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# Πληροφοριακό Δελτίο της Ελληνικής Αρχαιομετρικής Εταιρείας

**- Δεκέμβριος 2004 -**

# Newsletter of the Hellenic Society of Archaeometry

**- December 2004 -**

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## ΣΥΝΕΔΡΙΑ - CONFERENCES/WORKSHOPS

# 2<sup>ND</sup> EGYPTOLOGICAL CONFERENCE IN GREECE: FOREIGN RELATIONS & DIPLOMACY IN THE ANCIENT WORLD

Dear Colleagues,

We are pleased to announce the 2<sup>nd</sup> International Egyptological Conference on Rhodes, Greece, entitled: **Foreign Relations and Diplomacy in the Ancient World: Egypt, Greece, Near East**, organised by the Department of Mediterranean Studies of the University of the Aegean sponsored by the Ministry of Education and Religious Affairs and the Ministry of Culture.

Date: 3-5 December 2004

Venue: Mediterranean Hotel and Convention Center, 35 Cos St., 85100 Rhodes, Greece  
(<http://www.mediterranean.gr>)

For information about the Conference go to:

<http://www.rhodes.aegean.gr/Assets/announcements/Conference/index.htm>

Invited speakers: P. Brand (Memphis), K. Kitchen (Liverpool), B. Knapp (Glasgow), Y. Koenig (Paris), A. Lloyd (Swansea), L. Morenz (Leipzig & Berlin), D. Redford (Toronto), R. Ritner (Chicago), A. Roccati (Rome), A. Spalinger (Auckland), P. Wilson (Durham)

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## Programme

**Friday, 3 December 2004**

**08:30: Registration**

**09:30: Welcome and Introduction**

**Session 1: Diplomacy & Politics**

10:00: L.Morenz (Leipzig & Berlin), Town versus tribe / clan in Southern Palestine of the Iron Age. On an Egyptian perspective as reflected in the list of Sheshonk I

10:30: C.Maggidis (USA), "Mukana" at War: the Anatolian Front and the Theory of Overextension. Reconstructing an Integrated Causal Nexus for the Decline and Fall of the Mycenaean World

**11:00: Coffee break**

11:30: E.Morris (Swansea), Bowing and scraping in the Ancient Near East: An Investigation into obsequiousness in the Amarna Letters

12:00: A.Smith (Auckland), Royalty-based females and the effect of diplomatic marriages on the office of Kingship

12:30: P.Franzisz (Edinburgh), D.Bourantonis (Athens), K.Magliveras (Rhodes), Ambassadors, diplomats and messengers in Ancient Greece: A view based on Thucydides

### **Session 2: Sea routes & Trade**

14:30: D.Redford (Toronto), Mendes, a major emporium in the East Mediterranean, c. 800 - 300 B.C.

15:00: P.Wilson (Durham) & G.Gilbert (Australia), Sais and its Trading Relations with the Eastern Mediterranean

15:30: B.Knapp (Glasgow), Insularity and connectivity in the Bronze Age Mediterranean: Maritime interaction and the sea

#### **16:00: Coffee break**

16:30: U.Krotscheck (Stanford), Going with the grain: The influence of subsistence trade on Athenian state formation

17:00: A.Brybaert (Glasgow), The technology of Bronze Age painted plaster as if people mattered

17:30: M.Stefanakis (Rhodes), The Pirates of the Aegean and their role in the development of foreign relations and diplomacy in the Hellenistic Period

20:00: Reception at Mediterranean Hotel

### **Saturday, 4 December 2004**

#### **Session 3: The Egyptian Empire in Near East**

09:30: K.Kitchen (Liverpool), Some thoughts on Egypt, the Aegean and Beyond of the 2nd Millennium BC

10:00: P.Brand (Memphis), Egypto-Hittite relations from after the battle of Kadesh until the peace treaty of Ramesses II and Hatusillia III

10:30: A.Nemirovskiy (Russia), Babylonian presence on the borders of Egyptian possessions in Asia throughout Amarna Age

#### **11:00: Coffee break**

11:30: A.Spalinger (Auckland), Some notes on the chariot arm of Egypt in early Dynasty XVIII

12:00: B.Heagren (Auckland), The logistics of the Egyptian army in Asia

12:30: V.Christopoulos (Athens), Statues of two officers of the Egyptian army of the XXVIth Dynasty from the National Archaeological Museum of Athens

#### **Session 4: Egypt and Hellas**

14:30: A. Lloyd (Swansea), The Greeks and Egypt. International Relations in the Seventh-Sixth Centuries BC

15:00: R.Muller-Wollermann (Tubingen), Foreign Coins in Late Period Egypt

15:30: K. Panagopoulou, Saviour' Monarchs in Context: Hellenistic Monarchy and the (Ab)use of the Title 'Soter'

#### **16:00: Coffee break**

16:30: S.Weber (Germany), Greek painted pottery in Egypt: Evidence for contacts in the 7th and 6th Centuries B.C.

17:00: M.Nikolakaki-Kentrou (Cambridge), Greeks bearing gifts in Egypt's 'Golden Era': 'Keftiu'-type representations from Amenhotep III's demolished First Jubilee Festival structure

### **Sunday, 5 December 2004**

#### **Session 5: Interactions in Magic and Religion**

09:30: R.Ritner (Chicago), Cultural exchanges between Egyptian and Greek Medicine

10:00: Y. Koenig (Paris), The image of the foreigner in the ancient Egyptians magical texts  
10:30: P.Kousoulis (Rhodes), Secrecy in Greco-Roman magic: native practice or cultural loan?

**11:00: Coffee break**

11:30: S. Gorke (Germany), Religious Interactions between Hattusa and Northern Syria  
12:00: E.Anagnostopoulou (Lampeter), Daphnis: a Near Eastern god in Egypt  
12:30: R.Tatomir (Romania), Between God and Genius. Guiding and Protective Entities: Anubis, Wpawt and Semitic Homologii

**Session 6: Linguistic and cultural contacts**

14:30: A. Roccati (Rome), The alphabet(s) at a turning point: a view from Egypt  
15:00: S.J.Wimmer (Munich), "Palestinian Hieratic": Egyptian scribal tradition in the Hebrew Kingdoms  
15:30: Y.Ladynin (Moscow), Two instances of the Satrap Stela: Tokens of the Graeco-Egyptian linguistic and cultural Interrelation at the start of the Hellenism?

**16:00: Coffee break**

16:30: E.Walters (Pennsylvania), Hierakonpolis women of stature and the legacy from the Near East in Egypt  
17:00: M.Panagiotaki (Rhodes), Exchange of prestige technologies as evidence of cultural integration between the Aegean and the Near East

**17:30: Closing of the conference and concluding remarks**

**20:00: Reception at a traditional restaurant in the Medieval Town of Rhodes**

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We would appreciate you forwarding this invitation to any faculty colleagues or graduate students who might be interested.

With kind regards  
Panagiotis Kousoulis  
on behalf of the OC

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# **NON-DESTRUCTIVE TECHNIQUES ON ARTWORKS - LAT2005 CONFERENCE, MAY 11-15, 2005, ST. PETERSBURG**

## **2<sup>nd</sup> Call**

Dear Colleague,

I would like to remind you that the submission deadline for the International Conference on Lasers, Applications and Technologies: **ICONO/LAT 2005 (St. Petersburg, May 11-15, 2005)** is approaching.

Abstract due date is **December 1, 2004**.

I would also remind you that among the topics discussed in Session #3, ( **Laser Sensing, Imaging and Information Technologies** ) there will be a special section for **Non-destructive techniques on artworks**

Submissions can be applied through the following electronic form:

[http://congress.phys.msu.ru/icono-lat-2005/reg/register.php?conf\\_id=2](http://congress.phys.msu.ru/icono-lat-2005/reg/register.php?conf_id=2)

For more information please consult the conference website:

<http://congress.phys.msu.ru/icono-lat-2005/>

Please do not hesitate to forward this message to colleagues who could be interested.

Looking forward to see you in St. Petersburg.

Best regards,

Luca Pezzati

\*\*\*\*\*

Dr. Luca Pezzati, Coordinator  
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**MEDITERRANEAN ENCOUNTERS:**  
**PEOPLE, HISTORY AND LITERATURE, 11-**  
**12 FEBRUARY 2005, UNIVERSITY OF**  
**CAMBRIDGE**

**Call for Papers**

The Mediterranean world has a rich history of encounters between peoples of various cultural, ethnic and religious backgrounds. Given the often contentious nature of current discourse on the region, it is beneficial to adopt an inter-disciplinary approach to its study. In association with the Center for Research in the Arts, Social Sciences and Humanities, the Middle East Graduate Association of the University of Cambridge is hosting this conference to bring together studies on the exchange and interaction between various peoples within the Mediterranean in the areas of trade, culture, literature and relations of power.

The conference will be organized along several main themes: European and Middle Eastern historiography of the Mediterranean, the Mediterranean as a trade zone, relations of power within the Mediterranean and the Mediterranean in literature and culture.

Papers in English on these and related themes concerning the Mediterranean from the ancient to the modern period are encouraged. The conference particularly encourages the participation of scholars at an early stage in their careers. Panels are expected to include three papers each lasting around twenty minutes with ten minutes for discussion.

**Abstracts of 200 words are expected  
by 1 December 2004.**

The conference will be held in Cambridge on 11-12 February 2005. Please include clear contact details, academic affiliation and title of paper. Limited funding opportunities will be available in support of participants.

For more information please contact :

\*\*\*\*\*  
Murat C. Menguc  
Clare Hall, Cambridge CB3 9AL  
Email: [murat\\_menguc@myway.com](mailto:murat_menguc@myway.com)

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## MINOAN SEMINAR NOTICES

Please note that the "Minoans in the North Aegean" Workshop has been postponed until 22nd/23rd January 2005

Danish Institute, Cherefondos 14, Plaka, Athens

Anna Lucia d'Agata CNR/ICEVO, Roma

### *CRETAN WARRIORS OF THE EARLY DARK AGE*

A figured krater from Thronos Kephala (ancient Sybrita) and the rise of a 'microstate' on Central-Western Crete

Greek-Italian excavations, carried out in collaboration between CNR/ICEVO (Rome) and 25th Ephoria of Prehistoric and Classical Antiquities (Khania), have confirmed the existence of a large Dark Age – and later – settlement, on the south-west slopes of the Psiloritis massif in Central-Western Crete. The site, located in the territory of the Greek and Roman city of Sybrita, is situated on the summit of the Kephala hill and appears closely linked both to the valley of Amari, which lies to the south, and to the slopes of Psiloritis, which share similar environmental and cultural features.

The earliest settlement on Kephala was established at the end of the Late Bronze Age and represents one of the new foundations which, at the very beginning of the 12th century BC, spread across the Cretan landscape and, in most cases, were continuously inhabited until the early 7th century BC.

In 2002 excavation soundings carried out in Building 3 on the north plateau, where the settlement is located, recovered a clay bell-krater which displays what appears to be one of the earliest figured scenes of Greek vase painting. Warriors and a group of objects are depicted on both faces of the vase.

Figured scenes on clay vases are known on Crete, as on the Mainland, in LM IIIC. Later on, they appear at Knossos in the 9th century BC, showing that – in contrast to what is known for the Greek mainland – during the Late Dark Age a figured repertoire was employed on Cretan pottery, which made use of elements of both Minoan and Near Eastern derivation.

The bell-krater from Thronos Kephala is a novelty: it is quite early, being assignable to the end of 11th/beginning of the 10th century BC, and the scene depicted on it appears to be entirely new.

It is the aim of this paper to present this outstanding document of Early Dark Age Crete, whose analysis may help reconstructing some aspects of the mental attitude and social behaviour of a Cretan elite in the very centuries of formation of the early Greek society.

Will all those wishing to attend please inform us by email [SECRETARY@MINOANSEMINAR.GR](mailto:SECRETARY@MINOANSEMINAR.GR) or by telephone (Danish Institute, Herefondos 14, Plaka, Athens) 210 3244644 between 09.00 and 13.30 Monday to Friday. Fax: 210 3247230

# **NEW LIGHTS ON ANCIENT MATERIALS, FIRST EUROPEAN TRAINING SCHOOL ON THE SYNCHROTRON ANALYSIS OF MUSEUM OBJECTS**

**ESF - COST G8, Synchrotron SOLEIL**

**Saint-Aubin, France, 14-18 December 2004**

## **Preliminary program**

Deadline for subscription: November 15, 2004

### **Tuesday 14 December**

Welcome:

**10h30-11** welcome

Denis RAOUX, synchrotron SOLEIL

**11-12** current challenges on archeological and cultural heritage materials

[ lunch ]

Introduction:

**14-17** introduction on analytical methods and synchrotron radiation techniques applied to museum

objects (lecture)

tutorial

synchrotron SOLEIL

**15-16** optics for X-ray imaging

Mourad IDIR, synchrotron SOLEIL and COST P7

Buffet (to be confirmed)

### **Wednesday 15 December**

Ancient metal analysis / synchrotron elemental analysis

**9-10** synchrotron elemental imaging of cultural heritage artefacts

Koen JANSSENS, Gent university (Gent, Belgium)

**10-11** synchrotron X-ray fluorescence and absorption

**11-12** current challenges regarding ancient metal analysis

Alessandra GIUMLIA-MAIR, professor at the Udine university (Udine, Italy)

[ lunch ]

**14-15** long term corrosion and conservation of metal artefacts

Régis BERTHOLON, senior lecturer at the University Paris I (Paris, France)

**15-17** case study on ancient metal analysis using synchrotron radiation

Philippe DILLMANN, head of the archeomaterial analysis group at Laboratoire Pierre Süe (Saclay, France)

Régis BERTHOLON, senior lecturer at the University Paris I (Paris, France)

### **Thursday 16 December**

Ancient pigment analysis / synchrotron structural analysis

**9-10** current challenges regarding ancient pigment analysis

Marika SPRING, senior researcher at the National Gallery (London, UK)

**10-11** synchrotron X-ray diffraction

synchrotron SOLEIL

**11-12** pigment analysis using synchrotron radiation

Marius VENDRELL-SAZ, professor at the Barcelona university (Barcelona, Spain)

[ lunch ]

Visits to synchrotron facilities:

**14-15h30** visit to the former superACO synchrotron

**16-17h30** extensive visit to the synchrotron SOLEIL building site

**Friday 17 December**

Synchrotron molecular analysis / synchrotron structural analysis:

**9-10h30** synchrotron infrared microscopy

synchrotron SOLEIL

**10h30-12h30** case study on the structural analysis of museum objects

[ lunch ]

Visit to a museum or conservation laboratory:

**15-17** Visit

Training school dinner in a museum

**Saturday 18 December**

Synchrotron molecular analysis / ancient organic material analysis:

**9-10** current challenges regarding ancient organic material analysis

**10-11h30** case study on molecular chemistry

Marine COTTE, ESRF (Grenoble, France)

[ lunch ]

Conclusions:

**14-15** coupling of synchrotron imaging techniques

synchrotron SOLEIL

**15-16** the future of synchrotron radiation applied to cultural heritage materials

Manolis PANTOS, SRS synchrotron (Daresbury, UK)

Loïc BERTRAND, synchrotron SOLEIL

**16-17** conclusions

Roger FOURME, scientific director, synchrotron SOLEIL

[ end of the training school ]

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**"ELEGY, SACRIFICE, GRAVES, CULTS,  
AND EPIGRAPHY AT THE  
SYNCHROTRON", FRIDAY, NOVEMBER  
19, CORNELL UNIVERSITY**

THE DEPARTMENT OF CLASSICS AT CORNELL UNIVERSITY SPONSORS:  
"ELEGY, SACRIFICE, GRAVES, CULTS, AND EPIGRAPHY AT THE  
SYNCHROTRON"

A SYMPOSIUM IN MEMORY OF MICHAEL JAMESON"

FRIDAY, NOVEMBER 19, CORNELL UNIVERSITY, A.D. WHITE HOUSE, 3.00 PM.  
RECEPTION TO FOLLOW

3.00-3.15 PM. INTRODUCTION  
PROFESSOR KEVIN CLINTON, DEPARTMENT OF CLASSICS

3.15-3.30 PM. "A LEGISLATIVE FORMULA IN ARCHAIC ELEGY"  
PROFESSOR HAYDEN PELLICCIA, DEPARTMENT OF CLASSICS

3.30-3.45 PM. "PRIESTLY PREROGATIVES AND *HIERA MOIRA*"  
DR. NORA DIMITROVA, DEPARTMENT OF CLASSICS

3.45-4.00 PM. "*KREANOMIA*"  
PROFESSOR ERAN LUPU, GEORGE WASHINGTON UNIVERSITY

4.00-4.15 PM. INTERMISSION

4.15-4.30 PM. "WOMEN'S NAMING FORMULAE ON ATTIC TOMBSTONES FROM  
THE FIFTH CENTURY TO THE HELLENISTIC PERIOD"  
PROFESSOR ARIEL LOFTUS, WICHITA STATE UNIVERSITY

4.30-4.45 PM. "THE CULT OF *ARKHEGETAI* AND *KTISTAI* IN MAGNESIA  
(THESSALY)"  
DENVER GRANINGER, DEPARTMENT OF CLASSICS

4.45-5.00 PM. "PRELIMINARY INITIATION AT THE ELEUSINIAN MYSTERIES"  
PROFESSOR KEVIN CLINTON, DEPARTMENT OF CLASSICS

5.00-5.15 PM. "X-RAY FLUORESCENCE RECOVERS WRITING FROM ANCIENT  
INSCRIPTIONS"  
JUDSON POWERS, DEPARTMENT OF PHYSICS

5.15 PM. DISCUSSION

5.30 PM. RECEPTION

For further information please contact:

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## **COURSE ON EARLY JEWELLERY TECHNOLOGY, THURSDAY 14<sup>TH</sup> - FRIDAY 15<sup>TH</sup> APRIL 2005, LONDON**

A Two-Day Course: A Brief History of Jewellery Manufacturing Techniques

To be held in central London in Spring 2005 and arranged by Gem-A - the Gemmological Association of Great Britain, a world leader in gem and jewellery-related training. The course tutor is Dr. Jack Ogden, a well-known specialist in the historical development of jewellery materials and techniques.

Thursday 14th - Friday 15th April 2005

This two-day course covers the history of jewellery manufacture from the earliest times up to the end of the 19th century. With the main focus on gold jewellery, the course will cover the development of jewellery manufacturing and assembling techniques, and how these affected design. The course includes a hands-on session with ancient jewellery components from an extensive teaching collection. Participants will gain a good basic understanding of jewellery technology in the past, and how this knowledge helps in assessments of dating and authentication.

Price £190 + VAT (£223.25) (Gem-A Member Price £175 + VAT). These prices include buffet lunches

For more information email [claire@gem-a.info](mailto:claire@gem-a.info)

# **WORKSHOP “CONSERVATION AND MANAGEMENT OF OUTDOOR BRONZE MONUMENTS”, AUDITORIUM DEI MUSEI DI STRADA NUOVA, GENOA 2-4 DECEMBER 2004**

## **Second Announcement**

Ministero per i Beni e le Attività Culturali,  
Istituto Centrale per il Restauro Opificio delle Pietre dure e Laboratori di Restauro di Firenze,  
Soprintendenza Regionale BAC della Liguria Soprintendenza PSAD della Liguria CNR -  
ISMAR - Sezione di Genova Comune di Genova - Settore Musei

### **Introduction**

The workshop will be supported by the Italian *Ministero per i Beni e le Attività Culturali* (MiBAC). It is promoted by Istituto Centrale per il Restauro (ICR), Opificio delle Pietre Dure e Laboratori di Restauro di Firenze (OPD), Soprintendenza Regionale per i Beni e le Attività Culturali (BAC) of Liguria, Soprintendenza per il Patrimonio Storico Artistico e Demoetnoantropologico (PSAD) of Liguria, the Genoa Branch of the Istituto di Scienze Marine (ISMAR) of Consiglio Nazionale delle Ricerche (CNR) and by the Direzione Musei of Genoa Municipality. The workshop proposal rise from a collaboration among CNR, ICR, Soprintendenza PSAD and Direzione Musei of Genoa Municipality for the “Pilot Project on the Quarto Monument - Field testing of protective coatings for outdoor bronze monuments in marine environment”. The meeting will be held in the mainframe of Genoa2004-European Capital of Culture, and it is intended to draw the state of the art concerning outdoor bronze monuments management in Europe and to stimulate co-operation for future developments among the different professionals involved in this field.

The workshop aims at offering a meeting opportunity in order to exchange ideas and experiences on outdoor bronze cultural heritage conservation at European level. The proposed task is to focus on the different experiences and knowledge acquired, in order to promote a multidisciplinary approach to the management of a peculiar kind of cultural heritage –such as outdoor monuments – which play a relevant role in the city landscape. To this end participation at the workshop is proposed to researchers, restorers, curators, owners and technical staffs:

- To enlighten the state of the art about management, analysis, restoration and maintenance of outdoor bronze monuments (statues, doors, bells, etc.)
- To focus on the knowledge gathered and on the tasks to be developed in the future
- To help in promoting best practise guidelines for bronze conservation at European level and to take care of their diffusion

The program foresees three days of plenary sessions. Each day is specially devoted to a peculiar perspective. The first one will address legislative aspects and the historical-artistic point of view. The second day will focus on the technical-scientific tools available to support characterisation, cleaning, protection and maintenance for conservation purposes. The third day will be devoted to a survey of practical experiences in different European countries, described according common guidelines:

- Description of the monument and its role in the city
- Description of decision makers involved and applicable laws
- Characterisation tools and analysis
- Problems and methodology adopted for restoration
- Maintenance program
- Founding of the several steps in intervention

Along with the plenary lectures, a poster session will be available the entire workshop long, in order to show the widest overview available concerning the activities in this field. Each day will be closed with a round table, which aims at discussing the common accepted statements and the open questions; hopefully future collaborative work will be set up.

## Program

*Thursday 2*

### Opening Session

#### **9.30 – 10.40 Workshop presentation**

*Liliana Pittarello (Soprintendenza Regionale BAC della Liguria – Genoa, Italy)*

*Caterina Bon Valsassina (ICR – Rome, Italy)*

*Cristina Acidini (OPD – Florence, Italy)*

*10.40 – 11.00 Coffee break*

### **Session I - The role of outdoor monument in society – public awareness, laws and management**

#### **11.00 – 11.40 Public authorities and laws: their impact on municipal outdoor monument collection**

Survey of the Italian legislation

*Raffaella Besta – Cristina Bartolini (Soprintendenza Regionale BAC della Liguria – Genoa, Italy)*

Survey of international laws and recommendations

*Speaker to be confirmed (ICCROM)*

#### **11.40 – 13.20 The city and its landscape**

The modification of towns around the bronze monuments

*Annamaria Giusti (OPD – Florence, Italy)*

The role of bronze artefacts in the town: the development of celebration monuments from 19th century

*Franco Sborgi (Università di Genova – DIRAS – Genoa, Italy)*

The Gori Collection's perspective (title to be confirmed)

*Giuliano Gori (Fattoria di Celle - Pistoia, Italy)*

The artist's perspective (title to be confirmed)

*Speaker to be confirmed*

*13.20 – 14.30 Lunch (and poster session)*

#### **14.30 – 16.30 The social and historical-artistic perspective**



Public awareness: state of the art and future measures to increase it

*V.Argyropoulou (Dept. of Conservation of Antiquities & Works of Art - T.E.I. – Athens, Greece)*

Conservation and restoration from the point of view of the Brandi's theory

*Giuseppe Basile (ICR– Rome, Italy)*

Patina from the historical-artistic point of view

*Phoebe Dent Weil (Northern Light Studio – S.Luis, USA)*

About the conservation of patinas on outdoor bronze monuments

*Marica Mercalli (ICR– Rome, Italy)*

16.30 – 16.45 Coffee break

**16.45 – 18.15 Round Table**

“ Evaluations about conservation and maintenance of outdoor bronze monuments”

*Friday 3*

**Session II - Methods for conservation, restoration and maintenance for outdoor bronze statues**

**9.00 – 10.40 Better knowledge of object and environment**

Laboratory analysis for conservation and restoration

*Rocco Mazzeo (Università di Bologna – Dipartimento di Chimica – Bologna, Italy)*

Interaction between the object and the environment

*Carlo Lalli (OPD – Florence, Italy)*

Non Destructive Techniques for conservation and restoration

*Maurizio Marabelli (Rome, Italy)*

Structural analysis techniques

*Mario Micheli (ICR – Rome, Italy)*

Laser techniques for the documentation and the copies production

*Giorgio Accardo (ICR – Rome, Italy)*

10.40 – 11.00 Coffee break

**11.00 – 12.30 Better understanding of new conservation treatment – cleaning**

Survey of European experiences

*Christian Degryny (ICOM-CC Metal e Malta Centre for Restoration - Bighi, Kalkara, Malta)*

The micropeening cleaning

*Giovanni Morigi (Restauratore – Bologna, Italia)*

Ten years studies about laser applicability for bronze artefact conservation at the Opificio

*Stefano Francolini (OPD – Firenze, Italia)*

Laser cleaning

*Salvatore Siano (CNR-IFAC – Firenze, Italia)*

Cleaning and restoration of bases

*Marisa Laurenzi Tabasso (Roma, Italia)*

12.30 – 14.00 Lunch (and poster session)

**14.00 – 15.20 Better understanding of new conservation treatment – protection and maintenance**

Electrochemical measurements for characterisation and monitoring of protecting ability of patinas and

coatings:

The Rp technique

*Giorgio D'Ercoli (ICR– Rome, Italy)*

The EIS technique

*Paola Letardi (CNR-ISMAR – Genoa, Italy)*

Development of new coatings - scientific and practical challenges

*Annelore Romich (Fraunhofer-Institut für Silicatforschung – Bronnbach, Germany)*

15.20 – 15.50 Coffee break

**15.50 – 18.00 Round Table**

“Practical methods, measurements and experiences: commonly accepted practice and needing for future research”

*Saturday 4*

**Session III - Experiences survey**

**9.00 – 10.30**

Overview about peculiar aspects in the restoration of bronze monument in different environmental conditions

*Giovanni Morigi (Restorer - Bologna, Italy)*

Outdoors copper alloy sculpture conservation: Various aspects

*Annix Texier (Laboratoire de Recherche des Monuments Historique – Champs sur Marne, France)*

Restoration and conservation of bronze monuments in Bavaria (what I have learnt from it)

*Martin Mach (Bayerisches Landesamt für Denkmalpflege – München, Germany)*

10.30 – 11.00 Coffee break

**11.00 – 13.00**

The restoration of the “Dying Horse” by Francesco Messina

*Ines Marcelli (ICR – Rome, Italy)*

The metal restoration branch of OPD: activities and experiences over thirty years

*Fabio Burrini (OPD – Florence, Italy)*

A few thoughts about the condition and preservation of outdoor statues

*Gábor Séd (Hungarian National Museum - Budapest, Hungary)*

Some problems concerning XIX Th - XX Th centuries Equestrian Monuments: two experiences

*M.Ludovica Nicolai ( Restorer – Florence, Italy)*

Management of Helsinki outdoor sculptures

*Teija Mononen (Helsingin kaupungin taidemuseo – Helsinki, Finland)*

Failure of gentle treatments on an outdoor bronze fountain

*Stefan Pennec (Restorer – Semur en Auxois, France)*

13.00-14.30 Lunch (and poster session)

**14.30 – 15.30**

Our Lady of Konstanz (Die Mariensäule) and the St Peter on the Trajan Column: two emblematic examples

of maintenance and non-maintenance

*Ingrid Reindell (Restorer – Rome, Italy)*

The Fountains and Monuments of Rome: The experience of the Sovraintendenza for Cultural Heritage of the City Council

*Luisa Cardilli (Comune di Roma – Rome, Italy)*

The copper alloy modern sculptures of the Peggy Guggenheim Collection: a conservation plan assisted by electrochemical methods

*Cecilia Bartuli (Università di Roma – DCIM – Rome, Italy), †Sergio Angelucci (Restorer – Roma, Italia)*

**15.30 – 17.00 Conclusion**

**“Toward a European strategy for outdoor bronze monument management ”  
Discussion and approval of a final document of recommendations**

The workshop will be held in Genoa (<http://www.apr.genova.it/>), an international city on the Mediterranean Sea, which is reach of historical monuments and museums witness of his glorious past. This year the city will be also European Capital of Culture (<http://www.genova-2004.it/>).

The workshop venue is the “Auditorium dei Musei di Strada Nuova” kindly offered by the “Direzione Musei” of Genoa Municipality. This conference place, just renewed, is located in the historical building “Palazzo Rosso” (<http://www.museigenova.it/palazzorosso/>), in Via Garibaldi 18.

All practical information can be found on the web site (<http://www.bmc2004.org>) or they can be requested to the organizing secretary.

### **Language**

The official languages are Italian and English. Simultaneous translation will be available

### **Publication**

The plenary lectures will be published in a book, which will be distributed at the workshop. Both plenary lectures and poster papers will be distributed on CD-ROM also.

### **Workshop registration and abstract submission**

Participants are requested to fill in the registration form and to pay the registration fee, preferably before 30 September 2004; registration will be accepted in limited number, according to the places available in the conference room.

Registration fee Service included

Regular participant 70€ + VAT coffee break, workshop bag and contents, CD-ROM with all the papers, the book with the plenary lectures.

Students 35€ + VAT coffee break, workshop bag and contents, CD-ROM with all the papers.

Participants will have free entrance to many Genoa museums.

Online registration form is available <http://www.bmc2004.org/eng/registrations.htm>.  
Registration form, instruction for payment and hotel reservation form can be also requested to:

ASAP

Asap S.r.l. - Eventi Congressuali

Via Luccoli 29/9 - 16123 Genova

Tel (+39-) 010255800 - 0102462777

Fax (+39-) 0102479743

With the registration form it is possible to submit an abstract for the poster session. Title, authors and abstract should be submitted before 31 July 2004. Notification for accepted poster will be delivered by 10 September with all the instruction needed. Authors of accepted poster should send their paper in electronic format by 10 October, in order to have their work on the workshop CD-ROM.

### **Hotel accommodation**

Some suggestion for cheap accommodations can be found on the web site (<http://www.bmc2004.org/eng/accomodation.htm>).

Some hotel rooms have been selected and can be booked along with the workshop registration procedure. Early booking is strongly recommended

### **Promoting Committee**

CNR-ISMAR-Sezione di Genova: *Paola Letardi, Giuseppe Cutugno, Ilva Trentin*

ICR: *Maurizio Marabelli, Marica Mercalli, Giancarlo Buzzanca*

OPD: *Carlo Lalli, Stefano Francolini*

Settore Musei – Comune di Genova: *Maria Flora Giubilei*

Soprintendenza PSAD della Liguria: *Piero Donati*

Soprintendenza Regionale BAC della Liguria: *Cristina Bartolini, Raffaella Besta, Elena Calandra*

### **Organising Secretary**

Ilva Trentin (CNR-ISMAR-Sezione di Genova)

CNR-ISMAR-Sezione di Genova

Via De Marini,6

16149 Genova

tel +39.010.6475.408

fax +39.010.6475.431

e-mail: [bmc@ge.ismar.cnr.it](mailto:bmc@ge.ismar.cnr.it)

### **WEB site**

<http://www.bmc2004.org>

## **OPTICAL METHODS FOR ARTS AND ARCHAEOLOGY - 2<sup>ND</sup> CALL - SPIE - MUNICH, JUNE 2005**

Dear Colleague,

I would like to remind you that the deadline for abstract submissions for the Conference: **OPTICAL METHODS for ARTS and ARCHAEOLOGY (Munich, June 13-16, 2005)** within the SPIE International Symposium: **Optical Metrology** is approaching.

Abstract due date is **December 20, 2004**.

Within the Session "**Integrated methods for diagnostics**" a case study on the diagnostic of **Madonna dei Fusi by Leonardo** will be discussed.

Submissions can be applied through the following link:

<http://spie.org/conferences/calls/05/eom/conferences/index.cfm?fuseaction=EOM02>

For more information please consult the website: <http://spie.org/>

Please do not hesitate to forward this message to colleagues who could be interested.

Looking forward to seeing you in Munich.

Best regards,

Luca Pezzati

\*\*\*\*\*Dr.

Luca Pezzati, Coordinator  
Gruppo Beni Culturali  
INOA - Istituto Nazionale di Ottica Applicata  
Largo E. Fermi 6, 50125 Florence, ITALY  
ph. +39 055 2308221, fax +39 055 2337755  
E-mail: [beniculturali@ino.it](mailto:beniculturali@ino.it)  
URL: <http://arte.ino.it>

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## ARCHÉOMÉTRIE 2005 - DATE RÉSUMÉS - RAPPEL

Cher/Chère Collègue,

Nous vous rappelons que la date limite de réception des résumés pour le colloque du GMPCA-Archéométrie 2005 (Site internet : <http://www.ladir.cnrs.fr/GMPCA2005/>) a été fixée **au 1er décembre 2004 !**

Voici quelques informations supplémentaires concernant la conférence :

**Publication** : Les participants proposant des résumés sont invités à soumettre leurs articles, en anglais ou en français, à la Revue d'Archéométrie. La Revue d'Archéométrie est une revue de rang A, éditée par le Groupe des Méthodes Pluridisciplinaires Contribuant à l'Archéologie (GMPCA).

Deux rubriques sont prévues :

- 1) article de synthèse (Research Paper), d'une dizaine de pages de la revue (soit env. 20 pages de manuscrit à interligne double ou 40 000 caractères et 6-8 figures)
- 2) note (Short Contribution), de cinq pages de la revue (soit env. 10 pages de manuscrit à interligne double ou 11 000 caractères et 3-4 figures).

Les propositions d'articles devront être déposées le premier jour du colloque. Les directives aux auteurs et les modalités d'évaluation de la Revue d'Archéométrie peuvent être consultées sur le site : [http://gmpca.u-bordeaux3.fr/ra\\_gen.html](http://gmpca.u-bordeaux3.fr/ra_gen.html). Le dépôt des articles lors du colloque donnera accès à une publication fin 2005.

**Rappel aides aux étudiants** : faire votre demande auprès de M. Regert ou Ph. Dillmann (voir 2de circulaire ou site internet)

**Repas et transport** : les repas de midi se déroulant dans un des restaurants du CEA de Saclay, les salariés du Centre pourront déjeuner avec leur carte habituelle. Pour les autres participants, pensez à pré-réserver les repas ainsi que les transports en cochant les cases de la fiche d'inscription.

**Visites** : des visites d'installations du plateau de Saclay (réacteur, laboratoire de mesure du  $^{14}\text{C}$ , microsonde du laboratoire P. Süe, synchrotron Soleil) seront proposées.

**Excursion en Vallée de Chevreuse** : l'excursion comprend le transport, le repas du midi, la visite de 2 sites parmi le Château de la Madeleine (XI<sup>e</sup> s.), les musée et ruines de l'Abbaye de Port Royal, promenade (si le temps le permet) commentée du chemin Jean Racine, abbaye de Vaux de Cernay.

**Inscription définitive** : les formulaires de confirmation d'inscription vous seront envoyés courant janvier 2005. Ils seront à renvoyer au secrétariat du colloque avec le règlement des frais, soit par vous-même (paiement par chèque ou CB), soit par votre organisme de rattachement.

En espérant vous compter parmi les futurs participants,

Le comité d'organisation :

Lucile Beck, Ludovic Bellot-Gurlet, Philippe Colomban, Philippe Dillmann

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ARCHEOMETRIE 2005

CONTACT ET INFORMATIONS :

E-mail : [GMPCA2005@iscsa.cnrs.fr](mailto:GMPCA2005@iscsa.cnrs.fr)

Site internet : <http://www.ladir.cnrs.fr/GMPCA2005/>

Secrétariat :

Anne Morel

Archéométrie 2005

Laboratoire Pierre Süe

Bat 637, CEA Saclay

91191 Gif sur Yvette

Fax : 01 69 08 69 23

**FICHE DE D'INSCRIPTION/REGISTRATION FORM**

**A retourner de préférence par e-mail / to send preferably by e-mail to:**

GMPCA2005@iscsa.cnrs.fr

ou/or

Anne Morel

Archéométrie 2005

Laboratoire Pierre Süe, Bat 637, CEA Saclay, 91191 Gif sur Yvette

Fax : (33 ou 0) 1 69 08 69 23

**NOM, Prénom / Name, first name :**

**Institution / Organisation :**

*Adresse / Address :*

**Tél / Phone – Fax :**

**E-mail :**

Participera au colloque/*I will be attending the conference* : oui/yes  non/no

Soumet un résumé /*I submit an abstract* : oui/yes  non/no

Titre et auteurs :

Joindre un résumé (format page 3)/

*If yes, please fill the abstract form (template page 3)*



**NOM, Prénom / Name, first name :**

**Frais d'inscription (Euros TTC) / Registration fees (VAT included):**

Inscriptions/Registration Professionnel/Regular participant	100 €	<input type="checkbox"/>
Etudiant/Student	30 €	<input type="checkbox"/>
Repas de midi/Lunch 10 €/ jour/day	<i>mardi/Tuesday</i> <i>mercredi/Wednesday</i> <i>jeudi/Thursday</i> <i>vendredi/Friday</i>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Dîner du colloque/ Conference dinner	40 €	<input type="checkbox"/>
Excursion	50 €	<input type="checkbox"/>
TOTAL	..... €	Les modalités de paiement seront fixés ultérieurement/ <i>Methods of payment will be specified later on</i>

Tarifs pour paiement avant le 28 février 2005, après cette date, majoration de 20 % / *Prices for payments before February 28, after add 20%.*

**Merci de compléter ce formulaire le plus tôt possible** afin de prévoir à l'avance votre participation aux repas, dîner et excursion / **Thanks for filling this form as soon as possible** in order to take into account your participation in the lunches, to conference dinner and excursion.

**Annulation / Cancellation and refund**

- si annulé avant le 1<sup>er</sup> avril, les frais seront remboursés / *If cancelled before April 1<sup>st</sup> 2005, 100% of the fee will be refunded*
- après le 1<sup>er</sup> avril 2005, aucun remboursement ne sera possible/ *If cancelled after April 1<sup>st</sup> 2004, no refund will be made*

**Prévision des transport / Transportation**

Si vous avez déjà une idée de votre lieu d'hébergement, pouvez-vous nous indiquer les moyens de transport que vous comptez utiliser/*The conference will take place in Saclay (25 km from Paris). Do you plane to use :*

Véhicule personnel/Car

Car de / Bus from Paris, Denfert-Rochereau → INSTN (départ à 8 h)

Navette / Shuttle RER-Le Guichet → INSTN (matin/morning)

Navette / Shuttle INSTN → RER-Le Guichet (soir/ evening)

Le 1<sup>er</sup> jour, navette / The 1<sup>st</sup> day shuttle RER-Le Guichet → INSTN (entre 11 h et 13 h/between 11 a.m. and 1 p. m.)

Navette personnel CEA / CEA shuttle (matin/morning):   
Indiquez votre point de départ / Specify your starting point:

**Résumé proposé par (NOM, Prénom) / Abstract submitted by (Name, first name) :**

Adresse E-mail de l'auteur auquel doit être envoyée la correspondance / corresponding author  
E-mail address:

Session thématique souhaitée / thematic session:

Type de communication souhaitée (oral ou poster):

### Format des résumés / Abstract template

### Titre pour un exemple de présentation de résumé

*Prénom NomAuteur*<sup>1</sup>, *Prénom NomAuteur*<sup>2</sup>, *Prénom NomAuteur*<sup>2</sup> ...

1 Adresse et E-mail auteur 1

2 Adresse et E-mail auteur 2

3 .....

Texte du résumé. Le nom de la personne qui présentera la communication doit être souligné.

L'ensemble du résumé, titre, auteurs, affiliations/adresses, texte, mots-clefs selon les formats utilisés ici, doivent tenir sur une page A4 avec une marge de 2,5 cm à gauche, 2 cm à droite, 4 cm en haut, 3 cm en bas.

Ce résumé peut contenir des figures et/ou photos si elles sont insérées sous forme de .jpg ou de .wmf.

Les organisateurs ne seront pas responsables des désordres de mise en page résultant de figures ou photos non-conformes.

Mots clefs / key-words : Indiquez au maximum 5 mots-clefs.

## FITCH-WIENER LABS SEMINAR SERIES

on “science-based archaeology”

A new seminar series, aiming to cover all aspects of “science-based archaeology”, is jointly organised by the Fitch Laboratory, British School at Athens and the Wiener Laboratory, American School of Classical Studies at Athens, in order to encourage discussion and interaction between researchers working in various fields and institutions, both in Greece and abroad, and to promote meaningful integration of archaeological and scientific approaches, methods and techniques in the field of “science-based archaeology”.

The third seminar will be held on

**WEDNESDAY, 8<sup>TH</sup> DECEMBER, 5:30 P.M.**

**Prof. Sotiris MANOLIS**

(University of Athens)

will introduce the topic:

***"Palaeoanthropological Research in Greece"***

*The seminars will take place monthly at the Fitch Laboratory of the British School at Athens.*

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**22<sup>ND</sup> INTERNATIONAL MEETING ON  
ORGANIC GEOCHEMISTRY (22<sup>ND</sup>  
IMOG), SEVILLE, SPAIN, 12-16  
SEPTEMBER 2005**

Dear Colleague,

We hereby would like to draw your attention to the 22<sup>nd</sup> IMOG that will be held in the wonderful city of Seville, Spain.

**The deadline for abstract submission is approaching (7<sup>th</sup> January 2005).**

All the information about the event is available at the conference web page (<http://www.imog05.org>) where you may also submit your contributions electronically

Please, forward this message also to your colleagues.

We are looking forward to seeing you at this meeting.

Yours sincerely,

Francisco J. Gonzalez-Vila  
22<sup>nd</sup> IMOG Chairman

All the information is available via our web page:

<http://www.imog05.org>

Get the 22ndIMOG brochure (600Kb pdf format)

<http://www.imog05.org/22IMOGBrochure.pdf>

Get the 22ndIMOG 1st Circular & Call for papers (3200Kb pdf format):

<http://www.imog05.org/IMOG1CIRCULAR.PDF>

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**IMPORTANT DATES:**

Deadline for submission of abstracts: January 7th , 2005

Acceptance notification to authors: May, 2005

Distribution of second circular: May 15th , 2005

Advance registration & hotel reservation: June 30th , 2005

Conference & submission of manuscripts (Organic Geochemistry): September 12-16, 2005

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**ADDRESSES:**

**ORGANIZING COMMITTEE:**

Francisco J. Gonzalez-Vila

Jose A. Gonzalez-Perez

22nd IMOG Organizing committee

Dpt. Biogeoquímica y Dinámica de Contaminantes

Instituto de Recursos Naturales y Agrobiología de Sevilla (IRNAS-CSIC)  
Avda Reina Mercedes 10; 41012 Sevilla, Spain  
Tel. +34 954 624711 ext 116  
Fax. +34 954 624002  
e-mail: [fjgon@irnase.csic.es](mailto:fjgon@irnase.csic.es); [jag@irnase.csic.es](mailto:jag@irnase.csic.es)

TECHNICAL CONFERENCE SECRETARIAT:  
Viajes El Corte Ingles S.A. Div. Congresos  
C/Teniente Borges 5, Seville  
41002 Spain  
Tel: +34 954506605  
Fax: +34 954223512  
e-mail: [secretary@imog05.org](mailto:secretary@imog05.org)  
Web site: <http://www.imog05.org>

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## **ROYAL SOCIETY CALL FOR PAPERS**

We have been asked to circulate the attached call for papers to NERC fellows. Please forward it to any colleagues who may be interested.

CALL FOR PAPERS on Astronomy and Earth Science

Visions of the future by young scientists  
Christmas Issues of Philosophical Transactions of the Royal Society,  
Series A

As the Editor of Phil. Trans. R. Soc, A, I am hereby inviting young scientists (normally under the age of 40) to submit a paper for our Christmas Issue of 2005 devoted to Astronomy & Earth Science. Any researcher, worldwide, wishing to submit a paper should send a one-page abstract and short CV (with date of birth) by e-mail to me at [jmtt2@damtp.cam.ac.uk](mailto:jmtt2@damtp.cam.ac.uk). Please send a statement of intent immediately, even if there will be a short delay in sending the two items specified.

The abstracts will be assessed almost immediately, and full papers will be needed by 15 February 2005. More details of the series of Christmas issues are contained in the attachment to this e-mail. Book versions of the Christmas Issues will be published by Imperial College Press.

Michael Thompson, FRS  
Editor

\*\*\*\*\*

Janet Montgomery Ph.D.  
NERC Research Fellow  
Department of Archaeological Sciences  
University of Bradford,  
Bradford, UK.  
BD7 1DP

Tel +44 (0)1274 236551  
Fax +44 (0)1274 235190

\*\*\*\*\*

**Visions of the future by young scientists**  
**Christmas Issues of Philosophical Transactions of the Royal Society, Series A**

**About the Journal**

The Philosophical Transactions of the Royal Society is the world's longest running scientific journal. Founded in 1665 it was used by Newton to launch his scientific career. It is published monthly in 2 parallel series by the Royal Society (the UK academy of science). All issues of the journal are archived electronically by JSTOR in the USA ([www.jstor.org](http://www.jstor.org)), accessible through most University Libraries.

### **Background: The Millennium and Triennial Issues**

The three Millennium Issues of Phil Trans A, devoted to the work of young scientists, proved to be highly successful. Popular versions have now been published by Cambridge University Press as three paper-backed books, all carrying the generic title Visions of the Future (ed. JMT Thompson, 2001). They are devoted to Astronomy & Earth Science, Physics & Electronics, and Chemistry & Life Science. The collections give a unique snap-shot of the state of physical science at the turn of the millennium, of interest to researchers and the public at large. The excitement and enthusiasm of the young scientists is strongly conveyed. The triennial series of Christmas Issues on the A-Side have already built on this success.

### **New Joint Venture**

This year the biological B-Side is joining the Christmas Series. Accordingly we are both soliciting articles from leading young scientists, including holders of Royal Society Research Fellowships. For compatibility with these awards, young will be interpreted as scientists with no more than ten years post doctoral experience.

### **Guidelines for the Articles**

Young researchers, world-wide, are hereby invited to submit articles reviewing their field of work and looking forward to new developments. They are encouraged to be more speculative, and perhaps more provocative, than they would normally be in a review article. The articles should be timely and topical, and written for a general scientific audience, at about the level of Scientific American. They should be well illustrated with diagrams, photographs, etc, and detailed mathematics should be kept to a minimum. A paper that describes some recent cutting edge research, as well as putting it in its wider context, and looking forward to the future is an ideal candidate. The papers will be subjected to a refereeing process which takes account of the above criteria.

### **Triennial Pattern on the A-Side**

Unlike the B-Side, each issue of which will include papers from across the biological spectrum, the A-Side will continue to operate on the established three year rolling cycle shown below. The A-side issues will also form the basis of a series of books published by Imperial College Press under the general title Advances in Science.

2002 and 2005 to cover Astronomy & Earth Science  
2003 and 2006 to cover Mathematics & Physics  
2004 and 2007 to cover Chemistry & Engineering

In view of the interdisciplinary nature of much research, this classification will be applied in a flexible manner.



### Timetable for A-side issues

Suggestions for contributions are now welcomed, according to the following timetable:

October year before publication	Call for abstracts
5 December year before publication	Receipt of abstracts by the Editor
15 December year before publication	Acceptance decisions to authors
15 February year of publication	Receipt of papers by the Editor
February-May year of publication	Refereeing process
15 June year of publication	Receipt of final, refereed papers
15 December year of publication	Publication of the Christmas issue

### Submitting an Abstract

Any young scientist, world-wide, who would be interested in contributing an article should send an abstract to the editor by e-mail. The abstract should be about one page in length, and a brief CV (with date of birth) should also be attached.

Professor JMT Thompson FRS  
Editor, Philosophical Transactions A  
Honorary Fellow, Dept of Applied Mathematics & Theoretical Physics,  
Centre for Mathematical Sciences, Wilberforce Road, Cambridge, CB3 0WA.  
[jmt2@damtp.cam.ac.uk](mailto:jmt2@damtp.cam.ac.uk)  
[www.homepages.ucl.ac.uk/~ucess21](http://www.homepages.ucl.ac.uk/~ucess21)

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## **CONFERENCE CALL: GENDER @ RETHYMNON, 3-5 JUNE 2005**

UNIVERSITY OF CRETE  
DEPARTMENT OF HISTORY AND ARCHAEOLOGY  
Gallos Campus, 74100 RETHIMNO  
Tel. (28310) 77487 & 77337 /  
Fax (28310) 77467 & 77338  
[kopaka@phl.uoc.gr](mailto:kopaka@phl.uoc.gr) & [gender@social.soc.uoc.gr](mailto:gender@social.soc.uoc.gr),

### **ENGENDERING PREHISTORIC 'STRATIGRAPHIES' IN THE AEGEAN AND THE MEDITERRANEAN**

**Rethimno, 3-5 June 2005**

The Department of History and Archaeology of the University of Crete is organizing a Symposium on "**Engendering Prehistoric 'Stratigraphies' in the Aegean and the Mediterranean**", to be held in Rethimno on **3-5 June 2005**.

The Symposium proposes to open a discussion on our concepts - and preconceptions - of gender and cultural identities in their Aegean and wider Mediterranean contexts. Archaeological data will be examined through diachronic male and/or female approaches, in so far as 'engendered' research points of view have influenced analytical and synthetic options, investigatory strategies and interpretations; and have led to cultural readings and evaluations of gender, using the sparse 'stratified fragments' that survive of the individual, family and collective experience of the living people of the past. Comprehensive approaches, theory-based, that co-evaluate previous views and recent methodological and interpretative enlargements are encouraged, in their relation to the appearances and representations of prehistoric women and men. We aspire to define the respective epistemological emphases, stereotypes, biases and divergences of research; as well as the new challenges and possible emerging perspectives in shaping more solid interdisciplinary approaches to prehistoric gender in the Aegean and the Mediterranean. We wish to emphasize the contribution of women archaeologists to the discussion. There is also an educational aspect to the meeting, since students will be encouraged to attend.

Within this two-level perspective - of a gender 'visibility' in both prehistoric horizons and archaeological practices - we suggest the following themes:

1. 'Worlds' of women and men: roles, interactions, symbolisms
2. Women and children: the neglected dimension of motherhood
3. Is there a 'women's' approach in Aegean and Mediterranean research?
4. Gender studies in Aegean and Mediterranean Prehistory

This meeting is part of a Programme EPEAEK (co-funded by the European Community

and the Greek Ministry of Education) on "Gender in Social Sciences". The project is run by the Departments of Sociology (project leader), History and Archaeology, and Philosophical and Social Studies of the University of Crete. It aims to enlarge academic research agenda and undergraduate education in Greece through the incorporation of gender studies.

The Symposium on prehistoric gender is intended to a restricted number of invited colleagues, with contributions in Greek, English and French, not exceeding 20' and leaving enough time for discussion - which will be included in the Proceedings.

The cost of staying in Rethimno will be covered by the Symposium. Some participants can be offered additional funds for travel expenses, especially those who cannot find other funding.

Please e-mail (address at top) your reply at your early convenience, but not later than the 15th December 2004, to confirm your participation and announce your title. Abstracts (up to 300 words) should be sent by the 15th January 2005 and papers should be submitted by the end of April.

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# **1<sup>ο</sup> ΤΑΚΤΙΚΟ ΕΘΝΙΚΟ ΣΥΝΕΔΡΙΟ** **ΜΕΤΡΟΛΟΓΙΑΣ**

## **2<sup>ο</sup> Κάλεσμα**

Η Οργανωτική Επιτροπή του Συνεδρίου Μετρολογίας σας ευχαριστεί για την μεγάλη εκδήλωση ενδιαφέροντος που επιδείξατε για το Συνέδριο Μετρολογίας. Μετά από επίμονο αίτημα ορισμένων παραληπτών, αποφασίστηκε η παράταση της προθεσμίας Υποβολής Εκδήλωσης Ενδιαφέροντος μέχρι το τέλος Δεκεμβρίου 2004.

Με την ευκαιρία θα θέλαμε να σας ενημερώσουμε ότι ενεργοποιήθηκε, για τις ανάγκες επικοινωνίας του Συνεδρίου, ειδικός λογαριασμός ηλεκτρονικού ταχυδρομείου [metrology2005@hellaslab.gr](mailto:metrology2005@hellaslab.gr). Σύντομα θα λειτουργήσει και ειδική ιστοσελίδα με σύνδεση από την ιστοσελίδα της HellaLab ([www.hellaslab.gr](http://www.hellaslab.gr)).

**Με εκτίμηση**

**Η Οργανωτική Επιτροπή**



ΕΛΛΗΝΙΚΗ ΕΝΩΣΗ ΕΡΓΑΣΤΗΡΙΩΝ

*HellasLab National Member of EuroLab*

**ΔΙΟΙΚΟΥΣΑ ΕΠΙΤΡΟΠΗ**

Σισίνης 8 & Αλκμάνος 7, 11528, Λίσινα - Τηλ. 2107233140-Fax. 2107233173-email:hellaslb@otenet.gr, metrology2005@hellaslab.gr

## ΑΝΑΚΟΙΝΩΣΗ

### ΕΚΔΗΛΩΣΗ ΕΝΔΙΑΦΕΡΟΝΤΟΣ

για το

### **1<sup>ο</sup> ΤΑΚΤΙΚΟ ΕΘΝΙΚΟ ΣΥΝΕΔΡΙΟ ΜΕΤΡΟΛΟΓΙΑΣ**

Η Ελληνική Ένωση Εργαστηρίων - HellasLab, έχοντας ως διαρκές μέλημα την τεχνική και επιστημονική αναβάθμιση των εθνικών εργαστηριακών και μετρολογικών υποδομών, αποφάσισε τη διοργάνωση σε τακτική βάση εθνικού συνεδρίου μετρολογίας. Επιδίωξη της ΕΝΩΣΗΣ είναι το συνέδριο αυτό να καθιερωθεί ως πεδίο συνάντησης και γόνιμου προβληματισμού όλων όσων δραστηριοποιούνται στο χώρο της μετρολογίας στην Ελλάδα και ως χώρο ανταλλαγής επιστημονικής γνώσης και εμπειρίας μεταξύ επιστημόνων, ερευνητών, εργαζόμενων στην παραγωγή και στα εργαστήρια, με στόχο την παροχή επιστημονικά έγκυρων και τεχνικά αξιόπιστων υπηρεσιών μέτρησης.

**Το 1<sup>ο</sup> Τακτικό Συνέδριο θα πραγματοποιηθεί στην Αθήνα, τον Νοέμβριο 2005.** Στους ειδικότερους στόχους του 1<sup>ου</sup> αυτού συνεδρίου περιλαμβάνονται η καταγραφή του ελληνικού μετρολογικού δυναμικού, η αποτύπωση των προβληματισμών και των δραστηριοτήτων του, καθώς και η παρουσίαση θεμάτων ειδικότερου επιστημονικού ενδιαφέροντος. Πιο συγκεκριμένα προβλέπονται οι παρακάτω θεματικές ενότητες:

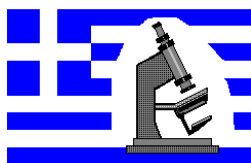
1. Η μετρολογία στον Ελλαδικό χώρο χθες και σήμερα - ιστορικές, θεσμικές και οργανωτικές διαστάσεις - προκλήσεις για το μέλλον (η εξέλιξη της μετρολογίας στην Ελλάδα, η σημερινή πραγματικότητα και σχέσεις με το διεθνές μετρολογικό γίγνεσθαι, θέση της μετρολογίας στο χώρο των δοκιμών – διακριβώσεων - διαπίστευσης, προτάσεις για το μέλλον κλπ).
2. Η ποιότητα της μέτρησης - Ιχνηλασιμότητα στις Μετρήσεις, Δοκιμές και Διακριβώσεις – Αβεβαιότητα – Διακρίβωση – Διάδοση σφαλμάτων.
3. Ειδικές θεματικές περιοχές στη μετρολογία:
  - Φυσικές – Μηχανικές – Ηλεκτρικές - Θερμοδυναμικές - Πυρηνικές Μετρήσεις, Χημικές – Βιοχημικές - Μικροβιολογικές Μετρήσεις, Μη Καταστροφικές Δοκιμές.
  - Ερευνητικές και τεχνολογικές δραστηριότητες στον τομέα της ανάπτυξης νέων διατάξεων, συσκευών και τεχνικών μέτρησης – νέες τεχνολογίες.

Θα γίνουν δεκτές προφορικές παρουσιάσεις και πόστερ.

Παρακαλούνται όσοι ενδιαφέρονται να συμμετάσχουν στις εργασίες του συνεδρίου να εκδηλώσουν το ενδιαφέρον τους, αποστέλλοντας συμπληρωμένο το επισυναπτόμενο έντυπο στα:  
e mail: [hellaslb@otenet.gr](mailto:hellaslb@otenet.gr) ή [metrology2005@hellaslab.gr](mailto:metrology2005@hellaslab.gr)

Τηλεομοιοτυπία: 210 7233173

Εκδήλωση ενδιαφέροντος: έως 31/12/2004.



ΕΛΛΗΝΙΚΗ ΕΝΩΣΗ ΕΡΓΑΣΤΗΡΙΩΝ

HellasLab

National  
Member of

Eurolab

Σισίνης 8 & Αλκμάνος 7, 11528, Λίσινα - Τηλ. 2107233140-Fax. 2107233173-email: hellaslb@otenet.gr, metrology2005@hellaslab.gr

## **1<sup>ο</sup> ΤΑΚΤΙΚΟ ΕΘΝΙΚΟ ΣΥΝΕΔΡΙΟ ΜΕΤΡΟΛΟΓΙΑΣ**

**ΝΟΕΜΒΡΙΟΣ 2005**

**ΑΘΗΝΑ**

### **Εκδήλωση Ενδιαφέροντος Συμμετοχής**

Όνομα:.....

Φορέας/Οργανισμός/Εταιρεία:.....

.....

Ταχυδρομική Διεύθυνση:.....

.....  
Τηλέφωνο:.....

FAX:.....

E-mail:.....

Θεματική Περιοχή:.....

Επιθυμώ να συμμετάσχω στις εργασίες του 1<sup>ου</sup> Εθνικού Συνεδρίου Μετρολογίας:

Χωρίς εργασία:

Με εργασία:

Παρακαλώ να αποστείλετε την εκδήλωση ενδιαφέροντος στη Γραμματεία της Ελληνικής Ένωσης Εργαστηρίων

(Τηλεομ: 210 7233173, e-mail: :: [hellaslb@otenet.gr](mailto:hellaslb@otenet.gr) / [metrology2005@hellaslab.gr](mailto:metrology2005@hellaslab.gr))

**το αργότερο μέχρι 31 Δεκεμβρίου 2004.**

**ΘΕΣΕΙΣ ΕΡΓΑΣΙΑΣ/ΥΠΟΤΡΟΦΙΕΣ –**  
**JOB VACANCIES/FELLOWSHIPS**

**CALL FOR NOMINATIONS:**  
**TETRAHEDRON YOUNG**  
**INVESTIGATOR AWARDS**

The Executive Board of Editors and the Publisher of the Tetrahedron Publications\*, are pleased to announce the creation of the Tetrahedron Young Investigator Awards. These awards will be presented to two individuals who have exhibited "exceptional creativity and dedication" in the fields of Organic Synthesis and Bioorganic and Medicinal Chemistry respectively.

The winners will each receive \$1,000, a certificate, and an invitation to present a plenary lecture during the 6th Tetrahedron Symposium ([www.tetrahedron-symposium.elsevier.com](http://www.tetrahedron-symposium.elsevier.com)) to be held in Bordeaux, France, 29th June - 1st July 2005. Furthermore, two Symposium-in-Print will be compiled in their honour. As with the Tetrahedron Prize for Creativity in Organic Chemistry, [http://www.elsevier.com/wps/find/journalrelatedinfo.cws\\_home/942/prizes1](http://www.elsevier.com/wps/find/journalrelatedinfo.cws_home/942/prizes1) which these awards complement, the awards will be made on an annual basis.

Nominees are to be under 45 years of age at 1st July 2005, and nominations should be sent to the appropriate award coordinator, to arrive no later than 14th January 2005:

Organic Synthesis:

Professor Richard JK Taylor,  
Department of Chemistry,  
University of York,  
York, YO10 5DD, UK  
E-mail: [mailto:tet@york.ac.uk](mailto:mailto:tet@york.ac.uk)

Bioorganic and Medicinal Chemistry:

Professor Dale L Boger,  
Department of Chemistry,  
The Scripps Institute,  
La Jolla, CA 92037, USA  
E-mail: [mailto:boger@scripps.edu](mailto:mailto:boger@scripps.edu)

Instructions for Nominations:

- Nominees are to be under 45 years of age at 1st July 2005
- Nominations will be welcomed for all candidates from all nationalities
- Nominations should consist of:
  - a covering letter
  - a brief biographical sketch (max 2-pages)

- a list of no more than 15 publications

Nominations should be sent to the appropriate award coordinator

Each award will have a separate voting committee:

- Editors of Tetrahedron, Tetrahedron Letters, and Tetrahedron:

Asymmetry voting on the Organic Synthesis Award

- Editors of Bioorganic and Medicinal Chemistry and Bioorganic and Medicinal Chemistry Letters voting on the Bioorganic and Medicinal Chemistry Award
- Members of the voting committees may not be candidates, nor make nominations

For further information on the Tetrahedron Young Investigator Awards or on the Tetrahedron Prize for Creativity in Organic Chemistry, please contact:

Iain Craig, Senior Publishing Editor, Organic Chemistry, Elsevier.

E-mail: <mailto:i.craig@elsevier.com>

\* Tetrahedron Publications:

Tetrahedron [www.elsevier.com/locate/tet](http://www.elsevier.com/locate/tet)

Tetrahedron Letters [www.elsevier.com/locate/tetlet](http://www.elsevier.com/locate/tetlet)

Tetrahedron: Asymmetry [www.elsevier.com/locate/tetasy](http://www.elsevier.com/locate/tetasy)

Bioorganic & Medicinal Chemistry [www.elsevier.com/locate/bmc](http://www.elsevier.com/locate/bmc)

Bioorganic & Medicinal Chemistry Letters [www.elsevier.com/locate/bmcl](http://www.elsevier.com/locate/bmcl)



## **ENVIRONMENTAL ARCHAEOLOGIST** **BOSTON UNIVERSITY POSITION**

Dear All,

Please pass along this job opening to anyone you think might benefit.

Thank you.

Assistant Professor of Archaeology

Boston University's Department of Archaeology announces a tenure-track opening for an Assistant Professor (pending approval). Expertise in Environmental Archaeology (other than Geoarchaeology) required, with a preference for Palaeoethnobotany; geographical and period specialization open. Ph.D. is required, together with major ongoing research program. Candidates should be prepared to teach general archaeology courses and an introductory course in archaeological sciences in addition to courses in their special field. Application letters should be accompanied by a curriculum vitae, published paper or sample of writing, and the names of three referees, and should be sent by February 1, 2005 to: Professor Norman Hammond, Boston University, Archaeology, 675 Commonwealth Avenue, Boston, MA 02215. AA/EOE

\*\*\*\*\*

Maria H. Sousa  
Boston University  
Department of Archaeology  
675 Commonwealth Avenue, Suite 347  
Boston, MA 02215  
Phone: (617)358-1641  
Fax: (617)353-6800

\*\*\*\*\*



## DOCTORAL OPPORTUNITIES IN BELFAST

Dear colleagues,

Can I draw your attention to the following PhD opportunities at Queen's University Belfast.

Regards,

Rick Schulting

\*\*\*\*\*

Dr Rick J Schulting  
School of Archaeology and Palaeoecology  
Queen's University Belfast  
Belfast UK BT7 1NN

telephone: 028 9097 3824

fax: 028 9031 3628

e-mail: [r.schulting@qub.ac.uk](mailto:r.schulting@qub.ac.uk)

\*\*\*\*\*



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The School of Archaeology and Palaeoecology, Queens University Belfast encourages applications from suitably qualified candidates for the following two PhD topics funded through the newly established Centre for Climate, the Environment and Chronology (14 CHRONO):

**(1) Palaeodietary analysis of prehistoric populations from the Minusink Basin, South Siberia.**

Supervisors: Dr Eileen Murphy ([eileen.murphy@qub.ac.uk](mailto:eileen.murphy@qub.ac.uk)) and Dr Rick Schulting ([r.schulting@qub.ac.uk](mailto:r.schulting@qub.ac.uk)) in collaboration with Prof. Yuri Chistov and Dr. Valery Khartanovich (The Kunstammer, St. Petersburg, Russia)

### **Candidate qualifications**

The student will have gained a 1<sup>st</sup> class honours or 2:1 undergraduate degree or equivalent in archaeology or a related discipline and/or a relevant MSc degree. They will be required to be fluent in the Russian language. It will be necessary to spend substantial

periods of time undertaking skeletal analysis in Russia and the applicant must be willing to do this. It is highly desirable that they will have some prior experience of human osteology and be able to demonstrate an understanding of Russian prehistory. They should also have an aptitude for undertaking laboratory analysis since they will be required to do so for the stable isotope component of the project. It is envisaged that the three-year project will commence in March 2005, although there is potential for a start date later in 2005.

**(2) Climate and environmental change in New Zealand at the end of the last ice age: testing hypotheses of inter-hemispheric climate change using fossil Coleoptera**

**Supervisors: Dr Nicki Whitehouse ([n.whitehouse@qub.ac.uk](mailto:n.whitehouse@qub.ac.uk)), Dr Jamie Shulmeister (University of Canterbury, Christchurch, New Zealand) and Dr Richard Leschen (Landcare Research, Auckland, New Zealand).**

**Candidate qualifications**

This project will suit a student with expertise in the broad area of entomology, palaeoecology or palaeoclimate. Preference will be given to candidates with experience of fossil insect identification (Coleoptera) to dissertation level. Experience of handling numerical data will be an advantage. Applicants should have or expect to have good honours degree in Geography, Palaeoecology, Archaeology or related subject and/or a relevant MSc degree. The successful candidate will be expected to spend up to several months a year in New Zealand for the first two years of the project and so should be prepared to travel away from home for extended periods of time. The student will be expected to attend and present their results at international meetings and to major international peer review journals. Ideally, this studentship should initiate as soon as practically possible, due to planned fieldwork in February 2005 to coincide with suitable weather conditions and availability of supervisors/collaborators. However, we also welcome applications from suitably qualified candidates who are not able to start immediately, but who have the necessary expertise for the project.

**Further information on the projects may be found at:**  
<http://www.qub.ac.uk/arcpal/projects.htm>

**The School:**

The School of Archaeology and Palaeoecology conducts research of international importance. Queen's Archaeology and Palaeoecology achieved a Grade 5 (highest 5\*) for the quality of its research in 1996 and again in 2001, placing it in the top 10 departments in the UK. In November 2000, the Palaeoecology Centre was awarded the Queen's Anniversary Prize. Over the past thirty years the School's Palaeoecology Centre has developed an expertise in scientific dating methods, climate and environmental change and bioarchaeology. The Centre has been closely involved with the development of the tree-ring calibration curve used to calibrate all radiocarbon dates worldwide. Archaeological research ranges through early prehistory to the late medieval period across Europe, with a particular emphasis on Ireland and Great Britain. In 2002, the School established the Centre for Archaeological Fieldwork (CAF) which undertakes excavation work for Environment and Heritage Service (NI) and has provided employment for students and graduates.

**The <sup>14</sup>CHRONO Centre:**

The School was recently awarded £6.2 million to set up the Centre for Climate, the Environment and Chronology (<sup>14</sup>CHRONO) funding new research on environmental and

climate change and the establishment of an AMS radiocarbon laboratory, only the third such facility in the UK and the first in Ireland. The Centre brings together researchers with expertise in radiocarbon dating, stable isotope analysis, tephrochronology, dendrochronology, palaeoecology, and archaeology. Facilities are being built or upgraded and equipment is being installed to provide state-of-the-art technology to tackle problems of past and present climates and environments and the relation to societal change.

Further details of the Centre may be found at: [www.chrono.qub.ac.uk](http://www.chrono.qub.ac.uk).

### **Funding:**

Funding for the above projects is available through 2 studentships, which will pay full fees and maintenance of circa £12,000 a year. Candidates should hold a 1<sup>st</sup> class or 2:1 Honours degree in Archaeology or related subject. Preference will be given to candidates with a Masters degree. All EU students are eligible to apply for the studentships. Moreover, one out of the two projects above has sufficient funding to appoint one international student (non EU).

### **How to apply:**

Applicants should submit a completed **Admission Form** to the University. Additionally, for these specific projects, prospective students should send a Curriculum Vitae and covering letter stating which project they wish to be considered for to: Dr N.J. Whitehouse, [Palaeoecology Centre, Queen's University Belfast, Belfast BT7 1NN](mailto:Whitehouse@qub.ac.uk). Applicants should state clearly their availability regarding commencement of the project they have applied for. All applications should reach the University by the **8<sup>th</sup> December 2004**. Applications are not accepted electronically.

### **Contacts:**

Applicants who require further information of the projects are encouraged to visit: <http://www.qub.ac.uk/arcpal/projects.htm> and make direct contact with potential supervisors. Further information on the School may be obtained from our web site at: <http://www.qub.ac.uk/arcpal>. For other information and Admissions Forms, please contact: [Mrs Gillian Johnson, Palaeoecology Centre, Queen's University Belfast, Belfast BT7 1NN](mailto:g.johnson@qub.ac.uk). Tel 028 90335141; email: [g.johnson@qub.ac.uk](mailto:g.johnson@qub.ac.uk). Forms may also be downloaded at: <http://www.qub.ac.uk/ado/postgrad/applying.html>.

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## NEH SEMINARS

ANNOUNCING: Summer 2005, National Endowment for the Humanities (U.S.A.),  
Seminars and Institutes for College and University Teachers

Application Deadline: March 1, 2005

\* \* \*

Each summer the National Endowment for the Humanities supports a variety of study opportunities in the humanities for faculty who teach American undergraduates. Seminars and institutes are national, residential, and rigorous. Designed to strengthen the quality of humanities teaching and scholarship, they are led by some of the nation's outstanding scholars and take place at major colleges and universities and archival facilities across the United States and abroad.

Topics considered among the 32 seminars and institutes offered in the summer of 2005 include the Bayeux Tapestry, religion and culture, Latin American philosophy, African cinema, the early American republic, the Vietnam War, and studies of major figures such as St. Francis of Assisi, Ralph Waldo Emerson, Joseph Smith, Eugenio María de Hostos, José Martí, William Faulkner, and Hannah Arendt. For a complete list of both seminars and institutes, go to the NEH Web site, or phone (202/606-8463), or e-mail ([sem-inst@neh.gov](mailto:sem-inst@neh.gov)).

<http://www.neh.gov/projects/si-university.html>

The listings contain seminar and institute titles and the means to contact each director. Prospective applicants can request information from as many seminar and institute directors as they wish but may apply to only two NEH summer offerings. In response to a request for information, seminar and institute directors will send a letter describing the content, logistics, expectations, and conditions of that project. Each letter will be accompanied by application instructions as well as information about the program's costs.

Participants receive from the National Endowment for the Humanities a stipend based on the length of the seminar or institute. Stipends are \$3,000 for four weeks, \$3,600 for five weeks, and \$4,200 for six weeks and are intended to help cover travel costs and living expenses, as well as books and miscellaneous expenses.

Requests for information and completed applications should NOT be directed to the National Endowment for the Humanities; they should be addressed to the individual projects as found in the listings. The application postmark deadline is March 1.

## **MARGO TYTUS VISITING SCHOLARS** **PROGRAM AT THE UNIVERSITY OF** **CINCINNATI**

The University of Cincinnati Classics Department is pleased to announce the Margo Tytus Visiting Scholars Program. Tytus Fellows, in the fields of philology, history and archaeology will ordinarily be at least 5 years beyond receipt of the Ph. D. Apart from residence in Cincinnati during term, the only obligation of Tytus Fellows is to pursue their own research. Fellowships are tenable during the regular academic year (October 1 to May 31).

There are two categories of Tytus Fellowships, long-term and short-term.

Long Term Fellows will come to Cincinnati for a minimum of one academic quarter (two and a half months) and a maximum of three during the regular academic year. They will receive a monthly stipend of \$1000 plus housing and a transportation allowance.

Short Term Fellows will come to Cincinnati for a minimum of one month and a maximum of two during the regular academic year. They will receive housing and a transportation allowance.

Both Long Term and Short Term Fellows will also receive office space and enjoy the use of the University of Cincinnati and Hebrew Union College Libraries. While at Cincinnati Tytus Fellows will be free to pursue their own research.

The University of Cincinnati Burnam Classics Library is one of the world's premier collections in the field of Classical Studies. Comprising 210,000 volumes, the library covers all aspects of the Classics: the languages and literatures, history, civilization, art, and archaeology. Of special value for scholars is both the richness of the collection and its accessibility -- almost any avenue of research in the classics can be pursued deeply and broadly under a single roof. The unusually comprehensive core collection, which is maintained by three professional classicist librarians, is augmented by several special collections such as 15,000 nineteenth century German Programmschriften, extensive holdings in Palaeography, Byzantine and Modern Greek Studies. At neighboring Hebrew Union College, the Klau Library, with holdings in excess of 445,000 volumes, is rich in Judaica and Near Eastern Studies.

Application Deadline: January 1.

For application forms please write:

\*\*\*\*\*

Director, Margo Tytus Visiting Scholars Program  
Department of Classics  
University of Cincinnati  
Cincinnati, OH 45221-0226

e-mail: [secretary@classics.uc.edu](mailto:secretary@classics.uc.edu)

URL: <http://classics.uc.edu/tytus>

Getzel M. Cohen

Professor of Classics and History

Director, Tytus Visiting Scholars Program

Phone: 513-556-1951; Fax: 513-631-1715

Dept. of Classics, 410 Blegen Library, University of Cincinnati,  
Cincinnati, Ohio 45221-0226

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## ΑΝΑΚΟΙΝΩΣΕΙΣ - ANNOUNCEMENTS

### UNIVERSITY OF CINCINNATI, DEPARTMENT OF CLASSICS, SUMMER RESIDENCY PROGRAM

The University of Cincinnati Classics Department is pleased to announce the Summer Residency Program. Summer Residents, in the fields of philology, history and archaeology will come to Cincinnati for a minimum of one month and a maximum of three during the summer (June 15 - September 15). Apart from residence in Cincinnati during term, the only obligation of Summer Fellows is to pursue their own research. They will receive free university housing. They will also receive office space and enjoy the use of the University of Cincinnati and Hebrew Union College Libraries.

The University of Cincinnati Burnam Classics Library (<http://www.libraries.uc.edu/libraries/classics/index.html>) is one of the world's premier collections in the field of Classical Studies. Comprising 210,000 volumes and other research materials, the library covers all aspects of the Classics: the languages and literatures, history, civilization, art, and archaeology. Of special value for scholars is both the richness of the collection and its accessibility -- almost any avenue of research in the classics can be pursued deeply and broadly under a single roof. The unusually comprehensive core collection, which is maintained by three professional classicist librarians, is augmented by several special collections such as 15,000 nineteenth century German Programmschriften, extensive holdings in Palaeography, Byzantine and Modern Greek Studies. At neighboring Hebrew Union College, the Klau Library (<http://library.cn.huc.edu/>), with holdings in excess of 445,000 volumes and other research materials, is rich in Judaica and Near Eastern Studies.

Application Deadline: February 15. Applicants must have the Ph.D. in hand at the time of application.

For application forms please write:

\*\*\*\*\*

Getzel M. Cohen  
Professor of Classics and History  
Director, Tytus Visiting Scholars Program  
Phone: 513-556-1951; Fax: 513-631-1715  
Dept. of Classics, 410 Blegen Library, University of Cincinnati,  
Cincinnati, Ohio 45221-0226  
e-mail: [secretary@classics.uc.edu](mailto:secretary@classics.uc.edu)  
URL: <http://classics.uc.edu/tytus>

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## **INFORMATION RELATIVE TO THE EU-ARTECH PROJECT**

Jean Louis BOUTAINE  
C2RMF  
EU-ARTECH N1 Networking Activity

The inaugural meeting of the new European **EU-ARTECH** project (**Access Research and Technology for the conservation of the European Cultural Heritage**), contract no.: RII3-CT-2004-506171, took place in FIRENZE on July 16-17th 2004.

### **1 – Goals & structure of EU-ARTECH**

Enhanced cooperation in conservation science promotes the diffusion of the highest level of research, develop potential new applications and appropriate services, and offer opportunities for advanced training of young scientists and operators. At the same time, it facilitates the sharing of best practices and the establishment of standards in conservation.

From the above considerations, a Consortium among thirteen European institutions operating in the field of conservation science is established with the name EU-ARTECH (**Access Research and Technology for the conservation of the European Cultural Heritage**).

The objective of EU-ARTECH is to create a permanent interoperability among the participating infrastructures, establishing cooperation and exchange of knowledge with the other infrastructures active in this field, in the perspective of structuring a common European research area.

The thirteen research institutions are all operating at present in cooperative interdisciplinary programmes with curators, conservators, archaeologists and art-historians, and therefore represent, in their own countries, an important model for the overall community concerned with study and conservation-restoration of cultural heritage.

The co-ordinator of the project is Professor Bruno BRUNETTI – Università di Perugia (Italy).

A web site can be seen at:

<http://becu.chm.unipg.it/euartech/frame2.htm>

The activities of the project are articulated in:

1 - **NETWORKING**, devoted to exchange of knowledge, to diffuse good practices in conservation, to define common protocols and/or standards, and other common work-parameters in order to improve the quality of research, and conservation-restoration. This activity is shared in two parts:

## N1 - Sharing knowledge and resources

### N2 - Materials and methods

2 - *ACCESS*, offered by a single high-level infrastructure (C2RMF) and by a unified group of joint infrastructures (UNI-PG, CNR-ICVBC, OPD, INOA), open to users working in Europe and associated countries.

### A1 - AGLAE: accelerator based system for Ion Beam Analysis

- *AGLAE*, where non-destructive elemental analyses are carried out with high sensitivity and precision, in a unique environment of scientists having a large expertise on artwork materials;

- *230 person\*days available*

### A2 - MOLAB: Mobile Laboratory

- *MOLAB*, where a unique collection of portable or transportable instrumentation, together with staff competent on methods and materials, allows performing in-situ non-destructive measurements for studies on artworks and for the evaluation of conservation-restoration methods (directly in a museum room, or on the scaffold of a restoration workshop, or in an archaeological site). 10 instruments will be available.

- *220 person\*days available*

3 - *JOINT RESEARCH ACTIVITIES*, devoted to improve the performances of the participating infrastructures.

### JRA1 - Development and evaluation of new treatments for the conservation-restoration of outdoor stone and bronze monuments

- The objective is to clarify and define advantages and limits of new conservation treatments on outdoor monuments, comparing new and traditional methods and encouraging their use, based on clear scientific and ethical criteria (i.e. choice of methods and materials only after a careful scientific study of the artwork state of conservation, in the full respect of its aesthetic and historical value).

### JRA2 - New methods in diagnostics: imaging and spectroscopy

- The involved teams will develop new diagnosis methods by innovative in-situ non-destructive and non-contact measurements, enhancing the quality of the services that are offered to the cultural heritage community.

All these activities are interconnected and, since they converge to strengthen cooperation among Consortium and external institutions, have the critical mass to create a good level for European research area in this field.

EU-ARTECH starts on June 1<sup>st</sup> 2004 and will last 5 years. Every six months, general meetings, associated or not with dedicated seminars or workshops, are planned throughout the whole duration of the project.

### *Participants*

All the institutions which participate are systematically involved in the study and/or conservation-restoration of artworks, cultural heritage artefacts and monuments in their country. Some of them are scientific infrastructures directly interfaced to relevant

European museums, some have responsibility at a national level of the study, safeguard and conservation-restoration of Cultural Heritage, some others are Universities or public research centres active in the field of methods and materials applied to the scientific study and the conservation/restoration of cultural heritage.

The 13 participating institutions are:

- Università di Perugia (UNI-PG) - Italy
- Centre de Recherche et de Restauration des Musées de France - Paris (C2RMF) -France
- Consiglio Nazionale delle Ricerche, Istituto per la Conservazione e Valorizzazione dei Beni Culturali – Firenze (ICVBC) - Italy
- The Scientific Department of the National Gallery of London (NGL) – United Kingdom
- Opificio delle Pietre Dure – Firenze (OPD) - Italy
- Bayerische Landesamt für Denkmalpflege – München (BLFD) - Germany
- Ormylia Art Diagnosis Centre – Ormylia (OADC) - Greece
- Instituut Collectie Nederland – Amsterdam (ICN) – The Netherlands
- Laboratório Nacional de Engenharia Civil – Lisboa (LNEC) - Portugal
- Institut Royal du Patrimoine Artistique – Bruxelles (IRPA) - Belgium
- Rheinisch Westphälische Technische Hochschule - Aachen (RWTH) - Germany
- Università di Bologna (UNI-BO) - Italy
- Istituto Nazionale di Ottica Applicata – Firenze (INOA) - Italy

## **2 - EU-ARTECH networking**

Convenor: Rocco MAZZEO (UNI-BO), email: [mazzeo@ciam.unibo.it](mailto:mazzeo@ciam.unibo.it)

### **N1 - Sharing knowledge and resources**

*Objectives:*

- improve the cooperation among the consortium institutions and foster cooperation with institutions external to the consortium;
- exchange knowledge and expertise on specific examination or analysis methods;
- promote the use of common reference materials;
- develop inventory of best analytical practices;
- elaborate and diffuse common analytical good practices;
- propose standards, to the newly created CEN Technical Committee CEN/TC 346 dedicated to “Conservation of Cultural Property”;
- encourage the education and training through research, increasing the opportunities of formation for young scientists.

Responsible for this task: Jean Louis BOUTAINE (C2RMF), email: [jean-louis.boutaine@wanadoo.fr](mailto:jean-louis.boutaine@wanadoo.fr).

*First information:*

The EU-ARTECH consortium offers to all the institutions which collaborate to the LabS TECH network to become correspondent institutions of EU-ARTECH.

Only those institutions who will concretely answer positively to this proposal will be integrated in the EU-ARTECH database.

These institutions do accept that their data will be publicly available, both on printed documents distributed in the frame of the project and on the future web site of EU-ARTECH.

*Survey of techniques*

Following the LabS TECH final meeting in Paris and the EXRS 2004 conference in Alghero, it is proposed to extend and render more accurate the list of used techniques, by including the following list:

Photography - multi-spectral (on better wording in English)  
Radiography - using accelerator  
Radiography – using digital detector (CCD matrix, photo-stimulated imaging device...)  
Radiography - K-edge absorption  
Electron probe X-ray microanalysis (EPMA)  
X-ray fluorescence analysis - split “laboratory equipment” in “WDXRF wavelength dispersion” & “EDXRF energy dispersion”  
Micro X-ray fluorescence analysis  
Total reflection X-ray fluorescence analysis  
Portable X-ray diffractometry  
Neutron diffraction  
Synchrotron radiation examination - to be split in sub groups, suggestions are welcome  
AAA - change into AAS, for Atomic Absorption Spectrometry (acronym used by the majority of Anglo-Saxons)  
NMR based methods – perhaps be to be divided in subgroups according specialists’ opinion  
XANES  
Micro XANES (?)  
Micro Raman spectrometry  
Portable Raman spectrometry  
Laser based methods – perhaps to be divided in subgroups according specialists’ opinion  
Electric arc spectrometry (OES)  
Mechanical testing - compression test  
Mechanical testing - hardness measurement  
Mercury Intrusion Porosimetry (instead of Mercury Porosimetry)  
Pore size distribution determination  
Micro drop absorption test  
Ultra sound velocity measurement  
Laser micro profilometry  
Endoscopy  
Thickness measurement of deposit by XRF  
Thickness measurement of deposit by beta particle backscattering  
+ maybe, some specific biological tests to be defined.

All suggestions, remarks, ideas... relative to this list are welcome.  
An updated file will be distributed a.s.a.p.

*Decided or foreseen meetings*

Presently the first decided workshops are:

- **Raphael's painting technique: working practices before Rome** – London – National Gallery - November 11<sup>th</sup> 2004

C.f. attached document: Raphael-Announcement.doc

- **Non destructive analysis of cultural heritage artefacts** – in co-operation with COST G8 – Amsterdam – ICN - January 12<sup>th</sup> 2005.

- **Studies on organic materials in artworks** – Ormylia – Working group co-ordinated by Sophia SOTIROPOULOU (OADC) – Workshop scheduled at the end of 2005, email: [s.sotiropoulou@artdiagnosis.gr](mailto:s.sotiropoulou@artdiagnosis.gr)

## ATHENA

Possibilities in the frame of Marie Curie action, of fellowships for young scientists in “A scientific Training for High Education initiatives in Art conservation” (ATHENA)

Contact: Professor Emilio M. CASTELLUCCI – INFN – FIRENZE (e-mail: [castel@lens.unifi.it](mailto:castel@lens.unifi.it))

Web site: <http://www.lens.unifi.it/mc-est/selection.html>

### *Standardisation - Co-operation with the CEN/TC 346*

Decisions taken during the Venezia meeting (June 21<sup>th</sup> 2004):

Co-ordinator: Vasco FASSINA (Soprintendenza per il Patrimonio Storico, Artistico e Demoantropologico del Veneto), Secretary: Elena MOCCHIO (UNI – Milano)

WG1: Guidelines, terminology, safety – convenor: Lorenzo APPOLONIA (Direction des biens archéologiques & paysages – Val d’Aoste – Italy)

WG2: Materials making up the artefacts – convenor not nominated

WG3: Conservation works – convenor: Vasco FASSINA

WG4: Environment, outdoor & indoor – convenor: Jesper Stub JOHNSEN (Danske Filminstitut – Kobenhavn – Denmark)

WG5: Transportation & casing - convenor not nominated

The standard way, for each interested institution, to get information from this CEN/TC consists in contacting ones national standardisation body.

A small EU-ARTECH volunteers working group, dedicated to this item will be organised (how to establish co-operation with the TC, how to feed the TC with materials resulting from LabS TECH & EU-ARTECH works...). Volunteers are welcome.

### *CAMEO co-operation with MFA Boston*

The co-operation with MFA Boston launched under the umbrella of LabS TECH is included in the agenda of EU-ARTECH.

A memorandum of understanding between the two parties will be prepared.

A small EU-ARTECH volunteers working group on this action will also be organised.

## **N2 - Materials and methods**

Objectives:

-to deepen the survey carried out in the frame of LabS TECH on conservation practices in Europe, discussing new details of specific interventions recognised as relevant;

- to diffuse good common practices in conservation treatments;
- to contribute to the elaboration of possible European standards;
- to contribute to the implementation of these standards.

Responsible for this task: Mauro MATTEINI (ICVBC), email: [m.matteini@icvbc.cnr.it](mailto:m.matteini@icvbc.cnr.it)

### **3 – EU-ARTECH ACCESS**

Convenor: Michel MENU (C2RMF), email: [michel.menu@culture.fr](mailto:michel.menu@culture.fr)

For the ACCESS activity, EU-ARTECH is in a position to support and finance 450 person\*days of infrastructures, for external teams which will have the possibility to answer to periodical calls for proposals.

For each of the two types of infrastructures, a dedicated group of three peers is nominated, external to the consortium. They will examine the submitted files, and propose to the management of the consortium a priority list.

The six nominated peers will receive, as information, the data of the LabS TECH general survey of institutions, plus the final version of the technical paper relative to the LabS TECH task 1.6 “Medium term development of examination & analysis techniques”.

#### **A1 - AGLAE: accelerator based system for Ion Beam Analysis**

Because of their non-destructive character and their good analytical performances, accelerator-based analytical techniques are increasingly applied to the study of art and archaeological objects. For more than 14 years, an ion beam analysis (IBA) facility has been installed in the Centre for Research and Restoration of the Museums of France (C2RMF). Until now, it is the only facility of this kind entirely dedicated to the study of cultural heritage artefacts.

The facility labelled AGLAE (*Accélérateur Grand Louvre d'Analyse Élémentaire*) is based on a 2 MV electrostatic accelerator of tandem type, equipped with two ion sources, one for the production of protons and deuterons and the other for helium ions. Three experimental lines are presently in use, a classical one leading to a vacuum chamber, used for small objects or samples, another called the external beam line, specially designed for the direct analysis of artefacts at atmospheric pressure, without any sampling and the last one, recently built for operating a variety of X-ray fluorescence spectrometry (labelled PIXE<sup>2</sup>). The external beam line, which is the most often used, has been fitted with a focusing system which enables to reduce the beam diameter to about 10 μm and thus to make a nuclear microprobe at atmospheric pressure.

Three main analytical techniques are applied, either individually or in association: Particle-Induced X-ray Emission (PIXE), Rutherford Backscattering Spectrometry (RBS) and Nuclear Reaction Analysis (NRA) with a sub-category called PIGE (Particle-Induced Gamma-ray Emission), frequently associated with PIXE. More recently, a fourth technique has been implemented, namely ERDA (Elastic Recoil Detection Analysis) for the analysis of hydrogen.

IBA techniques combine numerous qualities: non contact, non-destructiveness, multi-elemental and quantitative character, accuracy, high sensitivity (PIXE), elemental mapping under micro-beam operation. Such a beam enables the analysis of small details like inclusions in gemstones or illuminated manuscripts. Moreover, the capability of a real nuclear microprobe is reached using a multi-parametric acquisition system and

moving the sample under the fixed micro-beam with accurate stepping motors. It is then possible to draw *elemental micro-maps* with a lateral resolution of a few tens of  $\mu\text{m}$ .

### AGLAE types of experiments and beam features

Analytical technique	Particle	E (MeV)	Stragglng (keV)	Beam diameter ( $\mu\text{m}$ )	I (nA)	Charge ( $\mu\text{C}$ )
PIXE	p	3	4.5	10-20	0.05-1	1
PIXE-PIGE combination	p	3	4.5	10-20	5	5
PIXE-RBS combination	p	3	4.5	10-20	5	5
RBS He	He <sup>++</sup>	3	30	50-100	5	5
ERDA He	He <sup>++</sup>	3	30	50-100	5	5
NRA	d	2		10-20	10	10

AGLAE will be open to transnational access for 46 days of 8 hours each per year. These 46 days correspond to 20% of the effective days open to experiments on AGLAE (i.e. a total of 230 days during the 5 years duration of the project).

The contact person is: Jean-Claude DRAN (C2RMF) – email: [jean-claude.dran@culture.fr](mailto:jean-claude.dran@culture.fr)

### A2 – MOLAB

#### Portable or transportable instrumentations (10) available for the MOLAB access and their features

	Available instrumentation and use
1 - Fibre optics FT-IR spectrometer [UNIPG]	EQUIPMENT: FT-IR reflectance spectroscopy is a suitable technique for the study of organic and inorganic materials. The critical part of the portable FT-IR spectrometer, is the probe, made of chalcogenide glass fibres. The fibres totally absorb radiation below $900\text{ cm}^{-1}$ , but the range $2000\text{-}900\text{ cm}^{-1}$ is characterised by a satisfactory signal/noise ratio. This is the “finger print” region for the identification of many organic polymeric substances and inorganic salts. The equipment is light and can be used even on the scaffold of a restoration yard. It has been realised combining IR transparent fibre optics with a compact portable interferometer. Its manageability renders the instrument unique. The availability of a large number of standards allows an optimal use of the technique. USE: in-situ non-destructive identification of alterations on stones, mortars and metals; identification of pigments and binders in paintings; identification of undocumented restorations. Technique complementary to micro-Raman and X-ray fluorescence.
2 - Micro-Raman	EQUIPMENT: portable equipment for in situ non-destructive



<p>spectroscopy [UNI-PG]</p>	<p>studies of inorganic and some organic substances on stones, metals or polychrome surfaces. Only very few light and manageable examples of this instrumentation are available in Europe at present. A large collection of standards and specific expertise are available.</p> <p>USE: in-situ non-destructive identification of alterations on stones, mortars and metals; identification of pigments in wall paintings. Technique complementary to FT-IR and X-ray fluorescence.</p>
<p>3 - Fibre optics UV-VIS fluorescence [UNI-PG]</p>	<p>EQUIPMENT: Portable equipment for in situ non-destructive studies of organic substances on polychrome surfaces. A large collection of standards and specific expertise are available at UNI-PG and ICVBC.</p> <p>USE: in-situ non-destructive detection of the presence of organic substances and possibly identification of their nature. In case of necessity, the technique is able to guide an appropriate micro-sampling for stratigraphic studies.</p>
<p>4 - Fibre optics VIS-NIR spectroscopy [UNI-PG]</p>	<p>EQUIPMENT: Portable instrument, light and manageable, to be used as a spectrometer and a colorimeter.</p> <p>USE: Colorimetric measurements and, possibly, identification of pigments. Measurement of possible colour change after restoration.</p>
<p>5 - Scanning IR reflectography [INOA]</p>	<p>EQUIPMENT: A prototype portable scanning IR reflectograph allows to record IR reflected images, with the best resolution presently available. The system records at the same time images corresponding to four different regions of the electromagnetic spectrum: IR, red, green and blue. From the collected data, it is possible to compare directly on the monitor of a PC, the visible image of an object and its IR reflectogram. The examination of the four images allows in some cases to identify also pigments or to compare substances in different regions of the artefact.</p> <p>USE: characterisation of painting techniques, in easel and wall paintings, through the identification of underdrawings, identification of undocumented interventions, characterisation of pigments.</p>
<p>6 - Laser micro-profilometer [INOA]</p>	<p>EQUIPMENT: The laser micro-profilometer is an interferometric device designed to measure with high precision the distance between an optical head and the surface of a wide variety of objects. The optical head is a conoprobe, a device composed of a birefringent crystal coupled to two polarisers, placed between a lens and a CCD camera. The light, diffused by the object under investigation, is split into two beams, called ordinary and extraordinary beam, which interfere creating a fringe pattern. The distance ensues from the measurement of the fringe period. Depending on the lens mounted on the probe, a micrometric to sub-micrometric resolution is achievable, to the detriment of a short measurement range. Such a distance-meter, mounted on a scanning device, allows the mapping of the relief of small</p>



	<p>objects, as well as almost flat surfaces with very fine details.</p> <p>An advanced prototype, developed at INOA, allows a 1 <math>\mu\text{m}</math> resolution on a 8 mm measurement range, at a stand-off distance of 40 mm. The portable instrument is unique in its performances. The accuracy is better than 6 <math>\mu\text{m}</math>, and the transversal resolution is about 20 <math>\mu\text{m}</math>.</p> <p>USE: Laser micro-profilometry can be applied to measure and monitor the surface of many artworks, ranging from wooden panels to characterise possible undocumented restoration interventions, to any painting to show micro colour detachments; to marble artefacts to monitor the roughness before and after the restoration intervention, to panel paintings of doubtful attribution to find out drawing technique.</p>
7 - X-ray fluorescence analyser [UNI-PG]	<p>EQUIPMENT: This instrument is relatively common among conservation scientists. However, its resolution (~130 eV) is the best presently available for portable equipments. The instrument is available coupled with a specific expertise in inorganic materials identification.</p> <p>USE: The instrument can be used for elemental analyses (elements of <math>Z &gt; 12</math>) on stones, metals, wall and easel paintings, and other objects.</p>
8 - Portable fluorescence device [OPD]	<p>EQUIPMENT: fluorescence is recorded by a couple of lamps (Lubino model) with a maximum emission at 365 nm. New lamps are also available with additional filters to further cut the visible component. As a reference to evaluate the quality of the image, a spectralon reflectant is used. Images are recorded by a digital camera.</p> <p>USE: in-situ identification of distribution of organic substances, via images.</p>
9 - EUREKA-NMR Mouse <sup>®</sup> [UNI-PG]	<p>EQUIPMENT: The portable instrument (Nuclear Magnetic Resonance mobile universal surface explorer, developed at the RWTH Aachen - Eureka project E!2214 - MOUSE.) is a unidirectional NMR relaxometer purposely created for the study of cultural heritage and for NMR characterisation of unmovable objects. At present, the instrumentation is equipped with a Bruker Minispec console and a laptop computer. Probe-heads are small, inserted within the magnet and already pretuned (Bruker Biospin<sup>®</sup>). The present useful depth of observation is 7 mm, hopefully increasable to 10 mm within the next two years.</p> <p>USE: The instrument can be used to measure paper or parchment degradation, wood degradation, detachment of painted surfaces from a wall or another support, and presence of water in porous stones, frescoes or ceramics.</p>
10 - Drilling Resistance Measurement System (DRMS) [ICVBC]	<p>EQUIPMENT: DRMS is a new portable system developed and validated for directly determining stone mechanical parameters such as hardness by measuring its drilling resistance [validated within the European project HARDROCK: <i>Development of a new measurement method to determine the superficial</i></p>

	<p><i>hardness of exposed monumental rocks (SM&amp;T,CT96-2065)]</i></p> <p>The force is measured with a monaxial load cell (extensimetry transducer) which transforms the gauge deformation into an electrical signal (tension). The load cell deformation is correlated with the “resistance to penetration” hence to the “stone cohesion. The DRMS has no competitor for its application in comparative tests in situ and its use has been suggested as a standard method for assessment of the quality of consolidating treatments.</p> <p>USE: The test is rather non-destructive, since stones can be tested, with only minor patching of holes (Ø 5 mm) on exposed faces. This device permits to determine the cohesion profile of a stone material, based on its mechanical and abrasive properties. It is also possible to determine either the state of decay, or the consolidating performance (efficiency and depth of penetration) of applied conservative treatments.</p>
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The instruments and the qualified staff to operate them, will be available for transnational access, **on the site of the teams selected** by the committee, for a total of 220 person\*days during the 5 years duration of the project.

MOLAB is coordinated by UNI-PG. The contact person is Costanza MILIANI (UNI-PG) – email: [miliani@thch.unipg.it](mailto:miliani@thch.unipg.it)

#### **4 - Joint Research Activity**

The convenor of this activity is: Mauro MATTEINI (ICVBC), email: [m.matteini@icvbc.cnr.it](mailto:m.matteini@icvbc.cnr.it)

#### **JRA1: Development and evaluation of new treatments for the conservation-restoration of outdoor stone and bronze monuments**

##### **Objectives**

The objectives are to investigate new treatments based on inorganic materials and to test them for two kinds of artefacts: stone and bronze. These materials represent the majority of outdoor monuments components. The activity is devoted to compare the use of inorganic and organic protective or consolidant products, defining detailed properties of their new compounds, in the perspective of “good conservation practices”, improved knowledge on materials and methods in conservation, development of new treatments.

On this theme, four issues will be developed:

- consolidating treatments for marble, limestone and sandstone artefacts;
- protective treatments for marble, limestone and sandstone artefacts;
- corrosion inhibitors for bronze artefacts;
- protective treatments for bronze artefacts.

This research is undertaken in response to the pressing need, as voiced by art conservators-restorers, for new coating and active corrosion inhibition strategies to protect outdoor bronzes from polluted environments. Exposure to these aggressive environments, particularly acid rain and ambient chloride salts, subjects bronzes to chemical/electrochemical instability, usually resulting in disfiguring changes in appearance. At the present time, acrylic lacquers, various waxes and organic corrosion inhibitors remain the choice for outdoor bronze protection.

The developed treatments will be evaluated and compared with those commonly applied today in Europe.

Participants are ICVBC, UNI-PG, UNI-BO, BLFD, LNEC and OPD.

The responsible of this task is Suzanna BRACCI (ICVBC), email: [bracci@icvbc.cnr.it](mailto:bracci@icvbc.cnr.it)

### **Activity JRA2: New methods in diagnostics. imaging and spectroscopy**

#### *Objectives*

These research activities are directly connected with the A2 access program. The improvement of the performances of the MOLAB service implies necessarily the development of innovative methodologies conducting to new applications for in-situ non-destructive study of cultural heritage artefacts.

Four different new analytical methodologies for artwork studies will be developed. In parallel, assembling of new equipments and validation of their performances will be also carried out.

1 - new applications of portable NMR techniques to artwork studies will be experimented, included the application of the very recently developed portable device for in-situ NMR measurement, the EUREKA-MOUSE<sup>®</sup> a new NMR-imaging equipment will be also assembled and applied to artwork studies; responsible: RWTH

2 - two different methods for imaging spectroscopy in the near IR: high resolution imaging at various fixed wavelengths (low wavelength resolution) and low resolution imaging at continuous wavelengths (high wavelength resolution); responsible: INOA + OADC.

3 - new method for simultaneous portable in-situ X-ray diffraction (XRD) and X-ray fluorescence measurements (XRF); responsible: C2RMF + UNI-PG

4 - new method for applying simultaneously portable micro-Raman technique with VIS micro-fluorescence technique to obtain extended information for non-contact, in-situ identification of organic colorants; responsible: UNI-PG

The responsible of this task is Antonio SGAMELLOTTI (UNI-PG), email: [sgam@thch.unipg.it](mailto:sgam@thch.unipg.it)

## **5 - Miscellaneous information**

### ***5.1 - LabS TECH web site***

The LabS TECH web site will be maintained by Universita di Perugia. It will include an aesthetic and users friendly database which will give through simple requests access to all the data collected during the LabS TECH activity.

The participants of LabS TECH are invited to check their data in the attached labstech1.xls file and to send updating by e-mail to J.L. Boutaine.

### ***5.2 - Preparing the 7<sup>th</sup> European Framework Programme***

All institutions involved in the area of Science & Technology for the Cultural Heritage are invited to participate to the European Strategy Forum for Research Infrastructures (ESFRI) forum. Consult the web site:

[http://www.cordis.lu/era/infrastructures\\_forum.htm](http://www.cordis.lu/era/infrastructures_forum.htm)

Common proposals could be meant by the EU-ARTECH partners and/or correspondent institutions.

The decision to send common input collectively, as EU-ARTECH consortium, or by institutions individually is not yet taken

### **5.3 - AGLAE post-doc position**

**IN THE FRAME OF EU-ARTECH ACCESS, A POST-DOC POSITION WILL BE AVAILABLE, STARTING JANUARY 2005. THIS WILL INCLUDE PARTICIPATION IN RESEARCH PROGRAMS ON ION BEAM ANALYSIS ON THE AGLAE MACHINE (NON-DESTRUCTIVE X-RAY MICROANALYSIS, MICRO-IMAGING TECHNIQUES ON THE EXTERNAL BEAM SET-UP..) AND ACTIVITIES INVOLVING EXTERNAL USERS**

C.f. attached document: post-doc-aglae.doc

### **5.4 - E-MRS Spring Meeting – Strasbourg - May 31 - June 3 2005**

This symposium will present and discuss recent advances in scientific and technical studies in art, archaeology and conservation.

C.f. attached document: EMRS2005-1<sup>st</sup>-announcement

### **5.5 – SOLEIL - COST G8 training school on synchrotron analysis of works of art – December 14-18<sup>th</sup> 2004 – “NEW LIGHTS ON ANCIENT MATERIALS”**

The Synchrotron SOLEIL will organize the first COST G8 training school on the synchrotron analysis of ancient materials from the 14th to the 18th of December 2004 in Saint-Aubin (Paris region, France).

The training school will aim at providing young scientists working on the analysis of ancient artefacts with an in-depth presentation of the new possibilities offered by synchrotron radiation techniques. Courses will include lectures presenting current challenges regarding the study of ancient metals, ancient pigments and organic materials. Tutorials will aim at combining these two approaches.

C.f. attached document: coursSoleil.doc

## INTERNET SITES

# AMERICAN ICE AGE SITE ON THE ARCHAEOLOGY CHANNEL

Friends and colleagues,

Who were the first people in the Americas and when they arrived are two of the most compelling questions in archaeology today. New information on this topic is coming from the Topper Site, featured in *They Were Here: Ice Age Humans in South Carolina*, the latest video offering on our public education Web site, *The Archaeology Channel* (<http://www.archaeologychannel.org>).

It was a time when our climate was cooler. Great ice sheets covered the northern areas of what was to become the United States. At the Topper Site in what is now Allendale County, South Carolina, artifacts have been found that show early humans were coming to ancient chert quarries, making rudimentary knives and other tools. This South Carolina Educational TV documentary covers the careful study and analysis of artifacts, led by Dr. Albert C. Goodyear, leading to evidence of early humans that dates back 15,000-20,000 years ago.

This and other programs are available on TAC for your use and enjoyment. We urge you to support this public service by participating in our Membership (<http://www.archaeologychannel.org/member.html>) and Underwriting (<http://www.archaeologychannel.org/sponsor.html>) programs. Only with your help can we continue and enhance this nonprofit public-education and visitor-supported service. We also welcome new content partners as we reach out to the world community.

Please forward this message to others who may be interested.

\*\*\*\*\*

Richard M. Pettigrew, Ph.D., RPA  
President and Executive Director  
Archaeological Legacy Institute  
<http://www.archaeologychannel.org>

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## NEW POMPEII VIDEO ON TAC

Friends and colleagues: Archaeological excavation at Pompeii has revealed dramatic evidence of ancient Roman life, but in the process has created a monumental conservation problem. A new effort to address this problem is featured in *Guardians of a Legacy*, the latest video offering on our public education Web site, *The Archaeology Channel* (<http://www.archaeologychannel.org>).

Ancient Pompeii, a 150 acre walled city in southern Italy, was destroyed and covered by volcanic material when nearby Mt. Vesuvius erupted in AD 79. A complete city block, once inhabited by patricians, slaves and merchants, is now the focus of research and conservation by the Archaeological Sciences Department of the University of Bradford. *Guardians of a Legacy* describes how the recently created Pompeii Trust is attempting to preserve this important piece of history for future generations.

This and other programs are available on TAC for your use and enjoyment. We urge you to support this public service by participating in our Membership (<http://www.archaeologychannel.org/member.html>) and Underwriting (<http://www.archaeologychannel.org/sponsor.shtml>) programs. Only with your help can we continue and enhance this nonprofit public-education and visitor-supported service. We also welcome new content partners as we reach out to the world community.

\*\*\*\*\*

Richard M. Pettigrew, Ph.D., RPA  
President and Executive Director  
Archaeological Legacy Institute  
<http://www.archaeologychannel.org>

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## DISPILIO EXCAVATIONS SITE

Dear all,

The site about the excavations in the Neolithic Dispilio (the lakeside settlement in Kastoria, Greece) is now available at:

URL: [www.auth.gr/dispilio](http://www.auth.gr/dispilio)

E-mail: [dispilioexcavations@hist.auth.gr](mailto:dispilioexcavations@hist.auth.gr)



## **ΝΕΕΣ ΕΚΔΟΣΕΙΣ – NEW PUBLICATIONS**

### **NEW PUBLICATION - AEGEAN SEALS**

The University of London Institute of Classical Studies is pleased to announce the forthcoming publication of:

AEGEAN SEALS: AN INTRODUCTION (BICS Supplement 85)

by Olga Krzyszkowska

xxx + 429 pp hardback

maps, figures, numerous black & white and colour plates

publication date: January 2005

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## ΕΙΔΗΣΕΙΣ - NEWS RELEASE

### MYCENAEAN TOMB NEAR SPARTA

An unlooted family grave, dating back over 3,000 years, has been discovered in the southern Peloponnese, the Culture Ministry said yesterday (Monday).

The Mycenaean chamber tomb, an artificial cave dug into the soft rock, was found during terracing work on a knoll near the village of Peristeri, some 47 kilometers southeast of Sparta. It contained the skeletons of nine adults and a child, and was furnished with grave goods made of clay, bronze and semiprecious stones - including a steatite seal-stone, a bronze razor and a pair of tweezers used by Mycenaean women to pluck their eyebrows. The child's bones were ringed with upturned vases.

The finds, tentatively dated to between 1340 and 1050 BC, were extracted during a feverish dig carried out around the clock for security reasons, in which state archaeologists and laborers were helped by local residents.

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