

Dyes in History & Archaeology- Articles Contained in Volumes 1-21

DHA Volume 1: (Dyes on Historical and Archaeological Textiles) 1982 Editor:

- *Recent advances in the detection and identification of red and yellow dyes*
Mark Whiting
- *Analysis of dyes in fabrics recovered from the Mary Rose site*
John Harvey
- *Detection and identification of dyes on Anglo-Scandinavian textiles*
George W. Taylor
- *Dyes on textiles from Newcastle-Upon-Tyne and Spitsbergen*
Penelope Walton
- *Colour specification and colour fading*
Roy S. Sinclair
- *Natural dyes used in Scottish textiles*
David G. Duff
- *Problems in identifying dyes on old Scottish textiles*
Helen E. Dalrymple
- *Textiles available from Middle Eastern sites*
Gillian Eastwood

DHA Volume 2: (Dyes on Historical and Archaeological Textiles) 1983

- *Dye identification at the National Museum of Antiquities of Scotland*
H.E. Dalrymple
- *Dye analysis at the British Museum*
V. Daniels
- *Natural dyes of the Scottish Highlands*
D.G. Duff & R.S. Sinclair
- *Practical work with dyes of the Scottish Highlands*
Su Grierson
- *Lichen purples*
G.W. Taylor & Penelope Walton

DHA Volume 2 Continued:

- *Detection of shellfish purples on textiles*
G.W. Taylor
- *Evidence of dyeing practices from a group of late Saxon textiles from London*
Frances Pritchard
- *Evidence of dyeplants from Viking age York and medieval Beverly*
A.R. Hall
- *Natural dye collection- Leeds University*
F. Jones

DHA Volume 3: (Dyes on Historical and Archaeological Textiles) 1984

- *Dyes on Scottish tartans*
H.E. Dalrymple
- *Progress in dye analysis at the British Museum*
V. Daniels
- *Egyptian dyes and colours*
G.M. Eastwood
- *Workshop dyeing*
S. Grierson
- *Survey of the insect red dyes*
G.W. Taylor
- *American Chemical Society Meeting, Philadelphia, August 1984- comments on the papers concerned with dye analysis*
G.W. Taylor
- *Progress in palaeobotanical studies of dye plants 1983/84*
P. Tomlinson & A. Hall
- *Dyes on medieval textiles*
P. Walton

DHA Volume 4: (Dyes on Historical and Archaeological Textiles) 1985

- *Anthocyanin dyes- tests using petals and berries*
S. Greirson
- *Analysis of samples containing turmeric*
V. Daniels
- *The recreation of historic dyes*
D. Hill
- *Dye analysis on two fragments from Enkomi*
V. Daniels
- *Dye analysis at the Textile Conservation Centre, Hampton Court Palace*
N. Easthaugh
- *Insect red dyes: an update*
G.W. Taylor
- *Dye related work at the National Museum of Antiquities*
H.E. Dalrymple
- *The chemical constitution, colour, and fastness of natural dyes (part 1)*
R.S. Sinclair & C. Wilson
- *Additional note, July 1986: Shellfish purple in a Coptic textile*
P. Walton

DHA Volume 5: (Dyes on Historical and Archaeological Textiles) 1986

- *The natural pigmentation of animal textile fibres*
M.L. Ryder
- *Observations on the analysis of dyewood dyeings*
G.W. Taylor
- *Leeds dye project*
S. Grierson
- *Some aspects of colour definition*
F. Jones
- *Dyes in early Scandinavian textiles*
P. Walton

DHA Volume 5 Continued:

- *The analysis of madder dyes*
H.E. Garland

DHA Volume 6:

- *Further work on the dye analysis of textile fragments from Enkomi*
Vincent Daniels
- *Leeds collection of natural colouring materials*
Su Greirson
- *The preparation of early lake pigments: a survey*
Jo Kirby
- *Blue dyeings from natural and synthetic indigo*
George Taylor
- *The colourants in Israeli kermes*
George Taylor
- *The colouring matter of Rhus cotinus*
Jan Wouters & Stefaan Florquin
- *HPLC of insect reds*
Jan Wouters & André Verhecken

DHA Volume 7: 1988 Published, 1989

- *Mediterranean kermes and kermes-dyeing*
D. Cardon
- *The analysis of madder and related dyes*
M.C. Whiting
- *Identification of red madder and insect dyes by thin-layer chromatography (abstract only)*
H. Schweppe
- *Dyes of the Viking Age: a summary of recent work*
P. Walton
- *Possible contaminants in indigo dyeing*
S. Grierson
- *The use of aluminium in clubmoss as a dye mordant*
D.G. Duff & R.S. Sinclair

DHA Volume 7 Continued:

- *'Natural' testing of early synthetic dyeings*
G.W. Taylor

DHA Volume 8:

- *Dye analysis at Paisley*
Dr. R.S. Sinclair
- *The identification of safflower red dyeing*
Dr. G.W. Taylor
- *The solubility of indigo*
L.R. Green
- *Anomalous fading of indigo-dyed paper*
Dr. V. Daniels
- *Archaeological records of dye plants—and update with a note on fullers' teasels*
Dr. A.R. Hall & P. Tomlinson
- *Analysis of medieval red dyes by HPLC, with special emphasis on the insect dyes*
D. Cardon, A. Colombini, & B. Oger
- *Analysis of the dyes on two early Chinese kesi panels*
Dr. G.W. Taylor
- *Four black-dyed silk textiles of the late 17th century*
M. Findlay
- *A list of dyed yarns available for analytical work*
S. Grierson
- *Recent publications concerning the analysis and history of dyes*

DHA Volume 9:

- *Indigo in the Arab world*
J. Balfour-Paul
- *Black dyes for wool in Mediterranean textile centres: an example of the chemical relevance of guild regulations*
D. Cardon
- *Identification of mordants using analytical techniques*
L.R. Green & V. Daniels

DHA Volume 9 Continued:

- *The Dunhuang Diamond Sutra: a study in scientific conservation techniques*
F.H. Jones & K.R. Seddon
- *Dyes and dyeing: a select bibliography compiled by members of the Association*
Various
- *On the nature of dyeing with madder and related dyestuffs*
G.W. Taylor
- *Dye analysis undertaken in the National Museums of Scotland between October 1989 and September 1990*
A. Quye
- *A Jouy calico print using chay root*
G.W. Taylor
- *Recent publications concerning the history and analysis of dyes*

DHA Volume 10: National Gallery, London 1991 Editor: Penelope Walton Rogers

- *Was the Golden Fleece really coloured?*
M. L. Ryder
- *Identification of flavones and flavanols on a microgram scale*
M. Whiting
- *Solution to the enigmas of dyeing Tyrian purple and biblical tekhet*
O. Elsner
- *A new method for the analysis of blue and purple dyes in textiles*
J. Wouters
- *New information on the medieval woad vat*
D. Cardon
- *Indigo dyeing in Japan*
S. Ushida
- *The chemistry of madder dyeings: application of semi-quantitative TLC*
G.W. Taylor
- *Dyes on some 16th- and 17th-century textiles excavated in London*
F. Pritchard

DHA Volume 10 Continued:

- *The original colour scheme of embroidered cushions from Hódmezővásárhely*
A. Timár-Balázs & A. Szôke
- *An application of HPLC to the identification of natural dyes*
A. Quye & J. Wouters
- *Experiments in the identification of colorants in situ: possibilities and limitations*
B. Guineau

DHA Volume 11: York 1992 Editor: Penelope Walton Rogers

- *The International Conference on Woad in Erfurt*
J. Balfour-Paul
- *Woad growing and manufacture in the Lincolnshire and Cambridgeshire Fens and in Northamptonshire*
N. T. Wills
- *The use of N-methyl-2-pyrrolidone (NM2P) as a solvent for the analysis of indigoid dyes*
L. R. Green & V. D. Daniels
- *Non-destructive, in situ identification of indigo/woad and shellfish purple by Raman microscopy and visible reflectance spectroscopy*
R. Withnall, R. J. H. Clark, C. J. Cooksey & M. A. M. Daniels
- *Methods of dye analysis used at the Shenkar College Edelstein Center in Israel*
Z. C. Koren
- *Plant and animal dyes formerly used in Albania*
F. Stamati
- *Analysis of dyes and technique of a 20th-century Iranian carpet from the city of Nain*
J. Wouters and G. de Craeker
- *Light-induced colour change in red and yellow organic pigments - work in progress (an abstract)*
J. Kirby and D. Saunders

DHA Volume 12: Brussels 1993 Editor: Penelope Walton Rogers

- *Furnaces in the jungle: Gambier in West Sumatra*
F. Sorber
- *Indigo in South-West China*
J. Balfour-Pau

- *Dye analysis of Chinese and Indian textiles*
J. Wouters
- *Red Dyes in Indian painted and printed cotton textiles*
G. W. Taylor
- *Cochineal and lac: a simple method for estimating mixtures*
D. McJunkin
- *Experiments with the dyes from European purple-producing mollusks*
A. Verhecken
- *Painting techniques of polychromed Antwerp altarpieces*
J. Sanyova & J. Wouters
- *Non-destructive three-dimensional fluorescence technique*
S. Shimoyama & Y. Noda

DHA Volume 13: Edinburgh 1994 Editor: Penelope Walton Rogers

- *Shellfish purple: the use of *Purpura patula pansa* on the Pacific coast of Mexico*
J. Thompson
- *Making Tyrian Purple*
C. J. Cooksey
- *Non-destructive determination of plant dyestuffs used for ancient madder dyeing, employing a three-dimensional fluorescence spectrum technique*
S. Shimoyama & Y. Noda
- *An efficient HPLC analysis scheme for plant and animal red, blue and purple dyes*
Z. Koren
- *Dye analysis in a broad perspective: a study of 3rd- to 10th-century Coptic textiles from Belgian private collections*
J. Wouters et. al.
- *Identification of flavanoid type yellows in paint samples by solution absorption and fluorescence spectrophotometry*
A. Wallert
- *Yellow dyes of historical importance: beginnings of a long-term multi-disciplinary study; part 1*
D. Cardon

DHA Volume 13 Continued:

- *Imports of dyestuffs into late 17th-century Scotland: the customs records as a source*
T.C. Smout
- *The woad trade of Toulouse and The Second International Conference on Woad, Indigo and Other Natural Dyes*
J. Balfour-Paul

DHA Volume 14: Amsterdam 1995 Editor: Penelope Walton Rogers

- *Analysis of Punic natural dyes: purple earth from Zembra and cosmetic make-up from Carthage*
T. Karmous, N. Ayed, M. H. Fantar & J. Wouters
- *Maori black mud dyeing of Phormium tenax fibre*
V. Daniels
- *Changes in colouring: observations on the islands of Rei Metau in Micronesia*
C. Petrosian-Husa
- *Yellow dyes of historical importance, II: chemical analysis of weld and saw-wort*
C. Andary, S. Prunac & D. Cardon
- *Ottoman textiles: dye analysis, results and interpretation*
E. Enez and H. Böhmer
- *Dyes on some Kashmir shawls*
G. W. Taylor
- *Dye analysis of Florentine borders of the 14th to 16th centuries*
J. Wouters
- *Recycling in the 17th-century textile industry*
J. H. Hofenk de Graaf
- *TLC of the indigoid colorants in shellfish purple*
C. J. Cooksey
- *The Arisaig purple expedition*
G. W. Taylor

DHA Volume 15: Manchester 1996 Editor: Penelope Walton Rogers

- *The Bühler collection of Indonesian dyeplants*
R. Hofmann

DHA Volume 15 Continued:

- *Non-destructive analysis of Ukiyo-e prints*
S. Shimoyama, Y. Noda & S. Katsuhara
- *A study of the tannins in pomegranate peel*
C. Ben Nasr & M. Metche
- *Fading hopes for flavanoid dye analysis?*
A. Quye, J. Wouters & J. J. Boon
- *Non-destructive analysis of dyes in a Chinese brocade*
S. Shimoyama & Y. Noda
- *HPLC analysis of extracts, dyeings and lakes, prepared with 21 species of Relbunium*
C. M. Dutra Moresi & J. Wouters
- *Orchil of Auvergne*
M. Dallon

DHA Volume 16/17: Lyon 1997 & Greenwich 1998 Editor: Jo Kirby

- *Plant dyes: from archaeology to industry*
Patrick Brenac, Emmanuelle Beaur, Patrick Choisy & Anne De La Sayette
- *Yellow dyes of historical importance. III: new historical / chemical evidence on a wild Mediterranean dye-plant, Daphne gnidium*
Dominique Cardon & Claude Andary
- *The technology of silk dyeing by cochineal II : The influences of types and concentrations of cations*
Valery Golikov
- *The technology of silk dyeing by cochineal III. The influences of pH, water quality, cream of tartar and oak galls*
Valery Golikov
- *Synthetic alizarin - the dye that changed history*
Alan Dronsfield, Trevor Brown & Christopher Cooksey
- *Mariano Fortuny (1871-1949):his use of natural dyes*
Frances Pritchard
- *Traditional recipes for natural dyeing of wool in the south of Tunisia*
Naceur Ayed & Abir Alatrache

DHA Volume 16/17 Continued:

- *Colorants used in the material culture of Papua New Guinea*
Rowena Hill
- *Dyeing with indigo and mud in Senegal and Mali*
Jenny Balfour-Paul
- *The last indigo dyer in Tunisia: technology and quality control*
Abir Alatrache & Naceur Ayed
- *Indigo and the 40 robbers: romantic transfigurations of the blue-printer's trade in modern society*
Georg Stark
- *Revival of biblical tekhelet dyeing with banded dye-murex (*Phyllonotus trunculus*): chemical anomalies*
Dr Irving I. Ziderman
- *Chemical studies on *Nucella lapillus**
Christopher Cooksey & Robert Withnall
- *The synthesis and properties of 6-bromoindigo: indigo blue or Tyrian purple? The effect of physical state on the colours of indigo and bromoindigos*
Christopher Cooksey
- *The microbiology of the medieval woad vat*
Nikki Padden, Vivian Dillon, John Edmonds, David Collins, Nerea Alvarez, & Philip John
- *Dye analyses using derivative UV-visible spectrophotometry & fibre-safe extraction with EDTA*
Recep Karadag & Harald Böhmer
- *Orchil lichens of Tunisia: chromatographic identification and dyeing system*
Tijani Karmous & Naceur Ayed
- *The possibility of differentiation and identification of red and blue 'soluble' dyewoods: determination of species used in dyeing and chemistry of their dyestuffs*
Witold Nowik
- *The dye of *Rubia peregrina*. 1. preliminary investigations*
Jan Wouters
- *A successful Talmudic-flavored HPLC analysis of carthamin from red safflower dyeings*
Zvi C. Koren
- *Preliminary research into lac lake pigments using HPLC/electrospray mass spectrometry*
Raymond White & Jo Kirby

DHA Volume 16/17 Continued:

- *Development of analytical techniques for the study of natural yellow dyes in historic textiles*
Ester S. B. Ferreira, Anita Quye, Hamish McNab, Alison N. Hulme, Dr Jan Wouters & Jaap J. Boon
- *Analysis of natural organic pigments by laser desorption mass spectrometry (LDMS): preliminary study to spatially resolved mass spectrometry*
Nicolas Wyplosz, Ron M. A. Heeren, Gerard van Rooij & Jaap J. Boon
- *The colouring of alum-tawed skins on late medieval books*
Cheryl Porter
- *Influence of fungicides and insecticides on colour materials*
Oliver Hahn
- *Degradation of artefacts caused by iron-containing dyes*
Vincent Daniels
- *Recent publications concerning the analysis and history of dyes: abstracts of books and papers received since 1997*
Penelope Walton Rogers (Compiled by)

DHA Volume 18: Brussels 1999 Editor: Jo Kirby

- *Woad, tattooing and the archaeology of rebellion in Britain*
Gilly Carr
- *Adolph von Baeyer and the indigo molecule*
Christopher J. Cooksey & Alan T. Dronsfield
- *NMR spectroscopy of leucoindigotins and formation of deuterated indigotins*
Gundula Voss
- *The etymology and botany of some European lichen dyes*
Karen Diadick Casselman
- *Botanical alternatives to alum*
G. W. Taylor
- *The right mud: studies in mud-tannic dyeing in West China and West Surrey*
Deryn O'Connor & Ann Richards
- *Traditional Maori dyes*
Rangi Te Kanawa, Scott Thomsen, Gerald Smith, Ian Miller, Claude Andary & Dominique Cardon

DHA Volume 18 Continued:

- *Colour in modern Polish tapestry*
Katarzyna Schmidt-Przewozna
- *Analysis of natural dyes from Roumanian 19th- and 20th-century ethnographical textiles by DAD-HPLC*
Irina Petroviciu & Jan Wouters
- *Photo-oxidation products of quercetin and morin as markers for the characterisation of natural flavanoid yellow dyes in ancient textiles*
Ester S. B. Ferreira, Anita Quye, Hamish McNab & Alison N. Hulme
- *Non-destructive analysis of ukiyo-e, traditional Japanese woodblock prints, using a portable x-ray fluorescence spectrometer*
Yasuko Noda & Susumu Shimoyama
- *The classification of coloured organic materials in painting and applied arts on the basis of natural dyes*
Valeri Golikov
- *The use of coloured organic materials based on natural dyestuffs in Russian icon painting of the 15th - 19th centuries*
Valeri Golikov & Zoë Zharikova

DHA Volume 19: Edinburgh 2000 Editor: Jo Kirby

- *An historical and analytical study of red, pink, green and yellow colours in quality 18th- and early 19th-century Scottish tartans*
Anita Quye, Hugh Cheape, John Burnett, Ester S. B. Ferreira, Alison N. Hulme & Hamish McNab
- *LC-ion trap MS and PDA-HPLC - complementary techniques in the analysis of flavonoid dyes in historical textiles: the case study of an 18th-century herald's tabard*
Ester S. B. Ferreira, Anita Quye, Alison N. Hulme & Hamish McNab
- *LC-Ion trap MS and PDA-HPLC - complementary techniques in the analysis of different components of flavonoid dyes: the example of Persian berries (Rhamnus sp.)*
Ester S. B. Ferreira, Alison N. Hulme, Hamish McNab & Anita Quye
- *Did the medieval illuminator know how to prevent oxidative damage?*
Brian H. Davies
- *Pharmacy price-lists as a new type of documentary source for research into historical artists' materials: the Münchner taxenprojekt*
Christoph Krekel & Andreas Burmester

DHA Volume 19 Continued:

- *Sir Nathaniel Bacon's 'pinke'*
Jo Kirby
- *Color in the Andes: Inca garments and 17th-century colonial documents*
Elena Phipps
- *Organic colorants in the 17th-century Parsuna of Patriarch Nikon from the State Historical Museum, Moscow*
Olga Lantratova & Valery Golikov
- *The reproduction of a traditional votive figure based on the non-destructive analysis of colorants*
Yasuko Noda, Susumu Shimoyama & Masahiro Kasamatsu
- *An experimental system of analysis of the uses of saffron in Moroccan culture*
Jérôme Dupont
- *Identification of six natural red dyes by high-performance liquid chromatography*
Masako Saito, Akiko Hayashi & Mariko Kojima
- *New dye research on Palmyra textiles*
Harald Böhmer & Recep Karadag
- *Analysis of dyes on Jordanian textiles from Khirbet Qazone*
John A. Fields
- *Blue and purple dyestuffs used for ancient textiles*
Masanori Sato & Yoshiko Sasaki
- *Dyeing a purple shade using fresh leaves of the Japanese indigo plant*
Satoshi Ushida & Mitsuyo Kawasaki
- *Chemical studies of the purple dye of *Purpura pansa**
Rob Withnall, Dharmesh Patel, Chris Cooksey & Ludwig Naegel
- *Pre- Perkin synthetic routes to purple*
Chris Cooksey & Alan Dronsfield
- *Indigos with uncommon properties*
Gundula Voss & Carlo Unverzagt
- *The application of transmission electron microscopy (TEM) in the research of inorganic colorants in stained glass windows and parchment illustrations*
Peggy Fredrickx, Jan Wouters & Dominique Schryvers

DHA Volume 19 Continued:

- *Iron-sensitized degradation of black-dyed Maori textiles*
Nicole More, Gerald Smith, Rangi Te Kanawa & Ian Miller
- *The use of cyclododecane for the fixation of bleeding dyes on paper and textiles: a critical evaluation of application methods*
Annemette Bruselius Scharff & Ingelise Nielsen

DHA Volume 20: Amsterdam 2001 Editor: Jo Kirby, Published 2005

- *A concise history of dye analysis*
André Verhecken
- *Possible future developments in the analysis of organic dyes*
Jan Wouters
- *The analysis of dyes with HPLC coupled to photodiode array and fluorescence detection*
Maarten R. van Bommel
- *Studying dyes by time of flight secondary ion mass spectrometry*
F. Delamare & M. Repoux
- *Analysis of coloured compounds found in natural dyes by thermospray liquid chromatography-mass spectrometry (TSP LC-MS) and a preliminary study of the application to analysis of natural dyes used on historic textiles*
Nobuko Shibayama, Ryohei Yamaoka & Masanori Sato
- *TLC and HPLC analysis on red and violet cotton yarns of Indonesian textiles*
Regina Hofmann-de Keijzer & Maarten R. van Bommel
- *Dye analyses helped to determine the treatment of two historically important textiles*
Sharon Little
- *Stabilization of cellulosic textiles decorated with iron-containing dyes*
Gerald Smith, Rangi Te Kanawa, Ian Miller & Glen Fenton
- *Components of mordants and the silk fabrics treated with them*
Masako Saito, Mizuho Uehara & Kazuki Yamazaki
- *Madder (*Rubia tinctorum* L.) and gromwell (*Lithospermum erythrorhizon* Sieb. & Zucc.) Dyeing with alum in the Nara era, 8th century, in Japan - duplicate mordanting*
Jiro Komiyama, Mario Suematsu, & Shojiro Ogawa
- *Historical dyes in Poland and their revival (poster presentation)*
Katarzyna Schmidt-Przewoz'na

DHA Volume 20 Continued:

- *Description and analysis of four Moroccan uses of saffron. saffron, body and sexuality: art and ritual (poster presentation)*
Jérôme Dupont
- *Processing of indigo plants and dyeing with indigo in Japan: impressions of a visit in autumn 2000*
Ursula Klingelfuss-Schneider
- *Colour variations in Tyrian purple dyeing*
C.J. Cooksey & R.S. Sinclair
- *The first optimal all-murex completely natural purple dyeing in the eastern Mediterranean in a millennium and a half and its colorimetric characterization*
Zvi C. Koren
- *The purple fermentation vat: dyeing or painting parchment with Murex trunculus*
Inge Boesken Kanold
- *Chinese green, an enduring mystery*
C.J. Cooksey, A.T. Dronsfield & Jo Kirby
- *It happened by chance: the discovery of malachite green*
C.J. Cooksey & A.T. Dronsfield
- *Dyes (and pigments) as food additives (and adulterants)*
Brian H. Davies
- *The compatibility of transmission electron microscopy and micro-raman spectroscopy: application to parchment illustrations (poster presentation)*
P. Fredrickx, P. Vandenabeele, J. Wouters, L. Moens & D. Schryvers
- *A mass spectrometric study of the red naphthol PR170 as pigment and in acrylic emulsion paint (poster presentation)*
Beatrice Marino, Jerre van der Horst, Tom Learner & Jaap J. Boon

DHA Volume 21: Avignon and Lauris, France 2002 Editor: Jo Kirby

- *Dye analysis of selected textiles from three Roman sites in the eastern desert of Egypt: a hypothesis on the dyeing technology in Roman and Coptic Egypt*
Jan Wouters, Ina Vanden Berghe, Ghislaine Richard, René Breniaux & Dominique Cardon
- *Dyestuff analysis of two textile fragments from late antiquity*
Regina Hofmann-de Keijzer & Maarten R. van Bommel

DHA Volume 21 Continued:

- A new HPLC-PDA method for the analysis of Tyrian purple components
Zvi C. Koren
- *The biblical dye Tekhelet and its use in Jewish textiles*
I. Irving Ziderman
- *Indigo-reducing bacteria from the medieval woad (*Isatis tinctoria* L.) vat: some aspects of their interaction with indigo*
Philip John, Stylianos Arghyros & Sonja Nicholson
- *Woad production in Catalonia and Roussillon at the end of the Middle Ages*
Anthony Pinto
- *The identification of purple in manuscripts*
Cheryl Porter
- *Missal blue: anthocyanins in nature and art*
Maria João Melo
- *Sanguis draconis, dragon's blood: the use and analysis of a manuscript illuminators' colorant*
Arie Wallert & Maarten R. van Bommel
- *Some aspects of medieval and renaissance lake pigment technology*
Jo Kirby
- *Monitoring of damage to historic tapestries (MODHT): a newly initiated EU project*
Anita Quye, with an Addendum by Kathryn Hallett
- *Dye analysis of braids used for Japanese armour dating from the 14th to the 16th century (poster presentation)*
Yoshiko Sasaki, Masanori Sato, Mari Omura & Ken Sasaki
- *Chromatographic and spectroscopic differentiation of insect dyes on East Asian paintings (poster presentation)*
Jennifer Giaccai
- *A study of model carminic acid lakes prepared using cochineal, collagen and different mordant salts*
Valery Golikov & Zoë Zharikova
- *Natural dyes used in Polish workshops in the 17th and 18th centuries*
Katarzyna Schmidt-Przewoźna

DHA Volume 21 Continued:

- *Archaeology and dyeing traditions in West Africa (poster presentation)*
Marie Marquet
- *Chinese green: experimental investigations (poster presentation)*
Christopher J. Cooksey, Alan T. Dronsfield & Jo Kirby
- *Logwood under the microscope*
Brian H. Davies
- *Edward Schunck: forgotten dyestuffs chemist?*
Christopher J. Cooksey & Alan T. Dronsfield
- *Spectroscopic studies (FTIR, SIMS, ES-MS) on the structure of anthraquinone- aluminium complexes (poster presentation)*
Jana Sanyova
- *Computation of a visible light absorption spectrum, a semi-empirical quantum mechanical approach: application to the colour determination of alizarin complexes in solution or chemisorbed onto cellulose*
François Delamare & Bernard Monasse
- *Evaluation of consolidants for black iron tannate-dyed Maori textiles (poster presentation)*
Rangi Te Kanawa, Gerald J. Smith, Glenn A. Fenton, Ian J. Miller & Cara L. Dunford
- *In the circle of colour: natural dyeing of flax, silk and wool (poster presentation)*
Katarzyna Schmidt-Przewoźna & Witold Przewoźny