## ARCLG123: Conservation: Materials Science: James Hales

Postgraduate: core: 0.5 units

Two terms



[1]

Abd El Salam, S.A. 2004. Egyptian and Graeco-Roman wall plasters and mortars: A comparative scientific study. Hedges.

[2]

Appleyard, H.M. and Wira 1978. Guide to the identification of animal fibres. Wira.

[3]

Arnold, Dean E. 1985. Ceramic theory and cultural process. Cambridge University Press.

[4]

Barclay, Katherine 2001. Scientific analysis of archaeological ceramics: a handbook of resources. Oxbow.

[5]

Batt, Catherine et al. 2007. Analytical chemistry in archaeology. Cambridge University Press.

[6]

Biswas, A.K. and Davenport, W.G. 2002. Extractive metallurgy of copper. Pergamon.

[7]

Boersma, F. et al. 2007. Unravelling textiles: A handbook for the preservation of textile collections. Archetype.

[8]

Bousfield, Brian 1992. Surface preparation and microscopy of materials. Wiley.

[9]

Bray, C. and Society of Glass Technology 2000. Ceramics and glass: A basic technology. Society of Glass Technology.

[10]

Bray, Charles and Society of Glass Technology 2000. Ceramics and glass: a basic technology. Society of Glass Technology.

[11]

Bray, Charles and Society of Glass Technology 2000. Ceramics and glass: a basic technology. Society of Glass Technology.

[12]

Bregnhøi, L. and Nationalmuseet (Denmark) 2006. Paint research in building conservation. Archetype.

[13]

Brill, Robert H. et al. 1999. Chemical analyses of early glasses. Corning Museum of Glass.

[14]

Buchwald, V.F. and Kongelige Danske videnskabernes selskab 2005. Iron and steel in ancient times. Det Kongelige Danske Videnskabernes Selskab.

[15]

Calnan, C.N. et al. 1991. Leather: Its composition and changes with time. Leather Conservation Centre.

[16]

Catling, D. and Grayson, J.E. 1982. Identification of vegetable fibres. Chapman & Hall.

[17]

Chalmers, John M. et al. 2005. Raman spectroscopy in archaeology and art history. Royal Society of Chemistry.

[18]

Chandler, H. 1998. Metallurgy for the non-metallurgist. ASM International.

[19]

Colombini, Maria Perla and Modugno, Francesca 2009. Organic mass spectrometry in art and archaeology. Wiley.

[20]

Craddock, P.T. and La Niece, S. 1993. Metal plating and patination: Cultural, technical and historical developments. Butterworth-Heinemann.

[21]

Dawson, J. et al. 2010. Decorated surfaces on ancient Egyptian objects: Technology, deterioration and conservation: Proceedings of a conference held in Cambridge, UK on 7-8 September 2007. Archetype in association with the Fitzwilliam Museum and Icon Archaeology Group.

[22]

Delamare, F. 2000. Colour: making and using dyes and pigments. Thames & Hudson.

[23]

Dorge, V. et al. 1998. Painted wood: History and conservation. Getty Conservation Institute.

[24]

Drayman-Weisser, T. and American Institute for Conservation of Historic and Artistic Works 2000. Gilded metals: History, technology and conservation. Archetype Publications in association with The American Institute for Conservation of Historic and Artistic Works.

[25]

Eastaugh, N. 2004. The pigment compendium: Optical microscopy of historical pigments. Elsevier Butterworth-Heinemann.

[26]

Eastaugh, N. 2004. The pigment compendium: Optical microscopy of historical pigments. Elsevier Butterworth-Heinemann.

[27]

Eaton, R.A. and Hale, M. D. C. 1993. Wood: Decay, pests, and protection. Chapman & Hall.

[28]

Eckel, E.C. 2005. Cements, limes and plasters: Their materials, manufacture and properties. Donhead.

[29]

Feller, R.L. et al. 2007. Artists' pigments: A handbook of their history and characteristics. National Gallery of Art.

[30]

Freestone, Ian et al. 1987. Early vitreous materials. British Museum.

[31]

Gaimster, David R. M. and Freestone, Ian 1997. Pottery in the making: world ceramic traditions. British Museum Press.

[32]

Gill, R. 1996. Chemical fundamentals of geology. Chapman & Hall.

[33]

Glinsman, Lisha 2004. The application of X-ray fluorescence spectrometry to the study of museum objects. s.n.].

[34]

Greaves, P. H. et al. 1995. Microscopy of textile fibres. BIOS Scientific in association with the Royal Microscopical Society.

[35]

Gribble, C. D. and Hall, A. J. 1993. Optical mineralogy: principles and practice. Chapman & Hall.

[36]

Gribble, C. D. and Hall, A. J. 1993. Optical mineralogy: principles and practice. Chapman & Hall.

[37]

Grieken, R. van and Janssens, Koen H. A. 2004. Non-destructive microanalysis of cultural heritage materials. Elsevier.

[38]

Haines, B. and Leather Conservation Centre 1999. Parchment: The physical and chemical characteristics of parchment and the materials used in its conservation. Leather Conservation Centre.

[39]

Hamer, Frank and Hamer, Janet 1991. The potter's dictionary of materials and techniques. A & C Black.

[40]

Hather, J.G. 2000. The identification of northern European woods: A guide for archaeologists and conservators. Archetype.

[41]

Hather, J.G. 2000. The identification of northern European woods: A guide for archaeologists and conservators. Archetype.

[42]

Hayman, R. 2005. Ironmaking: The history and archaeology of the iron industry. Tempus.

[43]

Heck, M. and Hoffmann, P. 2002. Analysis of early medieval glass beads - The raw materials to produce green, orange and brown colours. Mikrochimica acta. 139, (2002), 71–76.

[44]

Heck, M. and Hoffmann, P. 2002. Analysis of early medieval glass beads - The raw materials to produce green, orange and brown colours. Mikrochimica acta. 139, (2002), 71–76.

[45]

Henderson, Julian 2000. The science and archaeology of materials: an investigation of inorganic materials. Routledge.

[46]

Henry, A. 2006. Stone conservation: principles and practice. Donhead.

[47]

Hoadley, R.B. 1990. Identifying wood: Accurate results with simple tools. Taunton Press.

[48]

Hoadley, R.B. 1990. Identifying wood: Accurate results with simple tools. Taunton Press.

[49]

Hodges, H. 1989. Artifacts: an introduction to early materials and technology. Duckworth.

[50]

Holztapffel, C.H. 2000. Working horn, ivory & tortoishell. Caber Press.

[51]

Janaway, R.C. et al. 1989. Evidence preserved in corrosion products: New fields in artifact studies. United Kingdom Institute for Conservation.

[52]

Janaway, R.C. et al. 2005. Scientific analysis of ancient and historic textiles: Informing preservation, display and interpretation: Postprints. Archetype.

[53]

Jones, A. V. 1999. Access to chemistry. Royal Society of Chemistry.

[54]

Jones, D.A. 1996. Principles and prevention of corrosion. Prentice Hall.

[55]

Jones, M. and May, E. 2006. Conservation science: heritage materials. RSC Publishing.

[56]

Jones, M. and May, E. 2006. Conservation science: heritage materials. RSC Publishing.

[57]

Kingery, W. D. and Vandiver, Pamela B. 1986. Ceramic masterpieces: art, structure, and technology. Free Press.

[58]

Kite, M. and Thomson, R. 2006. Conservation of leather and related materials. Butterworth-Heinemann.

[59]

Kite, M. and Thomson, R. 2006. Conservation of leather and related materials. Butterworth-Heinemann.

[60]

Koob, S.P. and Corning Museum of Glass 2006. Conservation and care of glass objects. Archetype in association with the Corning Museum of Glass.

[61]

Lang, J. and Craddock, P.T. 2003. Mining and metal production through the ages. British Museum.

[62]

Lang, J. and Craddock, P.T. 2003. Mining and metal production through the ages. British Museum.

[63]

Lang, Janet and Craddock, P. T. 2003. Mining and metal production through the ages. British Museum.

[64]

Larsen, R. 2002. Microanalysis of parchment. Archetype.

[65]

MacGregor, A. 1985. Bone, antler, ivory & horn: The technology of skeletal materials since the Roman period. Barnes & Noble Books.

[66]

McCrone, Walter C. et al. 1978. Polarized light microscopy. Ann Arbor Science.

[67]

Mills, John S. and White, Raymond 1999. The organic chemistry of museum objects. Butterworth-Heinemann.

[68]

Mills, John S. and White, Raymond 1999. The organic chemistry of museum objects. Butterworth-Heinemann.

[69]

Mills, John S. and White, Raymond 1999. The organic chemistry of museum objects. Butterworth-Heinemann.

[70]

Mills, John S. and White, Raymond 1999. The organic chemistry of museum objects. Butterworth-Heinemann.

[71]

Newton, R.G. and Davison, S. 1996. Conservation of glass. Butterworth-Heinemann.

[72]

Newton, R.G. and Davison, S. 1996. Conservation of glass. Butterworth-Heinemann.

[73]

O'Connor, S.A. and Brooks, M.M. 2007. X-radiography of textiles, dress and related objects. Elsevier/Butterworth-Heinemann.

[74]

Orton, Clive et al. 1993. Pottery in archaeology. Cambridge University Press.

[75]

Ottaway, B.S. and Wang, Q. 2004. Casting experiments and microstructure of archaeologically relevant bronzes. Archaeopress.

[76]

Pender, Robyn et al. 2007. All manner of murals: the history, techniques and conservation of secular wall paintings; proceedings of the Secular Wall Paintings Symposia organised by the Icon Stone and Wall Paintings Group and supported by English Heritage, London 2004-5. Archetype.

[77]

Pollard, A. M. et al. 2008. Archaeological chemistry. Royal Society of Chemistry.

[78]

Potts, P. J. 1992. A handbook of silicate rock analysis. Blackie Academic & Professional.

[79]

Price, T. Douglas and Burton, James H. 2011. An introduction to archaeological chemistry. Springer.

[80]

Prudence M. Rice Recent Ceramic Analysis: 1. Function, Style, and Origins. Journal of Archaeological Research. Vol. 4, No. 2, 133–163.

[81]

Prudence M. Rice Recent Ceramic Analysis: 2. Composition, Production, and Theory. Journal of Archaeological Research. Vol. 4, No. 3, 165–202.

[82]

Rice, Prudence M. 1987. Pottery analysis: a sourcebook. University of Chicago Press.

[83]

Richards, M. 2004. Deerskins into buckskins: How to tan with brains, soap or eggs. Backcountry Pub.

[84]

Rivers, Shayne and Umney, Nick 2003. Conservation of furniture. Butterworth-Heinemann.

[85]

Robinson, P. C. et al. 1992. Qualitative polarized-light microscopy. Royal Microscopical Society.

[86]

Rye, Owen S. 1981. Pottery technology: principles and reconstruction. Taraxacum.

[87]

Sands, R. 1997. Prehistoric woodworking: The analysis and interpretation of Bronze and Iron Age toolmarks. UCL Institute of Archaeology.

[88]

Schoeser, M. 2003. World textiles: A concise history. Thames & Hudson.

[89]

Scott, D.A. and Eggert, G. 2009. Iron and steel in art: Corrosion, colorants, conservation. Archetype.

[90]

Scott, D.A. and Getty Conservation Institute 2002. Copper and bronze in art: Corrosion, colorants, conservation. Getty Conservation Institute.

[91]

Scott, David A. 1991. Metallography and microstructure of ancient and historic metals. Getty Conservation Institute.

[92]

Scott, David A. 1991. Metallography and microstructure of ancient and historic metals. Getty Conservation Institute.

[93]

Scott, David A. 1991. Metallography and microstructure of ancient and historic metals. Getty Conservation Institute.

[94]

Seiler-Baldinger, A. 1994. Textiles: A classification of techniques. Smithsonian Institution Press.

[95]

Selwyn, L. and Canadian Conservation Institute 2004. Metals and corrosion: A handbook for the conservation professional. Canadian Conservation Institute.

[96]

Selwyn, L. and Canadian Conservation Institute 2004. Metals and corrosion: A handbook for the conservation professional. Canadian Conservation Institute.

[97]

Selwyn, L. and Canadian Conservation Institute 2004. Metals and corrosion: A handbook for the conservation professional. Canadian Conservation Institute.

[98]

Starling, K. et al. 1987. Archaeological bone, antler and ivory. United Kingdom Institute for Conservation.

[99]

Strand, Eva B. Andersson and North European Symposium for Archaeological Textiles 2009. North European Symposium for Archaeological Textiles X. Oxbow Books.

[100]

United Kingdom Institute for Conservation of Historic and Artistic Works 1998. Analysis of pigments and plasters: its relevance to current wall painting and stone conservation practice: post prints of a day conference of the Wall Paintings Section of the United Kingdom Institute for Conservation of Historic and Artistic Works held 22 February 1997. United Kingdom Institute for Conservation of Historic and Artistic Works.

[101]

Watkins, S.M. 1984. Clothing: The portable environment. Iowa State University Press.

[102]

Watt, Ian M. 1997. The principles and practice of electron microscopy. Cambridge University Press.

[103]

Wright, M.M. and Conservators of Ethnographic Artefacts 2002. The conservation of fur, feather and skin: Seminar organised by the Conservators of Ethnographic Artefacts at the Museum of London on 11 December 2000. Archetype.