



## Challenges of installing a new medicine gallery

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### Also in this issue

Modern materials at home • Documenting a rare survival

# CPD CAN BE SIMPLE.

Becoming and remaining a successful conservator requires knowledge and skills which develop over time. By identifying your strengths and weaknesses and creating your own personal and professional goals it is possible to plan a long and rewarding career in conservation. Continuing Professional Development (CPD) is an essential part of becoming and remaining Accredited.

**But CPD doesn't have to be complicated or difficult.**

**We've compiled some quick ideas for your CPD - whether you have 5 minutes, 1 hour or 1 day.**

*I've got...*

**5**

*min*

## 5 MINUTES

- Take a virtual coffee break and talk to another conservator about your work
- Join an Icon Group, Network or Icon's online Discord community
- Visit the Icon website to look up potential future CPD activities
- Register for an on-line event or course
- Search for any CPD grants available
- Share an idea or resource with a peer
- Identify a skill or competency you would like to develop
- Ask a colleague for feedback

**60**

*min*

## 1 HOUR

- Fill out your Upgraded Listing on the Conservation Register
- Read relevant articles, newsletters, books, websites
- Attend a webinar or virtual seminar
- Respond to a debate on social media
- Record and reflect on your CPD activities in your CPD learning log
- Carry out online research or study a relevant topic
- Consider writing an academic article
- Write an article for Icon's publications
- Research conferences to submit an abstract to
- Peer review an article or find a book to review
- Write a case study for the Icon website
- Chair an on-line team/committee meeting
- If you are an ACR, consider becoming an Icon mentor
- Listen to a TED Talk
- Practice your IT skills by taking software tutorials
- Teach a colleague something online

**8**

*HOURS*

## 1 DAY

- Participate in an online event or workshop such as the many Icon courses planned for the year
- Virtually shadow someone by sitting in on online meetings
- Take a stress management e-learning course
- Present or network at a conference, e.g. Icon's Twitter Conference
- Plan or run an online course or event
- Plan and pitch a research project
- Volunteer in a related field
- Learn a new craft for pleasure

The Institute of Conservation is a membership organisation and charity which brings together those with a passion for the care of cultural heritage. Icon raises awareness of the cultural, social and economic value of caring for heritage and champions high standards of conservation.

Find out more about CPD at:  
<https://icon.org.uk/training/continuing-professional-development>

AUGUST 2020 Issue 89



## From the Editor

The Science Museum team installing the new medicine galleries last year – see our feature article on page 21 - can have had no idea, as they wrestled with the challenges of displaying the Ebola PPE, how soon and how suddenly that acronym would be on all our lips in the UK and beyond. And even if we haven't suffered from the virus ourselves or, worse, lost loved ones to it, the consequential disruption to normal life has been grim for many of our members, as Icon's Policy and Communications Manager Anni Mantyniemi details in her Policy Update.

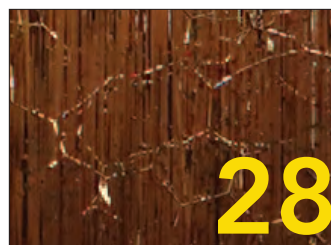
If there is a silver lining it is surely, as our Chief Executive Sara Crofts notes in her column, the enhanced collaboration and community spirit that the pandemic has fostered in Icon, as staff and members find ways of staying in touch with each other, keeping CPD on track, highlighting sources of help and advice, lobbying for the profession, strengthening ties with other organisations. Amongst these initiatives, the Committee members of the Modern Materials Network have found time to give us a tour of their own collections at home – of modern materials, of course!

**Lynette Gill**



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The presentation of gallstones devised for the new display of its medical collections at London's Science Museum: *Medicine The Wellcome Galleries*  
© The Board of Trustees of the Science Museum

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### Deadlines for adverts and editorial

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For the February 2021 issue  
Monday 30 November

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# professional update

## From The Chief Executive



### Sara Crofts on one of our underpinning values: collaboration

I'm going to share a secret. When it comes to writing this column for Icon News there is no grand plan and no sweeping narrative that guides my pen. Instead I open a blank document and I reflect on the activities of the last couple of months and what may, or may not, lie ahead. Working from home in early June the notion of predicting the

future seems even more challenging than ever.

The relative rigidity and clarity of the highly regulated lockdown period is starting to recede, to be replaced by the much more complicated and uncertain timetable and processes of reopening businesses and institutions. Just because the Government says that you can return to your office, studio or building site does that mean that you should? In many ways it seems that opening-up poses more questions than answers. This lack of pre-existing guidance and the need to work quickly to find solutions has prompted an explosion of discussions and webinars, and new guidance from a vast range of sources emerges almost daily. Icon continues to scan the airwaves, collating the most useful contributions in the suite of 'Coronavirus' pages on the website. You can access specific sections for:

- Coronavirus: Icon Policy Activity  
Information about our lobbying work in support of the conservation profession and copies of our statements and letters related to the Coronavirus pandemic.
- Coronavirus: Continuing Professional Development  
Information about Icon's CPD resources and other CPD ideas that we've compiled.
- Coronavirus: Collections Care  
Information relating to the risks to collections in closed or partially closed institutions and guidance on opening-up measures.
- Coronavirus: Historic Buildings and Sites  
Information and links that might assist members working on archaeological projects, building sites and monuments.
- Coronavirus: Business Support  
A digest of available support for businesses and freelancers issued by the Government and other agencies.

We have also set up a dedicated 'Coronavirus Response Group' channel in the new *Icon Online Community* (Discord) to provide a place for members to post their questions and to

offer support and suggestions to others.

However, Icon's most impressive achievement in the last few months has undoubtedly been the creation of the *Conservation: Together at Home* webinar series, set up by the Icon Book and Paper Group. At the time of writing a staggering thirty webinars have already been delivered, with more than 9,000 views (live on Zoom and afterwards via YouTube). The initiative has also expanded to bring in topics and speakers from other Groups and Networks. Icon's Heritage Science Group, Modern Materials Network and Photographic Materials Group have all taken part, and have contributed to a rich and varied diet of valuable CPD.

But supporting CPD is not the only positive outcome of this initiative; members have told us that joining the webinars has helped them to stay connected with their work, their colleagues, and their sector at a challenging time. Members have gained strength from the shared experience, and it seems that the virtual CPD sessions have fostered a sense of community that stretches around the globe and includes our international members in a way that physical events cannot.

So, I would like to offer my personal thanks to all those who have made this possible. You are all brilliant! The hard work and commitment of the event organisers is something that we should be immensely proud of. Seeing the passion and energy of Icon members contributing to the work of their professional body in this way also renews and refreshes my motivation to keep fighting to ensure that the conservation profession is visible, valued and respected in our sector. And it also demonstrates the power of working collaboratively. The *Conservation: Together at Home* webinar series has neatly and organically provided a means for our Groups and Networks to work together to contribute to a shared goal.

*Our values: 'Be collaborative and generous – we work with our members and partners to share learning and achieve the best results together'*

Learning to collaborate better within and beyond Icon is a key ambition that I hold for our organisation. Even pre-Coronavirus the resources available in our sector were scarce, and duplicating efforts unnecessarily makes little sense to me. Effective collaboration brings immense benefits. It is more efficient, meaning that we can achieve more with less. It also means that the impact of our work is amplified.

The clear shared branding of *Conservation: Together at Home* has achieved a greater degree of social media visibility and has generated greater momentum than individually promoted events could ever have hoped to achieve. We've also been able to share learning between the Groups and Networks as we refine the webinar hosting process and hone our IT and media skills.

I very much hope that this outstanding initiative will serve as a model for Icon's future ways of working and that we can build on this success to ensure that our Groups and Networks thrive



in a post-Coronavirus operating environment (whatever that looks like).

Improving collaborative practices also extends beyond Icon to the other organisations in the sector that we engage with. The willingness to share information between institutions and to act jointly to generate guidance has resulted in the rapid production of resources that we have been able to publish on the Icon website. A notable example is *'Waking Up' Collections: A Post-lockdown Guide* – a practical resource coordinated by the Heads of Conservation and Scientific Departments in National Museums, Galleries, Libraries and Archives Group; and the Icon Care of Collections Group, with specific input from a number of specialists in various institutions as well as the Church of England's ChurchCare team. We have been able to share this guidance, and the results of our Coronavirus impact gathering with sector colleagues at AIM (the Association for Independent Museums), Historic Houses, the Heritage Alliance and the Collections Trust amongst others.

Joint working on activities to address the impact of the

pandemic on collections and the historic environment has provided a useful prompt to renew our relationships with like-minded organisations and to seek out new contacts. Aside from the immediate benefits of finding new channels to share our expertise and to advocate for Icon and its work, I am certain that these relationships will be critical to our future success as the sector, and the country, adapts to new ways of working. Events of the last few months have reinforced my belief that we need to reach out more actively to other organisations that share our objectives and values and to seek out new projects and initiatives that can be delivered jointly in order to maximise impact and outreach.

For a small organisation Icon already punches above its weight, but there is huge potential to do much more – if we choose to collaborate.

As always, please feel free to share your ideas and reflections with me via [feedback@icon.org.uk](mailto:feedback@icon.org.uk) or join one of the scheduled Chief Executive's Surgeries.

With continued good wishes from everyone in the staff team.

## POLICY UPDATE

The results were grim. But not surprising. Over 90% reported loss or postponement of work. 70% of respondents said that their monthly income had decreased. 'Uncertainty', 'anxiety', and even 'breaking point', appeared in a list of words used to describe feelings for the future.

These were some of the results of Icon's Coronavirus impacts survey earlier this year. For a period of two weeks in April and May we ran an online survey asking conservators to share how they had been affected by the pandemic. The survey attracted nearly two hundred respondents, the majority of whom represented freelancers, sole traders or private limited companies. We were pleased to have captured a good geographical spread across the UK nations as well as Icon's specialisms.

As the above headlines indicate, the survey showed that the Coronavirus outbreak and associated social distancing measures have had a considerable and severe impact. Loss of work, cancellation of income generating events, reduced opening hours and visitors, delayed payments and supply chain problems were amongst the many ways in which participants were being affected. All of this was naturally leading to apprehensive forecasting and concern for the future.

However, there were some positive glimmers of hope. The results suggested that the Government's furloughing scheme had helped to mitigate impacts in the short term as four times more respondents had furloughed staff than laid staff off. Responses also indicated a strategic approach to resuming work post-lockdown. 37% of contributors planned to use a recovery plan, while another third said they intended to collaborate with partners. Less than 10% stated

they would start from scratch, suggesting a level of preparedness and strategic planning.

There were also some clear actions for Icon. 55% of respondents indicated that they were waiting for more clarification of Government support when asked which support measures they expected to access. One contributor called for a 'less complicated system' while another said 'clearer advice' was needed. This confirmed our view that there is a notable need for further business support advice to help people navigate and access different support options.

This call for action has featured continuously in our lobbying and advocacy work and we now had even more reason to keep shouting about it. We also compiled a digest of available support from Government and their arms-length bodies for our website with the hope that the resource would help simplify the process of finding information and accessing support measures.

The survey results provide important evidence for our ongoing work to lobby for support for conservation and the conservation profession. At the time of writing, we have written over a dozen letters to decision-makers across all UK nations advocating for support for conservators during the crisis. Our messages are also cutting through. Government ministers and sector leaders have responded positively to our asks and offers of collaboration. Fiona Hyslop (Cabinet Secretary for Culture, Tourism and External Affairs, Scotland) agreed with Icon's concerns about gaps in the UK Government's Self-employment Income Support Scheme and outlined the Scottish Government's measures to address these shared concerns. Iain Greenway (Director of Historic Environment Division, Northern Ireland) described Icon's

correspondence as 'a very useful bringing together of the main impacts for conservators' and assured that our points had been 'taken into our [the Department's] thinking'.

I am therefore grateful to everyone who took the time to participate in Icon's survey, even amidst the public health emergency.

Several survey participants pointed out that their business had not yet fully felt the effect of the pandemic but that this could change if social isolation and distancing measures carried on. Any changes to the government's existing support schemes will inevitably also affect many

conservators' situations. We are consequently planning a follow-up survey to ensure that Icon fully captures such changes and acts upon the latest needs of the profession. I hope you will help me collect this evidence and take part when the invitation appears in your inbox.

**Anni Mantyniemi**

Policy and Communications  
Manager



## DATE FOR YOUR DIARY

As you will see from the Notice of the 16th Annual General Meeting on page 14, the 2020 Icon AGM will take place on Wednesday 21 October 2020. This is a few weeks earlier than has been the case in past years. The date has been brought forward as it was felt that most members would find it more pleasant to travel in October than in December. Since then, the pandemic has made it more likely to be held remotely rather than in person. More details about this will be provided later. Please look out for more information on Icon's website and in Iconnects.

## ELECTIONS TO THE BOARD OF TRUSTEES

In order to rebalance the number of trustees on the Board and to allow the Board an opportunity to consider the optimum size and make-up of the Board in November we have decided that there will not be an election this year. We were also of the view that with so much uncertainty at present it might have been difficult to find candidates to stand for election. This decision means that Icon will still have fifteen trustees after the AGM with a wide range of skills and experience.

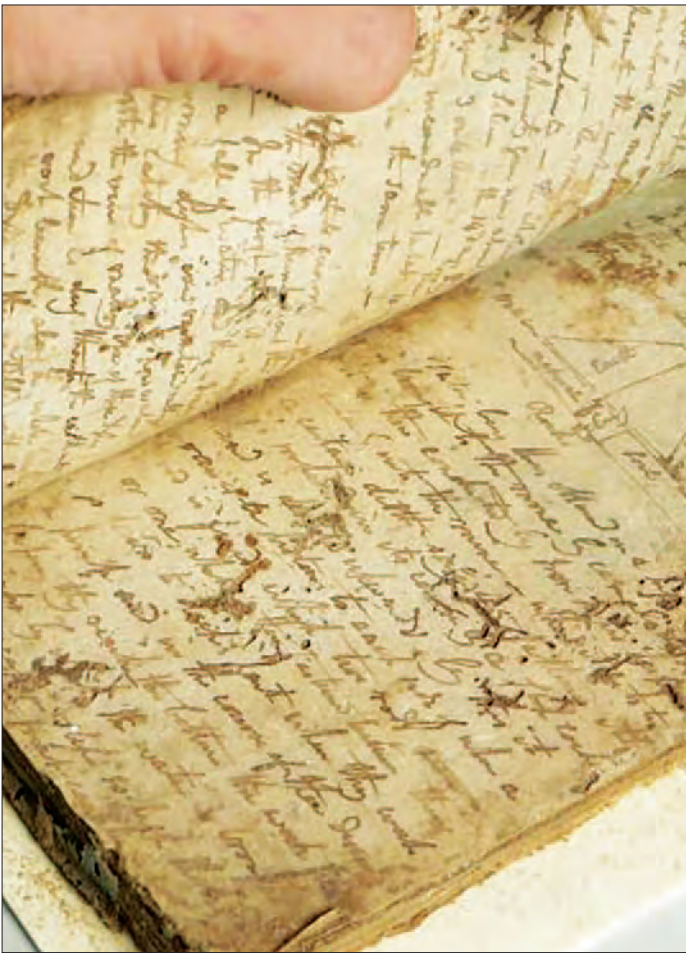
## NMCT NEWS

The National Manuscripts Conservation Trust Annual Report for 2019 not only details the award of last year's grants -

The fragile condition of Dr Richard Bright's notebooks, shown before conservation, demonstrates the need for the NMCT's work







Another view inside Dr Bright's notebooks

totalling nearly £160,000 - but also celebrates three decades of grant-making. Throughout that time the range of collections to benefit from the awards is huge. Last year they included the conservation of the 14th century court rolls for Doncaster Archives; engineering records for the Mills Archive Trust and medical records of Richard Bright (1789-1858) for Norfolk Record Office. The Report also illustrates some great examples of past generosity with recipients ranging from the Fitzwilliam Museum to the Skye and Lochalsh Archives.

Arriving in mid-lockdown, the Report seemed to reflect a past world that might never come back. Covid-19 has brought about some rapid and unanticipated changes but, virus or no, manuscripts will continue their decay and the NMCT is open for business as usual to help delay that deterioration, as it has done for the past thirty years.

The next deadline for grant applications is **1 November** and full details of the application process and forms can be found on the website ([www.nmct.co.uk](http://www.nmct.co.uk)). Or if you would like to discuss a possible application, contact Nell Hoare on [info@nmct.co.uk](mailto:info@nmct.co.uk).

## CPD GRANTS REMINDER

The next deadline for the Anna Plowden/Clothworkers' Foundation CPD Grants is **14 September**.

Thanks to generous support from the Clothworkers' Foundation, the Anna Plowden Trust can now offer greatly increased support for CPD opportunities for practising

conservators in the UK. Grants are given towards the cost of short courses and of attending conferences (students and interns are not eligible to apply for CPD grants).

All the information you need to apply can be found on the website ([www.annaplowdentrust.org.uk](http://www.annaplowdentrust.org.uk)), where there is also an update about the implications of Covid-19 on your application or on a grant you have already been awarded. The Trust is being very flexible with those awarded grants, including honouring the grant if the conference is postponed until next year or is to be online.

## NEWS FROM THE GROUPS & NETWORKS

### Archaeology Group

The Archaeology Group Twitter conference, which was held on 29 May, was a great success. We hope everyone enjoyed it as much as we did! We would like to say a huge thank you to all the speakers, everyone who participated and Archaeology Group committee members Vicky Garlick, Charlotte Wilkinson, Luisa Duarte and Emma Smith who organised the event. If you would like to read any of the papers on Archaeological Conservation in the 21st Century please follow #IconArchTC on Twitter. A full review of the event can be found in the review section of this issue.

The Archaeology Group 2020 AGM will be held in October. The AGM will be at the Museum of London Docklands and focus on the new exhibition *Haverling Hoard: A Bronze Age Mystery*. During the day there will be the opportunity to visit the exhibition and a talk from the lead Conservator and Curator. Unearthed in Haverling, this is the largest ever Bronze Age hoard to be discovered in London and includes axe heads, spearheads, fragments of swords, daggers and knives alongside some other unusual objects rarely found in the UK. This makes up a total of 453 bronze objects, dating between c.900 and c.800 BC, which will be on display as part of the exhibition. Further information on the event will be released in due course.

Progress on the fourth edition of *First Aid for Finds* continues under the direction of the editor, Sarah Watkins-Kenney, working with an editorial team. The aim is to publish a hard copy that will be practical for use in the field; this will be done jointly with RESCUE. Reviewers based in all areas of the UK will be approached later this year for comments and suggestions. Publication is planned for 2021.

Suggestions for future events and workshops are always welcome. Please watch for further announcements on Iconnect, Twitter (@ICONArchaeology) and the website. We always love to hear about your archaeological conservation projects big or small; please tag us in your posts and follow us on Twitter to see what everyone else is up to!

**Charlotte Wilkinson**

Icon AG Communications Rep



Icon's Book and Paper Group Committee: From l to r & top to bottom: :Leah Humenuck, Abby Bainbridge, Holly Smith, William Bennett, Arantza Dobbels, Victoria Haddock, Kiri Douglas, Sarah Bailey, Kirstin Norwood and Gloria Conti

### Book and Paper Group

The Book & Paper Group have hosted their first virtual AGM—not perhaps as large a thing to get our heads around as it would have been originally, as we have all grown well used to meeting remotely over the last eighteen months or so anyway. I was pleased that this allowed our committee members in North America to attend (we're up to three now!) as well as Icon members outside an easy commute to London where we would otherwise hold the AGM.

We had ninety nine people register, and sixty four attend—from the UK, US, Australia, Ireland, Canada, and Brazil (massive bonus points to that member in Australia: that couldn't have been a comfortable time difference). We think this is around about how many people attended in person last year, if not a bit more, and definitely more than two years ago, so we count this as a really successful turn-out! The papers from the AGM are on the BPG section of the Icon website, if you missed it and want to check them out. Leah Humenuck ran an experimental virtual pub quiz after the meeting which was really fun, so look out for more in the future.

We also announced the two recipients of this year's Fred Bearman Research Grant and they gave short introductions to their projects following the AGM. The selection panel was

impressed by the applications this year and there were many interesting projects proposed; in the end, the vote was so close between these two that we decided to award it to both of them. Both were particularly compelling because we thought they might appeal to non-conservators as well, helping to boost the profile of the grant and the outreach potential of the committee. The two recipients are Kiri Douglas (who was chosen before she applied to join the committee!) for research on synthetic paper, and Melissa Tedone for research into arsenic green pigmentation of publisher's binding bookcloth.

Partly for pandemic reasons, and partly for logistical reasons, we are also changing the timeline of the Fred Bearman Research Grant and Memorial Lecture. We had been asking for applications in December, notifying recipients in February-ish, asking them to speak at the AGM briefly in March/April, and then give a full lecture on their finished research the following November/December—however, we are going to shift the December events later. So for those of you who might be thinking about applying for next year, the call for applications won't go out in December 2020, but probably spring 2021. We will send out the details when we settle them.

*Abby Bainbridge*, BPG Chair



Website: <https://icon.org.uk/groups/book-paper>  
Blog: <https://iconbpg.wordpress.com/>  
Events: <https://icon.org.uk/events?group=book-paper>  
Instagram:  
<https://www.instagram.com/iconbookandpaper/?hl=en>  
Twitter: [https://twitter.com/iconbook\\_paper?lang=en](https://twitter.com/iconbook_paper?lang=en)

## Ceramics and Glass Group

### Committee Elections: call for nominations 2020/2021

The Icon Ceramics and Glass Group (CGG) is seeking a Publications Editor, Student Representative, and two Events Coordinators to begin as soon as possible.

This is an exciting opportunity to influence and contribute to the creation and running of events, training and networking opportunities for the Ceramics and Glass Conservation community. The Committee meets approximately four times each year, both online and in person, and some work from home is required. Travel expenses for Committee meetings are refundable.

#### Requirements of the roles

##### *Publications Editor*

- Acts as liaison between the Icon office for Iconnect Listings and other emails to members, Icon News Editor and Listings Editor and the Committee
- Notifies all committee members of submission deadlines in good time
- Receives and edits submissions, from within the committee and externally, liaising with authors, changing to required Icon format
- Updates website with new information (training provided by Icon)

##### *Events Co-ordinator(s)*

- Organises short visits to collections of ceramics and glass/other places of interest
- Leads on organisation for conferences and workshops
- Sends promotional material to Website Coordinator to promote through Icon News/Iconnect/website to ensure attendance, and student/graduate liaison

##### *Student/Graduate Liaison*

- Maintains and build relations with ceramic/glass conservation training providers in the UK and abroad, encouraging students to join
- Acts as liaison between students currently studying ceramic/glass conservation and the committee
- Where possible liaises with Student/Graduate Liaisons from other Icon committees

#### How to apply

To express interest in joining the committee please email Emily Thomas at [cgg@icon.org.uk](mailto:cgg@icon.org.uk). The deadline for self-nominations is 16 August 2020 but we encourage early applications. A vote will take place at the AGM on 12 September 2020.

## Annual General Meeting

The Ceramics and Glass AGM will be held on Saturday 12 September 2020. Because of Covid 19, the meeting will be hosted via Zoom and will include an exciting talk on mount-making by Phil Jell from the British Museum. All the details will be available via Iconnect.

## Nigel Williams Prize

We are delighted to announce that applications are now being accepted for the 2021 edition of the Nigel William Prize. The awarding panel will be composed of the head judge Loretta Hogan (British Museum), Vicky Oakley (Victoria and Albert Museum) and Beky Davies (Private Conservator based in Somerset).

We look forward to receiving applications on the fascinating work being undertaken in the conservation of ceramics, glass and related materials. For all the details about the prize and the application process visit the Ceramics and Glass Group page on the Icon website.



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\*10% off Icon members code ICN010

## Heritage Science Group

### Committee meetings

The HSG committee hosted their first online meeting on 28 May 2020, where the members discussed details of the organisation of their AGM and Guest Lecture, Heritage Science webinar series and future training and events.

### AGM and guest talk

The HSG AGM took place on 1 July at 3pm via Zoom, and the minutes are available on the Group's website. It was followed by a guest lecture by Paola Ricciardi, Senior Research Scientist at the Fitzwilliam Museum in Cambridge, entitled 'Psyche on a smartphone: shining new light on a Florentine Renaissance masterpiece'. The lecture was included in the *Conservation: Together at Home* webinar series, and the recording can be found on the Group's pages of the Icon website.

### Heritage Science Webinars

The HSG contributed to the *Conservation: Together at Home* webinar series with Heritage Science Wednesdays over the summer. The talks address a broad range of topics:

- Where the arts meet science: Keeping the Mary Rose shipshape (Eleanor Schofield)
- Metal Soaps in Art: from first observations towards a deeper understanding (Katrien Keune)
- Creating constructive pathways to aid ethical sampling decisions in scientific research for cultural heritage (Anita Quye)
- 100 years of Scientific Research at the British Museum (Carl Heron)
- Using online and open apps for preventive conservation (Josep Grau-Bové)
- Corrosion and conservation of the Mary Rose cast iron cannon shot (Hayley Simon)
- Sustainability and Cultural Heritage: Our Past and Our Future (Caitlin Southwick)
- Applying alkaline nanoparticles to deacidify alum-treated wood (Susan Braovac & Fabrizio Andriulo)
- National Heritage Science Forum's members meeting (Skilled and Diverse Heritage Science Communities Working Group)
- Heritage Science in the Archive – conservation, computation, and collaboration (Lora Angelova)

The recordings of the talks can be seen on the Group's website: <https://icon.org.uk/groups/heritage-science/webinar-series>

### Events

The HSG organised a training event on coding for Heritage Science data analysis. A review of this event will be given in the next issue. The Group are also planning a networking event for PhD students, more details will be given soon.

### Keeping in touch

Finally, keep an eye out for our notices in Iconnect, on our webpages, and on Twitter (@ICONSci) and get in touch via our Group email address ([hsg@icon.org.uk](mailto:hsg@icon.org.uk)) if you would like to become more involved in the Group's activities.

**Lucia Pereira-Pardo**

HSG Committee Communications Officer

### Paintings Group

In June and July the Paintings Group have been trialling virtual talks with Christine Bourron talking about the impact of Covid-19 on the art market on 11 June, and on 14 July Michael Duffy from MOMA in New York talking about the rediscovery of a painting by Rene Magritte, long thought lost. These were the first two online evening talks that will, for the foreseeable future, take over from our London-based talks. Being online enables us to reach Icon members and non-members alike all over the country. Cheese and wine pairing suggestions were sent to Icon members, along with the link to join the talk, after they had registered for the talk. We hope that you all enjoyed the talks and the accompanying beverage and food of your choice!

## NIGEL WILLIAMS PRIZE 2021

Call for applications  
deadline 2 February 2021



For more info  
please visit Icon's Ceramics&Glass group pages  
or email [nwp@icon.org.uk](mailto:nwp@icon.org.uk)

The postprints from Icon's Paintings Group conference 'Wet Paint - Interactions between Water and Paintings', held in Edinburgh on 12 October 2018, are now available for purchase at the reduced price of £17.20 (including postage within the UK). Payment by BACS and cheques will be accepted. Please email Julia Jablonska at [icon.paintingsgroup@googlemail.com](mailto:icon.paintingsgroup@googlemail.com) to place an order.

Icon Paintings Group are aware that there will be many short- and long-term impacts on our members (particularly those who are freelance or self-employed) as a result of the Covid-19 crisis. Please make sure to check the Icon website which is being regularly updated with information and advice.

#### **Icon Paintings Group Committee**

[icon.paintingsgroup@googlemail.com](mailto:icon.paintingsgroup@googlemail.com)  
@IconPaintings

#### **Photographic Materials Group**

As a result of the coronavirus pandemic, the PhMG's summer event - a workshop and lecture on the conservation of colour slides - has unfortunately been postponed. The event will hopefully be rescheduled for February or March 2021, depending on the situation in the coming months. Please look out for more information on our Facebook page and Twitter feed, as well as on our Icon website Group page.

The PhMG joined many other Icon Groups for the *Conservation: Together at Home* webinar series, with great contributions on a variety of topics. Recorded versions of the webinars are still available on the Icon website: <https://icon.org.uk/groups/book-paper/conservation-together-at-home-webinar-series>

As always, you can contact the committee via our Group email ([phmg@icon.org.uk](mailto:phmg@icon.org.uk)), Twitter (@ICONPhMG) or Facebook (<https://www.facebook.com/ICONPhMG/>).

#### **Stained Glass Group**

During these unprecedented times, the SGG Committee has continued to work behind the scenes to reorganise events that we had planned for this year. As with the rest of the Icon Groups, we are monitoring the Government information very carefully, in order to ascertain when it might be realistic to hold another training or conference day. On current guidance, the earliest this is likely to happen would be late autumn or early next year.

However, the SGG will hold its AGM in October or November and we will advertise closer to the time which format this will take. Last year we combined our AGM with a very successful conference day at Gloucester Cathedral. Whilst this year's meeting will most likely take place online, our aim is to include some interesting talks and/or some aspect of CPD/training.

Icon is already running an excellent series of webinars, on a variety of conservation subjects, via the webpage

*Conservation: Together at Home Webinar Series*. The SGG Committee would be delighted to hear from any members who would like to represent our Group and make a presentation via this forum. Similarly we would like to involve as many members in the AGM session as possible, so please do email us at the address below to get involved. Information about the AGM event will be advertised as it becomes available via Iconnect messages, the SGG Icon webpage and via our Facebook and Twitter pages (details of which can be found on our webpage).

We have also joined the Icon online forum on Discord, access to which can be found on the Icon website within the Resources section: Icon-online-community. We would encourage our Group members to join this community and hope that it will provide the opportunity for more engagement and discussions about what events and support people would like to see from the Stained Glass Group.

Lastly, we would like to thank the Icon main office for the fantastic work they have undertaken during this pandemic. They have set up many helpful pages under the tab Coronavirus Guidance, within the Resources section of the website. Of particular interest to stained glass practitioners is the page concerning changes to working practices onsite, Coronavirus: Historic Buildings and Sites; and the Business Support Page which lists funding options for those whose livelihood has been badly affected.

We wish everyone a safe, happy and healthy summer and hope to hear from you soon.  
[iconstainedglass@gmail.com](mailto:iconstainedglass@gmail.com)

**Sarah Jarron,**

Chair of the Stained Glass Group

#### **Icon Textile Group**

The Textile Group would like to once again send our best wishes to all our members during what has surely been a testing time for many working in the heritage and conservation sector during the coronavirus pandemic. Like us, we hope you have found joy in many video calls, the power of the outdoors and the occasional bit of sewing, knitting, machining (scrub making), crocheting, etc!

If you haven't already seen them, please take a look at our 'Isolation Activities' page on the Textile Group section of the Icon website, posted every Friday for the coming week, you'll be sure to find a diverse and interesting range of digital activities to keep you occupied and in touch during this uncertain time.

The Group are also pleased to announce that the postprints for the 'Conservation in Colour' symposium held in Manchester last year have been edited and are available to all members on the Textile Group section of the Icon website, just click on the 'Conference Postprints' section.



## Group Events

Textile Group AGM 2020 – Our annual general meeting took place on 10 June via Zoom® this year, and what a new experience it was! We were pleased to be joined by many familiar faces, albeit on a screen, plus a panel of speakers representing museums, institutions, private practice and training who each talked for five minutes about their experiences during the pandemic. There was also a round up of Textile Group events and general AGM business. The next issue of Icon News will feature a review of the 'virtual' AGM.

Emerging Professionals Event – Icon Textiles Group is to host a two-day event in Glasgow, set for spring 2021, aimed at emerging conservation professionals. 'Emerging Professionals: Making a Career in Conservation' will include tours, talks and breakout sessions on numerous topics to help emerging professionals during and after university, from interviews, grants and funding, starting work, internships, contract work, working abroad to publishing and conferences to name but a few.

If you are interested in contributing to this event by leading a workshop or presenting a paper, please contact Kelly Grimshaw on [kellygrimshaw@hotmail.co.uk](mailto:kellygrimshaw@hotmail.co.uk) using 'Icon Emerging Professionals Event'. Booking & registration will open Autumn 2020.

Icon Textiles Group Spring Forum 2021 – 'Textile Conservation: Out in the Open – The challenges of Displaying & Conserving Textiles on Open Display'. The Group is busy preparing a programme of events for their Spring Forum in 2021. We welcome abstracts for papers concerning the challenges of conserving and displaying textiles on open display. Abstracts on a wide range of issues potentially include: conservators on public display, contemporary art and installations, events in historic spaces, textiles in historic buildings, mixed media, mounting and mounting materials, museum open display, preventive conservations and IPM, touring exhibitions and loans. If you would like to submit an abstract for the forum, please send no more than 300 words in English, excluding title and author contact information (name, title, mailing address, email, telephone) to Hannah Sutherland: [hannah.sutherland@hotmail.com](mailto:hannah.sutherland@hotmail.com). The chosen authors will be notified in September 2020 and preprints will be expected by the end of December 2020. Registration and booking details will be posted in the autumn, including details of accompanying tours and workshops.

## Other Dates & Amendments

Inevitably, due to the Coronavirus outbreak many planned conferences & events have been cancelled or postponed. Please see details of these changes below but be sure to check with the relevant organisation due to ever-changing circumstances.

Following this year's postponement of The American Institute for Conservation's (AIC) 48th Annual Meeting in Salt Lake City, the next meeting has been scheduled to take place in Jacksonville, FL, in 2021, followed by Los Angeles in 2022.

The Association of Dress Historians (ADH) have two conferences for 2020, the first being the Annual New Research in Dress History Conference, which will be held on 19-20 August 2020 in Gothenburg, Sweden. Secondly, the International Conference of Dress Historians, which this year is titled *Costume Drama: A History of Clothes for Stage and Screen*, will be held on 2 November 2020 in Bristol. Please also check the ADH website for two call papers for conferences in 2021. 1st December 2020 is the call for papers deadline for The International Conference of Dress Historians, which will be held on 21-22 October 2021 in Turin, Italy. The title and theme of this conference is 'Curation and Conservation: Dress and Textiles in Museums'.

Following its postponement from June, a new date has not yet been confirmed for The Centre for the History of Retailing & Distribution (CHORD) event 'Public Textiles and Dress in Museums and Historic Houses: Textiles and Dress for Display and Show'.

Also postponed from June, The Costume Society conference 'Clothing on Paper' will take place instead on a date to be confirmed in 2022 in Bristol. The Society is working on its 2021 conference 'Clothes Maketh The Man', on a date to be confirmed in Manchester.

The 19th ICOM-CC Triennial Conference: 'Transcending Boundaries: Integrated Approaches to Conservation' is postponed from September 2020 in Beijing, to a new date in April/May 2021.

## Keeping in touch

Due to publication deadlines, it is not always possible to mention all events so please check the Icon website, Facebook page, Twitter feed and Iconnect for details. If you have anything that you would like mentioned in our communications please contact the Textile Group's News Editor [Terri.Dewhurst@nationaltrust.org.uk](mailto:Terri.Dewhurst@nationaltrust.org.uk)

## Writing for Icon News

If you would like to submit an article or review an event, details of how to write for Icon News can be found here: <https://icon.org.uk/what-is-conservation/writing-icon> or by contacting Terri Dewhurst.

## LINKED CONSERVATION DATA PROJECT NEWS

The Linked Conservation Data consortium (LCD) ([www.ligatus.org.uk/lcd/](http://www.ligatus.org.uk/lcd/)) has continued its work developing tools and resources for Conservators, Conservation Scientists and others interested in sharing Conservation Documentation using Linked Data. Building on work completed during the first grant period (2019-2020), the project has received a second grant from the UK's Arts and Humanities Research Council (AHRC) in February 2020. Consortium members have joined working groups on specific topics: modelling, terminology, pilot, education and policy.

For modelling, we are utilizing the CIDOC-CRM ontology ([www.cidoc-crm.org/](http://www.cidoc-crm.org/)) to describe conservation data. The modelling working group has been preparing material to submit to the CIDOC-CRM Special Interest Group for approval. This includes the addition and refinement of documentation concepts used by Conservators. This group is supported by Stephen Stead who joined LCD in April 2020 and who has many years of experience of data modelling, in particular with the CIDOC-CRM.

The terminology working group has further been discussing best practices on building and using vocabularies in conservation as well as publishing aligned vocabularies, i.e. vocabularies whose synonyms have been matched and can be used interchangeably. A draft version of the terminology guidelines is now out and we would welcome feedback prior to the final version. Feedback can be provided either through the IIC's community platform or directly to consortium members. The draft can be found on the LCD website ([www.ligatus.org.uk/lcd/output/193](http://www.ligatus.org.uk/lcd/output/193)).

In May 2020, consortium members gathered together for an online meeting on promoting the use of conservation data in education programmes in memory organisations (museums, galleries, libraries and archives) aimed at broader audiences. Recordings from this webinar are available on the project website ([www.ligatus.org.uk/lcd/meeting/phase-2/education](http://www.ligatus.org.uk/lcd/meeting/phase-2/education)). We are also working with representatives from our three main professional groups - IIC, Icon, and AIC - on developing policy guidance on the use of Linked Data for Conservation Documentation. We hope to present our work in this area at the IIC congress in Edinburgh in November 2020.

Finally, four institutions are participating in a pilot to use Linked Data for a subset of their conservation treatment



documentation. The Bodleian Library, Oxford; the Library of Congress; the National Archives (UK); and Stanford Libraries have selected between thirty and fifty treatment reports from each organisation, spanning over fifty years of documenting repair of books with detached boards (The John Rylands library is also contributing to this effort). The goal is to model this data using the CIDOC-CRM along with aligned local vocabularies. Once this is accomplished we will test how the resulting summarised data can answer research questions in book conservation. Leading this effort is Alberto Campagnolo, who also joined LCD in April 2020.

Looking ahead, we will be applying for an additional round of funding from the AHRC and for the first time from the NEH for US partners. In our next round we hope to continue to extend our work and involve greater numbers of partners and projects.

*Athanasios Velios & Kristen St.John*  
Project leads

## **STANDARDS: WORKING GROUP 13 CONCLUDES**

'Send us the last "normal" photo on your phone' said the BBC. They wanted images taken just before the world went into lockdown, in that time before everything was different, before everything changed. 'What's the story behind the photo? What does it signify? Did you know what was about to happen?' they asked.

My last two 'normal' photographs of Covid 19 innocence are dated 6 March 2020. They were taken at the end of a long day working on a European conservation standard. What we notice now of course is how close everybody is to each other. But look closer and perhaps you can see the wearied camaraderie of the group and perhaps a hint of a sense of achievement.

The two photographs mark the day when after four years of meetings Working Group 13 had finally completed their task to produce a conservation standard for Architectural Paint Research (APR). The working group is a sub-group of the Technical Committee CEN/TC 346 which is overseeing the production of a raft of standards for the Conservation of Cultural Heritage.

The meeting was held in Stockholm. Two days before, on the evening we arrived, we had arranged to meet for dinner at one of the oldest restaurants in the Old Town. It was a chilly night, ice was forming on the surface of the water in the harbour and so the bar was welcomingly warm. It was noisy and very crowded.

I spotted Maria and Lisa, they waved me over and I squeezed onto their bench to sit beside them. They had news that Jean-Marc had just landed and planned to come straight to the restaurant, sadly Mia could not make it but would see us tomorrow, of course. Pip had just texted from her hotel and there was Kathrin just coming through the door, followed by Edwin - no kissing, no hugs, we laughed.



The Last Gathering of Working Group 13. L – r: Lisa Nilsen & Kathrin Hinrichs Degerblad (Sweden), Stephan Brunnert (Germany), Edwin Verweij (Norway), Phillipa McDonnel (UK), Witold Nowik (France)

We did elbow bumps – remember them? Stephan and Witold were running late and would join us when they could and had said we should not wait for them but to eat. Beers were ordered and handed across.

'And Ernesto and Luciana where are they?'

'Ah, they decided not to come in the end.'

'But why? They live in Rome; the outbreak was up in the north of Italy.'

That was another age.

Do not think that being a member of a standards working group is just a matter of foreign travel and jolly socialising. It involves a lot of hard work writing texts, sharing drafts from national mirror groups, collating comments, and meeting tight deadlines. I am self-employed, the work is unpaid, and travel grants barely cover the basic expenses of travel and accommodation.

The face to face meetings of all standards working groups are essentially two-day sessions of headache inducing on-screen editing of the text and addressing pages and pages of international comments. At times, tempers fray and darken - be warned. Working Group 13 is composed of experts from seven countries (France, Germany, Italy, Finland, Norway, Sweden and the UK). It has met nine times in various European cities since 2016. In 2018 the group almost abandoned the project when an early draft of the APR standard was rejected in the public ballot, but members decided to reconvene and try again.

Standards are important. APR is a developing conservation discipline. Since 2000 there have been several international attempts to produce a standard for APR which, lacking a defined core commonality, is in danger of becoming 'all things to all men', at the mercy of ill-informed, cost-cutting clients.

The main difficulty of producing an APR standard, the members of WG/13 were to discover at their very first

meeting, is that northern and southern Europe have two distinctly differing approaches to APR. When negotiations began the WG/13 was a collection of opposing camps, each insisting that their methodology must be adopted. Over time the group evolved to become unified and learned to understand and respect different working methods. That process was assisted by spending time working together and also sharing meals and socialising together. I do not think that nine Zoom meetings could ever have achieved this level of bonding and understanding. This is not to say that WG/13 had not already made good use of various virtual platforms for ad hoc meetings and smaller 'home-work' groups.

The document (TC346 W1) is currently submitted to the CEN Enquiry. A public ballot is due to open June/July 2020 and fingers crossed that the document will be ratified as a European conservation standard. Sad to say that the final meeting of WG/13 due to be held in Marseille in November 2020 will probably be a Teams or Zoom meeting. We will not be able to say our goodbyes in person, but we will have published our Pre-Covid-19 APR standard.

In the last issue of Icon News David Leigh flagged up the breakthrough in reduced pricing of conservation standards and the opportunity to buy fourteen standards in *DIN Handbook 410: Conservation of Cultural Heritage 2*. It is hoped that the standards currently in development such as the APR Standard and the conservation Procurement Standard will be included in further compilation editions, but they will always be available from the British Standards Institute shop.

**Helen Hughes ACR**

[www.helenhughes-hirc.com](http://www.helenhughes-hirc.com)





THE INSTITUTE OF CONSERVATION

## Notice of 16th Annual General Meeting

Notice is hereby given that the 16th Annual General Meeting of the Institute of Conservation will be held on Wednesday 21st October at 5.00 p.m. at a venue to be announced later to consider the following business:

**Ordinary Resolution 1:** To receive the Trustees' Annual Report and Accounts for the year ending 31st March 2020.

**Ordinary Resolution 2:** To authorise the Trustees to appoint the auditors to serve until the end of the next Annual General Meeting and to authorise the Trustees to decide the remuneration to be paid to the auditors.

A member of the Institute of Conservation who is entitled to attend and vote at the meeting (being a paid up Accredited, Pathway, Associate, Student or Emeritus Member) is entitled to appoint a proxy, who need not be a member of the Institute of Conservation, to attend and vote instead of them. Proxies may be appointed via the web portal or to the registered office so long as they are received before 5.00 p.m. on Monday 19 October. Those received later will not be counted.

If you are eligible to vote you will be sent an email by our election support provider mi-voice inviting you to access the Proxy Notice enabling you to register your instructions on-line. If you do not have an email address, please phone the mi-voice office at 0845 241 4148.

Members and non-members are cordially invited to attend the Icon Annual Lecture, which will take place at 2.00 pm on 21 October 2020. Full details can be found on the Icon website: <https://icon.org.uk/events/icon-annual-lecture-2020>

**Simon Green,  
Company Secretary**

3rd June 2020

# people

## British Museum appointments

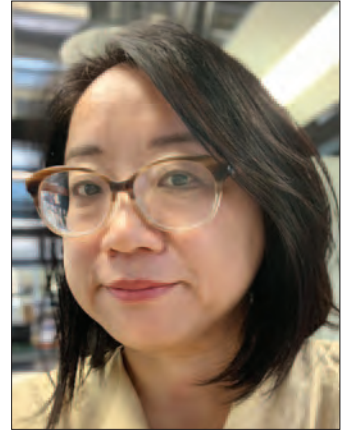


**Verena Kotonski ACR** was appointed Head of Organic Conservation at the British Museum in April. After initial training in cabinet making and furniture conservation prior to her university studies, Verena graduated from the Cologne Institute of Conservation Sciences in 2007. During stints at various museums in Germany, Austria and Canada, as well as working as Assistant Artefact Conservator at National Museums Scotland, she gained extensive experience in the care and conservation of indigenous and world cultures collections.

In 2018, Verena completed a MRes (SEAHA) degree at the UCL Institute of Sustainable Heritage, investigating the effects of vibration on 3D organic artefacts. This continues to be her particular research interest, alongside damage monitoring methods and vibration isolation techniques.

Verena has been with the BM since 2012 in the roles of Specialist and Senior Conservator. She especially enjoys working in multidisciplinary teams to tackle collection care challenges, promoting conservation to the public and provide training to the next generation of conservators.

Verena is a member of the Icon Ethnography Group committee.



In March this year, **Megumi Mizumura ACR** took up a new position as Senior Paper Conservator in the Western Art on Paper section. She has been working at the British Museum for over thirteen years.

After acquiring a MA in Conservation specialising in art on paper at Northumbria University and a BA in Conservation at Camberwell College of Arts, she has worked in both specialist areas, Western paper and Asian paintings, in various countries such as Japan, Norway, Turkey, Vietnam and USA. This included the Kress fellowship at the Northeast Document Conservation Center and the Mellon fellowship at the Conservation Center for Art & Historic Artifacts.

Megumi is interested in new technologies (e.g. hydrogels and nanocellulose) and the traditional materials and skills adapted from Japanese paintings conservation. She gives workshops on Japanese paper and wheat starch paste for students and peers, including talks on the topic at international conservation conferences. She has completed the Icon online Leadership Launchpad Mastermind Programme early this year with support from the Anna Plowden Trust



**Karen Birkhölzer** was recently appointed Head of Inorganic Conservation at the British Museum. This section comprises of teams of Stone, Wall Painting and Mosaic conservators, Ceramic, Glass and Metals conservators and a Facsimile service.

Karen graduated from the City & Guilds of London Art School Sculpture Conservation course in 1993, then joined the British Museum, where for over twenty-five years, she has demonstrated a strong commitment to the care of the Museum's collection.

As a specialist for Egyptian wall paintings she led a team of conservators in the eight-year project of conserving the wall fragments from the tomb chapel of Nebamun. The work was published in *The Nebamun Wall Paintings: Conservation, Scientific Analysis and Redisplay at the British Museum* (Archetype 2008).

Karen has continuously been sharing her expertise with colleagues as part of national and international consultancy projects. More recently she has been instrumental in reshaping the conservation procedures to ensure the efficient delivery of practical and preventive conservation advice in support of the Museum's extensive loans and exhibition programme.

## New ACRs

### The Accreditation Committee approved the accreditation of the following conservator-restorers at its meeting in April 2020

Congratulations to all these new ACRs!

**Anna Barnes**  
Preventive Conservation

**Melanie Caldwell**  
Easel Paintings

**Yannick Chastang**  
Furniture and Decorative Surfaces

**Sarah Coggins**  
Preventive Conservation

**Joanna Cook**  
Preventive Conservation

**Alison Foster**  
Objects & Conservation Management

**Sebastian Foxley**  
Objects Conservation

**Sarah Lambarth**  
Preventive Conservation

**Tatiana Marasco**  
Preventive Conservation

**Lizzie Miller**  
Objects Conservation

**Lauren Piper**  
Arms and Armour

**Anna Starkey**  
Preventive Conservation

**Anna Zwagerman**  
Preventive Conservation

## Welcome to these new members

We would like to extend a very warm welcome to all those who joined us in April and May 2020. We hope to see you at an Icon event soon!

**Gretchen Allen**  
Maynooth University  
Associate

**Susi Barbarossa**  
Harvard University  
Supporter

**Peter Booth**  
Student

**Lynda Bunting**  
AATA Online  
Associate

**Marie Cambolieu**  
Student

**Kathleen Cormack**  
Student

**Carey Cowham**  
Supporter

**Jana Dambrogio**  
Massachusetts Institute of Technology  
Associate

**Erinn Dunlea**  
Supporter

**Professor Adam Gibson**  
UCL  
Associate

**Robin Hanson**  
Cleveland Museum of Art  
Associate

**Joel Hopkinson**  
Pathway

**Marina Horvath**  
National Film and Sound Archive of Australia  
Student

**Kasia Howard**  
Supporter

**Vivienne Kelly**  
Student

**Tony King**  
Durham University  
Pathway

**Lauren La Tulip**  
Supporter

**Katica Laza**  
Supporter

**Perrine LeSaux**  
Student

**Conor Meehan**  
Triskele Conservation Ltd  
Associate

**Shoun Obana**  
Student

**Jacek Olender**  
University of Glasgow  
Associate

**Sherry Phillips**  
Art Gallery of Ontario  
Associate

**Rachel Roberts**  
Supporter

**Joshua Seymour**  
Cardiff University  
Student

**Asti Sherring**  
Art Gallery NSW  
Student

**Simeon Tsvetkov**  
Durham University  
Student

**Han Zhou**  
Student

## In memory



**Eddie Sinclair** 3 August 1956 - 30 January 2020

Eddie's career started in 1979 as an apprentice stone mason. This was an unusual choice, and I suspect that, on her first day in the yard, the appearance of a slim young woman, a graduate from Exeter University, would have caused quite a stir. Eddie trained as a banker mason and Peter Dare the cathedral master mason remembers her carving a buttress and pinnacle at the south end of the west front which included a portrait of Mike, her husband.

When Anna Hulbert arrived in the cathedral to conserve the nave bosses and a base coat for retouching was needed, they used M5 red. This would have been an early lesson for Eddie as it involved collecting stone from the cutting for the M5 extension through the hills on the other side of the River Exe. Ground down and mixed with lead white for the priming coat, this stone matches the primer so often found on painting on Devon roodscreens. This period of work with Anna was critical to Eddie's life's work in paint conservation.

Whilst working on the west front as a mason Eddie was also recording the traces of

paint found on the stonework. When the conservation work was completed Eddie produced her reconstruction of the west front as originally coloured. It was a revelation of international importance as the extent of decoration on external stonework was just not known at that time. It formed a theme throughout Eddie's life as she was the renowned expert (she would hate the term) and went on to investigate and produce similar reconstructions for Salisbury cathedral and was working on what might have become her most important, similar project at Lincoln Cathedral.

Now an established conservator, Eddie continued working on various projects in the cathedral from reconstructing wall paintings to conserving the paintings we all see if sitting in the nave, the 17th century paintings in the gallery front of the pulpitum.

Following on from Anna, much of Eddie's life was spent looking after the paint on Devon's roodscreens. Uffculme, Holne, Combe Martin, Buckland in the Moor, South Pool, East Portlemouth, South Milton, Bridford, Alphington, Ugborough were just some of them. Many conservators helped Eddie but she worked alone for much of the time and these screens will always be a memorial to her. Most are in isolated churches and for the visitor to enter and suddenly see the blazing colour of the screen and pulpit at Holne in the middle of Dartmoor - this will be something they will remember for ever.

Most of her work in these parish churches was carried out in the summer as funding only became available year by

year and it was too cold to work in unheated churches in the winter. So she could be staying on site for years at a time and became almost a member of the community, as the messages sent to me recently reveal.

During this work Eddie found many precious pigments used to make these paints five hundred years ago and her artistic talent led her to use them in a modern way. She held an exhibition showing all sorts of images painted with the original techniques and colours but to her own designs. This culminated in the private commission to paint a modern corbel based on the nave corbels at Exeter cathedral. To celebrate the completion of the project her client photoshopped a wonderful spoof of him and Eddie in the front seats of the popemobile, with her corbel on the Pope's stand behind and with a police motorcade and thousands cheering - a wonderful image with Eddie grinning from ear to ear.

Eddie went to art school in Watford before she came to Exeter so it is fascinating how all these pieces of training and education came together over the years.

A very special job for Eddie, given her Jewish family background, was the conservation of the Ark in the Synagogue at Exeter, the oldest in the country outside London. She then wrote extensively on the Ark in the Synagogues at Plymouth and Cheltenham.

As though this was not enough, Eddie gave numerous talks to both local groups and international conferences and she published chapters in the latest books on paint conservation. Both were on

colour on Devon Roodscreens and followed on from conferences in Oslo and then Cambridge. Over a dozen other research articles appeared in academic journals from 1991 onwards. You only have to read them to hear Eddie as though she were beside you.

Her last contribution was to the book by Charles Tracy *Britain's Medieval Episcopal Thrones*. Although Duke Cosimo wrote home after a visit in the 17th century marvelling at the white marble throne in Exeter Cathedral, Eddie was the first to find fragments of colour all over it.

When I told Charles about Eddie he exclaimed in genuine admiration regarding her contribution 'She did us proud' - what a wonderful summary of everything she did. And the messages of memories from her colleagues tell of the affection in which she was held by all.

### **Hugh Harrison**

Based on the eulogy Hugh delivered at the funeral



## In memory



### Jennifer Marchant

26 December 1979 – 7 June 2020

After completing a degree in archaeological science at Sheffield University in 2001, Jenny worked in the heritage sector as a field archaeologist, a landscape archaeologist and a community archaeologist. But eight years later she changed direction and undertook an MA at Lincoln University in the Conservation of Historic Objects.

In April 2012, Jenny joined the Fitzwilliam Museum, University of Cambridge, taking up a six-month Icon/HLF internship in the examination and conservation of Egyptian coffins. At the conclusion of the internship, her rapidly growing expertise was retained as project conservator. Then, in July 2014, Jenny was appointed Conservator of Antiquities, a post she held until her premature death in June.

Jenny's considerable achievements and vibrant personality contributed to the work of the Museum and the profession and affected the lives of her colleagues in many ways.

From her internship work, she developed a real passion for the investigation and conservation of Egyptian

organic materials and relished spending April 2013 at the site of Tell el Amarna in Egypt with two Fitzwilliam colleagues, lifting and treating some of the most seriously deteriorated basketry and painted wood a conservator would never hope to encounter.

She became the backbone of the second phase of the Fitzwilliam's coffins work, which culminated in the 2016 exhibition *Death on the Nile: Uncovering the afterlife of ancient Egypt*. Jenny collated the earlier results, set up and carried out a great deal of the new work, contributed to the catalogue and supervised the antiquities conservation laboratory and its interns. Her unstinting support, awe-inspiring love of a list and cheerful determination, in addition to her research skills and conservation expertise, were crucial to the success of the show and the development of the subsequent website <https://egyptiancoffins.org>

Jenny's particular interest was in the structure and composition of the decorative surfaces on the coffins and she worked hard gathering new skills to support the investigations, in particular the use of UV-Vis-NIR Fibre Optic Reflectance Spectrometry (FORS) for the identification of pigments, waxes and oils and the use of Visible-light Induced Luminescence (VIL) photography in the identification of Egyptian blue pigment.

Unsurprisingly, given her precise and organized mind, another of Jenny's passions was documentation. Her memorable and refreshing talk at the University of Cambridge Museums *Science of Art* event in December 2018 began with

a slide of freshly laundered clothes billowing in the wind on a washing line and a warning that a small amount of conservation documentation dirty linen would be on show for the next twenty minutes. She was a founder member of Icon's Documentation Network and went on to become its chair. In the Museum, she started the project CONSERV'D to transform the conservation and scientific documentation procedures. In early 2018 she contributed her expertise to the AHRC-funded international project Linked Conservation Data where she led discussions on documenting the evaluation of conservation treatments.

These examples are just a snapshot of Jenny's contribution to research, conservation and collections care in the Museum and the wider profession. And, of course, there was so much more to her life.

She was a person of great principle, often asking challenging questions of managers and pointing out inconsistencies in the way colleagues were being treated. She became a passionate believer in the unfairness of the long-term employment of staff on short-term contracts. Her outstanding work with the Cambridge branch of the University and College Union (CUCU), from freezing on the picket lines in the USS pensions dispute of 2018 to becoming President of CUCU in 2019, has already been celebrated in a moving tribute (<http://www.ucu.cam.ac.uk/re-membering-jenny-marchant/>). Jenny had a deep sense of justice and was determined to bring about positive change in the world. She set a brilliant example.

As a trumpeter she was a key member of CSD Brass, regularly performing on her flugelhorn at concerts, occasionally as a soloist. She was a keen member of the Women's Institute, starting up a new branch in Cambridge very shortly after having first moved there. She was also a crafter of wide and varied talents, each year giving hand-made Christmas presents to colleagues.

Jenny was a fantastic colleague upon whom you could always depend. Equally willing to help others and learn from them, she always wanted to share credit. Her straightforward approach and good humour made things feel easy and her calm confidence was infectious. To many, Jenny was also a loyal friend. She knew how to listen, which made her very approachable, to talk to and to confide in. She truly cared about others, and often stood up for people who did not feel able to speak out.

Jenny was a very private person. She did not share widely the progress of her illness and many of her colleagues were unaware of the recurrence of her cancer until they received news of her death. Her loss at such a young age will be felt keenly in the Fitzwilliam and more widely, professionally and personally. She will be remembered with the greatest respect, affection and gratitude.

### Julie Dawson ACR

Head of Conservation  
Fitzwilliam Museum  
University of Cambridge

# OUR MUSEUM OF PLASTICS

## Committee members of Icon's Modern Materials Network invite you home to view their own special plastics

We all have our heirlooms, some objects we treasure a bit more than others. They are not necessarily valuable, but in their own way they are precious, as they have a story to tell. For some, their main interest and what makes the object special is the mystery of what it is created from. For Modern Materials Network (MMN) members, this fascination is frequently linked to – surprise! – some type of modern material.

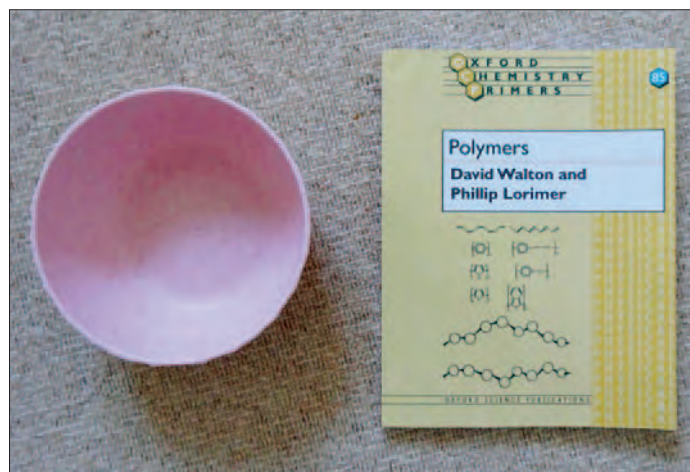
During lockdown, the MMN committee members have had some fun discovering and learning more about the modern materials in their homes. Here, they share some of their recent discoveries of interesting materials, and the process they went through to identify them:

### PINK BOWL

#### At home with Bhavesh Shah, Scientist (Environment), Victoria and Albert Museum

It is called 'organic' and yet looks and feels suspiciously like plastic. It is a relatively new addition to my kitchen, my partner's favourite 'breakfast bowl' from the German company Koziol's organic collection.

The pink bowl



Pink bowl with Bhavesh's university textbook on polymers: Oxford 'Polymers' Primer

With all the advantages of typical plastic kitchenware (lightweight, dishwasher safe, food safe), the material is actually made of 'a mixture of thermoplastic polypropylene and natural cellulose and is 100% recyclable'. This material can be melted, reused, and can apparently last decades.

Materials like the ones that make up this bowl highlight the growing range of hybrid natural and synthetic modern materials that are being manufactured with their lifecycle in mind. They avoid the old perception of plastics being harmful and damaging. As a consumer there seem to be no disadvantages to this ultra-eco-friendly material, which ticks all the boxes for practicality.

But when conserving these modern materials for the future, more time will be needed to study them, as 'lasts decades' is not long enough for many museum timelines. If you are wondering how to melt it down, you can send it back to the company and they will take it back for you, an illustration of the circular economy.

(<https://www.koziol-shop.de/organic-collection/>)

### COLLECTION OF PLASTIC WATCHES

#### At home with Fabiana Portoni, Preventive Conservator, The British Museum

From an early age, I was fascinated with the idea of wearing a small machine around my wrist that could tell time. All of my



Detail of degraded Mona Lisa watch



Watches with silicone rubber straps

watches have been well used – the more I liked a watch, the more I wore it, and the more I exposed it to heat, light radiation, sweat, and chemicals including perfume and sunscreen. This makes some of these watches really good examples of degraded plastics.

But what plastics are these watches made of?

In the 1980s and 1990s, it was common for plastic watches to have an ABS (Acrylonitrile butadiene styrene) body with PVC (Polyvinyl chloride) straps. One of my favourite ones was a Mona Lisa watch I got the first time I visited The Louvre Museum. The straps of the Mona Lisa watch are most likely made of PVC, a very versatile material but also one of the most vulnerable plastics. The strap has clearly yellowed which is characteristic of photochemical degradation in PVC. The strap is also sticky to the touch which is a sign of weeping plasticizers, another degradation process in PVC.

Not all watches in my collection have PVC straps, more recent ones have silicone rubber straps which are a lot more stable than PVC. Silicone rubber is very resistant to high temperatures, is inert and hypoallergenic but after constant wearing can also develop some physical damage such as tears.

Interestingly, there are now watches being created from recycled ocean plastic! I am looking forward to welcoming one of these into my collection and learning more about their degradation after use.

## DJANGO REINHARDT 78 RPM GRAMOPHONE RECORD

**At home with Vanessa Applebaum, Conservation and Collections Care Manager, Science Museum (Blythe House)**

When I married my partner, I also married into his vast collection of gramophone records. One of my favourites is the one you see pictured, a 78 rpm record of 'Porto Cabello' played by Django Reinhardt and his band. I will admit that I know very little about records, so it was fun to learn more about this one.

Gramophone and phonograph records were first produced in the latter portion of the 19th century. Some records were discs made from hard rubber, whereas others were cylinders produced from early celluloid plastics.

At the end of the 19th century, 78 rpm disc records began to be made from a combination of shellac resin and fillers. Typically, it was a 1:2 ratio of shellac to filler, with the most common being crushed slate or limestone. These shellac-based discs were manufactured until the 1960s, but vinyl (short for polyvinyl chloride) in combination with stabilisers and fillers also became a very popular material for record production. From my reading, it seemed like the Django Reinhardt record had to be made from either shellac resin with fillers or vinyl with fillers.



To help make my decision, I looked up the record number. I discovered that this particular record (which from the label I could see was produced by Decca and is number 9242) was manufactured in France in 1947. There didn't seem to be a listing of the record's material, and in post-war 1947 both shellac and vinyl records were being made. So, I shifted from research to testing.

Unsurprisingly, my partner was unwilling to let me perform a Beilstein test on the record. The Beilstein test identifies the presence of organic halides in a material, which makes it a good test to determine whether a record is vinyl. Nevertheless, I can understand my partner's hesitation since the test requires a sample from the record and an open flame. Working in a museum, I appreciate that a very strong case needs to be made for destructive sampling, particularly from an object that is in good condition and is still functioning.

In the end, I decided to judge the material based on its haptic properties. First, I noted its hardness. The record is rigid and does not bend. I also tapped the record with my fingernail and observed a sound that was somewhat resonant. A record made of vinyl would have had a small amount of flexibility and a dull, muted sound when tapped. On the other hand, a record made of shellac is not bendable and returns a sharp sound, which is what I observed.

From this, I've come to the conclusion that this is indeed a

shellac record. Whether it is made from a filler of limestone or slate, I'm still not sure. But from my research I now know that shellac discs are more fragile than vinyl ones, so it will be more important than ever to ensure this gramophone collection is stored safely in a cool, dark place.

## GREEN JUICER

### At home with Arianna Francescutto Miro, Senior Sculpture Conservator, Victoria and Albert Museum

I spend a lot of time cooking and have a love for gadgets and appliances. I also have a passion for conservation and cannot help but analyse the materials that I have been surrounded by during lockdown.

I purchased this juicer more than ten years ago – it has seen better days. Upon assessing the condition of the plastic surface, the colour and translucency appear to have been severely affected.

I was originally attracted to the juicer's colour and simplicity, but I am now disturbed by the cloudy surface predominantly in the bowl.

I consulted the Plastic Identification Tool website by the Cultural Heritage Agency from the Netherlands to identify the polymer composition. By tracing the manufacturing method, it can lead to identifying what polymers are treated like that.

The 78 rpm gramophone record of Django Reinhardt and his band playing 'Porto Cabello'





The green juicer displaying signs of deterioration

There were no ejector pin marks visible that would indicate the object was pushed from a mould, nor were there any sprue pin marks, which would mean it was made by injection moulding. Instead, I found a singular seam line running through the edge of the object, which could indicate the object was vacuum formed. There are some bubbles trapped, which are common to vacuum forming processes.

Combined with visual analysis, I listened to the sound made by the plastic by tapping the surface to check what sort of sound was made. I immediately noticed a tinny, almost

Blooming on the tested area



metallic, sound. Similar to the sound made when tapping cd jewel cases. Is polystyrene the plastic I am looking at? A high-gloss, translucent polymer that can be dyed in bright colours and is widely used in food packaging and kitchen utilities.

Polystyrene is a thermoplastic polymer, highly sensitive to polar and non-polar solvents, for example acetone makes it bloom almost immediately upon contact. I then proceeded to spot test with my nail polish remover which only contained a deceiving 80% of acetone but I was hoping it would still work. This is something I would never do on an actual museum object, but the functionality of this kitchen utensil will not be altered if a small surface area is affected by the acetone.

The area I tested turned cloudy quite fast, I rinsed it using water and the alteration remained there after drying. I think this object is indeed made of polystyrene.

Now that I have another cloudy spot on my squeezer, I can reflect on what has caused it to bloom over normal usage. The first thing that came to me was the acidity of the fruits I have been squeezing: lemons and oranges – fruits with pH at around 2 and 3.3-4, respectively. Polystyrene is considered resistant to breakdown by many acids and bases, but I have two thoughts to consider.

First, because the citrus pulp gets trapped on the squeezer indentations, I have been cleaning it quite harshly, using the toughest part of my scouring pad, creating multiple scratches to the surface of the squeezer, contributing to the loss of translucency and probably deteriorating the stability of the plastic polymer.

Second, when I cook, I like to have all ingredients and processes ready to be added to the pan or bowl as I follow the recipe, meaning I tend to leave the citrus juices in the bowl for periods up to one to two hours depending on the recipe.

I think the strong acid exposure on an already damaged surface has been contributing to this white cast visible on the bowl of my squeezer. And now that I have thought about it for long enough, maybe I should change it, who knows if I am 'eating' the degraded polystyrene?

.....

We hope you have enjoyed a peek into our at-home museums of plastic. If you have, you might want to check out the shiny new blog started by the Modern Materials Network at <https://icon.org.uk/groups/modern-materials-network/icon-mmn-blogs>, and we would like **YOU** to contribute!

So, have a rummage at home, and if you discover an interesting modern material that you want to investigate and do a blog post about, please send an e-mail to the Modern Materials Network at [iconmodernmaterials@gmail.com](mailto:iconmodernmaterials@gmail.com). You don't need to have all the answers, a good question will suffice!



# Medicine: the Wellcome Galleries

A challenging installation exercise at the Science Museum in London is carried out by Katie Petley-Jones, Marisa Kalvins, Sophie Strong, Misa Tamura ACR and Emma Turvey



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The Wellcome Medicine Galleries

## INTRODUCTION

On 16 November 2019 *Medicine: The Wellcome Galleries* opened its doors to the public. The new permanent display showcases the breadth and depth of the Medical collections from both the Wellcome Trust and Science Museum. The five vast galleries occupy a space equivalent to 1,500 hospital beds. For nine months, from February 2019, the object installation team tirelessly installed over 4,000 objects, ranging from small moles' feet amulets to an early MRI scanner.

Here are several of the highlights, challenges and rewards that we encountered in the project.

## GALLSTONES

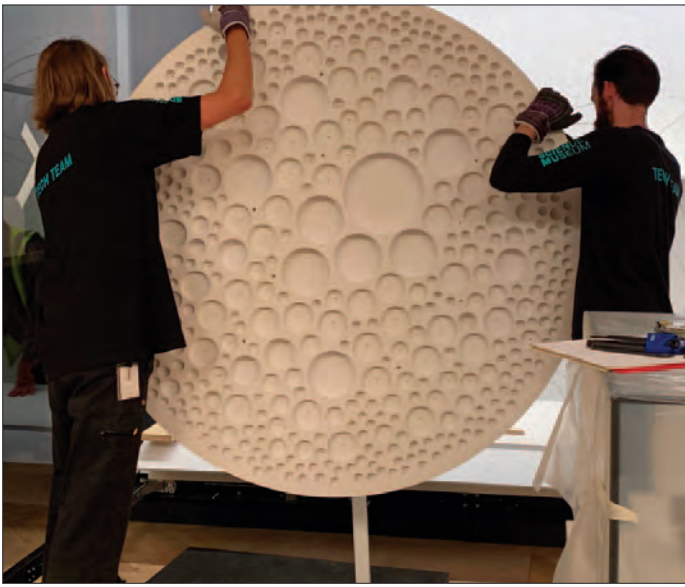
Creating a suitable display solution for a massed display of gallstones in the Medicine and Bodies Gallery necessitated an

inter-departmental approach, involving Conservation, Curatorial and Gallery Services.

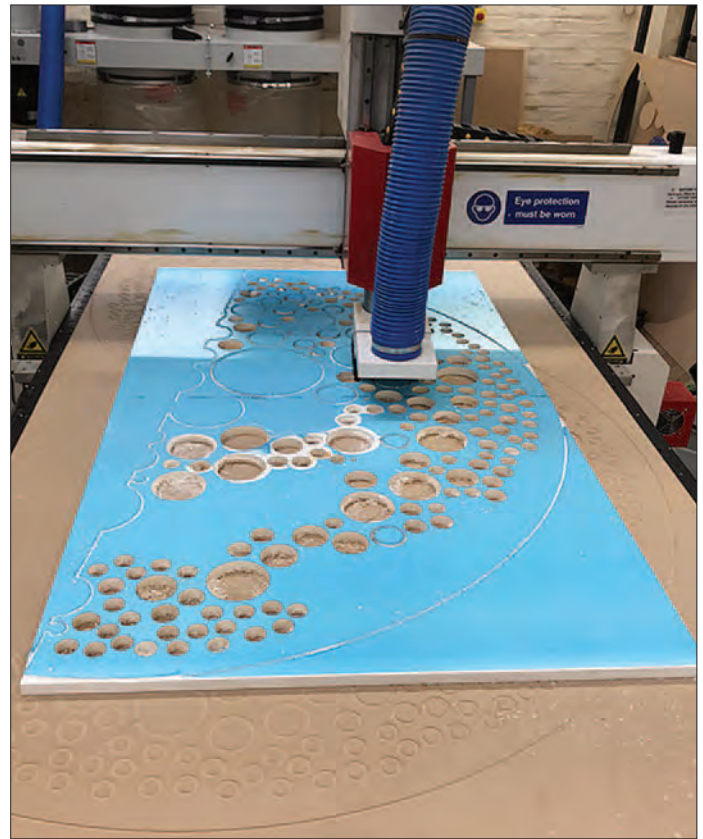
The Curatorial team created a modular system by which the stones were categorised into five size groups. This enabled the Gallery Services to determine the number and size of the holes required in the overall mount.

Each module required a different method of mounting in order to safely display the gallstones vertically. The larger stones were mounted with Plastazote-lined spray-coated brass armatures directly within the apertures of the main mount frame. The three smallest sizes, many of which included particulate-sized stones, were contained and mounted with pins and Plastazote in lidded petri dishes slotted into the frame. Minor modification of mounting methods was however necessary within the modular system to cater for the particular shape and size of each set.





The mass display of gallstones and its installation



The gallstones display mount under construction

## FOREST OF RODS

A large molecular model of myoglobin, known as the *Forest of Rods* (1960), weighs over 450kg and comprises numerous steel rods vertically slotted into a ply-wood base that is made up of five sections. Interwoven among the rods are molecular models showing peptide chains which bridge the different sections.

The movement of the object necessitated by installation was extremely testing. The steel rods were very sensitive to vibration, as they rocked and hit one another readily upon the slightest of movements. The interweaving molecular chains meant that only three of the five sections could be separated without extensively disassembling the chains.

The learning and experiences of the conservators and object handlers who had carried out the de-installation and re-installation of the object in the recent years effectively fed into formulating the strategy and logistics for its installation in the Medicine Galleries.

The object's showcase was specifically designed and commissioned with its complexity in installation taken into consideration. The base of the island case slides out, easing the transfer of the object onto the plinth. This prevented us from having to lift and manoeuvre the heavy object into a tight showcase. Millimetre-thick Teflon sheeting, cut to the footprint of the object, was placed as an interlayer between the object and the plinth. This would facilitate the handling of the object upon its eventual decant in future, as well as reduce the risk of damage to the base of the object caused by its extreme weight. Once in situ, the three sections were reconnected in their original formation. The installation was carried out collaboratively by conservators, collection assistants and our in-house heavy object handlers, due to its sheer size and weight.





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The *Forest of Rods* and its installation

## BUG VAN

The Fumigation Van (1925-1935) is the body of a van used during slum clearances to transport residents' belongings for fumigation. It was conserved at the Science Museum's National Collections Centre at Wroughton and arrived on site in London wrapped in Tyvek and palletised.

Due to its size and weight (over 400kg) the van was installed by logistics specialists Constantine, supervised by the conservation team. The constricted space, moveable plinth and table-top case blocking access from the front made this challenging. Historical damage to the exterior paintwork, with losses, lifting sections and cracks, were conserved in

preparation for the display. So only limited areas of the surface were handled in order to protect the remaining paint. The plinth was moved into the correct location and wedged in place. Using pallet trucks and wooden blocks the object was raised to the correct height. The gap between pallet and plinth was bridged with a wooden platform creating a flat surface. The van was then manoeuvred into position using Teflon sheeting.

In order to evoke another use of the object, screening public health films, a video projection was planned inside the van. Use of a projector in close proximity to the painted surface required careful testing in collaboration with the Audio-visual team. A mock van was created and the temperature was monitored with an infra-red thermometer. This informed the location of the box mount and enabled installation of the projector, meeting Audio-visual and Conservation team requirements.

The Fumigation van being installed



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A video projection inside the van



© The Board of Trustees of the Science Museum

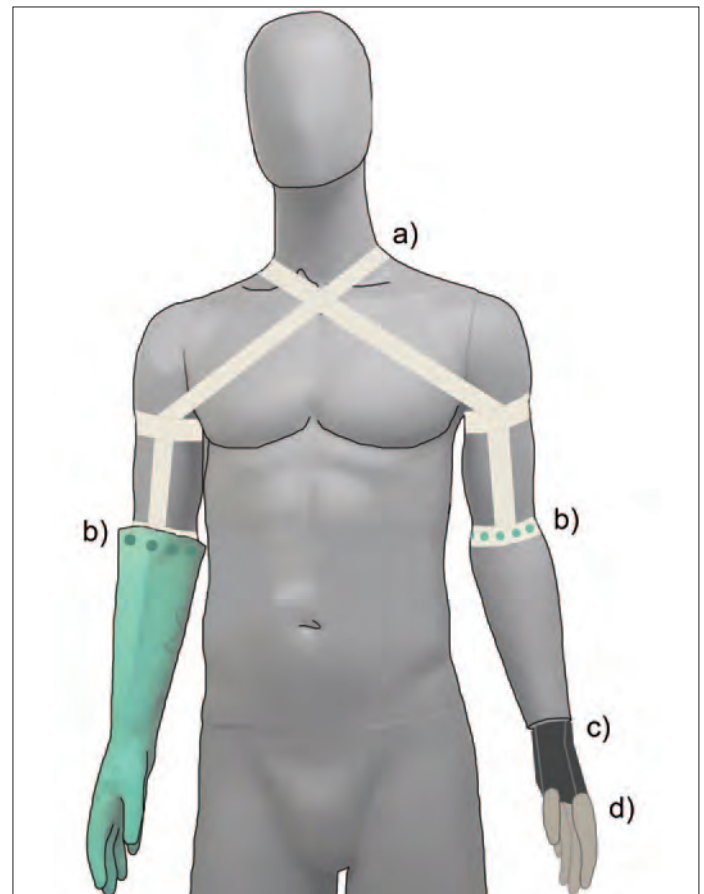
## EBOLA PPE

The Ebola Personal Protective Equipment is a set of PPE used by a health worker during the Ebola outbreak in Sierra Leone in 2014-2015. The PPE is on display in the Medicine and Community Gallery, which encapsulates the history and development of public health practice.

The layers of protective clothing, complete with full-face masks, disposal outer covering and heavy-duty rubber gloves were mounted on a fibre-glass mannequin, with extra support to hold every layer seamlessly during the long-term display.

A particularly challenging element in mounting were the thick rubber gloves which covered up to the elbows. The mannequin was posed with its arms down, not allowing the gloves to anchor themselves naturally. In use, the gloves would have been taped onto the arms using parcel tape, as testified to by the tape residue on the gloves and documentary photographic records. However, it was not considered acceptable to use the same method for display, quite apart from the fact that the adhesive of the tape will fail in the long-term. Standard male mannequin hands and fingers did not conform to the gloves. To resolve these issues, prosthetic hands made of Ethafoam, polyester wadding and calico fingers were created to conform to and support the shape of the gloves. Neodymium- magnet embedded armbands were produced to secure the long sleeves of rubber bands in place.

Ebola Personal Protective Equipment after installation



Adapting the Ebola PPE mannequin

## MARGARET LOWENFELD'S *World Technique*

A researcher in paediatric medicine, Margaret Lowenfeld (1890-1973) developed a child play therapy called the *World Technique*. The method enables children to create a 'world' using miniature toys, through which they express ideas and emotions that may not be captured fully by conventional talking therapy. In total, about 900 toys are displayed in shelves and sand trays.

Such a large volume of small, and often fragile objects, required careful organisation and a methodical approach. Objects were packed using channelled Plastazote and acid-free tissue for transport. Each toy was individually conserved, photographed and physically marked with its inventory number.

Having a clear objective and unambiguous criteria for prioritising their treatment was key to delivering the conservation work in time. The Curatorial team chose those objects with as few conservation issues as possible, without compromising on contexts and narratives. Evidence of use, such as sand from the sand trays, was left on the objects, whilst major structural instability was prioritised for repair and potential hazards like lead corrosion products were removed. As required by the Science Museum Group's hazard management, the presence, absence and nature of hazard risks were recorded for each item.

The toys are displayed grouped together by their themes, such as vehicles and domestic animals, to reflect Lowenfeld's categorisation of toys. Objects on sand trays were displayed after examples of 'worlds' that children created. Each toy was individually recorded and located in the MIMSY system. The Curatorial and Conservation team worked together to install the toys, whilst carefully considering the height, composition and depth of the display. The result was visually rewarding: satisfying both from a distance and with detail, on closer inspection, representing an important development in mental health therapy.





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Toys used for Margater Lowenfeld's child play therapy *World Techniques*

## PHARMACY

A reconstruction of an early twentieth century pharmacy can be found at the far end of the Medicine Galleries. The Gibson and Son Pharmacy was originally located in Hexham in Northumberland, England. The entire contents of Gibson's shop (including the structural elements) have largely been on display since 1984 when the Museum acquired them.

Once the installation of the shop front and internal structural elements were fitted by Taylor Pearce Conservation and Restoration, a mixture of auxiliary items, i.e. items that are not part of the collection, and objects from the Science Museum Group's collection were installed. The museum objects included an array of glass and ceramic shop rounds (jars) that have maintained, in differing conditions, their original painted labels.

The objects selected for display in Pharmacy, as well as all objects for these permanent galleries, were carefully chosen on the premise that they could be displayed safely and stably in the condition provided by the museum building. In fact, a significant number of cases provide the objects with more suitable climatic conditions than they had in storage. Additionally, rigorous environmental monitoring, a regular cleaning programme for open-display objects by the in-house conservation cleaning team, and targeted monitoring by conservators for the objects considered susceptible to environmental fluctuation are in place to ensure the stability and the safety of the objects.

The Gibson & Son pharmacy from Hexham after its installation



© The Board of Trustees of the Science Museum

All inventoried objects were extensively documented by photography during the conservation treatment. This will help any future monitoring to capture any changes to condition or any possible issues arising with the objects embedded in this immersive, partially open and interactive display with a high footfall of visitors.

## CONCLUSION

The Medicine Galleries successfully capture not only the history of medical-technological development but also the cultures, communities, social history and individual human stories that surround medicine.

The material, technological and contextual diversity of the exhibits, in turn, presented a significant challenge to the conservation and collections care team, both technically and logistically. On one hand the extremely large and oversized objects presented us with challenges in their effective and safe handling. On the other hand the mass displays of toys and gallstones needed to be tackled with methodical planning, workflow, and modular approaches, as well as the flexibility to create bespoke solutions where required.

Much problem-solving and adaptive thinking were put into mounting garments on mannequins, and drawing on collective memories and knowledge led to the successful installation strategy of an extraordinary and unusual object like the *Forest of Rods*. In collaboration with the cross-departmental project team, conservators duly considered and carefully devised bespoke solutions to cater for the diversity of the artefacts as well as their long-term care.

## Acknowledgements

The authors would like to thank Bryony Cairncross, Emily Yates and Jannicke Langfeldt ACR, the lead conservators over the lifetime of the project, Louisa Burden ACR, the Head of Conservation and Collections Care, and our past and present colleagues in Science Museum Group's Conservation and Collections Care department for their support. Our thanks also go to our Curatorial, Logistics, Gallery Services and Masterplan teams with whom we carried out the install programme. Special thanks go to Jack Scott from the Gallery Services mount-making team for contributing images to the article.

## BOOK

### **HISTORIC CITIES: Issues in Urban Conservation**

Readings in Conservation series  
Jeff Cody & Francesco Siravo, eds  
Getty Conservation Institute 2019  
ISBN 978-1-60606-593-8

As a preliminary note I should explain that I have reviewed this book for another audience in another publication: *News in Conservation of the International Institute for Conservation (IIC)*. This is a fresh and new review for *Icon News*.

If many of those in the UK's conservation community and profession are concerned with the moveable heritage then there may be questions about the relevance of a book focused on the conservation of the urban (and therefore built and static) heritage. However, many of us do work on, and with, the built heritage, either the conservation of the material of the built, architectural and/or urban fabric that makes up so much of our heritage landscape and which so many of us inhabit, or of the decorative and applied aspects of that fabric – murals, stonework, metalwork and so much more.

It should also be added that the built environment we inhabit helps define the way we live now, is a defining framework for our understanding of, and conservation of, our cultural heritage, and also provides context for ways in which the collections and repositories of our heritage are housed, shared and enjoyed. In the UK the importance and activity of organisations such as both National Trusts, CADW,

English Heritage and Historic Environment in Northern Ireland reflect this. Many museums and galleries (new and old, large and small) are architectural or built heritage conservation sites in their own right.

As with other publications in this series from the Getty Conservation Institute, this book is a carefully selected and edited collection of essays and papers giving a usefully broad range of angles on its central theme across time and cultures. In their editorial preface Cody and Siravo state that their aim has been '... to achieve ... balance between theories and practices, between 'Eurocentric' historic urbanism and other kinds of global cities, and between older perspectives and newer trends to confront the challenges of urban conservation', which is then well evidenced in the range of papers they have assembled here.

From a UK perspective there are a number of papers from these islands, from John Ruskin in 1854 (on the opening of the Crystal Palace) to Donald Insall in 2008 (on the Philosophy, Principles and Practice of Architectural Conservation); this is via Sir John Summerson in 1963 (on Urban Forms) and Robert Bevan in 2006 (Destruction of Memory: Architecture at War). Away from a UK angle there are, of course, international papers and articles which allow the comparing and contrasting of issues in differing cultures and their particular approaches to conservation. There are also interesting papers on some post-colonial angles to the built environment and to new heritage identities – Senam Okudzeto's 2017 paper 'Remembering African Cities: Rethinking Urban Conservation as Radical Public History' is fascinating to read here in particular.

The issues addressed by many of the writers will be familiar to many conservation professionals of all areas of activity and expertise - concerning not only the material and practical elements of heritage conservation but also the ethical, philosophical and shifting cultural attitudes to conservation. Donald Insall, in the 2008 paper referred to above, writing of an urban conservation project in Chester, lists issues that resonate throughout conservation: 'It has been illuminating to remind ourselves how many differing degrees of intervention are available, remembering in practice the whole range of these varied degrees may occur alongside one another: regular daily care; programmed maintenance; major but conservative repairs; repairs incorporating changes; more radical interventions and alteration; restoration; rehabilitation; renewal...' . These considerations are familiar to conservators in non-built heritage areas of work and research.

Similarly, the very current issues of authenticity are covered in Gustavo Aroz's

2008 paper on '...Defining and Protecting Authenticity' where he writes about challenges to the 'traditional materials-based approach and practices of the heritage conservation field ...' that apply to many other conservation areas. In many papers the (perhaps controversial) matter of 'the intangible' in conservation is also aired: the matter of 'spirit of place' or 'genus loci' that is often used in some UK conservation and heritage arenas is here given international context and placing. In many other papers too issues applied to urban heritage and the built environment are to be found echoed in other conservation fields.

This book, a worthy addition to this series, is a very useful resource for so many reasons, and if one had to winnow this down to three points these would arguably be:

1. To show how conservation of the built heritage, and specifically the heritage of the urban environment, is a central and essential part of the heritage conservation field
2. To show how conservation issues are to a significant degree universal across all manner of heritage conservation, from the movable to the immovable to the intangible
3. To show that across differing cultures and lifestyles, again many basic heritage conservation issues are shared and valued.

A book to read, refer to and revel in.

**Graham Voce FSA**

Executive Secretary of the International Institute for Conservation from 2004 to 2020.

## BIBLIOGRAPHY

### **INTEGRATED PEST MANAGEMENT**

**Chantry Library Bibliographies: No 6**  
**Amy Crossman and David Pinniger**  
**June 2020**

The Chantry Library in Oxford has provided physical access to a wide range of resources related to book and paper conservation since its inception in 1999, gradually broadening its scope to include the conservation profession as a whole. Since 2001 the Library has been hosted by the Oxford Conservation Consortium in the wonderful purpose built 'Grove Cottage' in Oxford, and since 2016 it has also been owned and supported by the Consortium. Physical access to the Library is relatively limited although available to all with an interest in conservation (see [chantrylibrary.org](http://chantrylibrary.org) for opening times), but since 2018 this physical access has been enhanced by an excellent online resource,



Readings in Conservation

### **Historic Cities: Issues in Urban Conservation**

Edited by Jeff Cody and Francesco Siravo





A pest management bibliography: microscopic image of an *Anthrenus*

the Chantry Library Subject Bibliographies. The Bibliographies cover a diverse range of subjects from Egyptian Tomb Painting to Enamelled Metals. They are curated by specialists in their subject areas and aim to provide an annotated and descriptive list of key works in each subject, to give readers a way in to the subject through the most relevant and authoritative works available. This review covers the newly released sixth bibliography in the series, 'Integrated Pest Management' by Amy Crossman and David Pinniger.

Crossman and Pinniger have managed an exhaustive and comprehensive searchable database of IPM resources on the What's Eating Your Collections website ([www.whateatingyourcollection.com](http://www.whateatingyourcollection.com)) for a number of years, but this new curated bibliography is a welcome complement to this. It sets the discipline of IPM in museums and heritage institutions in its context within the wider sphere of pest management as a whole, noting that the majority of the literature has previously been generated by non-conservation disciplines such as stored product protection, but that the conservation profession is now producing a wealth of material of its own. This bibliography helps to contextualise and evaluate that literature to allow conservators and other heritage professionals to select the material that will be the most currently relevant, whilst also allowing them to gain a greater understanding of the steps that have been taken to get to the current state of the IPM specialism.

This bibliography will be of particular use and interest to people beginning their IPM journey as well as to more experienced heritage professionals, as it is a fascinating chronological overview of IPM literature in a heritage context. It picks out the earliest references to concepts and processes that are familiar to us now, such as IPM itself, the move away from pesticide use and the emergence of methods such as anoxia and high and low temperature treatments.

There are also references to climate change

and its impact on pest damage and emerging species. There are no references to material giving a greater depth of information on specific species and their biology and behaviour, but to include this would result in an extremely long bibliography indeed, and these resources can be found in the What's Eating Your Collection extended database. The references to conference proceedings are very useful, although a brief overview of the conferences themselves, their themes, strengths and weaknesses and stand-out papers may have been useful to provide greater context here. The inclusion of the What's Eating Your Collection website as a resource is most welcome; other online resources such as the US-based [Museumpests.org](http://Museumpests.org) would have been a nice addition to this.

Overall this is an excellently written curated bibliography, clearly presented and with a logical and user-friendly flow. It will prove to be an extremely useful tool to heritage professionals of all disciplines, allowing them to sift through the available material and select the publications which are of most relevance and authority. It sits nicely within the Chantry Library's other subject

bibliographies and will doubtless be appreciated throughout the heritage field.

'Chantry Library Bibliographies: No 6: Integrated Pest Management' by Amy Crossman and David Pinniger' was released on 30 June 2020 on the Chantry Library website.

**Catherine Harris**

Assistant Preventive Conservator  
Bodleian Libraries

## ON-LINE EVENTS

### ARCHAEOLOGICAL CONSERVATION IN THE 21ST CENTURY

Icon Archaeology Group  
29 May 2020

The first Twitter conference run by Icon's Archaeology Group included presentations on a wide variety of topics, both in subject matter and geographical scope, with clever timetabling allowing for presentations from eight countries encompassing six different time zones with a combined time difference of seventeen hours!

After an initial introduction to the conference by the Archaeology Group (@ICONArchaeology), the first presentation by **Susanne Grieve** (@SusanneGrieve), and co-authored by **Emma Prideaux** and **Larry Paul**, gave an overview of the ongoing conservation of *Daring*, an important vessel in New Zealand maritime heritage. The discussion centred around the truly collaborative nature of the project, between Daring Rescue Group, archaeologists and conservators.

This was followed by **Muhammad Farooq** (@Muhamma23167866), who discussed treatment options regarding the fungal biodeterioration of stone. By using the site of Taxila in Pakistan as a case study, Farooq





# DURING



# BEFORE

# AFTER

Image: Luisa Duarte

From Luisa Duarte's presentation on the conservation of wooden bowls from the Garlick Hill excavation in the City of London

assessed the comparative efficacy and after treatment effects of commonly used fungicides and plant extracts, noting the importance of environmentally sustainable solutions.

**Francesca Guiducci** (@FrancescaGdccc) discussed building conservation of the late Kushite site of Dangeil in Sudan, as part of the Berber-Abidiya archaeological project. By using local knowledge, the team have sourced locally produced quick lime for use in pointing and building conservation, benefitting both the local economy and the conservation. A series of useful pictures and videos gave an interesting overview of the local quick lime production.

**Phil Parkes** (@PhilParkes4) discussed how he has best supported conservation students at Cardiff University, with conservation of a 17-18thC. Indian mail shirt belonging to Birmingham Museum and Art Gallery, by working with master mail maker, Nick Checksfield. Through making, Parkes has been able to better understand the mail and its conservation requirements. This has had the added benefit of keeping alive a technique which is on the Heritage Craft Association Red list, with further skill sharing through school outreach.

The next presentation by **Rowan Gillis** (@RowanAOCARCH), discussed conservation of artefacts recovered from Clachtoll Broch, Assynt. Here we were introduced to finds from the site and the analysis taking place. It was fascinating to see the differing stages of production of artefacts from this rapidly abandoned site.

**Kayleigh Spring** (@HeritageWSHC), discussed conservation of the Malmesbury coin hoard by Wiltshire Council's Conservation and Museum Advisory

Service. The clear presentation discussed what had been learnt from the conservation work, including better estimating, safety of conservators when repetitive working, managing volunteer expectations, and balancing demands such as professional ethics with income generation.

Next **Hayley Simon** (@HayleySimon1) presented part of her PhD research. By using the assemblage of the *Mary Rose* cannon shot, Simon has been able to compare differing iron corrosion treatments; neutral pH washing, alkaline storage and chemical reduction, using an array of scientific techniques.

**Vicky Garlick** (@ICONArchaeology), discussed conservation of the Lanchester diploma. She introduced the object and detailed the process of conservation. X-radiography was used to establish how much inscription remained and the level of corrosion and fragility, allowing for a considered approach on corrosion removal. Conservation included corrosion removal using both solvents and mechanical methods, and stabilisation, allowing the construction of the diploma to be better understood.

Following this **Jenny Mathiasson** (@cliftonconserve) presented on conservation of objects belonging to archaeologist and curator of Clifton Park and Museum, Dorothy Green (1898-1998). The presentation introduced us to Dorothy and the preparation of the display case based on her life. Discussion of how to balance narratives with budget and time constraints was highlighted, with several of the objects and their conservation discussed. The ability of conservation to aid the capacity to tell important stories was a

clear message of the presentation.

**Edward McGlinchey's** (@ConservationBob) paper on the reconstruction of a Roman amber glass bowl, which forms part of Colchester Museums' collection, gave detailed information about the conservation process. This included removal of old adhesive, reconstruction using a custom mould to support the vessel, and display.

The presentation by **Natalie Mitchell** (@Natalie68060860) discussed the ongoing conservation of a wooden bowl and peg from the Cairns Iron Age broch. Scientific analysis allowed for greater understanding of the bowl, such as a better view of intricate ancient repairs using X-radiography, with a wonderful video of the digital reconstruction appreciated by the audience, and having the benefit of allowing for handleable 3D replicas to be created.

**Pia Edqvist** (@EdqvistP) continued the discussion of conservation of wooden objects, this time with those from the Oseberg ship burial, forming the most comprehensive collection of wooden Viking Age objects in the world. Edqvist discussed how in many cases objects which had undergone a historic alum salt treatment were rapidly degrading, with the Alum Research project established in order to best treat these objects. The presentation highlighted the importance of research within the conservation profession and questioned how many conservators have research time allocated and funding available for this. The research is ongoing with various deacidification methods being testing, notably including the use of nano particles.

**Luisa Duarte's** (@luisaduarteac) paper discussed conservation of thirty six wooden vessels from the Garlick Hill excavation,

London. The conservation of these vessels was detailed, with polyethylene glycol and freeze drying used to preserve the vessels. Clever support methods and metal staples were used to prevent misshaping of the soft wood in treatment, and paper fills were used on remaining gaps between fragments.

**Tatiana Niculescu** and **Nichole Doub** (@AlexArchaeology), co-presented on conservation considerations of three 18th to early 19th century ships. Once unearthed, the wood from the vessels was stored in pools within a warehouse. The presentation highlighted the difficulties of dealing with a large quantity of waterlogged material. The team have been working to find a more sustainable long-term preservation solution, and after consultation with a range of stakeholders and the community have decided on storage in a pond within the city as a medium-term solution.

The next presentation by **Kristen Stockstill** (@PCArchaeology) discussed how batch treatment has allowed for efficient conservation of large assemblages of differing material type and degradation, using the case study of Inuit objects from Sirmilik National Park.

**Heather Rardin Rovardi**, **Nichole Doub** and **Francis Lukezic** (@MD\_Archaeology) highlighted the mental and physical undertaking of large collection surveys, and the need to care for conservators within this context. They showed how survey fatigue affects output and shared practical tips to reduce this.

Paper fill used on one of the bowls discussed in Luisa Duarte's presentation



Image: Luisa Duarte

The penultimate presentation by **Michel Runge** (@MikeRunge7), co-authored by **Francis Lukezic**, discussed conservation of material recovered from excavation of the historic Chinatown district of Deadwood, South Dakota. The paper introduced us to the objects and their conservation by Maryland Archaeological Conservation, highlighting how conservation had allowed the stories of Chinese immigrants to be told.

The final paper by **Karen Martindale** (@TAMU\_CRL) discussed conservation of composite objects, using a case study of iron and wood/bone utensils. The component parts of the object were separated, allowing for them to be treated according to their different needs, with this treatment detailed in the presentation.

The conference was closed by Chair of the Icon Archaeology Group, **Helen Ganiaris**, who thanked presenters and organisers. The event was a wonderful opportunity to see analysis and interventive conservation of an array of objects, which many of us are missing in our current home working environments. Common themes throughout the conference included the use of scientific analysis to inform treatment decisions and question established methods; sustainable approaches to treatment; the importance of caring for conservators; working with local groups and community engagement; conservation aiding in the ability of objects to tell their stories, and how we best balance constraints on our time and budget with ethical treatment and research needs.

The conference proved very engaging, with people asking questions of speakers and highlighting important points. Navigation of the event was easy with the hashtag (#ICONArchTC) and with introductions of each paper from the Icon Archaeology Group account. No publication of the day is planned; however, please contact individual speakers regarding any paper of interest. Presentations are available on Twitter and can be easily found using the #ICONArchTC hashtag and on the Icon Archaeology Group (@ICONArchaeology) page. Keep an eye on the Group pages of the Icon website for details of upcoming conferences, courses and events.

**Emma Smith**

Group Committee Member

### WHERE THE ARTS MEET SCIENCE: Keeping the Mary Rose shipshape

Icon Webinar Series

**Conservation: Together at Home**  
22 April 2020

Having recently been furloughed, I had to admit I was approaching the following weeks with trepidation. I am very lucky – my children are old enough to be self-sufficient,

I have a garden, a dog and outdoor spaces to walk in, but I was worried about how I would fill the gap without doing the job that I love. So, I was very happy to find the great range of resources available on the Icon website. In particular, the Together at Home Webinar series looked fascinating: they would provide some structure to my time and allow me to immerse myself for an hour here and there in the fascinating world of conservation. And, of course, not forgetting providing some invaluable CPD!

**Professor Eleanor Schofield's** talk was an ideal example. I visited the *Mary Rose* last year so was familiar with the site but conserving a vast Tudor ship was far removed from my area of expertise in preventive conservation of historic houses.

The talk started with the background of the *Mary Rose* – its history and the subsequent history of its excavation. Professor Schofield talked through the challenges that the team has faced over the years of its conservation; using the combination of conservation, science and engineering to develop practical solutions to enable the ship to survive and be shown to a mass audience. Wonderful time-lapse videos showed the development and construction of the museum building around the ship, highlighting the difficult conditions in which the conservators had to work over several years.

As well as the conservation Professor Schofield explained the ethos behind the museum – it is dedicated to those who died onboard and it is the people stories that are told in the exhibits of artefacts and remains.

For me the talk achieved the right balance in providing technical detail whilst still being understandable and informative to a non-scientist. Professor Schofield was open and honest – this is a long running project and throughout has required evaluation and rethinking as materials and methods of analysis develop and change. Financial considerations needed to be considered throughout and the compromises that sometimes had to be made to ensure the project was sustainable.

I would like to thank Professor Schofield for her fascinating talk and would highly recommend watching the recording for those who missed the live event. And huge thanks to Icon, the Book and Paper Group and other Groups for organising such a fantastic resource for us all to use. For those of us currently with time on our hands it provides a great learning experience and an insight in to what can be achieved for future CPD events now that we are all getting the hang of working digitally!

**Siobhan Barratt**

Conservator, National Trust



## RECYCLED PARCHMENT: Manuscript Fragments in Medieval Dresses

Icon Webinar Series

Conservation: Together at Home

30 April 2020

This seminar was given by **Henrike Lähnemann**, Professor of Medieval German at Oxford University ([henrike.laehnemann@mod-langs.ox.ac.uk](mailto:henrike.laehnemann@mod-langs.ox.ac.uk)).

His talk introduced us to the 'holy dresses' made by the nuns of the former monastery of Wienhausen in Lower Saxony around 1500. Around twenty of these dresses survive, ranging in size from only 10 cm to 90 cm. They were made to clothe statues, a widespread practice in the late medieval period, which continues in some places today.

How does a professor of Medieval German become involved in textile conservation? Henrike explained how she was drawn into researching these garments at the invitation of two textile conservators in Lüneburg. In the course of restoring the 'holy dresses', as the conservators called them, they discovered that the seams and hems were strengthened and stiffened with fragments of parchment from discarded books. They invited Henrike to work with them to identify the texts on these fragments.

In the first part of the talk, Henrike introduced us to several garments and explained how they were sewn from small pieces of velvet and silk donated to the convent. Originally, the little dresses were adorned with metallic bracteates that were designed to reflect the candlelight, which were removed and sold in the eighteenth century.

We learnt how the conservators reconstructed the dresses to identify whether any of the surviving garments had been made to clothe the statues the visitor can see today at Wienhausen. It is unusual to be able to match a garment to its intended recipient in this way, and the process affords a rare opportunity to examine the use of the garments in the setting for which they were made. These reconstructions revealed that a tiny garment was intended to be worn by a small figure of the infant Christ, and a larger green and red robe by a statue of the Risen Christ, the figure central to the nun's devotion.

Henrike then discussed why the nuns made these 'holy dresses' and their religious meaning. She explained how the visual richness of the late medieval cloister at Wienhausen is key to interpreting the meaning of the garments. Statues of holy figures were dressed to celebrate major feasts such as Easter and Christmas, through which the nuns imagined themselves engaging with Christ and the angelic hosts. Sewing the garments from



The 'holy dresses' from Wienhausen laid out in the textile restoration workshop in Lüneburg

recycled materials was also a way for women to fashion the spaces of their cloister to reflect their spiritual concerns.

In the final part of her talk, Henrike turned to the fragments of parchment sewn into the 'holy dresses' to strengthen the seams or to support the delicate fabric or fur of the hem. The parchment is only partially accessible, making the fragments hard to read fully without risk of damage. She explained how she has catalogued and identified the texts on those fragments of parchment that are accessible.

Readers who may have suggestions about possible ways to access and read the parchment fragments using non-invasive methods are encouraged to contact the presenter.

The nuns cut the fragments of parchment from books they no longer required. Three examples of texts identified among these fragments were discussed: a liturgical book used in church services, a medieval German law text, and a devotional meditation.

Practical concerns influenced the selection of parchment; long strips from the large folio size liturgical manuscripts were used to stiffen the hem, while smaller pieces from the devotional text were sewn together into seams. The nuns also recycled small strips

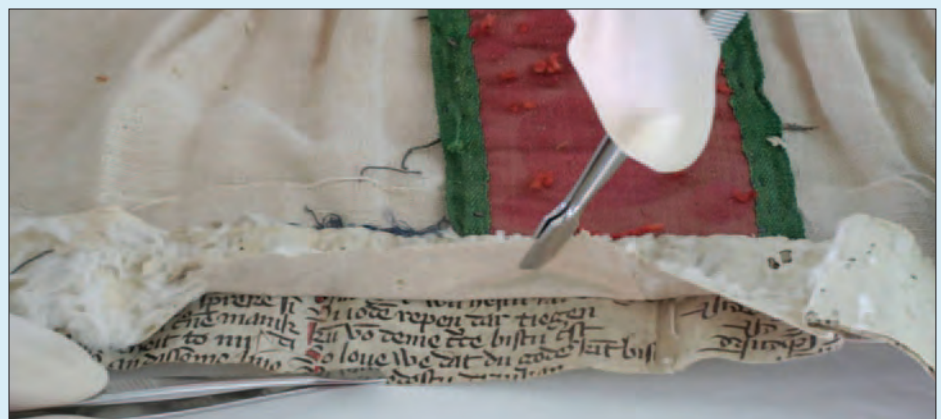
of parchment for a variety of other uses: to make labels to identify which statue the little dresses were made for, to wrap and label small pieces of bone relic, and appliquéd as speech scrolls onto embroideries.

This talk gave a fascinating insight into the convergence of textile and manuscript book history. The speaker discussed the construction and use of the garments in an accessible, informed and sympathetic manner, deftly illuminating the material and religious world of a late medieval female monastery. The talk also highlighted how our understanding expands when textile conservators, manuscript historians, linguists and others work together.

**Julie Hotchin** Honorary Lecturer  
Australian National University, Canberra.

Further information about the textile museum at Wienhausen: [www.kloster-wienhausen.de](http://www.kloster-wienhausen.de).

Fragment of a devotional text sewn into the hem of a dress to clothe the figure of an angel





Deteriorating boats at the National Waterways Museum in 2017

## RECORDING GWENDOLINE

**Margaret Harrison discusses the documentation challenges presented by an historic wooden motor barge at the National Waterways Museum**

### THE NATIONAL WATERWAYS MUSEUM COLLECTION

The Canal & River Trust's Designated collection, held across three museums, includes nearly seventy historic boats representing the most comprehensive and important single collection of inland waterways craft in the UK and the largest in the world. It is a unique legacy from the industrial canal era that played a leading role in Britain's economic and social development throughout the 18th and 19th centuries.

In addition, the collection includes examples of craft from the post-industrial age, during a time when canals became a focus for leisure and holiday-making. The collection includes narrow boats and wide craft, service and maintenance boats such as dredgers, tugs, a weed-cutter, ice breakers, and pleasure craft. The boats are both powered and unpowered and constructed of wood, iron, steel and concrete.

Just under 40% of the collection is either listed on the National Register of Historic Vessels (NRHV), or forms part of the National Historic Fleet. The collection at the National Waterways Museums is also recognised as Designated of outstanding importance under the Arts Council England (ACE) Designation Scheme

### THE CHALLENGES OF CARING FOR THE COLLECTION

The care and management of historic vessels is challenging. These are often very large and complex artefacts. They are expensive to care for, and interpret, to museum standards.

By 2012 the management of the museums had passed to the Canal & River Trust and it was clear that the collection was at risk. The museum faced long-standing challenges of underfunding, unrealistic expectations, absence of coherent strategy and little understanding of core museum and conservation collections care standards and ethical principles. The boat collection was deteriorating rapidly, and urgent action was required.

In 2015 the museum was successful in applying for a grant to the highly competitive Esmée Fairbairn Collections Fund to undertake a feasibility study for the future options for care, conservation and display of the boat collection. This provided a very strong opportunity to identify and agree solutions for the boat collection and, for the first time, led to a solid understanding of the future shape of the collection that can be sustained through a clear and agreed approach to its care and conservation.

Most importantly, because of the work that had been undertaken to plan the future of the collection we were able to secure £314,000 from the ACE Museum Resilience Fund to acquire a suitable building for boat storage. This has been a milestone achievement for the museum both to preserve the boats most at risk and to increase access to the collection.

### GWENDOLINE

*Gwendoline* was a unique conservation challenge for the museum. Identifying a plan for her future has necessitated a complex decision-making process balancing best practice against available resources.





Image: Tony Lewery

Yorkshire keels at Hartley Bank coal staithe on 23 June 1971

She was built in 1953 at Ledgard Bridge, West Yorkshire, by and for John Hargreaves, a cargo carrier. She is a wooden motor barge with reported carrying capacity of 75 tons. This type of vessel is known as a 'West Country Keel' or 'Yorkshire Keel', so called because they originated from the west of the West Riding of Yorkshire. She was purpose-built for Hargreaves (West Riding) Ltd. to carry coal along the Calder and Hebble Navigation to the Yorkshire power stations, although initially she may have carried grain, wool and general goods. *Gwendoline* was one of the last examples of this type of craft to be built and was operated by John Hargreaves until

1973 when she was sold into private ownership and altered to become a houseboat.

In June 2001, the Boat Museum recovered her from under a warehouse arm in Shipley on the Leeds and Liverpool Canal and, over a couple of days, bow-hauled (manually pulled) her along the canal for ten miles until she reached Rodley, where she was craned out of the water onto a lorry to continue the rest of her journey to Ellesmere Port. She was in poor condition when she arrived at the museum and underwent some remedial repairs. She was further damaged during transit and craning and remained sunk at the museum for many years.

*Gwendoline* in 2017 (on the far left)







Gwendoline being moved to the store

When the museum began to plan for the removal of boats into store it became apparent that a different approach would be needed for *Gwendoline*. Over the years large sections of external planking had been lost to rot and decay and the initial assessment by the crane contractor suggested that it was not possible or viable to lift her from the water. Their initial proposal was that she would need to be broken up in the water.

### INITIAL ASSESSMENT AND RECORDING

Documented deconstruction had been identified as one future option for boats in the collection in an extreme state of disrepair, and actively deteriorating. High quality recording of a vessel through documented deconstruction is a better outcome than allowing a vessel to continue to deteriorate, potentially losing all evidence of its construction.

National Historic Ships guidance acknowledges that there will be occasions when an historic vessel has fallen into such decline that it may become necessary to accept its loss and provides guidance on this.

At this point it seemed that recording and deconstruction in the water would be the only option for *Gwendoline*. The museum recognized that specialist skills would be needed for this and contacted Michael Carter, Principal Marine Surveyor with Marine Surveys Ltd. Michael has been a specialist historic vessel and inland waterways surveyor since the late 1990s having previously worked as a vessel repairer with a focus on historic inland waterway vessels.

Michael put together a team that included Malcolm Webster and Adrian Polglaze, experienced traditional boatbuilders specializing in wooden inland waterways boats, and Tony Lewery, waterway historian and artist.

The initial brief for the team was to:

- Record as much about the vessel as possible as she lay sunk.

- Carry out a feasibility assessment on how to attempt to float the craft.
  - Carry out a pre-craning assessment on how to lift the craft.
- The first recording was carried out in June 2017 with the vessel remaining sunk. From this, the team was able to develop an enhanced understanding that allowed them to become confident that she could be floated, and she was raised in July 2017 when further measurements were taken, along with some assessments regarding lifting and transportation. In order to minimise stress on the vessel she was allowed to re-sink in the same mud sump that she had rested in previously.

### LIFTING GWENDOLINE

The reassessment of the possibility of lifting *Gwendoline* meant that the museum needed to rethink the plan for her future. She was still in very poor condition and the only space to keep her out of the water was outside the newly-acquired store. We knew from past experience that wooden boats kept

The measuring team at work





uncovered would deteriorate rapidly and that to create a bespoke support and the environment for her was beyond our budget. Full recording and basic protection were the only option. However, once she was raised then the possibility of a more comprehensive recording was unlocked.

**MANUAL RECORDING**

Gwendoline was craned out of the water in October 2017 and transported to the off-site store. The recording team continued measuring and recording between October 2017 and February 2018. The narrative, drawings and photographs created aim to give a boatbuilder of the future the best information possible to build an authentic replica or reconstruct the existing vessel. The task has been viewed by the team as the first stage of reconstruction, recording all that is available and needed before any dismantling was begun.

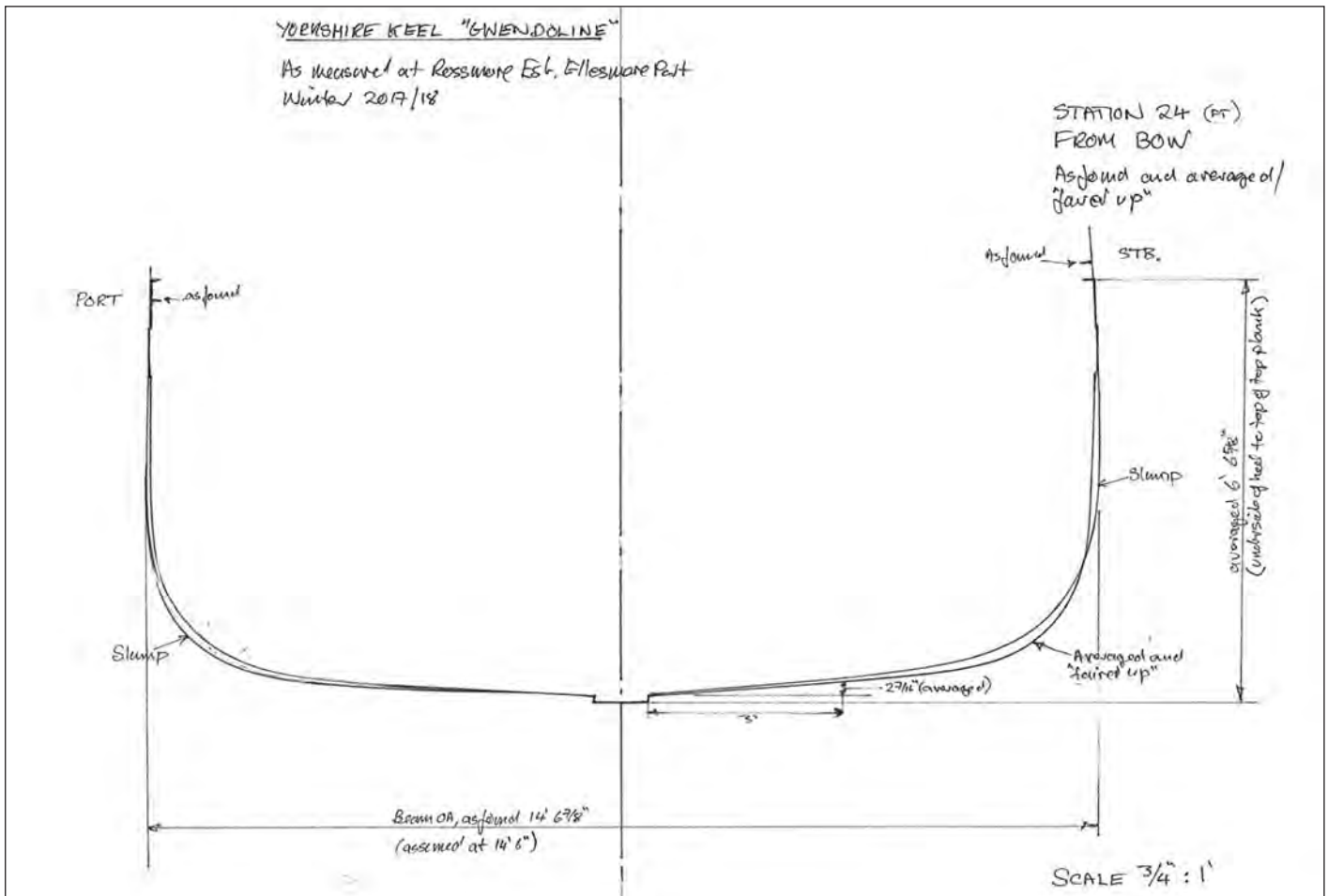
The overall dimensions and hull shape were recorded on the hard standing at the boat store. Some of the dimensions taken were complemented by measurements made previously whilst sunk at the museum. The craft was measured, as craned into position, on timber baulks, which were relatively level fore and aft. The stem was plumb, port to

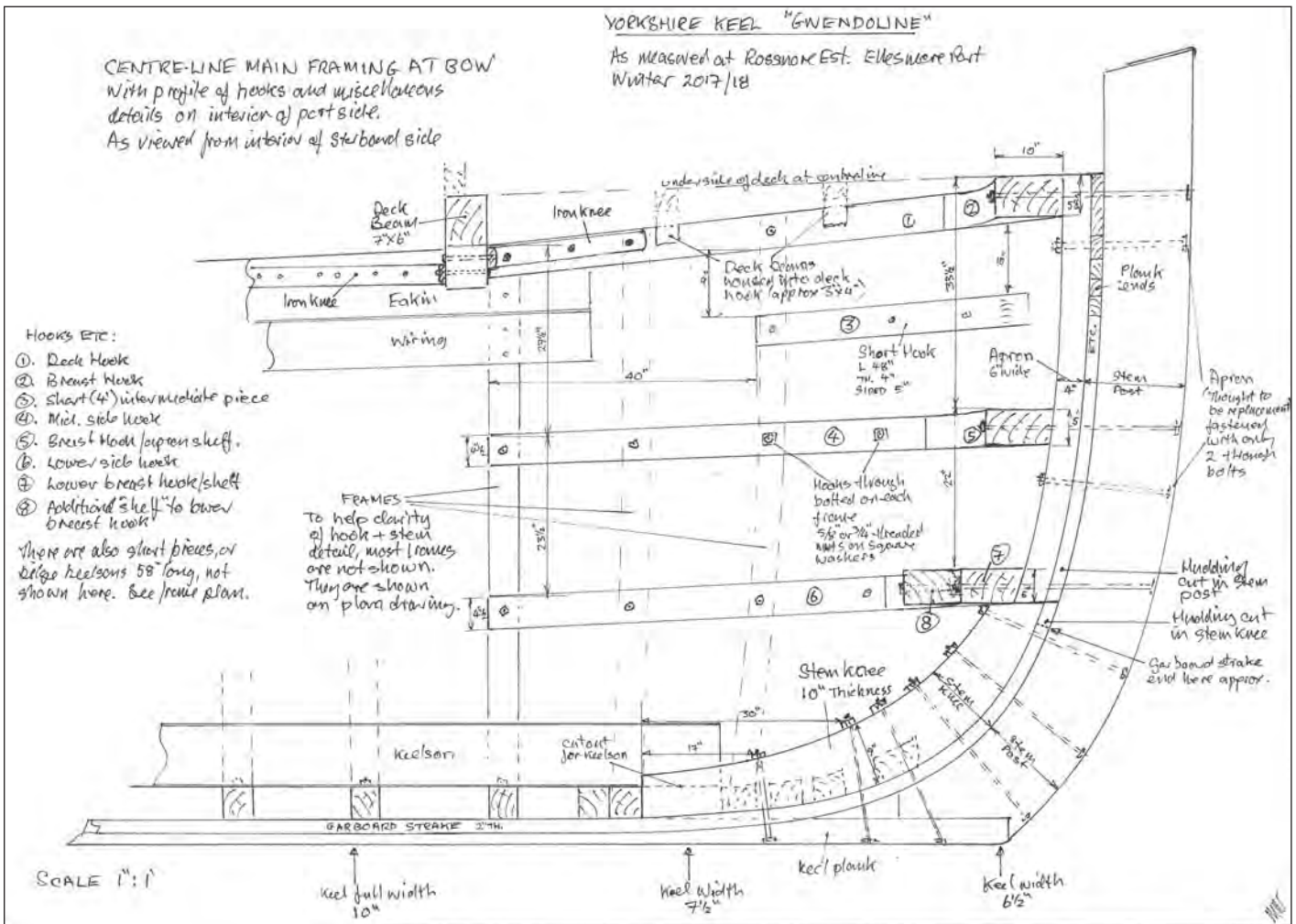
starboard, but the stern post leant heavily, by some eight inches to port. The boat had therefore developed a marked twist over many years

The major challenge for the recording team was to determine how Gwendoline's current shape and measurements related to those as she was built. In particular, ascertaining how much the stern and bow had 'hogged', a common feature in old and neglected craft. The more densely constructed, less buoyant sections at each end naturally bend downward from the more buoyant hold section. The mould, or cross-section, had also clearly 'slumped'.

Hull shape was ascertained by the setting up of rigid lines at a set distance from the hull, fore and aft, as determined by the string lines set up over the whole boat. These were used in conjunction with straight edges, enabling measurement to be taken at regular stations to give locations of regular heights and depths at points on the hull. Figures were transferred to the drawing board with adjustments being made for the aforementioned anomalies. The final 'fairing up' of lines hopefully produces a picture of the Gwendoline as built, with photographic evidence showing the boat as found.

Cross section showing the as-found shape and assumed as-built shape of the hull





Drawing showing bow main framing arrangement

### DIGITAL MODELLING

In addition to the manual recording of Gwendoline, the museum was also working with a CAD specialist, Stuart Norton, to create a digital 3D model. Stuart had considerable experience of modelling boats, having worked with the collection at Windermere Jetty.

Stuart used readily available photogrammetry software, Agisoft (<http://www.agisoft.com/>). This processes large numbers of digital images to create a 3D model. He worked with museum volunteers to create an initial model of Gwendoline while she was in the water. A second model was created once she had been craned out.

Photogrammetry proved to be a straightforward way to create an accessible digital model. However, more complex, specialist work was needed to create accurate measurements from the model and the museum also wanted to test how these compared to those taken by the boat recording team.

In June 2018 the museum received a small grant from Museum Development North West which enabled us to continue working with Stuart to investigate the value of digital recording. Using additional specialist CAD software, Rhino 3D and Delftship (<http://www.delftship.net/>) specialist marine design software, Stuart produced measured plans of the vessel.

### COMPARISON OF TECHNIQUES

The final stage was for the boat recording team to work with Stuart to compare results and look at how both approaches

could be used together to achieve the best results.

Because the shape of the boat had changed subtly to age, condition and its chocking ashore, Stuart had needed to make some assumptions when he was interpreting the digital data into the linesplans. As in the manual recording, the digital model had to be faired up to enable assumed as-built measurements to be taken. However, the assumptions based on desk-top information were shown to be much less reliable than those made by the measuring team that had the benefit of being on the craft when they contemplated them.

For example, Stuart had assumed that the boat was completely flat on the keel and this is shown in the linesplan. However, the recording team had, after much consideration, established that the keel extended deeper at the aft end to form a steering piece.

The exercise demonstrated that digital modelling was a very effective way to create measured plans. However, to gain a fuller and more detailed understanding of the vessel, the most effective and accurate way to carry out future modelling would be by using both techniques together. Using photogrammetry to create an initial model was straightforward and reduced the amount of time needed on-site taking measurements.

A considerable amount of specialist expertise was still needed from both the manual recording team and the CAD specialist. Interrogating the digital model and producing measurements required knowledge and experience of specialist CAD





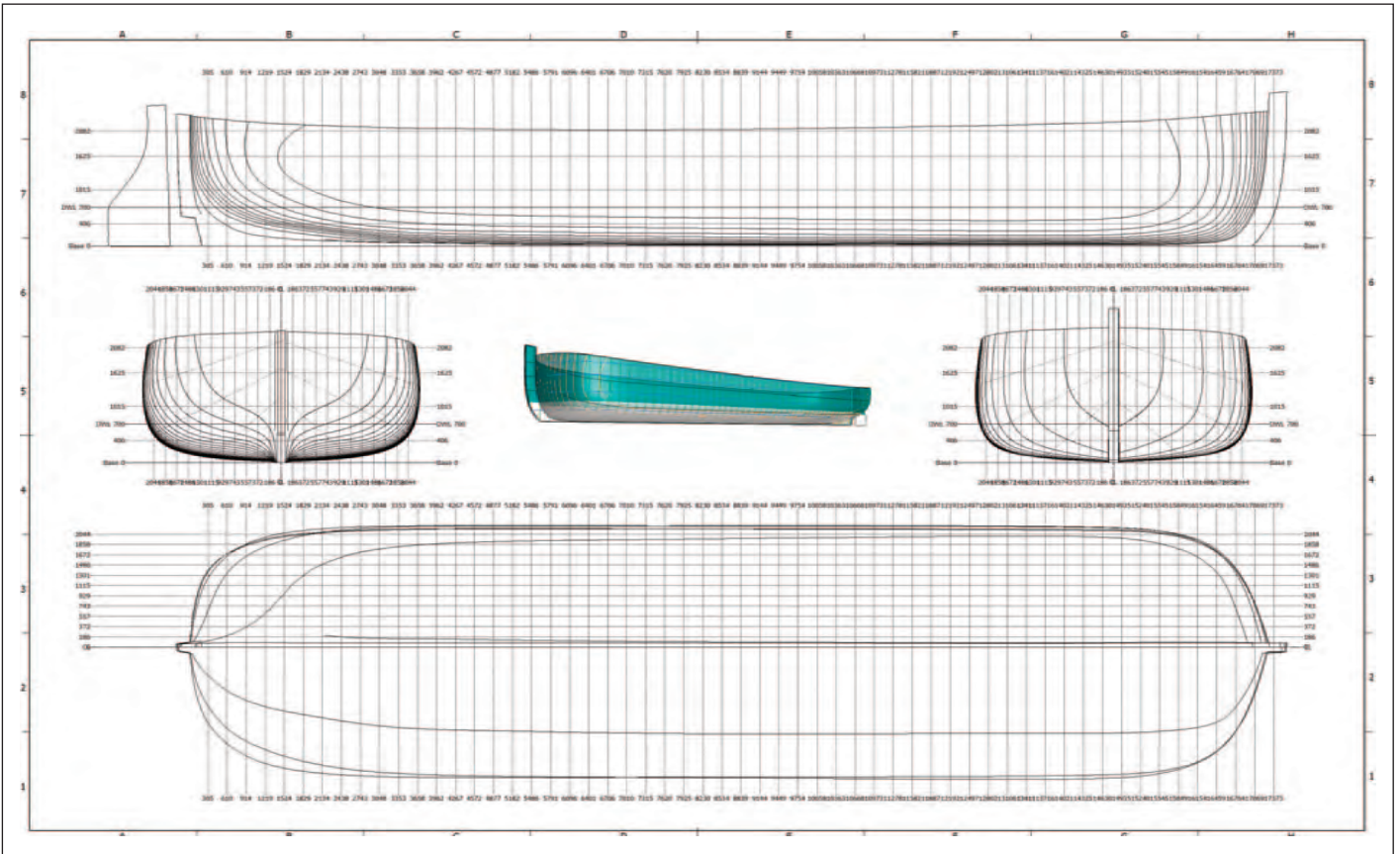
Photogrammetry model

software and the skills and expertise of the boat experts. In old vessels that have moved and changed, the digital model will have to be manipulated to get accurate as-built measurements. This needs to be done with the understanding of the boat brought by specialists.

*The author*

Margaret Harrison is the Programmes Manager at the Association of Independent Museums and was formerly Collections and Interpretation Manager at the National Waterways Museum.

Linesplan produced from the photogrammetry











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