ARCLG123: Conservation: Materials Science: Caitlin O'Grady

View Online

1.

Artioli G, Angelini I. Scientific methods and cultural heritage: an introduction to the application of materials science to archaeometry and conservation science [Internet]. Oxford: Oxford University Press; 2010. Available from: http://UCL.eblib.com/patron/FullRecord.aspx?p=618614

2.

Caneva G, Nugari MP, Salvadori O, Getty Conservation Institute. Plant biology for cultural heritage: biodeterioration and conservation. Los Angeles: Getty Conservation Institute; 2008.

3.

Henderson J. The science and archaeology of materials: an investigation of inorganic materials [Internet]. London: Routledge; 2000. Available from: http://UCL.eblib.com/patron/FullRecord.aspx?p=1144554

4.

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

5.

Kingery WD. A role for materials science. In: Learning from things: method and theory of material culture studies. Washington, D.C.: Smithsonian Institution Press; 1996. p. 175–80.

6.

Kingery WD. Materials science and material culture. In: Learning from things: method and theory of material culture studies. Washington, D.C.: Smithsonian Institution Press; 1996. p. 181–203.

7.

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

8.

Hill Stoner J. Changing approaches in art conservation: 1925 to the present. In: Scientific examination of art: modern techniques in conservation and analysis [Internet]. Washington, DC: The National Academies Press; 2005. p. 40–57. Available from: http://www.nap.edu/catalog.php?record_id=11413

9.

Pollard AM, Batt C, Young S, Stern B. Analytical chemistry in archaeology. Cambridge: Cambridge University Press; 2007.

10.

Pollard AM, Heron C, Royal Society of Chemistry (Great Britain). Archaeological chemistry [Internet]. 2nd ed. Cambridge: Royal Society of Chemistry; 2008. Available from: http://UCL.eblib.com/patron/FullRecord.aspx?p=1185179

11.

Price, T. Douglas, Burton, James H. An introduction to archaeological chemistry. London: Springer; 2011.

12.

T. J. R, C. L. R. Principles of experimental design for art conservation research [Internet]. Available from: http://www.getty.edu/conservation/publications_resources/pdf_publications/pdf/principles_

experiment.pdf

13.

Arnold DE. Ceramic theory and cultural process. Vol. New studies in archaeology. Cambridge: Cambridge University Press; 1985.

14.

Barclay K. Scientific analysis of archaeological ceramics: a handbook of resources. Oxford: Oxbow; 2001.

15.

Bray C, Society of Glass Technology. Ceramics and glass: a basic technology. Sheffield: Society of Glass Technology; 2000.

16.

Freestone I, Gaimster DRM. Pottery in the making: world ceramic traditions. London: British Museum Press; 1997.

17.

Hamer F, Hamer J. The potter's dictionary of materials and techniques. 3rd ed. London: A & C Black; 1991.

18.

Kingery WD, Vandiver PB. Ceramic masterpieces: art, structure, and technology. New York: Free Press; 1986.

19.

Orton C, Hughes M. Pottery in Archaeology [Internet]. Cambridge: Cambridge University Press; 2013. Available from: http://ebooks.cambridge.org/ref/id/CBO9780511920066

20.

Potts PJ. A handbook of silicate rock analysis. New ed. London: Blackie Academic & Professional; 1992.

21.

Rice PM. Pottery analysis: a sourcebook. Chicago: University of Chicago Press; 1987.

22.

Rice PM. Recent ceramic analysis: 1. Function, style, and origins. Journal of Archaeological Research [Internet]. 1996;4(2):133–63. Available from: http://www.jstor.org/stable/41053114

23.

Rice PM. Recent ceramic analysis: 2. Composition, production, and theory. Journal of Archaeological Research [Internet]. 1996;4(3):165–202. Available from: http://www.jstor.org/stable/41053131

24.

Rye OS. Pottery technology: principles and reconstruction. Vol. Manuals on archeology. Washington, D.C.: Taraxacum; 1981.

25.

Shepard AO. Ceramics for the archaeologist [Internet]. Vol. Publication / Carnegie Institution of Washington. Washington, D.C.: Carnegie Institution of Washington; 1956. Available from: http://publicationsonline.carnegiescience.edu/publications_online/ceramics_archaeologist/

26.

Arnold DE. Joining clay: a comparison of modern and ancient techniques. In: Holding it all

together: ancient and modern approaches to joining, repair and consolidation. London: Archetype Publications in association with the British Museum; 2009.

27.

Vandiver PB, Soffer O, Klima B, Svoboda J. The origins of ceramic technology at Dolni Věstonice, Czechoslovakia. Science [Internet]. 1989;246(4933):1002–8. Available from: http://www.jstor.org/stable/1704937

28.

Artioli G, Angelini I. Scientific methods and cultural heritage: an introduction to the application of materials science to archaeometry and conservation science [Internet]. Oxford: Oxford University Press; 2010. Available from: http://UCL.eblib.com/patron/FullRecord.aspx?p=618614

29.

Derrick M, Souza L, Kieslich T, Florsheim H, Stulik D. Embedding paint cross-section samples in polyester resins: Problems and solutions. Journal of the American Institute for Conservation [Internet]. 1994;33(3):227–45. Available from: http://www.jstor.org.libproxy.ucl.ac.uk/stable/3179635?origin=crossref&seq=1#page_scan_tab_contents

30.

Nicholas Eastaugh. The pigment compendium: Optical microscopy of historical pigments [Internet]. Taylor & Francis; 2004. Available from: http://www.tandfebooks.com/ISBN/9780080943596

31.

Gribble CD, Hall AJ. A practical introduction to optical mineralogy [Internet]. London: George Allen & Unwin; 1985. Available from: https://link-springer-com.libproxy.ucl.ac.uk/book/10.1007%2F978-94-011-7804-4

32.

Horie CV. Materials for conservation: organic consolidants, adhesives and coatings. 2nd ed.

Amsterdam: Butterworth-Heinemann; 2010.

33.

Jorjani M, Wheeler G, Riccardelli C, Soboyejo W, Rahbar N. An evaluation of potential adhesives for marble repair. In: Holding it all together: ancient and modern approaches to joining, repair and consolidation. London: Archetype Publications in association with the British Museum; 2009.

34.

McCrone WC, Delly JG, McCrone LB. Polarized light microscopy. Michigan: Ann Arbor Science; 1978.

35.

John Mills, Raymond White. Organic Chemistry of Museum Objects [Internet]. 2012. Available from: http://www.tandfebooks.com/ISBN/9780080513355

36.

Mogk DW. Optical mineralogy and petrography [Internet]. 2013. Available from: http://serc.carleton.edu/NAGTWorkshops/mineralogy/optical_mineralogy_petrography.html

37.

Conservation Unit Museums and Gall. The Science For Conservators Series: Volume 3: Adhesives and Coatings [Internet]. Taylor & Francis Group; 1992. Available from: https://ebookcentral.proquest.com/lib/ucl/detail.action?docID=1143796

38.

Odegaard N, Carroll S, Zimmt WS, Spurgeon D, Lane SK. Material characterization tests for objects of art and archaeology. 2nd ed. London: Archetype; 2005.

39.

Robinson, P. C., Bradbury, Savile, Royal Microscopical Society (Great Britain). Qualitative polarized-light microscopy. Vol. Microscopy handbooks. New York: Royal Microscopical Society; 1992.

40.

Plesters J. Cross-sections and chemical analysis of paint samples. Studies in Conservation [Internet]. 1956;2(3):110–57. Available from: http://www.jstor.org.libproxy.ucl.ac.uk/stable/1505000?origin=crossref&seq=1#page_scan_tab_contents

41.

Reedy CL. Thin-section petrography of stone and ceramic cultural materials. London: Archetype; 2008.

42.

Scott DA. Metallography and microstructure of ancient and historic metals [Internet]. 1991. Available from: http://www.getty.edu/conservation/publications_resources/pdf_publications/pdf/metallography.pdf

43.

Stavroudis C, Blank S. Solvents & Sensibility. 1989; Available from: http://cool.conservation-us.org/waac/wn/wn11/wn11-2/wn11-202.html

44.

Fenn J. Adhesion without adhesives: gecko-like adhesives [Internet]. Symposium 2011: Adhesives and Consolidants for Conservation: research and applications: proceedings. 2011. Available from: https://www.cci-icc.gc.ca/discovercci-decouvriricc/PDFs/Paper%2010%20-%20Fenn%20-%20English.pdf

45.

Marte, Fernando. Arsenic in Taxidermy Collections: History, Detection, and Management

[Internet]. 2006. Available from: http://ucl-primo.hosted.exlibrisgroup.com/primo_library/libweb/action/display.do?tabs=detailsTab&ct=display&fn=search&doc=TN_sro10088%2f8134&indx=1&recIds=TN_sro10088%2f8134&recIdxs=0&elementId=0&renderMode=poppedOut&displayMode=full&frbrVersion=&frbg=&&dscnt=0&scp.scps=scope%3A%28UCL%29%2Cprimo_central_multiple_fe&tb=t&mode=Basic&vid=UCL_VU1&srt=rank&tab=local&dum=true&vl(freeText0)=Arsenic%20in%20taxidermy%20collections%3A%20history%2C%20detection%20and%20management&dstmp=1474123526335

46.

Artioli G, Angelini I. Scientific methods and cultural heritage: an introduction to the application of materials science to archaeometry and conservation science [Internet]. Oxford: Oxford University Press; 2010. Available from: http://UCL.eblib.com/patron/FullRecord.aspx?p=618614

47.

Glinsman L. The application of X-ray fluorescence spectrometry to the study of museum objects. [S.l: s.n.]; 2004.

48.

Goldstein J. Scanning electron microscopy and x-ray microanalysis. 3rd ed. New York: Kluwer Academic/Plenum Publishers; 2003.

49.

Janssens KHA, Grieken R van. Non-destructive microanalysis of cultural heritage materials. Vol. Comprehensive analytical chemistry. Amsterdam, London: Elsevier; 2004.

50.

Potts PJ, West M, editors. Portable X-ray Fluorescence Spectrometry [Internet]. Cambridge: Royal Society of Chemistry; 2008. Available from: https://doi.org/10.1039/9781847558640

51.

Aaron N. Shugar, et al. Handheld XRF for Art and Archaeology on JSTOR [Internet]. Leuven University Press; 2012. Available from: https://www.jstor.org/stable/j.ctt9qdzfs

52.

Ian M. Watt. The Principles and Practice of Electron Microscopy - [Internet]. Cambridge Books Online - Cambridge University Press; 1997. Available from: http://ebooks.cambridge.org/ebook.jsf?bid=CBO9781139170529

53.

Namowicz C, Trentelman K, McGlinchey C. XRF of cultural heritage materials: Round-robin IV – paint on canvas. 2009; Available from: https://www-cambridge-org.libproxy.ucl.ac.uk/core/services/aop-cambridge-core/content/view/5DB13489C851D1FD881902B32D2AA115/S0885715600032814a.pdf/xrf-of-cultural-heritage-materials-round-robin-iv-paint-on-canvas.pdf

54.

Welcomme E, Walter P, van Elslande E, Tsoucaris G. Investigation of white pigments used as make-up during the Greco-Roman period. Applied Physics A. 2006 June;83(4):551–6.

55.

Ashurst J, Dimes FG. Conservation of building and decorative stone [Internet]. Paperback ed. Vol. Butterworth-Heinemann series in conservation and museology. Oxford: Butterworth-Heinemann; 1998. Available from: http://www.vlebooks.com/vleweb/product/openreader?id=UCL&isbn=9780080502908

56.

Bradley SM, Middleton AP. A study of the deterioration of Egyptian limestone sculpture. Journal of the American Institute for Conservation [Internet]. 1988;27(2):64–86. Available from: http://www.jstor.org/stable/3179403

57.

Charola AE. Salts in the deterioration of porous materials: An overview. Journal of the American Institute for Conservation [Internet]. 2000;39(3):327–43. Available from: http://www.jstor.org/stable/3179977

58.

Gill R. Chemical fundamentals of geology and environmental geoscience [Internet]. Third edition. Chichester, West Sussex, UK: Wiley Blackwell; 2015. Available from: http://UCL.eblib.com/patron/FullRecord.aspx?p=1879373

59.

Gribble CD, Hall AJ. A practical introduction to optical mineralogy [Internet]. London: George Allen & Unwin; 1985. Available from: https://link-springer-com.libproxy.ucl.ac.uk/book/10.1007%2F978-94-011-7804-4

60.

Henry A. Stone conservation: principles and practice [Internet]. Florence: Taylor and Francis; 2006. Available from: http://UCL.eblib.com/patron/FullRecord.aspx?p=4186381

61.

Middleton AP, Bradley SM. Provenancing of Egyptian limestone sculpture. Journal of Archaeological Science. 1989 Sept;16(5):475–88.

62.

Price CA. Stone Conservation: An Overview of Current Research [Internet]. 1996. Available from: http://www.getty.edu/publications/virtuallibrary/0892363894.html?imprint=gtcn&pg=2&res=20?imprint=gtcn&pg=4&res=20?imprint=gtcn&pg=7&res=20?imprint=gtcn

63.

Přikryl R, Smith BJ, European Geosciences Union, Geological Society of London. Building stone decay: from diagnosis to conservation [Internet]. Vol. Geological Society special publication. London: Geological Society; 2007. Available from:

https://app-knovel-com.libproxy.ucl.ac.uk/web/toc.v/cid:kpBSDFDC01/viewerType:toc//root_slug:building-stone-decay?kpromoter=marc

64.

Rodriguez-Navarro C, Hansen E, Sebastian E, Ginell WS. The role of clays in the deterioration of ancient Egyptian limestone sculptures. Journal of the American Institute for Conservation [Internet]. 1997;36(2):151–63. Available from: http://www.jstor.org/stable/3179829

65.

United Kingdom Institute for Conservation of Historic and Artistic Works. 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. London: United Kingdom Institute for Conservation of Historic and Artistic Works; 1998.

66.

Igneous Rocks Home Page [Internet]. Available from: http://csmres.jmu.edu/geollab/Fichter/IgnRx/Ighome.html

67.

Sedimentary Rocks Home Page [Internet]. Available from: http://csmres.jmu.edu/geollab/Fichter/SedRx/

68.

Metamorphic Rocks Home Page [Internet]. Available from: http://csmres.jmu.edu/geollab/Fichter/MetaRx/index.html

69.

Corti G, Costagliola P, Bonini M, Benvenuti M, Pecchioni E, Vaiani A, et al. Modelling the failure mechanisms of Michelangelo's David through small-scale centrifuge experiments. Journal of Cultural Heritage. 2015 Jan;16(1):26–31.

70.

Graziani G, Sassoni E, Franzoni E. Consolidation of porous carbonate stones by an innovative phosphate treatment: mechanical strengthening and physical-microstructural compatibility in comparison with TEOS-based treatments. Heritage Science. 2015;3(1).

71.

Feller RL, Roy A, FitzHugh EW, Berrie BH. Artists' pigments: A handbook of their history and characteristics. Washington: National Gallery of Art; 2007.

72.

Bregnhøi L, Nationalmuseet (Denmark). Paint research in building conservation. London: Archetype; 2006.

73.

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

74.

Delamare F. Colour: making and using dyes and pigments. Vol. New horizons. London: Thames & Hudson; 2000.

75.

Ruth Siddal, Nicholas Eastaugh, Valentine Walsh, Tracey Chaplin. Pigment Compendium [Internet]. Taylor & Francis e-books; Available from: http://www.tandfebooks.com/ISBN/9780080943596

76.

Harley RD. Artists' pigments c. 1600-1835: A study in English documentary sources. 2nd.

rev. ed. London: Archetype Publications; 2001.

77.

Mogk DW. Optical mineralogy and petrography [Internet]. Available from: http://serc.carleton.edu/NAGTWorkshops/mineralogy/optical_mineralogy_petrography.html

78.

Robinson PC, Bradbury S, Royal Microscopical Society (Great Britain). Qualitative polarized-light microscopy. Vol. Microscopy handbooks. New York: Oxford University Press; 1992.

79.

McCrone WC. The Shroud of Turin: blood or artist's pigment? Accounts of Chemical Research [Internet]. 1990 Mar;23(3):77–83. Available from: http://pubs.acs.org.libproxy.ucl.ac.uk/doi/pdf/10.1021/ar00171a004

80.

Samanian K. Identification of Green Pigment Used in Persian Wall Paintings (1501-1736) Using PLM, FT-IR, SEM/EDX and GC-MS Techniques. Archaeometry. 2015 Aug;57(4):740–58.

81.

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

82.

Brill RH, Rising BA, Stapleton CP, Bakowska E. Chemical analyses of early glasses. Corning, N.Y.: Corning Museum of Glass; 1999.

83.

Freestone I. Post-depositional changes in archaeological ceramics and glasses. In: Handbook of archaeological sciences [Internet]. Chichester: John Wiley; 2001. p. 615–25. Available from: https://contentstore.cla.co.uk/secure/link?id=97a2cea4-73f4-4a0c-8a4c-22641705ce36

84.

Heck M, Hoffmann P. Analysis of early medieval glass beads - The raw materials to produce green,orange and brown colours. Mikrochimica acta. 2002;139:71–6.

85.

Koob SP, Corning Museum of Glass. Conservation and care of glass objects. London: Archetype in association with the Corning Museum of Glass; 2006.

86.

Kunicki-Goldfinger JJ. Unstable historic glass: symptoms, causes, mechanisms and conservation. Studies in Conservation. 2008;53(sup2):47–60.

87.

Newton RG, Davison S. Conservation of glass. Rev. ed. Vol. Butterworths series in conservation and museology. London: Butterworth-Heinemann; 1996.

88.

Oakley V. The deterioration of the glass vessel. In: Glass and enamel conservation: collected papers from a one-day meeting on the conservation of glass and enamels held on 11 November 1989. London: United Kingdom Institute for Conservation of Historic and Artistic Works of Art; 1992. p. 18–22.

89.

Pollard AM, Heron C, Royal Society of Chemistry (Great Britain). Archaeological chemistry [Internet]. 2nd ed. Cambridge: Royal Society of Chemistry; 2008. Available from: https://ebookcentral.proquest.com/lib/ucl/detail.action?docID=1185179

90.

Rauch I. The Conservation and Restoration of Historical Stained and Painted Glass: An Introduction to the Problems. Available from: http://www.cvma.ac.uk/conserv/rauch.html

91.

Roemich H. Historic glass and its interaction with the environment. In: The conservation of glass and ceramics: research, practice and training [Internet]. London: James & James; 1999. p. 5–14. Available from: https://contentstore.cla.co.uk/secure/link?id=2d10d742-e34d-ec11-981f-0050f2f09783

92.

Mesbahinia A, Rashidi-Huyeh M, Shafiee Afarani M. Persian turquoise glazed bodies: reproduction and optical properties. Applied Physics A. 2015 Mar;118(4):1183–8.

93.

Ricciardi P, Colomban P, Tournié A, Milande V. Nondestructive on-site identification of ancient glasses: genuine artefacts, embellished pieces or forgeries? Journal of Raman Spectroscopy. 2009 June;40(6):604–17.

94.

Abd El Salam SA. Egyptian and Graeco-Roman wall plasters and mortars: A comparative scientific study. Vol. BAR international series. Oxford: Hedges; 2004.

95.

Eckel EC. Cements, limes and plasters: Their materials, manufacture and properties. Shaftesbury: Donhead; 2005.

96.

Gowing R, Pender R, Secular Wall Paintings Symposia, English Heritage, Institute of Conservation. All manner of murals: The history, techniques and conservation of secular wall paintings (Proceedings of the Secular Wall Paintings Symposia, London 2004-5).

London: Archetype; 2007.

97.

Henry A, Stewart J, English Heritage. Practical building conservation: Mortars, renders & plasters. Farnham: Ashgate; 2011.

98.

Abrams EM, Parhamovich J, Butcher JA, McCord B. Chemical composition of architectural plaster at the Classic Maya kingdom of Piedras Negras, Guatemala. Journal of Archaeological Science. 2012 May;39(5):1648–54.

99.

Walsh JJ. Petrography: Distinguishing natural cement from other binders in historical masonry construction using forensic microscopy techniques. Journal of ASTM International [Internet]. 2007;4(1). Available from: http://enterprise.astm.org/DIGITAL_LIBRARY/JOURNALS/JAI/PAGES/JAI100674.htm

100.

Cullity BD, Stock SR. Elements of X-ray diffraction. 3rd ed. Upper Saddle River, N.J.: Prentice Hall; 2001.

101.

Derrick MR, Landry JM, Stulik D. Infrared spectroscopy in conservation science [Internet]. Vol. Scientific tools for conservation. Los Angeles: Getty Conservation Institute; 1999. Available from: https://www.getty.edu/publications/virtuallibrary/0892364696.html

102.

Edwards HGM, Chalmers JM, Royal Society of Chemistry (Great Britain). Raman spectroscopy in archaeology and art history. Vol. RSC analytical spectroscopy monographs. Cambridge: Royal Society of Chemistry; 2005.

103.

Maria Perla Colombini, Francesca Modugno. Organic Mass Spectrometry in Art and Archaeology [Internet]. Chichester, UK: John Wiley & Sons, Ltd; 2009. Available from: http://doi.wiley.com/10.1002/9780470741917

104.

Smith GD, Clark RJH. Raman spectroscopy in art history and conservation science. Reviews in Conservation Studies in Conservation: Vol 46, No Supplement-1 [Internet]. 2001;96–110. Available from: http://www.maneyonline.com/doi/abs/10.1179/sic.2001.46.Supplement-1.92

105.

Centeno SA, Williams VI, Little NC, Speakman RJ. Characterization of surface decorations in Prehispanic archaeological ceramics by Raman spectroscopy, FTIR, XRD and XRF. Vibrational Spectroscopy. 2012 Jan;58:119–24.

106.

Tsang, Jia-Sun ; Madden, Odile ; Coughlin, Mary ; Maiorana, Anthony ; Watson, Judy ; Little, Nicole C. ; Speakman, Robert J. ; Jia-Sun Tsang ; Odile Madden ; Mary Coughlin ; Anthony Maiorana ; Judy Watson ; Nicole C. Little ; Robert J. Speakman. Degradation of 'Lumarith' Cellulose Acetate: EXAMINATION AND CHEMICAL ANALYSIS OF A SALESMAN'S SAMPLE KIT. Available from: http://ucl-primo.hosted.exlibrisgroup.com/primo_library/libweb/action/display.do?frbrVersion=4&tabs=detailsTab&ct=display&fn=search&doc=TN_jstor_archive_327867074&indx=1&recIds=TN_jstor_archive_327867074&recIdxs=0&elementId=0&renderMode=poppedOut&displayMode=full&frbrVersion=4&frbg=&&dscnt=0&scp.scps=scope%3A%28UCL%29%2Cprimo_central_multiple_fe&tb=t&mode=Basic&vid=UCL_VU1&srt=rank&tab=local&dum=true&vl(freeText0)=Degradation%20of%20%E2%80%98lumarith%E2%80%99%20cellulose%20acetate&dstmp=1474124372320

107.

Chandler H. Metallurgy for the non-metallurgist. Materials Park, Ohio: ASM International; 1998.

108.

Lang J, Craddock PT. Mining and metal production through the ages. London: British Museum; 2003.

109.

Biswas AK, Davenport WG. Extractive metallurgy of copper. 4th ed. Oxford: Pergamon; 2002.

110.

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

111.

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

112.

Mattusch CC, Barr-Sharrar B, Arthur M. Sackler Museum, Toledo Museum of Art, Tampa Museum of Art. The fire of Hephaistos: Large classical bronzes from North American collections. Cambridge, Mass: Harvard University Art Museums; 1996.

113.

Ottaway BS, Wang Q. Casting experiments and microstructure of archaeologically relevant bronzes. Vol. BAR international series. Oxford: Archaeopress; 2004.

114.

Scott DA, Getty Conservation Institute. Copper and bronze in art: Corrosion, colorants, conservation. Los Angeles: Getty Conservation Institute; 2002.

115.

Scott DA. Metallography and microstructure of ancient and historic metals [Internet]. CA:

Getty Conservation Institute in association with Archetype Books; 1991. Available from: http://hdl.handle.net/10020/gci_pubs/metallography_microstructure

116.

Scott DA, Podany J, Considine BB, J. Paul Getty Museum, Getty Center for the History of Art and the Humanities. Ancient & historic metals: Conservation and scientific research. Proceedings of a symposium organized by the J. Paul Getty Museum and the Getty Conservation Institute, November 1991 [Internet]. Marina del Rey, CA: Getty Conservation Institute; 1994. Available from: http://www.getty.edu/conservation/publications_resources/pdf_publications/ancientmetals.html#download

117.

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

118.

Ryndina N. The potential of metallography in investigations of early objects made of copper and copper-based alloys. Historical metallurgy: journal of the Historical Metallurgy Society. 2009;

119.

Metal 2010, Proceedings of the Interim Meeting of the ICOM-CC Metal Working Group, Charleston, South Carolina, USA,11-15 October 2010 (digital version) by Clemson University (eBook) â�� Lulu GB [Internet]. Available from: http://www.lulu.com/shop/clemson-university/metal-2010-proceedings-of-the-interim-meeting-of-the-icom-cc-metal-working-group-charleston-south-carolina-usa11-15-october-2010-digital-version/ebook/product-18691539.html

120.

Buchwald VF, Kongelige Danske videnskabernes selskab. Iron and steel in ancient times. Vol. Historisk-filosofiske skrifter. Copenhagen: Det Kongelige Danske Videnskabernes Selskab; 2005.

121.

Craddock PT, La Niece S. Metal plating and patination: Cultural, technical and historical developments. Boston: Butterworth-Heinemann; 1993.

122.

Lang J, Craddock PT. Mining and metal production through the ages. London: British Museum; 2003.

123.

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

124.

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

125.

Janaway RC, Scott BG, United Kingdom Institute for Conservation of Historic and Artistic Works, Council for British Archaeology. Evidence preserved in corrosion products: New fields in artifact studies. Vol. Occasional papers. London: United Kingdom Institute for Conservation; 1989.

126.

Jones DA. Principles and prevention of corrosion. 2nd ed. Upper Saddle River, NJ: Prentice Hall; 1996.

127.

Scott DA. Metallography and microstructure of ancient and historic metals [Internet]. CA: Getty Conservation Institute in association with Archetype Books; 1991. Available from: http://hdl.handle.net/10020/gci_pubs/metallography_microstructure

128.

Scott DA, Eggert G. Iron and steel in art: Corrosion, colorants, conservation. London: Archetype; 2009.

129.

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

130.

M. J. Drews. The application of subcritical fluids for the stabilization of marine archaeological iron. Studies in Conservation [Internet]. 2013;58(4):314–25. Available from: http://www.jstor.org/stable/42751834

131.

Juleff G. An ancient wind-powered iron smelting technology in Sri Lanka. Nature [Internet]. 1996;379(6560):60–6. Available from: http://www.nature.com.libproxy.ucl.ac.uk/nature/journal/v379/n6560/pdf/379060a0.pdf

132.

Derrick MR, Stulik D, Landry JM. Chapter 5: spectral interpretation. In: Infrared spectroscopy in conservation science [Internet]. Los Angeles: J. Paul Getty Trust; 1999. Available from: http://www.getty.edu/conservation/publications_resources/pdf_publications/pdf/infrared_spectroscopy.pdf

133.

Drennan RD. Statistics for archaeologists – A commonsense approach [Internet]. 1996. Available from: https://link-springer-com.libproxy.ucl.ac.uk/book/10.1007%2F978-1-4419-0413-3

134.

Drummond G. Statistics: A journey that needs a guide. In: Langton P, editor. Essential guide to reading biomedical papers: Recognising and interpreting best practice [Internet]. 2012. Available from: https://onlinelibrary-wiley-com.libproxy.ucl.ac.uk/doi/book/10.1002/9781118402184

135.

Ebel HF, Bliefert C, Russey WE. The art of scientific writing: From student reports to professional publications in chemistry and related fields. 2nd ed. Weinheim: Wiley-VCH; 2004.

136.

Reedy TJ, Reedy CL. Principles of experimental design for art conservation research [Internet]. Newark, DE; Marina del Rey, CA: Stat/Consul, University of Delaware; Getty Conservation Institute.; 1992. Available from: http://hdl.handle.net/10020/gci_pubs/principles_experimental_design

137.

Rougier NP, Droettboom M, Bourne PE. Ten Simple Rules for Better Figures. PLoS Computational Biology. 2014;10(9).

138.

Aaron N. Shugar; Jennifer L. Mass. Introduction: Handheld XRF for Art and Archaeology. In: Handheld XRF for Art and Archaeology [Internet]. Leuven University Press; 2012. Available from: http://www.jstor.org/stable/j.ctt9qdzfs

139.

Dylan Smith. Ch. 2: Handheld X-ray fluorescence analysis of Renaissance bronzes: Practical approaches to quantification and acquisition. In: Handheld XRF for Art and Archaeology [Internet]. Leuven University Press; 2012. p. 37–74. Available from: https://www.jstor.org/stable/j.ctt9qdzfs.6

140.

Valiela I. Doing science: Design, analysis, and communication of scientific research.

Oxford: Oxford University Press; 2001.

141.

van Hoek CJG, de Roo M, van der Veer G, van der Laan SR. A SEM-EDS study of cultural heritage objects with interpretation of constituents and their distribution using PARC data analysis. Microscopy and Microanalysis [Internet]. 2011;17. Available from: http://journals.cambridge.org/action/displayFulltext?type=1&fid=8386387&jid=MAM&volumeId=17&issueId=05&aid=8386385&bodyId=&membershipNumber=&societyETOCSession=

142.

Verkade P. Electron microscopy (TEM and SEM). Langton P, editor. Essential guide to reading biomedical papers: Recognising and interpreting best practice [Internet]. 2012; Available from: http://onlinelibrary.wiley.com/store/10.1002/9781118402184.ch7/asset/ch7.pdf?v=1&t=if6m013e&s=2f650e160edfc75f4bfcb8abcca8b62f2e048b39

143.

The GCI Newsletter, Conservation Perspectives Spring 2014 [Internet]. Available from: http://www.getty.edu/conservation/publications_resources/newsletters/29_1/index.html

144.

Horie CV. Materials for conservation: Organic consolidants, adhesives and coatings. 2nd ed. Amsterdam: Butterworth-Heinemann; 2010.

145.

Horie V. Does what we want exist? In: Adhesives and consolidants for conservation: research and applications symposium proceedings / Adhésifs et consolidants pour la conservation: recherche et applications: les actes [Internet]. 2011. Available from: http://www.cci-icc.gc.ca/discovercci-decouvriricc/Symposium/2011Symposium-eng.aspx

146.

van Oosten T, Shashoua Y, Waentig F, Fachhochschule Köln, ICOM Committee for

Conservation. Plastics in art: History, technology, preservation. Vol. Kölner Beiträge zur Restaurierung und Konservierung von Kunst-und Kulturgut. München: Siegl; 2002.

147.

Rowe S, Rozeik C. The uses of cyclododecane in conservation. Reviews in Conservation - Studies in Conservation: Vol 53, No Supplement-2 [Internet]. 2008;9:17–31. Available from: http://www.maneyonline.com/doi/pdfplus/10.1179/sic.2008.53.Supplement-2.17

148.

Shashoua Y. Conservation of plastics: Materials science, degradation and preservation. Amsterdam: Butterworth-Heinemann; 2008.

149.

Hather JG. The identification of northern European woods: A guide for archaeologists and conservators. London: Archetype; 2000.

150.

Hoadley RB. Identifying wood: Accurate results with simple tools. Newtown, CT: Taunton Press; 1990.

151.

John Mills, Raymond White. Organic Chemistry of Museum Objects [Internet]. Taylor & Francis online; 2011. Available from: http://www.tandfebooks.com/ISBN/9780080513355

152.

Garland KM, Bernstein J, Rogers J. RAISING MERET-IT-ES: EXAMINING AND CONSERVING AN EGYPTIAN ANTHROPOID COFFIN FROM 380–250 BCE. Journal of the American Institute for Conservation. 2015 May;54(2):102–13.

153.

Orsini S, Ribechini E, Modugno F, Klügl J, Di Pietro G, Colombini M. Micromorphological and chemical elucidation of the degradation mechanisms of birch bark archaeological artefacts. Heritage Science. 2015;3(1).

154.

Dorge V, Howlett FC, American Institute for Conservation of Historic and Artistic Works. Painted wood: History and conservation. Los Angeles: Getty Conservation Institute; 1998.

155.

Eaton RA, Hale, M. D. C. Wood: Decay, pests, and protection. 1st ed. London: Chapman & Hall; 1993.

156.

Hather JG. The identification of northern European woods: A guide for archaeologists and conservators. London: Archetype; 2000.

157.

Hoadley RB. Identifying wood: Accurate results with simple tools. Newtown, CT: Taunton Press; 1990.

158.

John Mills, Raymond White. Organic Chemistry of Museum Objects [Internet]. 2012. Available from: http://www.tandfebooks.com/ISBN/9780080513355

159.

Rivers S, Umney N. Conservation of furniture. Vol. Butterworth-Heinemann series in conservation and museology. Oxford: Butterworth-Heinemann; 2003.

160.

Sands R. Prehistoric woodworking: The analysis and interpretation of Bronze and Iron Age toolmarks. Vol. Wood in archaeology. London: UCL Institute of Archaeology; 1997.

161.

Appleyard HM, Wira. Guide to the identification of animal fibres. 2nd ed. Leeds: Wira; 1978.

162.

Catling D, Grayson JE. Identification of vegetable fibres. London: Chapman & Hall; 1982.

163.

Gale R, Cutler D. Plants in archaeology: Identification manual of vegetative plant manterials used in Europe and the southern Mediterranean to c. 1500. Otley: Westbury and Royal Botanic Gardens, Kew; 2000.

164.

Florian ME, Kronkright DP, Norton RE. The conservation of artifacts made from plant materials [Internet]. [Marian del Rey, Calif.]: Getty Conservation Institute; 1990. Available from: http://www.getty.edu/conservation/publications_resources/pdf_publications/pdf/cons_artifacts.pdf

165.

Greaves, P. H., Saville, B. P., Royal Microscopical Society (Great Britain). Microscopy of textile fibres. Vol. Microscopy handbooks. Oxford: BIOS Scientific in association with the Royal Microscopical Society; 1995.

166.

John Mills, Raymond White. Organic Chemistry of Museum Objects [Internet]. Taylor & Francis online; 2011. Available from: http://www.tandfebooks.com/ISBN/9780080513355

167.

Wildman AB. The microscopy of animal textile fibres: Including methods for the complete analysis of fibre blends. Leeds: Wool Industries Research Association; 1954.

168.

Calvini P, Gorassini A. On the rate of paper degradation: Lessons from the past. Restaurator: International journal for the preservation of library and archival material [Internet]. 2006;27(4). Available from: https://www-degruyter-com.libproxy.ucl.ac.uk/view/journals/rest/27/4/article-p275.xml

169.

Daniels V. Paper. In: Conservation science: Heritage materials. Cambridge: RSC Publishing; 2006. p. 32–55.

170.

Daniels V, Donnithorne A, Smith P, International Institute for Conservation of Historic and Artistic Works. Works of art on paper, books, documents and photographs: Techniques and conservation. London: International Institute for Conservation; 2002.

171.

Havlínová B, Katuščák S, Petrovičová M, Maková A, Brezová V. A study of mechanical properties of papers exposed to various methods of accelerated ageing. Part I. The effect of heat and humidity on original wood-pulp papers. Journal of Cultural Heritage. 2009 Apr;10(2):222–31.

172.

Seery M, editor. Paper Conservation [Internet]. 2013. Available from: http://www.rsc.org/education/eic/issues/2013March/paper-conservation-cellulose-acid-hydrolysis.asp

173.

Strlič M, Kolar J, Scholten S. Paper and durability. In: Strlič M, Kolar J, editors. Ageing and stabilisation of paper [Internet]. Ljubljana: National and University Library; 2004. Available from: https://contentstore.cla.co.uk/secure/link?id=c3a661a8-a23f-4b4e-93f5-2ac0cfd8c887

174.

Calnan CN, Haines B, Leather Conservation Centre. Leather: Its composition and changes with time. Northhampton, England: Leather Conservation Centre; 1991.

175.

Covington T. Tanning chemistry - The science of leather [Internet]. 2009. Available from: http://app.knovel.com/web/toc.v/cid:kpTCTSL002/viewerType:toc/root_slug:tanning-chemistry-science/url_slug:tanning-chemistry-science/?

176.

Florian MLE. Protein facts: Fibrous proteins in cultural and natural history artifacts. London: Archetype Publications; 2007.

177.

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

178.

Horie CV. Deterioration of skin in museum collections. Polymer Degradation and Stability [Internet]. 1990;29(1):109–33. Available from: http://www.sciencedirect.com/science/article/pii/0141391090900253?via%3Dihub

179.

Kite M, Thomson R. Conservation of leather and related materials [Internet]. Vol. Butterworth-Heinemann series in conservation and museology. Oxford: Butterworth-Heinemann; 2006. Available from: http://www.vlebooks.com/vleweb/product/openreader?id=UCL&isbn=9780080454665

180.

Larsen R. Microanalysis of parchment. London: Archetype; 2002.

181.

Richards M. Deerskins into buckskins: How to tan with brains, soap or eggs. 2nd ed., rev.updated. Cave Junction, Or: Backcountry Pub; 2004.

182.

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

183.

Cameron E. Identification of skin and leather preserved by iron corrosion products. Journal of Archaeological Science. 1991 Jan;18(1):25–33.

184.

Koochakzaei A, Achachluei MM. RED STAINS ON ARCHAEOLOGICAL LEATHER: DEGRADATION CHARACTERISTICS OF A SHOE FROM THE 11TH–13TH CENTURIES (SELJUK PERIOD, IRAN). Journal of the American Institute for Conservation. 2015 Feb;54(1):45–56.

185.

Strand, Eva B. Andersson, North European Symposium for Archaeological Textiles. North European Symposium for Archaeological Textiles X. Vol. Ancient textiles series. Oxford: Oxbow Books; 2009.

186.

Boersma F, Brokerhof AW, van den Berg S, Tegelaers J. Unravelling textiles: A handbook for the preservation of textile collections. London: Archetype; 2007.

187.

Janaway RC, Wyeth P, AHRC Research Centre for Textile Conservation and Textile Studies. Scientific analysis of ancient and historic textiles: Informing preservation, display and interpretation: Postprints. London: Archetype; 2005.

188.

O'Connor SA, Brooks MM. X-radiography of textiles, dress and related objects [Internet]. Vol. Butterworth-Heinemann series in conservation and museology. Oxford: Elsevier/Butterworth-Heinemann; 2007. Available from: https://www-dawsonera-com.libproxy.ucl.ac.uk/readonline/9780080550206

189.

Schoeser M. World textiles: A concise history. Vol. World of art. London: Thames & Hudson; 2003.

190.

Seiler-Baldinger A. Textiles: A classification of techniques. Washington, D.C: Smithsonian Institution Press; 1994.

191.

Watkins SM. Clothing: The portable environment. Ames, Iowa: Iowa State University Press; 1984.

192.

Cartwright C, King JCH. Identification of hairs and fibres in Great Lakes objects from the eighteenth and nineteenth centuries using variable pressure scanning electron microscopy. British Museum technical research bulletin [Internet]. 2012;6. Available from: http://www.britishmuseum.org/pdf/BMTRB_6_Cartwright-and-King.pdf

193.

Lennard F, Dulieu-Barton JM. Quantifying and visualizing change: Strain monitoring of tapestries with digital image correlation. Studies in Conservation. 2014 July;59(4):241–55.

194.

Cassman V, Odegaard N. Condition assessment of osteological collections. In: Human remains: guide for museums and academic institutions. Lanham, MD: AltaMira Press; 2007.

195.

Child AM. Towards an understanding of the microbial decomposition of archaeological bone in the burial environment. Journal of Archaeological Science. 1995;22(2):165–74.

196.

Holztapffel CH. Working horn, ivory & tortoishell. Portland OR: Caber Press; 2000.

197.

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

198.

John Mills, Raymond White. Organic Chemistry of Museum Objects [Internet]. Taylor & Francis online; 2011. Available from: http://www.tandfebooks.com/ISBN/9780080513355

199.

Paris C, Lecomte S, Coupry C. ATR-FTIR spectroscopy as a way to identify natural protein-based materials, tortoiseshell and horn, from their protein-based imitation, galalith. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy. 2005;62(1–3):532–8.

200.

Shelton SY. Byne's "disease;" how to recognize, handle and store affected shells and related collections. Conserve O Gram [Internet]. 2008;11/15:1–4. Available from: https://www.nps.gov/museum/publications/conserveogram/cons_toc.html

201.

Starling K, Watkinson D, United Kingdom Institute for Conservation of Historic and Artistic Works. Archaeological bone, antler and ivory. Vol. Occasional papers / United Kingdom Institute for Conservation of Historic and Artistic Works. London: United Kingdom Institute for Conservation; 1987.

202.

Passmore E, et al. Hidden, looted, saved: The scientific research and conservation of a group of Begram Ivories from the National Museum of Afghanistan. 2012; Available from: http://www.britishmuseum.org/pdf/BMTRB_6_Passmore-et-al.pdf

203.

Espinoza EO, Baker BW, Berry CA. The analysis of sea turtle and bovid keratin artefacts using drift spectroscopy and discriminant analysis. Archaeometry [Internet]. 2007;49(4). Available from: http://onlinelibrary.wiley.com.libproxy.ucl.ac.uk/doi/10.1111/j.1475-4754.2007.00328.x/epdf