October however, the conference will move to the Chateau de Lauris, Vaucluse, for poster sessions, visit of the botanical garden of dye plants and experimental archaeology: dying demonstrations. Of course demonstrations are no experiments, but the focus will be on practical activities.

The conference will be organised jointly by the Association Couleur Garance, the CNRS and the Laboratoire de Botanique et Phytochimie of the CNRS. People interested in participating are kindly requested to fill in the registration form and to send it back to Association Couleur Garance before July 10th. The fee for the 3 days conference is Euro 100,00. The full program will be sent to those registered by the end of August. Participation is limited to 100 persons. Hotels should be booked long in advance.

Papers, posters and dyeing demonstrations will have to be given in English.

All information and the registration form are available at:
<http://ghhat.univ-lyon2.fr/ciham/> (choose "DHA21") or mail to:
mich.garcia@online.fr

Preliminary Registration Form

Title: __Mr. __Ms. __Mrs. __Prof. __Dr.

First name.....

Family name.....

Institution.....

Address.....

.....

.....

Country.....

Phone.....Fax.....

E – mail.....

I plan to attend the Conference(s) Yes/No

I intend to submit a paper Yes/No

I intend to submit a poster Yes/No

I plan to attend the exhibition Yes/No

I will take part in the round table 1 Yes/No

I will take part in the round table 2 Yes/No

Title of contribution (tentative):.....

.....

.....

Please complete and return to:

Prof. Bisserka Samuneva

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yanko@uctm.edu

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EXHIBITION

Companies or individuals will be able to advertise and/or exhibit their latest products. Detailed information can be supplied by potential exhibitors to the secretariat.

OFFICIAL LANGUAGE

The official language of the Conferences will be English. The possibility to use Bulgarian language for a number of papers is reserved in a special Session with simultaneous English translation.

PROCEEDINGS

The abstracts of papers accepted for presentation at the Conferences will be printed as a special issue and given to all participants at registration. The manuscripts of the presented papers will be published in the Proceedings.

ROUND TABLE DISCUSSIONS

During the sessions of the Conferences, two round tables will be organized focussing on raw materials in silicate industry (1) and on technological problems, control and application of glassy and ceramic materials (2).

REGISTRATION FEE

The registration fee is 250 US \$ for participants registered before June 30. 2002. After this date 20 % higher fees have to be paid.

For students, post graduate students and young scientists (below 35 years of age) the registration fees will be reduced by 50%.

www.uctm.edu/14conf/Index.htm

First Announcement

THE SECOND BALKAN CONFERENCE ON GLASS SCIENCE & TECHNOLOGY

THE 14th CONFERENCE ON GLASS AND CERAMICS



24 - 28 September 2002
International House of Scientists
VARNA, BULGARIA

Organized by the:

**Bulgarian Ceramic Society
Union of Chemists of Bulgaria
Union of Scientists in Bulgaria**

CONFERENCE CHAIR

Prof. Bisserka Samuneva
Department of Silicate Technology,
University of Chemical Technology
and Metallurgy
Sofia, Bulgaria

CONFERENCE VICE-CHAIRMAN

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S. Kalimanova S. Stefanova

IMPORTANT DEADLINES

Preliminary Registration	15. 11. 2001
Second announcement and call for paper	30. 12. 2001
Abstracts	30. 03. 2002
Notification of acceptance	30. 05. 2002
Registration and receipt of manuscripts	24. 09. 2002

BACKGROUND

The First Balkan Conference on Glass Science and Technology was held at the University of Thessaly, Volos, Greece in October 2000. More than 100 papers were presented there, concerning the most important problems of present day science and technology.

The Second Balkan Conference in Varna, Bulgaria (2002) will provide the possibility of discussing the latest developments in this field.

The Second Balkan Conference on Glass Science and Technology will be held together with the 14th Conference on Glass and Ceramics, which is a traditional scientific meeting at the International House of Scientist "F. Joliot - Curie", Varna.

SCOPE

The Second Balkan Conference on Glass Science and Technology and the 14th Conference on Glass and Ceramics will provide interchange of information on Science and Technology in the field of Glass and Ceramics.

The main topics included in the Conferences Programme will be:

- Structure, physical and chemical properties;
- New glasses, glass-ceramics, ceramics and composite materials;
- Sol-gel processes;
- Biomaterials: glasses, glass-ceramics, ceramics and composites;
- Raw materials, technological and ecological problems;
- New equipment and save energy problems in glass and ceramic industry;
- New application of glasses and ceramics: agriglasses, ecoglasses and ecoceramics ;
- Historical glasses and ceramics.

LOCATION

The Conferences will be held from the 24 to the 28 September 2002 in Varna, Bulgaria at the International House of Scientist "F. Joliot-Curie". It is located on the Black Sea coast in the tourist resort region of "St Constantine".

SOCIAL PROGRAMME

The social programme will give the possibility to visit the historical places in Varna, European oldest golden treasure, the Battlefield of Nations, the famous tourist resorts Golden Sands, Albena, Balchik and Nessebar, as well as the ancient Monastery in the rocks.

The Daily Telegraph: 18 April 2002

ANCIENT CITY DISCOVERED

ATHENS: An archaeologist believes he may have found the ancient Mycenaean capital of Salamis, the island where one of the greatest recorded battles of antiquity took place.

Archaeologist Yannis Lolos said yesterday he had found two buildings and several hamlets scattered around the ancient acropolis of old Salamis, now known as Kanakia.

The discovery is on the south-western part of the island in the Saronic Gulf.

Mr Lolos, assistant professor of archaeology at the University of Ioannina, said it would take time to discover who ruled the ancient urban centre.

The finds could indicate Salamis had a thriving culture dating back to the 13th century BC, coinciding with Homeric accounts of the island.

Lolos has not yet published the results of his finds.

Salamis, about 15 km southwest of Athens was the site of a famous Greek naval victory over a larger Persian fleet in 480BC.

The finds uncovered by Lolos date back to the 13th and 12th Centuries BC, the late Mycenaean Era when the Trojan War was said to have been fought.

"I have no doubt that this is the urban centre of the island in the late Mycenaean," Lolos said.

A large copper plank that originated from Cyprus was also found, which indicates the two islands had contact during the period.

"This is one of the most important finds from our excavation at this site because it gives a good connection with Cyprus," he added. "This town may have had substantial involvement in the international maritime trade."

Lolos said there were hints that the two buildings may have been part of a larger complex, and that one may have been used for industrial purposes.

Clay vases along with stone and bronze tools were also found at the site, Lolos said.

Please visit the site:

http://www.dailytelegraph.news.com.au/common/story_page/0,5936,4151694%5E703,00.html

MEMORIES ARCHAEOOMETRY MEXICO 2000

CD-ROM ARCHAEOOMETRY, MEXICO 2000

On the occasion of the National Archaeometry Symposium celebrated in Mexico City, from May 15 to 19, 2000, as well as with the objective of disclosing the most recent work on different lines of research generated from the archaeometry perspective, a CD-ROM was published, in which 58 out of a total of 270 investigations presented during the event were published -210 posters and 60 oral reports.

These works were classified according to the material they related to, divided in six thematic fields as follows:

- Field Archaeology.
- Biomaterials.
- Ceramic and Glass.
- Dating.
- Metals.
- Stone, Pigments and Stuccos.

The first section includes 12 research works in which geophysical and chemical techniques were used.

In the first one, Electric Resistance devices, High Penetration Radar's, Gradiometers, as well as Satellite Images and Topometric Research were used in order to identify different features under the surface. These techniques were applied in sites such as: Coyoacan (D.F. Mexico); Teotihuacan (State of Mexico); Izamal (Yucatan, Mexico); Las Pozas (Guatemala); Piedras Negras (Guatemala); Nuevo Mexico (U.S.); Tafi Valley (Argentina); Tara Hategului (Rumania); Shangqiu (China); Itanos(Greece); Thrace (Greece) Alonissos (Greece) and Papa Stour, Shetland (United Kingdom).

In the Biomaterials field, seven investigations are presented, in which methods such as these were used: the Strontium Isotopes Relation, Scanning Electron Microscope (SEM), X-Ray Dispersive Energy Spectroscopy (XR-EDS), Oxygen Isotopes and X-Ray Spectrometry (XRS). Through the cited studies, material such as human bones and teeth from the archaeological site of Teotihuacan (State of México) was analyzed, as well as Olmec wood found at the site of El Manati (Veracruz, Mexico); animal bones located in ritual contexts from the III century b.C., in the Carpathian Basin; horse bones and teeth dating to the Pleistocene in Germany. Likewise, human and animal bones from the archaeological site in Calakmul (Campeche, Mexico); and non evaporated wine components from a funerary barrow which dated from the Iron Age, excavated in Fehervarsurgo-Eresztvenyi (Hungary); as well as a material which, according to the authors, had not been reported of in the Maya area, consisting of a textile mixed with clay, excavated in Las Pacayas and Aguateca sites (Guatemala).

Different research on Ceramic and Glass shows us some applications of techniques such as: Neutron Activation, X-Ray Diffraction (XRD), X-Ray Fluorescence (XRF) , Plasma Emission Spectrophotometry , Optical Microscopy, Scanning Electron Microscope,

Dispersive Energy Spectrometry (EDS), Electron Microprobe, Polarized Light Microscopy, Proton Induced X-Ray Emission (PIXE), and Thermoluminescence.

Using these analyses, materials such as the following are studied: Celtic ceramic from the Iron Age, from central Spain; glass beads from Riau (Indonesia) and Singapore, dating from the XII to the XIV centuries A.D.; glass from Luwu, South Sulawesi (Indonesia), which was dated from the I to the XVII centuries; majolica produced during the Renaissance in Faenza, (Italy); ceramic from Sienna (Italy) which dates from the III to the I centuries B.C.; glass remains from Colonial manufacture in El Paso, Texas (USA); ceramic from the Malpaso Valley (Zacatecas, Mexico) from centuries VII through X A.D.; as well as ceramic from the Iron Age from Megiddo (Israel); flint from the Prehistoric sites in La Grande-Rivoire and Jiboui, in the Western part of the French Alps; including raw material of ceramic produced nowadays in Santa Maria Atzompala (Oaxaca, Mexico); and Zapotec urns (original and imitations) located at the Royal Ontario Museum (Canada); majolica ceramic from the Colonial period found at the former Santo Domingo Convent (Oaxaca, Mexico); Colonial majolica found during the excavations at Templo Mayor (Mexico City); ceramic from Roman times produced in Sardinia, in the West Mediterranean; and also sealed bricks from centuries VII to VI B.C., located in Piammiano, Viterbo (Italy); and finally, Celtic glass from the III century B.C., from Austria.

The dating work presents the results obtained through the thermoluminescence technique on terracotta samples, which were extracted from the excavation site at a Roman Age church, located in Hungary, as well as research carried out in northeastern Oklahoma (U.S.), on the antiquity of human presence in America using Spin's Electron Resonance method.

Within the metals field, eight works are presented in which techniques such as the following were applied: PIXE, RBS, Neutron Activation, Electron Microprobe, Optical Metallography, Scanning Electron Microscope (SEM), Energy Dispersive Spectrometry (EDS), Prompt-gamma Activation Analysis (PGAA); including X-Ray Diffraction (XRD), X-Ray Fluorescence (XRF), and Plasma Emission Spectrophotometry coupled to an UV Laser Ablation System (LA-ICP-MS).

With those methods, diverse material was studied, such as: gold Iranian earrings from the IV century B.C.; a Prehispanic golden pendant from the Post-Classical Period in Oaxaca, Mexico; Celtic coins from the I century B.C.; Punic jewelry from the V to III centuries B.C. found in Puig des Molins, on the Spanish island of Ibiza; Roman brass buckles discovered in Hegyeshalom, west of Hungary; as well as coins from the Old and Medieval periods in Europe; a Pre-Columbian ring from Huandacareo, Michoacan, in Mexico; Roman coins from the III and IV centuries A.D., including the restoration of an African metallurgist oven dating from the Iron Age, victim of vandal acts, in Johannesburg, South Africa.

Finally, from the Stones, Pigments and Stuccos, 13 studies were published, in which diverse techniques were applied, including: Binocular Microscopy, Polarized Light Microscopy (PLM), X-Ray Diffraction, X-Ray Microfluorescence, Scanning Electron Environmental Microscope, Scanning Electron Microscopy with Energy Dispersive and Wavelength Dispersive Spectroscopy (EDS-WDS), Thermic Plasma, Digital Photographs and Image Processing, Photoluminescence, Prompt-gamma Activation Analysis (PGAA), Electron Optical Microscope, Scanning Electron Microscope,

Dispersive Energy Spectrometry, X-Ray Diffraction, Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LAM-ICP-MS), Plasma Emission Spectrometer, PIXE, Particle Induced Gamma Emission (PIGE), ICP-MS , Elastic Recoil Detection(ERD) , Electron Microprobe (EMPA), X-Ray Fluorescence (XRF), Infrared Spectroscopy with Fourier transform, Electron Microscope, Optical Microscope and Microparticles Voltimetry.

Some of the aspects that are analyzed through these methods include: the technology used in the manufacture of the Egyptian Blue pigment during the Roman and Hellenic Epochs; some aspects about the preservation of elements made in stone in Mexico; image processing and digital photography in the archaeological site of Cacaxtla (Tlaxcala, Mexico); characterizing the Mayan Blue pigment; stone tools from the Neolithic Period found in Hungary; Celtic, polichrome ceramic from the Iron Age; analyses of stone beads in order to infer trade routes and supply areas during the Neolithic on the southwest portion of the Iberian Peninsula; analyses of Paleozoic Period in the Ohio area, Pennsylvania and West Virginia, (U.S.); origin of the emeralds from a Visigothic finding from centuries VII and VIII, in Guarrazar (Spain); as well as the technological research on Roman paintings in graves located in Cyprus; the importance some thermal springs had on the economy of inhabitants from a Pre-Classic settlement located in Chupicuaro (Guanajuato, Mexico);the use, wear and tear of stone implements dating from 26,000 years ago in Moravia, Czech Republic; and a proposal for the characterization of materials such as pigments and different kinds of ceramic, through a non destructive technique.

Local Organizing Committee of the 32nd ISA.



FITCH LABORATORY

BRITISH SCHOOL AT ATHENS, GREECE

RESEARCH FELLOWSHIPS IN

CERAMIC PETROLOGY & ARCHAEOLOGICAL CHEMISTRY

Two posts are available for suitably qualified candidates at graduate or higher level in the Fitch Laboratory, British School at Athens, Greece. The Ceramic Petrology Fellow (Williams Fellow) will undertake research on archaeological ceramics using mainly polarising microscopy. The Chemistry Fellow will operate the ICP-AES system (inductively coupled plasma atomic emission spectrometer), undertaking provenance and technological studies on ancient ceramics and metals. In addition to Laboratory projects, the Fellows are encouraged to pursue approved research programmes of their own. Applicants should be archaeologists with training and practical experience in petrography/analytical chemistry or geomaterial analysts with archaeological experience. Previous experience in Aegean Archaeology is highly desirable but not a requirement.

The salary will be £12,500-14,500 (20,833-24,167euros) per annum, depending on qualifications and experience. In addition, the School will provide annual return airfare from the UK, health insurance and also membership of the USS pension scheme (available to UK residents only). For those who do not qualify for this or UK National Insurance, alternative arrangements will be made. The Fellows will be entitled to lunch when the dining room is open.

The successful candidates will be expected to take up the posts from October 2002 (for the Ceramic Petrology Fellow) and January 2003 (for the Chemistry Fellow) for three years duration (probationary first year). The Fellows must submit a report each September to the Laboratory Director for forwarding to the Fitch Laboratory Committee on the year's work.

Fellows are encouraged to reside in the Hostel of the School in the first instance.

A covering letter, a CV and the names and addresses of two referees should be sent, by post or e-mail, to:

Fitch Laboratory Research Fellowships
The London Administrator
British School at Athens
Senate House
Malet Street
London WC1E 7HU, UK
e mail: bsa@sas.ac.uk

Closing date: Friday 31 May 2002.

Applicants must ensure that references are submitted by the closing date. Interviews will be held in London in June. Potential applicants may contact Dr E. Kiriatzi (fldirector@bsa.ac.uk) for further information.

Further details about the School and the Laboratory can be also found at <http://www.bsa.gla.ac.uk/>

POSTDOCTORAL POSITION FOR RESEARCH ARCHAEOLOGIST

ARCHAEOLOGICAL RESEARCH INSTITUTE, ARIZONA STATE UNIVERSITY

We announce a Postdoctoral position in archaeology at the Archaeological Research Institute, Arizona State University (ARI website: <http://archaeology.asu.edu>). Ph.D. in Archaeology required. Desired: interest/experience in interdisciplinary studies and conducting research on archaeological issues of central Arizona; Interdisciplinary research experience or educational training relevant to modeling, hydrology, materials analysis, information management, or human/environmental impacts is desired. The postdoctoral associate will work with and contribute to an ongoing interdisciplinary effort to understand the long-term prehistoric development of the Salt/Gila Basin. Position begins 8/15/2002. Send cover letter explaining interest in position and relevant expertise; a curriculum vitae; names, addresses, phone numbers and email addresses of 3 references; and reprints of relevant publications (limit of 3) to: Dr. Arleyn Simon, Post-Doc Search, Archaeological Research Institute, Dept of Anthropology, PO Box 872402, Arizona State University, Tempe, AZ 85287-2402. Application deadline is 5/30/02 or the 15th and 30th of each month thereafter until filled. For inquiries, contact Dr. Arleyn Simon at 480-965-9231 or arleyn.simon@asu.edu. Position contingent upon funding. AA/EOE.
