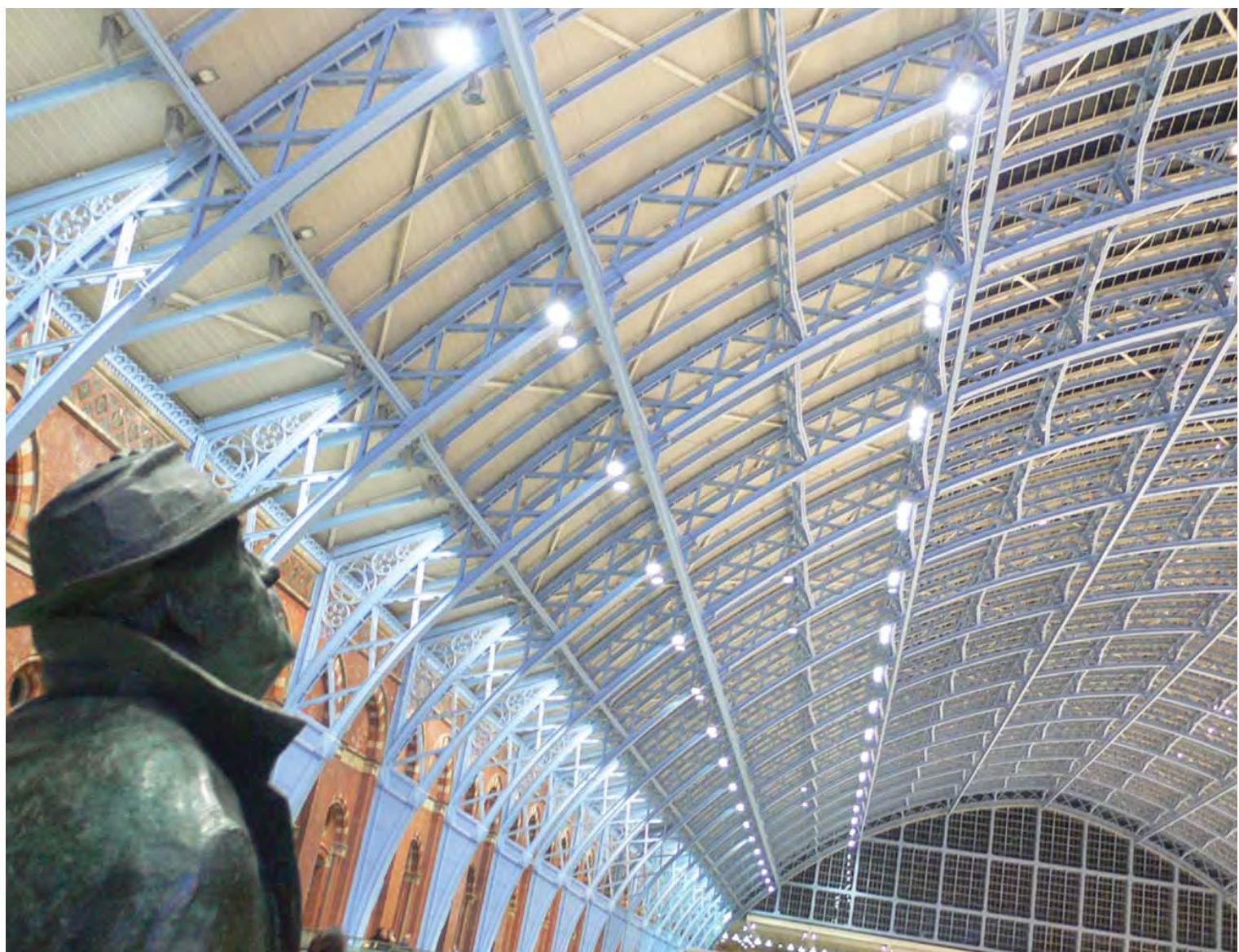


# Icon NEWS

THE MAGAZINE OF THE INSTITUTE OF CONSERVATION • MARCH 2008 • ISSUE 15



## Rhapsody in blue at St Pancras

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### Also in this issue

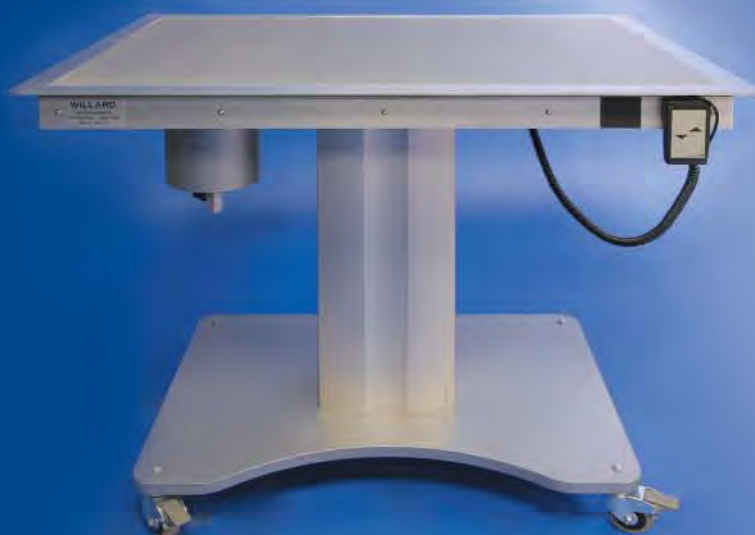
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## MARCH 2008

### Issue 15

A station, a cathedral, an abbey, a pub, a laboratory – *Icon News* gets around to bring you stories about conservation in all its wonderfully varied guises. I hope our enthusiasm for the subject won't lead us into glossing over uncomfortable truths but, as they found at Westminster Abbey recently – see page 27 – , negative spin can be just as much a glossing over of a more subtle story.

If you were expecting to find the Plenderleith lecture given by the National Trust's Sarah Staniforth in this issue then apologies – it has had to be held over. But Sarah does make an appearance in these pages in the welcome guise of Chair of the newly set up Steering Working Group charged with developing a national strategy for heritage science. And there is more good news on that front with the announcement of joint arts and science Research Council funding for heritage science – perhaps in the conservation discipline at least we can bridge the two cultures.

**Lynette Gill**, Editor



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Institute of Conservation  
3rd floor  
Downstream Building  
1 London Bridge  
London SE1 9BG, UK

T +44(0)20 7785 3805  
F +44(0)20 7785 3806

admin@icon.org.uk  
membership@icon.org.uk  
www.icon.org.uk

Chief Executive  
**Alastair McCapra**  
amccapra@icon.org.uk

Conservation Register  
T +44(0)20 7785 3804  
info@conservationregister.com  
www.conservationregister.com

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#### Icon News

Editor  
**Lynette Gill**  
news@icon.org.uk

Listings editor  
**Mike Howden**  
mike.howden@lineone.net

Production designer  
**Malcolm Gillespie**  
malcolm@ls-printing.com

Printers  
**L&S Printing Company Limited**  
www.ls-printing.com

Design  
**Rufus Leonard**  
enquiries@rufusleonard.com

Advertising  
**DP Media**  
T 0117 904 1283  
F 0117 904 0085  
sales@dpmedia.co.uk

Cover photo: Sir John Betjeman gazes at the blue roof of St Pancras International Station. Sir John's statue commemorates his role as the saviour of the building when it was threatened with demolition in the 1960s.

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**Deadlines:**  
For May 2008 issue  
Editorial: 2 April  
Adverts: 16 April

# around & about

## Guinness as usual ?

Teams of conservators led by Patricia Jackson, Fergus Purdy, Cliveden Conservation and Bush and Berry were involved in an unusual conservation project last summer.

The Crown Bar Liquor Saloon in Belfast has the reputation of being one of the finest Victorian Gin Palaces of its time but, paradoxically it was decorated by Italian craftsman moonlighting from church redecoration in the city. The building is described as the 'Jewel in the Crown', as the interior surfaces are richly ornamented by an assemblage of brightly coloured ceramic tiles, painted and gilded ceilings, ornate columns, elaborately carved wood, glass paintings, gilded signage, mosaics and mirrors. The exterior façade is a riot of polychromatic coloured tiles and stained glass windows.

The National Trust owns the property but it is an acquisition unlike any other. In contrast to the carefully protected interiors of a historic house, this one is still open as a hard-working and often overcrowded city centre bar. Nearby bombing during the troubles damaged the exterior tiles and glass façade and blew out the stained glass windows along Great Victoria Street and deterioration due to use and vandalism has taken its toll on the interior.

For the last eight months, teams of conservators have been working both onsite and from their workshops to conserve and restore these decorative surfaces. Vibrant colours are now emerging from beneath 100 years of city pollution, nicotine and carbon from the gas lighting that still illuminates the bar. The relief papier mache ceiling,

Patricia Jackson celebrates the welcome they have all received at *The Crown*



Reverse print mirrors in the snugs – damages and graffiti

originally thought to be a uniform dark brown, now dazzles in swirls of deep red, gold and burnt umber. The mosaic floor has been cleaned, multi-coloured glass surfaces sparkle and reflect the flickering lights and the tiles reveal their rich glazed colours.

Work is still in progress – on site, losses to the tiles are being slowly replaced and practical solutions developed to protect these surfaces in a sometimes rowdy tavern. Ten elaborately carved wooden booths or 'snugs' are the most famous feature of The Crown Bar. The woodwork has been cleaned of graffiti and the mirrors, reverse glass paintings and stained glass windows that shield customers from view have been conserved. Workshop activity has centred on the restoration of the shattered glass paintings, remounting and replacing lost elements of the mosaic glass from the bar fascia. Many of the restored pieces have been installed and reproduction ceramics, tiles, stained

Mosaic glass panels above the bar – removal from the fascia



glass and mirrors needed to clad the interior and exterior surfaces are now being made, all faithfully copied from the originals.

The project has been run as an open workshop – so that visitors popping in for a drink at the bar or lunch in one of the private snugs could watch the conservation work in progress and talk to the conservators involved. This activity alone has been useful in informing the public of our activities and raising awareness of conservation ideology. However by 5 o'clock the public are feeling thirst and requests are more likely to be directed to the bar staff. At the end of the day the conservators assemble – ostensibly to discuss the project yet invariably they refresh themselves in similar fashion!

**Patricia Jackson, ACR**  
Independent Conservator

*Pat will be giving a talk about this work at the Ceramics and Glass Group conference 25/26 April – see Listings*

## Death of a cliché

Writers, publishers and journalists, indeed even the man on the Clapham omnibus, are going to be stuck for a simile with the news that the unending task of painting the Forth Bridge is, in fact, coming to an end in 2012, after a hundred years of continuous painting. After stripping down the bridge to the bare metal, three coats of a paint similar to that used in the off-shore oil industry is being applied. This new paint has an estimated life span of twenty five to forty years.

## Hero of the hour

The restoration of the station clock forms a heart-warming footnote to our main St Pancras story (see page 18). Back in the 1970s when the station's fortunes were at a low ebb, British Rail sold off the century-old clock to an American collector but it smashed as it was being removed. Obviously a conservator at heart, railway guard Mr Hoggard rescued the pieces and over the course of eighteen months carefully reassembled them and installed the clock on the barn of his Nottinghamshire village home. Restoring St Pancras latterly, London and Continental Railways wanted to reinstate the clock but realised that the damage was too extensive to allow it to be done safely. However, Mr Hoggard's work had been so painstaking that it was possible for exact measurements and materials to be ascertained and a replica to be made (see picture on page 18) right down to the gold leaf decoration, the cast iron hands and the Welsh slate numerals. Mr Hoggard is now 93, an active Parish Councillor and leading a full life. His role



LCR / Michael Walter / Troika

Mr Roland Hoggard at his home in Thurgarton, Nottinghamshire, with the original Dent Clock that used to be at St Pancras Station.

in saving this great industrial relic was recognised with an invitation to the royal ceremony which marked the grand opening of the restored station last November, presided over by 'his' clock.

## Distance learning

A collaboration between Birmingham Museum and Art Gallery and Nottingham's Trent University proves just how fruitful the symbiosis of science and conservation can be. Academics from the University's School of Science and Technology and School of Arts and Humanities have developed imaging technology using a multispectral camera system which, it is hoped, could enable improved conservation of artwork. There is, of course, nothing new per se about imaging techniques which enable you to see what lies beneath the surface of an artefact or painting. What is new about this development is the portability of the equipment and its potential for use in-situ or even at a distance, where access is an issue – for example with ceiling paintings.

Dr Haida Liang (Physics) and Dr Stuart Burch (History and Heritage) of Nottingham Trent University



# more around & about

The team has linked up with Birmingham Museum and Art Gallery and is using the technology to study Botticelli's *Descent of the Holy Ghost* (c.1500–1510). Birmingham's conservators are now planning their conservation strategy for the Botticelli and after the work is completed, the team will go back and image the painting again to monitor the difference before and after the conservation.

Dr Haida Liang, Senior Lecturer in Physics at Nottingham Trent University, said: 'The camera is perfect for in-situ examination of paintings. There is an increasing demand for the application of non-invasive techniques to the examination of cultural artefacts, due in part to the increased awareness of conservation ethics'.

If anything neatly demonstrates the value of developing a heritage science strategy, this example of applying astrophysics techniques to the field of conservation surely does. See page 11 for heritage science news.

## MDA Loans Pack

MDA, the UK's focus for best practice in collections management, has announced the publication of a Loans Pack, available to download free from the Collections Link website at: [www.collectionslink.org.uk/manage\\_information/loanspack](http://www.collectionslink.org.uk/manage_information/loanspack). The pack has been compiled in response to the many enquiries MDA receives from its Members and users about how best to go about negotiating, managing and documenting the loan of objects between heritage organisations. Properly documenting loans enables a museum to account for all the items currently in its care whether or not they are part of its permanent collection, and to ensure that all borrowed items are cared for to agreed standards. Loaning objects to SPECTRUM standards is also a requirement of the Museum Accreditation Scheme. The pack is made up of a number of resources, including a new Loans In agreement template, which can be used as the basis for developing an organisation's own loans documentation. Alongside this, the pack also includes: the MDA Loans In fact sheet; the MDA Loans Out fact sheet; Example loans documentation from the Imperial War Museum and an example loans agreement form from the DH Lawrence Heritage Museum.

## A (dis)liking for lichen

Further to the article on lichen and headstones in Icon News 13, Robert Entwistle of Colchester and Ipswich Museum Service got in touch to tell us that: 'I have in my possession in Ipswich Museum the 'receipt book' of the conservator/curator George Nathan Maynard, who worked



The 'receipt' for cleaning gravestones.

in Saffron Walden museum from 1885 to 1905. (His son later became curator/director of Ipswich Museum in the 1920s.)

George Nathan was clearly something of an one man show when it comes to conservation: judging by his recipe book, he seems to have made his own glues, cleaned his own pictures, stuffed his own animals, cleaned his own metal, treated fossils, made casts etc.

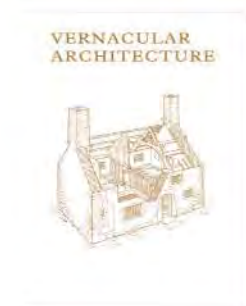
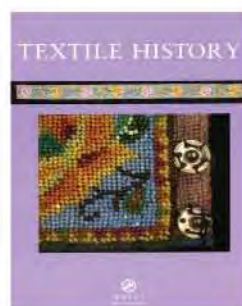
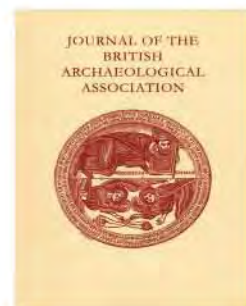
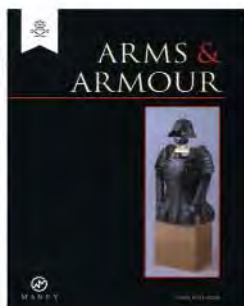
One of the 'receipts' is for cleaning moss and lichen from gravestones.

It says "Mr F Buckland on referring to the moss that grows on Gilbert White's grave stone says the best solution for killing it is a solution of corrosive sublimate [i.e. bichloride of mercury] in spirits of wine, a strong solution say 10 grains to the ounce it will not only kill the moss etc, but prevent it germinating again. See Buckland's edition of Whites Selbourne page 317." Robert concludes by saying 'The book referred to is Gilbert White's Natural History of Selbourne. Readers may find this of interest, although I don't recommend they try it'.

## Insurance inadequacies

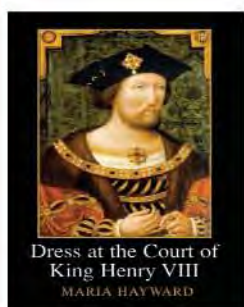
According to figures from Ecclesiastical Insurance Group, a specialist in the preservation of buildings of historical interest, 55 per cent of the owners of listed buildings do not have sufficient insurance to cover the higher cost of repairs to such properties. However, other listed property owners are paying unnecessarily high premiums – 17 per cent are over-insured, according to the same figures. To improve the services available to owners of historical buildings, brokers Smart & Cook have teamed up with Ecclesiastical to create the Heritage Scheme, a comprehensive package of insurance services for specialist properties. Strict planning requirements for listed buildings, which may include the need for specialist materials and craftsmanship, can hugely inflate the cost of repairs and needs to be planned for. Such additional costs will not be covered by standard policies. The Heritage Scheme package is suitable for most businesses, both listed and unlisted, operating from a heritage property, including castles, care homes, theatres, tea rooms and other tourist attractions.

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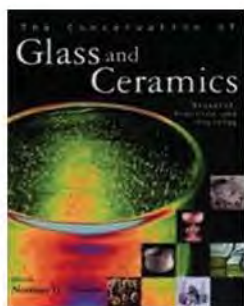
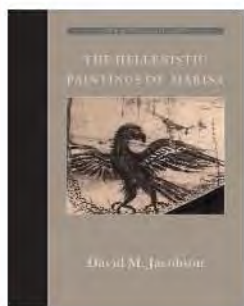
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# professional matters

## 13 URBAN MYTHS ABOUT ACCREDITATION

### 1 You have to be an Icon member for 5 years before you can apply

There is no rule about how long you have to be an Icon member before you can apply.

### 2 You have to have worked in conservation for five years before you can apply

You need to be ready for assessment before you apply, which means you need to be able to show that you meet the professional standards consistently at the 'proficient' level. Depending on the nature of your work, you may have enough evidence of this after less than five years, or possibly more. But there is no time restriction – five years is a very rough guideline, not a rule. If you think you may be ready apply to before 5 years, we suggest you ask for a mentor to help you get ready for your application. A mentor list is available from Susan Bradshaw, Accreditation Manager – email: [pacr@icon.org.uk](mailto:pacr@icon.org.uk)

### 3 It is only for bench conservators

There has been a route for preventive conservators to become accredited since 2003. Currently a new route for managers, educators and advisers is being piloted. Anyone working in conservation at the appropriate level ought to be able to seek accredited status.

### 4 It is only for people in museums

There are people from the private sector in every round of assessment. There are assessors, mentors and members of the Accreditation Committee from private practice.

### 5 It is a gold-standard only accessible to people at the height of their careers

Accreditation was never intended to be a 'gold standard'. It is a peer-review process by which the conservation profession says to employers, clients and the wider world 'we are satisfied that this person works to a consistently proficient level.' It is not an Academy Award, a Booker Prize, a Fellowship or a medal of honour. Anyone working in conservation who exercises independent judgement (i.e. is not working under supervision) is eligible to be accredited.

### 6 It is really expensive

The £500 fee simply covers the cost of the assessment visit. Many conservators working in large institutions can get some form of support from their employers towards this. Conservators in private practice should be able to count the accreditation fee as a business expense when completing their tax returns (the same is also true of Icon membership subscriptions and Conservation Register fees). Private conservators are advised to discuss this with their accountants.

### 7 It is a 'back door' alternative to academic studies

Accreditation is not, and has never been, intended as an alternative to academic studies. It is a means of assessing conservation work in practice. Just as doing a degree in medicine does not make you a doctor (you need further training) and a degree in law does not make you a barrister (you need to do pupillage). Some people come into conservation by non-academic routes, either because of their personal circumstances or because there are no academic routes available in their specialism. PACR does not discriminate against these people, just as it does not give any exemptions to people who have undertaken academic study. It judges how far they integrate what they know into their daily practice.

### 8 You will be assessed by people who don't understand your work

The Accreditation Committee aims to match appropriate assessors to each individual candidate. An assessment only takes place once the candidate has agreed to the assessors, and vice versa, so there is a right of refusal before committing to an assessment.

### 9 It may be fine for other specialisms, but it can't possibly work for clocks/ bells/ oriental textiles/church organs

People have been accredited across the broad range of specialisms over the years. On occasions where the candidate has a very specific specialism, a similar specialist ACR is invited to attend the assessment to advise the PACR assessors. The assessors' role is to elicit from the candidate how their work relates to the standards and how they exercise their professional judgement. This applies as much to conservators of church organs as it does to ceramics, and as much to historic ships as it does to decorative masonry.

### 10 People working on short-term projects can't apply

If you are working consistently to a proficient level as defined by the professional standards, there is no reason why you can't use project work to support an application. If you keep detailed documents of each project, including good photographs, as you go along, and are prepared to describe to assessors how you exercise your professional judgements in undertaking the work, you can include such project work in your application.

### 11 You can only use recent projects in your application.

There is no age limit for the projects used in your application. Although some current/recent projects will be expected, projects that you have worked on post initial training that demonstrate your proficiency against the professional standards is the requirement.

12 You can only use projects where you have taken sole responsibility.

It is important to demonstrate your responsibility within a project but you do not need to have sole responsibility. The application form asks for you to indicate your responsibility for each project/activity, whether as team leader, sole responsibility or team member.

13 The best way of getting information about PACR is to ask another conservator

If you want up-to-date and accurate information about accreditation, look on the accreditation page of the Icon website or phone the Accreditation Manager, Susan Bradshaw, on 01626 824 510 or email [pacr@icon.org.uk](mailto:pacr@icon.org.uk).

## CPD & MENTORING FOR PACR

There was a positive buzz about the CPD reviews received in the 2007 recall. The CPD readers, themselves accredited, thought this was the best year so far with a good understanding of continuing professional development and the achievements – large and small – that had been made by Icon's accredited members.

However it was noticed that some members did not want to comply with the process – e.g. no CPD plan. Whether this was a reflection of how much time they gave to writing the review or something else it was not clear. Some reviewers had not used the review form sections as well as they could have to make it a useful 'reflective' tool for their future reference.

How often do you write something down and think – what did I mean by that? A review needs to be clear, so that when you do come to look back and remember what you did – perhaps to help you submit a job application form or to consider options for a particular project based on past experience – and for drafting your next review, you can make good use of the time you spent writing it, when it is clear.

The 2008 recall letter will be sent out in March to members who have been selected to submit CPD reviews. The deadline for returning CPD reviews will be 13 June 2008.

At the CPD readers' annual meeting a few points were highlighted to assist with future submissions:

- **Supporting material** is not required with the review form. The readers base their feedback around information provided by the reviewer in relation to the five questions posed in the CPD Review form
- **CPD credits do not exist.** Your review is based on activities and learning from them – not how long you have taken or which conference or course you have attended.

- **Migration of skills** If you start to change direction in your conservation work eg moving more into the management of conservation – this needs to be reflected in your CPD to show skills in the new field. There is a professional responsibility to demonstrate the professional standards in any area in which you are working.

- **Mentors for PACR and CPD** Susan Bradshaw, Accreditation Manager, has a list of mentors to help and support members with their CPD. If you would like a mentor please contact Susan on [pacr@icon.org.uk](mailto:pacr@icon.org.uk)

**Becoming a PACR mentor** would be one way to support the profession for your CPD – through volunteering time to help new PACR applicants. Members who have been accredited over the past few years would be well placed to put themselves forward but all accredited members are welcome to take part. If you are interested please email Susan Bradshaw on [pacr@icon.org.uk](mailto:pacr@icon.org.uk) or telephone 01616 824510.

Mentoring workshops for PACR events are designed to support a formal mentoring scheme. They provide an overview of the mentoring process based around a Mentor Toolkit. More details can be found in the Listings section and on the PACR website [www.pacr.org.uk](http://www.pacr.org.uk)

**What is involved?** Mentoring is primarily about offering support and encouragement; developing capability and potential. Members planning to submit a PACR application are encouraged to seek a suitable mentor to help them with the application form and prepare them for assessment.

All PACR mentors are listed with some details about who they are and what support they can provide. Members who require a mentor need to contact Susan Bradshaw, Accreditation Manager, for the list and they are invited to select two potential mentors from that list. The mentors are contacted to check availability. If they are able to help, contact details are exchanged and an agreement is made between the mentor and mentee at the beginning of the relationship, to avoid any misunderstandings of what is expected from either party.

Some mentor relationships are carried out purely by email and telephone, while others meet face to face. Geographically this is not always possible. However, members have found it helpful to email a mentor to seek a second opinion about the projects selected for the application form, and advise on the clarity of information and the range and proficiency of work in relation to the professional standards.

Mentors do not need to be in the same specialism as the mentee – in fact sometimes this is very useful considering that one of the PACR assessors is from another specialism. It can help to produce a clear description of your work in relation to the professional standards.

If you do wish to seek a mentor – please plan ahead and allow ample time to make such arrangements. Mentors cannot help within a short period of time prior to a PACR application deadline.

## CPD policy

The PACR Management Board is finalising a CPD policy and procedure document. This will be available soon on the Icon website and PACR website following approval from all three participating professional bodies: the Institute of Conservation, the Society of Archivists and the British Horological Institute.

An introduction to mentoring course will run on 15 April at the Icon office. The Introduction to CPD course will run twice in May in Oxford and Leeds. See Listings and website for full details.

## HERITAGE, WHOSE HERITAGE?

A new Open University course may be of value for CPD purposes or to anyone wanting to engage with the bigger 'heritage' picture. Lasting for fifteen weeks, this distance-learning, short course looks at the relationship we have to a national heritage managed largely by institutions and public organisations. It encourages students to engage with the debates and campaigns that surround heritage objects and places and focuses on 'objects of heritage' – anything that has been evaluated, listed or created to commemorate international, national or local productions of heritage. For further information about the course and to register see: <http://www.open.ac.uk/Arts/a180/>

## FINDING RELEVANT INFORMATION ON THE WORLD WIDE WEB

Access to information has long been thought of as a central factor in the rapid development of mankind and today, with modern mass publishing practices, the proliferation of the world wide web and access to it becoming ever more commonplace, information has never been more freely available to so many. The web in particular has revolutionised the way information is disseminated and accessed. Journalists are now able to report stories in real time, scholars can publish research independent of journal publishers and the peer review process, and literally anyone with an internet connection is able to have their say. Likewise, this information can be accessed from a home computer, on a PDA, or even through a mobile phone at any time of day or night. However, whilst the convenience and usefulness of information on demand cannot be denied, too much choice can pose its own problems.

## Searching for a needle in a haystack? The perils of information overload and the limitations of search engines

The vast expansion of websites and web pages can make finding information a much more challenging experience than some may have us believe. Unless you know the exact details of a resource that you want, it is likely that you will use one of the major search engines to locate web-based information. The common perception is that search engines are easy to use and that they can locate everything there is to find on the web, and the companies behind the technology do not dispel this myth. However, it is just that – a myth.

It is true that search engines are technically easy to use – typing in a few terms and clicking 'search' couldn't be simpler, could it? – but using them effectively is another matter. How often have you typed a phrase or a few keywords into a search engine only to be told that there are 1,420,000 possible results?! The number of web pages that are possibly relevant to your search is staggering. This information overload is a common problem. The end result is that we don't get beyond the first page of results. Indeed, we often don't look past the top three hits. The natural assumption is that the higher up the results list a web page appears, the more relevant the information will be to our search. Sadly, this is not necessarily the case; website designers can use techniques to manipulate how search engines react to specific key terms and phrases, so that they appear higher up a results list. Therefore, whilst the first page of search results may appear to be directly relevant, they may in fact only have partial relevance to your particular information needs.

The assumption that search engines find everything on the web is also a popular misconception. All search engines have their limitations and none of them are capable of searching every page on the web. They can probe what is commonly described as the 'surface web' – websites that are unrestricted. However, there is a vast quantity of the web that search engines cannot currently penetrate, known as the 'invisible' or 'deep' web. Some sites restrict access to certain sections subject to subscription or payment of some sort. A good example is the Icon website where membership only pages are password protected. These pages prevent search engines from indexing them, and so do not show up in search results.

Search engines are also limited by the fact that they cannot yet type or enter text as part of a search – they merely look for text on existing, unrestricted web pages. Much of the invisible web is made up of databases that generate results pages based on the human input of search terms. As these results pages are merely temporary and dependent on additional input from the user, search engines cannot possibly find and index them. They are

effectively 'invisible'. So, a Google™ search for a book title will not be able to retrieve results from a web-based library catalogue directly. Likewise, using a general search engine to search for the title of a journal article will not bring back results from abstracting services such as AATA<sup>1</sup> or BCIN<sup>2</sup> as they are query-driven databases. According to one estimate, the invisible web is between 400 and 550 times the size of the surface web<sup>3</sup>. This gives a good idea of the vast quantity of information missed by a standard search engine enquiry.

### **Adding value to Web searches**

It isn't all doom and gloom, however. There are a number of things you can do to improve your chances of finding the right information for your needs.

#### *Build a profile of the type of information you need*

One of the biggest problems many people face when they start a search is that they only have a vague idea of what they are looking for. Ask yourself what type of information are you interested in? Practice-based examples of treatments, chemical properties of a substance, details of historic conservation practices or something else? Why do you require this information? The more detailed your initial profile the easier it will be to narrow the focus of your search later.

#### *Select your resources carefully*

It is always tempting to go straight to Google™ when searching for information on the web – we've heard so much about it over the last few years that it's hardly surprising. However, this is rather like deciding to search for a very small needle in the largest available haystack. If you have already built up a profile of the information that you wish to look for, why not try matching this to a more directly relevant resource? For example, a search for peer-reviewed journal articles on, say, the degradation of paper with relation to iron gall ink could be conducted more effectively using one of the major abstracting services such as AATA or BCIN; these would almost certainly yield more relevant results than a general web search. To broaden the search beyond peer-review articles but to retain the subject-specific focus, one option would be to browse conservation-related portals such as the Chantry Library's Web resources page<sup>4</sup> or Conservation Online<sup>5</sup>.

If you have exhausted the resources with a more narrow focus try the larger search engines, but use a selection rather than persisting with one. Contrary to popular belief, search engines don't all search the same web pages. For technical reasons their coverage can vary, and so by only using one you risk missing something that may be of use. By using a meta-search engine such as Dogpile<sup>6</sup> or Intelways<sup>7</sup> you can even save time by searching multiple search engines in one window.

#### *Construct your query precisely*

Whilst search engines and online databases have their limitations, it is often our own input that proves the greatest barrier to effective searching. For example, someone wishing to find information about object consolidation may decide to enter the term 'consolidation' into a search engine. They will invariably be disappointed with the results, which will probably be dominated by sites dedicated to debt consolidation. Current search engines and databases can't determine semantic differences and split results accordingly. It is up to the searcher to provide more details.

A helpful starting point may be to devise a brief thesaurus of terminology relevant to your particular enquiry. Remember that authors may well express themselves in different ways, so variants of the same term are worth noting. Variant spellings are also worth considering – particularly differences between US and UK English (e.g. 'color' versus 'colour'). Some of the larger search engines will automatically account for this, but databases such as library catalogues and abstracting services almost certainly will not, so trying both forms may be productive.

Try using the more unusual terms first as they will certainly narrow your search results. Use multiple search terms, as one or two are rarely enough to provide a contextual framework for a search engine or database to deliver relevant results. Investigate the advanced search options offered by your chosen resource – options such as phrase or document format searching can drastically narrow your set of results and help increase relevance. Finally, make a note of the terms you have used in individual searches, as well as the resources you submitted them too. This will save you time by showing you the ground you have already covered and reducing the duplication of work.

### **Informed searching: the key to success**

So, the next time you're searching for information online, why not try the following:

- *Frame your enquiry* – develop a profile of the kind of information that might help you based on your current needs and your end goals.
- *Choose resources wisely* – consider the profile you've developed and choose the resources that best match it. Start with a narrower focus (e.g. library catalogue or online database) and broaden your scope dependent on success.
- *Pick search terms carefully* – devise a thesaurus of relevant terms, consider alternative spelling options, and use multiple/unusual terminology to bypass technological limitations in semantic understanding.

Investing more time and effort at the start of the process

may seem like a burden, but I'm sure that the results will speak for themselves.

Happy searching!

**James Andrews**

Chantry Librarian

- |                                                                                   |                                                                                     |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1 <a href="http://aata.getty.edu/NPS/">http://aata.getty.edu/NPS/</a>             | -01/bergman.html [Accessed                                                          |
| 2 <a href="http://www.bcin.ca/">http://www.bcin.ca/</a>                           | 08/10/07]                                                                           |
| 3 Bergman, M.K. (2001). 'The deep                                                 | 4 <a href="http://del.icio.us/chantrylibrary">http://del.icio.us/chantrylibrary</a> |
| Web: surfacing hidden value'. The                                                 | 5 <a href="http://palimpsest.stanford.edu/">http://palimpsest.stanford.edu/</a>     |
| Journal of Electronic Publishing,                                                 | 6 <a href="http://www.dogpile.com/">http://www.dogpile.com/</a>                     |
| 7(1), [Online].                                                                   | 7 <a href="http://www.intelways.com/">http://www.intelways.com/</a>                 |
| <a href="http://www.press.umich.edu/jep/07">http://www.press.umich.edu/jep/07</a> |                                                                                     |

## THE CONSERVATOR

Volume 31 of The Conservator will be on your doorsteps in May and it looks like it will be a bumper edition! As we finalise volume 31 we are already thinking of the next volume. Publishing your work in a peer-reviewed journal counts towards both accreditation and continuing professional development, it also gives you the opportunity to view your own work in perspective and etch your name on the profession for posterity.

Has your proposal for a conference paper been turned down because it was not quite on-topic? Have you recently treated a fascinating object? Do you have some research to share? Is the student dissertation you are working on of interest to other professionals? We would like to hear from you.

**Deadline for first drafts for volume 32 is 31 May 2008.**

Please see Guidelines for Contributors for The Conservator at the back of volume 30 and on the Icon website <http://www.icon.org.uk/>.

**Irit Narkiss**, Editor, The Conservator

[Irit.narkiss@manchester.ac.uk](mailto:Irit.narkiss@manchester.ac.uk)

conservator-restorers who are working in the public or independent sectors in the UK or abroad are eligible to apply so long as they are paid up members of Icon. The winner(s) will receive a £500 cash prize and will have their name(s) added to the specially designed trophy, a gilded ceramic copy of the Portland Vase.

The panel who have very kindly agreed to judge the award this year will be Sandra Smith, Head of Conservation Department at the V&A, Lorna Calcutt, Tutor at West Dean College and Dave Thickett, English Heritage.

Some of the criteria on which the assessment of the judging panel will be based are:

- Projects that demonstrate excellent conservation/restoration work involving some complexity, ingenuity and problem solving.
- Projects which promote good practice.
- Educational benefits to the profession after judging, the project should be capable of being submitted for publication in Icon News or The Conservator.
- Projects which are thoroughly documented including illustrated condition and conservation reports. Clarity of methodology and documentation.
- Insurance, COSHH and Health & Safety awareness and compliance.
- Providing guidance for clients on the future care of conserved objects, including packaging and transport.

The closing date for entries is June 1st 2008 to be awarded in the autumn. Full submission details can be found on the relevant Group section on the Icon website.

If you would like to speak to someone before deciding whether to apply please contact either the Prize Coordinator Rachel Swift, email [rswift@thebritishmuseum.ac.uk](mailto:rswift@thebritishmuseum.ac.uk) or Chair of the Ceramics and Glass Group Ros Hodges, email [roshodges@waitrose.com](mailto:roshodges@waitrose.com)

## REMINDERS

The March deadlines to get your applications in for the awards advertised in January's Icon News (page 9) are looming!

**Anna Plowden Trust:** deadline 17 March for CPD grants. (Although there are further chances later this year with application deadlines of June 16 and September 16)

**Zibby Garnett Travelling Fellowship:** deadline 31 March for grants to conservation students to practise in other countries

**York Foundation for Conservation and Craftsmanship:** deadline 29 March for training bursaries

## AWARDS AVAILABLE

### THE NIGEL WILLIAMS PRIZE 2008

A reminder that the deadline to apply for The Nigel Williams Prize is soon approaching. The prize is awarded by the Ceramics and Glass Group for excellence in the conservation/restoration of an object or a project in ceramic, glass or a related material which has been completed within the previous four years. This is inclusive of research regarding materials/tools used in conservation. If you are considering submitting an application it is worth noting that the scale of the project will not be a deciding factor. All students, individuals and collaborating

# institute briefing

## MEMBERSHIP RENEWAL

It is renewals time of year again – you will find a renewal form on the reverse of the letter that accompanies this copy of Icon News. Please carefully check the current contact details that we hold on file for you and mark any amendments in the space provided. Then choose your payment method, and complete the details before returning the form to the office in the pre-addressed envelope provided.

If you have a UK bank account, why not pay your membership fees by quarterly direct debit – simply complete the mandate at the bottom of the renewal form and return it to the office. Your membership fee will be debited in four easy instalments spread throughout the year. Once you have set up a direct debit, you can forget about it and you will never miss another copy of Icon News again!

If you are renewing at a student or concessionary rate please remember to include proof of your status with your renewal form as failure to do so may cause delays with processing your renewal – if you would like further information please contact Charlotte Cowin at the Icon office [membership@icon.org.uk](mailto:membership@icon.org.uk)

## FIVE HOURS OF CULTURE

Conservators, especially those working in museums, should prepare to make the most of a scheme, announced by the government's Culture Secretary and Children's Minister, to give children in England access to meaningful cultural activities for at least five hours a week. The new programme, called 'Find your talent' will be piloted in ten areas around the country and is intended to allow young people to learn through culture, engaging with the arts and related activities to boost their skills, personal development and appreciation.

The project will be implemented by a new body, the Youth Culture Trust, which will also oversee the Creative Partnerships scheme, working with more than 2,000 schools each year. The Trust will receive £110 million over three years, as well as £25 million to pilot 'Find Your Talent'. Ministers also announced a further £13 million over three years for their 'strategic commissioning' programme, an initiative that funds educational work with museums and galleries around the country.

Our Chief Executive, Alastair McCapra, has welcomed the initiative '...because we know that when young people come into contact with what conservators do, they see a new dimension to the heritage and start to understand it as something modern humans interact with rather than a

dead object in a glass case. For many years the government's culture agenda has focussed on people as consumers rather than as producers. It is fine to attract ever more people to our museums, galleries and creative spaces but if all they are doing is watching rather than participating, we are not equipping them to produce their own culture in the future.

We are very pleased that this new initiative is not just about opening up greater possibilities to explore cultural heritage, but explicitly aims to help young people experience our cultural work places – workshops, studios and laboratories. It will also encourage them to develop craft skills, aesthetic sense and a desire to explore the unfamiliar. There is little point in conserving our material heritage if the public don't care about it and this initiative will help ensure future generations are excited and inspired by the heritage around them. It may even inspire a few young people to think about becoming conservators themselves'.

More information on the Find Your Talent programme is available at <http://www.creative-partnerships.com/offer>.

## HERITAGE SCIENCE UPDATE

Baroness Sharp of Guildford, Chair of the House of Lords Science and Technology Committee, must be feeling quiet satisfaction, as she sees the recommendations of her committee's report into science and heritage falling into place. She was present at the launch of the joint AHRC/EPSRC\* Science and Heritage Programme on 20 February. Speaking on behalf of both the research councils, Professor Philip Esler, Chief Executive of AHRC, announced that the two bodies would be funding the Programme to the tune of £8 million over the next five years. Programme Director May Cassar then spoke of the importance, the aims and the task of the Programme. Although UK heritage science research is justly known for its high quality, she noted that this is 'a pivotal moment' offering unique opportunities: 'The lasting legacy of our success could be the emergence of a progressive hybrid "science-and-heritage" discipline'. The two main tasks of the Programme are to increase understanding and improve the resilience of cultural heritage in the face of 21st century challenges by funding high quality research and to develop the heritage science community by funding networks and other awareness-raising and capacity-building activities. In the process, the Programme will challenge and support the research community to work across disciplines and institutions, to focus on whole objects as well as materials and techniques and to tackle cultural and scientific questions together. 'The Programme intends to live up to the true meaning of interdisciplinary endeavour', she concluded. You can read her speech and



Programme Director May Cassar, AHRC Chief Executive Philip Esler (l) and EPSRC Chief Executive Dave Delpy at the Heritage Science Programme Launch

find further details of the Programme on:  
[www.heritage-science.ac.uk](http://www.heritage-science.ac.uk)

\*The Arts and Humanities Research Council and the Engineering and Physical Sciences Research Council

At the same time, English Heritage announced the appointment of the Chair and members of a Steering Working Group, set up to take forward the recommendation of Baroness Sharp's Committee that the heritage sector develop a comprehensive national strategy for heritage science. The full membership of the Group, on which Icon is well represented, is:

Dr Sarah Staniforth (Chair) (Historic Properties Director, National Trust)  
 Professor Peter Brimblecombe (University of East Anglia)  
 Dr Craig Kennedy (Head of Science, Historic Scotland)  
 Katy Lithgow (Head Conservator, National Trust)  
 Dr Alastair McCapra (Chief Executive, Institute of Conservation)  
 Dr Nick Merriman (Director, Manchester Museum)  
 Dr Sebastian Payne (Chief Scientist, English Heritage)  
 Professor Mark Pollard (Oxford University)  
 Helen Shenton (Head of Collection Care, The British Library)  
 Dr Jim Tate (Head of Department of Conservation & Analytical Research, National Museums Scotland)  
 Dr Heather Viles (Oxford University)  
 Dr David Watkinson (Cardiff University)

The next move is to recruit a co-ordinator to work with the sector in assembling the information the Working Group will need to develop the strategy, and to develop a website to keep the sector informed and provide it with a channel for communication.

It is intended that the first draft of the strategy will be completed by the summer of 2009. For further information contact: [Sebastian.Payne@english-heritage.org.uk](mailto:Sebastian.Payne@english-heritage.org.uk)

## 2020 VISION THE CONSERVATION WORKFORCE OF THE FUTURE

The closure in 2005 of the Durham University Masters in Conservation; the impending closure of the Textile Conservation Centre in 2009; and the uncertain future of the RCA/V&A Masters in Conservation programme all point to a crisis in conservation teaching in UK universities. What can the conservation community do to ensure that we both maintain high-level programmes and create a future conservation workforce which is 'fit for purpose'?

To start addressing these challenges, Icon convened a meeting, hosted at Tate Modern, on 9 January. The first question we tackled was: What will the public expect from museums, libraries, galleries and archives in 2020? What demands will the commercial sector in conservation have to address? What does this mean in terms of the future workforce? What new skills will conservators need to have? How many will be needed? How many will be working directly for heritage institutions and how many will be independent?

Most participants at the event agreed that a partnership between universities and employers is required to deliver the future workforce, but what should that partnership look like? At the end of the day's sessions, the consensus was that conservation employers needed to play a greater role in the future education and training of the workforce. It was also clear that there was a real keenness among employers present to find practical ways of doing so.

The two tasks which Icon will therefore take on in 2008 are:

- i. helping employers to map out exactly what kind of expanded role they are able to take on
- ii. exploring with universities and other training institutions how an increased employer role could help them restructure what they do so that we maintain standards, increase employability and redistribute training responsibilities in a way which yields benefits for universities, employers and trainees alike.

In June Icon will be organizing a second event, in conjunction with the Textile Conservation Centre, to take this discussion further and start working towards concrete and practical proposals. Speakers' presentations for the January 2020 Vision event are available on the Icon website.

## TECHNICIAN'S QUALIFICATION

### First certificates awarded and new partners sought

February saw the wrapping-up of the pilot phase 1 of the new Technician Qualification (CTQ), with the award of eight full qualification certificates to participating

candidates. The aims of the new qualification are to improve career mobility for people working or volunteering in 'in-depth' roles in a conservation context, where there has traditionally been limited room for career progression. It also serves to recognise and acknowledge the high standard of work done by technicians, historic house staff and related craftspeople.

The five current pilot partners are Eura Conservation, Oxford University Library, National Archives, National Trust, Tate Gallery - and Icon is pleased to announce that all of these had successful candidates in this initial phase. Of eighteen candidates nominated at the start, fourteen participated actively in the pilot, three of these have deferred to phase 2 and only one has withdrawn. Eleven went as far as the final phase of external assessment and of these, eight got the full qualification and three achieved the units they presented in. Nine pilot candidates will therefore continue to phase 2, alongside any others we introduce from new or existing partners. Icon and partners agree that the pilot has been a great success and thanks are due to all those committed participants – whether candidates, mentors, internal assessors or external assessors.

You can find out more details of the work on the qualification by visiting the CTQ pages of Stan Lester's website: [www.sld.demon.co.uk](http://www.sld.demon.co.uk)

After considering feedback from phase 1, and a final meeting of partners in March, Icon intends to progress to a second phase starting in April. We are now actively seeking interested organisations who want to join the consortium; to express interest in future involvement in this project or to obtain more information, contact Carol Brown at [hlfbs@icon.org.uk](mailto:hlfbs@icon.org.uk). At the moment, we can only consider candidates from participating organisations; if you are interested in taking the qualification yourself, please do contact your manager and encourage them to get involved and to contact us.

## HLF SCHEME UPDATES

**Our fourteen current second year interns** are all progressing well and have interesting schedules for the rest of the year; several are in the throes of a *Chemistry for Conservators* course too! We continue to organise regional gatherings to help interns meet each other and build up their social and professional networks. North region interns met in February to visit Glasgow Museums conservators and in May, West and Midlands interns will make a visit to the Wiltshire & Swindon History Centre. If you want to find out more about this year's intake, then do visit the Icon website ([www.icon.org.uk](http://www.icon.org.uk)) and go to the interns page which has recently been re-designed and updated.



North area HLF interns at Martyrs' School with Tarn Brown

**The advert for year 3 intake** is due out in April, with an advert in May's Icon News. The programme is being firmed up at the moment, but will certainly include placements in textiles, collection care, ceramics, natural history, archives and metals. Watch the website for news!

## Regional Co-ordinators news

Icon will be announcing changes to our super-efficient regional coordinator team over the spring months. Alison Fraser leaves us in February and Susan Bradshaw in May; we are very sorry to see them go, but look forward to assembling a new team to take care of our current interns and supervisors and the growing network of previous participants in the scheme.

## EXCHANGING PLACES?

### Want to advertise a short placement opportunity in your workshop?

Icon's Training Exchange is a virtual noticeboard where organisations and employers can advertise work-based training placements, and where people seeking internships and short periods of work experience can post their details for prospective hosts to see. The only rule for employers is that the placements on offer should be genuine short-term professional development or student training opportunities, and not formal paid employment. Anyone can post up details of a placement, without being an Icon member. You can also look through details of potential candidates offering services by going to the 'People' section of the site and browsing the pdfs there

### Seeking a short placement or internship?

The Training Exchange can also be used as a noticeboard to post up your own career details and profile. Use the form provided on the website to advertise your details for prospective hosts' perusal. To post your 'cv' and to view placements on offer you must be an Icon member. For more details on the service, go to the Education & Training section of the Icon website:

[http://www.icon.org.uk/index.php?option=com\\_content&task=view&id=470&Itemid=52](http://www.icon.org.uk/index.php?option=com_content&task=view&id=470&Itemid=52)



Kew Palace winner of the Restoration & Conservation category in the M&H show's Award for Excellence

## FROM THE LIBRARY

I am pleased to be able to announce a new exchange program with Germany's Herzog August Bibliothek. The Chantry Library will now receive copies of their excellent publication *Wolfenbütteler Schriften zur Geschichte des Buchwesens* in exchange for the *The Paper Conservator*. We have received our first copy (volume 40: *Bibliotheken, Bücher und andere Medien in der Zeit des Kalten Krieges*) and it is now available for consultation in the library.

Recent additions to the collection include:

- House of Lords Science and Technology Committee (2006). *Science and heritage: report with evidence*.
- Hughes, J.J. [et al.] (2003). *Mortars in historic buildings*.
- Coleman, R. [et al.] (2004). *Development and archaeology in historic towns and cities*.
- Dallas, R. (ed.) (2003). *Measured survey and building recording for historic buildings and structures*.
- Centre for Conservation and Urban Studies (2000). *Scottish slate: the potential for use in building repair and conservation area enhancement*.
- Scottish Lime Centre (2003). *Preparation and use of lime mortars – revised edition*.
- Masonry Conservation Research Group (2003). *The consequences of past stonecleaning intervention*.
- Young, M. (2003). *Chemical consolidants and water repellents for sandstones in Scotland*.
- Hyslop, E. & McMillan, A. (2003). *A pilot study into the potential for a building stones of Scotland publication*.
- Nicholson, K. (2001). *Impact of the Braer oil spill on Historic Scotland monuments in Shetland*.
- Holmes, S. (2003). *Evaluation of limestone and building limes in Scotland*.
- Whitfeld, L. (2000). *Rural buildings of the Lothians: conservation and conversion*.
- Ashok, R. and Smith, P. (eds.) (2004). *Modern art, new museums: contributions to the Bilbao congress, 13–17 September 2004*.
- Saunders, D. Townsend, J.H. & Woodcock, S. (eds) (2006). *The object in context: crossing conservation boundaries: contributions to the Munich Congress, 28 August – 1 September 2006*.
- Bregnhøi, L. [et al.] (2006). *Paint research in building conservation*.
- Forde, H. (2007). *Preserving archives*.
- Stirk, Jean V. (2006). *The lost mills: a history of papermaking in County Durham*.

## MUSEUMS AND HERITAGE SHOW 2008

This year's Museums & Heritage Show, 7 & 8 May 2008 at Earls Court, London, has a strong focus on conservation, with a stream of seminars dedicated to the theme.

Curators from Manchester Museum will be speaking on 'Preservation versus Accessibility' and will be exploring a variety of issues including how best to keep primary school children happy when it comes to handling interesting artifacts.

Visitors will also be able to hear from Dr. Jennifer Hiller at Diamond Light Source who will be explaining how this cutting edge technology can assist conservators and archaeologists in studies of preservation of a wide range of materials, including documents, textiles, and wood artifacts.

The Show includes the largest exhibition in the industry with over 130 exhibitors displaying a wide range of products and services. There is also an extensive programme of free seminars as well as a new International Design Conference and advice clinics offering expert help and guidance on all issues relating to Interpretation and Collection's Management.

The Collection's Link Surgery is a new feature for 2008. It offers free, friendly and informal advice from industry professionals. There is a wide range of topics which the advisors would be happy to discuss, ranging from conservation and archive materials to collections development and collections management training.

For a full programme please visit the Museums and Heritage Show website. The seminars, drop in clinic and exhibition are all free to attend – register for your free entry pass at [www.museumsandheritage.com](http://www.museumsandheritage.com).

Please feel free to come and use this growing collection. We also supply photocopies of chapters from books or journal articles and conference papers which we can send to you free of charge on quoting your Icon membership number. We welcome all donations from members' personal collections of professional literature. Introductory tours of the library for you or your group can be arranged with me. To find out more or for help with any other enquiries please contact me at the library:

Librarian **James Andrews**  
 Email **chantrylibrary@icon.org.uk**  
 Tel./Fax **+ 44 (0) 1865 251 303**  
 Address **The Chantry Library, Grove Cottage,  
 St Cross Road, Oxford, OX1 3TX, UK**  
 Website **www.lib.ox.ac.uk/ipc-chantry/**

Below is a selection of recently published articles available from the Chantry Library. For a complete list please visit the website and follow the 'New Titles' link.

**From AIC News, 31(6).**

Garland, P.S. (2006). 'Finding solutions to the problems of complex art packing'. pp. 1, 7–8.

**From The ephemerist, 135.**

Barlow, D. (2006). 'The Portland vase'. pp. 4–8.

**From Print quarterly, 23(4).**

McDonald, M.P. (2006). 'A genealogy for the Count Duke of Olivares'. pp. 359–382.

Livingstone, M. (2006). 'Three Hockney prints rediscovered'. pp. 417–420.

**From Restaurator: international journal for the preservation of library and archival material, 27(4).**

Zervos, S. and Moropoulou, A. (2006). 'Methodology and criteria for the evaluation of paper conservation interventions: a literature review'. pp. 219–274.

Calvini, P. and Gorassini, A. (2006). 'On the rate of paper degradation: lessons from the past'. pp. 275–290.

**From AICCM national newsletter, 101.**

Kubik, M.E. (2006). 'Tucker's box: an overview of Albert Tucker's painting materials'. pp. 3–5.

Golds, T. (2006). 'Sustainable buildings: cost vs collection needs'. [Seminar review] pp. 15–17.

Lau, D. and Wain, A. (2006). 'Laser cleaning for conservation: a review of the Australian workshop series'. pp. 19–21.

**From Conservation-restauration des biens culturels, 24.**

Jallet, P., Dubarry, P. and Joseph, F. (2006). 'La grotte de

Lascaux: du constat d'état à la création d'une base de consultation'. pp. 11–20.

Houssay, A. (2006). 'Le violon d'Ingres, un violon très symbolique?'. pp. 21–29.

Naud, C. [et al.] (2006). 'La Fondation du patrimoine religieux du Québec et restauration des peintures'. pp. 43–50.

Binet, C. and Echard, J.-P. (2006). 'Utilisation de la fluorescence X in situ: comme aide à la reconnaissance de l'os, de l'ivoire et de la corne sur des objets patrimoniaux'. pp. 59–62.

**From The Guild of Book Workers newsletter, 169.**

Cheng, J. (2006). 'The book as tool: a summer in the state archives at Château de Neuchâtel'. pp. 6–7.

**From PH: Boletín del Instituto Andaluz del Patrimonio Histórico, 60.**

López Fernández, I. (2006). 'Diseño y programación de itinerarios culturales'. pp. 20–33.

Sivan, R. (2006). 'Uso y abuso de medios interpretativos en los itinerarios culturales'. pp. 142–145.

**From The Getty conservation newsletter, 21(3).**

'Preserving world heritage: a discussion about rock art conservation'. pp. 10–15.

Deacon, J. and Agnew, N. (2006). 'Building capacity to conserve southern African rock art'. pp. 20–23.

**From Art business today 2007 no. 1.**

Clews, M. (2007). '"Level pegging" [article on contemporary frames]'. pp. 78–81.

Ruston, A. (2007). 'Which mountboard?' [framing article]. pp. 82–85.

**From Journal of the American Institute for Conservation [AIC], 45(3).**

Brooks, M.M. and Eastop, D. (2006). 'Matter out of place: paradigms for analyzing textile cleaning'. pp. 171–181.

Greene, V. (2006). 'Using case studies to examine the decision-making process for cleaning ethnographic objects'. pp. 183–199.

Sutherland, K. (2006). 'Measurements of solvent cleaning effects on oil paintings'. pp. 211–226.

**From Discover NLS [National Library of Scotland]. Issue 3.**

Jutrzenka, E. and Hamilton, G. (2006). 'Sharing information on the Wiki Wide Web'. p. 7.

Dunn, K. (2006). 'The mirror of the life of Christ'. pp. 8–9.

Edwards, O.D. (2006). 'Forensic evidence from the case-book of Sherlock Holmes'. pp. 14–17.

## ONWARDS AND UPWARDS...

Congratulations to **Birthe Christensen** who became Head of Conservation and Preservation at the National Maritime Museum in Greenwich last December. She brings a wealth of conservation and collection care experience to the post, having worked in national, local government and university museums. Initially training at London University's Institute of Archaeology, Birthe worked as a conservator in Denmark before moving into the management of heritage projects. This included several years in Brighton where a major part of her job was to ensure the presentation and long-term care of the Royal Pavilion, along with managing the £10m Brighton Museum Refurbishment Project. In parallel with her job as Head of Conservation Group at the British Museum, Birthe studied part-time for an MBA (Masters in Business Administration), graduating in 2005. She then managed local history museum Valence House in East London for two years before taking up her present post, where she adds the maritime dimension to the broad range she has already accumulated in archaeological, historical, archival and even buildings and gardens collections.

After sixteen years working in conservation in London, **Caroline Checkley-Scott** is moving North. On 2 January 08 she took up her newly defined post as Head of Collection Care for the John Rylands Library in Manchester.

Caroline studied printing and bookbinding in Dublin, Ireland. As a trainee in book conservation she joined the British Library in 1991 and worked for the House of Lords and the Oriental and India Office before moving to St Pancras.

After nine years she moved literally up the road to the Wellcome Library where in 2002 she was appointed Senior Conservator. During this time she moved the collections, opened new galleries and of course built her new conservation studios as showcased in last July's Icon News (issue 11). She also was Accredited and achieved a Masters in Conservation.

Caroline is involved nationally and internationally in conservation projects including teaching on the



Montefiascone Project in Italy, and work with the Thesaurus Islamicus Foundation at the National Library of Cairo in Egypt. She has also lectured in Slovenia, South America and Australia.

## HONOURS

Too late to catch our January issue but the New Year Honours List saw the award of the DBE to two important figures in the heritage field: Lynne Janie Brindley, Chief Executive of the British Library, for services to education, and Fiona Claire Reynolds, CBE, Director-General of the National Trust, for services to heritage and to conservation.

## NEW POST

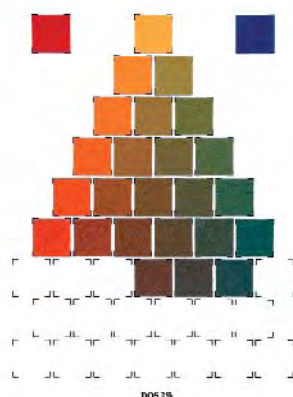
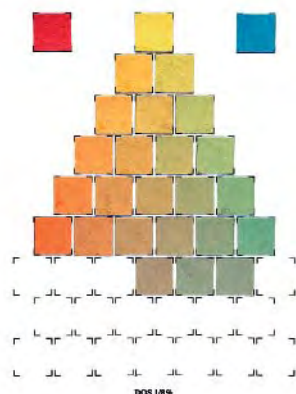
Kathryn Hallett has recently been appointed to the new post of Preventive Conservation and Science Manager within the Conservation and Collection Care (CCC) team at Historic Royal Palaces (HRP).

Previously Senior Conservation Scientist for HRP, Kathryn's new role joins together the renowned preventive conservation and scientific research activities across the five palaces\* in HRP's guardianship for the delivery of a science-based research and preventive conservation programme to achieve the highest standards of conservation of the collections and decorative features. Kathryn trained at UCL's Institute of Archaeology and the RCA/V&A joint course with the British Museum, winning the (then) UKIC Student Conservator of the Year award in 2002. She subsequently joined HRP as a research scientist on the EU-funded 'Monitoring of Damage to Historic Tapestries' project, on which she is currently co-editing a book with Dr Anita Quye of National Museums of Scotland. Kathryn is a committee member of the Icon Science Group. She can be contacted at [kathryn.hallett@hrp.org.uk](mailto:kathryn.hallett@hrp.org.uk)



\* Tower of London, Hampton Court Palace, the Banqueting House, Kensington Palace and Kew Palace

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*Surprisingly different*



# Whose blue? The true story behind the sky-blue roof of St Pancras International Station

**Next time you pass through St Pancras on your way to the Continent, admire the bold decoration of this wonderful building with a more knowledgeable eye, as Helen Hughes, Head of Historic Interiors Research and Conservation for English Heritage, explains**

One of the most admired features of the newly reincarnated building St Pancras International is the striking sky blue colour of the massive cast iron ribs which soar over the platforms – imagine if they had been painted dark brown! I was privileged to play a part in determining the appearance of this stunning decorative finish. The story behind the decisions made about the original decoration of the roof trusses in the nineteenth-century and its renovation in the final years of the twentieth provide interesting insights into the tastes of both periods.

The station is listed Grade I and therefore all alterations were subject to approval by Camden Council and English Heritage. But the site was also the focus of a major redevelopment of the Channel Tunnel Link, alterations to a busy London Underground intersection and the redevelopment of a blighted area of central London.

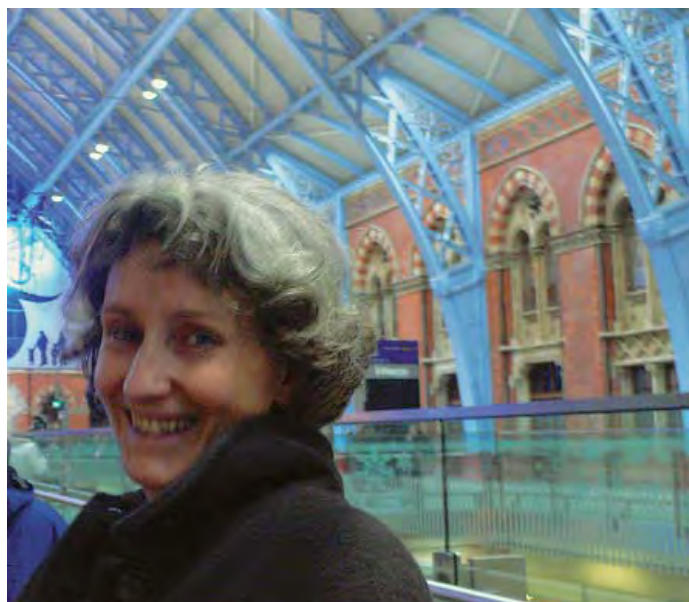
However, as the result of this massive project eloquently demonstrates, conservation and modern development can work in harmony to achieve impressive results.

I became involved in 1998 when my colleague at English Heritage Zoe Croad, Historic Buildings Inspector for the project, requested my assistance to help correlate the mass of documentary and archaeological evidence which related to the decorative history of the interior of the station and establish a coherent decorative scheme for the future. Throughout the lengthy project Zoe managed to maintain a perfect balance of steely determination, perfectionism and pragmatism. Even in 1998, some nine years before the planned opening, the project was working to tight deadlines dictated by submissions, consent, approvals processes and lead-in times for massive construction orders.

The roof of the train shed had suffered bomb damage during the war and the project aimed to reinstate the areas of glazing which had been lost during the course of subsequent repair campaigns. Regarding the decoration of the station roof on completion of the works, English Heritage had suggested that the original nineteenth-century colour scheme, thought to be a blue, could be reinstated, and, if appropriate, this could be incorporated into the modern extension. The early decorative schemes needed to be established and evaluated so that the

(left) The replica clock (see page 3 for the original) sits well against St Pancras's blue décor (Dent was also the manufacturer of Big Ben's clock)

The author and 'her' blue



agreed modern aluminium glazing units could be powder coated in the selected colour as part of their manufacturing process.

A perfunctory perusal of the historic descriptions of St. Pancras seemed to confirm that the interior had indeed been painted blue. It was suggested that William Henry Barlow, the designer of the cast iron framework, which is an outstanding piece of engineering – 689 foot long, 100ft high at its apex and at the time spanning the largest covered area in the world (and almost half of its surface is glazed!) – painted the ribs blue so that the roof would melt into the sky.

However examination of paint samples removed from the iron trusses quickly revealed that these elements had originally been painted in an iron-oxide brown paint and that the blue paint had clearly been applied at a later date. How could this be explained? It was known that construction of the iron framework train shed was begun in 1866 at the north end. The original specification for the ironwork was that it would be painted with three coats of 'iron minium' after being erected on site to prevent the metal rusting (*Rail 491/411 Original specification for St Pancras*). This painted protection proved to be necessary as the metal framework was exposed to severe winds and rain due to delays in erecting the brick side walls and end screens. By 1868 the station was open for use by passengers but the hotel and the taxi rank on the Euston Road side of the site were not completed until 1876. It seemed logical to consider the iron oxide brown paint to be a temporary 'builders' finish' rather than a finished decorative scheme, and that it was always the intention to apply the sky blue paint to the entire station complex when all of the construction work was eventually complete. However further inspection of the documentation suggested that this was not the case and that Barlow always intended the trusses to be painted brown 'a colour which would least show the dirt from smoke of the engines' (*Minutes of Proceedings of the Institution of Civil Engineers: 1869–1870*, p.105).

As early as 1870, long before the hotel had been completed, James Allport, the Midlands General Manager who supervised the work, was voicing his concerns about the colour of the station roof. Allport had already provided a significant contribution to the station design: it was he who suggested that the basement area offered valuable storage space when Barlow had simply intended to fill the space with spoils from tunnelling. This undercroft area has now been opened up to provide vital functional space for the new development. Allport reported: 'With reference to the colouring of the roof of the St. Pancras Station, he had done all he could to prevent the dark brown colour being used, which made it look exceedingly dull and heavy...and had discussed this matter with Mr Barlow and Mr Gilbert

*Scott on several occasions....' He thought that nature should be imitated and the roof should be painted 'a beautiful blue'. (Minutes of Proceedings of the Institution of Civil Engineers (1869–1870), p.95). Allport's suggestion was eventually taken up by sometime between 1870 and 1877 when the roof is described as being recently repainted and having 'a blue sky-like appearance'. (The Midland Railway, Its Rise and Progress by F.S. Williams 1877)*

I collated this archival evidence and existing paint research and embarked on my own on-site investigation to produce an outline of the decorative history of the interior of the station. In early 1999 I presented my findings at the first of a series of meetings to establish the paint scheme with Rail Link Engineering (RLE) headed by the principal architect Alastair Lansley. I explained our new understanding of the early brown paint layers and that the first 'Allport?' sky-blue colour was composed of a mixture of French ultramarine and white lead. French ultramarine was quite a costly pigment favoured by Victorian landscape painters to depict skies. Rather surprisingly the base or 'boot' of the iron trusses had been painted in vermilion at this time. I also explained that there was evidence to suggest that some of the high level moulded detail of the trusses had been picked out using vermilion – but access was limited and further research would be needed to clarify the exact placement of this embellishment. The original scheme was repeated once, before being overpainted in a blue tinted with a cheaper pigment – Prussian blue – probably a cost cutting economy, with the 'boot' painted in brown. Prussian blue produced a blue with a slightly greenish cast. This Prussian blue paint in conjunction with the brown applied to the boot was used for subsequent decorations applied until the early part of the twentieth-century. From the 1920s until the 1990s a cream and brown scheme was employed.

Having established the historic schemes we had a series of options before us for the redecoration of the renovated roof. We were all aware of the subjectivity of all conservation decisions. Such decisions are always based on a consensus and values of the parties involved and do not reflect some hidden fundamental truth. It was



Sir John Betjeman admires the blue



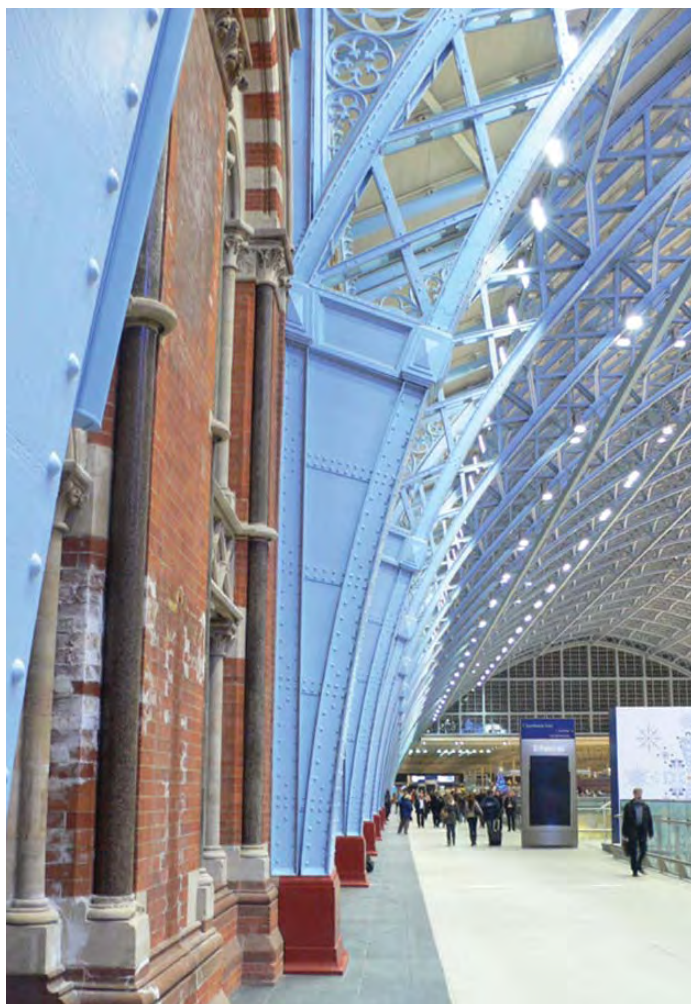
The beautifully preserved Victorian brick and stonework

important to be aware of, and to respect the different approaches held by the various agents involved with the St. Pancras project. These ranged from 'objective interpretive archaeology' to a less slavish more 'inspired by the past' use of research findings. It is interesting to trace the discussions which led to the selection of the final colour scheme. Understandably, as the colour of the metal ribs spanning the station would have a great impact on the final scheme RLE were not happy with the idea of having an 'historic scheme' imposed upon them. It is important to state that whatever colour the roof was to be painted great care was taken to retain the historic paint wherever possible for analysis by future generations. A system was developed for stripping dirt and loose paint with low and high pressure water jets, while leaving well adhered paint intact.

Despite English Heritage's suggestion that the original scheme should be recreated, there was, unsurprisingly, scant consideration given to using 'Barlow's Brown' – although this was the technically the first decorative scheme and reflected the designer's original intention. The RLE team liked the first 'sky-blue' colour but were not happy with the vermilion coloured base or boot – and they had no interest at all in commissioning further research to establish the Victorian detailing of the vermilion picking

out on the spandrels. It was suggested that we conduct some colour trials within the station. I prepared these by sourcing the original pigments, French ultramarine, Prussian blue, vermilion and iron oxide browns. These were then ground in linseed oil and mixed with lead white to produce a match to areas of historic paint revealed on site and examined in cross-section under high magnification. I then matched these to modern paint systems. To speed up the process I painted out the trial areas on site using sample pots of emulsion paint bought from John Lewis.

The paint trials were viewed in the station. Everyone agreed that the ultramarine blue was a more attractive colour than the Prussian blue and that the bright vermilion I had applied to the 'boot' did not sit well against the building's red sandstone and red/brown brick. Various decoration options were then considered such as using the original sky-blue but using the brown 'boot' of the later scheme. This was discounted as being without historical precedent. But such was the horror at the prospect of the 'vermilion boot' that it was even suggested that the Prussian blue and brown scheme should be recreated on the grounds that although this was not the original blue and was obviously a cheaper, less attractive colour, it had actually had a longer period of use throughout the later nineteenth and early twentieth centuries than the ultramarine blue. There was even a suggestion of



The ultramarine blue ribs and vermillion boots

fashionable in the late 90s. I refused to do this and together we examined the cross-section to confirm that the paint did not contain any pigment other than French ultramarine and white lead. I did offer the observation that with the levels of pollution in central London, the light blue may soon look grey under layers of grime. The paint swatch was taken away for matching to a modern paint system (with health warnings that the sample contained lead white).

That was the end of my direct involvement with the project. St Pancras has always been one of my favourite places in London. I had always loved its dark Victorian gloom and accumulated grime. During the following years whenever I caught the train there I felt a little guilty that I was partly responsible for the dramatic changes which were to take place: the person who was banished this wonderful Stygian survival and replaced it with bright sky-blue.

In the summer of 2006 cycling from Camden with St Pancras in the distance I noticed a small patch of a strangely familiar blue behind the scaffolding and cranes hunched over the exposed train shed roof. The iron trusses were finally being painted blue. During the following weeks I watched the project proceed with some satisfaction and, like everyone else, I was stunned when I saw the completed scheme from the inside and how the old station had been transformed into a vibrant international link which celebrated both the old and the new.

### Afterword

The blue paint applied to the trusses of St. Pancras International is officially called English Heritage Barlow Blue. This is clearly incorrect and I believe it should be called Allport's blue – or perhaps if we are being really accurate Helen's blue.

Many of the boots record the manufacturer and date



abandoning any colour differentiation of the boot and carrying the blue down to the ground level.

The discussion was opened out for wider consultation. Camden Council and the Victorian Society expressed their preference for the ultramarine scheme but in general favoured 'a less rigid application of the historical evidence'. The 'boot saga', as Zoe now called it, rumbled on. Darker, browner shades of vermillion were sourced and used for further trials. These provided a colour match for the boot which provided a closer match to the colour of the surrounding stone and brick – and so a compromise was reached. Archaeological rigour and late twentieth century taste was reconciled with no great loss of face by either side.

The colour scheme agreed, my final task was to provide a colour specification for the 'sky blue' and the boot 'red' so that the paint and powder-coat systems could be ordered. An RLE architect came to the English Heritage Conservation Studio to pick up the information. I produced that final matched colour using authentic materials, although the actual paint systems would be made from modern stains and resins. Starting with 100% lead white and adding increasing amounts of French ultramarine I produced a painted sheet of vibrant light blue which corresponded to the paint viewed in cross-section – and certainly did not match the exposed sections of the original paint which had faded, discoloured and darkened in the course of time! The architect thought my sample was a little bright and asked if I could add some black to make it slightly greyer – remember grey was very

# Preserving the Architectural Archive of St Paul's Cathedral

Paper conservation within the Archive, by Georgina Whiteley and Aikaterini Laina with Sue Crossley and Architectural Archivist Dr Christine Faunch.

## INTRODUCTION

The year 2004 marked the 1,400th anniversary of the founding of the first St Paul's Cathedral on Ludgate Hill and the 300th anniversary of the topping out of Wren's Cathedral will be celebrated in 2008. For that purpose St Paul's Cathedral has embarked on an historic £40 million restoration campaign to mark the anniversary and to prepare the Cathedral for its next three hundred years. Following on from that agenda is the care of the architectural archive of the Cathedral, which was established in the triforium of the cathedral in 1996.

The story of this project began in 2003 when Sue Crossley was temporarily appointed as senior paper conservator / adviser. Her work was to assess, identify, prioritize and plan the workload together with the architectural archivist Dr Christine Faunch. Amongst other tasks, a long-term preservation project was set in motion to stabilise the archive. This involved cleaning and re-housing its contents in archival quality enclosures consistent with British Standards (BS5454), the National Preservation Office and the National Archives. From the outset the project relied on the help of a team of student volunteers from Camberwell College of Arts who remained fully involved

throughout as postgraduate employees. The whole operation was carried out within the conservation department of the cathedral. It came under the overall control of Martin Stancliffe as Surveyor to the Fabric, and the Cathedral's Collection Management Committee. The work was undertaken with the financial support of the Pilgrim Trust and the National Manuscripts' Conservation Trust which is gratefully acknowledged.

In July 2007 this project had been completed, on time and on budget.

## THE ARCHIVE

The architectural archive at St. Paul's Cathedral is a mixed working collection relating to the fabric of the building. It comprises two distinct areas: the first contains some 7000 architectural plans and drawings of varying size from A3 to A0, whilst the second is made up of 75 linear metres of assorted manuscripts and typescript documents, glass plate negatives, a large photographic collection and books.

These records cover the period from the 1850s to the 1980s and, together with the Dean and Chapter Archive at the Guildhall Library (Aldermanbury), constitute the primary source of information, both for essential work

Documents prior to treatment





Project team members: (l to r) Dr Christine Fauch, Aikaterini Laina, Georgina Whiteley and Sue Crossley



Documents as originally housed

undertaken on the fabric and for historical research.

Before the preservation programme was initiated, the Cathedral had never had an in-house paper conservator, and the efforts of the conservation department had been concentrated on objects and paintings, now under the supervision of Teresa Heady, the cathedral's in-house conservator. Consequently, predominantly paper-based items in the architectural archive had received only ad hoc conservation treatment, with no comprehensive plan of action having been instituted for the collection as a whole.

Previously, plans, documents and photographs had been distributed in various parts of the cathedral before being brought together within the newly created archive. Despite an important grant from English Heritage for the purchase of plan chests in 1998 which helped greatly, many items remained in older storage which was now considered inappropriate by emerging conservation standards and had, for many years, accelerated their deterioration. St Paul's Cathedral is situated in the City of London, where atmospheric pollution had been consistently high, causing oxidation and acidity. Dirt and dust accumulation had triggered chemical degradation, and these problems were compounded by fluctuations in temperature and humidity within the building.

## PROJECT MISSION

### Funding

Between 2003 and 2006, three project grants were awarded by the Pilgrim Trust and the National Manuscripts Conservation Trust, which enabled the project to go ahead.

In March 2004 the Pilgrim Trust generously awarded £10,000. This grant, which was matched by funds from the Dean and Chapter, enabled the purchase of survey software from the National Preservation Office (NPO) so that a formal Preservation Needs Assessment could be undertaken, which coincided with the installation of IT equipment to the archive storage area. Crucially, the grant also facilitated the development of an ethical, cost-effective methodology, including accurate systems for assessing items and recording outputs, based on tested procedures. In April 2005 a second grant of £35,832 was awarded by the Pilgrim Trust to complete the project over a two-year period, with the remaining costs being met by a grant from the National Manuscripts Conservation Trust (NMCT).

### Formation of Studio/ Methodologies

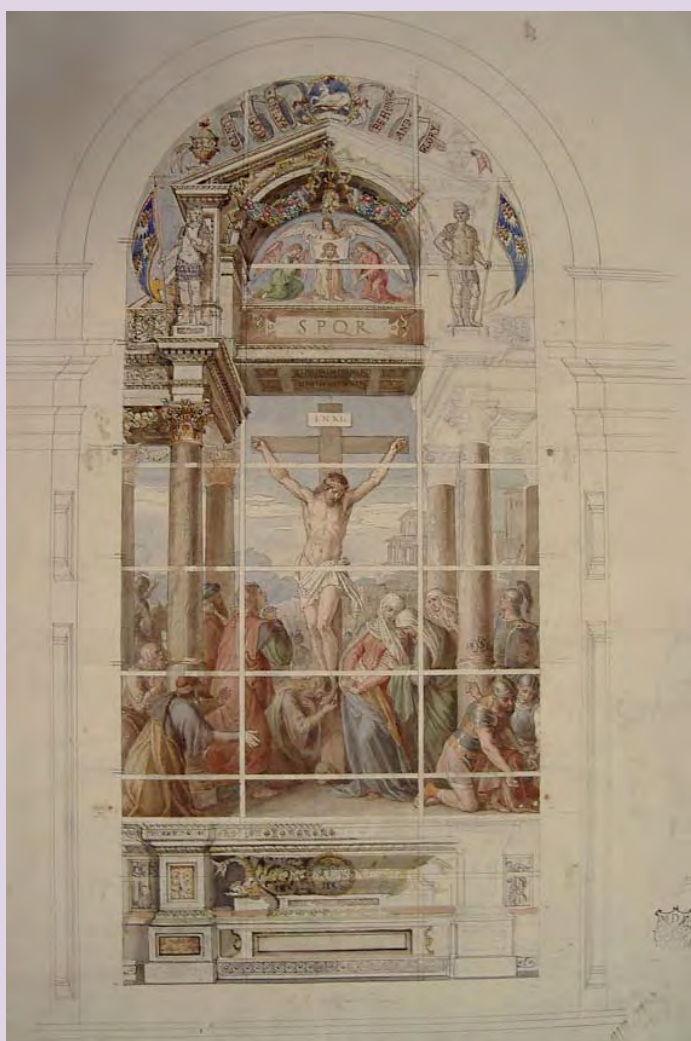
When the project began, we were a team of five students undertaking a work placement, a mandatory unit of our

Made to measure postbinding portfolio to house plans in groups



Construction of postbinding portfolio





A stained glass window design from the archive

comprehensive overview of the condition of its drawings, maps and plans. The results of the survey were able to provide the archive with sufficient quantitative information to guide policies and strategic planning, as well as help support the funding bids.

The plans constitute a variety of media and supporting material, including graphite on oil-impregnated tracing paper, gel lithograph, and other photo-mechanical processes (inherently unstable), pen and watercolour on machine-made cartridge paper (some of which is poor quality); as well as cloth, (the most durable of the supports). Common problems of the ageing process include embrittlement, discolouration, and a build-up of dirt. These problems have been compounded by years of manual handling leading to multiple tears, lacunae, and damaging remedial repairs (yellowing and degraded Sellotape, for instance).

Our role involved assessing each item individually and noting any agents of deterioration or specific damage. All ferrous clips and pins were removed and the plans were surface cleaned (recto and verso) using vulcanized 'chemical' sponges, a variety of soft brushes and micro-fibre cloths. All collection plans up to size A0, were put in 100 or 70 micron inert polyester sleeves (Melinex) in order to provide protection during handling, and then stored flat in the plan chests.

In some cases, where items were in obvious groups, custom-made housing was constructed, including

The sleeved plans in their plan chests



degree. Following that, it was proposed that a selection of the group return on a voluntary basis for one day a week for the next six months; this was instrumental in helping the senior paper conservator and archivist develop funding proposals. Our job was essentially to provide first phase preventive treatment i.e. the 'physical stabilization of a collection through a systematic program of re-housing within protective enclosures and storage in a stable environment', rather than remedial conservation which is the most labour-intensive and expensive option. The aim was to take a long-term view of the collection as a whole and keep item-level treatment to a minimum.

With a limited budget, and even more limited space, we had to be creative in our methodologies and studio set-up so that, for instance, without a guillotine or card creaser, we found ways to entirely hand-make phase boxes speedily, without compromising quality, and plan-chest tops were adapted as work stations.

The project was divided into two general phases: phase 1 dealt with the architectural plans, whilst phase 2 covered the documents, manuscripts, photographs, books and remaining miscellaneous material.

## PHASE ONE

An NPO Preservation Assessment Survey was undertaken during the summer of 2005; the archive's first full and



Documents after cleaning and re-housing

portfolios, four-flap acid free enclosures and simple non-adhesive binding structures.

262 oversized individual plans were earmarked for special attention, as they had been stored folded and were therefore at risk. Treatments included flattening, tape removal and minor repairs. These were rolled onto acid-free inner tubes and stored horizontally in boxes.

It was clear from the very early stages of the project that two people working together was the most efficient approach and the conservators worked as a team throughout in order to ensure the safe handling of the many over-sized items in the collection.

The collection contains a small number of 19th-century watercolours depicting stained glass designs which required additional attention. They are among the most used and most vulnerable items in the collection, often requested by visiting researchers as well as for internal and external exhibition purposes. A sturdy window-mount enclosure was devised, incorporating polyester sleeves, which had the double benefit of being suitable for storage and facilitating safe-handling, and also exhibition/display purposes.

Careful documentation and records of treatment were undertaken throughout, while digital images recording the scale and nature of the work involved were stored electronically. In addition, environmental monitoring was set up and the provision of printed guidelines and support materials for use by researchers in the archive workroom has done much to further ensure item longevity.

## PHASE TWO

There were fifty two metal filing cabinet drawers containing a large quantity of un-catalogued mixed-media material.

This comprised mainly 19th–20th century documents including correspondence, manuscript and typescript minutes, invoices, agendas, reports, contracts, journals, purchase orders, blue prints, building plans, and newspaper articles. The collection also contained photographic prints, slides and glass plate negatives, books and magnetic media.

The documents were originally stored vertically, in ill-fitting suspension files in filing cabinets, which left them vulnerable to mechanical damage and atmospheric pollutants that had, over time, caused metal corrosion of staples and paper clips. Acid degradation in supporting folders had migrated into documents, compounding the problems of inherent acidity and weakness in parts of the collection.

The documents were transferred from their substandard housing to lignin-free archive storage boxes. A detailed list of contents for each box was produced, on paper and in an electronic format, to aid cataloguing and to clarify original order sequence.

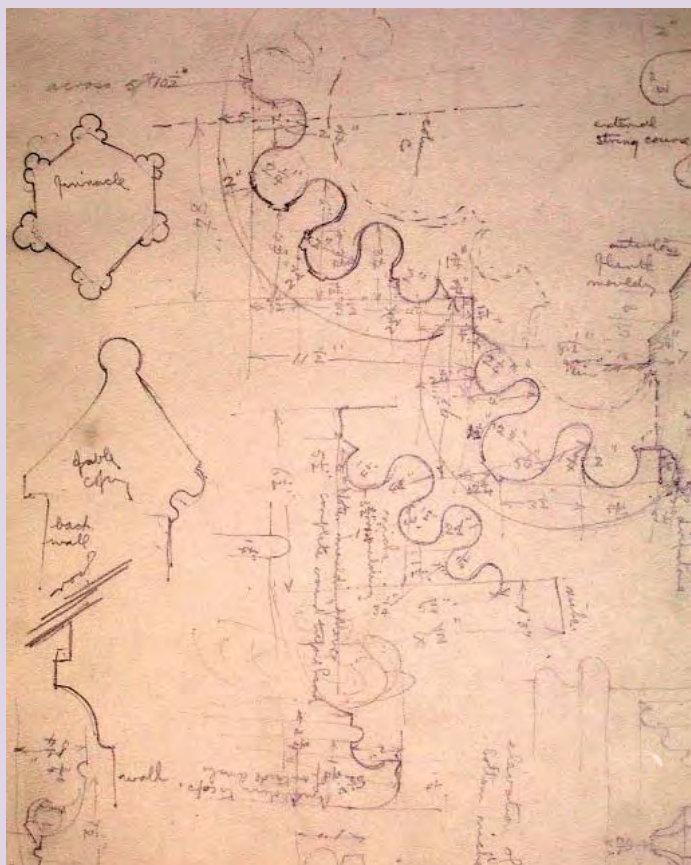
The existing filing cabinets were replaced by BS5454 approved metal shelving, incorporating additional space for the inevitable growth of the collection as it is conserved. All the material was transferred in original sequence to the new storage boxes and placed horizontally in lockable metal shelving in the archive storage area, which is now environmentally monitored.

Surface cleaning was carried out recto and verso using cloths, chemical sponges and soft brushes. All corrosive metal fastenings/bindings were removed and replaced with brass paperclips.

Flattening with controlled moisture was occasionally

Documents after cleaning and re-housing





creation of a post-binding enclosure using melinex sleeves, acid-free box board and phase box rivets. This proved to be a simple but effective method of housing plans, entirely adhesive-free and extremely sturdy.

We had to be realistic with our aims but at the same time be open to proposals that could increase efficiency or otherwise improve output.

Working with student volunteers and postgraduates provided mutual benefits. Good teamwork was essential throughout. Each individual had a different way of working, and brought different qualities and strengths. When these had been identified, tasks were apportioned accordingly and information pooled amongst colleagues.

All work was processed within the projected time period, as a result of careful planning, continuous discussion and great teamwork. To achieve this, target-placing was essential to enforce timescale and maintain momentum.

In conclusion, the project was not only immensely successful but showed what can be achieved with limited resources (albeit with plenty of enthusiasm and dedication) – in a historic building, i.e. an environment not readily suited to the archiving of cultural artefacts. Whilst the project was undoubtedly dependent on external funding to a large degree, it would not have succeeded without the full support of the Dean and Chapter and its advisory groups and the determination and consistent efforts of an enthusiastic and dedicated team.

The authors would like to thank Martin Stancliffe as Surveyor to the Fabric, Lay Canon Professor Michelle Brown and Objects Conservator Teresa Heady for their invaluable assistance.

The article is produced with the kind permission of the Dean and Chapter of St Paul's Cathedral.

#### Storage of oversize plans



carried out. Repairs were carried out to restore functionality and/or render legibility, using pre-prepared document-repair tape for speed and convenience.

A number of folded plans and tracings that had been stored amongst the documents were sleeved and transferred to the plan-chests.

The original highly acidic enclosures were replaced by custom-made acid-free archival folders, with annotations retained for records. Books and other bound volumes were surface cleaned and housed in custom-made phase boxes. Pages were interleaved as necessary with acid-free tissue.

Photographs were stored in envelopes constructed from Photon paper and polyester sleeves while simple, dimensionally stable enclosures were constructed for the glass plates and metal printing plates using box-card, supported with Plastizote linings.

The refinement of a disaster plan – to be continually revised – will ensure that the collection is as fully protected as possible in the foreseeable future.

## THE KEY TO SUCCESS

As every conservator knows, one of the biggest enemies of a preservation project of this nature is repetition: the same daily task repeated over and over again during a protracted period. Methods to counteract 'conservators' fatigue' involved varying task distribution and continually re-evaluating our working methods. Creative problem-solving, through research, regular meetings and group discussion increased our knowledge and skills set and kept the project fresh and mentally engaging. This increased our range of packaging formats, notably involving the

# Setting the record straight

Recent coverage in the press of conservation issues at Westminster Abbey has demonstrated how easily a positive conservation story can be turned into a negative and rather scandalous interpretation of the truth. Vanessa Simeoni, Head Conservator at Westminster Abbey, gives us the real story

Last November's Icon News carried a discussion about attracting media attention to conservation stories. On the subject of being misquoted and misrepresented, one participant observed 'even with the best will in the world it will happen and there's not really much we can do about it'. I had first-hand experience of this later that month, when one of the big Sunday newspapers published what we thought was to be a nice piece on the forthcoming conservation of the Westminster Sedilia, highlighting the proposed treatment programme, the extensive research, the Abbey. I sent an email out to colleagues in anticipation and pride about this wonderful place I work in. How utterly naïve:—

## *Heating Threatens Westminster Abbey Treasures*

The conservation of the early 14thC painted oak panels of the Sedilia, it seems, was just not sexy enough.

The article sensationally claimed that the central heating at Westminster Abbey had directly damaged the Coronation Chair and that we struggle to protect the Chair and other national treasures, including the Sedilia. This edited version of the facts sadly distorts what is really happening at the Abbey.

I have worked as conservator there for just over eight years and in that time, with the very generous and well informed support of the Dean and Chapter and Westminster Abbey Fabric Commission, have brought about many preventive conservation measures in order to try to slow down the inevitable process of deterioration. The Abbey is a working church, not a museum or historic house, and as such a balanced approach is taken in which we aim to combine informed conservation with the needs of a very busy public building that just happens to be crammed full of some of the most fantastic art on earth. The church is open for services 365 days a year and both our visitors and staff (including conservators) require some heating.

In September 2007, expanding on our small bank of environmental sensors, the Abbey invested in an extensive environmental monitoring system in order to monitor RH, temperature, Lux and UV. Sensors have been placed near sensitive objects as well as in the more general areas

around the Abbey and its precincts. We are now beginning to build up a picture of the many different environments in the church and its surrounding buildings and the subsequent effects on objects. In time this data will help us plan better for the long term preservation of the collection.

The very few months worth of data collected so far show the average temperature in the Abbey to be 19°C, a little lower than stated in the article and the RH readings are also between much narrower bands than those reported. To quote RH ranges out of context becomes meaningless and in terms of data collection a few months is a very short time, certainly not enough on which to base an entire environmental strategy. Little would be gained from turning down the heating on the basis of this data and this was conveyed to the reporters. Conditions in such an old and complex building as the Abbey could be far worse and to act too soon, with too little understanding, could well lead to mistakes which further down the line could cause expensive problems and pointless damage. One theme of the recent Copenhagen conference on Museum Microclimates and Preventive Conservation was evidence suggesting that the accepted tight RH bands for collections care are unnecessarily narrow: 50-55% doesn't fit all situations. Obviously heating can have a detrimental impact on organic material by affecting humidity levels but the inaccuracy of the reporting was disappointing.

The Abbey is in the forefront of developing preventive conservation within ecclesiastic buildings. At present Canterbury Cathedral, under the direction of Heather Newton, Head of Masonry and Stone Conservation, is the only other church I know of that has installed an environmental monitoring programme with a view to the long term care and conservation of its collection. There may be more. The Abbey has also created the position of conservation cleaner (a role now developed into Preventive Conservator) with responsibility for the conservation housekeeping of the more sensitive areas in the Abbey. Several members of our general cleaning team have also attended the English Heritage Housekeeping course. In time we hope to train up more non-conservation staff. But it seems that the press have little interest in this extremely important approach to collection care.



© Dean and Chapter of Westminster. Image: Marie Louise Sauerberg

The North side of the Sedilia.

As to the implication of secrecy in the article and the 'threat' caused to the Coronation Chair, in 2004 paintings conservators Marie Louise Sauerberg of the Hamilton Kerr Institute and Alice Tavares Da Silva of the Courtauld Institute of Art, undertook localised consolidation of the lifting layers of gilding on the Chair. This was as a direct result of our vigilance and monitoring of the objects within the Abbey. Since the Chair is hardly ever moved from the church a scaffold was erected around it and the two conservators worked onsite for several weeks in full public view. An article on the Chair was also published in *Studies in Conservation*, vol.50, No.3, pp.230–233 in 2005. The article, however, stated that Abbey officials had only just 'admitted' that any work had been carried out.

The Sedilia did finally get a mention towards the end of the piece but sadly not in the form we were interviewed for. Painting conservators from the Hamilton Kerr Institute will begin its conservation in the New Year.

The majority of our collection is very accessible to the viewing public, the very touchable nearness of it being one

of the many wonderful attractions the Abbey has to offer worshipper and tourist alike. We are not a museum but face many of the same challenges.

So far there have been several offers from various companies offering to sort out 'our heating/humidity problem'. We respectfully decline at this point as we believe that it makes better sense to understand the environmental information being collected and then act on known quantities rather than be alarmist and act in haste, but repent at leisure.

We will bring you more from Westminster Abbey as work gets underway on conserving the wonderful Cosmati pavement in front of the High Altar, a major project for which a big team of conservators and advisers has been assembled.



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## CONTINUING PROFESSIONAL DEVELOPMENT COURSES

### METALWORKING FOR CONSERVATORS PART I

Jon Privett 24-27 April

### APPLIED COLOUR THEORY FOR CONSERVATORS

Mark Cazalet and  
David Dorning 6-9 May

### CONSERVATION OF LEATHER

Aline Angus and  
Roy Thomson 12-15 May

### PREVENTIVE CONSERVATION

Linda Bullock 2-5 June

### CONSERVATION OF PLASTICS

Thea van Oosten 14-17 July



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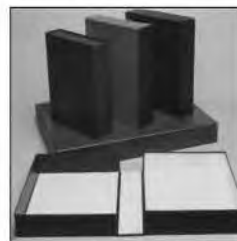


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# news from the groups

## BOOK AND PAPER GROUP

Book and Paper Group members will have received their copy of the newly printed Members Directory with this issue. We are enormously indebted to Linda Eells and Edward Cheese for putting it together. Who would have thought that a list of names could have proved so complicated to produce? But I can assure everyone that this was not an easy task and that both Linda and Edward spent many, many hours generating our first B&PG directory. We hope you find it of use.

Our programme of evening lectures continues on 13 May with Sylvia Sumira discussing the conservation of globes at the Icon office building, London Bridge. See Listings and the website for full details.

### Reminder

Are you receiving monthly Iconnect and B&PG e-briefings? If you are NOT please email Charlotte Cowin at [membership@icon.org.uk](mailto:membership@icon.org.uk) to up-date your information.

### Annual meeting

The Annual Meeting will take place at the Art Workers Guild, Thursday 10 April 2008, 5.30pm. Stuart Welch from Conservation by Design Ltd will be giving a talk after the meeting. Attendance is free, come to meet the committee and share a drink with colleagues.

### Goodbye from your current Chair

This is my last notice in Icon News as Chair of the B&PG as my term will come to an end at the annual meeting. Sally Esdaile will also be leaving the committee in April and I wanted to take this opportunity to thank Sally and all the other committee members for their hard work over the last few years. It has not been the easiest period of time to be a committee member with convergence having taken up so much energy. There were some rocky moments over the transition when it seemed that the endless exchange of emails on issues such as the members database and group budgets would never cease. But cease they did and we have successfully moved into our new phase.

There is much to look forward to for the B&PG; our primary aims are to increase our capacity for training, improving and co-ordinating volunteer activities and providing the services members have indicated they are interested in. So au revoir and I leave you in the capable hands of the committee and our new chair.

**Helen Lindsay**, Chair B&PG committee  
[helenlindsayconservation@googlemail.com](mailto:helenlindsayconservation@googlemail.com)

## CARE OF COLLECTIONS GROUP

Please note in your diary Wednesday 30 April, when there will be a half-day (14.00–17.00) meeting for members of the Icon Care of Collections Group. A selection of short presentations on topical collection care issues will be followed by the Annual Members' Meeting. The event will take place in the conference room at One London Bridge (where Icon is based). For further information see the Icon website. Please register in advance (this is a requirement for building security reasons) by email to **Peter Winsor**, CCG Chair ([peter.winsor@dsl.pipex.com](mailto:peter.winsor@dsl.pipex.com)).

## CERAMICS AND GLASS GROUP

### Nigel Williams Prize 2008 Call for Applications

Please see the Awards section on page 10 for the deadline for applications for the Nigel Williams Prize.

### Letter from the Chair

Dear Members

As my time as Chair draws near to a close there are a few announcements I would like to make. For reasons of economy we will not be sending our normal Spring mailing out to you by post. The cost of mailing the members each time we have a conference has become excessive. The detailed information for the conference will be available to you via a link to our website and you will be notified of its presence by a special Iconnect bulletin. We expect this information to be available to you in the latter half of February, please watch out for it and download the forms to return to us. Details of Committee elections and nomination forms will also be available in this form. For the small number of our members who do not have email addresses we will, of course, continue to send the normal letter and forms through the Royal Mail. Anyone who experiences difficulties can of course contact Lesley or Ros and we will do our best to help. Please ensure that the Head Office always has your most up-to-date email address.

We would like to see as many of you as possible at the Spring Meeting as there will be many changes on the Committee. I will be standing down as Chair after three years in the position, Alex Patchett Joyce will be standing down from the position of Conference Organiser as will our Secretary Lesley Urquhart, Brett James is relinquishing his post as Nigel Williams Prize co-ordinator. This will mean that there will be a shifting of responsibilities within the Group and opportunities for other members to come and join us to keep the group flourishing. Obviously to accomplish this we need a strong show of support. As yet none of the remaining Committee Members have expressed a desire to stand as Chair and whilst it is normal

to appoint the Chair from within the Committee we will on this occasion be looking to receive nominations from the membership.

Due to the uncertainty of the Chair's future we have decided that there will be **NO** Group meeting in the Autumn of 2008. This will give the largely new Committee time to settle in and assess how they wish to guide the Group before having to undertake the task of organising a major meeting.

The Committee are presently busy organising the fine detail of the Spring Meeting; below is a brief outline of the format, as always we are keen to hear from any members who would like to contribute. The Meeting will be held slightly later than usual on 25 and 26 April. We will be holding it over one and a half days as the cost of a two day meeting was prohibitive. A second night's accommodation would have made the event uneconomic for the majority of delegates. Burghley is within easy reach of London by train and also has good road and air links.

We are going to be at the George Hotel in Stamford, Lincs. from 2.00 pm on Friday 25 April for an afternoon of interesting talks which will terminate in the AGM and a dinner. The AGM will then be over and done leaving us a full, long day to enjoy the delights of Burghley House. We plan to hold approximately six lectures during the day and will have a long lunch hour during which delegates can opt to view the house at their own pace or take part in a guided tour. The restaurant will be open and delegates can choose from the full range of lunch options.

As to content, I am profoundly aware that the most successful conferences are built around the desire of our members to be kept up to date with new techniques and materials and to observe the different approaches of their colleagues. With that in mind I am following our conference last year at West Dean with a series of lectures by members of the group on practical projects that they have undertaken with the emphasis on good visual content and information on techniques and materials. I still have some lecture slots to fill and would welcome members' input on a wide variety of ceramics or related materials.

Look out for further details of this lively meeting on the website and in Iconnect over the coming month.

With best wishes to you all for 2008,

**Ros Hodges**, Chair  
On behalf of the CGG

## HISTORIC INTERIORS GROUP

In June 2003, the Historic Interiors Group held its inaugural conference at West Dean College. The title of the conference was *'Historic Interiors under Threat'* and, five years on, the importance of the interdisciplinary approach to the understanding and conservation of historic interiors has proved successful with our section having over 500 members from a variety of conservation disciplines as well as the involvement of architects, historic house curators and art historians. As a group we have provided a number of interesting activities including a joint study day with the Textile Group on *'Opening up Open Display'* at the Clothworkers' Hall; a visit to the newly redecorated Apsley House followed by drinks and canapés on the roof of the Wellington Memorial Arch; a conference entitled *'Searching for Hidden Treasures: Interpreting the Evidence of Historic Interiors'* held at Corpus Christi College, Cambridge followed by punting on the Cam to a riverside restaurant; as well as visits to Tyntesfield, Stourhead and Kew Palace.

For 2008 we are planning a visit to the Merchants House in Marlborough on 27 April to see the conserved decorative scheme and have the opportunity to talk to the paint analysts and conservators involved in the work. The planned Edinburgh Conference has been postponed but we are grateful to our Scottish members who are keen to show members the glories of Scottish interiors. However, the fact that we have had to postpone the conference highlights one of our major difficulties which is the need for more members to assist with the work of the Committee.

In order to encourage members and have a better idea of their needs we are planning a summertime event to bring the group together. The Historic Interiors Group can only continue to provide conferences, visits and information if more members can offer their services to help with organising and publicising events; soliciting articles for publication in Icon News and developing guidelines and information leaflets on all aspects of historic interiors conservation for our members. By volunteering to be on the committee, you can help to shape the future of the Historic Interiors Group and also gain valuable experience in terms of your professional development. The date and location of our summertime party will be announced shortly but in the meantime should you be willing to volunteer to serve on the committee, please contact either **Christine Sitwell** (christine.sitwell@nationaltrust.org.uk) or **Mette de Hamel** (mdehamel@btinternet.com).

## SCOTLAND GROUP

The events programme for 2008 got off to a good start with a tour of the Royal Commission on the Ancient and Historical Monuments of Scotland in Edinburgh, to see the library, print room and the conservation work undertaken as part of the Sir Basil Spence Archive Project, and the February pub group meeting. There are plenty of interesting events in the pipeline for the rest of the year - details will be posted in this update and on the Scotland Group webpage as they are finalised.

Save the date! A tour of the conservation studio at the National Library of Scotland is planned for 27 March 2008. Further information to follow.

In other Committee business, we are happy to welcome Kirsten Elliott to the Vice Chair post.

A grant to support conservators in the PACR process is now established. Applicants must be full members of Icon, members of the Scotland Group, and living and working in Scotland. An application form can be downloaded from the Scotland Group page of the website or is available by emailing [scotland@icon.org.uk](mailto:scotland@icon.org.uk). Completed forms should be sent to: The Chair, Icon Scotland Group, c/o Icon, 22-26 George Street, Edinburgh EH2 2PQ. Awards to successful candidates will normally be £100 paid on receipt of confirmation that accredited status has been conferred. Icon Scotland Group hopes to make four awards a year and, in the event of multiple applicants, preference will be given to equal distribution between the disciplines. Applications are reviewed by the Group's office bearers and awards are conditional on achieving ACR status. All applications will be treated in the strictest confidence.

Committee meetings for 2008 will be held on 13 May, 16 September and 9 December. Time and venue to be confirmed.

The Icon Scotland Group Committee is as follows:

|                                  |                                                            |
|----------------------------------|------------------------------------------------------------|
| Chair:                           | Linda Ramsay                                               |
| Vice Chair:                      | Kirsten Elliott                                            |
| Secretary:                       | Amanda Clydesdale                                          |
| Vice Secretary:                  | Antonia Craster                                            |
| Treasurer:                       | Audrey Wilson                                              |
| Vice Treasurer:                  | Gill Keay                                                  |
| Events team:                     | Helen Creasy, Erica Kotze, Sophie Younger, Kirsten Elliott |
| Publications/<br>publicity team: | Stephen Umpleby and Ruth Honeybone                         |

Ordinary Committee Members:

Wilma Bouwmeester, Julian Watson,  
Mo Bingham

Icon Scotland Member of the Board of Trustees:

Louise Lawson

Observers: Carol Brown and Clare Meredith

## TEXTILE GROUP

Since the last issue of Icon News you will have received the Textile Group January mailing outlining what we hope will be an interesting and varied programme of events for the year.

February saw a fascinating visit to the mannequin suppliers, Proportion, the day included a tour of the workshop at Walthamstow to see the production of the mannequins followed by a visit to the showrooms to see the finished articles. We would like to thank Proportion for making us so welcome and to Deborah Phipps for organising the visit.

Later this month sees this year's Spring Forum – The Furnished Room which will be held on 31 March at the V&A. The day promises a wide range of interesting talks looking at practical treatments, preventive conservation measures, and economic, ethical, analytical and curatorial considerations in connection with the furnished room. Thank you very much to all those contributing papers and posters. We are also very grateful to our colleagues at the Historic Royal Palaces Textile Conservation Studio for offering an opportunity for further discussion and tour of one of the rooms at Hampton Court Palace the following day on 1 April. If you haven't already done so please book now!

A number of other interesting events are planned for the rest of the year, details of which can be found on the Textile Group web pages and in Listings.

Alex-Seth Smith at The Textile Conservancy, mindful of the growing concern over the use of plastic, has found an eco-friendly alternative to traditional sample bags in the shape of biodegradable mini-bags made from starch paste. As the minimum order is several thousand she is very willing to share the consignment with anyone who is interested at a cost of £3.50 per 100 plus postage. Please see Group web page for more information.

Following on from the successful Back to Basics Workshop – Life after Synperonic N, Frances Hartog (Victoria & Albert Museum) has allowed us to include the 'Brief Summary of Results from the Investigation into Alternatives for Synperonic N' in this issue of Icon News. A detailed report

of the above has been published in JAIC, Spring 2004, Vol.43, Number 1. It must be stressed that these investigations were carried out on textiles.

We would be very keen to have feedback on the group web pages of people's experiences using the detergents in practical situations; this could form a valuable source of information and would help inform future workshops and research.

### 2008 BEER MEETINGS

The next beer meeting takes place on Tuesday 8 April at The Bricklayers Arms off Tottenham Court Road  
<http://fancyapint.com/pubs/pub1292.html>

If you have any questions, contact *Catt Baum*, who organises the meetings. She can be contacted on 07973 918738 or [cattbaum@googlemail.com](mailto:cattbaum@googlemail.com)

Catt has also fixed dates and venues for the rest of the year as follows:

Tuesday 3 June: The Coal Hole, The Strand  
<http://fancyapint.com/pubs/pub599.html>

Tuesday 5 August: The Marquis of Cornwall, Marchmont St  
<http://fancyapint.com/pubs/pub948.html>

Tuesday 7 October: The Porterhouse, The Strand  
<http://fancyapint.com/pubs/pub1264.html>

Tuesday 2 December: The Rugby Tavern, Holborn  
<http://fancyapint.com/pubs/pub310.html>

The usual start time is 5.30.  
Get yourself on Catt's mailing list if you want to receive the reminders which she sends out closer to the time, along with any other information such as which floor it's on or whether a table has been booked.

## Clare Hampson Scholarship Fund Publication Grant

Clare Hampson was a founding member and Secretary of the Institute of Paper Conservation for over twenty years before her untimely death in 2002. She was deeply committed to promoting professional development opportunities as demonstrated by her generous legacy 'to provide for an annual scholarship for the study of paper conservation'.



To support this aim, an innovative programme is being launched to encourage individuals engaged in the field of book or paper conservation, or in related activities to enable them to complete an article or a chapter of a book to peer reviewed publication standard.

Applications are invited by authors with advanced drafts based on completed research. Funding can be sought to support time away from work, travel, subsistence, translation and/or illustration costs. The award panel is keen to support individuals who have not yet published and to facilitate this, editorial support and mentoring may be provided to successful candidates. Grants can be sought up to £3,000.

Further information and application forms can be downloaded from [www.icon.org.uk](http://www.icon.org.uk) and returned electronically to [sophie@zedat.fu-berlin.de](mailto:sophie@zedat.fu-berlin.de) by **31 December 2008**.

Successful applicant(s) will be informed by **1 March 2009**.

**If you have any questions please contact Sonja Schwohl**  
[sophie@zedat.fu-berlin.de](mailto:sophie@zedat.fu-berlin.de).

# reviews

## BOOKS

### **LIGHT FOR ART'S SAKE: LIGHTING FOR ARTWORKS AND MUSEUM DISPLAYS**

**Chris Cuttle**

Elsevier Butterworth-Heinemann 2007  
hardback

ISBN:13:978-0-7506-6430-1

ISBN:10:0-7506-6430-4 280 pages £49.99



Lighting objects in museums and art galleries is complex. It can make or break exhibitions. Poor lighting can make the most exciting and beautiful object seem dull and leave visitors uninspired; conversely, good lighting can elevate a mundane object to almost iconic status. Chris Cuttle states in his book that 'lighting does not merely make things visible, but it influences the appearance of everything we see.' This balance of providing optimum viewing conditions and causing minimum damage to the objects is intelligently and passionately explored throughout the book.

Chris Cuttle has travelled widely visiting museums and art galleries throughout the world and his personal observations of various daylighting and electric lighting installations are described in detail. The options are extensively illustrated using his collection of photographs taken with a handheld camera. Regrettably, the quality of the photographs detracts from the overall pleasure of reading this book, although the images convey effectively the viewing conditions that the visitors experience or perceive.

The lighting philosophy expressed throughout the book is an issue of extreme interest. It is based on the premise that electric lighting offers effects that are not attainable using daylight. However, this does not equate to substituting electric light for daylight, but rather it is considered a valued supplement. The two forms of lighting have their own distinctive characteristics and can be in conflict when

used together without due consideration. The book offers imaginative and illustrative examples of how it is possible to resolve the potential conflict.

Light for Art's Sake focuses mainly on lighting options for art galleries displaying mostly, but not exclusively, non-light sensitive items rather than on museums or historic houses with their broader range of materials, many of which are light sensitive. However, the author is not neglecting or omitting the issue that light causes irreversible damage. He offers various control measures that can be incorporated into any chosen lighting strategy to limit the damage. He has also included sections on the physical nature of light and light-induced damage to objects.

The two science chapters 'Revealing visual attributes' and 'Light-induced damage to objects' are much appreciated, although they are perhaps the least inspirational chapters to read. They are written without the evident enthusiasm that is prevalent throughout the rest of the book. In addition, the light-induced damage chapter is inadequate in the presentation of the subject matter. The main flaw is the lack of acknowledgement and reference to the extensive scientific research that has been carried out on light deterioration of pigments, watercolours, dyes, etc.

The final sections on developing and implementing sustainable lighting policies and strategies are comprehensive and thought-provoking. Most institutions tend to focus primarily on developing a policy for display lighting to limit the damage to objects by limiting the exposure level or exposure time (or a combination of both). Rarely is the importance and impact of cleaning, security, emergency and ambient lighting taken into consideration. Chris Cuttle advocates developing a holistic lighting policy and strategy that acknowledges the damage to objects on display and the overall visitor experience. A good lighting design is not enough; it needs following through with good maintenance and procedures. To quote the author, 'Lighting designers have only themselves to blame if their lighting design is not good enough 6-12 months later, as they probably did not leave clear instructions for the lighting maintenance team.'

Light for Art's Sake is not intended for the lighting designer interested in establishing a distinct and recognisable style. Nor is it a textbook on light damage to objects. It has a few blemishes, but overall the book is a welcome addition on lighting of artworks in museums and art galleries. It enables a constructive dialogue between different professionals to take place with the intent of

drawing attention to the objects, providing the optimum viewing conditions and understanding the damage that this causes to the objects on display.

**Birthe Christensen**

Head of Conservation & Preservation  
National Maritime Museum

### **A PRACTICAL GUIDE TO COSTUME MOUNTING**

**Lara Flecker**

Elsevier Butterworth-Heinemann

ISBN:139780750668309

ISBN: 10075066830X 272pages £39.99



The late Gianni Versace was once quoted as saying 'It's a designer's role to make people dream'. Since the age of ten, the costume gallery at the Victoria and Albert Museum has made me dream..... dream of owning and dream of wearing the exquisite creations housed within. This is because the costumes, and there are many, are some of the most important pieces ever to have emerged from many a designer's imagination.

The interpretation and display is integral in helping the viewer understand a piece of costume; the transformation from a gown hanger or being laid out in a box or drawer to a three-dimensional form is often staggering, as Lara shows us in the photographs at the beginning of the book.

From the conservator's and curator's perspective there is a further essential element: the support and safety of the garment. As anyone who has mounted a costume will know, it's not as easy as it looks and for many it is a daunting task. I have often been asked for recommended reading on the subject of costume mounting and to date I have been unable to supply a comprehensive reference.

Bravo to Lara Flecker for standing up to the plate and producing this book, the culmination of many years of experience and painstaking research. Her commitment to detail and genuine care means that the

costumes featured in the photographs here actually look as if real people might have worn them. The book's intention is to explain the different methods that can be applied when mounting, in the main, historic or contemporary women's costume. The section on menswear is quite slim and I have often found men to be trickier than one would first expect (in more ways than one).

It is clearly written and walks you step-by-step through the simplest stitching technique to complicated padding techniques. The technical advice is clear; the instructions are well illustrated with frequent use of detailed drawings to help visualize them.

Each chapter covers a new process: from instructions on how to take precise measurements from a costume and relate them to a mannequin to producing wonderfully mounted costume and everything in between, including – for those who can't afford the luxury of a bespoke mannequin – how to make your own. It tells you what you will need (with a very comprehensive list of suppliers both European and American), the process and possible problems (trouble shooting). Lara includes background information and uses for each technique with an emphasis on the needs of what can sometimes be very fragile objects, as well as photo examples of beautiful finished projects.

She has also included basic patterns for underpinnings, which for those without pattern cutting skills will prove to be invaluable. I tested the underpinning instructions out on a group of volunteers who had, at best, basic dressmaking skills to great success so I can say the patterns do work.

The entire idea of this book is amazing. I couldn't recommend it more highly. Not only is it well laid out, it offers encouragement and hope to those who have been presented with the task of mounting a costume.

I think that costume mounting is a skill and, as with all skills, there is an element of practice makes perfect, so I don't think it will make a beginner perfect overnight. But it does supply the tools both for beginners looking for a place to start and for experienced professionals who, by dipping in and out of the book, will find new techniques that can improve their skills.

As well as being truly useful, it is also a book which can be read and studied or enjoyed for its own sake and most worthy of a place on the bookshelf of a diverse range of readers. It is certainly a welcome addition to mine.

Well done to not only Lara and the staff at the V&A but Butterworth Heinemann in

seeing the potential scope, because it will not only assist museum professionals but indeed anyone involved in historical and replica costume.

Now we just need one on mounting ethnographic costume – anyone willing?

**Anne-Marie Hughes**

Textile conservator,  
National Museums Liverpool

## CONFERENCE

### FACING IMPERMANENCE, EXPLORING PREVENTIVE CONSERVATION FOR TEXTILES

#### The 6th Biennial North American Textile Conference

Washington DC 6-9 November 2007

Hosted by the National Gallery of Art, the Textile Museum, and the Smithsonian Institution, National Museum of the American Indian, a generous grant provision made it possible for a number of textile professionals from around the world to attend both the conference and its workshops. The writer was the grateful recipient of one of the grants.

This was an altogether most stimulating, diverse, and successful meeting. A recurring theme was how factors not relating to conservation per se have to be taken into consideration – and in fact may provide solutions. Also, where budgetary restrictions are especially strict, determination, perseverance and ingenuity can have surprisingly positive results.

Day 1 began with welcoming words by Alan Schestack, Deputy Director of the National Gallery of Art followed by the keynote

speech from Jean Tétreault, Senior Conservation Scientist at the Canadian Conservation Institute.

Judith Gómez Gonzáles, from the Museo Nacional de Antropología de Mexico demonstrated how a clear vision on the Care of Collections can be applied to achieve high standard storage facilities for an important ethnographic collection of composite and textile material, with severe limitations posed by reduced staff, and a basement location with far from perfect environmental conditions. Most importantly, the values of a prominent indigenous community were successfully integrated with those of a Museum body.

Shannon Elliott, from the Royal Ontario Museum, gave a very precise account of the actions, cost and time of a very large preventive conservation project, which aimed to achieve an inventory, a survey, and photo and general documentation, a storage up-grade and future recommendations for a collection of 50,000 objects. The discipline exercised was impressive, with strict time-keeping – essential for their grant application and future funding requests.

Johanna Nilsson, from The Royal Armouries in Stockholm, described the extensive analysis, conservation, and display of 55 textile fragments belonging to the famous Queen Cristina of Sweden (d. 1689). Along with devising an adequate display method for the fragments, the project attempted to create an approximate image of the appearance of the Queen's burial costume through extensive analysis of the fibres, weave, metal components, dyestuffs and mordant.

Maria Catalina Plazas García from the Museo de Trajes Regionales de Colombia

From left: Frances Lennard (TCC UK), Deirdre Windsor (Private textile conservator USA), Susana Hunter (V&A UK), and Catalina Hernandez (National Museum of American Indian) at the evening reception in the Textile Museum



spoke of how a threat of closure to this Museum, which houses the largest and most varied regional costume collection – rural and indigenous – in the country, was reversed thanks to strong leadership, and the successful implementation of SIC (Integrated System of Conservation) The Museo has proved it is possible to maintain an acceptable level of recognized museum standards within its very limited resources and a difficult building.

Pia Chritensson from Kulturmagasinet, Sweden, provided a fascinating account of the challenging role of the conservator with a brief in a foreign country, where the aims of her visit as initially understood were changed soon after her arrival. Her presentation gave an account of her work with the National Museum and House of Culture in Tanzania, which has embarked on a major programme of growth and organization. The Museum staff had a vision and Pia was called upon to help materialise it, despite many problems. Following a series of meetings, the plan of action was agreed, objectives are now clearly defined and the Museum and House of Culture will open in 2011.

Christina Margariti, from the Directorate of Conservation of Ancient and Modern Monuments (DCAMM), spoke on the newly formed strategy for the treatment, display and storage of archaeological textile finds in Greece, developed in response to the number of finds continually being made and the need for quick and sensitive action. Safeguarding this heritage from negative factors, such as vandalism or robbery, is of paramount importance.

To close the day Cynthia Godlewski from The Getty Conservation Institute spoke about the forthcoming, definitive work on textile conservation with its editors Mary M. Brookes and Diana Eastop.

The first speaker of Day 2 was Tatiana Kousoulou, Textile Conservator affiliated to the Greek Ministry of Culture, who described the large-scale salvage operation, together with preventive conservation action and documentation strategies, applied to the textiles and costumes of the Greek Royal family, neglected for the last four decades at the Tatoi Palace north of the Greek capital. The project, financially supported by the EU, is to be completed in 2008.

A fascinating presentation and panel discussion followed on the theme of 'Disaster Response and Preparedness' with Jane Long from Heritage Preservation, Washington DC (see [www.heritagepreservation.org/lessons](http://www.heritagepreservation.org/lessons)) and Robert Sonderman and Theresa Voellinger from The National Park Service, who have a remarkable volume of experience dealing

with on-site assistance in instances of major natural disasters

My colleagues Elizabeth-Anne Haldane and Lara Flecker from the textile conservation studio at the Victoria & Albert Museum spoke on the exigencies of preparing for large loan exhibitions, often including numerous costumes, which travel dressed on their mannequins. The prospect of major V&A exhibitions embarking on ambitious multi-venue tours all over the world has become increasingly common. With limited installation and de-installation time, and varying teams of couriers at each venue, it is very important to prepare clear step-by-step instructions. The success of this ambitious loan programme is achieved by the efficient teamwork of various sections within the V&A: conservation, curatorial, technical services, exhibitions and registrar.

Aliston Lister, Jo Banks and Vicky Loosemore, private conservators from the UK, then spoke about a large project at The Royal Festival Hall on London's South Bank. The conservation of a series of red woollen twill textile hangings designed in the 1950s and covering a display area of 330m<sup>2</sup> posed many difficulties, arising from their size, far from ideal conditions on-site and issues with clients unversed in textile conservation. Conservators will continue a housekeeping role and monitor the hangings on display. Since 1998 Rommel Angeles Falcón has been working on a rewarding programme, called 'Adopt a textile', sponsored by ICOM Peru, in the Huaca Malena Archaeological site. It has been a great social success, integrating local schools, businesses and whole families and helping to foment a sense of pride in the local culture. A small museum has been established and to date 120 textiles have been adopted.

Fanella G. France's interesting presentation explained the method and solutions for the safe distribution of UV filtered natural light as well as artificial light at the Ellis Island Immigration Museum, Treasures from Home Gallery, located on the top floor of the building. The efficient data logging of incident visible light, also measured at various angles, specific logging for artificial and natural light and the recording of variations during a day and seasons provided the material to implement changes.

Suzanne Thomassen-Krauss from the Smithsonian's National Museum of American History, spoke on the much awaited re-display of the 'Star Spangled Banner' due for next year at the Museum of American History. The Banner is a unique and valuable iconic object, which inspired the US national anthem.

A number of Poster displays complemented the main content of the Conference and

provided topics of discussion amongst the participants.

The 6th NATCC Meeting concluded with the announcement of Québec as the next venue and an evening farewell reception took place at the splendid Museum of American Indian.

**M. Susana Fajardo-Hunter**

Victoria & Albert Museum

## WORKSHOPS

### IRON GALL INKS WORKSHOP & SYMPOSIUM

The National Archives, 23 – 25 October 2007

.....

'And first to make inke in divers maners....'

Wrapped in tyvek, nitrile and plastic, participants in this workshop dipped into the course by measuring out exact quantities of 'strong wine, galls, gum Arabike and victriall' according to a recipe from the sixteenth century 'Booke of Secrets'. All this preparation was to make up a quantity of 'good inke'. Hand-cut quill pens at the ready, the 'goode inke' was applied to various paper substrates and the effects observed as the liquid either remained pale for a few minutes or blackened quickly, while being absorbed into the paper and bleeding or pooling on the well sized surface. This practical exercise enabled delegates to meet informally and work together but also demonstrated the complex chemical reactions which take place during the production and application of iron gall ink.

Although our particular ink recipe was relatively simple – combining a tannin source and iron sulphate for the coloured part of the ink with a liquid and a binder in order to make a fluid with enough body and flow to be used for writing or drawing – it was interesting to learn more about the other ingredients which would also have been included in historic ink recipes and which will therefore have an effect on the ageing characteristics of the ink and its support. Interpretation and conversion of the sixteenth century recipe revealed how variable ink compositions and recipes would have been, with a range of available raw materials, no standard measurements and errors in translations of recipes. Historical events have also had an impact on writing technology, once ink production developed from a domestic activity to a large scale industrial process using pure compounds. With large amounts being produced and stored, the addition of disinfectants, dyes and anti-fungicides became necessary to increase the shelf life of the ink. Even for conservators with experience of examining historic inks, the issue of iron gall ink



Delegates at the three day iron gall ink workshop held at The National Archives in Kew

identification on historic documents using only visual means is further complicated by later progressions such as the use of chrome logwood inks.

Course tutors, paper conservator Birgit Reissland and conservation scientist Dr Han Neevel, have been researching Iron Gall Inks on paper and parchment at the ICN (the Instituut Collectie Nederland) since the mid-nineties, investigating the composition and degradation of iron gall ink in order to develop conservation methods and treatments which deal with ink corrosion. It is as a result of their research that iron II indicator paper and calcium phytate treatment have been developed, and that the effect of aqueous treatments on iron gall ink documents is better understood. Their research work continues with a host of projects with different partnerships, ranging from non-aqueous calcium phytate treatment to new non-destructive techniques and methods for the identification of artists' media.

The event was invaluable. For a conservator who had not previously used calcium phytate, the conference was extremely informative and interesting; and the opportunity to discuss problems and queries with a range of conservators, and to be able to ask experts for advice was fantastic. During the three days we looked at a variety of samples in differing degrees of degradation and discussed areas of concern and how these should be treated. We practised ways of examining the items to gather as much information as possible in order to make an informed decision. For example: a thick application of ink; evidence of mechanical decay; cracks in the ink; bleeding and loss of ink are all important factors in determining the appropriate treatment to use. The information gleaned varied depending on which light source the samples were viewed under. Some deteriorated areas were only visible under UV radiation, and fine cracks in the ink were more apparent through transmitted light. Examining the back as well as the front of the support is important because existing water damage can be more evident from the back than the front. When examining an object you are not only considering the condition of the ink and how degraded it is, but also how susceptible to further damage it might be if an aqueous treatment were to

be carried out. Although the calcium phytate treatment will not cause iron gall ink damage to be completely arrested, the act of using an aqueous treatment might cause damage to the ink in the same way it might to any media. For example: a thick layer of ink may be more at risk, the ink might be fugitive, and if cracked it may be more vulnerable.

Reissland and Neevel were keen to stress that calcium phytate treatment should not become a routine part of every treatment, especially where items and collections are kept in conditions generally accepted as good or ideal. According to Reissland, it is not yet proven that ink corrosion continues in climate controlled conditions. It would appear from historical evidence and from collections in tropical countries that ink corrosion occurs under extreme conditions with high relative humidity values, increased temperatures and extreme fluctuations. Reissland and Neevel are inclined to approach the risk of ink-corrosion like the risk for mould: under exceptional climate conditions the risk is very high, otherwise it is 'safe'. However, when an aqueous treatment is unavoidable, the phytate method is the most effective method presently available, although any treatment has considerable side effects and is by definition irreversible. A rule of thumb for treating iron gall inks is that even a small introduction of moisture, such as an increase in the relative humidity, is the most dangerous situation for the artefact, because invisible but very reactive species in the ink (like iron ions or sulphuric acid) are spread across the substrate by moisture. An experiment during the workshop illustrated this. The 'goede inke' was applied to a strip of iron (II) indicator paper and left to dry before a drop of water was applied to indicator paper in the inked area. The reactive iron ions in the iron gall ink form a coloured complex with the bathophenanthroline impregnated in the indicator paper and can be seen migrating across the indicator paper as the drop of water is absorbed and wicked into the strip of indicator paper. Actual historic items would not react in the same way as the composition and sizing of the paper will have an influence on how moisture is absorbed, but the experiment illustrated the point that no aqueous treatment is still the

best option if possible. Treatment is therefore an all or nothing situation. If an aqueous treatment is unavoidable, then iron II testing and stabilisation of iron gall ink should be considered. For Neevel and Reissland, interventive treatment of iron gall ink documents is a last resort for their preservation, to be pursued only when the preventive options do not provide an acceptable solution.

The course format of practical sessions complemented by theory lectures was excellent. The practical tasks reinforced all the learned issues and helped participants to commit the information to memory. Reissland's approach of researching, examining historical examples and then replicating the production came across in the practical tasks she set and also through her impressive knowledge of historical inks. Her hands-on approach was further demonstrated in her more recent research into blotting materials, ranging from blue coloured sand to ivory, which truly are a beautiful and delicate part of historic documents.

Neevel and Reissland's work is well published and the contents of the workshop held at Kew are covered on the Ink Corrosion website, which also includes detailed visual documentation of aqueous calcium phytate treatment steps and procedures to minimise the risk to objects during treatment. The main departure, however, from their previously published work is a move away from the four stages of iron gall ink corrosion or 'condition ratings' (where a document is classified as either 1 good, 2 fair, 3 poor or 4 bad using the area most degraded to classify the item) in favour of a new method of risk assessment. According to Reissland, the classification system is limited as it describes the present condition of the item, while what is needed is a prediction or prognosis of its future condition if kept in its current circumstances, so that means can be implemented to best preserve collections and individual items. The new approach aims to allow a prediction of areas of risk as a basis for anticipating a loss of value and making a sound treatment decision. The two decay

'good inkes'





Delegates examining objects affected by iron gall ink corrosion

processes of major concern are: chemical and mechanical degradation. Chemical degradation leads to a loss of contrast or definition between the ink and the surrounding support, making the document harder to read while handling of a fragile item results in mechanical damage and losses. Barriers to protect artefacts such as enclosures, cupboards, stores, and the building itself can slow and control the chemical degradation process; while limited access and the possible use of surrogates reduces the risk of mechanical damage.

The final afternoon was given over to a symposium of case studies. Examples included an update on the iron gall ink project at the British Library by Mariluz Beltran de Guevara; part of this project has been the development of a flow chart to aid conservators with decision making when dealing with items with iron gall ink media. Robert Minte from the Bodleian Library discussed the non-interventive approach he followed to treat Mary Shelley's manuscripts. Using hooked singletons of archive text, interleaved with sheets of microchamber

paper impregnated with zeolites, sewn into fascicules, he was able to ensure the future longevity of the manuscript pages without using interventive treatments. The fascicules can easily be disbound should the microchamber paper become exhausted and need to be replaced. Linking into the idea of minimal intervention was a case study given by Juergen Vervoort, Head of Conservation at The National Archives, who spoke about the treatment of Wool Sample Books from the 1700s. These were six dye recipe books containing dyed wool samples which were of great interest to social and textile historians due to their key use in the industry, and the wool samples, which were still brightly coloured due to their housing in the books. The books were badly creased and folded and the main issue was how to flatten them. Each book had a unique sewing structure, not easy to replicate, which the conservation team felt would be a shame to take apart. The books also contained iron gall ink preventing the use of humidification. The decision was made to flatten the creases manually using different shaped blotters. In heavily creased areas a 50% ethanol solution was used locally in non inked areas. This required some patience, but the result after completion was impressive, showing that good results are possible without using very interventive means.

Thanks are due to The National Archives for making such an important event available to conservators in the UK.

#### **Erica Kotze**

Paper Conservator  
Book & Paper Conservation Studio,  
University of Dundee  
e.kotze@dundee.ac.uk

#### **Frances Lunn**

Paper Conservator  
Special Collections, University of  
Southampton  
fh1x07@soton.ac.uk

### **DIGITAL PHOTOGRAPHY AIMED AT BOOK AND PAPER CONSERVATORS**

York Minster conservation studios 29 October 2007

Tutor Jason Revell, Photographic Technician

at the Conservation Unit, University of Northumbria, managed to both demystify and effortlessly clarify, many of the aspects linked to achieving successful results when using digital cameras. We had the chance to ask questions, discuss a variety of ideas and were given clear guidance and help as practitioners. We looked at assorted functions on most cameras, the flexibility afforded and, perhaps most importantly, the breadth of photographic options available to us..

#### **How these cameras work**

Several helpful illustrations were given explaining how a digital image is captured, analysed and then processed. Similar in many respects to conventional film cameras, many of the camera 'modes and settings' are much the same. We looked at how colour is processed and were reminded of the fact that we all see and perceive colours slightly differently. Other technical issues raised were – resolution, bit depth and colour space. Familiarity with and understanding of these will help in achieving more consistent and superior results. Resolution is linked to the number of 'pixels' and the more pixels in an image the greater the detail recorded and overall resolution. On selecting a camera, consideration should of course be given to the number of pixels / image but equally important are factors such as the overall cost, lens quality, interpolation (camera programmed to guess) and the overall resolution achievable. Equipment compatibility is fundamental: there is little point using a superior camera and good computer with sophisticated software and then expect to print on a low resolution printer of inconsistent quality.

#### **File format**

Familiarity with the file format options is both relevant and essential when endeavouring to capture and archive, superior records. An understanding of the strength and weaknesses of file formats is beneficial: the three main options are Jpeg, tif and RAW and in their own ways, all have roles to play. Jason warned of the potential loss of detail with Jpeg files noticeable, sometimes when repeatedly saved, more so, when intentionally reduced beyond any real usefulness. Tif affords a large, uncompressed file, with the RAW format seeming to have emerged as the preferred choice if available. Jason mentioned that tif is generally used at Northumbria with the original tif files then taken down to Jpegs. This form of digitised record keeping is considered tidy, easy with regard to retrieval and offers significant space saving benefits.

#### **Taking photographs / lighting**

The recommended set up for 'copy stand photography' was demonstrated, this being ideal for many works of art on paper and



most books. It was suggested illuminating the copy stand bed equally from either side, at an angle of 45 %, unless the object being photographed has a particularly shiny surface, in which case, one would be advised to reduce the angle, to 30 degrees or so. It is vital to give careful consideration to the light source and we were encouraged to select lighting as close to daylight if possible and to avoid a mixed light source. If available Continuous Daylight (cold light) is considered the best alternative to natural light, with tungsten a reasonable second although perhaps slightly hot. If restricted to natural, directional side light, one should consider using a white card on the opposite side, as a reflector thus achieving more even, diffused light. 'Custom White Balance' and colour temperatures were discussed and we were strongly reminded to make use of the 'Exposure Adjustment Function', if available.

#### Macro, micro, transmitted and raking light

Most digital cameras have a macro facility of sorts, often denoted by a flower symbol or similar. Generally one can get to within about 2 cms of the surface being recorded. Jason reminded us of the importance of suitable lighting with fibre optics providing a good macro light source. By making use of an appropriate clamp mechanism micro photography should be possible in most cases through a suitable microscope. With transmitted light photography it is understandably important to cut down on ambient / additional stray lighting and to mask off areas outside the object itself. For raking light photography again removing background lighting will help.

#### UV and Infra-Red

Most digital cameras are capable of recording these wavelengths which can prove very useful to extend one's options. Ultra violet work is relatively easy without modification to the camera. However, for infra-red photography an internal IR filter will, in the majority of cases, have to be removed professionally before being suitable for this purpose. (Some Sony cameras do have an IR mode switch.). The afternoon session demonstrated how, with a good understanding of one's light source and intelligent use of assorted filters, a variety of information can be effectively revealed. With UV illumination we saw how both absorption and reflectance could reveal, often with reasonable clarity, inks, specific pigments and, in some instances, various states of mould attack (active or dormant). For IR photography discussion included the choice of lighting where tungsten was considered ideal, supplying the plentiful amounts required. The subject of focussing, filters and the significance of

bracketing were also looked at; the subject of false infra-red photography was touched upon and health and safety issues discussed.

#### Monitors/ Printers

Jason discussed these, their compatibility, calibration and consistency. We were reminded of the fact that what you see on your monitor is not necessarily what you will get out of your printer. All monitors will periodically require recalibration. Assorted software and aids, such as 'spyder' monitor calibration, are commercially available for this purpose. Standardising the type of paper, inks, dyes or pigments used will further reduce the chance of variation. Recommendations were made to stick with the manufacturer's own branded cartridges; be consistent with paper selection and remember to change the 'paper options' settings on your printer. We were also reminded of alternatives to printing in house; the many professional colour labs now offer a very reasonable service, using expensive state of the art printers and increasingly offering the facility on line.

#### A few general tips

- the number of pixels is not the be all and end all. The sensor and lens quality are also essential
- fill the frame to make efficient use of those pixels available
- know the functions on your camera and make use of the 'Custom White Balance'
- make use of the built-in timer as an alternative to a conventional cable release, if required. Especially useful for micro photography, UV work and longer exposures
- whilst photographing glazed objects make use of a black background and consider shooting from a slight angle, to reduce reflection. If possible always go for a black camera body, black tripod etc. Black velvet is also an excellent backdrop
- try to avoid using the flash mode on a camera. Ideally use a soft diffuse light
- adjust the light source rather than have to make adjustments within the camera or worst still, at the printing stage
- consider the permanency (archival quality) of both print and more significantly the stored data.

#### Some contacts and websites:

- howstuffworks.com – an excellent site with information on vast and varied subject matter
- warehouseexpress.com – general photographic supplier
- calumetphoto.co.uk – useful supplier for assorted photographic filters.

In summary the workshop was broad,

fascinating, constructive and encouraging. Digital is moving forward and the more we embrace the endless possibilities, the greater the rewards. Particular mention should be given to our tutor Jason Revell for this superb workshop, to Richard Hawkes for his committed and efficient input, Mary Smith and her helpful colleagues at York Minster. An enormous amount of work obviously went into the event, its preparation and ultimately the day itself.

#### Richard Farleigh

Freelance 'art on paper' conservator.

### INTRODUCTION TO FEATHERS

#### Icon Ethnography Group

Birmingham Museum & Art Gallery 17–18 October 2007

The advert was inviting and the timing couldn't have been better. 'Icon Ethnography Group has organised a two day workshop to study the conservation of feathers, led by Allyson Rae...'

I always feel that feathers fit into the challenging category of materials facing us conservators. Given that feathers show great structural diversity and a complex micro and macrostructure; are composed of keratin with a unique chemical structure; are coloured by a variety of pigments and pigment-bearing structures; and come attached to a wide variety of material substrates – it is not surprising that most object conservators experience a combined sinking feeling and twitch of excitement when faced with the need to conserve a feather artefact. Add to this the fact that my museum (NMS) has just begun a four year project to redisplay our world cultures galleries, and you can imagine how I jumped at the opportunity.

The promise of a combination of both theoretical and practical sessions was particularly attractive. The body of literature available to guide the conservator in the conservation of feathers is still quite small and critical reviews of conservation treatments have been hard to find until very recently.<sup>1,2</sup> The chance to consolidate an up-to-date theoretical review with hands-on practice of techniques was a real draw. Allyson Rae, who has extensive experience in the conservation of artefacts incorporating feathers, provided us with a very balanced treatment of the subject, and encouraged some stimulating debate. The learning atmosphere was further enhanced by the range of participants, a significant number of whom came from museums outside the UK.

The two days were fairly equally divided between theoretical and practical content, with lectures alternating with practical sessions. It was very impressive how



## Feathers!

effectively Allyson managed to cover all the material she had in her programme

On the first morning Allyson gave an illustrated talk on the structure and chemical composition of feathers. It was very enlightening to learn about the significant difference that exists between the  $\beta$  form of the keratin molecule native to feathers, where the unusual pleated double helical structure means a significant reduction in its elasticity in comparison to hair and skin keratin, yet an increase in its inherent resilience. Variations in the feather keratin found even within areas of the same feather explains some of the unpredictable results experienced treating this material.

The explanation of the five systems of colouration that occur in feathers was particularly useful, as it helped explain why feathers with certain colorants were more likely to degrade under certain conservation treatments or with exposure to UV. A very useful handout brought together each colorant's chemistry, the bird species each might be expected to be found in, and the sensitivity of each colorant to light and other

environmental damage.

This subject was followed by a discussion of the characteristics of each of the growth stages of the feather and some distinctive cyclical wear patterns which the conservator may come upon in featherwork artefacts. Because of the way in which melanin bonds with keratin and strengthens it, white areas of a patterned feather can be more vulnerable to wear than dark. The complex chemistry of preen oils was also touched on in this session, and their preservative properties raised the issue of whether organic and water/detergent cleaning systems were likely to remove or change these mixtures in a way that would later have a deteriorative effect on the feather.

The talk delivered a lot of information very effectively in a short time. What was good was that it was immediately followed by a practical session centring on microscopic examination of a variety of feathers that had been carefully chosen to illustrate each of the characteristics just discussed. Indeed the feather sample sets given to each participant were indicative of the

extraordinary quality of preparation that characterised this workshop. Allyson told us that she 'just picks them up on walks', and 'has a friend at the zoo'...

Another take-away from this session was, as ever, the discovery of a natty new conservation tool – the Motic LM-100 monocular field microscope, which yields a mighty x20 to x100 magnification with integral 3 mode illumination all in a very small package and priced to meet the most modest of budgets. ([http://www.wedgwood-group.com/motic\\_lm-100\\_microscope\\_field\\_kit.htm](http://www.wedgwood-group.com/motic_lm-100_microscope_field_kit.htm) will help you find one for yourself)

An illustrated lecture on the use of feathers in artefacts finished the morning. I hadn't come upon the use of whole feathered skins in artefacts before or considered the complications of their tanning and incorporation into garments. Allyson's slides provided excellent examples of artefacts displaying each of the main construction techniques (bound, woven, adhered) used to incorporate loose feathers into a wide variety of artefacts and artworks. The illustrations of particular binding techniques which flashed past altogether too quickly left me wishing I could have a copy of the presentation or that there was a single comprehensive reference I could go to when next faced with understanding or attempting to reconstruct a feather artefact. A selection of feather artefacts from Birmingham Museum's collections was available for examination during the first day and added another dimension to the information we had been given.

The afternoon talk focused on the major agents of deterioration for feather artefacts – moulds, insect attack, UV breakdown of polypeptide bonds, heat and low RH embrittlement/high RH swelling, and denaturing by alkalis. The subject of hunger marks, disruptions in the growth of feathers leading to characteristic losses of sections of vane, sent us groping for our Motic LM-100's. Damage arising from techniques of manufacture and use life were also described. Perhaps the most interesting discussion, however, arose from the subject of past and current pesticide treatments. The ICOM-CC Ethnography Working Group's Pesticide Database Project was discussed. This group is currently developing a centralized database of pesticides used in the past in museum collections, and building a bibliography on identification, hazards and mitigation. Mention was also made of the handheld X-ray fluorescence (XRF) spectrometer which has become increasingly popular as a practical tool for surveying ethnographic collections for the presence of metallic pesticides. The February 2007 issue of the ICOM-CC Ethnographic Conservation

## Brush and blotter cleaning





Immersion cleaning and reshaping

Newsletter has a number of articles discussing the advantages and limitations of this method of detection. Mention was made of the potential of ATR-FTIR for filling in the gaps left by XRF in identifying the organometallic species present in pesticide residues.

Participants shared their opinions about what are felt to be the currently acceptable options for pest eradication in feather artefacts and our experience with heat and freezing treatments, as well as nitrogen anoxia were discussed. A piece of recent research into the application of various alcohol vapours (in particular, butanol) as a fungicide against moulds in artefacts, was highlighted for our attention.

Only a brief mention was made of damage resulting from previous conservation treatments – cleaning, consolidation, adhesive repairs; this was because the next topic on the agenda was an illustrated discussion of conservation approaches. Reason and context for non-intervention were discussed in detail, with some emphasis given to ethics and cultural issues. A comprehensive issues and ethics checklist was included in the handouts – a very useful resource.

The second day started with a review of current cleaning approaches. It was a bit of a surprise to hear how relatively more risky mechanical approaches were proving than some of the wet cleaning techniques, and this was underlined by our experience in the practical session which followed. Special mention was made of the recent project by Julie Eklund studying the potential damaging effects of conservation treatments on DNA. The reduction of levels of preen oils in feathers brought about by both aqueous and solvent cleaning methods is a concern that was stressed should be balanced with the improvement to preservation brought about by removal of damaging dirt.



Drying and reshaping feather

The demonstration and practical session which took up much of the morning centred on removal of soiling by wet cleaning methods, followed by reshaping and drying. Here, the excellent preparation of both Allyson and our hosts at the Birmingham conservation labs shone out. A range of practice samples were available for each participant: different feather types (both contour and semi-plume), and different damage types (pest weakened, soiled, bent, and fractured). We proceeded to experience at first hand the issues that had been laid out in the review. The potential for disruption of feather structure and migration of dirt deeper into the structure were messages that came home during this session. What was particularly fun however, was watching the almost miraculous effect of water immersion on the passive reshaping of feathers, and the remarkable success of finger preening in re-hooking barbs in reintegrating the feather.

Our final afternoon was spent discussing the principles of feather repair, followed by a



Repair of feather

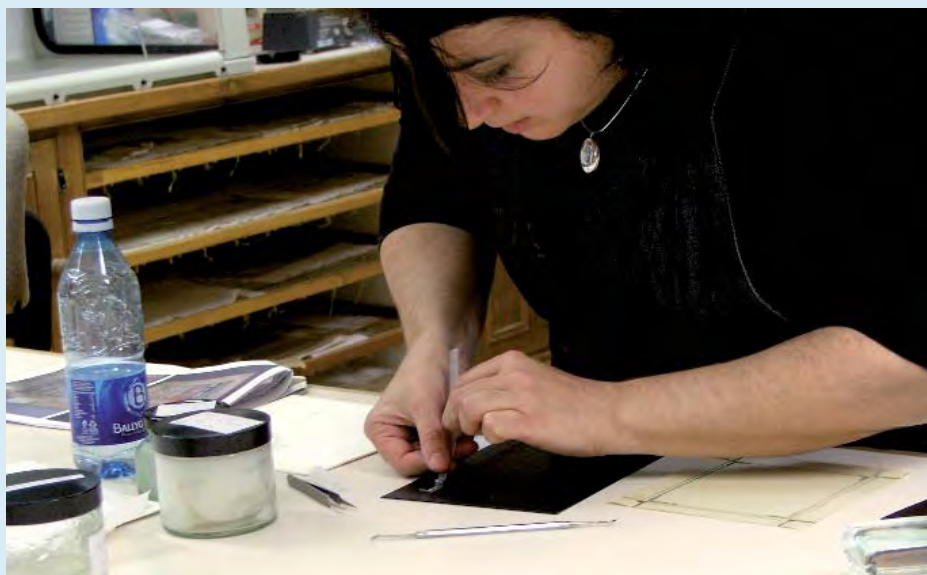
demonstration of split quill repairs, and then a practical session where we all attempted the repair of a broken feather. This was great fun and a challenge to our hand coordination skills. It was obvious that too many of us didn't any longer get enough of this sort of fun in our everyday work! A strong message from this session was the significant role the condition of barbs and barbules played in deciding the success of the repair and reintegration of damaged areas of vane. Where the condition of these was good, it was possible to re-hook bent barbs, and re-join sections of torn vane without need of adhesive.

A brief run through of the consolidation of feathers (general agreement – don't!) and the replacement of preen oils, brought the workshop to an end.

This was a really valuable workshop – a nice balance of practical sessions to consolidate the theoretical content; excellent preparation with plenty of practice material and a quantity of take home resources – and particularly generous hosting by the

Workshop participants





Lara Artemis lays remoistenable tissue down onto a dampened surface to reactivate.

conservation staff at BMAG, with all our needs anticipated in their spacious, newly refurbished facilities.

Inevitably, participants were left wishing that the workshop was twice as long. It would have been great to have had the chance to hold a critical forum on our experiences with different conservation techniques. It would have been wonderful to have been able to try out a broader range of conservation techniques in dialogue with the other participant conservators. But fair enough, this workshop was advertised as 'an introductory workshop'. Perhaps the intermediate and advanced is up to us.

**Dr T.M.A. Ogilvie**

National Museums Scotland

**1** Mason J and Graham F, 2005. A review of feather cleaning methods. In: M Brunn and J Burns, eds. *Fur Trade Legacy: the preservation of organic materials*. Canadian Association for Conservation of Cultural Property, 17–18 May, 2005. Jasper, Canada, pp 79–96.

**2** Karantoni E and Malea E, 2005. The influence of cleaning methods on feather structure: a comparative study. In: as above, pp 97–108.

## REMOISTENABLE TISSUE AND CYCLODODECANE WORKSHOPS

York Minster Archives 30–31 October 2007

Ten conservators from across the country came to York for each of the two paper conservation workshop days hosted by York Minster Archives in its well equipped conservation studio. The schedule was a packed one, with a morning session on the use of remoistenable tissue, led by Lara Artemis of The Wellcome Institute; followed by a cyclododecane fixative workshop with Amy Junker Heslip of the Ashmolean Museum, Oxford, in the afternoon. In true Blue Peter style, Lara and Amy had come fully prepared with ready-made adhesives, materials and tools for everyone. Each participant also received a comprehensive booklet for each workshop, much reducing the need for frenzied note-taking.

Remoistenable tissue repair is a technique which has been developed over the last ten years, and was also the subject of a paper at the Icon 2006 Conference in Edinburgh.<sup>1</sup> The chosen repair tissue is pre-coated with an aqueous adhesive (or a combination of adhesives), and allowed to dry. Later, the

adhesive is reactivated with a damp brush prior to attachment. This minimises the moisture required, being particularly suited to areas with moisture sensitive pigments, hygroscopic paper, or simply where a local repair is required. Workshop participants first prepared their tissues using a 5 gsm Kozo tissue. Three different adhesives were brushed through the fine tissue while supported on Melinex: a mixture of zin shofu paste and methocel (a methyl cellulose), funori and isinglass. Lara explained the relative properties of each and personally recommended the isinglass-coated tissue as being most useful. Ideally a couple of coats are required, but time constraints enabled us to do only one. Once prepared, the Melinex sheet can be labelled in pen and rolled for storage until needed. It will keep a number of years, so Lara recommended making a stock.

While our tissues were drying, Lara demonstrated its application with 'some she had made earlier'. A strip of Melinex is cut, complete with tissue on, ready to use. This does mean a straight-edged repair however, as feathering diminishes the effectiveness of the adhesive at the edges, and the fibres

### Workshop participants observe fixed ink samples during immersion washing.



tend to fluff up. The tissue is remoistened using a mixture of water and alcohol from a water brush pen (Lara used an Aquash pen, but we subsequently found one by Kuretake at our local art shop). This is done by painting a strip of solution on a black surface for ease of visibility (ceramic tile or polypropylene – we have since bought a plain, black mouse mat) and laying the tissue side down on top. The strip is lifted off, laid onto Bondina to blot, then transferred immediately to the repair site and pressed.

We then experimented with different tissues to repair our mock, verdigris-degraded Persian manuscripts. Once dry, repairs were found to have stuck well. Practice definitely makes perfect, judging the moisture and handling the wet repair strip were not as easy as they looked.

After lunch, Amy began her workshop with an introduction to cyclododecane – a crystalline substance with wax-like properties, which can be used as a temporary fixative prior to wet treatment. One of its main attractions, is that it gradually sublimates (evaporates directly from its solid form) from the support. This can be speeded up by (careful) use of a hairdryer.

Amy provided different papers on which participants applied different inks for a comparative trial with two other fixatives (Paraloid B72 and Sandofix). The cyclododecane, which is usually applied as a melt can also be dissolved in non-polar solvents such as petroleum ether. During the workshop, we heated the crystals until liquid in a kistka (a batik tool with a brass basin and spout), either against a hot plate, or in a self-heating, battery operated kistka. The latter was easiest to use, although applying a smooth line of fixative at the temperature required to sink into the paper rather than blob on top, required a bit of judgement.

The samples were all then subjected to three wet treatments; immersion, spraying over the suction table and blotter washing. Where applied accurately cyclododecane proved very effective.

It is planned to repeat these excellent and reasonably priced workshops at the same venue in the spring, information will be circulated when available. My thanks to Lara and Amy for such approachable and informative sessions, and to Richard Hawkes (Artworks Conservation) and Mary Smith and Christine Harbisher at the York Minster Archives for organising the course.

**Shirley Jones**

Senior Conservator  
West Yorkshire Archive Service

**1** The Conservation of a Seventeenth Century Persian Shahnama, Kristine Rose, pp. 79–86, Edinburgh Conference Papers, Icon 2006.

## VISITS

### CARE OF COLLECTIONS

#### Icon Ceramic & Glass Group

Polesden Lacey 3 November 2007

The Ceramic and Glass Group's Autumn meeting at the National Trust property Polesden Lacey in Surrey was well attended and included specially arranged guided tours of the house, not currently open to the public, and a series of lectures on the care of collections.

The day began with an Introduction to Polesden by Christine Lunch, Visitor and Volunteer Co-ordinator for the National Trust. Christine gave a very interesting and informative account of the history of Polesden and the life of Mrs Margaret Greville, a legendary Edwardian hostess who purchased Polesden with her husband in 1906 as a weekend retreat. Mrs Greville's father William McEwan was an Edinburgh brewing millionaire and well connected businessman. His interest in collecting 'Old Dutch Masters' and other paintings inspired his daughter to collect. When she died in 1942 she bequeathed the property, her London home in Mayfair and the art collections to the National Trust. She requested that Polesden should remain open to the public in memory of her father.

On our guided tour, Caroline Baker, House Steward, gave an interesting overview of the library and the study, where a glazed showcase contained 18th century Meissen porcelain from tea, coffee and chocolate services painted with Wharf and Chinoiserie scenes in the style of J.G Herald (1696–1775), a dominant painter of the Meissen factory from 1720. We were shown a number of exquisite pieces of Meissen and Furstenberg porcelain and allowed a close inspection of 1730 and 1740 services not currently displayed to the public. The Saloon or 'Gold' room, once used for entertaining Mrs Greville's guests, contained a number of showcases of carved figures of animals and birds and a pair of Mandarin jars and covers on open display. Other examples arranged in the room include various groups, Chinese vases, bowls and wares that were of the Kangxi period, decorated mostly in famille verte colours.

Paul Dearn, House Manager for seven years, continued the tour of the other ground floor rooms and corridors. He discussed the problems experienced with keeping the collections on open display, pointing to a Chinese export soup tureen in the form of a goose, which had lead weights inside to prevent the public handling it to view the ceramic markings underneath its base. He ended the tour with an exclusive view of the

reserve collection, containing many other porcelain services, which would be displayed when the first floor is presented to the public. We were shown a beautiful Staffordshire Tulip collection, which left the house in 1946 and returned in very poor condition. Unfortunately, little is known about the history of the red and purple tulip ware, as there are no records.

Paul continued during the afternoon with a tour of the Garden Statuary. He discussed the management of the statues and the current conservation programme. The cost of the repair work to reinstate the crumbling plinths and to purchase vinyl covers for the protection of the statues during the winter months was raised by raffles run by the staff, who intend to continue raising funds so that the conservation work will progress.

Ceramic expert and author John Mallet gave a fascinating and detailed lecture on the history of the Maiolica at Polesden. He began by describing the technique of Maiolica, which is a tin-glazed earthenware pottery that is recognised by its white, opaque glaze, due to the presence of tin-oxide, which gives the body a glassy finish. It is painted with ceramic pigments and fired at low temperature which fuses the glaze, setting the colours of the decoration. At the beginning of the 15thC when Maiolica was first manufactured, the range of colours available was limited to purple-brown derived from manganese, copper green and cobalt to produce blue. By the 16thC a variety of colours was obtainable, including several tones of lustre colours such as red, pink ruby and yellow. Lustre colours were a speciality of workshops and the application involved a tricky technique, where the painter was required to work quickly and precisely.

At Polesden there are examples of yellow lustre Maiolica. John then discussed the subjects of the pieces decorated with both pictorial compositions and abstract designs. Examples include work by the Maiolica painter, Francesco Xanto Avelli. Xanto was renowned for his work in Urbino during the Renaissance period. He often painted scenes from classical and contemporary literature to suit his compositions and signed and inscribed many of his pieces. Most of the Maiolica ware at Polesden is Italian and depicts mythological and historical scenes, such as 1527–30 'Sack of Rome'. Other examples include plates by the painter Francesco Durantino painted with scenes from the Old Testament.

Ann Katrin Koester, Assistant Territory Conservator, provided an outline of the National Trust's preventive conservation and collections' care strategy, with an emphasis on the aspects of preventive conservation currently carried out in historic properties.

Topics included regular housekeeping regimes to minimise risks, disaster planning, monitoring the environment and pest management. Collections are assessed by specialist contractual conservators, who are commissioned to carry out condition surveys and remedial conservation accordingly. Ann discussed the challenge of keeping objects on open display, which are more vulnerable to damage and deterioration. She described the problems faced with access and public interest and the demand for collections to be loaned and historic properties hired for functions and events. Properties are often popular venues for filming which can pose a risk to collections, for example longer opening hours increase the exposure to light and accumulation of dust and dirt.

Caroline Baker continued the topic of disaster planning with a report on the emergency response within the National Trust, the 1989 fire at Uppark and a serious fire at Polesden Lacey in 1960. Disaster planning has become an important aspect of preventive conservation and each historic property will have its own Emergency and Salvage plan.

Charlotte Hubbard and Sofia Marques rounded off the day with a very interesting lecture on the conservation work of twelve 15thC glazed terracotta roundels, sculpted by Luca della Robbia. Charlotte discussed the manufacturing process and how the hand-painted decorative surface was achieved. The decoration was applied using the tin glazed process, painted with different shades of blue and white coloured oxides on a flat surface. Firing was a very complex procedure and kiln technology was not advanced. The sculptor's problems with firing resulted in the body of the material cracking whilst the clay was drying out. All the roundels had suffered from structural problems and re-touched areas of the glaze appeared to have been applied over cracks and re-fired. Charlotte and Sofia gave us an insight into how valuable these roundels were at the time of their manufacture, as demonstrated by the extraordinary lengths that the sculptor was willing to go to save these pieces and get them through their final firing and mounted in position on the ceiling of the Medici Palace. Sofia lectured to the group in the spring on the techniques chosen to bond these fragments and mount them for exhibition. At Polesden we learnt how the roundels were retouched after exhaustive testing of materials. Eventually Laropal A81 was used, applied with painstaking care in minute dots of dense colour.

**Felicity Bolton**

CGG Co-opted committee member

# in practice

## LIFE AFTER SYNPERONIC N

Following on from the successful Back to Basics Workshop – Life after Synperonic N (see the January 08 issue of Icon News, p.44), Frances Hartog of the Victoria & Albert Museum has allowed us to include the following item in this issue of Icon News. A detailed report of the work summarised here has been published in JAIC, Spring 2004, Vol.43, Number 1

It must be stressed that these investigations were carried out on textiles, so the results cannot be read across to other materials.

### Brief summary of results from the investigation into alternatives for synperonic n®

The investigations were undertaken by The British Museum and Victoria & Albert Museum, with the assistance of Andrew Wingham, then a chemistry student at Imperial College.

Originally eleven surfactants were included in the testing programme, alongside Synperonic N®. These were whittled down to a final five after the first phase. This involved wash tests on partially soiled cotton and wool samples. Those that had proved themselves to be the most efficient were:

|                    |             |
|--------------------|-------------|
| Non-ionic          | Anionic     |
| Dehypon LS45®      | Hostapon T® |
| Synperonic 91/6®   | Orvus WA®   |
| Imbentin C135/070® |             |

Phase two testing was an attempt to evaluate the long-term effects of the surfactants on fabric samples using artificial aging. Results showed there to be no distinct variations between the surfactants. Therefore any of the above could be used as replacements for Synperonic N®.

### Results and Observations

**Dehypon LS45® (non-ionic)** – proved the most efficient ‘all rounder’. It had good results on cotton, a little better than Synperonic N®. On wool it was the only alternative surfactant to perform well, again giving slightly better results than Synperonic N®.

Dehypon LS45® produced a mildly cloudy solution at working strength. This was caused by its very low cloud point of 21–22°C. It is this low cloud point that is the reason for its high efficiency at temperature below 21°C. If the temperature rises above 21°C it begins to fall out of solution, observed as cloudiness. However, this reverses if the temperature drops.

**Synperonic 91/6® (non-ionic)** – was slightly more efficient on cotton than Dehypon LS45® but considerably less

| Surfactant         | CMC%    | 5 × CMC% | 5 × CMC g/l*<br>Working Strength |
|--------------------|---------|----------|----------------------------------|
| Dehypon LS45®      | 0.05977 | 0.29     | 3 g/l                            |
| Synperonic 91/6®   | 0.05565 | 0.28     | 3 g/l                            |
| Imbentin C135/070® | 0.06420 | 0.32     | 3 g/l                            |
| Hostapon T®        | 0.04383 | 0.22     | 2 g/l                            |
| Orvus WA®          | 0.29065 | 1.4      | 14 g/l                           |

\* g/l have been rounded up for ease of use. The detergents should be measured by weight not volume.

efficient on wool, giving a result of approximately half the efficiency of Synperonic N®.

Synperonic 91/6® has a distinct odour and its foam disappeared almost instantaneously on the initial rinse; this may indicate unstable foam rather than amazing ease of rinsing.

**Imbentin C135/070® (non-ionic)** – came third in efficiency amongst the non-ionics. Results on cotton were similar to Synperonic N® but on wool it performed only half as effectively.

Imbentin C135/070® was found to be extremely difficult to dissolve when making up the test solutions.

**Hostapon T® (anionic)** – proved the most efficient at preventing re-deposition of soiling. It was slightly less efficient on cotton than Synperonic N® and on wool about two thirds as effective.

Its efficiency at preventing re-deposition of soiling indicates it could be used without the addition of a soil suspension agent such as sodium carboxymethyl-cellulose, an additive routinely used by textile conservators in the UK.

**Orvus WA® (anionic)** – was the most efficient on cotton. On wool it was approximately three quarters as effective as Synperonic N®.

However, all wash tests were carried out at a concentration of five times each surfactant's critical micelle concentration (CMC). At this concentration Orvus WA® becomes unworkable because of the high levels of foam produced; it may therefore be prudent to use it at a lower concentration, possibly 2 – 3 times its CMC.

### Critical Micelle Concentrations (CMC)

Theoretically, surfactants are most efficient at their CMC. In practice as the soil is released from a textile into the bath, the number of micelles available to continue the process falls rapidly. For these investigations, a concentration of five times each detergent's CMC was used, it offers efficiency without inhibiting rinsing. Conservators can choose to use the detergents at a lesser concentration according to the level of soiling and the object they are

treating, it is unlikely a higher concentration would ever be required. (See table opposite)

### Suppliers

**Dehypon LS45®:** Conservation Resources (UK) Ltd, Units 1, 2, 4, & 5 Pony Road, Horspath Industrial Estate, Cowley, Oxford OX4 2RD  
Telephone: 01865 747755

**Orvus WA®:** Preservation Equipment, Shelfanger, Diss, Norfolk IP22 3DG  
Telephone: 01379 647400

The other three detergents need to be requested as samples from their retail wholesalers.

**Hostapon T®:** Chemlink Specialities Ltd, Carrington Business Park, Manchester M31 4ZU  
Telephone: 0161 776 4303

**Synperonic 91/6®:** Ellis & Everard, Pine Street, South Bank Road, Cargo Fleet, Middlesborough TS3 8DB  
Tel: 01642 227388

**Imbentin C135/070®:** Libra Chemical Ltd. Brinell Drive, North Bank Industrial Park, Irlam, Manchester M44 5LF  
Telephone: 0161 775 1888

## ANALYZING PIGMENTS USING THE SYNCHROTRON AT DARESBUY LABORATORY, CHESHIRE

by *Helen Wilson*, Conservation Science HLF intern

### Introduction

Recently, as part of my HLF internship at the Pigmentum Project, which is an ongoing programme aimed at developing and cataloguing quality data on the pigments within its ever growing collection<sup>1</sup>, I had the opportunity to participate in an investigation into the fascinating pigment Prussian blue. The complex chemical structure and behaviour of Prussian blue has been an enduring source of interest to many, including myself. In collaboration with colleagues at Tate and from the University of Manchester, we were using the Daresbury synchrotron radiation source to analyze the structure of Prussian blue. This was part of a research project investigating why and how the pigment photo-fades in anoxic environments (those that lack oxygen), as well as to help us better understand the chemistry of Prussian blue and some closely related pigments.

The Pigmentum Project holds a large number of Prussian blue samples, both from historical sources and modern synthesis, in their collection. With my colleague at the Project, Bhavini Gorsia, I planned to produce more analogues of Prussian blue using elements that substitute



Inside station 9.3 x-ray lab 2

into the structure. This was specifically to investigate the effect of ion size and oxidation state on the pigment structure which may then affect the pigment's ability to photo-fade. With the synchrotron and a technique called XAFS ('X-ray absorption fine structure spectroscopy') we could look in detail at the internal physical and chemical structure of Prussian blue at the atomic scale and see how this can change under different circumstances. The results from this research are currently being analyzed and further research at the more powerful Diamond Synchrotron is planned for March.

### Making Prussian Blue and its analogues

While in the past, convoluted recipes, sometimes involving animal blood, were needed to produce Prussian blue, now direct addition of iron trichloride to potassium hexacyanoferrate is sufficient. There are several theories about the structure of Prussian blue<sup>2</sup> and many analogues (not necessarily blue in colour) can be made with different metals such as Zn, Cu and Co substituting some of the Fe ions in the structure<sup>3</sup>.

The pigments in my experiment were made by direct addition of a transition metal halide with potassium hexacyanoferrate dissolved in distilled water. The transition metals chosen either had:

- a) an ionic radius of the iron(III) ion but a different oxidation state, or

Outside the x-ray room: no entry





Cameras viewing inside radiation room

b) the same oxidation state as iron(III) but a different ionic radius.

A further experiment involved differing the ratio of transition metal halide (such as cobalt dichloride) : potassium hexacyanoferrate. To ensure that the number of moles of metal remained constant, iron trichloride was also added so that the sum of the relative quantities of the substituent and iron trichloride equalled one. Once mixed together and stirred, the resulting solutions were filtered using filter paper and a funnel. The pigments were dried at room temperature in air on the filter papers and in beakers on a hot plate. The presence of heat during the drying process may have led to alterations in the structure, which I was interested in seeing. Prior to leaving for Daresbury Laboratory samples of the pigments were scraped into labelled glass vials using a spatula and FTIR spectra were taken at King's College London.

### Daresbury Laboratory and Synchrotron

The synchrotron at Daresbury produces a wide range of electromagnetic radiation by accelerating charged particles near to the speed of light using magnetic fields. The X-rays it produces are many orders greater in intensity and brightness than those produced by conventional X-ray tubes, and thus enable study into the structure of compounds (metal oxidation states, bond lengths and bond angles), which would normally be impossible.

During the visit to Daresbury we used XAFS in which core electrons of atoms within the pigments absorb the hard X-rays and become unbound leaving a vacancy in the orbital it came from. Two detection techniques, both providing the same information, were then used depending on

### FTIR analysis of Prussian blue samples



Helen puts sample into holder ready for the transmission scan

expendability of the sample.

- Transmission – in this case the unabsorbed i.e. transmitted X-rays are monitored. This is the more common technique but requires that the samples be ground into a powder with polyethylene and packed into a cell. The original sample cannot be recovered and therefore this was not a suitable technique for the very small and priceless historical samples from the Pigmentum Project.
- Total electron yield (TEY) – in this set up, the pigments were placed onto a small metal surface, with half of the X-ray beam on the sample and half above it. This

### Scraping a Prussian blue sample into a glass vial for storage



### Placing sample on the diamond cell for FTIR analysis

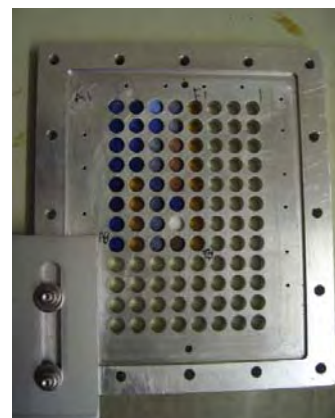




Filtration of Prussian blue analogue



TEY set up: pigments in the holder below and detector clamped above



Pigments for transmission scan in separate cells of the sample holder

technique is unusual and very few researchers can use it, however it is essential when there are small quantities of priceless samples as they can be recovered uncontaminated. An electron detector was placed perpendicular to the X-ray beam over the sample to detect the Auger electrons produced. Auger electrons are emitted from within the core of an atom when an electron from a higher energy level transfers energy to the second electron in its orbital in order to move down into the vacancy mentioned above. The energy transferred to the second electron in the orbital is large enough to enable it to simultaneously become unbound and detectable. One photon of energy results in the release of one Auger electron.

It is hoped that the data from these scans will explain why Prussian blue fades with light under anoxic conditions and how transition metals substituted into Prussian blue affect the structure. The data has been converted into excel files with spectra which now have to be interpreted. I intend to be part of this interpretation stage to learn more about the type of data that can be gained from XAFS and the processes needed to develop the raw data.

### Reflections on this project

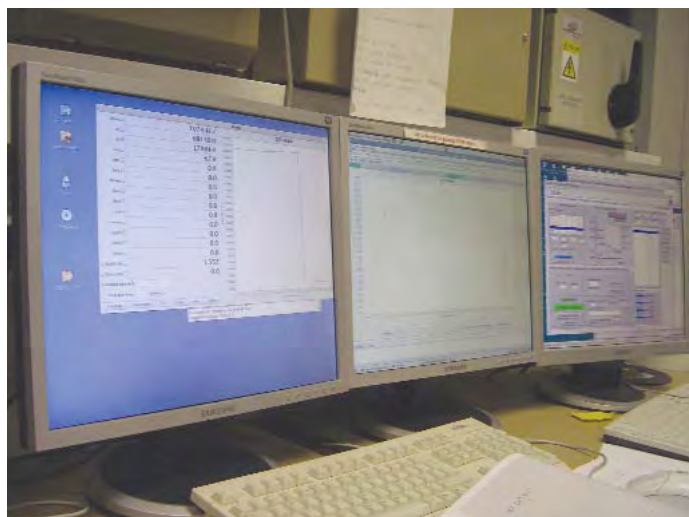
I am very pleased to have had the rare opportunity to go to Daresbury Laboratory and use their Synchrotron, despite the lack of sleep and long shifts! (The synchrotron runs 24 hours a day and there is no time to be wasted). I have learnt a great deal about planning an experiment, from choosing and ordering the chemicals through to performing the experiment and overcoming the many obstacles that occur. At Daresbury I learnt how to perform the safety checks around the radiation room and start the X-rays – which I doubt will happen too often in the future. I am also grateful for having the opportunity to have worked with the other members of the team and I hope to keep in contact with them in the future.

- 1 <http://pigmentum.org/>
- 2 The currently accepted structure of Prussian Blue is  $\text{Fe}_4[\text{Fe}(\text{CN})_6]_3 \cdot x\text{H}_2\text{O}$  where  $x = 14 - 16$  (and substitutions)
- 3 Berrie, Barbara H. 'Prussian Blue' in book *Artists' Pigments – A handbook of their history and characteristics*, vol. 3, Ed: Fitzhugh, Elisabeth West. Washington and Oxford: National Gallery of Art and Oxford University Press, 1997, pp. 191–218.

Samples drying on hotplate



Computer screen in x-ray lab with spectrum forming



# listings

Full details of all the events listed here can be found on the Icon website [www.icon.org.uk](http://www.icon.org.uk)

Icon Offices: Please note that many events are now being held at the Icon Offices at 3rd Floor, Downstream Building, 1 London Bridge, London SE1 9BG. Security clearance for entry into the building must be arranged in advance so please follow any instructions included in the listings entry. The Icon website provides comprehensive directions on how to find the offices – from the home page, go to 'About Icon' and then to the 'Find us' page

13 March, 6.15pm

## **The Nigel J. Seeley Memorial Lecture**

Venue: UCL Centre for Sustainable Heritage, London.  
Speaker: Dr David Saunders, Keeper, Department of Conservation, Documentation & Science, The British Museum, London.

Cost: Free

Contact: Skye Dillon, Tel: 020 76795903,  
email: [sustainableheritage@ucl.ac.uk](mailto:sustainableheritage@ucl.ac.uk)

31 March

## **Icon Textile Group**

### **Spring Forum – The Furnished Room**

Venue: Victoria & Albert Museum, London  
Contact: Nicola Yates, National Maritime Museum, Greenwich, London SE10 9NF, email: [nsyate@nmm.ac.uk](mailto:nsyate@nmm.ac.uk),  
Tel: 020 8312 6770

1 April

## **Icon Textile Group**

Venue: Hampton Court Palace.

Linked to the Furnished Room (31 March) – a morning tour of one of the rooms with colleagues from the Historic Royal Palaces Textile Conservation Studio.

Contact: Nicola Yates, National Maritime Museum, Greenwich, London SE10 9NF, email: [nsyate@nmm.ac.uk](mailto:nsyate@nmm.ac.uk),  
Tel: 020 8312 6770

2 April, 5pm

## **The British Museum**

### **The Science Behind Paper Structure**

Speaker: Paper scientist Dr Steve I'Anson.  
Last of 4 lectures on paper structure.

Contact: [conservation@thebritishmuseum.ac.uk](mailto:conservation@thebritishmuseum.ac.uk)

2–4 April

## **Association of Art Historians**

### **34th Annual Conference**

Venue: London

Contact: Samuel Bibby and Nöelle Streeton, University College London, [s.bibby@ucl.ac.uk](mailto:s.bibby@ucl.ac.uk) and [n.streeton@ucl.ac.uk](mailto:n.streeton@ucl.ac.uk)

10 April, 5.30pm

## **Icon Book and Paper Group**

### **AGM**

Venue: Lecture Hall, Artworkers Guild, 6 Queen Square, Bloomsbury, WC1N 3AR.

The meeting will be followed with a talk by Stuart Welch from Conservation by Design.

Cost: Free

12–13 April

## **Archaeological Leather Group**

### **Weekend Conference – "Have we got a Tannery?"**

Venue: Walsall Leather Museum

Aimed at increasing knowledge and understanding of leather manufacturing techniques from pre-historic times up to the 19th century.

Cost: £50 for ALG members, £65 for non-members.

Contact: Mike Glasson, Leather Museum, Littleton Street West, Walsall, WS2 8EG, tel: 01922 721153 or email: [leathermuseum@walsall.gov.uk](mailto:leathermuseum@walsall.gov.uk) for details and to book a place.

16–17 April

## **Icon Ethnography Group**

### **Feather Conservation Workshop**

Venue: Pitt Rivers Museum, Oxford.

Speaker: Allyson Rae, freelance conservator, previously Head of Organic Artefacts Conservation at the British Museum.

Covering the structure and nature of feathers, their causes of deterioration, principles and practice for non-interventive and basic interventive options (soil removal, reshaping, repair techniques).

Cost: £200.

Visit the Icon website for further details.

18 April

## **Icon Care of Collections Group**

### **Study visit to the BM&AG Museum Collections Centre**

Venue: Museum Collections Centre, 25 Dollman Street, Nechells, Birmingham B7 4RQ.

An opportunity to see a large collections centre with a talk about the reasons for the store, day to day operation and snagging issues.

Cost: £10 (includes lunch)

Contact: [jane.thompson-webb@birmingham.gov.uk](mailto:jane.thompson-webb@birmingham.gov.uk)

18 April

## **Icon Paintings Group**

### **Conference – "The Final Touch: Artists' Varnishes Past and Present"**

Venue: The Wallace Collection, London

Contact: Rebecca Ellison ACR tel: 02920 573225, email: [rebecca.ellison@museumwales.ac.uk](mailto:rebecca.ellison@museumwales.ac.uk) or Emma Fisher tel: 01792 516914, email: [emma.fisher@swansea.gov.uk](mailto:emma.fisher@swansea.gov.uk)

18 April

**Traditional Paint Forum Conference**

**Soane: Paint, Colour and Light**

Venue: The Sir John Soane's Museum,  
13 Lincoln's Inn Fields, London WC2A 3BP.

To consider Soane's extraordinary use of paint, colour and light not only at Lincoln's Inn Fields but also at Moggerhanger, Pitzhanger Manor and Dulwich Picture Gallery.

On 19 April there will be visits to the Soane Family Tomb in St Pancras Gardens and Pitzhanger Manor.

Contact: Christine Sitwell on email:

christine.sitwell@nationaltrust.org.uk for booking details.

21 April

**INCCA-NA: International Network for the Conservation of Contemporary Art, North America Interview Methodology for Conservators**

Venue: Denver, Colorado, USA

Cost: \$130

Contact: Gwynne Ryan, Assistant Objects Conservator, Museum of Fine Arts, email: gryan@mfa.org

21–24 April

**AIC Book and Paper group Creative Collaborations**

Venue: Denver, Colorado, USA.

Contact: Alexis Hagadorn Program Chair, BPG-AIC, Columbia University Libraries. Email: ah333@columbia.edu or tel: 212-854-3580

25–26 April

**Icon Ceramics and Glass Group 2008 Meeting and AGM**

Venue: Burghley House, Lincolnshire

Costs: £110/ £65 (conc.) price does not include accommodation or meals.

Contact: Alex Patchett-Joyce at: apatchett9@aol.com or Ros Hodges at: roshodges@waitrose.com

25–26 April

**AHSS National Conference Scotland's Castle Culture**

Venue: Main Lecture Theatre, Edinburgh College of Art.

Contact: Mary Pitt, The Architectural Heritage Society of Scotland, The Glasite Meeting House, 33 Barony Street, Edinburgh EH3 6NX, or tel: 0131 557 0019.

Visit the Icon website for further details.

27 April

**Icon Historic Interiors Group Visit to the Merchants House, Marlborough.**

Tour of the conserved decorative scheme and discussions with paint analyst and conservators.

Contact: Mette de Hamel on email:

mdehamel@btinternet.com for further details and a booking form.

30 April, 2pm

**Icon Care of Collections Group Annual Members Meeting**

Venue: Icon Offices, London.

Contact: Please register in advance by emailing Peter Winsor, CCG Chair on peter.winsor@dsl.pipex.com

April/ May

**Icon Textile group**

**Proposed visit to view adhesive removal equipment.**

Venue: National Trust Textile Conservation Studio.

The need to reverse previous adhesive treatments on tapestries has led the studio to refine the equipment and methods used. A further adhesive treated tapestry is to be treated in April/ May 08 and the Studio is offering an informal visit to see the equipment and method used.

Contact: Rachel Langley on 01263 735 878 or email:

rachel.langley@nationaltrust.org.uk for further details and to place your name on a list as numbers will have to be limited.

13 May, 6pm

**Icon Book & Paper Group**

**Dealing with the Model World: the conservation of globes.**

Venue: Icon Offices, London.

Speaker: Sylvia Sumira – specialist in the conservation of globes.

Contact: Please register in advance with Charlotte Cowin on tel: 020 77853805 or email: events@icon.org.uk by 8 May.

14 May, 6.30pm

**Icon Textile Group**

Venue: Icon Offices, London

Informal discussion to focus on career progression and the possibilities in the job market for graduates in textile conservation.

Visit the Icon Textile Group pages online for further details.

Please register in advance.

22 May

**Icon Archaeology Group**

**Visit to Newport Ship conservation facility, and Annual General Meeting**

Venue: Newport, South Wales

A last chance to see the UK's largest clinker-built archaeological ship, see the 3-D digital recording device in action, and hear about the imminent conservation plans, before the facility is closed to visitors. Buffet lunch and AGM.

Cost: £12.50 (to be confirmed)

Contact: Jim Spriggs, AG Chair, 01904 632827 or email: spriggs.conserve@hotmail.co.uk

25–30 May

**Israel National Society for NDT  
Art 2008, 9th International Conference**

Venue: Jerusalem, Israel

Non-destructive investigations and microanalysis for diagnostics and conservation.

Contact: ISAS International Seminars, PO Box 91004, Israel, tel: ++972 2 6520574 or email: meetings@isas.co.il

Link to homepage on the icon website.

27–30 May

**IPH Congress**

**Birth of an Industry – from Forest to Paper during the 19th Century**

Venue: Stockholm, Sweden.

Contact: Jan-Erik Levlin, email jan-erik.levlin@iki.fi

14–28 June

**Papermaking Tour in China**

Including visits to: the conservation labs at the Shanghai Museum; a writing brush mill, a Chinese ink mill and a Xuan paper mill, all in Anhui Province; papermaking and printmaking at the Dege Sutra-Printing House; a mill which makes paper from Dragon bear grass and a Xuan paper mill, both in Sichuan Province.

Contact: Megumi Mizumura on email: megumimizumura@aol.com for further details.

2–4 July

**6th International Conference  
Evaluating Safety and Significance**

Venue: Assembly Rooms, Bath.

1 September

**BAPH**

**Annual Conference**

Venue: Berghotel, Amersfoort, Holland

Contact: Barbara Venables on email: barbara@bivelham.freemove.co.uk

8 September

**Icon Textile Group**

**Back to Basics – Life after Synperonic N**

**Venue: National Museums of Scotland textile conservation studio, Edinburgh.**

A repeat of the practical workshops held last year at the British Museum, this is an opportunity to find out more about alternative detergents available to textile conservators.

Bookings or expressions of interest cannot be taken yet but further details of the day will be announced soon.

15–19 September

**IIC: 22nd Congress**

**Conservation and Access**

Venue: Queen Elizabeth II Conference Centre, Westminster, London.

Contact: IIC, 6 Buckingham Street, London, WC2N 6BA (registration opens in February)

Visit the Icon website for further details.

22–26 September

**ICOM-CC Triennial Meeting**

**Diversity in heritage conservation: tradition, innovation and participation**

Venue: New Delhi, India.

Further details to be announced

30 September, 6pm

**Icon Book and Paper Group**

**"A Blue Story"**

Venue: Icon Offices, London.

Speaker: Dr Brian H. Davies BSc PhD CChem FRSA

A talk to illustrate the changes in the use of blue in heritage and cultural materials and to describe the methods for the identification of the blue colours of inks and paints used on paper and parchment.

Contact: Please register in advance with Charlotte Cowin on tel: 020 77853805 or email: events@icon.org.uk

6–9 November

**Costume Colloquium: A Tribute to Janet Arnold**

Venue: Florence, Italy.

The first international symposium exclusively dedicated to all aspects of dress history and an opportunity to 'encounter' of some of the world's most distinguished and renowned costume and dress curators, historians, conservators and designers. Includes visits to many of the primary historic sites in Florence.

Further details on the icon website.

April 2009

**Icon Gilding & Decorative Surfaces Group  
Conference on Applied Decoration**

Venue: TBA, London

Contact: Michael Parfett on email:

mike@mjparfett.fsnet.co.uk or Colleen Donaldson on email: cd1762@aol.com

## TRAINING

### PACR Clinics

7 April, Glasgow

10 April, Cardiff

14 April, London

22 April, Leicester

Clinics are aimed at potential PACR candidates who are working towards the next application deadline. This event will support candidates with their PACR application, address any queries and provide a useful insight to the accreditation process.

Cost: Free

Contact: Susan Bradshaw, PACR Accreditation Manager, email: [pacr@icon.org.uk](mailto:pacr@icon.org.uk) or tel/fax: 01626 824510 for further details. Please use the booking form on [www.pacr.org.uk](http://www.pacr.org.uk) to reserve a place.

### PACR Introduction to Mentoring

15 April, London.

Venue: Icon Offices, London.

For accredited members who are interested in becoming a PACR mentor to support members working towards accreditation and for their continuing professional development.

Contact: Susan Bradshaw, PACR Accreditation Manager, email: [pacr@icon.org.uk](mailto:pacr@icon.org.uk) or tel/fax: 01626 824510 for further details. Please use the booking form on [www.pacr.org.uk](http://www.pacr.org.uk) to reserve a place.

### PACR Introduction to CPD

14 May, Chantry Library, Oxford

19 May, Royal Armouries, Leeds

To explain the CPD process, compiling personal records and development plans, and identify sources of information to support professional development.

Contact: Susan Bradshaw, PACR Accreditation Manager, email: [pacr@icon.org.uk](mailto:pacr@icon.org.uk) or tel/fax: 01626 824510 for further details. Please use the booking form on [www.pacr.org.uk](http://www.pacr.org.uk) to reserve a place.

### Scottish Museums Council Conservation Courses

A series of one day courses covering Environmental Monitoring, Care of Textiles and Writing Collections Care Action Plans.

Contact: [training@scottishmuseums.org.uk](mailto:training@scottishmuseums.org.uk) or visit the icon website for more details.

### UCL Centre for Sustainable Heritage

CSH Short Courses come highly commended by heritage professionals from museums, historic houses and galleries.

Contact: Skye Dillon, Short Course Co-ordinator, UCL Centre for Sustainable Heritage, tel: 020 7679 5903, email: [skye.dillon@ucl.ac.uk](mailto:skye.dillon@ucl.ac.uk)

### Heritage Conservation Network Building Conservation Workshops

Annual series of hands-on building conservation workshops in association with local preservation partners in order to further the sites' preservation and provide an educational experience for participants.

### International Academic Projects Ltd Conservation Training

Contact: International Academic Projects, 6 Fitzroy Square, London W1T 5HJ, tel: 0207 380 0800, email: [info@academicprojects.co.uk](mailto:info@academicprojects.co.uk)

### Ironbridge Institute

#### Historic Environment Conservation Training

Contact: Harriet Devlin, Ironbridge Gorge Conservation Trust, Coalbrookdale, Telford, Shropshire, TF8 7DG, Tel: 01952 435969 or email: [harriet.devlin@ironbridge.org.uk](mailto:harriet.devlin@ironbridge.org.uk)

### West Dean College

#### Conservation Short Courses

Including Building Conservation Masterclasses, Professional Conservators in Practice and CPD courses. Contact: West Dean, Chichester, West Sussex, PO18 0QZ, tel: 01243 818219.

**Full details for all entries in Listings can be found at [www.icon.org.uk](http://www.icon.org.uk) under either "Events" or "Education and Training"**

# intervention

## Evolving to work with paradox and ambiguity

by Kate Frame, Head of Conservation and Collection Care at Historic Royals Palaces\*

As Historic Royal Palaces (HRP) nears its 10th anniversary as an independent charity, it seems like a good time for us conservators to look back and reflect on the change and evolution that have occurred here as we have adapted to and embraced our new circumstances. When it was announced that HRP, a charity for conservation and education at the five unoccupied royal palaces, would have to rely on its own revenue generation, without assistance from the government or the Crown, some staff did not quite know what would be required from them. How would HRP survive? Yet for all this, we can say that our decade long journey has proved one of great discovery, challenge, opportunity and fulfilment. (And we know the journey is not over yet). We now deliver conservation in an environment where planning and accountability are more rigorous while maintaining the standards many associate with publicly-funded institutions. While this is a balancing act it has in large measure produced unforeseen opportunities and some splendid outcomes. Success has come through HRP's ability to take the two cultures and reinvent a new one. As CEO, Michael Day says, HRP is an organisation that has been transforming, to move first from being a 'civil service culture to a customer-focussed business, and then from business to a modern conservation charity'.

Michael Day believes this working environment 'gives rise to certain work challenges for palace staff', conservators included, which he has characterised in part, to be an environment of *contradictions and paradoxes, different time 'waves', and change as a constant state*. What then has this meant in practice for conservators? *We can see how the role of conservator has become much more complex and layered in light of the implementation of seemingly conflicting goals, the 'contradictions and paradoxes', set for HRP – the long-term conservation of the palaces and their collections to the highest standards for future generations while at the same time vigorously increasing public access and commercial site use.*

With commercial site-use thriving, collections risk management becomes a heightened and continual responsibility. As conservators, we manage a delicate balancing act between the conservation and revenue generation goals. Today, we're now part of a team, actively working with other divisions and outside stakeholders to develop successful plans that will accommodate new uses upon old. While maintaining our standards, we've become much more flexible in our approach. No longer will a standard agreement of 'dos and don'ts' work. The days of fixed agreements are over. Each new project or case demands its own unique approach. We have now agreed

general principles of conduct that conservators negotiate and clients observe. The result is that our conservators have had to become skilful negotiators and good communicators to ensure that the highest standards are met. This has meant we also have to think creatively, to find solutions that work to meet all HRP goals. As we went (and learned) from one successful project to the next our confidence increased and so did our ability to think outside the box; to move beyond the tried and tested to the development of innovative approaches that enable new revenue generating or educational venues to be tried (theatre, jazz evenings, etc). In collaboratively striving for solutions to mitigating risks, conservators are no longer 'conservation auditors' and 'nay sayers', but now members of these teams and contributors to these business developments in a conservation charity.

The degree of involvement conservators now have as part of a broader team within HRP requires them to be fully engaged, not just with their own work but the work of the section and the whole organisation. We have to have enthusiastic and empowered staff. They have to want to participate. In today's HRP, conservators have to be managers of time and resources. They have to think long-term and short-term and be ready to accommodate to contemporary changes while continuing to guarantee long-range goals are met.

Michael Day describes HRP as operating on different time 'waves', those that are 'short' and necessitating *constant change* to compete, and those that are 'long', doing critical work to ensure the survival of the palaces far into the future. Thus to be effective, conservators need to be appreciative of the reason and value of both time lines and responsive to both. To do this we have made conservators actively involved in the creation of their own as well as our ten year long-term work plan for the section. They are key decision makers in the priorities, deadline creation and organisation of resources. Empowered, they have a feeling of ownership over the work and are keen participants in the process. Conservators now have to think like managers, to assess their work in relation to the two 'waves' and ensure the right balance between the two.

In such a multiple bottom line business that is commercial and conservation, conservators have come to measure their success in the round with that of their colleagues, based on quality of conservation, delighting the visitors our guests, and achieving financial targets. In effect we have made the paradox less of a paradox.

\*Tower of London, Hampton Court Palace, the Banqueting House, Kensington Palace and Kew Palace

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