



SAS Bulletin

Society for Archaeological Sciences

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Summer 2002



From the President

The Society for Archaeological Sciences is approaching its 25th anniversary. During the past quarter-century, there has been continued growth of interdisciplinary and international research and communication. We

hope to see these trends continuing to strengthen and expand in the next 25 years.

The SAS owes its existence to the efforts of its founder, Dr. R. E. (Erv) Taylor, who has also served as the SAS General Secretary these 25 years. On behalf of the SAS, I would like to take this opportunity to offer our sincere thanks to Erv for the founding of the SAS as well as all of his efforts and guidance as General Secretary over the years.

To honor Erv, the SAS Board unanimously voted to name the SAS Student Poster Award after the Society's founder. At the 33rd International Symposium on Archaeometry, held April 22-26, 2002, hosted at the Vrije Universiteit, Amsterdam, The Netherlands, the first of the **R. E. Taylor Student Poster Awards** were made (see related article this issue).

As noted in an earlier *SASnet* message to the membership, in March of 2002, the role of the SAS General Secretary was transferred from Erv Taylor to Robert Sternberg, a past President and *Bulletin* Editor for the SAS and subsequently, the Office of the General Secretary and its functions have been moved to Franklin & Marshall College. We extend our thanks to Rob Sternberg for taking on this vital role for the SAS. Please note that the new address now in effect for correspondence regarding membership and subscriptions is as follows:

Society for Archaeological Sciences
Office of the General Secretary
Department of Geosciences
Franklin & Marshall College
Lancaster, PA 17604-3003

The membership of SAS has been very active in national and international meetings over the past year. SAS officers and members gathered for an informal roundtable discussion

in conjunction with the Annual Meeting for the *Society for American Archaeology* in Denver, Colorado, on March 21, 2002. The following month, the SAS annual business meeting was held at the *33rd International Symposium on Archaeometry*, April 25, 2002, which was hosted at the Vrije Univesiteit, Amsterdam, The Netherlands (<http://www.uiuc.edu/unit/ATAM/conf/home.html>).

At these meetings, the attending board and members had the opportunity to discuss some of the compelling issues that face the future of archaeometry. Foremost among these was the need for further institutional and professional recognition of archaeometry within archaeology and related scientific disciplines. It was noted that many archaeometry laboratories have only "boot-strap" funding, relying on the individual researcher's talent to secure grants and contracts. These operations often lack adequate or even minimal institutional investment in equipment and its maintenance, as well as operational expenses and personnel support. The value of archaeometric research should be recognized by institutional matching support for the laboratory operations, including personnel, equipment, and facilities. This support is vital to the continuity of research and service in such laboratories.

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JOBS, POST-DOCS & STUDENT POSITIONS**University of Nottingham**

Lecturer in Archaeological Science. Applications are invited for a permanent post in the Department of Archaeology. Candidates should have a strong research and publication record in either archaeological materials or environmental archaeology. In addition it would be helpful if candidates could expand the Department's current undergraduate teaching expertise by offering a specific archaeological period or area, such as in the ancient Near east or ancient Egypt. The successful candidate should be able to contribute also to the teaching of Masters students, and be capable of supervising doctoral students. Initial salary will be within the range £20,470 - £32,537 per annum (Lecturer scale), depending on qualifications and experience. The post may be open to a job share. Interviews are likely to occur in mid-October 2002.

Informal enquiries may be addressed to Professor Julian Henderson: tel 0115 9514840; fax 0115 9514812; email: julian.henderson@nottingham.ac.uk. Further details and application forms are available at <http://www.nottingham.ac.uk/personnel/vacancies/academic.html> or from the Personnel Office, Highfield House, The University of Nottingham, University Park, Nottingham, NG7 2RD; tel 0115 9513262; fax 0115 951 5205; email: Personnel.Applications@Nottingham.ac.uk. Closing date: 30th September 2002.

The Field Museum, Chicago

The Field Museum seeks candidates for a two-year post-doctoral fellowship emphasizing interdisciplinary research as well as the central role of museum collections. The Boyd Fellowship program was created in honor of former Field Museum president Willard Boyd, who stressed the importance of interdisciplinary work to the intellectual strength of the Museum. The successful candidate will have a successful record of research in an area that bridges any of the Museum's scientific areas, including anthropology, archaeology, botany, systematics, evolutionary biology, conservation biology, paleontology, and zoology. Research must involve development and use of the Museum's collections, which span anthropology, botany, geology, zoology, as well as tissue collections for molecular work. Boyd fellows are expected to participate fully as part of the Field Museum academic community, to undertake high-quality original research, and to present their work to both academic and public audiences. The fellowship runs for two years, carries full Museum benefits, and a modest research budget.

The Field Museum is an equal opportunity employer and actively encourages applicants from diverse backgrounds. Send cover letter, including outline of a project, C.V., and names of references to Chair, Boyd Post-Doctoral Fellow Search Committee, Office of Academic Affairs, The Field Museum, 1400 S. Lake Shore Drive, Chicago, IL 60605. Applications will be accepted until Sept. 30, 2002. Position available starting January 2003 and will remain open until filled.

University College London

A range of possible research topics for MSc dissertations are available in the Institute of Archaeology's MSc in Technology and Analysis of Archaeological Materials programme. These are ideally for the academic year 2002-03, and most of them include the opportunity to participate in fieldwork during the spring or summer of 2003. They are derived from Prof. Thilo Rehren's ongoing research, and should result in a publishable manuscript as well as in a MSc thesis. The topics include: Crucible steel slag from Akhsiket (early Islamic Uzbekistan); Copper-based metallurgy from Akhsiket (early Islamic Uzbekistan); Glass and glazes from Akhsiket (early Islamic Uzbekistan); and Domestic and technical ceramic fabrics from Akhsiket (early Islamic Uzbekistan). All are from a joint project with the Uzbek Academy of Sciences, Institute of Archaeology in Samarkand. Other topics include: Late Inka/early Spanish lead-silver smelting in Bolivia (jointly with the Dept. of Anthropology, Colorado State University); Medieval lead-silver smelting in Britain; 20th century lead-silver smelting in Laurion/Greece; A study of glass and colorants of Byzantine glass tesserae from Israel; LBA technical ceramics from a copper-centred workshop in Qantir/Egypt; and LBA production of Egyptian blue from Qantir/Egypt.

Details of the MSc programme can be found at <http://www.ucl.ac.uk/archaeology/prospect/pgtaught/MScTech.htm>, and general information on the Institute of Archaeology UCL at <http://www.ucl.ac.uk/archaeology/>. Please contact Prof. Rehren at Th.rehren@ucl.ac.uk for further information.

Oxford University

English Heritage intends to fund a scholarship for a student taking the 1 year MSc course in Archaeological Science at Oxford, starting in October 2002. The purpose of the scheme under which the scholarship has been allocated is to support the expansion of professional expertise in archaeological science which is seen as an area of potential constraint. The student awarded the scholarship must therefore have 2 years work experience within archaeology and the thesis topic should be relevant to English archaeology. The value of the scholarship is £10,305 of which about £4500 will be required to pay University and College fees with the balance being available to cover maintenance.

The MSc was designed, in part, for archaeologists who intend to pursue a career in the management of archaeological projects in order that they have a sound understanding of the potential of archaeological science. The three taught components of the course are Scientific Dating, Molecular Bioarchaeology and Materials Analysis in Archaeology and these are followed by a 5 month research project. Further information on the MSc is available on our website at <http://athens.arch.ox.ac.uk/masters>.

Enquiries should be addressed to Robert Hedges at robert.hedges@rlaha.ox.ac.uk or to Michael Tite at michael.tite@rlaha.ox.ac.uk. Application forms can be downloaded via the website.

CONFERENCES

67th Society for American Archaeology (SAA)

Manual R. Palacios-Fest of Terra Nostra Earth Sciences and Jeffrey A. Homburg of Statistical Research, Inc. were the winners of the professional (non-student) poster award at the 67th annual SAA meeting, held in Denver, Colorado, for their poster entitled "Ostracode Paleoecology in the Ballona Lagoon of Coastal Southern California." Homburg and several co-authors were also the winners of the professional poster award at the previous year's meeting in New Orleans, for their poster entitled "Evolving Holocene Landscapes and Cultural Land-Use Patterns in the Ballona Wetlands of Coastal Southern California." The current poster may be seen at: http://www.sricrm.com/homburg_poster.html

Christopher Morehart of Florida State University won the student paper award for "A Paleoethnobotanical Perspective on Ancient Maya Cave Utilization." Winners of the Award for Excellence in Archaeological Analysis and of the Fryxell Award for Interdisciplinary Research were announced in the previous issue of the *SAS Bulletin*.

David Killick (University of Arizona) and Ron Bishop (Smithsonian) hosted a roundtable on the Future of Archaeological Science in the USA. Topics discussed included project and technique development funding, and training and employment of archaeological scientists. Please email Killick for more information (killick@u.arizona.edu).

33th International Symposium on Archaeometry (ISA)

This year's ISA was held in Amsterdam, the Netherlands from April 22-26. About 270 delegates from all over the world attended. The conference opened with a themed session on "The Application of Ground Probing Radar in Archaeology." A. Eder-Hinterleitner and W. Neubauer gave two outstanding presentations on the use of GPR to explore Roman buildings in Austria and Styria, highlighted by unusually clear animations of time-slices. The session on the "Origin of Tin-What is New?" included a paper on a possible Iranian source for the tin used to make Luristan bronzes by M. Momenzadeh. In the session

"Post-depositional Alterations of Ceramics," G. Schneider discussed how to measure chemical alteration in the surface and core of the same potsherd and how to compare the same types of pottery found in two different burial environments. "Human Migration and Mobility as Detected by the Analysis of Biological Materials" included an update on the Austrian Iceman by W. Müller, with isotopic evidence that implies the Iceman spent his childhood in a low altitude environment. In "Pigments and Paints in the Roman Byzantine Period," A. Carmignani reported on the Etruscan use of purple lake (rather than Tyrian purple) in their funerary paintings.

The overall conference theme session was on "Conservation science: In-Situ Preservation of Archaeological Heritage." This session, organized by the H. Kars and the host committee in Amsterdam, was especially interesting to those of us who do not have to cope with land sites that are below sea-level. We learned how to conserve a site for the future by raising the water table around it inside layers of protective material to create an anaerobic environment. Our knowledge of the unique problems faced by Dutch archaeologists was reinforced by a field trip to Lelystad to visit the Laboratories for Maritime and Ship Archaeology. Here we also had the opportunity to climb and crawl all over a replica of a Dutch East Indies ship. The conference poster sessions, held over the lunch hour, included many well-presented examples of provenance studies, field archaeology, metals and ceramic technology, etc., and an unusual but very useful poster on the teaching of archaeometry at the undergraduate level by R. Sternberg. The complete program of the meeting can be viewed as a PDF file at <http://www.geo.vu.nl/archaeometry/details/program.pdf>

The steering committees of both the ISA and the SAS met in Amsterdam and are working closely together to share information and publications between the two organizations. Both the ISA (<http://www.uiuc.edu/unit/ATAM/conf/home.html>) and the SAS (<http://www.socarchsci.org/sas.htm>) websites have conference information, and abstracts from past ISA conferences will be posted or mirrored on the SAS site as they become available. The 32nd ISA held in Mexico two years



SAS board members, from left to right: Rob Sternberg (new general secretary); Jim Burton; Steve Shackley; Arleyn Simon; Robert Tykot; Mike Richards



Rob Sternberg and Arleyn Simon giving out the R.E. Taylor poster awards as ISA chairman Michael Tite looks on.

ago is now published in the form of a CD (contact Luis Barba at barba@servidor.unam.mx for information on how to obtain it). The 34th ISA will be held in China in 2003 and the 35th ISA will meet in Zaragoza, Spain. Links and information for both conferences are posted on the ISA website.



The winners of the SAS (Erv Taylor) student poster awards were Agustin Ortiz (Laboratorio de Prospeccion Arqueologica, IIA, UNAM, Mexico) with coauthors Alessandra Pecci and Sandra Lopez Varela for their poster "Ethnoarchaeology Study of the Residues of a "Living" Household in Mexico" and Anna Mukherjee (Organic Geochemistry Unit, Biogeochemistry Research Centre, School of Chemistry, University of Bristol, UK; e-mail: anna.mukherjee@bristol.ac.uk) with coauthors R.P. Evershed and A.M. Gibson for their poster "The Significance of the Grooved Ware Pottery Tradition in Neolithic Britain in Relation to Human Diet, Animal Husbandry and Ritual Practices." The Aitken Awards went to Baiba Dumpe (University of Latvia) for "New Conclusions Regarding Neolithic All Over Cord-Imprinted Ware" and Diane Schmidt (University of Goettingen) with coauthors Susanne Hummel and Bernd Herrmann for their poster "Does a Molecular Analysis Necessarily Mean Sample Destruction?"

contributed by Sarah Wisseman

art 2002

The conference art2002, the 7th International Conference on Non-destructive Testing and Microanalysis for the Diagnostics and Conservation of the Cultural and Environmental Heritage, was organized by the University of Antwerp, by René Van Grieken (chairman) and Koen Janssens (vice-chairman), and held in Antwerp, Belgium, June 2-6, 2002. Six plenary lectures, 17 invited lectures, 1 round table, 2 poster sessions and 15 oral sessions were proposed with a total of 155 communication (87 oral and 68 posters) and 200 participants from 27 different countries. The conference was held in the Elzenveld Congress center, housed in the restored historical buildings of the mediaeval Saint-Elizabeth hospital, presbytery and cloister. The main themes by session were as follows: study of pigments by Raman, IR, FTIR; conservation of cultural heritage, environmental impact, historical buildings; glass; metals, manufacture techniques, corrosion; non-destructive analysis of inks; X-ray tomography, 3D image, magnetic resonance for stone, buildings, statues; historical buildings, air pollution, conservation and restoration of different materials (wood, tissues, etc.); conservation and restoration of stones, marbles; analysis of resins, organic pigments, varnishes, binding medias, inks etc. for paintings and manuscripts mostly by GC-MS; study of pigments, potteries, quartz objects, tiles, etc.; analysis and authentication of objects through the study of pigments (scientific aspect); analysis by XRF, database for analytical results; analysis and corrosion of glasses; provenance and authentication of metallic objects; and corrosion and analysis of metallic objects, mostly bronzes. In addition to these oral presentations, there were 68 posters in two sessions on all subjects.

This conference covered the application of different techniques to the study of several cultural heritage materials but very few technical developments were presented, among them the latest technical developments of portable XRF (with developments on X-ray tubes and X-ray detectors) and tomography. A large range of techniques was used to study



Alessandra Pecci (above) and Anna Mukherjee (below) with their posters. Winners of the R.E. Taylor student poster award receive an annual SAS membership with journal subscriptions.



René Van Grieken (2nd from right), chairman of art2002, during a break in the poster room.

materials, from the very classic ones such as SEM to the "heavy" ones like SR-XRD or less known such as 3D fluorescence reflectance spectroscopy. Pigments and inks were the most studied materials during this conference and the most considered technique was Raman spectroscopy, used primarily for the study of paintings but also applied to the study of other problems such as bronze corrosion. Raman spectroscopy is clearly becoming a very common technique in the cultural heritage area everywhere in the world.

Some talks considered authentication either by using individual techniques or in combination, for example the authentication of a painting from a Californian mission by petrography, XRD, SEM and ^{14}C AMS dating. There were also a large number of talks on the development of data bases, among them the Pigmentum project by the University College of London that considers the identification of the pigments, of the historical sources, of the composition and also a large number of analytical results by MEB, PLM, XRD, FTIR, and Raman. Computer applications included 3D computer imaging and connected to the internet. Databases with internet access were cited throughout the conference, for example ARKIS for the conservation of historical buildings, ASTEA for different materials, and others like an American one for IR Raman and also the ENEA Italian database.

Several projects presented during this conference concerned a global view of a certain subject, concerned a large number of objects, a large number of techniques, a large number of data and the development of more or less complex databases. Among those projects are the Australian work on conservation and storage of Aboriginal bark paintings by using optical microscopy, FTIR, Raman, SEM, XRF, SR-XRD, etc.

Further information may be found on the conference website: <http://chem-www.uia.ac.be/art2002/>

contributed by Maria Filomena Guerra

6th International Conference on aDNA and Associated Biomolecules

The 6th International Conference of aDNA and Associated Biomolecules was held July 21-25 in Jerusalem, Israel. The conference was a great success due to the quality of the papers

presented and the support shown by our many international visitors. We were particularly pleased to note a geographical shift in that we had apart from North American and Western European delegates we were pleased to see delegates from Eastern Europe, the Indian subcontinent, Latin America and Africa, making our discipline truly international. Those who were not present did miss an excellent Scientific as well as social meeting.

At the conference it was decided that the next meeting would be held in Australia at the University of Queensland under the chairmanship of Tom Loy. In view of the enviable reputation Australia has for hosting international events I am certain you will not want to miss aDNA7.

It was proposed that we should form a more formal organization. During the business meeting it was felt that such an organization should have a basis of local chapters which would be country based.

Proposals were made on guidelines, ethical and scientific and a position paper it was decided that position papers will be asked to be presented at aDNA7. Tom Loy was appointed temporary chairperson. He will appoint committees to study the issues involved, and they will present their reports at aDNA7. Thus it is extremely important that you send him any input you may have, and plan to attend aDNA7.

For further information, visit the conference website: <http://www.dna6.com/> or send an email to: dna6@md.huji.ac.il

contributed by Michael Spigelman

Wellcome Bioarchaeology Day for the North of England

The Wellcome Trust, in conjunction with the Department of Archaeological Sciences, University of Bradford, will host a day (September 5, 2002) of presentations on the funding opportunities available for research in bioarchaeology under the auspices of the Wellcome Trust. The day will include presentations from Dr. Gavin Malloch and representatives of the Wellcome Trust, a series of research overview presentations, and research presentations from current Wellcome Trust grant and fellowship holders. The meeting will also provide a forum for questions and answers for those interested in obtaining research support from the Trust in the future. Further information about the day can be addressed to Dr. Christopher Knusel at the Department of Archaeological Sciences, University of Bradford; tel 01274 233545; fax 01274 235190; email: c.knusel@bradford.ac.uk

Among the presenters are: Mark Pollard (chair); Alan Cooper (Ancient Biomolecule Research Centre, University of Oxford), Problems and Solution in Ancient DNA Research: Contamination, Damage, and Authentication; Mike Richards (Department of Archaeological Sciences, University of Bradford), The Evolution of Human Diets; Jennifer Hiller (Department of Archaeology and Prehistory, University of Sheffield and Fossil Fuels and Environmental Geochemistry, University of Newcastle), New Methods for Detecting Preservation in Archaeological Bone; Christina Nielsen-Marsh (Fossil Fuels and Environmental Geochemistry, University of Newcastle), Direct Sequencing of Protein from Ancient Bones

Using Matrix-Assisted Laser Desorption Ionization Mass Spectroscopy; Tom Gilbert (Ancient Biomolecules Research Centre, University of Oxford), Characterising Post-Mortem Driven DNA Damage in Ancient Specimens; Elizabeth Stuckey (Department of Biomolecular Sciences, UMIST), A Biomolecular Approach to the Study of Malaria in Neolithic and Bronze Age Greece; Susan Haynes (Department of Biomolecular Sciences, UMIST), The Origin and Evolution of Einkorn Domestication; and Andrew Isaac (Department of Biomolecular Sciences, UMIST), Using Microsatellites to Study the Domestication and Spread of Emmer Wheat.

Geoarchaeology and Archaeometrical Techniques Symposium

Marta Sampietro and Marta Amelia Vattuone will coordinate a symposium to be held within the III Virtual Congress of Anthropology and Archaeology, in cyberspace during October 2002. The purpose of this Symposium is to generate an interdisciplinary space of study and discussion of human societies as an integration between culture and environment.

The geoarchaeological approximation to the study of the material record of human behavior implies the use of methods and techniques of geosciences to solve archaeological questions. This techniques are beyond the geosciences incorporating other disciplines such as chemistry, physics, etc. This is the guideline to propose an integrated symposium among geoarchaeology and archaeometrical techniques. The goal is to generate an exposition and discussion space of several techniques in an interdisciplinary and pluralist scope that will enrich the possibilities for the approximation to the archaeological record. Consequently it will improve our interpretative capacity of it.

Registration is free at www.naya.org.ar/congreso2002/index.html or sampietro@tucbbs.com.ar

Papers must have approximately 10 pages including bibliography and notes. They must be send in word or compatible format. Photographs, tables and figures could be included in GIF or JPG format. Official languages will be Spanish, English and Portuguese. All must be sent to sampietro@tucbbs.com.ar before September 20th, 2002. All accepted papers will be publish in NayA web site and in CDROM proceedings.

Towards Technoarchaeology

TTA' 02, organized by A. Mickiewicz and Jerzy J. Langer (University at Poznań), will be held 11-13 October 2002 in Srem, Poland. The conference is the first of a series of international meetings planned as an interdisciplinary forum for a discussion on all aspects concerning technoarchaeology in the broadest sense: modern analytical techniques applied to archaeological research (characterization and dating, identification of materials, their provenance), obsidian, stone and flint characterization; the geochemistry of clays and the provenance of ceramics; glass; metals; resinous substances (tar and pitch, resins, waxes); analysis of archaeological remains of food and oils; technology and provenance of pigments and dyes, structure and characterization of bones, biomaterials, characterization and provenance of amber. The conference is designed to provide as much discussion among the participants

as possible. The program includes a plenary session and technical sessions comprised of invited and contributed papers for oral presentation. Abstracts should be sent by September 1, 2002, by e-mail to: slawek@main.amu.edu.pl

For further information, please contact: A. Mickiewicz or Jerzy J. Langer, Faculty of Chemistry, Laboratory for Materials Physicochemistry and Nanotechnology, Archaeometry research group, Marciniaka 2, PL-63100 Srem, Poland; tel +4861 2833511; fax +4861 2833622; email: orsel@sigmaxi.org

TAG 2002

Keri A. Brown (University of Manchester) is organising the session "Why can't we be friends? Archaeological theorists need archaeological scientists" at this year's Theoretical Archaeology Group (TAG) conference (Manchester, UK, December 21-23, 2002) on the relationship between archaeological theory and archaeological science, a topic ripe for reassessment in view of the dominance of social theory in archaeology for the last few decades. The session abstract (below) may be thought provocative, but she believes that it is time for a new debate on archaeological science and its position in the discipline in light of recent developments in scientific applications and their potential to add to our knowledge of the past and resolve various theoretical debates. Will this potential be lost because theoretical archaeologists may not be aware of developments in archaeological science? She hopes that you will be able to contribute to this debate, which is open to all archaeologists, both theoretical and scientific. For further information, please contact: Keri A. Brown, Department of Biomolecular Sciences, UMIST, P.O. Box 88, Manchester M60 1QD; email: keri.brown@umist.ac.uk

Abstract

The 'two cultures' characterisation of archaeology has caused immense harm to our discipline. For three decades the majority of undergraduates have been taught archaeology as an arts degree, and a new generation of young lecturers has arisen which is almost completely ignorant of the amazing things archaeological science can now achieve. For example: Strontium and oxygen isotope analysis can be used to examine migration in past societies; OSL (Optically Stimulated Luminescence) dating can be used to directly date soil sediments; Carbon and nitrogen stable isotope analysis can give new insights into past diet and also the Meso/Neo transition; Lipid and protein analysis of residues within ceramics can help elucidate how pots were used; The possibility of radiocarbon dating residues from pottery is being investigated; Not to mention ancient and modern DNA studies. With this cornucopia of scientific possibilities available for archaeologists, is it not time to make courses on archaeological sciences compulsory for ALL archaeology undergraduates? Should theoretical archaeologists start framing their interpretations in ways that can be tested by the application of scientific techniques? Is the best interpretive archaeology actually being carried out by archaeological scientists and their projects? This session welcomes papers from archaeological theorists and scientists, but please, no papers that just critique science and scientists. Let's move beyond those sterile arguments so often heard at

TAG and so often used to justify the rejection of science by post-processualists and acknowledge, that for whatever reason, science has been the most successful method for understanding the world around us. Scientific developments are rapid - the latest can now significantly contribute to our understanding of the past if theoretical archaeologists can be made aware of the possibilities and use them.

34th International Archaeometry Symposium

The conference will be held May 4-8, 2003 in Hefei, China, hosted by the University of Science & Technology of China Department of Scientific History & Archaeometry. The Local Organizing Committee is chaired by Changsui Wang and includes Fei Xu, Min Feng, Ying Qin, Yaowu Hu, Wulan Zhao, and Hongsheng Wang, all from Hefei. For further information, please visit the website (<http://www.archaeometry.ustc.edu.cn>) or contact:

Yaowu Hu, Department of Scientific History and Archaeometry, University of Science and Technology of China, P.R.China; tel +86 551 360 3914; fax: +86 551 360 3576; email: ywhu@ustc.edu.cn

4th Symposium on Archaeometry of the Hellenic Society of Archaeometry

The Hellenic Society of Archaeometry (H.S.A.) announces the organization of the 4th Symposium on Archaeometry, which will take place in Athens, Greece, in May 2003. The Symposium aims at providing a forum for the discussion and presentation of recent research and trends of archaeometry pertaining to the prehistory and classical antiquity as well as Byzantine and recent times.

The main topics to be covered in the Symposium will be: Science-based dating, Technology and Provenance of archaeological materials (ceramics, metals, glass, stone, mortars, pigments, etc.), Remote Sensing, Geoarchaeology, Biomaterials, Organic Residues, Research in Conservation Science, Mathematical Methods. The Symposium schedule will also include a specific theme session, which focuses on the Aegean and the presentation of reviews and developments of the archaeometry studies over the past 20 years.

Interest should be expressed to the organizers by September 20; abstracts must be submitted by November 20, 2002. The official languages of the Symposium are Greek and English, but all papers submitted for publication in the Symposium Proceedings should be written in English.

For more information, visit the Symposium Web-site: <http://www.archaeometry.gr/symposium2003/4thSymposiumHSAEn.htm> or contact K. Polikreti (email: kpolikreti@ims.demokritos.gr) or N. Zacharias (email: zacharias@ims.demokritos.gr)

World Archaeological Congress 5

Abstracts are requested for a symposium on Marine and Coastal Geoarchaeology at WAC5 (Washington DC, June 2004) as part of the Theme in Underwater and Maritime Archaeology (details of which are on the WAC5 website: www.ehlt.flinders.edu.au/wac5/indexhomepage.html).

Abstracts should be submitted to the organizers, Justin Dix

and Rory Quinn, by October 31, 2002. For further information: Justin Dix, Marine Archaeological Geophysics, School of Ocean and Earth Sciences and the Department of Archaeology, University of Southampton, tel 02380 593057/596861; email: jkd@soc.soton.ac.uk

Abstract

As with the progression of terrestrial archaeology during the 19th and 20th Centuries, the desire to have a detailed understanding of the nature and temporal evolution of the environment of any submerged site has sadly lagged behind the desire to record, interpret and extract artefactual material. This is an even greater oversight for the marine environment as here the dynamics of the system (physical, chemical and biological) operate at time and space scales orders of magnitude greater than on terrestrial sites. However, the last decade has seen an increasing awareness for the need of generic models and theories for both site evolution and the archaeological interpretation of artefact sites and submerged landscapes. Ironically management and preservation concerns, rather than the requirements of academic archaeologists have driven this. It is therefore an ideal time to bring together the sparse, but global network of people currently working in all aspects of marine and coastal geoarchaeology. This symposium therefore aims to bring together talks on Marine Archaeological Site Evolution and Coastal and Marine Landscape Archaeology. The symposium proposers believe that such themes could draw experts from both hemispheres to provide a global overview of the current state of the discipline.



Archaeological Ceramics

Charles C. Kolb, Associate Editor

This issue includes 11 topics: 1) two major announcements (the Getty's AATA and Russia's IHMC); 2) summaries about new books related to archaeological ceramics; 3) notes on other important publications; 4) reprinted works in archaeology; 5) collaboration sought; 6) professional meetings held; 7) forthcoming professional meetings; 8) Internet sites; 9) ceramic kiln excavations; 10) exhibitions; and 11) other news.

Art and Archaeology Technical Abstracts (AATA) to be a Free Online Resource

Locating current citations and up-to-date reviews of salient books and articles appearing in key journals is always a difficult task for researchers and students. Luke Gilliland-Swetland, Head of Information Resources at The Getty Conservation Institute (GCI), has posted an announcement that will be useful to readers of the Archaeological Ceramics column and readers of the *SAS Bulletin* in general. This significant change in making the Getty's AATA available gratis online will benefit scholarship and research. One of the AATA categories is "ceramics and glass."

The Getty Conservation Institute (GCI), in association with

the International Institute for Conservation of Historic and Artistic Works (IIC), is bringing *Art and Archaeology Technical Abstracts* to the World Wide Web as a free service to the international conservation community. Publicly launched on June 8, 2002, *AATA Online: Abstracts of International Conservation Literature* (<http://www.getty.edu/conservation>) offers all 36 volumes of *Art and Archaeology Technical Abstracts* and its predecessor, *IIC Abstracts*, published between 1955 and the present. By December 2002, abstracts from the 20 AATA special supplements and almost 2,000 abstracts published between 1932 and 1955 by the Fogg Art Museum and the Freer Gallery of Art will be included as well. Ultimately, more than 100,000 abstracts related to the preservation and conservation of material cultural heritage will be accessible in *AATA Online*. New abstracts will be added quarterly, as AATA staff work with subject editors and volunteer abstractors to expand the breadth, depth, and currency of coverage.

After registering for this free service, users may select a variety of preferences to tailor the system to their particular research interests and needs. The interface provides a number of features including several simple but powerful search capabilities; the ability to save user-created search strategies for use in future sessions; and an on-screen notice of the new abstracts added in the users' selected areas of interest in the last quarterly update. Users will be able to download or print out their search results. The classification scheme and subject category descriptions from the print version of AATA can also be displayed online.

AATA Online was introduced to the conservation community at the American Institute for Conservation of Historic & Artistic Works (AIC) Annual Meeting in Miami (6-11 June 2002) and officially premiered on 8 June. There will be subsequent demonstrations of *AATA Online* at the IIC Baltimore Congress 2002 (1-6 September) and at the *ICOM-CC Triennial Meeting* in Rio de Janeiro (22-28 September). Delegates will be able to visit booths in the vendor hall at each of these conferences to experiment with the new system and to speak with AATA staff.

In developing *AATA Online*, the GCI staff heeded recommendations of the field, convened focus groups, evaluated the technology, and conducted user testing. Information gained from these activities will guide the final development of the resource. Continuing feedback from those members of the field who have supported AATA will be solicited. Please contact the AATA office at aata@getty.edu if you have questions or need additional information.

Institute for the History of Material Culture

The Institute for the History of Material Culture (IHMC) in St. Petersburg Russia, has an exceedingly valuable Internet site, accessible originally only in Russian, that has now been made available in English and will be significant to a variety of readers of the *SAS Bulletin* beyond artifact studies and regional archaeology. The URL is http://www.archeo.ru/index_eng.htm. The translations are extremely accurate with very few transcription errors.

Historically, the Institute for the History of Material Culture, the successor of the former Imperial Archaeological

Commission (IAC) founded in St.-Petersburg in 1859, was the Russian state archaeological organization. Following the revolution, the Russian State Archaeological Commission was found on the base of the IAC in 1918. A year later it was reorganized into the Russian Academy of History of Material Culture (RAHMC) and after formation of the USSR in 1926 the RAHMC was renamed into the State Academy of History of Material Culture (SAHMC). In 1937 the institution was again reorganized into the Institute for the History of Material Culture on the Academy of Science of the USSR (IHMC AS USSR) with the head office based in Leningrad and a branch located in Moscow. In 1943 the Institute administration was transferred from Leningrad to Moscow and both divisions became coequal in importance. By 1959 the IHMC was reorganized into the Institute of Archaeology of AS USSR with the head office based in Moscow and the branch in Leningrad. In 1991 the Leningrad branch became an independent archaeological institution under the former name of the Institute for the History of Material Culture of Russian Academy of Science (IHMC RAS).

The IHMC presently includes four archaeological departments, two laboratories, and an archives. The research areas cover a wide range of archaeological cultures and topics and the names of staff members or research fellows and brief biographies are also included on the website. The departmental focuses include the interaction of tribes and peoples in East Europe and Baltic region, and the archaeology and history of Ancient Russia (Department of Slavonic-Finnish Archaeology; 22 research fellows); early agricultural settlements, towns, and civilizations of Central Asia (Department of Archaeology of Central Asia and the Caucasus; 26 research fellows); Greek-barbarian contacts in North Black Sea region (Department of Antiquity; 11 research fellows); and the Paleolithic and Neolithic of Eurasia (Department of Stone Age Archaeology; 23 research fellows). The Use-Wear Analysis Laboratory (8 research fellows) assesses use-wear or "traceology" through micro- and macroanalyses of artifacts and by conducting experimental and replication studies. The studies span the Stone Ages through the Middle Ages. The Laboratory of Archaeological Technology (11 research fellows) emphasizes artifact analyses using natural science methods (analytical chemistry and spectral analyses) to reconstruct ancient technologies and environments and also conducts radiocarbon dating. Materials from all time periods are studied from archaeological sites in Russia and the Commonwealth of Independent States (CIS), the former Soviet Central Asian Republics. Lastly, the Archaeological Monitoring Group (6 fellows) is charged with archaeological site recording, preservation, rescue archaeology, field surveys, and creating GIS-based data analysis. IHMC RAS conducts research projects in European part of Russia from Karelia on the north to Caucasus on the south as well as in Siberia and Tuva, and participates in excavation projects in Ukraine and the nations of Central Asia. The archaeological library housed at the IHMC is among the largest in Europe. There are 205,800 books (98,600 in Russian and 107,200 in other languages; 100,500 monographs, and 105,300 periodicals). Since 1998 bibliographic indices have been published in electronic forms. The Institute

also publishes two journals, *Archaeological News* (in Russian with English summaries) and *Radiocarbon and Archaeology* (in English).

New Publications: Books

Katherine Barclay is the author of *Scientific Analysis of Archaeological Ceramics: A Handbook of Resources* (Oxford, England: Published for English Heritage by Oxbow Books, 2001. viii + 56 pp., appendices, bibliography, index, ISBN 1-84217-03107, £4.95/\$9.95). The author prepared this booklet for English Heritage as a handbook for ceramic archaeologists and to provide appropriate background for discourse with archaeological scientists and archaeometricians. English Heritage (The Historic Buildings and Monuments Commission for England), established in 1983, is charged with conserving and enhancing the historic environment, broadening public access to the heritage, and increasing people's understanding of the past. It is also the main source of funding for rescue archaeology and provides expert advice on all aspects of archaeological projects.

This handbook is oriented to research in the United Kingdom, specifically the three national period-based ceramic research groups SGRP, MPRG, and PCRG (Study Group for Roman Pottery, Medieval Pottery Research Group, and Post-medieval Ceramic Research Group) and provides fundamental information on ceramic analysis. Unfortunately, biographical information is not supplied about Barclay nor are her academic or other qualifications listed. She has been a compiler and editor (1987-1993) of the "MPRG Annual Bibliography of Medieval Ceramics" published in the journal *Medieval Ceramics*, where she also serves as an editor. Alex Bayless, Ian Freestone, Chris Gerrard, Clive Orton, and David Williams, among others, vetted the manuscript of this book.

In her initial remarks she points out that the handbook is "NOT a menu from which to choose; the selection of methods of analysis should be made by the scientist and the archaeologist together as members of the project team" (p. viii.). Barclay's "Introduction" (pp. 1-8) covers basic parameters about planning ceramic analyses and has a meager section on classification, but the discussion of sample selection, costs (in £ Sterling), combining multiple analytical techniques, and evaluation and publication are adequately considered. She also elaborates five reasons "why we are doing it": fabric description, kiln source characterization, raw material and provenance determinations, investigations of fabrication technologies and use/function, and dating). Major journals and a few web-sites are mentioned, and British funding sources are noted. If readers are interested about scientific archaeology and funding opportunities in the United Kingdom, your reviewer suggests perusing the *Science-based Archaeology Newsletter* available on the Internet at <http://www.nerc.ac.uk/funding/sbarchaeology/sbanews1-2000.shtml>

The volume is divided into eight sections, the initial groups of analytical techniques covering mineralogy, composition, technological issues, dating (chronology), and other methods. Each entry in these five sections considers basic parameters about each of the methodologies: "how it is done," what can it do," "when it is used," and "who does it." The latter element is

keyed to Appendix B, tabulation with addresses of 37 British "Centres Undertaking Analysis: alphabetically by acronym." Especially useful are tables that compare the techniques and provide practical information on sample sizes; potential damage to the specimen; survival versus destruction of the sample; the potential of specimen retesting; the specific parts examined (surface, inclusions, paste, etc.); measurement sensitivity and accuracy; costs; and speed of sample analysis (usually expressed in days or weeks). These discussions are well referenced and Barclay cites specific published studies that employed the techniques.

The initial group includes "Mineralogical Analysis" or petrographic assessments of ceramic fabrics in terms of mineral constituents and other raw materials (Table 1, p. 10, which contrasts four analytical techniques). Separate discussions center upon the petrographic examination of thin sections (thin-section analysis), textural analysis (grain-size analysis), heavy mineral analysis, X-ray diffraction (XRD), infra-red absorption spectrometry (Fourier transform, FTIT), and Mössbauer spectroscopy (nuclear gamma resonance spectroscopy). Raman microscopy is mentioned briefly but optical crystallography is not detailed. The section also includes a discussion of the preparation of thin-sections and point counting and area counting.

A second section, "Compositional Analysis," focuses on elemental, chemical, and trace element analyses (Table 2, p. 16, which differentiates five methods). There is a dialogue about the "pitfalls" of nomenclature which precedes general statements on inductively-coupled plasma spectrometry (ICP, ICPS), thermal ionization mass spectrometry (mass spectrometry, MS), atomic absorption spectrometry (AAS), X-ray fluorescence spectrometry (XRF) and the electron probe microanalyser (electron microprobe, EMPA), particle- or proton-induced X-ray emission analysis (PIXE), neutron activation analysis (NAA), X-ray photoelectron spectroscopy (XPS), and electron spectroscopy for chemical analysis (ESCA). Barclay differentiates MS from ICP-MS and observes that the X-ray milliprobe is obsolete. Auger Spectroscopy and wet chemical analysis are mentioned as other useful techniques.

In "Technological Analysis" Barclay emphasizes those methods used to study pottery fabrication and why the particular methods and materials are selected. Thermal analysis, electron microscopy — including transmission electron microscopy (TEM) and scanning electron microscopy (SEM) — and X-ray and xeroradiography are reviewed. She also notes the value of experimental firings, including kiln firings, but this section is rather brief and incomplete. "Dating Ceramics" includes four principle techniques (Table 3, p. 29), notably radiocarbon dating (^{14}C dating); luminescent dating — including thermoluminescence (TL) dating and optically stimulated luminescent dating (OSL), photon-stimulated (PSL), green-light (GSL), and infra-red stimulated (IRSL); and thermoremanent magnetic dating (archaeomagnetic dating, magnetic dating, TRM). The methods within the OSL group are inadequately differentiated. Another section, "Other Analyses, including organic tempers and residues, fingerprints, and DNA," mentions organic residue analysis using FTIR, ICP-MS, chromatography, and immunoassay. Organic temper analysis is reviewed

insufficiently, while fewer than one hundred words characterize fingerprint and DNA studies.

One page is devoted to “Statistical Analysis of Results” while “Authentication or Authenticity Testing” mentions several methods considered previously (TL, EMPA, AAS, and Raman microscopy). The final section, “Conclusion,” points out that that fewer practical applications have been published during the past five years, and there are “only a very few developed synthetic works” (p. 37). Barclay also cites Pollard, “serious scientific work in archaeology needs ... to make progress beyond the trivial level of applying analytical techniques” (the original source is “Why teach Heisenberg to archaeologists?” *Antiquity* 69:242-247, 1995; p. 246). Appendix A: Reference Collections” contains a review of the development of a thin-section database, however, the URL provided for that site, <http://www.ceramicpetrology.uklinux.net>, has unfortunately not been updated since August 2001. The handbook also includes an index of 103 analytical techniques and their acronyms.

The “Bibliography” contains 237 items primarily from British and American publications including selections from *Archaeometry*, *Medieval Ceramics*, *American Journal of Archaeology*, and *Journal of Archaeological Science*. Barclay (p. 1) alerts the reader to general references including R. E. Taylor and M. J. Aitken’s *Chronometric Dating in Archaeology* (New York: Plenum (1997) for dating (see C. C. Kolb’s Internet book review at <http://www2.h-net.msu.edu/reviews/showrev.cgi?path=6306898705074>). She also mentions three standard sources: Anna O. Shepard’s *Ceramics for the Archaeologist*, 8th printing (Washington: Carnegie Institution of Washington, 1976), Prudence M. Rice’s *Pottery Analysis: A Sourcebook* (Chicago: University of Chicago Press, 1987), and

Clive Orton, Paul Tyers, and Alan Vince’s *Pottery in Archaeology* (Cambridge: Cambridge University Press, 1993). Curiously, she does not cite either edition of Alex M. Gibson and Ann Woods’s *Pottery for the Archaeologist* (1990) or the second edition, *Prehistoric Pottery for the Archaeologist* (1997, both London: Leicester University Press).

Barclay also refers to Ian Freestone’s synthesis on major petrographic techniques (*American Journal of Archaeology* 99:111-115, 1995). She cites “The United Kingdom ceramic thin-section database” edited by Alan G. Vince as “forthcoming” in *Internet Archaeology* (<http://intarch.ac.uk>) but it is not yet posted on the Internet. Barclay’s source for this is apparently *Archaeology Review 1996-1997* published by English Heritage, see http://www.eng-h.gov.uk/ArchRev/rev96_7/certs.htm. In addition, references to Paul Blinkhorn’s “forthcoming” *Ipswich Ware* (MPRG Occasional Paper 2) and D. F. Williams (1994) in Blinkhorn “forthcoming” are not listed in the British Library catalogue or other databases.

An unfortunate number of errors are found in the bibliography, including Bimsom 1969 (= Bimson); Hughes, et al. 199X (= 1982); Morris and Woodward, missing the publication date (but stated as “forthcoming,” p. 38); Orton 2001 (missing page numbers); and in Shepard 1942, a misprint (Carnegie = Carnegie). Sayre and Who (eds.) 1988 should read Sayre, Edward V., Pamela Vandiver, James Druzik, and Christopher Stevenson (editors) in reference to the volume *Materials*

Issues in Art and Archaeology. Lastly there are several instances in which 0 (zero) is typeset rather than the letter O (for example, O. S. Rye [three instances] and A. O. Shepard). Vassilis Kilikoglou’s name is misspelled several times (p. 24). Significant British Internet sites dealing with ceramic might have been included: <http://www.SGRP.org> (SGRP — Study Group for Roman Pottery), <http://www.potsherd.uklinux.net/> (Paul Tyres’s Potsherd site [Roman period]), <http://www.medievalpottery.org.uk/> (MPRG — Medieval Pottery Research Group), <http://potweb.ashmol.ox.ac.uk/> (the Ashmolean Museum, Oxford, “PotWeb” site), <http://www.postex.demon.co.uk/> (Alan Vince Archaeological Consultancy), and <http://www.tegula.freemove.co.uk/acbm.html> (ACBM — Archaeological Ceramic Building Materials Group). The Post-Medieval Ceramic Research Group which held its inaugural meeting in November 1963 and would become the Society for Post-Medieval Archaeology and maintains a website at <http://www.britarch.ac.uk/spma/> *SPMA and the Northern Ceramic Society organized an important joint conference entitled “Pots, People and Processes” held 14-26 July 1998 in Stoke-on-Trent*. The URL for Spoilheap Pottery could also have been added, <http://www.spoilheap.co.uk/medpoti.htm>

While this handbook is not exhaustive, the techniques discussed have accurate and up-to-date (as of 2000) information. Pru Rice’s *Pottery Analysis: A Sourcebook* (1987:307-446) and her “Recent ceramic analysis, 2: Composition, production, and theory” (*Journal of Archaeological Research* 4:165-202, 1996) cover other chemical and mineralogical characterization studies in more detail. Bruce Velde and Isabelle C. Druc’s *Archaeological Ceramic Materials: Origin and Utilization* Berlin and New York: Springer-Verlag, 1999:266-286) discussion of analytical methods includes those topics covered by Barclay but adds computer scanning and video systems, high-resolution transmission electron microscopes (HRTEM), thermogravimetric analysis (DTA), differential thermal analysis (DTA), infrared spectral analysis (IR), and magneto archaeometry (MA). The Velde and Druc text has been reviewed by C. C. Kolb in *SAS [Society for Archaeological Sciences] Bulletin* 23(1):17-21, 2000 and the British Museum’s *Old Potter’s Almanack* 8(3):5-9, 2000). Topics not covered by Barclay comprise particle shape, surface and paste colors, hardness (Mohs’ ordinal scale, for example), strength (modulus of rupture), permeability, porosity (apparent and true), specific gravity, thermal properties (expansion and fatigue), stress (tensile, compression, and transverse), strain (elastic deformation owing to stress), elasticity (Young’s modulus), fracture, microstructure, pigment and paint analysis, glazes, archaeothermometry (range of original firing temperatures), and equivalent firing temperature (analysis incorporating time and atmosphere conditions), among others.

Given the stated scope and purpose of this handbook, Barclay has succeeded in creating a useful quick guide to the major procedures used by ceramic scientists and archaeologists. The main problem is not its comprehensiveness, but the troublesome errors that appear in the references, making the volume less useful than it should be. The handbook may be

ordered through the David Brown Book Company (P. O. Box 511, Oakville, CT 06779; telephone 800/791-9354, e-mail david.brown.bk.co@snet.net) which has a web site at <http://www.oxbowbooks.com>

Donna M. Glowacki and Hector Neff are the editors of *Ceramic Production and Circulation in the Greater Southwest: Source Determination by INAA and Complementary Mineralogical Investigations* (Monograph 44, Cotsen Institute of Archaeology, University of California, Los Angeles, 2002. vi + 217 pp., ISBN 0-917956-98-2, \$35.00 paper). Glowacki is a doctoral candidate at Arizona State University and a research associate at the Crow Canyon Archaeological Center; her dissertation topic focuses on ceramic exchange in the Mesa Verde region of the American Southwest. Neff's early research focussed on Mesoamerican Plumbate ware and he completed his dissertation on at the University of California at Santa Barbara in 1984. Since 1990 has been at the Research Reactor Center of the University of Missouri at Columbia where he has collaborated in ceramic provenience studies and the analysis of archaeological materials from throughout the world. The editors' point out that INAA in ceramic research in the American Southwest has become widespread during the past decade and has become a useful tool in understanding exchange, migration, social identity, and economic organization. The editors provide introductory and concluding chapters: "Ceramic Source Determination by Instrumental Neutron Activation Analysis in the American Southwest" (pp. 1-14, 4 figures) by Neff and Glowacki; and "Using INAA in the Greater Southwest" (pp. 179-185) by Glowacki and Neff. An extremely useful second chapter by Neff, "Quantitative Techniques for Analyzing Ceramic Compositional Data" (pp. 15-36, 1 figure, 1 table), provides an essential background to understanding the 10 case studies that follow. A clearly written "Glossary" prepared by Michael D. Glascock contains 97 items — accuracy through Z cores, and includes entries on chi-square, clay, covariance, Hotelling's T2 statistic, IC-AES, IC-PMS, Mahalanobis distance, precision, principal components analysis, standard reference material, t test, variance, XRD, and XRF. The monograph has a conflated proper noun and subject "Bibliography" which contains 647 items, the most recent published in 2000. The 26 contributors to these 10 case studies come from 21 colleges, universities, state agencies, and commercial enterprises (such as CRM firms); the authors are listed on p. 217.

The other chapters are "Black Mountain Phase Ceramics and Implications for Manufacture and Exchange Patterns" (pp. 37-46, 5 figures, 2 tables), by Darrell Creel, Matthew Williams, Hector Neff, and Michael D. Glascock; "Chaco and the Production and Exchange of Dogoszhi-Style Pottery" (pp. 47-65, 5 figures, 2 tables, 1 appendix) by Jill E. Neitzel, Hector Neff, Michael D. Glascock, and Ronald L. Bishop; "Resource Use, Red-Ware Production, and Vessel Distribution in the Northern San Juan Region" (pp. 67-73, 3 figures, 1 table) by Donna M. Glowacki, Hector Neff, Michelle Hegmon, James W. Kendrick, and W. James Judge; "Artifact Design, Composition, and Context: Updating the Analysis of Ceramic Circulation at Point of Pines, Arizona" (pp. 74-84, 3 figures)

by M. Nieves Zedeño; "From Compositional to Anthropological: Fourteenth-Century Red-Ware Circulation and Its Implication for Pueblo Reorganization" (pp. 85-97, 8 figures, 1 table) by Daniela Tridan, Barbara J. Mills, and Andrew L. Duff; and "Ceramic Production and Distribution in Two Classic Period Hohokam Communities" (pp. 99-109, 5 figures, 4 tables) by Karen G. Harry, Paul R. Fish, and Suzanne K. Fish. The other contributions are "Protohistoric Ceramics from the Texas South Plains: Documenting Plains-Pueblo Interactions" (pp. 111-120, 2 figures, 5 tables) by Douglas K. Boyd, Kathryn Reese-Taylor, Hector Neff, and Michael D. Glascock; "Patayan Ceramic Variability: Using Trace Elements and Petrographic Analysis to Study Brown and Buff Wares in Southern California" (pp. 121-139, 5 figures, 4 tables) by John A. Hildebrand, G. Timothy Gross, Jerry Schaefer, and Hector Neff; "Typologies and Classification of Great Basin Pottery: A New Look at Death Valley Brown Wares" (pp. 140-151, 3 figures, 1 table) by Jelmer W. Eerkens, Hector Neff, and Michael D. Glascock; and "A Petrographic Approach to Sand-Tempered Pottery Provenience Studies: Examples from Two Hohokam Local Systems" (pp. 142-178, 9 figures, 5 tables) by James M. Heidke, Elizabeth J. Miksa, and Henry D. Wallace.

This splendid volume contains a significant compilation of recent research on ceramics produced in the American Southwest and demonstrates the efficacy of INAA. The monograph parallels Neff's edited volume *Chemical Characterization of Ceramic Pastes in Archaeology* (Madison: Prehistory Press, 1992) in importance to ceramic analysis and documents that a regional focus on ceramic provenience problems is a viable research approach. It also documents the incredible amount of work that has taken place in the last decade — witness the bibliographic entries published since 1992. Anyone interested in the American Southwest, archaeometry, or the latest applications of INAA and petrographic analyses should consult this important compendium.

Geoffrey G. McCafferty is the author of *Ceramics of Postclassic Cholula, Mexico: Typology and Seriation of Pottery from the UA-1 Domestic Compound* (Monograph 43, Cotsen Institute of Archaeology, University of California, Los Angeles, 2001. viii + 132 pp., ISBN 0-917956-97-4, \$30.00 paper). Although McCafferty obtained his M.A. and doctorate from SUNY Binghamton and wrote his dissertation on the analysis of Cholula domestic contexts, his interest in the archaeology of Cholula began during his undergraduate career at the Universidad de las Américas campus located adjacent to the UA-1 site in Cholula, Estado de Puebla, México. He is currently an associate professor in the Department of Archaeology at the University of Calgary. Cholula was the center for the religious cult of Quetzalcoatl during Mexico's Postclassic period (ca. 900-1520 CE). McCafferty's monograph, a revision of part of his 1992 dissertation, provides an innovative new classification of ceramics based on an detailed analysis of artifact assemblages from primary depositions (house floors and middens) at the UA-1 excavations, conducted as a field school in 1968. Ceramic seriation suggests a sequence that spans the Tlachihuatepetl (700-1200 CE) and

Cholollan (1200-1550 CE) phases. He documents the problems and prospects of analyzing a curated collection long after its excavation. Notable are the variety of polychrome ceramics with designs and motifs representing the complex iconography of the Mixteca-Puebla stylistic tradition. The initial chapter, "UA-1" (pp. 1-7, 6 figures) provides background on the site and collection, while the subsequent chapter, "Historical Context and Research Objectives" (pp. 9-17, 2 figures) considers typologies of Postclassic Cholula ceramics by McCafferty (1992) and Lind (1994). "Methodology" (pp. 19-30, 5 figures), documents the laboratory and analytical procedures employed, and the five descriptive categories (paste and firing effects, surface treatment, decoration, vessel forms, discussion) for 13 types subsequently elaborated. Vessel forms and rim types for utilitarian, serving, and ceremonial wares are defined, and depositional contexts and units of analysis are also detailed. Chapter 4, "Pottery Types" (pp. 31-87, 54 figures, 19 tables) is subdivided into three sections: Major Undecorated Types ($n = 5$), Major Decorated Types ($n = 8$), and Minor Types (Colonial/Historic, Late Postclassic, Early Postclassic, Classic, Preclassic, and Unidentified types). The illustrations include rim profiles and images of actual specimens but not all of these have measurement scales. The black-and-white illustrations do not do justice to the original vibrant polychrome painted specimens. "Ceramic Analysis" (pp. 89-116, 2 figures, 14 tables) includes descriptive and statistical seriation data from a stratified trash midden and Well 3, Structures 1 and 2, and other selected stratified units. Vessel forms, an analysis of the forms, and discussion of types and classes are also reported. The final chapter, "Summary and Discussion" (pp. 117-123, 3 figures) considers the culture history of Postclassic Cholula and places UA-1 in the context of the Mixteca-Puebla stylistic tradition. The bibliography contains 206 items (the most recent citation is 2001); there is no index. Geoff McCafferty and his wife Sharisse have continued to work at Cholula and on Mixteca-Puebla archaeology and ethnohistory for more than 20 years. Scholars will be gratified to have this important data available and owe a debt of gratitude to Geoff for having rescued the collection and for documenting and reporting this valuable ceramic assemblage which aids in our comprehension of the Central Mexican Postclassic and Mixteca-Puebla archaeology.

Eduardo Williams, a Mexican colleague who holds a doctorate from University College London, currently serves as a research professor at the Centro de Estudios Arqueológicos, El Colegio de Michoacán, A.C. (Martínez de Navarrete 505 C.P. 59690 Zamora, Michoacán, México). Eduardo has conducted archaeological, ethnoarchaeological, ethnohistoric, and ethnographic research in West Mexico for more than 25 years. He and a colleague at the Centro, research professor Phil Weigand, who holds a doctorate from the University of Illinois and has for 30 years conducted archaeological and ethnographic studies in West Mexico, are the editors of and contributors to a splendid 10-chapter volume on ceramics from west and north Mexico. The volume is entitled *Estudios cerámicos en el Occidente y Norte de México*, edited by E. Williams and P. C. Weigand, (El Colegio de Michoacán, Instituto Michoacano de Cultura, Zamora,

Michoacán, Mexico, 2001, 437 pp., ISBN 970-679-045-4, 140 pesos/\$14.00 US). Williams have translated several papers prepared originally in English into Spanish. Additional information, including ordering instructions, is available on the Colegio's website at <http://www.colmich.edu.mx> This Internet site also lists other notable volume on pottery and related topics: Christopher Beekman and Phil C. Weigand, *La cerámica arqueológica de la tradición Teuchitlán, Jalisco; tipología, análisis petrográfico y cronología* (2000); Eduardo Williams and Robert Novella, *Arqueología del occidente de México: nuevas aportaciones* (1994, out of print); Williams and Weigand, *Arqueología del occidente y norte de México* (1994); and Williams and Weigand, *Arqueología y ethnohistoria: La región del Lerma* (1999).

The contents of the edited *Estudios cerámicos* volume include an introductory statement by Weigand, "Presentación," pp. 9-13; and a valuable, up-to-date synthesis on ceramic studies by Williams entitled "Introducción: perspectivas antropológicas sobre la alfarería" (pp. 15-56, 14 notes, 94 references). He considers antecedents to ceramic studies (Jefferson, Petrie, Uhle, and Gamio), ceramic ecology (Matson, Rice, D. Arnold, Kolb), and ceramic ethnoarchaeology (Foster, Longacre, Skibo, Deal); studies of production, style, and decoration (D. Arnold, DeBoer); and physicochemical analyses (Harbottle). Weigand also contributed "La cerámica moderna de los huicholes: estudio etnoarqueológico" (pp. 57-96, 3 notes, 3 tables, 6 figures, 8 references) in which he reviews the history of Huichol ceramics and technology within a social context. Michael Shott (University of Northern Iowa) and Williams are the authors of "Datos censales sobre la vida útil de la cerámica: estudio etnoarqueológico en Michoacán" (pp. 97-125, 3 tables, 7 figures, 36 references) that documents fieldwork and the quantification of ceramic vessel use life. Louise M. Senior (SWCA, Inc., Environmental Consultants), "Cálculo del valor prehispánico: un modelo derivado de la etnoarqueología Rarámuri" (pp. 127-173, 16 notes, 10 tables, 5 figures, 102 references) writes about post-processualism, artifact classifications, systems and evolutionary theory, and the ethnography of pottery among the Rarámuri (Tarahumara), drawing upon correlations from ceramics at Grasshopper Pueblo and Homol'ovi III, citing data on vessel volumes, sizes, types, and frequencies. Williams also authored "La cerámica salinera del Occidente de México" (pp. 175-218, 8 notes, 16 figures, 44 references) in which he discusses salt production and ceramics in Jalisco, Michoacán, Colima, and other areas, noting vessels types and relating Basin of Mexico Texcoco Fabric Marked ceramics.

In a well-documented chapter, Nicola M. Strazicich (University of Washington), "Manufactura e intercambio de cerámica en la región de Alta Vista y La Quemada, Zacatecas (400-900 d. C.)" (pp. 219-251, 1 note, 8 tables, 7 figures, 36 references) employs NAA data and writes about production and exchange in the Malpaso Valley and at the sites of La Quemada, Alta Vista, and Chalchihuites. E. Christian Wells and Ben A. Nelson (both, Arizona State University), "Manufactura de cerámica e innovación tecnología en el valle de Malpaso, Zacatecas" (pp. 253-287, 10 notes, 6 tables, 8 figures, 77 references) use SEM-EDX and vessel form and decoration analysis to document technological changes at

Murguía, La Quemada, and in the Malpasos Valley. Helen P. Pollard and Amy Hirshman (both, Michigan State University) and Hector Neff and Michael D. Glascock (both, University of Missouri), “Las elites, el intercambio de bienes y el surgimiento del área nuclear tarasca: análisis de la cerámica en la cuenca de Pátzcuaro” (pp. 289-309, 1 note, 2 tables, 6 figures, 17 references) consider trade in obsidian, marine shell, metals, and ceramics in the Late Postclassic, employing NAA compositional analyses from 88 funerary pottery specimens to demonstrate elite exchange. Philip C. Weigand and Celia Garcia de Weigand, authors of “Producción cerámica en San Marcos, Jalisco” (pp. 311-342, 4 notes, 13 figures, 4 references), take an ethnoarchaeological approach to document ceramic production and distribution. The accompanying images are especially cogent. Lastly, Patricia Moctezuma Yano (El Colegio de San Luis) author of “La cerámica de Cocucho, Michoacán: un caso de revaloración cultural y mercantil” (pp. 343-406, 17 notes, 2 tables, 19 figures, 33 references) uses archival, historical, and ethnographic data in writings about the fabrication of large handbuilt ollas in a community composed of campesinos and craftsmen. The technical aspects of production (materials selection, preparation, forming methods, decoration, and firing) and commercial aspects are reviewed.

In sum, Williams and Weigand have edited an excellent assemblage of ceramic studies that employ ethnoarchaeology, and technical and scientific studies on pottery from West and North Mexico that collectively add immeasurable to our understanding of this understudied region. These contributions are useful to scholars working on ceramics in other areas of the world who use inter- and multidisciplinary research frameworks.

Archaeometry Issues in Greek Prehistory and Antiquity edited by I. Bassiakos, E. Aloupi and Yorgos Facorellis, a collaborative effort of the Hellenic Society of Archaeometry and the Society of Messenian Archaeological Studies, was officially published on 20 May 2002 at the National Hellenic Research Foundation, Vas. Konstantinou 48, Athens. Yorgos Facorellis, President of the Hellenic Society of Archaeometry (Laboratory of Archaeometry, Institute of Materials Science, NCSR “Demokritos”, 153 10 Aghia Paraskevi Attikis, Greece, e-mail yfacorellis@ims.demokritos.gr) provided information about the presentation ceremony at which Professor Petros Themelis (University of Crete) and Associate Professor Alexandros Mazarakis-Ainian (Department of History, Archaeology, and Social Anthropology, University of Thessaly), and the editors will talk about this publication. Additional information about the structure and the contents of the book is provided in the following Internet site: <http://www.archaeometry.gr/publication/sybosio/index-eng.htm>

The volume contains 8 “chapters” (in reality, units, each with multiple contributions) with a total of contributions. These are “Chapter 1: Dating - Authenticity” (6 contributions, two on ceramics); “Chapter 2: Paleoenvironment - Anthropological Studies” (5 contributions); “Chapter 3: Geophysical Prospection” (5 contributions); “Chapter 3: Materials Characterization: Technology - Provenance - Weathering - Conservation (subunit “A: Marble and other stones” with 5

contributions; subunit “B: Wall Paintings, Plaster, Glass” with 7 contributions including one on faience; subunit “C: Ceramics” with 5 contributions; subunit “D: Metal Artefacts” with 6 contributions including two on ceramics; and subunit “E: Organic Materials” with 4 contributions); “Chapter 5: Ancient Quarries (4 contributions); “Chapter 6: Ancient Mines - Metallurgy” (9 contributions); “Chapter 7: Technology and Trade in the Eastern Mediterranean during Prehistory” (5 contributions); and “Chapter 8: Mathematical and Statistical Methods.” The specific ceramics-related papers are: “Optical Luminescence: A Review of the New Dating Method for Ceramics for Archaeologists” by I. Liritzis (Research Center for Astronomy and Applied Mathematics, Academy of Athens); “Spurious Thermoluminescence Signals of Recently Fired Ceramics: The Advantageous Use of the Foil Technique” by N. Zacharias, C. Michael, and K. Polykreti (all, Laboratory of Archaeometry, Institute of Materials Science, N.C.S.R. “Demokritos”), and D. Dimotikali (Materials Science and Engineering Division, Department of Chemical Engineering, National Technical University of Athens); “Early Bronze Age Faience Beads from Aghios Mamas, Chalkidiki: A Short Note” by Å. Mitsou (6th Ephorate of Prehistorical and Classical Antiquities), M. Vavelidis (Department of Mineralogy, Petrology and Economic Geology, Aristotle University of Thessaloniki), D. Ignatiadou and M. Pappa (both 16th Ephorate of Prehistorical and Classical Antiquities); “New Mycenaean Pottery Production Centers from Eastern Central Greece Obtained by Neutron Activation Analysis” by H. Mommsen and A. Hein (both, Institut für Strahlen- und Kernphysik, Universität Bonn), D. Ittameier and J. Maran (both, Institut für Ur- und Frühgeschichte, Universität Heidelberg) and Ph. Dakoronia (14th Ephorate of Antiquities, Lamia, Greece); “Chemical Differentiation of Ceramics and Control Groups: Combined Application of Chemical and Petrographic Analyses on Proto-Minoan Ceramics” by Á. Tsolakidou (Laboratory of Archaeometry, Institute of Materials Science, N.C.S.R. “Demokritos”), Å. Kiriati, and P. M. Day (Department of Archaeology and Prehistory, University of Sheffield, UK), and Å. Kilikoglou (Laboratory of Archaeometry, Institute of Materials Science, N.C.S.R. “Demokritos”); “Petrographic Analysis of Middle Bronze Age Pottery from Lerna, Argolid” by I. K. Whitbread (Fitch Laboratory, British School at Athens — now at University of Leicester, UK); “Comparative Petrographic Analysis of Sherds from Five Minoan Sites in Western Crete” by G. M. Chandler (Fitch Laboratory, British School at Athens); “Non-destructive Analysis and Visual Recording Survey of the Pottery Collection in the Nicosia Museum, Cyprus” by E. Aloupi (THETIS Hellas Ltd, Athens), A. Karydas, P. Kokkinias, and N. Paradellis (Institute of Nuclear Physics, NCSR Demokritos, Athens), A. Lekka (Department of Archaeology, University of Athens), and V. Karageorghis (“Anastasios G. Leventis” Foundation, Nicosia, Cyprus); “The Effect of Burial Environment on the Physicochemical Properties of Ceramics” by Souvatzis and B. Kilikoglou (Laboratory of Archaeometry, Institute of Material Science, NCSR “Demokritos”, Athens); “Tin-covered Pottery and Chemical Analyses: A Summary” by C. Gillis (Department of Classical Archaeology and Ancient History, Gothenburg University, Sweden); and “Ancient Repairs on Bronze and

Ceramic Vessels” by M. Lykiardopapolou-Petrou (Archaeological Museum of Eani, Eani, Kozani, Greece).

Rudi Autio, authored by Louana M. Lackey (Research Scholar in Ceramics, Maryland Institute College of Art) and published in March 2002 by the American Ceramic Society, is an ethnographic account of a contemporary American ceramic artisan. Her latest book complements her monograph *The Pottery of Acátlan: A Changing Mexican Tradition* (Norman: University of Oklahoma Press, 1982) a ceramic ethnoarchaeological treatise in which she documented a Mexican potter, Mario Martinez and his family, and pottery production in the context of a fluid socioeconomic environment. In *Rudi Autio* (Westerville, OH: American Ceramic Society, 2002, xv +262 pp., 132 color images, 75 black-and-white illustrations, ISBN 1-57498-144-7, \$65.00), Lackey uses her anthropological skills to explore and evaluate a legendary ceramic artisan who is considered one of the most important and influential ceramic artists working in the United States in the past fifty years.

This is the first book to be written on Autio, born Arne Rudolf Autio, 8 October 1926, in Butte, Montana, the youngest son of Finnish immigrants. Lackey’s scholarly volume begins with a dedication to her mentor, Frederick R. Matson. In six chapters she characterizes Autio’s life and work, his artistic endeavors in ceramics, bronze, cement, steel, textiles, and with pen and ink, and his return to ceramics. The late Peter Voulkos (a fellow artist, friend, and colleague of Autio’s for 55 years), comments in the book’s Forward that Autio made ceramic “horses and babes” but his work encompasses much more than these themes. Autio’s experiences in the U.S. Navy, the importance of the G.I. Bill, and his introduction to ceramics by Frances Senska at Montana State College at Bozeman are related. Attaining his BS in Applied Art, he took an MFA at Washington State University before moving to Helena, Montana. In 1951, Autio co-founded (with Peter Voulkos) the Archie Bray Foundation in Helena, and six years later Autio founded the Ceramics Department at the University of Montana in Missoula, beginning a teaching career at the school that encompassed nearly three decades, “retiring” as professor emeritus in 1984. The Chapter entitles “In the Studio” provides the reader with an understanding of a ceramic artist’s workshop, his materials, fabrication and decorating techniques, firing and refiring, and “naming the pieces.”

In addition to teaching, Autio has given lectures and conducted more than 100 workshops in the United States and other countries including Finland, and continues to work in his studio. Autio’s works are to be found in the permanent collections of museums around the world including the American Craft Museum, the Boston Museum of Fine Arts, the Brooklyn Museum, the Carnegie Museum, the Metropolitan Museum, the Portland Art Museum, the Renwick Gallery of the Smithsonian Institution, the St. Louis Art Museum, the Applied Arts Museum in Helsinki, the National Museum in Stockholm, and in Japan at the Aichi and Shigaraki museums of ceramics. Among his honors is election to the prestigious Académie Internationale de la Céramique, based in Geneva, Switzerland. Lackey also explores the role ceramic artists play in

contemporary American culture, details how one becomes a ceramic artist, how ceramic artists create their work, how technology has changed their medium, and what motivates these artists do this work at all. This is an excellent presentation and assessment well worth reading. The book also contains a chronology of Autio’s life, an appendix on “Workshop Secrets” (including recipes for claybodies and slips, handbuilding and decorating tips, and glaze stains), a 68-item bibliography, and five-page double column conflated index incorporating proper nouns and topics. This clearly written, magnificently illustrated volume is both a history and celebration of Autio’s life, career, the historical development of his artwork and its impact on contemporary ceramics, and his innovative artistic techniques. The color fidelity of the images is superb. Additional information about the book and procedures for ordering copies may be found on The American Ceramic Society website at <http://www.ceramics.org/publications/books/bookdetails.asp?BookID=370>

Notes on Other Important Books

Labyrinth Revisited: Rethinking Minoan Archaeology, edited by Yannis Hamilakis, (Oxford, Oxbow Books, 2002, 248 pages, b/w illustrations, ISBN 1-84217-061-9, paperback, £28.00/\$45.00) contains 11 chapters, several of which emphasize ceramics. These include “Mind the Gap: Between Pots and Politics in Minoan Studies” by Carl Knappett and “Pottery as a Barometer of Economic Change: From the Protopalatial to the Neopalatial Society in Central Crete” by Aleydis Van de Moortel. The volume may be ordered from Oxbow Books, Park End Place, Oxford, OX1 1HN, UK (telephone 44 (0)1865 241249; Fax 44 (0)1865 794449); e-mail: oxbow@oxbowbooks.com or The David Brown Book Company, P.O. Box 511, Oakville CT 06779, USA. (telephone 1-860/945-9329, Fax 1-860/945-9468, e-mail: david.brown.bk.co@snet.net) or on the Internet at <http://www.oxbowbooks.com>

Clay and Fire: Pottery in Africa edited by Christopher D. Roy (Iowa City: Iowa Studies in African Art, The Stanley Conference at the University of Iowa, Vol. 4, 2002, 252 pp., 115 black and white illustrations, ISBN 0-87414-120-6, \$50.00 paperback, postpaid) is the proceedings of a pottery conference held at the University of Iowa. The contributors Christopher Roy (University of Iowa); Barbara Frank (SUNY Stony Brook); Marla Berns (Fowler Museum, UCLA); Dale Walde (University of Calgary); R.M.A. Bedaux; Andrea Nicolls (Smithsonian Institution); Allen F. Roberts (UCLA); Raymond Silverman (Michigan State University); Christine Mullen Kreamer (Smithsonian Institution); Robert T. Soppelsa (Washburn University); and Boye Agunbiade, Christopher Roy, Michael McNulty, and Charles Hindes (Ibadan/Iowa). For additional information visit <http://www.uiowa.edu/%7Eintl/ACAD/rft/clayfire.htm> and to place an order, send an e-mail to africart@uiowa.edu or write to Art and Life in Africa, E100 Art Building, University of Iowa, Iowa City, IA 52242

Other Publications

Mediterranean Archaeology and Archaeometry (MAA)

is a newly established interdisciplinary and international journal issued by The University of the Aegean, Department of Mediterranean Studies, Rhodes, Greece. It focuses on the Mediterranean region and on matters referred to interactions of the Mediterranean with neighboring areas, but presents an international forum of research, innovations, discoveries, applications and meetings, concerning the modern approaches to the study of human past. It covers the following interdisciplinary topics: theoretical and experimental archaeology, environmental archaeology, ethnoarchaeology, completed excavation reports; the Palaeolithic, Prehistoric, Classical, Hellenistic, Roman, Protochristian, Byzantine, and Etruscan periods; and megalithic cultures in Mediterranean region, Egyptian and Middle Eastern archaeology, Biblical archaeology, and mythology and archaeology. Additional topics are the natural sciences as applied to archaeology (archaeometry): methods and techniques of dating, analysis, provenance, archaeogeophysical surveys and remote sensing, geochemical surveys, statistics, artifact and conservation studies. Other topics include the ancient astronomy of both the Old and New Worlds, all applied to archaeology, history of art, and in general the hominid biological and cultural evolution, biomolecular archaeology, osteoarchaeology, palaeoclimatological/geographical/ecological impact on ancient humans, archaeology and the origins of writing, reports on early science and ancient technology, and cultural interactions of ancient Mediterranean inhabitants with peoples further inland.

The MAA editors are Ioannis Liritzis (Rhodes), Adamantios Sampson (Rhodes), Robert Galloway (Edinburgh), Mostafa Al Abbadi (Alexandria), and Panagiotis Kousoulis (Rhodes). The Editorial Board for Archaeology includes A. Agelarakis (Adelphi), P. Betancourt (Philadelphia), O. Bar Yozef (Harvard), Anna Belfer-Cohen (Tel Aviv), M. Blomberg (Uppsala), D. Blackman (British School of Athens), A. Bonanno (Malta), J. Coleman (Cornell), J. Davies (Cincinnati), J. Fossey (Montreal), H. Hauptmann (Deutsches Archäologisches Institut, Istanbul), Z. A. Kafafi (Yarmouk), K. A. Kitchen (Liverpool), J. Kozłowski (Crakow), G. Kourtesi-Filippaki (Paris I), B. Knapp (Glasgow), M. Leahy (Birmingham), I. Morris (Stanford), M. Ozdoğan (Istanbul), O. Palaggia (Athens), S. Snape (Liverpool), N. Stampolidis (Crete), C. Stevenson (Virginia), P. Themelis (Crete), R. Treuil (Paris X), and P. Wilson (Durham). The Editorial Board for Archaeometry includes J. N. Barranton (Centre E. Babelon), M. Baxter (Nottingham), I. Calliari (Padova), Emeritus Prof. K. M. Creer (Edinburgh), M. Evison (Sheffield), Emeritus Prof. R. Fairbridge (NASA, Columbia), I. Hedley (Geneva), M. Kovacheva (Sofia), A. Murray (Aarhus), M. Mantler (Wien), H. Mommsen (Bonn), M. Papathanassiou (Athens), M. Pawlikowski (Cracow), P. Potts (Open University, UK), P. J. Reimer (Belfast), Dr M. Schreiner (Wien), G. Sideris (Athens), G. Tsokas (Thessaloniki), and I. Whitbread (Leicester).

The editors are soliciting relevant manuscripts, which should be in English and written using Microsoft Word, and may be of any reasonable length appropriate to the subject matter. Papers submitted for publication will be refereed and assessed on the basis of the aims of the journal as stated at the first issue and the web-site. All submissions are refereed by at least two

external specialist readers. Manuscripts and books for review should be sent to: Professor Ioannis Liritzis and Dr. Panagiotis Kousoulis, Department of Mediterranean Studies, University of the Aegean, Rhodes 85100, Greece. Additional information is available on the website at http://www.rhodes.aegean.gr/maa_journal

Reprinted Works

Eliot Werner Publications, Inc. has announced the reprinting of several significant volumes in archaeological method and theory which have been significant in the interpretation of material culture, including archaeological ceramics. Three of the reprinted volumes include seminal works by Schiffer, McGuire, and South. Additional information is available on the press's website at <http://www.eliotwerner.com>

Behavioral Archeology by Michael Brian Schiffer (University of Arizona), with a New Prologue by the author in which he states that "Clearly many issues raised in *Behavioral Archeology*, as well as its principal ideas, retain considerable relevance for the practice of archaeology. Thus I present this reprinted edition of *Behavioral Archeology*, warts and all, in the hope that readers will enjoy engaging the ideas that played a pivotal role in establishing as fundamental the behavioral perspective in archaeology." This landmark volume in archaeological methodology elaborates the fundamentals of behavioral assessments. Many of Schiffer's later theoretical writings were grounded in this book in which he considers the interrelationships between laws, cultural and natural formation processes, and their applications for indirect observation of past cultural systems. *Behavioral Archeology* (254 pp., illustrations, Foundations of Archaeology series, ISBN 0-9712427-1, \$29.50, paperback) was published in January 2002.

A Marxist Archaeology by Randall H. McGuire (Binghamton University, State University of New York) has a New Prologue by the author in which he notes "The unique contribution that Marxism can make to archaeology comes from the integration of [its three parts] to gain knowledge of, critique, and take action in the world. . . . [T]his integration is an ongoing, dynamic, and never-ending process. My starting point for this process is to be found in *A Marxist Archaeology* and I hope that other archaeologists will find my efforts helpful as they begin their journey." McGuire provides a broad overview of Marxist theory and Marxist archaeology, brief discussions of the contributions of many significant Marxist thinkers, and a valuable bibliography. *A Marxist Archaeology* (358 pp., illustrations, ISBN 0-9712427-4, \$32.50, paperback) was published in March 2002.

Method and Theory in Historical Archeology by Stanley South (University of South Carolina at Columbia, with a New Introduction by the author, has also been reissued. This influential book in historical archaeology revolutionized the way Americanist scholars viewed historical archaeology and was a high point of the impact of the New Archaeology and processual studies on historical archaeology. *Method and Theory in Historical Archeology* (386 pp., illustrations, Foundations of Archaeology series, ISBN 0-9712427-3, \$34.50, paperback) was published in January 2002.

Percheron Press accepts checks or money orders in U.S.

funds only. Postage and handling costs vary, but New York State residents should add 7.25% sales tax to the entire order, including postage and handling; Canadian residents need to add 7% GST. Include your telephone and fax numbers and e-mail address with your order. Orders may be sent to Eliot Werner Publications, Inc., P. O. Box 268, Clinton Corners, New York; telephone 845/266-4241, Fax 845/266-3317; e-mail ewerner@earthlink.net

Systematics in Prehistory by Robert Dunnell will also be available again, reprinted by The Blackburn Press. This is an essential book for anyone who wishes to understand the principles of classification and how they apply to archaeology. *Systematics in Prehistory* "almost single-handedly influenced how today's scholars of evolutionary archaeology approach the archaeological record." For more information, check the press's website at <http://www.blackburnpress.com/sysinpreh.html> or contact The Blackburn Press, P. O. Box 287, Caldwell, NJ 07006, telephone 973/228-7077, Fax 973/228-7276, e-mail AHerbert@BlackburnPress.com, or visit the general website at <http://www.BlackburnPress.com>

Collaboration or Assistance Sought

Clay Pipe Stems and DNA: Julie Schablitsky will be chairing a session at the 14-19 January 2003 Society for Historical Archaeology annual meeting in Providence, RI that concerns forensic applications in archaeology. The session will be covering topics such as DNA analysis of human remains as well as DNA analysis of inanimate objects including pipe stems and syringes. The discussant will be Doug Scott with papers contributed by Doug Owsley (Smithsonian Institution physical anthropologist), Raymond Grimsby (forensic scientist), and Schablitsky who will be discussing how to identify prospective artifacts for DNA testing, how to gather samples, and interpret DNA results. In early May April 2002 Julie was seeking two or three additional contributors who would present their research results using the mass spec or projects involving DNA recovery from human remains. Papers related to other aspects of forensic applications and archaeology are also welcome. Contact Julie at julschab@teleport.com for additional information.

History of Soil Science: The International Union of Soil Sciences (IUSS) and the Soil Science Society of America (SSSA) are collaborating to publish a book on the history of soil science. The editorial committee invites interested historians (and others) to contribute to the volume tentatively entitled *Roots of Civilization; Soils and Society*. The volume will be directed to an audience primarily from disciplines other than soil science and to a public increasingly concerned about global soil degradation. This book will contribute to the small but growing literature concerning the origins of the prevailing concepts in soil science and how these concepts developed within their broader social contexts. The soil science societies have recognized a need for understanding how people in other times and in different parts of the globe have understood soils. There is a section devoted to archaeology. The tentative chapter outline for the volume (January 2002) is: I. *Introduction*: The

discipline of soil science, concepts of soil, overview of soil science in society, soil science as a global science, soil basics. II. *Soil Awareness in History of Civilizations: Attitudes to Soil and Land Use*. Attitudes to soil and land use in different civilization (Greek and Latin, China, South Asia), ethnopedology and linguistics, ethical and moral-religious issues. III. *Landscapes and Soils*: Soil geography and human activities, changes in landscape, human influences on landscapes, soil conservation, stewardship, sustainability and soil health, conservation ethics, soil in land use decisions, using soils knowledge for policy decisions. IV. *Soil as Body of Nature*: Genesis, descriptions and classification, development of seminal ideas in pedology by people who furthered its understanding and acceptance; early harbingers of bio-pedo concepts, the contribution of V.V. Dokuchaev, the Hilgard-Whitney controversy, concepts and bases of soil classification, and colonial surveys. The chapter will also consider soil properties and processes, the development of the seminal ideas in each of these branches, the people who furthered our understanding, the societal context, applications to soil management. (hydrology, physical sciences, soil mechanics, and engineering; chemistry and surfaces, including mineralogy; biology, including micromorphology, soil in an ecological context, diversity, soil functions, in ecosystems, soil as a habitat, cross discipline contributions, archaeology, and paleopedology. V. *Uses and Users: Soil Improvements*: from gathering to horticulture to agriculture, soils and environmental issues, some informative examples (such as soils and water quality), modification of soils for human use, reclamation, and restoration (with informative examples). VI. *Communication of Soil Knowledge*: education — teaching different audiences, professional communication, history of journals, conferences, specialized workshops, soil science archives; quest for professional legitimacy and authority; soil science contributions to global scientific and environmental initiatives. Interested parties should contact Lloyd Ackert, The Johns Hopkins University, Department of the History of Science, Medicine and Technology, e-mail lloydack@bellatlantic.net

Effigy Pottery Study: John H. House (Arkansas Archeological Survey, University of Arkansas at Pine Bluff Mail Slot 4814 UAPB, Pine Bluff, AR 71601; telephone 870/535-4509; e-mail jhhouse603@yahoo.com) is conducting a study of prehistoric Native American effigy pottery from the Lower Mississippi Valley. Mississippian culture effigy pottery, dating 1200-1600 CE, includes anthropomorphic or zoomorphic modeled representation. In some cases, the entire vessel may be in the form of an effigy. In other cases, sculptural elements are appended to the vessel form. He hopes eventually to characterize the artistic systems (or styles) in terms of rules for using which elements for which representational purposes and in what relationship to other elements. The initial goal of this study is to describe and compare the individual art works in terms of the techniques (e.g., modeling, applique, incision, excision, punctation) used to create their visual elements. In the case of modeling, subtle disjunctures in contour between major elements of the effigy suggest assembly of the finished work from components that were previously formed separately.

He asks if there is a standard language in either art history or archaeology for describing and comparing modeled representations? In addition, he wonders if there are formal analyses of pottery or other objects (ancient or modern) in modeled media that include representational elements? Examples of the Mississippian effigy vessels are found at <http://www.uark.edu/campus-resources/archinfo/effigyvessels.html>

Professional Meetings Held

The *Medieval Pottery Research Group* (MPRG) annual conference was held 11-13 May 2001 in Edinburgh City Arts Centre and had the theme "Scottish Medieval Ceramics Studies." Additional information is available on the MPRG website at <http://www.medievalpottery.org.uk/conf2001.htm> There was a plenary lecture by George Haggarty, on how archaeological and documentary research has highlighted the importance of Edinburgh, Leith and the Lothians in the development of the Scottish industrial ceramic industry. The conference presentations included: "Historic Scotland and the Study of Scottish Medieval Ceramics?" by Olwyn Owen; "Scottish Fabrics and Production Centres" by Derek Hall; "An Introduction to the Scottish Redware Project" by George Haggarty; "The Scottish Redware Project, Phase One Results" by Simon Chenery; "Shell-tempered Wares in Scotland" by Alan Vince and Lynn Blackmore; "An Introduction to the Scottish White Gritty Project" by George Haggarty; "The Results of the Scottish White Gritty Pilot Study" by Simon Chenery; "The White Gritty Project, the Archaeological Background" by Bob Will; "The White Gritty Project, the Chemical Analysis" by Richard Jones; and "Medieval Hebridean Pottery, Current Research" by Ewan Campbell. On Sunday there was a viewing by English and Continental ceramic experts of the pottery assemblages recovered from recent archaeological excavations in Leith, Edinburgh and other Scottish sites. This was followed by a round-table discussion of the material, in the hope of setting it into its European trade context and economic significance.

The sixth annual *Workshop: Archäologie und Computer* was held 5-6 November 2001 in Vienna, Austria. Advancements in computer technology over the last years have lead many archeologists to change from simple computer users to full-blown developers of custom-made applications. Austrian archeology lacked collaboration and cooperation with the computer industry. Therefore an attempt was made to create a platform for the exchange of developments of standardized applications, for problem solving, and for the promotion of a deeper cooperation. With this goal in mind, the "Workshop: Archäologie und Computer," was developed in 1996 through the mutual cooperation of the "Forschungsgesellschaft Wiener Stadtarchäologie" and the Municipal Department 14. Since then there have been annual sessions held in Vienna in late fall. In its initial years, it has attracted in addition to archeologists, specialists from other fields of study, computer specialists and representatives from community organizations and the private industry from various European countries. The lectures have been published in workshop volumes of the same name. Beginning with the third workshop in 1998 the presentations

are also published as a CD-ROM (PDF and Powerpoint). The workshop subject matter involves such topics as CAD, CAD based Excavation Recording Systems, GIS, database construction, predictive modeling, stratigraphic assessments, chronological topics, and (occasionally) ceramics. The contents of the workshop volumes (mostly in German) are posted on the workshop's website beginning with the second volume (1 November 1997, 8 presentations). The other volumes include: Workshop 3, 18-19 November 1998 (14 presentations); Workshop 4, 11-12 November 1999 (14 presentation); Workshop 5, 9-10 November 2000 (8 presentations); Workshop 6, 5-6 November 2001 (28 presentations with 16 in English). Of note to the readers of this column are the contributions prepared by Kristina Adler-Wölfl, Martin Oenz, Katerina Schindler, Martin Kampel, and Robert Sablatnig (Vienna) entitled "Computer Aided Classification of Ceramics - Achievements and Problems"; Juan A. Barcelo, Oriol Vicente, Oscar de Castro (Barcelona) "Towards a 3D Representation of Archaeological Layers"; and Peter Stadler (Vienna) "High Precision Dating with 14C/Wiggle-Matching by Use of External Information (Year-rings, Relative Chronology by Seriation or Stratigraphy)." Also of interest is a presentation by Christine Finn, and Sekkam Ismail (Oxford) "The Valley of Lost Data: Excavating Hard Drives and Floppy Discs."

Abstracts of the 2001 presentations are available on the workshop's Internet site at <http://www.archaeologie-wien.at/workshop/index.html> Additional information about purchasing any of the workshop proceedings and about the plans and registration forms for the forthcoming seventh workshop (scheduled 21-22 November 2002 in the City Hall of Vienna, Austria) is also posted on the Internet. Questions may be directed to Wolfgang Börner, Magistrat der Stadt Wien, Geschäftsgruppe Kultur - Stadtarchäologie, Friedrich-Schmidt-Platz 5/1 1080 Wien (telephone 0043/(0)1/4000 81176, e-mail bor@gku.magwien.gv.at)

The *Society for American Archaeology* held its 67th annual meeting in Denver, Colorado, 20-24 March 2002 with 3,164 in attendance. There were 125 contributions involving ceramics among the 1,900 papers and posters presented. Overall tabulations indicated that a majority ceramic papers were devoted to topics from the American Southwest and Mesoamerica: American Southwest = 40; Mesoamerica 36 (including 15 from Central Mexico, 12 from the Maya region, and 4 from the Gulf Coast); Western South America = 14 (Peru 9, Ecuador 4, and Colombia 1); Eastern United States = 11 (Northeast 5, Southeast 3, Midwest 3); Asia = 8 (one each from Central Asia, India, Israel, Jordan, the Negev, Syria, Southeast Asia, and Turkey); Oceania = 6 (Fiji 2, Micronesia 1, the Philippines 2, and Yap 1); and Africa = 3 (Egypt, Ethiopia, and Nigeria). In addition there were one presentation each concerning ceramics from Europe (Germany), the Caribbean (French West Indies), the American West (California), and the New World; plus three unclassified (characterization, production, and theory).

The numbers of contributions indicate a significant decline in comparison to the numbers of presentations concerning ceramics in 1999, 2000, and 2001 (145, 141, and 171

respectively); the 125 matches the number given in 1998. There was a dramatic increase in the numbers of presentations concerning the North American Southwest and a major decline in the Mesoamerican contributions from 66 in 2001 to 36 in 2002 (for comparative data, see the *SAS Bulletin* 24(3-4):18, 2001). AMS, INAA and petrographic studies were reported in 15 papers but there was also an entire symposium devoted to Laser Ablation ICP-MS.

Among the notable sessions were a forum entitled "The Archaeology of Workshops," organized by Cathy Costin and Katharine Spellman, and moderated by the former. Among the ten panelists were several that considered ceramic materials: Barbara Stark, Philip Arnold, Frances Hayashida, and Barbara Mills. A General Session on "Maya Lithic and Ceramics" included pottery papers by Christopher Gunn (Puuc Slate Ware); Linda Howie-Langs, Peter Day, and Elizabeth Graham (production and consumption at Lamanai, Belize); Sandra Lopez Varela, Patricia McAnany, and Kimberly Berry (kilns and tools of Late Classic K'axob potters); and Marne Ausec (Naco Valley ceramic stamps). Another General Session, "Ceramic Studies in the Southwest," was chaired by Henry Wallace and included eight papers: Henry Wallace, David Abbott, and Alexa Smith (Middle Gila Buff Ware); David Abbott and David Purcell (pottery from El Caliche); Steven James and Michael Foster (dogs and iconography among the Hohokam); Taft Blackhorse, Andrea Carpenter, William Kroenke, and Clint Swink (quartz sand and igneous rock tempers in Chuska Valley ceramics); Gregory Seymour and Audrey Rager (Pyramid Gray, a Lower Colorado Buff Ware); Tiffany Clark and Darrell Creel (Chupadero Black-on-White); Jonathan Van Hoose and Kari Schleher (San Marcos Pueblo undecorated); and Selma Morley ("Variation in Frequencies between Bowl Size Classes"). Judith Habicht-Mauche and Suzanne Eckert organized a symposium entitled "The Social Life of Pots: Glaze Wares and Cultural Transformation in the Late Prehistoric Southwest," chaired by Habicht-Mauche, which had 11 papers and two discussants (Linda Cordell and Miriam Stark). Habicht-Mauche; Eckert; Toni Laumbach; William Graves; Kit Nelson and Habicht-Mauche; Cynthia Herhahn; Patricia Capone; Nbarbara Mills, Thomas Fenn, and Maren Hopkins; Scott Van Keuren; Deborah Huntley; and Greg Schachner gave papers. A session organized by Robert Speakman, "Laser Ablation ICP-MS — A New Frontier in Characterization Studies," had 13 papers and Douglas Kennett served as discussant. Hector Neff, Mike Glascock, Rob Tykot, and Speakman were among the authors of papers concerning obsidian, glass beads, and jade. Other presentations examined copper minerals, pigments, and tephra. The papers on ceramics were given by Benjamin Diebold, Speakman, Neff, and Glascock (Late Neolithic pottery from the Amuq Plain, Turkey); Kevin Vaughn and Neff (Nazca polychrome paints); James Cogswell, David Abbott, Elizabeth Miksa, Neff, and Glascock (Hohokam Schist-tempered pottery); Candace Sall and Speakman (Salado polychrome paints); Daniel Larson, Sachiko Sakai, Neff, and Andrew Mason (Virgin Branch Anasazi ceramics); and Speakman (Mesa Verde and Mancos B/w paint).

The 2002 "Excellence in Archaeological Analysis" award which was established in 2001 "subsumes within it three themes

presented on a cyclical basis: 1) an unrestricted or general category, 2) lithic analysis, and 3) ceramic analysis." George Cowgill (Arizona State University) was the 2001 awardee, while Robin Torrence (Australian Museum, Sydney) is the 2001 recipient. The award reads (in part): "Robin Torrence's contributions to the field of archaeology, especially lithic studies, have been remarkable. From Greek quarries she showed how lithic data can be employed to answer questions of craft specialization, social complexity, and centralized control of resources. Her research involving the sourcing, through PIXE/PIGME and density analysis of obsidian from Oceania led to new insights concerning the production and distribution of the resource...." This award also cited her contributions to theories on hunter-gatherers, lithic use-wear analysis, phytolith and starch residue studies, field research, and pedagogy. (Sidebar: Robin took all of her undergraduate archaeological courses at Bryn Mawr with Charles Kolb, with whom she also conducted her first field work in archaeology [in northwestern Pennsylvania], she later studied with Lewis Binford at New Mexico and Lord Renfrew at Cambridge.)

Please note that the 2003 "Excellence in Archaeological Analysis" award will go to an archaeologist in ceramic studies. Previous winners (1994-2000, before the award procedure was modified) include Patricia Crown, William Longacre, Frederick Matson, Prudence Rice, Dean Arnold, Ronald Bishop, James Hill, Robert Rands, Warren DeBoer, and Owen Rye. Information for nominating researchers may be found on the SAA's website at <http://www.saa.org/Aboutsaa/awards/nominations.html>

"Does Archaeological Science Have a Future in the USA?" was the title of one of the SAA noon roundtables held on 22 March, hosted by Ronald Bishop and David Killick. SAS members Rob Tykot and Charlie Kolb attended this session. Of particular concern were the reduced number of faculty and students in archaeological science and the potential closing of laboratories for fiscal reasons. The possibility of forming regional consortia where faculty in science and archaeometry might become visiting professor at several institutions and students could undertake research projects during the summer at the professor's home institution laboratory facilities. While obsidian hydration and characterization studies and ceramic provenance and residue research seem to fare well, dendrochronology and archaeomagnetic dating appear to be in difficulty.

The *Study Group for Roman Pottery* (SGRP) Annual Conference was held at King Alfred's University College, Winchester, UK, 5-7 April 2002. The SGRP was formed in 1971 to further the study of Roman pottery in Britain. Some papers presented at the conference have a local emphasis, others a more national or international orientation. For details about the group, visit the Internet site at <http://www.SGRP.org> or e-mail Kayt Brown at kayt@kaytb.fsnet.co.uk On 6 April there was a tour of Roman Winchester with Graham Scobie, followed by pottery viewing at Hyde Historic Resource Centre with a talk by Helen Rees. The program included presentations by Andy Russell, "Southampton"; Malcolm Lyne, "Roman Pottery on the Isle of Wight"; Kayt Brown and Nick Cooke, "Perryoaks"; David Hopkins, "Recent Surveys of the New

Forest Pottery Kilns”; Roberta Tomber, “Indo-Roman Trade”; Malcolm Lyne, “Claudian Pottery from Richborough”; A. Fawcett, “Early Hadham Wares”; Scott Martin, “New Evidence for Derbyshire Wares”; Annette Hancocks, “Rutland/Leicestershire”; Graham Scobie, “Topography and Development of Roman Winchester”; Ed Biddulph, “How to Suck Eggs”; Colin Wallace, “Approaching Our Predecessors: Ways of Looking at the History of Romano-British Pottery Studies”; D. Williams, “The Eruption of Vesuvius and its Implications for Roman Pottery Studies”; Paul Booth, “title unannounced”; Fiona Seeley, “The Roman Pottery Industry at Moorgate: An Update”; and James Gerrard, “The Fourth Century: A Dark Age?”

The 33rd *International Symposium on Archaeometry* was held 22-26 April 2002 in Amsterdam, The Netherlands. The symposium sessions were listed in the previous *SAS Bulletin* but the paper titles were not available at that time, but have been posted recently at <http://www.geo.vu.nl/archaeometry/details/index-en.html>. Papers on ceramics and other significant and related materials are listed below. One of the seven sessions was devoted to ceramics and was entitled “Technology and Provenance of Ceramics (including ceramic pigments) and Glass: Post-Depositional Alterations of Ceramics,” convened by Michael Tite and Gerwulf Schneider. The papers included “Chemical Alteration of Ceramic Made from Calcareous and Non-Calcareous Clays” by G. Schneider; “The Role of Chemical, Micromorphological and Archaeological Evidence in Determining Site-Specific Production Provenance of Archaeological Ceramics, and Post-Depositional Alteration of their Composition” by D. Adan-Bayewitz, M. Wieder, F. Asaro, and R. D. Giauque; “Roman Amphorae from the Julia Felix Shipwreck: Alteration and Provenance” by J. Buxeda i Garrigós, M.A. Cau Ontiveros, M. Madrid Fernández, and A. Toniolo; “Direct Evidence of Alteration in Pottery During Burial by Neutron Activation Analyses of Surface Samples” by A. Schwedt, H. Mommsen, and N. Zacharias; and “Presentation of future venues” by M. Tite and others. Other contributions included “Mineralogy of Ceramics from Tell Beydar (NE-Syria)” by T. Broekmans, A. Adriaens, and E. Pantos; “Pottery Traditions in Early Bronze Age West Crete: Investigating Technology and Style at Nopigeia, Kissamou” by E. Nodarou, P. M. Day, and V. Kilikoglou; “Provenancing Bronze Age Pottery from Ialysos, Rhodes, by Means of Neutron Activation Analysis” by N. Zacharias, E. Karanzali, V. Kilikoglou, T. Marketou, H. Mommsen, and A. Schwedt; “Continuity and Change in Pottery Making from Mesolithic to Islamic Periods in Region of 4th Nile’s Cataract (Sudan)” by M. Daszkiewicz and E. Kolosowska; and “Trade and Industry at Qal’ at Halab: Petrographic Analysis of Medieval Pottery from the Recent Excavations at the Aleppo Citadel, Syria” by R. Mason. The “General Session” had presentations on “Technological Aspects of Black Gloss Production from Etruria” by E. Gliozzo, E. Pantos, and I. Memmi Turbanti;

“Production of Lustre Decoration: a Comparison Between Ancient and Modern Traditional Techniques” by J. Molera, T. Pradell, J. Pérez-Arantegui, and M. Vendrell; and “Italian Renaissance Lustre Pottery: Nanostructured Composition and

Physical Properties” by I. Borgia, B. Brunetti, F. Cariati, A. Giulivi, I. Mariani, M. Mellini, and A. Sgamellotti.

Papers devoted to glass included “The Provenance of Antimony and its Implications for the Study of Early Glass” by A. Shortland; “Sources of Raw Materials for 9th Millennium BC Glasses from Hasanlu, Iran” by C. P. Stapleton, S. E. Swanson, and A. M. Ghazi; “Primary Glass Production and Distribution in the Mid-First Millennium AD” by I. C. Freestone, Y. Gorin-Rosen, M. J. Hughes, K. Leslie, and S. Wolf; “Archaeometric Evidence of A Possible Relationship Between Carolingian Lead-Glass Smoothers and the Glassy Slag Produced by the Lead-Silver Mines of Melle (France)” by B. Gratuze, K. H. Wedepohl, J. Bayley, F. Tereyge, L. J. Lancelot, and D. Foy; “Glass by Design? Raw Materials, Recipes and Compositional Data” by C. M. Jackson and J. W. Smedley; and “Oxygen Isotopes in Ancient Glass by Laser Fluorination — Results and Potential” by K. A. Leslie, I. C. Freestone, and D. Lowry.

Several papers concerned pigment analyses: “The Production Technology of Egyptian Blue” by G. D. Hatton, M. S. Tite, and A. J. Shortland; and “Roman Frescoes: Characterization and Provenance of Pigments and Plasters” by Damiani, E. Gliozzo, M. de Vos, I. Turbanti Memmi, and J. Spangenberg. The latter has significance for Mesoamerican painted fresco ware ceramics from Classic Teotihuacan, Mexico. Another paper, “Central Asian Crucibles for Crucible Steel Production: Characteristics and Context (Including Evidence for Local Traditions, Recycling, and as Stone-Paste Forerunner)” by A. Feuerbach was included in a session on metals but is important for ceramics as well as metallurgy. Poster Session II: “Technology and Provenance of Ceramics (including ceramic pigments) and Glass, Biomaterials, Conservation Science and Miscellaneous” was held on 25-26 April (Thursday and Friday). SAS members were represented at the 33rd symposium, witness “Comprehensive Source Analysis and the Socioeconomic Role of Obsidian Trade in Northern Italy: New Data from the Middle Neolithic Site of Gaione” by R. H. Tykot, A. J. Ammerman, M. B. Brea, and M. D. Glascock.

The *Society for Pennsylvania Archaeology* held its 73rd annual meeting in Greensburg, Pennsylvania, 26-28 April 2002. Among the 22 presentations was a paper by Donna George (Carnegie Museum of Natural History), “A Practical Exploration of the Effects of Fiber Sources on the Appearance of Cordmarking on Ceramic Vessels,” in which she pointed out that the length of different plant and animal fibers determines the spinning method, angle and amount of twist, tightness, and diameters of the cord or thread. Spindles, spinning techniques, and technologies, vary by fiber source such as dogbane, nettle, milkweed, dog fur, and bird down and can be recognized on fired ceramics. William C. Johnson and Andrew J. Meyers (Michael Baker Jr. Inc., and Appalachian Archaeological Consultants) gave a related paper, “Population Continuity and Dispersal: Twist Analysis and the Late Woodland in the Glaciated Allegheny Plateau of Northwestern Pennsylvania.”

The *Ceramic Petrology Group* meeting held at the British

Museum, London on 9 May 2002, featured eight presentations: Carl Knappert (University of Cambridge) "A Near Eastern Bronze Age Conundrum: Red Lustrous Wheelmade Ware — Made where?"; Lucy Harrad (University of Oxford) "Gabbroic Ceramics in Cornwall"; Lara Maritan (University of Padova, Italy) "Petrographic Analysis of Neolithic Pottery on Orkney — New Findings"; Louise Ford, R. A. E. Coningham, A. M. Pollard, and B. Stern (University of Bradford) "A Geochemical Investigation of Rouletted Ware and other Related South Asian Fine Wares"; Ruth Siddal (University College London) "Whose Lime is it Anyway? Mortars and Concretes in Antiquity"; Helen Hatcher (University of Reading) "Chemical and Petrological Examination of White Slip Bowls from Bronze Age Cyprus"; Ian Whitbread (University of Leicester) "Middle Bronze Age Ceramic Production and Exchange in Greece"; and Elaine Morris (University of Southampton) "Afro-Caribbean Pottery." For additional information, contact Louise Joyner, CPG Chairman, ljoyner@thebritishmuseum.ac.uk or Andrew Middleton, CPG Secretary, amiddleton@british-museum.ac.uk, Department of Scientific Research, British Museum, London WC1B 3DG. Abstracts of the papers will be published in the June 2002 issue of *The Old Potter's Almanack* 10(2), the joint newsletter of the Prehistoric Ceramics Research Group and the Ceramic Petrology Group (British Museum).

The Medieval Pottery Research Group (MPRG) held its annual conference on 18 May 2002 at Mortimer Wheeler House, 46 Eagle Wharf Road, London. The conference theme was "Dynamics of an Industry: Late Medieval/Post-medieval Slipwares of Britain." The presentations included "Symbolism of the Inscriptions on Metropolitan Slipware" by Wally Davey, "Donyatt Slipwares" by Richard Coleman-Smith, "The London Archaeological Archive Research Centre" a talk/tour by John Shepherd, "Buckley Slipwares" by Christine Longworth, "Essex Slipwares" by Helen Walker, "Recent Discoveries in London" by Lucy Whittingham, and a viewing/handling session including "Have a go at Trailing Slipware" by Andrew Watts. Additional information is available from Nigel Jeffries at njeffries@musuemoflondon.org.uk and on the Internet at <http://groups.yahoo.com/group/arch-pot/files/MPRG%20May%202002%20meeting.doc>

Past Societies and Materials: Archaeological Information and Written Sources was the title of a one-day conference held on 20 May 2002 at the Institute of Archaeology, University College London. The conference was co-organized by the Research Group on Complex Societies and the Research Group on Material Culture and Technology. Among the dozen presentations involving lithics, ceramics, metals, and archives were four of interest to ceramics: "Alternative Archives in Clay: Reconciling Palatial Documents with the Excavated Ceramic Record from Late Bronze Age Mycenaean Pylos, in Greece" by Todd Whitelaw (Institute of Archaeology, UCL); "Memphis as a Centre of Production in Ptolemaic and Roman Egypt" [terracotta and faience] by Sally-Ann Ashton (Petrie Museum, London); "Vitruvius's Recipe for the Manufacture of the Pigment 'Egyptian Blue'" by Frédéric Davidovits (Université de Caen, France); and "Pliny and the Manufacture

of Raw Glass" by Ian C. Freestone (Department of Scientific Research, British Museum). Further information is available from Marcos Martín-Torres, Research Group on Complex Societies, Institute of Archaeology, University College London, 31-34 Gordon Square, London WC1H 0PY, e-mail: m.martinon-torres@ucl.ac.uk The abstracts are posted on <http://www.ucl.ac.uk/~tcnmma/>

Art 2002: 7th International Conference on Non-destructive Testing and Microanalysis for the Diagnostics and Conservation of the Cultural and Environmental Heritage was held 2-6 June 2002 at Congress Centre Etzenveld, Antwerp, Belgium. The conference considered all analytical and testing techniques that are non-destructive or micro-analytical in nature, and their applications to cultural and environmental heritage items. Both diagnostics and conservation aspects were treated. There were five plenary lectures plus two or three parallel sessions with 160 total papers, and a round table on education and testing. No sessions were devoted exclusively to ceramics but Session III concerned archaeological glass, "Modern and Ancient Glass in the Polluted Atmosphere...", chaired by Roger A. Lefèvre, University of Paris 12), and Session XIII included an invited lecture, "Endangered Glass Objects Identified by Ion Beam Analysis" by Christian Neelmeijer (Forschungszentrum Rossendorf eV, Dresden, Germany). Also of interest is a paper by Roberto Cesario (University of Sassari, Sassari, Italy) entitled "Portable Equipment for Energy-dispersive X-ray Fluorescence Analysis." Additional information may be found at the conference website. *Published brochures and the website list an incorrect URL (sch substituted for chem). The correct Internet site is* <http://sch-www.uia.ac.be/art2002/>

Archaeology Ceramic Study: Strawberry Banke Museum in Portsmouth, NH hosted an "Archaeology Ceramic Study" from July 22-August 4, 2002. This two-week study session was intended for collectors, students, archaeologists, curators and individuals interested in ceramics and emphasized the 18th and 19th century, with special focus on stoneware. This study session included lectures, field trips, workshops and working with the Strawberry Banke archaeological collection. Contact the Strawberry Banke Museum reception office for further information at 603/433-1106.

Forthcoming Professional Meetings

The 2002 Pecos Conference is scheduled for 8-11 August 2002 at Pecos National Historical Park, New Mexico, and has a conference theme "The Road to Ruins: 75 Years of Southwestern Archaeology." Paper and poster titles were not available in late-June; see <http://www.swanet.org/projects.html> for an update. The Thursday evening reception at the Museum of Indian Arts and Culture features an exhibition "Touched by Fire, the Life of Maria Martinez."

The International Council on Museums Conservation Committee (ICOM-CC) 13th triennial meeting is scheduled for Rio de Janeiro, Brazil, 22-28 September 2002. A list of papers to be given is available at <http://www.icom-cc.org/rio2002/>

[ppprs.html#top](#) Among the four papers to be given in Session 18: Glass, Ceramics, and Enamels Working Group, are “The Restoration of Olmec Ceramics from San Lorenzo Tenochtitlan, Veracruz Mexico: Theory and Practice” by Lara Silva, Muñoz, and Cyphers; and “A New Methodology for Scientific Studies in Conservation and Restoration of Prehispanic Ceramics” (in Spanish) by Christiani Llach, Muñoz, and Tirado. For more information on the meeting and registration visit <http://www.icom-cc.org/rio2002/>

Transport Amphorae and Trade in the Eastern Mediterranean is a conference organized by the Danish Institute at Athens, Herefondos 14, GR 105 58, Athens Greece, scheduled for 26-29 September 2002. The conference is made possible through the support of The Carlsberg Foundation, Grosserer E. Schous Legat, The Danish National Museum, The Danish Institute in Athens, L'Ecole française d'Athènes and The American School of Classical Studies in Athens. For additional information, contact Jonas Eiring at the Institute jonaseiring@hotmail.com Jonas has provided a preliminary list of the scheduled presentations. The papers to be given cluster into seven categories: 1) General Themes on Chronology and Trade (11 papers): Gérald Finkielsztejn, “Establishing the Rhodian Amphora Stamps Chronology: The Next Steps”; Vincent Gabrielsen, “Transport Amphorae as a Source for Economic History in Antiquity”; John W. Hayes (Title to be announced); Mark Lawall, “Archaeology and Amphora Chronologies”; John Lund, “Oil on the Waters?”; Jerome Poblome, “The Interdependence of Roman Amphora and Tableware Exchange Patterns in the Eastern Mediterranean. A Quantextual Approach”; Jean-Francois Salles “Le commerce lointain: avec ou sans amphores”; Malcolm M. B. Wallace “Amphora Capacities: New Evidence”; Ian Whitbread (Title to be announced); Elizabeth Lyding Will “Amphoras and Trade”; and David Williams (Title to be announced). 2) Greece (10 papers): Nathan Badoud “Un dauphin aulète sur les timbres amphoriques de Thasos”; Francine Blondé and Yvon Garlan, “Les représentations de vases sur les timbres amphoriques thasiens”; Stella Demestica and Elias Spondylis, “Amphorae from Five Shipwrecks in the Aegean (Roman to Byzantine Period)”; Viktoria Georgopoulou, “Koan Amphorae”; Gerhild Hübner, “Transport Amphorae of the Colonia Achaica Patensis (A Preliminary Report)”; Carolyn G. Koehler and Philippa M. Wallace Matheson, “Knidian Amphorae”; Marek Palaczyk, “Amphora Stamps from Eretria”; Kaare Lund Rasmussen “Rhodian Amphora Handles from Lindos in the Light of New Scientific Analysis”; Kathleen Warner Slane “Amphorae of the 4th to 7th Centuries AD”; and Natalia Vogeikoff, “New Evidence for Wine Production in Crete in the Hellenistic Period.” 3) Asia Minor (6 papers): Catharine Abadie-Reynal, “A Preliminary Presentation of Amphoras found at Zeugma”; Tamas Bezeczky, “Early Roman Food Import in Ephesus: Amphorae from the Tetragonos Agora”; Sabine Ladstätter, “Amphorae in the Destruction Layers of Hanghaus 1 and 2/Ephesus”; Vinnie Nørskov, “Amphorae in Contexts: Finds from Three Wells at the Maussolleion in Halikarnassos”; Nicholas Rauh, “Pirated Knock-Offs: Cilician Imitations of International Transport Amphoras”; and Gonca Senol et al.,

“Hellenistic Amphora Production in Knidos and the Rhodian Praia. 4) The Black Sea (8 papers): Niculae Conovici, “The Problems of the Chronology of the Sinopean Stamps”; Gerhard Jöhrens, “Stamped Amphora Handles and the Founding of Tanais”; Andrei Opait, “Aegean Amphorae from the Province of Scythia”; Karolina Paczynska, “Forlimpopoli Amphorae Imports at Tanais (2nd to 3rd centuries AD)”; Euidoksia Papuci-Wladyka, “Greek Amphorae from the Polish-Ukrainian Excavations at Koshary, Odessa District (4th-3rd cent. BC)”; Vivien Swan, “Dichin Supply Base (Bulgaria) and the Provisioning of the Lower Danube in the 5th and 6th Centuries AD”; Dominique Kassab Tezgör and Hasan Erten, “Etude typologique et analyses de laboratoire pour le tracé des exportations des amphores sinopéennes à l'époque romaine en mer Noire et en Méditerranée”; and Sergei Vnukov, Sergei: “All-Roman Amphorae Types Produced in Black Sea Region.” 5) Cyprus (4 papers): Craig Barker, “The Use of Rhodian Amphorae in a Hellenistic Funerary Custom in Nea Paphos, Cyprus”; Winter Kristina Jacobsen, “Regional Distribution of Transport Amphorae in Cyprus in the Hellenistic and Roman Periods”; Sandrine Maquié, “Early Roman Amphorae from Kition”; and Henryk Meyza, “New ‘Kouriaka’ — Stamps from the Acropolis of Kourion.” 6) Egypt and the Levant (6 papers): Donald Ariel, “The Stamped Amphora Handle Finds from Bet Shean: Evidence for the Urban Development of the City in the Hellenistic Period”; Catherine Aubert, “Les amphores rhodiennes de Beyrouth”; Pascale Ballet, “Some Aspects of the Amphorae Production in the Egyptian Chôra”; Grzegorz Majcherek, “Long-distance Trade of Roman Alexandria: The Amphora Evidence”; Dalit Regev, “Phoenician Amphorae”; and Roberta Tomber, “Recent Amphora Finds from the Red Sea Coast of Egypt.” 7) Western Mediterranean (4 papers): Rita Aurigemma and E. Quiri, “Imports of Oriental Amphorae in the Adriatic Sea between First and Middle Empire”; Severine Lemaître, “Les processus de commercialisation des produits orientaux vers l'Ouest à l'époque impériale: l'apport des études amphoriques”; Daniele Malfitana, “History and Archaeology between Eastern and Western Mediterranean in the Hellenistic and Roman Period: Goods, Markets and People from Rhodes, Delos and the Aegean to Sicily: The Evidence of Pottery”; and Jane Timby, “Amphorae from Recent Excavations by Reading University at Pompeii.”

Prehistoric Pottery: People, Pattern, and Purpose is the title of a joint conference announced by the Prehistoric Ceramics Research Group <http://www.prehistoric-ceramics.org.uk> and the Ceramic Petrology Group <http://www.ceramicpetrology.uklinux.net/> to be held 11-13 October 2002. Hosted by the University of Bradford's Department of Archaeological Sciences (located in Phoenix Building), this conference draws together archaeologists and scientists from throughout Europe to discuss their current researches in and approaches to the field of prehistoric ceramics. The conference prospectus states that “Pottery has always been important to the prehistorian. To the early antiquaries it was a collectible, a curiosity. To prehistorians of the early C20th, it was a dating tool and an indication of culture and cultural contacts. Pottery is still important to prehistorians for those reasons but it can

also tell us more about prehistoric technology, economy and the potters themselves. Increasingly, scientific analysis is telling us more and more about the practical functions of ceramics while theory contributes to our understanding of the wider roles within contemporary society.” The conference costs are: £10 students/unwaged and £15 waged (includes wine reception on Friday 11th).

Additional information may be obtained from Alex Gibson, Hon. Chairman, Prehistoric Ceramics Research Group, Department of Archaeological Sciences, University of Bradford, Bradford BD7 1DP, e-mail a.m.gibson1@bradford.ac.uk See also the CPRG website <http://www.prehistoric-ceramics.org.uk> As of late June 2002, the following speakers have been confirmed: Alex Gibson, Alison Sheridan, Ann MacSween, Anna Mukherjee, Anna Brindley, Annette Hancocks, Carl Heron, Carol Allen, Clive Bond, Cynthia Lampert, David Knight and Patrick Marsden, Michael Meyer, Ole Stilborg, Dragos Gheorghiu, Gilles Durrenmath, J.D. Hill, I. F. Cobas Fernandez, Criado Boado, M. P. Prieto Martinez, Jacqui Wood, Louise Brown, Louise Ford, Melanie Johnson, Oliver Craig, Jacqui Mulville, Mike Parker Pearson, Vicky Parsons and Helen Smith, Rémi Martineau, Sandy Budden, Stuart Needham, and Trevor Cowie.

Land and Sea: Common Ground and Contemporary Issues for Australasian Archaeology is the title of the first combined conference between the three major Australasian archaeology associations AIMA (Australasian Institute for Maritime Archaeology), ASHA (Australasian Society for Historic Archaeology) and AAA (Australian Archaeological Association) which will be held in Townsville from 17-22 November 2002. The meeting will provide participants with the first ‘formal’ opportunity to discuss common themes and issues in the world of Australasian archaeology and to consider future directions. It will also be a rare opportunity to become familiar with new and innovative research from the diverse fields of interest of the Australasian archaeological community. The Conference will be jointly hosted by the Maritime Museum of Townsville and the School of Archaeology, Anthropology and Sociology at James Cook University. The venue is the Southbank Hotel and Convention Centre in Palmer Street, South Townsville. The general format of the conference will be: Archaeology and Heritage Practices; Public Perceptions, Promotion, and Interpretation; Management and Sharing of Data and Resources; and Teaching and Training. Late morning and afternoons: “Contemporary Issues”- three concurrent sessions, each ‘sponsored’ by one of the societies, but open to any speaker or participant. The sessions will reflect a wide range of innovative research programs and current regional studies from all of the sub-disciplines of Australasian archaeology. Papers are invited for all of these sessions, with preference given to presentations that cross boundaries between the sub-disciplines and/or explore interesting directions for the future of Australasian archaeology. Papers presented in the afternoon sessions that address also the main themes of the conference are especially welcome. Consideration will also be given to proposals for other sessions. Seventeen theme topics are suggested, among these New Directions and Developments;

Technologies and Techniques in the Service of Archaeology; Theory and Practice; Colonization, Contact and Cultural Transference; Frameworks for Historic and Maritime Artefact Analysis; and Archaeology of Urban Areas. A 200-word abstract should reach the conference organizers by Friday 21 June: Land and Sea Conference Organisers, School of Anthropology, Archaeology and Sociology, James Cook University, Townsville, 4810 Queensland, Australia. There is a temporary conference website at <http://www.australianarchaeologicalassociation.com.au/conferences/2002/firstannouncement.html> E-mails may be addressed to Martin.Gibbs@jcu.edu.au; telephone: + (61) 7 4781-4759, FAX: + (61) 7 4781-4045.

Ceramic Ecology XVI: Current Research on Ceramics — 2002, the 16th annual ceramic ecology symposium will be held at the annual meeting of the American Anthropological Association in New Orleans, Louisiana, 20-24 November 2002. The session is co-organized by Charles C. Kolb (National Endowment for the Humanities) and Louana M. Lackey (Maryland Institute College of Art) and chaired by Kolb. The symposium abstract and abstracts of the ten papers will appear in the next issue of the *SAS Bulletin*.

UK Archaeological Sciences 2003 (UKAS 2003) is scheduled for St. Anne’s College, University of Oxford, from 2-5 April 2003. The deadline for the submission of abstracts is 31 December 2002. Further details are available on the Internet site maintained by the Research Laboratory for Archaeology and the History of Art, 6 Keble Road, Oxford, OX1 3OJ, UK, <http://users.ox.ac.uk/~ukas2003> Four major sessions are planned: 1) Geoarchaeology (Convenors: Chris Doherty and Robert Hedges), which will include papers on site formation processes and taphonomy as well as provenance studies with a definite geological input. 2) Human and animal lifeways (Convenors: Robert Hedges and Jessica Pearson), to include papers, based primarily on chemical and molecular analytical evidence, relating to human and animal movement, subsistence and life history. 3) Technological studies (Convenors: Andrew Shortland and Mike Tite), to include papers that consider technology within an archaeological context (e.g., how were new technologies discovered and why were they adopted, what was the mode of production, why a particular technological choice and why technological change?). And 4) Future directions in archaeological science (Convenors: Alistair Pike and Marc Walton), which will include papers on new developments in any field of archaeological science (e.g., chronology, geophysical prospection, bioarchaeology, artefact studies, mathematical modelling). In addition there will be two sessions devoted to the application of archaeological science to the following three specific archaeological sites: Catalhöyük (Convenor: Jessica Pearson), Amarna (Convenor: Andrew Shortland), and Old Scatness (Convenor: Cathy Batt).

The 4th *Symposium on Archaeometry*, sponsored by the Hellenic Society of Archaeometry (HSA), will take place in Athens, Greece, in May 2003 (specific dates not yet determined). This symposium will provide a forum for the

discussion and presentation of recent research and trends of archaeometry pertaining to the prehistory and classical antiquity as well as Byzantine and recent times. The main symposium topics will be: 1) Science-based Dating, 2) Technology and Provenance of Archaeological Materials (ceramics, metals, glass, stone, mortars, pigments, etc.), 3) Remote Sensing, 4) Geoarchaeology, 5) Biomaterials, 6) Organic Residues, 7) Research in Conservation Science, and 8) Mathematical Methods. The symposium will also include a specific theme session that focuses on the Aegean and the presentation of reviews and developments in archaeometric studies over the past 20 years. Yorgos Facorellis, President of the HAS (Laboratory of Archaeometry, Institute of Materials Science, N.C.S.R. "Demokritos", 153 10 Aghia Paraskevi Attikis, Greece; telephone ++30010-6503958, FAX ++30010-6519430, e-mail yfacorellis@ims.demokritos.gr) is the primary contact and reports that the official languages of the symposia will be Greek and English. Abstracts (400-500 words in *Archaeometry* format) are due by 20 November 2002. For additional details and updates, please see <http://www.archaeometry.gr/symposium2003/4thSymposiumHSAEn.htm>

WAC-5 the fifth World Archaeological Congress (WAC) is the first full WAC to be held in North America and is scheduled from 21-26 June 2003 in Washington, DC. The WAC is the only representative worldwide body of practicing archaeologists; it supports open dialog with all people genuinely concerned about the past. WAC holds an international congress every four years to promote the exchange of the results of archaeological research; professional training and public education for disadvantaged nations, groups and communities; the empowerment and betterment of Indigenous groups and First Nations peoples; and the conservation of archaeological sites. Previous congresses have been held in England, Venezuela, India, and South Africa. WAC is a non-governmental, not-for-profit organization within the United States. The Patron for WAC-5 is Harriet Mayor Fulbright, and the President of WAC-5 is Richard West (Director of the Smithsonian Institution's National Museum of the American Indian). WAC-5 will be held at The Catholic University of America, centrally located in northeast Washington, DC and easily accessible to the rest of the city and surroundings by Metrorail. The WAC-5 website with materials in 20 languages, may be accessed at <http://www.ehl.flinnders.edu.au/wac5/indexhomepage.html>, and provides information on membership, registration, the program (themes and sessions) and additional useful information. The WAC-5 themes will be finalized around three areas: 1) programmatic/ policy issues concerning corrections and future directions in the practice of global archaeology; 2) practical/ technical knowledge to increase self-reliance and responsibility in protecting sites, artifacts and intellectual property; and 3) theoretical frontiers and research results with relevance across tribal and national boundaries. As of early May 2002, 14 session abstracts not related to these themes were posted. There are no sessions on archaeometry, archaeological sciences, material culture (including ceramics, metallurgy, archaeobotany, lithics, obsidian, etc.) — perhaps an opportunity for SAS members to think about formulating

sessions.

7th EMAC 2003: 7th European Meeting on "Ancient Ceramics" is being organized by the Cultural Heritage and Sciences Group (Grupo Património Cultural e Ciências) of the Instituto Tecnológico e Nuclear (ITN) and will be held 27-31 October 2003, in Lisbon, Portugal. The Organizing Committee includes M. I. Prudêncio, M. I. Dias, and J. C. Waerenborgh (all ITN); the Scientific Committee is being formed and will soon be announced. The goal of the EMAC'03 is to disseminate and exchange the latest knowledge about the study of ancient ceramics. Geologists, archaeologists, chemists, anthropologists, physicists, engineers, and other earth scientists; students intending to explore the multifaceted relationship between these sciences are invited to participate. Oral presentations and posters will provide the basis for discussions centering on four conference themes: 1) The characterization of material culture, technologies and organization of pottery production, resource exploitation strategies, and spatial interaction through time; 2) dating ceramics; 3) the significance of ceramics to metallurgy; and anthropological approaches for a better understanding of the "social rules" of ancient potters. The deadline for the submission of abstracts is 15 April 2003 with acceptance notification by 15 June 2003. The length of an abstract is limited to 200 (min.) - 400 (max.) words including formulae (pictures are not accepted). Abstracts can be submitted as hard copy sent to the secretariat, or via e-mail to emac03lisbon@itn.pt as an attached file in MS Word or pdf format. Additional information is available at <http://itn1.itn.pt/EMAC03/>

Internet Sites

Three related Internet sites span significant periods of pottery production in the United Kingdom: <http://www.SGRP.org>; <http://www.medievalpottery.org.uk/>; and <http://potweb.ashmol.ox.ac.uk/>

The Study Group for Roman Pottery (SGRP) publishes the *Journal of Roman Pottery Studies* (published and distributed by Oxbow Books, Vols. 1-8, 1986-1999) as well as an informative Newsletter (29 issues through January 2001). SGRP also published *Guidelines for the Archiving of Roman Pottery* (1994) edited by Margaret J. Darling, which is available on the Internet at <http://www.SGRP.org/Guidelines/Contents.htm> (16 pp. or 150kb).

The Medieval Pottery Research Group (MPRG) publisher of *Medieval Ceramics* (Vol. 1-23, 1977-1998/9), also publishes *A Guide to the Classification of Medieval Ceramic Forms*, 2 vols. (Occasional Paper 1, 1998) documenting 500 vessel forms, and *Minimum Standards for the Processing, Recording, and Publication of Post-Roman Ceramics* (Occasional Paper 2, 2001). MPRG has a 12,400-item bibliography on a website maintained at the University of Liverpool. The database has 12 types of search capabilities; see <http://ntserver002.liv.ac.uk/mprg/>

PotWeb: Ceramics Online @ the Ashmolean Museum emphasizes the collections at the Ashmolean Museum of Art and Archaeology, University of Oxford. The goal of the project is to create an online catalog of the entire ceramic collection. The collections include four major categories with subcategories

(those currently online are underlined): Early Europe and Near East (comprising Prehistoric Europe, Ancient Egypt and Nubia, Ancient Greece, Cypriot, and Near East), Classical to Medieval (Greek, Etruscan, Roman, Romano-British, Anglo-Saxon, Byzantine, and Medieval Europe 13-16th centuries), Europe from 1500 (English delftware, English porcelain, French and German porcelain, Italian maiolica, Spanish lustreware, Staffordshire salt glaze, Studio pottery, English stoneware, Rhenish stoneware, and English earthenware), and Oriental and Islamic (Chinese, Indian and South-east Asia, Islamic, and Japanese). The URL is <http://www.ashmol.ox.ac.uk/PotWeb/>

Islamic Ceramics: A “Web-Based Teaching Course on Islamic Ceramics” was conceived originally as an educational resource for undergraduate and graduate students of Islamic art and archaeology at the Oriental Institute, University of Oxford. Funded by the Barakat Trust in 1997, the program has two components: Technology (further divided into step-by-step fabrication techniques and a discussion of the methods of study: scientific, archaeological, and ethnological) and the History of Islamic Ceramics (10 parts). In addition, there are online lectures, a glossary, a comprehensive bibliography (incorporating all 12 parts), and suggestions for study (a “Study Guide”). The illustrations are drawn almost exclusively from the Department of Eastern Art at the Ashmolean. Some of the digitized materials are taken from “Making Lustre Pottery with Alan Caiger-Smith.” The program is in Microsoft Front Page 2.0 for use with Internet Explorer 5.0, and includes materials in HTML and JavaScript, Adobe Photoshop 4.0, and Paint Shop Pro 4. The course is available at <http://islamicceramics.ashmol.ox.ac.uk/> The website also carries an advertisement for the 80-minute video “Making Lustre Pottery with Alan Caiger-Smith” (1999, £12.95 plus £3.00 postage and handling in the UK). Contact the Ashmolean Museum’s Publications Department for details about purchasing this video; e-mail publications@ashmus.ox.ac.uk American readers should inquire if the video format is US-VHS compatible.

Art and Life in Africa: Christopher Roy, Associate Dean of International Programs and Professor of the History of Art at the University of Iowa, has announced the addition of streaming videos of potters making containers in Burkina Faso to the “Art and Life in Africa” website at <http://www.uiowa.edu/%7Eintl/ACAD/rft/pottery.html> To use the streaming video viewers will need to download Quicktime (versions are available for Mac and Windows machines) from the Apple Web site at <http://www.apple.com/quicktime/download/>

Earth Transformed: Barbara Thompson’s “Earth Transformed” website has added 700 images of potters using five different fabrication techniques to make pottery in May 2001 and February 2002 at http://bailiwick.lib.uiowa.edu/african-ceramic-arts/archives/field%20photo%20archive/photo_db_toc.html

Kiln Excavation, Preservation, and Use

The University of North Carolina-Greensboro and Old

Salem announced the 10th annual historic archaeology field school at Old Salem, in Winston-Salem, North Carolina, 28 May 28 through 21 June 2002. The site has an 18th century domestic component and a 19th century commercial component. Heinrich Schaffner, a potter, arrived in Salem from Neuwied, Germany in November 1833 and although John Holland was producing pottery in Salem, Schaffner was given permission in 1834 to establish a second pottery. Schaffner located his venture on lot 81, using the “Builders House” as part of his operation. Under the direction of Schaffner, and later Daniel Krause, this pottery was in production until after the 20th century began. The Builders House, the kiln, and additional outbuildings stood until 1907. The eastern edge of the Schaffner-Krause pottery kiln was discovered in 2000 and excavations revealed part of the original pottery kiln and a rich collection of artifacts relating to 19th century pottery operations. Setting tiles and trivets used in the firing process were among some of the artifacts found in the kiln. Moravian tobacco pipes, a popular product of this pottery throughout its existence, were also unearthed. This ruin, as well as other features in the pottery complex, was further explored during the 2002 field season which focused on locating the 18th century Builders House as well as continued excavation of the 19th century Schaffner-Krause Pottery. For additional information contact Mo Hartley, Director of Archaeology at Old Salem, 336/721-7384 or visit the website at <http://www.uncg.edu/cex/oldsalem.html>

In February 2002, the Board of Directors of the Archeological Society of Virginia (ASV) voted to acquire, preserve, and take responsibility for a relatively intact 19th century pottery kiln located in the Shenandoah Valley. The Morris Kiln Pottery Site (44RM430), located on the property of Eastern Mennonite University, has for 15 years been studied and preserved by the Massanutten Chapter of the ASV, and the university has offered to transfer the parcel on which the kiln is located to the ASV at no charge. Additional information is available in the ASV *Newsletter* 164:1-2 (March 2002) and from Carole Nash at nashcl@jmu.edu

“Afghan Recovery Fires Up Demand for Brick-making” is the title of a Los Angeles Times article dated 1 March 2002 which may be accessed at <http://www.myaafghan.com/news2.asp?id=563608754&search=3/1/2002> The article describes the need in Kabul alone for 500,000 to 600,000 bricks per day for rebuilding the city and the response by more than 400 small, family-owned brickyards located in Dai Khudaida district south of the city. Some information about the manufacturing process, firing, workers’ salaries, and sales are included.

Thermoluminescence in the Popular and Scientific Literature: A Discovery Channel News report, “Physicists Outwit Antique Forgers” by Jennifer Vargas, featured physicist Doreen Stoneham (Oxford Authentication Ltd, Oxfordshire, England) who discussed thermoluminescence (TL) as a means of determining the true age of objects made of pottery, terracotta, porcelain, stoneware, and bronze, which often contain a clay core. See <http://dsc.discovery.com/news/briefs/20020401/>

[antique_print.html](#) for the full report. The process is described in greater detail and with examples from Sotheby's and Christie's in the current issue of *Physics World*, the journal for the Institute of Physics, in an article by Valerie Jamieson entitled "Antique Dealers Turn to Physics." <http://physicsweb.org/article/world/15/4/3>

Exhibitions

Italian Renaissance Ceramics: The Howard I. and Janet H. Stein Collection was exhibited from 8 December 2001 through 28 April 2002 at the Philadelphia Museum of Art in Galleries 250, 251, 254, and 255. Howard Stein and his late wife assembled this corpus of tin-glazed earthenware (maiolica), regarded as the finest private collection of these ceramics in the United States, and have donated the collection to the museum. The exhibit of 70 pieces of maiolica includes items from the Stein collection as well as the museum's permanent collection. The Stein Collection contains pieces from many of the important centers of production, particularly the towns of Deruta and Urbino, and includes some of the best-known ceramic painters: Xanto, Maestro Giorgio Andreoli, and members of the Fontana family. The collection is rich in wares made for pharmacies, and other objects for daily use, such as the charming pieces presented to women recovering from childbirth. In addition, the collection contains especially fine "istoriato" pieces decorated with complex compositions that illustrate stories from mythology and history. Previously, pieces in the collection belonged to such famous admirers of maiolica as Baron Adolphe de Rothschild of Paris and Robert Lehman of New York. Dean Walker, The Henry P. McIlhenny Senior Curator of European Decorative Arts and Sculpture, curated the exhibition. The museum's website documents the collections and has links to the conservator's Introduction, Sources, Techniques, Authenticity, Treatment, and Resources. A related book is also available: *Italian Renaissance Ceramics from the Howard I. and Janet H. Stein Collection and the Philadelphia Museum of Art*, by Wendy M. Watson (Philadelphia: Philadelphia Museum of Art, 2001, 208 pp., ISBN 0-87633-154-1, cloth \$45.00; ISBN 0-87633-155-x, paper, \$28.00). The Internet site provides further information on the collection and the catalog:

<http://www.philamuseum.org/exhibitions/exhibits/stein-ceramics.shtml>

The *National Gallery of Art* website depicts and documents 25 specimens of Italian Renaissance maiolica ceramics from their permanent collection. The URL is: <http://www.nga.gov/collection/gallery/itacer/itacer-main1.html>

The Potter's Brush: The Kenzan Style in Japanese Ceramics is the title of an exhibition at the Freer Gallery of Art, Smithsonian Institution, Washington, DC through 27 October 2002. Ceramics decorated by Ogata Kenzan (1663-1743) and other Kenzan-style wares selected from the Charles Lang Freer collection are on display. Ogata Kenzan, regarded as Japan's first and foremost potter, created bold and original ceramics that were esteemed during his lifetime, reproduced by acknowledged masters, and imitated over subsequent

centuries. A catalog authored by Richard L. Wilson, *The Potter's Brush: The Kenzan Style in Japanese Ceramics* (Washington, DC: Smithsonian Institution Press, in association with Merrill Publishers [UK], 2001, softcover only) is available Smithsonian Member Price: \$31.46, non-member Price: \$34.95. Further information on the catalog and exhibition are on the Internet at <http://www.asia.si.edu/exhibitions.kenzan.htm>. Selected chapters may be downloaded in Acrobat PDF form. These include Chapter 1: Learn about the Kenzan collection amassed by Charles Lang Freer, beginning in 1894, and culminating in the acquisition of nearly 100 Kenzan-style ceramics within a period of seventeen years; Chapter 2: Discover two signature examples of Kenzan design from the catalogue proper — "The Scholar Recluse," based on ideas represented in Chinese literature and painting, and "Native Poetics," the use of images from classical literature that have been incorporated into Kenzan's ceramics; and Chapter 4: Take a closer look at the sophistication of the Kenzan workshop, as Wilson discusses the authorship and authenticity of Kenzan ware.

Maritime Archaeology Malaysia is the title of an exhibition at the Muzim Negara in Kuala Lumpur, Malaysia that ends in November 2002. The exhibition emphasizes nautical archaeological artifacts recovered from Malaysian waters, emphasizing objects recovered by Sten Sjostrand (Nanhai Marine Archaeology, Sds. Bhd). Specimens are from the *Turiang* (ca. 1370 CE), *Nanyang* (1380), *Longquan* (1400), *Royal Nanhai* (1460), *Xuande* (1540), *Singtai* (1550), and *Desaru* (1830). In addition, selected artifacts from *Diana*, *Flor de la Mar*, *Nassau*, and *Risdam* shipwrecks are included. *Maritime Archaeology and Shipwreck Ceramics in Malaysia* is the title of the exhibition's catalog authored by Roxanna Brown (UCLA) and Sten Sjostrand (Kuala Lumpur: Muzium Negara and Department of Museums and Antiquities, Kuala Lumpur, 2001). Information about the exhibition and the catalog, and more than 75 pages of text and numerous color illustrations are found on the Internet site at <http://www.maritimeasia.ws>. There is some technological information on clays, slips, reduction firing, glazes, etc.

Other News

Geophagy Revisited: The importance of clay is reiterated in an article by Paul Simons entitled "Amazonian Parrots Shed Light on Our Craving for Clay" (*The Guardian* [Manchester, UK], April 2, 2002). The full article is accessible at <http://www.guardian.co.uk/Print/0,3858,4386950,000.html>. Parrots living in the vicinity of the Manu River in the Peruvian Amazon rainforest consume clay as a part of their normal diet. James Gilardi, formerly at the University of California, Davis, and now director of the World Parrot Trust, a UK-based global charity, discovered that the consumption of clay by the parrots was crucial to their success, and it also shed light on how our diet evolved. Biologists theorized that the clay added grit to the diet, or that it assisted in digestion, or that was rich in minerals, but these hypotheses have been eliminated. The secret lay in the parrot's diet of poisonous fruits, which have poisonous seeds containing compounds such as strychnine, quinine and tannic

acids, that would kill an adult human. However, the birds survive by eating the clay soon after eating the fruit — it is the ultimate detox treatment. Once one parrot discovered clay eating, they all indulged. “Most parrots in this area eat soil, and many parrots elsewhere - we’re hearing of more all the time,” says Gilardi. “The power to neutralize plant poisons means the parrots can eat foods no other animal would touch.” In many parts of the world, pregnant women in their first trimester have a craving for clay, probably to diminish morning sickness. White china clay (kaolin) was used in kaolin-and-morphine medicine for diarrhea and indigestion. Kaolin has now been replaced with more powerful types of clay, remarkably similar to those eaten by the Amazonian parrots.

Pothunting: “The Case of the Purloined Pots” in *Smithsonian Magazine* (September 2001) relates the issue of the looting of archaeological resources (pothunting) on federal land in the American Southwest. Some relevant issues are also reviewed at http://www.smithsonianmag.si.edu/smithsonian/issues01/sep01/pot_hunters.html



Book Reviews

Mark Hall, Associate Editor

The Science and Archaeology of Materials: An Investigation of Inorganic Material. Julian Henderson, Routledge: London and New York, 2000. xvii + 334 pp., 162 figures, 5 tables, index. Price: \$32.99 (softcover). ISBN: 0-415-19934-4.

Reviewed by W.E. (Bill) Boyd, School of Environmental Science & Management, Southern Cross University, Lismore, New South Wales 2480, Australia

First appearances are always something to go by, and while they may mislead, my first and most positive impressions of this book reflect well the strength and high quality of the book. This is a book that overviews the large and growing scientific and archaeological study of materials, especially those created by people in the course of their normal social and cultural lives. It represents a major contribution to the literature on the archaeological and geoarchaeological study of, especially, glass, metals and ceramics, providing both the depth and breadth of knowledge and information that will be invaluable for students and researchers alike.

What does the book set out to do? Unlike many materials or geoarchaeological texts, this book explicitly sets out to span the divide between the materials science approach of examining ceramics, glass, metals and, to a lesser extent, stone (of which more later) and the archaeological examination of said materials. It does this, not by taking a middle ground, but by merging both

approaches, embedding technology firmly in an environment of social and cultural behavior. The major chapters focus on a single material, starting out with a thorough overview of the science and technological aspects of the material, and following through with a series of case studies, illustrating the archaeological aspects of the relevant materials studies. It is, after all, the material culture that tells us so much about past people, societies and behavior, and provides us with our primary evidence. The book, therefore, focuses on behavior: what do people do with materials to make them useful. This is where a slight divide in the book does emerge. The major chapters and, in my opinion, the greatest strength of the book, lie with the focus on human behavior: how do people procure the raw materials to make, and then go on to make, glass, ceramics and metal? How do they modify these industrial products and control the technological aspects of working with them? Such questions cannot simply be answered in technical terms, dealing with, for example, only the chemistry or physicals of the materials. They must beg questions of the social relationships and structures that allow societies to develop the relevant technologies, place them into the political and cultural contexts of materials use, and promote and support an artisan or industrial class that becomes the experts at providing material culture of value and significance. Michael Tite, in his Preface to this book makes reference to the *chaîne opératoire* of artifacts, usefully summarizing Henderson’s overall approach to the subject. Tite describes *chaîne opératoire* as the “life cycle of the surviving artifacts from the procurement and processing of the raw materials, through the fabrication and decoration of the artifacts, to their distribution, use, reuse and discard” (p. xv), and in doing so, neatly summarizes the scope of this book.

The major chapters are wrapped in a couple of invaluable, succinct and short statements of context. Chapter 1, Introduction, puts the case for an overview that intimately links technical, social and cultural considerations of materials. Chapter 2, Techniques of scientific analysis, introduces the destructive and non-destructive techniques of analysis, clearly explaining them at a level that does not trivialize them, yet is not too complex for the non-specialist user. This chapter will become, I suspect, a standard on reading lists. And at the close of the book, chapter 7, Archaeological science and the way forward, restates the bid for an integrated and more careful use of the analysis of materials within archaeology. It calls for a holistic approach that “can produce by far the most powerful results with the greatest contribution to mainstream archaeology” (p.326). This is not an outrageous call, and on the evidence of this book, most certainly achievable.

As for the major chapters, each commences with a description of the procurements and processing of raw materials, and a study of the fabrication of artifacts from the raw materials. This is the technical content commonly encountered in materials-based texts. From here, however, Henderson provides case studies from across the world (although with a northern hemisphere emphasis) that marries the technical and social aspects of materials use. What drives and influences technological innovations? What choices and changes are evident in the archaeological record and how can we explain

these? What patterns of artifact and materials distribution can we perceive, and what do these tell about the trade, exchange and use of these materials in different societies in the past? What are the links between our answers to such questions and our understanding of past economic, cultural, social and political process and change? The case studies are broad and detailed. Glass studies start with the origins of glass and its early production in the Mediterranean and Mesopotamia, progressing to examinations of glass production and use in Rome, Medieval and 17th C Europe and Islamic Syria. The ceramics case studies encompass Iron Age and Medieval Britain and the Ottoman Empire, while the metals case studies roam more widely, from Iron Age Britain, through Bronze Age Europe and Jordan, to Bronze Age Thailand. Each case study is, as indeed is every section in his book, richly illustrated with illustration, ranging from conventional scientific and archaeological graphics (graphs, thin sections, line drawings of artifacts, distribution maps, for example), photographic records of contemporary materials processing and artifact production, to line drawing and woodcuts illustrating reproductions of the social and environmental aspects of materials use. In addition to these and the very full text, the supporting reference lists will provide every student and researcher in this field with a ready-made bibliography: the scope is mind-boggling, and clearly reflects Henderson's long engagement with this field.

So what could have been done better?! Every researcher will, of course, have their own favorite case study and topic, and I am certain many will read this text and suggest "why not ... case study"? Also, geographically, there are notable gaps. My response to this would be that if more had been inserted, the book would have propelled itself beyond the budget of most practitioners: it is a text that ought to be on all archaeologists and materials scientist's shelves. Furthermore, the way in which Henderson has engaged his chosen case studies should, by example, stimulate others to do so in a similar manner. The major area of disappointment, however, is with the chapter on stone, upon which, you may note, I have made little comment. This chapter stands out as being notably shorter and less encompassing; its 20 or so pages contrast unfavorably with the 80-100 or so of each of the other three chapters. Is this the chapter the publishers suggested be in the book? If so, their judgement could be questioned: a text such as this focussing solely on metals, ceramics and glass would have been perfect. The focus on the processing of raw materials and their substantial reworking into other materials provides an adequate commonality. Having said this, the stone chapter is there. It could, however, have been developed further. The Mediterranean obsidian case study begs questions about the state-of-the-art obsidian research being done in Melanesia at present. Secondly, what about the worldwide use of minerals and rock in ornament and jewelry making. There is a critical work coming out of S.E. Asia that merges the technical aspects of jewelry making and the critical analysis of past social and cultural process that would sit very comfortably in this book. Jewelry and other ornaments are, after all fundamentally cultural artifacts, and provide one of the most unambiguous links between materials use and cultural behavior; they are also key indicators in studies of trade and exchange, inter-

regional cultural influence, and social stauts. Finally, if we are going to discuss stone in its broadest sense, what about sediments, the most fundamental component of all archaeological sites? There is a large geoarchaeological literature on sediment sourcing, site sedimentation, human use and modification of sediments, etc. I do not want to detract from the bulk of this book, but do feel the stone chapter does fall short of the absolutely magnificent contribution the rest of the book makes. Nevertheless, the stone chapter does offer some interesting insights into this material source and its use in past societies, and certainly students will find it a helpful introduction.

To conclude, if I squint and ignore the stone chapter, I have nothing but praise for the book. It has arrived in a timely fashion on my desk, as I write up some work on burnt clays and their analysis. It will, I anticipate, rapidly leave my office destined for my research students' bookshelves. As I have commented before in book reviews, a measure of a book's worth is in the rapidity it travels from supervisor to student; it scores top marks in this regard. A final word? In the Australian vernacular, she's a beaut!!

The Roman Textile Industry and its Influence: A Birthday Tribute to John Peter Wild. Penelope Walton Rogers, Lise Bender Jorgensen and Antoinette Rast-Eicher, Oxbow Books: Oxford, 2001. xiii + 200 pp., 133 figures, 8 tables, 7 plates, indes. Price: \$35.00 (cloth). ISBN: 0-84217-046-5.

Reviewed by Christina B. Rieth, New York State Museum, Division of Research and Collections, Albany, New York 12230

John Peter Wild is widely recognized for his work on Roman textiles in Europe, Asia, and the Near East. The chapters in this book were prepared by colleagues and friends of John Peter Wild and represent a fitting tribute to his lifelong research on the use and manufacture of Roman textiles. The book is well written and includes color and black and white images. Many of these images not been previously published and provide the reader with new insights into the use and construction of Roman textiles.

The book contains twenty-one chapters and a final bibliography of Wild's work. The author's derive from varied backgrounds and the chapter contents are drawn from studies conducted in different geographic regions. The authors consider a wide range of textiles including everyday clothing, tapestry-woven fabrics, and bags. Several chapters also discuss the role that the Roman textile industry had on later fashion and textile industries. While most analyses derive from examinations of the textiles themselves, written records, carvings, and other material objects are used to reconstruct the perishable industries of these groups. Archeometric techniques, including x-ray fluorescence analysis, scanning electron microscopy, and radiocarbon dating are also employed to reconstruct the manufacture of these ancient artifacts.

The chapters in this book are arranged around four specific culture areas. The first five chapters discuss textiles recovered from sites in Roman Egypt and Nubia. Chapter 1, written by Lisa Bender Jorgensen and Ulla Mannering, describes textiles recovered from Mons Claudianus in Egypt's eastern desert and highlights problems associated with the recovery and analysis of large quantities of textiles in field settings. In Chapter 2, Dominique Cardin discusses remnants of a small damask twill tunic recovered from the Roman fortress of Didymoi. Francis Pritchard and Chris Verhecken-Lammens describe 3rd and 4th century burial tunics recovered from the site of Panopolis. Analysis of the tunic along with the specialized loom used in its construction are discussed. Nettie Adams and Elisabeth Crowfoot provide descriptions of utilitarian items, including a soldier's flax shoulder bag, and remnants of a curtain fabric/spread recovered from an army dump at Qasr Ibum near Lake Nassar. In chapter 5, Jane Batcheller employs microscopic analysis to study the types of fibers used in the construction of textiles from the Roman town of Karanis, in the Fayum of Egypt. The results of this work provide information about the processing and selection of woven fibers.

Chapters 6-8 provide a summary of the use of perishables from sites in Asia and the Near East. Sophie Desrasiers, Corinne Debaine-Francfort and Abdurassul Idris discuss resist dyed cotton textiles recovered from the third century occupation at Karadong, Xinjiang. Kazuko Sakamoto compares the effigy faced tapestries recovered from the at-Tar Caves in Iraq in Chapter 7. A discussion of the technique of three dimensional tapestry manufacture and the importance of such emblems in Persian Culture are also provided. Gillian Vogelsang-Eastwood discusses items of clothing worn by women in Sasanian Iran between A.D. 224 and 651. Contemporary silver plates and vessel iconography are examined and suggest that women living in western Iran had a unique clothing tradition that distinguished them from other regional groups.

Chapters 9-16 discuss the influence that the Roman textile industry had on the manufacture of textiles (primarily clothing items) recovered from sites in Europe and the British Isles. Chapter 9 is authored by Carmen Giner and describes a series of gold textiles recovered from the city of Gadir (Cadiz) in the Mediterranean. XRF analysis of the gold encrusted on the textiles reveals information about the material's composition. Analysis of gold threads from burials in Munigua, Seville is also provided. Antoinette Rast-Eicher uses scanning-electron microscopy to analyze Roman textiles from Switzerland in Chapter 10. Analysis of these textiles shows that these artifacts were manufactured from hemp, wool, and linen. Although these materials could have been locally procured, the structure of the material suggests that the textiles may have been of non-local Roman manufacture. Elizabeth Wincott Heckett's description and initial dating of a woolen mantle and leather cloak from Roman Age deposits in Ireland are discussed in Chapter 11. This chapter provides information about the temporal use of these garments and their function in Roman Age Europe.

Thea Gabra-Sanders uses radiocarbon analysis to redate a hooded cape recovered from bog deposits in St. Andrew's Parish, Orkney. Comparisons with other hooded garments

suggests that similar clothing items may have been widely used by both the peasant and gentry classes during the 12th and 13th centuries. Textiles found in Przeworsk burials are described by Jerzy Maik in Chapter 13. Analysis of these textiles shows most fabrics were twill fabrics and were manufactured using similar weaving techniques. Comparisons of different types of fabrics from a single grave suggests the types of clothing worn by those buried in the graves. Johanna Banck-Burgess discusses the early textiles produced by the Alamanni of the upper Rhine Valley in Chapter 14.

In Chapter 15, Klaus Tidow and Penelope Walton Rogers reexamine textiles recovered from Bökener Moor and Vaaler Moor, Germany. The results of this work provide exciting conclusions about the construction and types of materials used in these artifacts. Heidemarie Farke discusses a kirtle-like garment recovered from the bog of Hogehehn in Germany in Chapter 16. Radiocarbon dating of the textile not only provides information about the temporal use of this artifact but also important insights into the use of specific costumes throughout the Iron and early Middle Ages.

Chapters 17-21 discuss the influence that the Roman textile industry had on the manufacture of clothing and other perishables from later sites in Europe. Daniël De Jonghe discusses the technology of weaving in Chapter 17. Through his comparison of the Roman horizontal loom and other known looms from sites in Europe, the author demonstrates how changes in the structure of looms influenced the types of textiles that could be produced by Roman and Byzantine weavers. Through her analysis of textiles from Greece, Anna Muthesius discusses the role of the lion as an important symbol of political power and authority in Chapter 18. In this chapter, Muthesius demonstrates how the power of textiles can be used to transmit information about the nature and extent of the Roman cultural influence. Penelope Walton Rogers uses historical and archaeological evidence to reconstruct the initial use and eventual reappearance of the two-beam loom in Roman and Medieval society in Chapter 19.

In Chapter 20, Naomi Tarrant discusses the ways in which Roman textiles influenced clothing styles of the late 18th and 19th centuries. Elizabeth Peacock discusses the contributions that experimental archaeology has made to our understanding of Roman textiles in Chapter 21. In one of the most interesting chapters in the book, Peacock summarizes the role that archaeometric and experimental techniques have played in our understanding of the manufacture of ancient textiles. She simultaneously encourages the reader to use these techniques to understand the function, construction, and preservation of these artifacts in the future. The final chapter pays tribute to John Peter Wild's contributions to the study of Roman textiles by summarizing his publications on the subject. This summary is not only informative but is also a fitting tribute to an outstanding career.

Although the focus of the book is on textiles, two recurring themes are interwoven throughout the book. The first theme relates to the range and extensive influence of the Roman textile industry. As all of the chapters in this book illustrate, the Roman textile industry was not only centered in southern Europe but extended its influence into the Near East, southern Asia, and

northern Europe. Within a temporal framework, the manufacturing techniques and stylistic designs utilized by Roman weavers continued to be used to varying degrees into the late 18th and early 19th centuries. The second theme relates to the important role that older museum collections and their reexamination using modern archaeometric techniques can play when understanding the past. The overwhelming majority of the textiles discussed in this book were recovered previously and do not represent materials collected through more recent excavations. Instead, most chapter authors have chosen to reexamine previously identified textiles to confirm and/or put forth new ideas about the manufacture of ancient textiles. This theme is most readily espoused in the chapters by Batcheller, Rast-Eicher, Gabra-Sanders, Alfaro Giner, and Peacock.

The editors of this book not only provide a fitting tribute to a leading scholar in the field of Roman textiles but also provide a balanced and easily readable set of case studies about the use and construction of ancient textiles. This book is a very useful text for both scholars and lay readers interested in the Roman textile industry.

Dyes in History and Archaeology 16/17: Papers Presented at the 16th Meeting, Lyons, 1997, and the 17th Meeting, Greenwich, 1998. Jo Kirby (editor), Archetype Publications Ltd: London, 2001. xviii + 222 pp., 27 chapters, index.

Reviewed by Shawn K. Collins, Department of Anthropology, University of Missouri-Columbia, Columbia, MO 65211 USA

“When the traditional dyeing vats and dyeing trade vanished, the memory of this ‘strange, exotic dye’ remained in the heads of the people, although more and more obscured by romantic ideas of the ‘good old days’ In order to look beyond these false, romantic notions, I want to give you a report on the indigo-dyeing trade, its chemistry and its implications for the workers.” Georg Stark, *Indigo and the 40 Robbers: Romantic Transfigurations of the Blue-Printer’s Trade in Modern Society*

“The ... dyeing of fibres, far from being the sole province of artisans and ecologists, should be placed in its proper dimension and we — chemists, botanists, historians — should restore to it its true value.” Naceur Ayed and Abir Alatrache, *Traditional Recipes for Natural Dyeing of Wool in the South of Tunisia*

Indigo, cochineal, orchil lichens, safflower, madder, pomegranate, woad, and shell. These are but a sample of the materials used in the past as dyes, and are some of the materials analyzed in *Dyes in History and Archaeology*. The volume is a collection of twenty-seven papers presented at the 1997 and 1998 annual conferences on Dyes in History and Archaeology that took place in Lyons and Greenwich, respectively. Natural vegetable- and animal-based dyes and early synthetic dyes

are analyzed, as are some of the materials that are dyed. The broad scope of the work presented at the conference should appeal to scholars from many disciplines including history, archaeology, anthropology, conservation/curation, biology, and chemistry.

Geographic areas covered in the volume include parts of Europe, Africa, the Mediterranean, and Papua New Guinea. Due to the constraints of space, although I reviewed each of the twenty-seven articles individually, I summarize here the essence of the volume as a whole. That being said, scholars interested in dyes, mordants, dyed materials, and historic dyeing methods in various parts of the Old World will do well to look specifically for areas of interest among the individual articles in this volume as well as in future volumes.

Although there are articles that are largely based on ethnographic research (e.g., Balfour-Paul’s “Dyeing with Indigo and Mud in Senegal and Mali” and Hill’s “Colorants used in the Material Culture of Papua New Guinea”), the majority of the articles are based on modern experiments and analyses with historical and archaeological applications. Many of the authors perform chemical analyses such as two-dimensional thin-layer chromatography (2D TLC), mass spectrometry, UV-visible spectrophotometry, and high-performance liquid chromatography (HPLC) to analyze the quality, colors, and chemical constituents of dyes. Authors have also performed historic research into the past use and standardization of dyestuffs, including examining the role of past treatises of dye quality that state which dyes are and are not acceptable for use in commerce. Each article is concise in its presentation and concludes clearly on what the chemical analyses indicate in the broader scheme of things.

The historical and archaeological implications come into play when the analyses are cast in the light of the most appropriate method for conserving dyed materials (e.g., Hahn’s “Influence of Fungicides and Insecticides on Colour Materials” and Daniels’ “Degradation of Artefacts caused by Iron-Containing Dyes”). Is the dye color-fast? Light-fast? Can the materials be placed on public display without risking them? The analyses also help archaeologists and historians to construct and understand the processes by which artisans in the past worked with the media to achieve the colors that we appreciate today.

One shortcoming of the volume is the limited number of color plates (nine total). Such rich subject matter as dyed silk or wool textiles and painted Medieval book bindings warrant a greater use of color illustrations. Furthermore, I would also like to see a contribution to future volumes by scholars working in the New World. The methods applied in this volume can effectively inform multiple disciplines throughout the world.

Ethnobiologists will be particularly gratified to see a volume of such eclectic research. While a reader would do well to have at least a rudimentary understanding of dyeing and its intricacies (such as the use of mordants for “fixing” colors to the dyed materials), it is not critical to have a refined comprehension. Although many of the articles are highly technical, non-specialists need not be intimidated because the analyses contribute to a broader understanding of dyes and their roles in history and archaeology. The editor notes (p. xi)

that “in the time that has elapsed since the appearance of *Dyes in History and Archaeology 15*, interest in natural and early synthetic dyestuffs, their use, history, and conservation, appears to have grown.” As technology becomes ever more advanced, and as collections from the world over become increasingly available, I anticipate that this volume and its descendants will contribute to an ever-increasing interest in the significance of dyes in history and archaeology.

Paleodemography: age distributions from skeletal samples. Edited by Robert D. Hoppa and James W. Vaupel, Cambridge University Press: New York, 2002. 275 pp. Price: \$80.00 (cloth). ISBN: 0-521-80063-3

Reviewed by Daniel J. Wescott, Department of Anthropology and Geography, University of Nebraska, Lincoln, NE 68588-0368

Do paleodemographic methods have the accuracy and reliability necessary to reconstruct the demographic structure of past populations? If so, which methods work the best? In the summers of 1999 and 2000, some of the top physical anthropologists, mathematical demographers, and statisticians doing work in paleodemography were brought together in Rostock, Germany to address these questions and others. One result of the Rostock workshop was the “unanimous acceptance of a theoretical approach – what became known amongst attendees as the ‘Rostock Manifesto’” (p. 2). The manifesto generally calls for the development of vigorously tested osteological age indicators, more appropriate reference samples, the use of Bayes’ theorem in statistical analyses, and validation of methods used to estimate the probability distribution of age at death for the target population.

Paleodemography is the inclusive result of the Rostock workshop, with its twelve chapters primarily addressing the assessment of adult age from osteological characters, mortality models, and approaches to age structure estimation from skeletal samples. In the first chapter, Hoppa and Vaupel layout the Rostock Manifesto and discuss the contribution of the remaining chapters to the protocol. Chapters 2 and 4 are primarily historical in nature. In Chapter 2, Hoppa provides a brief history on the use of demography in physical anthropology, while in Chapter 4, Kemkes-Grottenhaler presents an historical overview of osteological age indicator methods and some of the problems associated with them. In the third chapter, Usher discusses the need for skeletal collections with specimens of known age and sex. She also provides an eight-page table listing known-age osteological collections with details on number of specimens, age range, specimen origin, and collection location. This table alone is an excellent resource.

Methods for assessing age are discussed in Chapters 5 and 6. Boldsen et al. (Chapter 5) present a new method of age estimation based on morphological characteristics of the pubic symphysis, auricular surface, and cranial sutures using transition analysis. Their method allows researchers to calculate a probability density function for each skeleton, and therefore is extremely useful for small archaeological populations and

individual skeletons associated with medicolegal investigations. In addition, older individuals (50+ years) can be more reliably estimated using this method than with other approaches. I would highly recommend this chapter to all osteologists. In the sixth chapter, Wittwer-Backofen and Buba present an improved method for estimating age by tooth cementum annulation (TCA) and assess the reliability and accuracy of the method. Their new method reduces some of the time involved in TCA assessment, which allows it to be more easily used on larger samples. The preliminary validation study presented by Wittwer-Backofen and Buba also suggests that while TCA is a promising method for accurately estimating age at death, it still has many bugs that need to be worked out.

The remaining chapters deal with approaches to modeling mortality patterns and estimating age-at-death distributions. Wood et al. (Chapter 7) review various parametric models for reconstructing mortality patterns, and Paine and Boldsen address how mortality patterns can be used to investigate questions about disease, migration, and fertility. The estimation of age-at-death distribution is dealt with by Love and Müller (Chapter 9) using a semiparametric approach, by Holman and colleagues (Chapter 10) using a parametric logit method, and by Konigsberg and Herrmann (Chapter 11) using parametric probit regression. The final chapter by Herrmann and Konigsberg demonstrates the statistical methodology outlined in Chapter 11 by reconstructing the demographic parameters of the Indian Knoll site and comparing them to earlier attempts.

Scholars doing paleodemographic research will undoubtedly find this book an invaluable resource, but its relevance is not limited to paleodemographers. I also highly recommend it to forensic anthropologists and archaeologists. However, many of the chapters may be difficult to get through, especially for the statistically challenged, because of the cumbersome mathematical notation.

Paleodemography would also make an excellent text for an advanced demography course, although probably only as a supplementary text because of the limited scope (i.e., age-at-death) of the book. In addition, I think forensic anthropology and skeletal biology instructors will find this book a good source for graduate reading assignments. Many of the chapters may be beneficial in a skeletal biology course, and I personally think that all forensic anthropology students should read the chapters by Kemkes-Grottenhaler and Boldsen et al.

In sum, paleodemographers, skeletal biologists, forensic anthropologists, bioarchaeologists, as well as archaeologists will find *Paleodemography* an important resource. As a skeletal biologist, I will refer to *Paleodemography* frequently, and am glad to have a copy on my bookshelf. If you cannot afford your own copy, I would recommend you urge your library to purchase the book.

Among the New Books

Archaeomineralogy. By G.R. Rapp. Springer, Natural Science in Archaeology, 2002. 326 pp., 71 figs., 8 tabs. ISBN 3-540-42579-9. \$89.95 (cloth).

SOCIETY FOR ARCHAEOLOGICAL SCIENCES
Income and Expenditure Summary
January 1, 2001 to December 31, 2001

As of January 1, 2001:

Bank of America Checking balance	\$26,669.74
UCR Campus Credit Union balance	500.75
TOTAL ACCOUNT BALANCES	27,843.94

INCOME

Membership Income	28,834.84
Royalty, USF, UCR/C-14	12,539.26
Interest	10.32
TOTAL INCOME	41,384.32

EXPENDITURES

Advertising	0.00
Annual Meeting	105.87
Banking Costs	782.54
Accounting Fee	0.00
Member Dues, NSF	170.00
Bulletin printing/postage	2,094.84
SAS Member Vote (printing, postage)	564.47
General Secretary Office expense	313.25
General Secretary Office supplies	53.71
USF payment for R. Tykot	6440.00
UCR/C-14 payment for F. McManamon	4000.00
Payment for subscriptions (JAS, Archaeometry)*	23,562.00
State taxes:	30.00
Web service**	0.00
TOTAL EXPENSES	38,116.68

As of December 31, 2001:

Bank of America Checking balance	29,937.38
UCR Campus Credit Union balance	511.07
TOTAL ACCOUNT BALANCES	30,448.45

*Still awaiting invoice for Archaeometry subscriptions, expected to be \$1,500.00

**Web service in-transition to new server; costs incurred in 2002

Electronic PORTAL for Humanities & Social Sciences

The British Academy has opened PORTAL, a new, modern service for scholars and researchers in the humanities and social sciences. PORTAL offers scholars easy access to online information about research resources in all areas of the humanities and social sciences. PORTAL resource sites are selected for their high quality and potential utility to the academic community, responsible ownership and up-to-date state. PORTAL has a simple, convenient user interface, with a range of tools for searching the directory. The website is open to all at no charge: <http://www.britac.ac.uk/portal/>

**CSA CAD Guide for Archaeologists and
Architectural Historians**

The Center for the Study of Architecture/Archaeology (CSA) is very pleased to announce the completion of the CSA CAD Guide for Archaeologists and Architectural Historians. This work has been in preparation for more than four years, and we believe the completed guide to be a thorough and up-to-date overview of CAD as a technological aid in archaeology and architectural history. The guide is available only on the Web at <http://csanet.org/inftech/cadgd/cadgd.html>. As a result, it can be updated easily; readers' comments will be gratefully received.

This guide was written in cooperation with the Archaeology Data Service in England. At a point in the editing process, there began to be two separate versions, an ADS version, which will be part of the Guide to Good Practice series and will include contributions by various authors, and the CSA version, which benefits from some early comments from Jeremy Huggett and preliminary editing by Kate Fernie but is otherwise the responsibility of Harrison Eiteljorg, II, with a great deal of help from Susan C. Jones. The CSA version was subsequently altered further to apply only to archaeology and architectural history; the ADS Guide is intended to apply to a broader set of disciplines.

From the President (continued from page 1)

Another topic of concern was obtaining more national and international funding for archaeometry. Much of existing research agency funding goes to existing laboratories that perform valuable service analyses for various research projects. While this level of support should be continued, it leaves little monetary support for innovative and developmental research. For archaeometry to thrive and keep pace with scientific discovery and new technology, there must be archaeometric support for both areas. This does not mean cutting one to pay the other, but rather reaching a balance by increasing the available funding.

The education, training, and future employment of new generations of archaeometrists are also dependent on recognition of the importance of archaeometric research among the larger discipline of archaeology and the related fields in which students obtain education and training. We must continue to do our part to bring the contributions of archaeometric research to the attention of our colleagues, administrators, and the general public to make the case for financial support of these vital research programs.

The slogan of the *Society for Archaeological Sciences* carries this broad message today just as appropriately as it did 25 years ago. "*We invite you to join our quest to understand the past, using the tools of tomorrow.*"

Arleyn Simon

August 7, 2002

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Society for Archaeological Sciences

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