A Bibliography for Synchrotron Radiation and Imaging in Archaeology

BACKGROUND READINGS

Coltston, S.L., A.C. Jupe, and P. Barnes

2000 Synchrotron Radiation Tomographic Energy-Dispersive Diffraction Imaging. In *Radiation in Art and Archaeometry*. D.C. Creagh and D.A. Bradley (eds). New York: Elsevier Science B.V. [N8558.2.R33 R33]

Friedman, E.S., A.P.J. Stampfl, Y. Sato, D.R. Haeffner, T.J. Wilkinson, C.E. Johnson, K.A. Yener, and E.E. Alp

1999 Archaeology at the APS: Illuminating the Past. *Advanced Photon Source Research*, 2: 12—16.

MORI, Yoshihiro & Kenichi Uemura

Error factors in quantitative total reflection x-ray fluorescence analysis. *X-Ray Spectrometry*, 28: 421—426.

GENERAL

Adams, F., A. Adriaens, A. Aerts, I. De Raedt, K. Janssens, and O. Schalm

1997 Mirco and surface analysis in art and archaeology. *Journal of Analytical Atomic Spectrometry*, 12: 257—265.

Adams, F., K. Janssens, and A. Snigirev

Microscopic X-ray fluorescence analysis and related methods with laboratory and synchrotron radiation sources. *Journal of Analytical Atomic Spectrometry*, 13: 319—331.

Blank, A.B. & L.P. Eksperiandova

Specimen preparation in X-ray fluorescence analysis of materials and natural objects (review article). *X-Ray Spectrometry*, 27: 147—160.

Dran, J.C., T. Calligaro and J. Salomon

2000 Chapter 6: Particle-Induced X-ray Emmision. In *Modern Analytical Methods in Art and Archaeology*. E. Ciliberto and G. Spoto (eds). (pp: 135—166). Chemical Analysis Series, Vol. 155. New York: John Wiley & Sons.

Janssens, K., G. Vittiglio, I. Deraedt, A. Aerts, B. Vekemans, L. Vincze, F. Wei, I. Deryck, O.

Schalm, F. Adams, A. Rindby, A. Knochel, A. Simionovici, and A. Snigirev

Use of microscopic XRF for non-destructive analysis in art and archaeometry. *X-Ray Spectrometry*, 29: 73—91.

Mantler, M. & M. Schreiner

- 2000 X-ray fluorescence spectrometry in art and archaeology. *X-Ray Spectrometry*, 29: 3—17.
- McNulty, I., B. Lai, J. Maser, D.J. Paterson, P. Evans, S.M. Heald, G.E. Ice, E.D. Isaacs, ML. Rivers and S.R. Sutton
 - 2003 X-ray microscopy at the Advanced Photon Source. Technical Report in *Synchrotron Radiation News*, 16(4): 34—42.

Moens, L., A. Von Bohlen, and P. Vandenabeele

2000 Chapter 4: X-Ray Fluorescence. In *Modern Analytical Methods in Art and Archaeology*. E. Ciliberto and G. Spoto (eds). (pp: 55-79). Chemical Analysis Series, Vol. 155. New York: John Wiley & Sons.

Pantos, M.

2000 Synchrotron Radiation in Archaeometry. Meeting Report in *Synchrotron Radiation News*, 13(3): 6—10.

Scott, D.A.

The application of scanning X-ray fluorescence microanalysis in the examination of cultural materials. *Archaeometry*, 43(4): 475—482.

Smith, Gregory D. & Robin J.H. Clark

2004 Raman microscopy in archaeological science (review article). *Journal of Archaeological Science*, 31: 1137—1160.

Weber, G., L. Martinot, D. Strivay, H.P. Garnir and P. George

Application of PIXE and PIGE under variable ion beam incident angle to several fields of archaeometry. *X-Ray Spectrometry*, 24: 297—300.

CERAMICS

Hall, Mark E.

Pottery styles during the Early Jomon Period: Geochemical perspectives on the Moroiso and Ukishima pottery styles. *Archaeometry*, 43: 59—75.

Hall, Mark E. & Sergei Minyaev

2002 Chemical analyses of Xiong-nu pottery: A preliminary study of exchange and trade on the Inner Asian Steppes. *Journal of Archaeological Science*, 29: 135—144.

Leung, P.L. & Hongjie LUO

A study of provenance and dating of ancient Chinese porcelain by x-ray fluorescence spectrometry. *X-Ray Spectrometry*, 29: 34—38.

Leung, P.L., M.J. Stokes, M.T.W. Li, Zicheng PENG and Shuicun WU

- EDXRF studies on the chemical composition of ancient porcelain bodies from Linjiang, Jiangxi, China. *X-Ray Spectrometry*, 27: 11—16.
- Leung, P.L., Zicheng PENG, M.J. Stokes and M.T.W. Li
 - EDXRF studies of porcelains (800—1600 AD) from Fujian, China with chemical proxies and principle components analysis. *X-Ray Spectrometry*, 29: 253—259.
- Mata, M.P., D.R. Peacor and M.D. Gallart-Marti
 - Transmission electron microscopy (TEM) applied to ancient pottery. *Archaeometry*, 44: 155—176.
- Matsunaga, M. & I. Nakai
 - A study of the firing technique of pottery from Kaman-Kalehöyük, Turkey, by synchrotron radiation-induced fluorescence X-ray absorption near-edge structure (XANES) analysis. *Archaeometry*, 46: 103—114.
- Mirti, Piero
 - 2000 X-ray microanalysis discloses the secrets of Ancient Greek and Roman potters. *X-Ray Spectrometry*, 29: 61—72.
- Mirti, P. & P. Davit
 - Technological characterization of Campanian pottery of Type A, B, and C and of regional products from Ancient Calabria (Southern Italy). *Archaeometry*, 43: 19—33.
- Pillay, A.E., C. Punyadeera, L. Jacobson and J. Eriksen
 - Analysis of ancient pottery and ceramic objects using x-ray fluorescence spectrometry. *X-Ray Spectrometry*, 29: 53—62.
- al-Saad, Ziad
 - Chemical composition and manufacturing technology of a collection of various types of Islamic glazes excavated from Jordan. *Journal of Archaeological Science*, 29: 803—810.
- Tang, C.C., E.J. Maclean, M.A. Roberts, D.T. Clarke, and E. Pantos
 - The study of Attic Black Gloss sherds using synchrotron X-ray diffraction. *Journal of Archaeological Science*, 28: 1015-1024.
- ZHU Jiping, Jie SHAN, Ping QIU, Ying QIN, Changsui WANG, Deliang HE, Bo SUN, Peihua TONG, and Shuangcheng WU
 - The multivariate statistical analysis and XRD analysis of pottery at Xigongqiao site. *Journal of Archaeological Science*, 31: 1685-1691.

LITHICS

Hall, Mark & Hideaki KIMURA

2002 Quantitative EDXRF studies of obsidian sources in Northern Hokkaido. *Journal of Archaeological Science*, 29: 259—266.

YANG M.L., C.W. LU, I.J. HSU and C.C. YANG

The use of optical coherence tomography for monitoring the subsurface morphologies of archaic jades. *Archaeometry*, 46(2): 171—182.

METALLICS

Calliari, I., M. Magrini, A. Zambon, P. Guerriero and R. Martini

1999 Microstructural and compositional characterization of Roman coins. *X-Ray Spectrometry*, 28: 86—90.

Guerra, Maria F.

Analysis of archaeological metals. The place of XRF and PIXE in the determination of technology and provenance. *X-Ray Spectrometry*, 27: 73—80.

al-Kofahi, M.M. & K.F. al-Tarawneh

Analysis of Ayyubid and Mamluk dirhams using X-ray fluorescence spectroscopy. *X-Ray Spectrometry*, 29: 39—47.

SEDIMENTS

Adderly, W. P., I. L. Alberts, I. A. Simpson, T. J. Wess

2004 Calcium-iron-phosphate features in archaeological sediments: characterization through microfocus synchrotron X-ray scattering analyses. *Journal of Archaeological Science*, 31: 1215—1224.

Figueiredo, M.O., M.T. Ramos, T. Pereira da Silva, M.J. Basto and P. Chevallier

Synchrotron XRF microprobe analysis of geological samples: Influence of size and orientation of single mineral grains. *X-Ray Spectrometry*, 28: 251—254.

Laursen, J., B.T. Vestergaard, N. Pind, K. Karlsen and H.C.B. Hansen

Rapid method for EDXRF analysis of clayey and sandy soil. *X-Ray Spectrometry*, 30: 186—189.

Somogyi, A., M. Braun, A. Tóth and K.J. Willis

Speciation of elements in lake sediments investigated using x-ray fluorescence and inductively coupled plasma atomic emission spectrometry. *X-Ray Spectrometry*, 27: 283—287.

Wilkinson, T.J., E.S. Friedman, E. Alp, and A.P.J. Stampfl

The Geoarchaeology of a lake basin: spatial and chronological patterning of sedimentation in the Amuq Plain, Turkey. *Cahiers d'archéologie du CELAT*, 10: 211—226.

MISCELLANEAOUS

Aloupi, E., A.G. Karydas and T. Paradellis

Pigment analysis of wall paintings and ceramics from Greece and Cyprus. The optimum use of X-ray spectrometry on specific archaeological issues. *X-Ray Spectrometry*, 29: 18—24.

Hiller, J.C., M.J. Collins, A.T. Chamberlain, and T.J. Wess

Small-angle X-ray scattering: a high-throughput technique for investigating archaeological bone preservation. *Journal of Archaeological Science*, 31: 1349—1359.

Kuisma-Kursula, Pirkko

Accuracy, precision and detection limits of SEM-WDS, SEM-EDS and PIXE in the multi-elemental analysis of medieval glass. *X-Ray Spectrometry*, 29: 11—118.

Kunicki-Goldfinger, J., J. Kierzek, A. Kasprzak and B. Małożewska-Bućko

A sudy of eighteenth century glass vessels from central Europe by x-ray flourescence analysis. *X-Ray Spectrometry*, 29: 310—316.

Martinetto, P.

A Synchrotron X-ray diffraction study of Egyptian Cosmetics. In *Radiation in Art and Archaeometry*. D. C. Creagh & D. A. Bradley (eds). (pp. 297-316). New York: Elsevier Science B.V. [N8558.2.R33 R33]

Wess, T.J., M. Drakopoulos, A. Snigirev, J. Wounters, O. Paris, P. Fratzl, M. Collins, J. Hiller and K. Nielsen

The use of small-angle X-ray diffraction studies for the analysis of structural features in archaeological samples. *Archaeometry*, 43(1): 117—129.

Wobrauschek, P., G. Halmetschlager, S. Zamini, C. Jokubonis, G. Trnka and M. Karwowski 2000 Energy-dispersive x-ray fluorescence analysis of Celtic glasses. *X-Ray Spectrometry*, 29: 25—33.