

ASMOSIA NEWSLETTER

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ASMOSIA VII - A THASIAN SUCCESS

It was in the fall of 2003 when the ASMOSIA membership convened at the newly remodeled "Kalogeriko" conference center on the beautiful island of Thassos. The four-days of paper presentations from archaeologists, art historians, geologists, archaeometrists and others provided a stimulating and rewarding experience for all who attended. The following two days gave the attendees the opportunity to participate in a tour of the beautiful island and visit some of antiquities alluring and important quarries at Alikí and Cape Fanari, Vathy,

and Saliara. Despite the beautiful setting and the wonderful accommodations, the success of the seventh international conference can be measured by the degree to which the participants enthusiastically shared their research, discussed and debated data, and developed new friendships and collaborations. It is this open-dialogue between colleagues from a wide-variety of backgrounds and disciplines that makes ASMOSIA the unique and important organization that it is. The success of this conference could not have been achieved with-



Yiannis "Hercules" Maniatis celebrating a successful completion of the ASMOSIA VII conference

out the Herculean efforts of the organizing committee, led by Dr. Yannis Maniatis. The committee should be proud of their accomplishment, for we are all very thankful.

EDITOR'S COMMENTS

This issue marks my first foray into providing the ASMOSIA membership with pertinent information concerning the organization as well as updates and news from the membership. This issue also marks ASMOSIA's first attempt to distribute the newsletter electronically. In this volume you will find informa-

tion on the 7th ASMOSIA conference, its proceedings and preliminary news on the location and dates of ASMOSIA 8. You will also find listed the papers that were delivered in Thassos as well as citations on recently published relevant manuscripts.

The strength of ASMOSIA is its success of

bringing together scholars and researchers from diverse academic traditions to pursue common goals in understanding our past. As such, the newsletter should be more than a simple clearinghouse of information. To encourage further dialogue among our membership, you will find within

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THASOS BY THE NUMBERS

- 132: The number of participants
- 0: The number of days it rained
- 104: The number of years until Athens host the next Olympics
- 15: The estimated number of months until the next ASMOSIA meeting.

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PRESIDENT'S REPORT

This is the first time our Society's Newsletter is transmitted electronically via e-mail and can also be downloaded from ASMOSIA's official web site www.eeescience.utoledo.edu/ASMOSIA/. I hope you will find this new arrangement more convenient and enjoyable.

After the 7th ASMOSIA Conference held on Thassos island in Greece (10-15 September 2003), where more than 120 participants attended presenting about 100 papers, our Society grew its membership to more than 200 members from all over the world. Since the very first meeting held in 1988 at Il Ciocco, Lucca, Italy, we have managed to successfully organize seven ASMOSIA Conferences, with a progressive increase in participation. This is really a remarkable record and shows clearly that ASMOSIA covers a very interesting interdisciplinary area where the Natural and Human Sciences meet for a deeper understanding of the relation between man and

stone from the prehistoric period to fairly recent times. The themes we tackle at each conference range from scientific techniques and methodology development for the characterization and provenance of different types of stone to archaeological and art-historical interpretation of ancient objects and monuments.

At future ASMOSIA meetings, we will continue to address these themes as well as more methodological problems, such as the compatibility and amalgamation of databases and use of combined databases. We will also target standardization of techniques and approaches as well as other related issues. In addition, the future conferences are expected to fill more gaps in the reconstruction of the movement and trade network of stone, and especially marble, in the ancient world.

Concerning the ASMOSIA VII Proceedings, 65 papers were submitted. To

date, most have been reviewed and several have already been returned to authors for corrections. The Proceedings will be published in a special issue of BCH, the official Bulletin of the French School at Athens, who will kindly undertake the expenses for the publication and circulation of the volume. Updates on the progress of the Proceedings will be posted on the VII ASMOSIA Conference website at

www.ims.demokritos.gr/arc/hae/Asmosia2003.html.

As far as the next venue is concerned, we had proposals for 2006 from Rome, Aix-en-Provence and Ohio. The Executive Committee, after considering the technical and financial aspects of each proposal, voted for Aix-en-Provence. Dr. Philippe Jockey, responsible for the organization, is expected to provide the exact days and details for ASMOSIA VIII very soon.

Yannis Maniatis



Statue of the ram-carrier, late 7th cent. BC, Thassos Museum

"FUTURE CONFERENCES ARE EXPECTED TO FILL MORE GAPS IN THE RECONSTRUCTION OF THE MOVEMENT AND TRADE NETWORK OF STONE, AND ESPECIALLY MARBLE, IN THE ANCIENT WORLD."

EDITOR'S COMMENTS (CONTINUED FROM COVER PAGE)

these pages what I hope to be the first of many research summaries written by ASMOSIA members. The first such summary is on research of the solificied sandstone quarries near Aswan Egypt by Per Storemyr. I also wish to solicit commentaries on topics important to the mission and goals of ASMOSIA. I hope that these commentaries

will be provocative in nature and will allow our members to address specific issues related to our field. As such, James Harrell has authored a synopsis of the current status of the now world-famous James Ossuary.

To keep the membership informed, I ask that you please forward to me any and all information concerning

recent accomplishments, publications and upcoming meetings and conferences that the membership may find interesting. I also welcome any comments and suggestions on how we can further improve the ASMOSIA newsletter. My contact information can be found on page 11.

Scott Pike



Lion from the garden of the Thassos Museum

COMMENTARY: THE JAMES OSSUARY CONTROVERSY

The so-called James ossuary is a limestone 'bone box' that purportedly dates to the first century AD. Incised into one of its sides is an Aramaic inscription that translates as "James, son of Joseph, brother of Jesus" (see photos below). The ossuary is in a private antiquities collection owned by Oded Golan, an Israeli businessman. Golan claims to have legally purchased it from a Palestinian antiquities dealer in Jerusalem, who obtained it from an unknown source (i.e., probably from a thief who stole it from a tomb). The James ossuary is, thus, an unprovenanced artifact with an uncertain history.

All scholars agree that the ossuary itself is authentic, and may well date to the first century AD and come from a tomb in the Jerusalem area. It is only the inscription that is questioned. Some believe it is contemporaneous with the ossuary (and so may refer to the Biblical James, Joseph and Jesus) whereas others view it as either entirely or partially a modern forgery. The analyses of this artifact conducted to date have focused on three aspects of the inscription: (1) its epigraphy and paleography [i.e., the choice of words and their spelling, and the shapes of the letters]; (2) the physical appearance of the incised letters and their stratigraphic and cross-cutting rela-

tionships with the surface deposits on the ossuary; and (3) the physical characteristics [hardness and texture] and chemical composition [elemental abundances, and oxygen and carbon isotopic ratios] of the surface deposits both within and around the inscription.

The authenticity of the inscription has not been seriously challenged on epigraphic or paleographic grounds, and so the real debate has been over what the 'scientific' evidence has to say about the inscription's authenticity. Unfortunately, the evidence is incomplete and so is difficult to interpret. The principal disagreement over the interpretation has been between myself (I think the inscription's authenticity is still an open question), and Yuval Goren and Avner Ayalon, representing the Israel Antiquities Authority (IAA, which thinks the entire inscription is a modern forgery). The Israeli government, at the IAA's urging, has now indicted Golan, the ossuary's owner, for forging the last part of the inscription (which says "brother of Jesus") as well as several other biblical artifacts. It is the charge regarding the James ossuary, however, that is the lead indictment against Golan.

I first became involved in the debate over the ossuary when Hershel Shanks, the edi-

tor of Biblical Archaeology Review (BAR), asked me to critique the IAA's arguments against the inscription's authenticity in an article for BAR magazine. In both this article and a subsequent one posted on the Biblical Archaeology Society's web site, I have taken no position on whether the inscription is authentically ancient or a modern forgery. I personally do not care because I have no religious or other stake in the outcome of this debate. I got involved only because I thought it was an intellectually interesting problem that deserved the best possible scientific input. The thrust of my two articles has been to criticize the work of Goren and Ayalon, who I have charged (and documented) with doing sloppy work that cannot be relied upon to condemn what is potentially an important biblical artifact. In casting doubt on their (and the IAA's) conclusions, I have angered Uzi Dahari, the IAA's Deputy Director, who has branded me a "charlatan" in a recent Washington Post article. The IAA is upset with me, I believe, because they fear my criticisms of Goren and Ayalon's work will weaken the government's case against Golan.

James Harrell

Relevant Literature on the 'Scientific Analysis' of the James Ossuary

1. Favoring the inscription's authenticity (i.e., claiming that it is ancient)

Letter to Hershel Shanks, editor of BAR magazine, from Amnon Rosenfeld and Shimon Ilani of the Geological Survey of Israel. Published on p. 29 of the November/December 2002 issue (vol. 28, no. 6) of Biblical Archaeology Review.

Edward Keall, 2003, "New tests bolster case for authenticity:" Biblical Archaeology Review, vol. 29, no. 4, pp. 52-55, 70.

2. Opposed to the inscription's authenticity (i.e., arguing that it is a modern forgery)

"Final Report of the Examining Committees for the Yehoash Inscription and James Ossuary" by Uzi Dahari, Deputy Director of the Israel Antiquities Authority and Committees Coordinator, submitted 20 June 2003 to Shuka Dorfman, Director General of the Israel Antiquities Authority, which includes a summary of the findings of the Materials Committee (Jacques Neguer, Orna Cohen, Yoav Goren, Avner Ayalon and Elisabetta Boaretto). Published in Biblical Archaeology Review (2003, vol. 29, no. 5, pp. 26-31)

Letter regarding "Examination of Authenticity: James Brother of Jesus Ossuary and Yehoash King of Yehuda Inscription"

(Continued on bottom of page 4)

LETTER TO THE EDITOR

James A. HarJames Harrell, AS-MOSIA's secretary, treasurer and web site manager, has been the subject of public attacks by a representative of the Israel Archaeological Authority (IAA). For two consecutive years Jim has spoken on methods of detecting stone forgeries at a panel organized by Hershel Shanks, editor of the Biblical Archaeological Review (BAR) in connection with the annual meetings of the American Schools of Oriental Research (ASOR), the Society of Biblical Literature (SBL), and the American Academy of Religions (AAR). Jim critiqued what is known about the tests recently conducted by the IAA on two sensational stone objects in private collections in Israel. He has also written on the subject in the BAR. Jim was attacked at the most recent conference; I quote the report of Hershel Shanks in the BAR for March/April 2005 (p. 46):

*Dr. Uzi Dahari, deputy director of the Israel Antiquities Authority and chairman of the IAA committee that had pronounced the now-famous James ossuary inscription ("James, son of Joseph, brother of Jesus") and the Jehoash inscription to be forgeries" *...also had harsh words for Professor*

*James Harrell of the University of Toledo and secretary/treasurer of ASMOSIA (the Association for the Study of Marble and Other Stones in Antiquity), the geologist who has written critically of the two IAA scientists on whose analysis the IAA committee based its judgment. ** Dr Dahari said that in Professor Harrell, BAR found the 'one geologist in all the United States to support' its position that the IAA had not proven that the two inscriptions were forgeries. Dr. Dahari charged that through Professor Harrell, BAR has 'completely disregard[ed] the solid proofs' of the IAA committee that found the ossuary and the Jehoash inscriptions to be forgeries.*

I was privileged to hear Jim's oral presentations at the two conferences and was impressed by his clear, objective discussion of techniques of testing and interpretation of test results. Richard Newman, Research Scientist at the Museum of Fine Arts, Boston and a frequent contributor to ASMOSIA conference papers, also spoke at the first of the BAR panels, and while less outspoken than Jim, he too was able to point to unresolved problems for the IAA's conclusions. Jim's article in the BAR reviews the treatment of isotopic test-

ing and argues neither for the authenticity or the falsity of the inscribed ossuary - only pointing out the inadequacy of currently available evidence. The calls by Jim and Richard for a deeper, more transparent, and more objective testing process for the famous objects in Israel certainly should be heeded.

*See "The Storm over the Bone Box," BAR, September/October 2003

** See James A. Harrell, "Final Blow to IAA Report: Flawed Geochemistry Used to Condemn James Inscription," BAR January/February 2004. Further comments by Harrell can be found in the "Finds or Fakes?" section of the (the BAR) Web site (www.bib-arch.org).

John Herrmann, Jr.
Boston, Massachusetts

Letters to the editor should be sent to spike@willamette.edu.

(Continued from bottom of page 3)

from Yuval Goren submitted 2 June 2003 to Shuka Dorfman and Uzi Dahari, Director General and Deputy Director, respectively, of the Israel Antiquities Authority.

Letter regarding "Examination of Authenticity of the James Brother of Jesus Ossuary and Yehoash Inscription" from Avner Ayalon submitted 9 June 2003 to Uzi Dahari, Deputy Director of the Israel Antiquities Authority.

Neal Asher Silberman and Yuval Goren, 2003, "Faking biblical history:" Archaeology, vol. 56, no. 5, pp. 20-29.

Avner Ayalon, Miryam Bar-Matthews and Yuval Goren, 2004, "Authenticity examination of the inscription on the ossuary attributed to James, brother of Jesus:" Journal of Archaeological Science, vol. 31, pp. 1185-1189.

3. Noncommittal regarding the inscription's authenticity, but opposing Ayalon, Goren and others who say it is a modern forgery

James Harrell, 2004, "Flawed geochemistry used to condemn James inscription:" Biblical Archaeology Review, vol. 30, no. 1, pp. 38-41.

James Harrell, 2004, "Discussion of 'Authenticity examination of the inscription on the ossuary attributed to James, brother of Jesus' by A. Ayalon, M. Bar-Matthews and Y. Goren (Journal of Archaeological Sciences, 2004, vol. 31, pp. 1185-1189) on the web site for the Biblical Archaeology Society (<http://www.bib-arch.org>) in its "Finds or Fakes?" section (see "Harrell critiques reports on the James Ossuary").

ASMOSIA VIII - AIX DE PROVANCE

ASMOSIA is pleased to announce that it will be returning to France for its 8th international conference at Aix en Provence. Professor Philippe Jockey of the Maison Méditerranéenne des Sciences de l'Homme has agreed to un-

dertake the leadership of the organizing committee. The dates for the conference have yet to be confirmed, but it will likely be held in mid-June 2006. A first call for abstracts is expected shortly. Once the dates have been final-

ized, you will be notified promptly. If you wish to contact Professor Jockey he can be reached by e-mail at pjockey@mms.h.univ-aix.fr or telephone at [33] 4-4252-4265.



Fontaine de la Rotonde, Aix en Provence

Photo from
www.guideweb.com

RECENT PUBLICATIONS

T. J. Anderson, C. Agustoni, A. Duvauchelle, V. Serneels and D. Castella, 2003, *Des arisans à la campagne. Carrière de meules, forge et voie gallo-romains à Châbles (FR): Archéologie fribourgeoise 19* (Academic Press Fribourg, Fribourg). For information send in inquiry to venetzc@fr.ch

F. Antonelli & L. Lazzarini, 2004. *Les marbres de couleur des monuments d'Arausio (Orange, Provence)*. In *Les roches décoratives dans l'architecture antique et du Haut Moyen Age*, (P.Chardron-Picault, J.Lorenz, P.Rat, G.Sauron, ed.), Paris, pp.9-23.

I. Bassiakos, E. Aloupi and Y. Facorellis, 2002, *Archaeometry Issues in Greek Prehistory and Antiquity* (Hellenic Society of Archaeometry, Athens).

M. Cosmopoulos (ed.), 2004, *The Parthenon and its Sculptures* (Cambridge University Press, Cambridge).

E. G. Garrison, 2003, *Techniques in Archaeological Geology* (Springer Verlag, NY).

J. B. Grossman, 2004, *Looking at Greek and Roman Sculpture in Stone: A Guide to Terms, Styles, and Techniques* (J. Paul Getty Museum, Los Angeles). To order, in the US contact Getty Publications at 800-223-3431. Distributed in the U.S. by Oxford University Press, in the U.K. and Europe by Windsor Books International, and in Canada by Canadian Manda.

L. Lazzarini (ed.), 2004, *Pietre e Marmi Antichi* (CEDAM, Padova). Written in Italian, with contributions by F. Antonelli, S. Cancelliere, L. Lazzarini, M. Luni, M. Mariottini, and C. Sangati. This 200-page book covers the composition, classification, origin, distribution, and history of collection of the most important stones and marbles used in antiquity. Fully illustrated with color photographs, this book has been especially designed for students of archaeology and architecture.

L. Lazzarini, 2004. *Archaeometric aspects of white and coloured marbles used in antiquity, the state of the art*. In *A showcase of the Italian research in Applied Petrology*, (G.M Bargossi, M. Franzini e B. Messiga ed.), Special Issue 3 del "Periodico di Mineralogia", Vol.73 (2004), pp.113-125.

L. Lazzarini, 2004, *Philosophiana* (Piazza Armerina, EN), i marmi policromi della villa e del grande opus sectile della "Basilica". In *Apparati musivi antichi nell'area del Mediterraneo*, Atti del I° Convegno Int. Di Studi, "I Quaderni di Palazzo Montalbano", 4, Palermo, pp. 384-388.

L. Lazzarini & R. Strassoldo, 2004. *I marmi colorati*. In *Palazzo Ducale. Storia e Restauri*, a cura di G.Romanelli, Verona, pp.247-262.

L. Lazzarini & B. Turi, two papers on the provenancing of Archaic statuary and architectural elements of Cyrene (Lybia), in *Rendiconti Accademia dei Lincei: Rend.Mor.Acc.Lincei*, s.9, v.14, fasc.3 (2003), 450-59.; and *Rend. Fis. Acc.Lincei*, s.9, v.15 (2004), 189-204.

RESEARCH SUMMARY: SILICIFIED SANDSTONE QUARRIES BY ASWAN, EGYPT

A team of British, Norwegian and Egyptian archaeologists and geologists are currently investigating the well-known silicified sandstone (often termed quartzite) quarries on the West Bank of the Nile by Aswan. The first fieldwork was carried out in 2004; the next season is coming up in March 2005. Covering an area of about 12 km², the quarries were a major source of silicified sandstone in antiquity, exploited at several stages in the Pharaonic Period, and later during the Ptolemaic, Roman and Coptic Periods.

Previously, focus has been on how the quarries were used for obtaining raw material for elite status objects, such as obelisks and statues, including colossi. However, our studies have concluded that the predominant activity, considering quarried volumes, was rather related to production of utilitarian objects, such as grinding stones. Other major results so far include the documentation of the extremely well preserved, most ad-

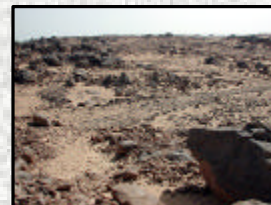
vanced system of quarry roads remaining from the Pharaonic period. The system was used for transport of stone to the Nile, mainly during the New Kingdom. It was partially reorganised in the Roman period, but then used at a much lesser extent. Significant evidence of the use of firesetting for primary stone extraction has also been found. Together with recent discoveries in Chephren's Quarry (Western Desert) and the Aswan granite quarries this indicates that firesetting was a more widespread extraction technique in the Pharaonic period than previously known. The quarries contain numerous occurrences of inscriptions and rock art dating from the Predynastic period onwards, many of which are directly related to the quarrying. Small clusters of temporary shelters and minimal ceramic data imply that the labour force was relatively small and not permanently resident in the quarries.

As a whole, the West Bank quarries are well pre-

served. However, like numerous quarries and other archaeological sites in Egypt and the Mediterranean, they are now threatened by advancing infrastructure, including house building and modern quarrying. The project is also addressing protection and conservation issues related to these threats. Undertaken with permission from the Supreme Council of Antiquities, the project is supported by the Geological Survey of Norway and the Leverhulme Trust.

Per Storemyr
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A report of this research can be found in the forthcoming article: T. Heldal, E. Bloxam, P. Storemyr and A. Kelany. The geology and archaeology of the ancient silicified sandstone quarries at Gebel Gulab and Gebel Tinger, Aswan, Egypt, in *Marmora – International Journal of Archaeology, History and Archaeometry of Marbles and Stones* (2005)



Part of the quarry landscape on the West Bank of the Nile by Aswan with extraction areas and ancient paved roads. (Photo: Per Storemyr)

“LIKE NUMEROUS
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BRUNO TURI - REMEMBERED

Professor Bruno Turi, a member of the ASMOSIA Executive Committee since Venice 2000, died in December 2003. He was already ill in spring of that year, and unable to attend the Thasos meeting. Bruno Turi was a distinguished scholar, a prominent member of the Italian community of geochemists, and internationally

well-known for the isotopic laboratory he created at the University “La Sapienza” in Rome and for his studies on the stable isotopes of minerals, rocks and waters.

In the past fifteen years, he became very interested in the archaeometry of ancient stones and marbles, a discipline to which he contributed widely (with more than 35

papers), and with remarkable results. Among other contributions, he co-authored the most complete and updated reference database on crystalline marbles.

We all miss the colleague, many of us also a dear friend

Lorenzo Lazzarini



Bruno Turi and Lorenzo Lazzarini in a happy moment during the Boston meeting of ASMOSIA

ASMOSIA VII PAPERS LISTED IN THE PROGRAM

Oral Presentations

- Thasian marble: A connection between Thassos and Thessaloniki
Th. Stefanidou-Tiveriou
- Tivoli Centaurs and the Thassian legacy
G.A. Hess
- Thassian Julius Ceaser
E.J. Waters
- Macedonian workmanship in a Thassian marble Hadrian in providence?
G.E. Borromeo, J.J. Herrmann, Jr. and N. Herz
- White marbles in the triclinium of the casa del Bacciale d'Oro (VI, 17, INS.OCC., 42
J. Clayton Fant, S. Cancelliere, L. Lazzarini, M.P. Martinez, and B. Turi
- Capitals with fine-toothed acanthus and the quarries of Dokimeion
J.J. Herrmann, Jr. and R. Tykot
- A new head of Augustus from Herculaneum: a marble survivor of Vesuvius' pyroclastic surge
J. Pollini
- Harvard's marble boy: a case study in restoration
Jones
- The Naxian Colossus at Delos: "Same Stone"
P.A. Butz
- Investigations on marbles and stones used in Augustean monuments of western alpine provinces
Betori, M. Gomez Serito and P. Pensabene
- Flavian amphitheatre: the cava and the portico. Comments about the quality, quantity and the working of its marbles
F. Bianchi, M. Bruno and A. Coletta
- New investigations on the pedimental sculptures of the "Hieron" of Samothrace: a preliminary report
O. Palagia, Y. Maniatis, E. Dotsika and D. Kavoussanaki
- Provenance investigations of some marble sarcophagi from Arles with stable isotope and maximum grain size analysis
V. Gaggadis-Robin, C. Sintes, D. Kavoussanaki, E. Dotsika and Y. Maniatis
- The marble world of Hagia Sophia
J. Trilling
- Faustino Corsi and the coloured marbles of Derbyshire
L. Cook and I Thomas
- A granodiorite quarry of Ptolemaic-roman age in Wadi Abu Bokari, Eastern desert, Egypt
J.A. Harrell

- Characterization of calcarenite quarries in East Crete: sourcing ashlar blocks at Gournia
S. Pike and J. Soles
- New findings in the extraction of red granite during the New Kingdom and Roman period at the unfinished obelisk quarry, Aswan
Kelany
- Hard stone quarrying in the Egyptian Old Kingdom (3rd Millenium BC): rethinking the social organization
E. Bloxam, P. Storemyr and T. Heldal
- The ancient Egyptian quarry at Dibabiya
T. Endo and S. Nishimoto
- Pharaonic limestone quarries in Wadi Nakhla/Egypt
D. Klemm and R. Klemm
- Ancient and modern quarries in Delos
P. Hadjidakis, D. Matarangas and M. Varti-Matarangas
- The Ephesian marble quarries. Topography, analysis, conclusions
K. Koller, P. de Paepe and L. Moens
- Geological constraints on the development of prehistoric quarries
P. LaPorta
- GPS and GIS methodology in the mapping of Chephren's, upper Egypt: a significant tool for the documentation of interpretation of the site
T. Heldal, P. Storemyr, A. Salem, E. Bloxam, I Shaw and R. Lee
- Ancient stone quarries: vulnerable archaeological site threatened by modern development
P. Storemyr and T. Heldal
- Some rectangular sarcophagi from Roman period in Thassos, from the quarry to the purpose place
M. Wurch-Kozelj and T. Kozelj
- A reinterpretation of the block concerning the wine law in Thassos
T. Kozelj and M. Wurch-Kozelj
- Considerations about ancient sculptural techniques
M. Bruno
- Corpus of ancient greek quarries
G. Kokkorou-Alveras, A. Chatniconstantinou and A. Efstathopoulos
- Polychrome Hellenistic sculpture in Delos. Research on surface treatments of ancient marble sculpture. Part II
Bourgeois and P. Jockey
- The role of X-ray fluorescence analysis towards the charactisation of pigments and techniques applied on Hellenistic marble sculpture and paintings
H. Breculaki, A. Karydas, P. Jockey and B. Bourgeois
- Calcitic marble from Thassos in Macedonia and in Nea Anchialos, Magnesia, central Greece
Mentzos, V. Barbin and J.J. Herrmann, Jr.

- The Torre Sgarrata wreck: characterisation and provenance of white marble artefacts in the cargo
Calia, M.T. Giannotta, L. Lazzarini and G. Quarta
- The use of calcitic and dolomitic Thasian marble at Cyrene
Attanasio, S. Kane, R. Platania and P. Rocchi
- Marmor Thessalicum (verde antico): source, distribution and characterization
L. Lazzarini and S. Cancelliere
- Marble objects from Asia Minor in the Berlin Collection of Classical Antiquities: characteristics and provenance
T. Cramer, K. German, W.-D. Heilmeyer and V. Kaestner
- On the provenance of white marbles used in the baths of Caracalla in Rome
M. Bruno, C. Gorgoni and P. Pallante
- Marble from Pentelikon, Paros, Thassos and Proconnesus in ancient Israel: an attempt at chronological distinctions
M. Fischer
- Dolomitic marble from Thassos in the Montemartini Museum, Rome
Van den Hoek, J.J. Herrmann, Jr., R. Newman and E. Talano
- The Torre Sgarrata wreck (South Italy): marble artefacts in the cargo
F. Gabellone, M.T. Giannotta, A. Monte and A. Alessio
- Stable isotope analysis of three mythological sarcophagi at the RISD Museum
F. Van Keuren and L.P. Gromet
- The “Keros Hoard”: provenance of marbles and their possible sources with a combination of scientific techniques
Y. Maniatis, P. Sotirakopoulou, K. Polikreti, E. Dotsika and E. Tzavidopoulos
- Provenance investigations of Neolithic marble vases from Limeraria, Thassos: Imported marble to Thassos?
Y. Maniatis, S. Papadopoulos, E. Dotsika, D. Kavoussanaki and E. Tzavidopoulos
- Provenance study of Roman marble artefacts of an excavation near Oberdrauburg (Carinthia, Austria)
M. Unterwurzacher, H. Stadler, C. Franzen and P. Mirwald
- Early Neolithic obsidian trade in Northern Italy: New results from Isola del Giglio
R.H. Tykot, M. Bradaglia, M.D. Glascock and R.J. Speakman
- Characterisation of obsidian samples from Monte Arci (Sardinia, Italy): implications for provenance studies
S. Meloni, C. Luglie, M. Oddone and L. Giordani
- On stones used as tesserae of Roman mosaics (Lombardy, Italy)
R. Bugini and L. Folli
- The natural building stones of Hellenistic to Byzantine Sagalassos: provenance determination through petrographic analysis and stable isotope geochemistry
P. Degryse, P. Muchez, E. Trogh and M. Waelkens

- Provenance of soapstone used in medieval buildings in the Bergen region, West Norway
Ø.J. Jansen, T. Heldal, R.B. Pedersen and S.H.H. Kaland
- Characterisation of the timeless white marble of Thassos
K. Laskaridis and V. Perdikatsis
- Correlation of mineralogy and physical properties from stones used for the restoration of ancient monuments in the Epidavros archaeological site
Tsikouras, I.-O. Georgopoulos, K. Hatzipanagiotou and N. Ninis
- Study of the behaviour of Serpentine stones used for the construction of ancient Dioklitianoupoli in Northern Greece
Papayianni and M. Stefanidou
- Conservation and restoration of marble sculptures in ancient Greece: the case of archaic sculpture Leka
- Mechanical properties of Dionysos marble tested in Triaxial compression
I.-O. Georgopoulos, I. Vardoulakis and J. Labuz
- Where have all the columns gone? The re-use and loss of antiquities in the Eastern Mediterranean
M. Greenhalgh
- Provenance studies of Lapis Lazuli nondestructive prompt gamma activation analysis (PGAA)
Zöldföldi and Zs. Kasztovszky
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M. Mariottini, E. Curti and E. Moscetti

HAPPENINGS

In August 2004, Florence hosted the 32nd International Geological Congress. More than 4,000 participants attended the conference and experienced the beauty of Florence. One of the hundred of sessions was dedicated to "Building and Decorative Stones." This session aimed to give an overview of the ongoing research on the quarrying, use, characterization and archaeometry of stones used in ancient and modern architecture. The session was convened by the present writer, included 4 oral selected papers and 33 posters and was attended by more than 50 persons, many of whom participated in the final discussion.

Lorenzo Lazzarini

NEWSLETTER DEADLINES

The strength of ASMOSIA rests on the communication between its membership. To ensure the regular dissemination of information, the following deadlines have been set for future newsletter items.

For the Fall Newsletter all items must be received by September 15

For the Spring Newsletter all items must be received by February 15

Please forward any information that may be of interest to the ASMOSIA membership to the newsletter editor at

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ASMOSIA VIII
EARLY SUMMER 2006

ASMOSIA is the acronym for the Association for the Study of Marble and Other Stones In Antiquity. It was founded in 1988 to promote the exchange of knowledge among its members in all fields related to the study of marble and other stones of art historical or archaeological interest. This exchange is accomplished through periodic Newsletters to members, biannual meetings of the membership, and publication of the meeting proceedings.

MEMBERSHIP

Membership in ASMOSIA is open to anyone interested in marble or other stones in antiquity. Members receive the ASMOSIA Newsletter as well as announcements for the next ASMOSIA Conference (held approximately every two and a half years). All that is necessary for membership is to pay the annual \$12 US or 10 Euro dues. People in Europe may pay in Euros but should send their payment to:

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All communications regarding membership should be directed to the ASMOSIA Secretary/Treasurer, James A. Harrell, E-mail: james.harrell@utoledo.edu, Telephone: [1] 419-530-2193, Fax: [1] 419-530-4421.