

Louvre Museum to open new conservation and storage facility



Architectural Rendering of the Louvre new conservation and storage facility.
©Musée du Louvre - All rights reserved

PARIS – Last December 2017, the cornerstone of a new conservation and storage facility to house the vast collection of the Louvre Museum was laid in the city of Liévin in northern France. The event was attended by France’s Minister of Culture Françoise Nyssen; Xavier Bertrand, President of Région Hauts-de-France; Jean-Luc Martinez, President-Director of the Musée du Louvre; Sylvain Robert, President of the Lens-Liévin urban area; and Laurent Duporge, mayor of Liévin.

Meet IIC’s new Executive Director! -

NiC interviews Sarah Stannage, newly appointed to the role. Read interview on page 7

Voices from the Deep –

Conserving a collection from the SS Gairsoppa shipwreck. Read full feature on pages 9-12

Scientific Approaches to Textile Conservation -

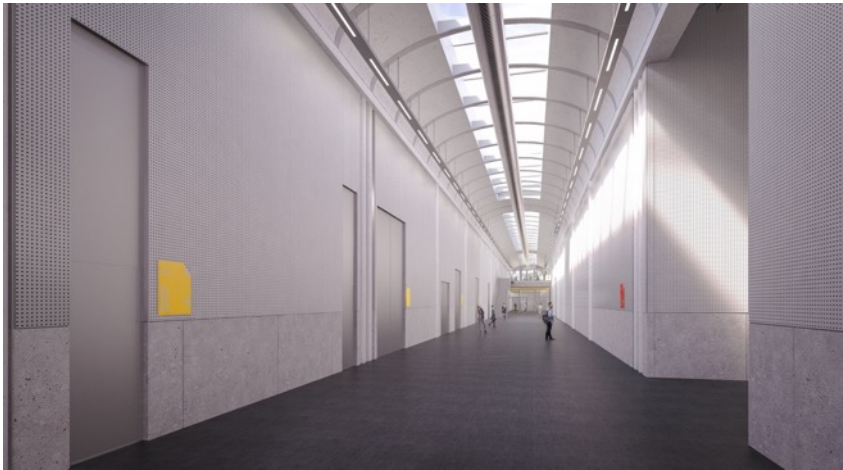
Suzanne Chee recounts her experience of the 3rd IIC-ITTC Training Workshop in Beijing. Read article on pages 13-15

Unroll and Unfold -

Alice Tsang reviews the IIC Palace Museum 2017 Hong Kong Symposium. Read the review on pages 16-17

www.iiconservation.org

Continued...



Architectural rendering of the internal spaces of the new conservation centre. ©Musée du Louvre - All rights reserved

It is estimated that the project will be completed in the summer of 2019.

The new facility will house over 250,000 works, currently stored in over 60 locations both inside and outside the Louvre palace. The Louvre's new conservation and storage facility was created to protect the museum's collections from the risk of flooding and improve conditions for conservation and research. The building will incorporate a new research and study with the aim of enhancing France's role in sharing scientific expertise with the world.

The new facility will only be open to specialists, partners, researchers and academics, but will not have a public-facing programme.

The building consists of approximately 18,500 m² of floor space, of which 9,600 m² will be reserved for storing works, and 1,700 m² for study and conservation treatment. A consortium of architects, environmental consultants and landscape specialists designed the building that will feature a sloping roof covered in vegetation. The building will combine spaces for people to work while at the same time technology will guarantee stable climatic conditions for the proper conservation of the Louvre's collections.

The project was financed primarily by State funds with money coming also from the Louvre (mostly from proceeds from the use of the Louvre name in the new museum in Abu Dhabi); €18 million from the European Union (FEDER); €5 million from the Hauts-de-France region; and €2.5M from the Ministry of Culture and Communication. The estimate total cost is expected to be in the region of €60 Million (£53 Million). Operating costs of the new facility will be entirely covered by the Louvre, thanks to a portion of the interest earned from the Louvre endowment fund.

While the top priority of the new Louvre facility is to protect the French national collections, it may also serve as a haven for works from countries experiencing conflict. This request must come from the States themselves, in full compliance with international law, and provided the works be returned safely when the conflict is resolved.

News in Conservation is published by The International Institute for Conservation of Historic and Artistic Works

3, Birdcage Walk, London, SW1H 3JJ, UK

Telephone +44 (0)20 7799 5500

Fax +44 (0)20 7799 4961

www.iiconservation.org

ISSN 1995-2635

Editor

Barbara Borghese

news@iiconservation.org

Advertising

Graham Voce

iic@iiconservation.org

Format | Production Design

Barbara Borghese

Deadlines for next issue

(April 2018)

Editorial: 1 March 2018

Advertising: 15 March 2018

Disclaimer: Whilst every effort is made to ensure accuracy, the Newspaper Editor and IIC can accept no responsibility for the content published in this newspaper. The opinions stated in individual articles belong to the author(s) and do not necessarily reflect those of the IIC, its officers or Council. No responsibility is assumed by the publisher for any injury and/or damage as a result of the application of any method, product, instructions or ideas in the publication. Inclusion of a product or treatment in this publication does not imply endorsement of the product or treatment.

© 2018 The International Institute for Conservation of Historic and Artistic Works

Editorial

Welcome to the February issue of NiC!

How good it was to see many of you at the IIC Annual General Meeting which took place in London last January, always a wonderful opportunity to catch up and meet new members. For the ones among you that didn't make it worry not – in the IIC News section (page 20) in this issue you will find updates on the evening's main events. Also, not to miss is NiC's interview with IIC's new Executive Director Sarah Stannage. Sarah is already busy shaping up IIC's strategy and future direction and she talks about it in the feature on page 7.

In this issue Suzanne Chee recounts her experience of the 3rd IIC-ITTC Training Workshop that took place in Beijing in November 2017, followed by a review of Unroll and Unfold: Preserving Textiles and Thangkas to Last, the conference organised by IIC and the Palace Museum in Hong Kong, also in November 2017.

IIC is looking for Fellows interested in the new initiative to create speciality groups within IIC, to help take it forward. If you want to know more about it read the IIC News section for details and contact IIC.

For this issue I have decided to include an article I wrote about the conservation of SS Gairsoppa's collection of letters and other objects salvaged from the shipwreck, to coincide with the opening of the exhibition Voices from the Deep, hope you'll enjoy!

Barbara Borghese
Editor

From the President's desk

The IIC Turin Congress 'Preventive Conservation: The State of the Art' is approaching and our partners in Italy, the Italian Group of IIC, Venaria Reale, Citta di Torino and Turismo Torino e Provincia are working hard to ensure us an enjoyable and educational week. Registration for the Congress will be launched at the end of February with a reduction for IIC members who register early.

I am delighted that during the last AGM Amber Kerr was elected as Vice-President, Joyce Townsend was re-elected as Director of Publications, David Saunders was elected to the new position of Director of Membership and Steven Koob, Tom Learner and Rachel Sabino as ordinary members of Council. Jo Kirby Atkinson, Secretary-General has done a tremendous job in editing the formal reports into a fully illustrated 28-page Annual Review.

After the formal part of the AGM there was a discussion about the proposal for IIC Special Interest Groups which was led by Austin Nevin, who had surveyed a number of IIC Fellows during 2017. Read more about the discussion and proposal in the IIC News Section. We are looking for an IIC Fellow to help take this idea forward, please contact me if you are interested.

The AGM finished with a short presentation by colleagues from the Palace Museum, Beijing who were in London for meetings with their UK partner organisations. They showed images of the Palace Museum, the new Hospital for Conservation, the IIC International Training Centre for Conservation and talked about the rapidly growing field of museum conservation in China.

Sarah Stannage, Executive Director started her new role at the beginning of January and impressed all Council members with her grasp of the role of IIC and our strategy. You can read more about Sarah on page 8; she will be in Turin and is looking forward to meeting more IIC members throughout this year.

IIC is working to ensure our compliance with the General Data Protection Regulation, introduced from 25 May 2018. Slaughter and May, our solicitors, provided a training session for IIC Officers and staff at the end of January. The principle change is the method of consent for communication from IIC to our members via email. We need your explicit permission to communicate by email and it is not enough to have the 'Unsubscribe' button, we need your express consent. We want to ensure communication continues, and thank those who have already returned your signed consent forms. We will be writing again to those of you from whom we have not received consent forms to ensure all permissions are in order before the May deadline.

My best wishes for a successful year during 2018 and see you in Turin.



Sarah Staniforth
IIC President



News in Brief...

Science and art on view at the Smithsonian's Sackler Gallery



Computed tomography scanning of the Freer Gallery of Art's lacquer Buddha at the National Museum of Natural History. Image by Freer|Sackler staff

WASHINGTON DC - The only existing sixth- and seventh-century Chinese lacquer Buddha sculptures have come together for the first time in the exhibition "Secrets of the Lacquer Buddha" at the Smithsonian's Arthur M. Sackler Gallery, which opened last December.

Modern technology and scientific analysis have revealed how these extremely rare life-sized Chinese Buddha sculptures were created and what they are made of. These new insights offer a deeper historical understanding of the three Buddha sculptures: one from the Freer Gallery of Art, one from the Walters Art Museum in Baltimore and one from the Metropolitan Museum of Art in New York City. The exhibition explores the methods and ancient process of making sculptures in lacquer, a resin from native trees of northeast Asia.

The Freer|Sackler's Department of Conservation and Scientific Research used specialised equipment and new methods to analyse the sculptures, exposing microscopic details. X-radiography and computerised tomography scans explored details hidden to the human eye. X-ray fluorescence analysis examined the eyes, and the scanning electron microscope was used to study bone particles mixed into the lacquer. Newly developed methods were used to study unusual organic materials in the lacquer layers. With each method, insights were gained that open up a new understanding of the lacquer process used in sixth- and seventh-century AD China.

Four-year conservation project concludes in Ostia



A view of one of the newly conserved structures

ROME - Following a restoration project in the ancient town of Ostia, near Rome, 187 new areas have been opened to the public. The areas include homes, shops, public monuments as well as private commercial activities and recreational places. These are located to the side of a major road (decumanus), running from what was once one of the access points to the city. The project lasted four years and focused on structures that were excavated during a dig at the turn of the 20th Century and later in 1940.

A multi-disciplinary team composed of conservators, archaeologists and scientists carried out the work using a minimal intervention approach. After weeding the structures, washing with water and hand brushing of all surfaces was carried out to eliminate surface deposits and biological patina. The mortar was replaced where it was eroded and reintegrated, with the gaps infilled with materials made with the same methodologies used in the second century AD.

In addition to the invasive vegetation, the most serious problems encountered affected the lower half of the structures and was due to the capillary rising of water, causing the crystallisation of salts. In such conditions, variations in temperature and humidity and the action of wind determines damaging erosive processes.

Source: Mibac

Regional building conservation award for Bramall Hall



Stockport City Council

The Withdrawing room after restoration

STOCKPORT - Bramall Hall, a Tudor Manor house in the north west of England dating from the 14th Century, has been awarded the 2017 Regional Institute of Historic Building Conservation Award for the restoration work that has seen the Hall returned to its full glory.

Bramall Hall was one of only four North West projects shortlisted for the Institute of Historic Building Conservation Regional Conservation Award.

Bramall Hall's re-opened in July 2016 following a £2.2 million [project funded by the Heritage Lottery and Stockport Council](#). The work saw transformation to the historic Grade I listed building and the adjacent Grade II listed stables.

Work in the Hall included sympathetic restoration of the Withdrawing Room's decorative ceiling, carried out by specialist plaster conservators, and repairs to hundreds of panes of beautiful, historic glass windows in the listed building.

Major building work also successfully converted the adjacent Grade II listed stables into a modern facility with visitor centre, gift shop, learning suite and new café.

Judges praised all aspects of the Bramall Hall conservation work highlighting that what made the project stand out was the team behind it. Their commitment to working as a whole meant that every aspect of the project from interpretation and education to the visitor centre and activities had restoration and telling Bramall Hall's story at its heart.

Councillor Kate Butler, Stockport Council's Cabinet Member for Economy & Regeneration at Stockport Council said "Congratulations to all of the team involved in the Bramall Hall restoration

project on this award. Your hard work means that visitors will be able to come and learn more about whilst also experiencing our local heritage in a unique and much-loved part of Stockport for countless years to come."

Bruker and The Metropolitan Museum of Art announce partnership in the field of cultural heritage science

NEW YORK - The Metropolitan Museum of Art (The Met) and the Bruker Corporation announced a 10-year partnership to advance novel analytical technologies and methods in the field of cultural heritage science.

This partnership builds upon and expands a long history of collaboration that has yielded considerable progress and results: among them, the introduction of the first Open Architecture Raman Microscope, the application of Surface-enhanced Raman spectroscopy (SERS) to the identification of organic colorants, the development of Laser Ablation SERS, and just recently, the use of Macro Area Scanning XRF for the study of paintings.

The two institutions previously collaborated in instrumentation development and methods that are now commonly used around the world. The new technologies will enable The Met's scientists to advance scholarship in cultural heritage science and solve challenging conservation problems.

As part of this collaboration, Bruker will also provide instrumentation and technical expertise for the Network Initiative for Conservation Science (NICS), the new programme established by The Met to support research at other museums in New York City.

As many of these museums lack the scientific resources to perform in-depth chemical and elemental analysis, Bruker portable infrared, Raman, and x-ray fluorescence instrumentation operated by Met scientists will play an essential role in establishing a mobile laboratory and in building a distributed scientific network benefitting all cultural heritage institutions in the city of New York.

X-ray technology helps map indigenous artefacts

Flinders University



Dr Rachel Popelka-Filcoff with Aboriginal artefacts

ADELAIDE - X-RAY technology used to analyse Indigenous Australian ochre artefacts could be used to accurately map the origin and techniques of indigenous art from around the world.

Researchers from Flinders University in South Australia have managed to use advanced X-ray technology from the Australian Synchrotron Facility in Melbourne to analyse Aboriginal artefacts without the need for sample extraction. Old European-style portrait artworks have been analysed using X-ray fluorescence microscopy, but the new research allows for more delicate artefacts like bark paintings to be examined while remaining intact.

Flinders University researcher Dr Rachel Popelka-Filcoff said although the technique had been used in European-style canvas paintings, this was the first time it was used on Indigenous objects. She said: "This new method provides higher resolution information and an alternative to traditional destructive testing, while returning the object unharmed to the museum collection," adding "The findings from across Australia will help to reconstruct ancient exchange routes, provenance of Indigenous art and objects, and other unprecedented analysis to help conservation and authentication studies", Dr Popelka-Filcoff said.

2018 is the European Year of Cultural Heritage

Barbara Borgnese



Santa Chiara cloister in Naples, Italy

MILAN - The European Year of Cultural Heritage kicked off with a ceremony that took place at the European Culture Forum in Milan.

Commissioner for Education, Culture, Youth, and Sport, Tibor Navracsics, who officially launched the event said: "Cultural heritage is at the heart of the European way of life. It defines who we are and creates a sense of belonging. Cultural heritage is not only made up of literature, art and objects but also by the crafts we learn, the stories we tell, the food we eat and the films we watch. We need to preserve and treasure our cultural heritage for the next generations."

The purpose of the European Year of Cultural Heritage is to raise awareness of the social and economic importance of cultural heritage. With 453 inscribed sites, Europe as a region accounts for almost half of UNESCO's World Heritage List.



NiC meets Sarah Stannage, IIC's new Executive Director

As announced in the last edition of News in Conservation, IIC has appointed Sarah Stannage as its first Executive Director. Sarah officially started in her new position on 1st January 2018 and will be focussing on strategic development, helping to strengthen IIC's future place in the world of conservation.

With a Bachelor degree in Conservation and Restoration from the University of Lincoln, UK, Sarah was awarded a [Clare Leadership Fellowship](#) to advance her work in museums and conservation. Before her appointment at IIC, Sarah had a CEO role at a UK conservation charity, the Countryside Restoration Trust, having amassed over 15 years senior executive experience in the management of heritage and museums, conservation of the historic environment, academic research and community-lead regeneration projects in the course of her career. She is also a Fellow of the Royal Society of Arts.



NiC: Sarah, first of all congratulation on your appointment, it feels very new and very exciting for us at NiC to be welcoming you and hopefully to have you stopping by regularly to update us on your activities. How have the first few weeks in the role been?

"Thank you, it is an enormous honour to be asked to be the IIC's first Executive Director and I am thrilled to be joining the organisation at such an exciting time. It's been an incredibly busy start to 2018 and to the role with preparations for IIC's AGM and Council meeting in London on 22nd January. We were fortunate to be joined at the AGM by our colleagues from the Palace Museum in Beijing who gave an impressive presentation on the IIC-ITCC conservation training programme and also a look into the future with shared aspirations covering the next few years. There was also a panel discussion on Special Interest groups with IIC Fellows and Council members. Interesting viewpoints were put forward on trends within the sector and a willingness to explore further practical subjects such as Health and Safety as well as wider sectoral debate on authenticity and leadership within the profession. It was a great opportunity to meet everyone there and introduce myself."

I realise It's early days, but have you got already a set of priorities you will be working on in 2018?

"Our immediate priorities include launching a refreshed website in early 2018 and creating a Communications and Marketing Plan that reflects our purpose as an organisation. A new era of technologies is changing the way that we can interact with the world around us, blurring the line between the physical and the digital. So I am keen to see how we can use different technologies to engage people in a truly meaningful way.

My hope is that through our congresses, professional dialogue series and various activities we can further develop our global network of distinguished Fellows, members and Institutions, which at the moment represent around 70 countries.

We know that our members value the fact we are an independent international organisation, 70% of our income comes from subscriptions as well as royalties from publications. However, as a self-funded organisation if we want to extend our impact and reach around the world we need to increase our income streams further with commercial partnerships, sponsorship and grants. Development and fundraising will be a key focus for IIC over the next few months and forms part of our new Strategic Plan 2018-2021.

Then of course there is our Turin Congress in September this year as well as the next edition of *Studies in Conservation*, so it's set to be a very busy first year."

You've had an extensive and diverse career working across heritage, conservation and museum sectors. Does the new role in IIC in some way feel like going back to your roots?

"I trained as a museum conservator and feel privileged to have led various heritage projects over the years, from building a new museum to celebrate a community's coastal heritage to supporting some brilliant teams involved in making internationally significant archaeological discoveries including Flag Fen and also one of Britain's best-preserved Bronze Age settlements at Must Farm. Quite importantly these projects have become wider platforms for knowledge sharing, discovery and advancement within the conservation sector.

I decided to take on the role at IIC because I felt that in the current climate, the IIC is uniquely placed to make a positive contribution to conservation and heritage but on a global scale. It is an opportunity to make a real difference in an area I've always cared about."

As an international organisation IIC operates globally; what do you perceive as opportunities/challenges in being able to respond to diverse needs and cultural approaches in a relevant and effective manner?

"You could say working globally is in our DNA here at the IIC and this is something I cherish most about our founding story. For those that don't know the IIC was established in 1950 by a group of men and women representing various nations from the Monuments, Fine Arts and Archives programme who witnessed dramatic events during WW2. They were involved in saving many internationally important historic and artistic works from being lost forever. They became known as the Monuments Men but we know them as our Founders.

Our purpose is to follow through on our original founding principles and work consistently to overcome many of the perceived challenges to working internationally. The way we hope to do this is by bringing together conservation and heritage professionals from around the world within a shared and independent arena, by enabling, educating and recognising excellence.

This commitment is at the heart of everything we do -from the intellectually stimulating Congresses to activities specifically tailored to capture the imagination and curiosity of conservation students around the world. I think that partnership, technology, communication and openness will also play an ever-greater role in helping to ensure the IIC continues to remain relevant and appeals to a growing international audience."



Voices from the Deep – Conserving the SS Gairsoppa's memories

By Barbara Borghese

On 5th December 1940, the British India Steam Navigation Co. Ltd.'s SS Gairsoppa left from the port of Calcutta, India to sail toward Britain. The cargo ship was carrying important war supplies including 2,817 Bombay Mint silver bars, tea and Royal Mail letters. On 16 February, just as the ship was nearing the end of its journey, a German U-boat torpedoed it and the ship sunk just off the coast of Ireland. The Gairsoppa went down in just five and a half minutes and remained at the bottom of the sea bed for the next 73 years.

The Postal Museum



At a depth of 4,700 metres, a cache of 700 letters, representing the largest collection ever found at sea, remained preserved until an expedition organised by the American company Odyssey Marine Exploration began the salvage operations to bring the content of the ship back to land. The shipwreck revealed hundreds of letters never delivered to their destinations.

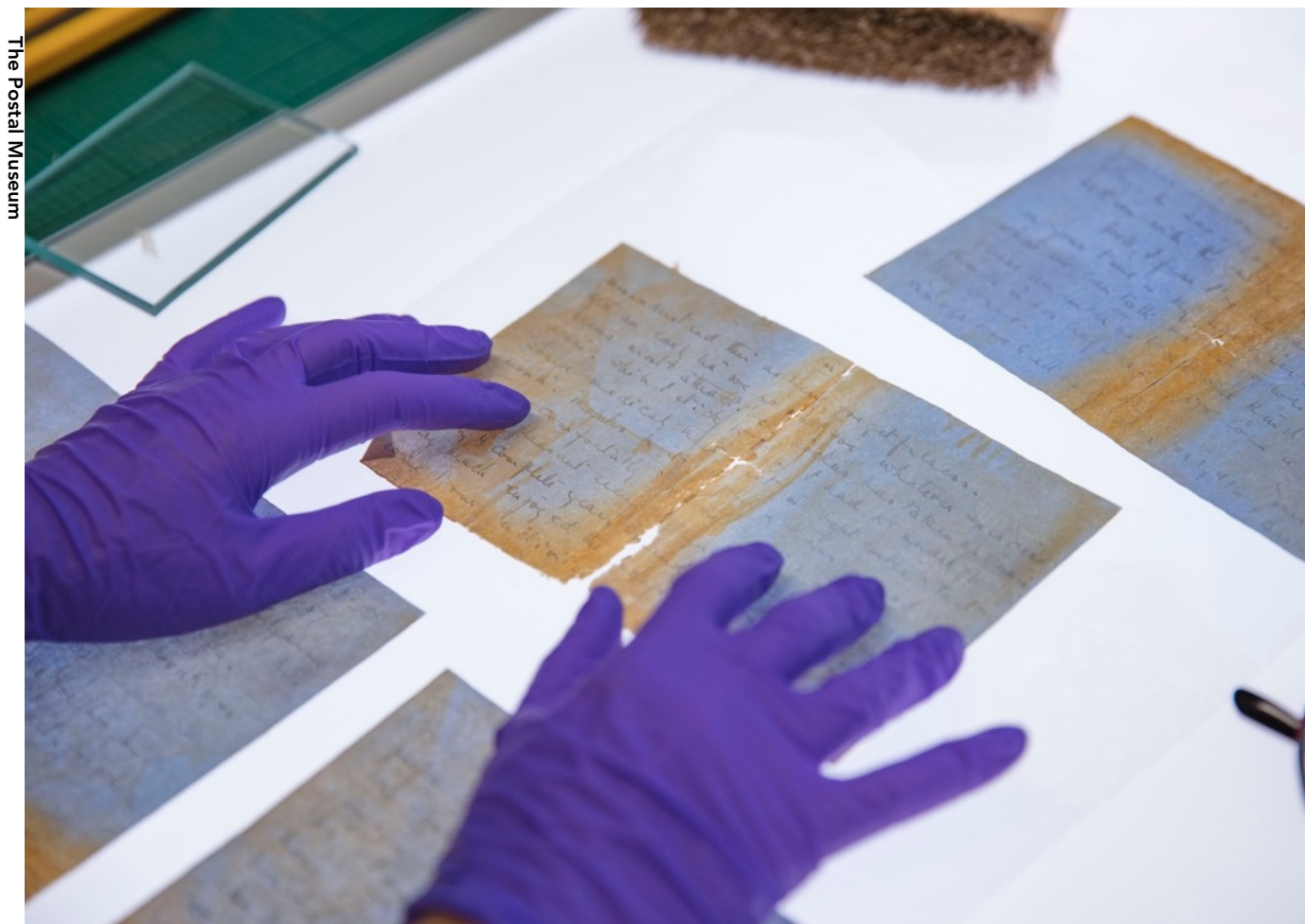
In 2017, the British Postal Museum and Archive (now Postal Museum) was approached to explore a possible interest in acquiring the collection of letters and other paper items. The organisation was at a crucial stage in its development as it was going from being

an archive and a museum collection without a permanent home to become a new museum and attraction including the Postal Museum and Mail Rail. The historical value of the collection was immediately apparent, and the acquisition was agreed after fundraising secured the necessary funds to complete the operation. The collection will be used in an exhibition that will tell the story of this amazing find, how these objects survived and most importantly the stories behind some of these letters.

Conservation

We were informed that after the salvage operations, the collection had been transported to Scotland to an archaeological conservation facility to receive initial treatment.

The collection of letters arrived in the conservation studio stored in boxes, arranged in folders, divided into batches contained within polyester sleeves. The identification numbers were the ones assigned by the archaeological conservation studio that had first worked on the letters, prior to acquisition by the Postal Museum. The first task, after visual examination, was to decide together with curators and the Head of Collections which numbering system to adopt to catalogue the collection. Given the limited time we had before conservation work had to begin and be ready in the for the exhibition opening, it was decided to keep the numbering system used by the Scotland's conservators and thus keeping also the single batches in the same order as they arrived. Digitising the whole collection was desirable and doing so both before and after conservation will help keeping high quality accurate records of the collection. Fortunately, the Postal Museum has an in-house digitisation studio, so this was easily achieved.



The Postal Museum

Communication with the conservation studio that first worked on the items was vital to established previous interventions and to be aware of any potential issues with the collection.

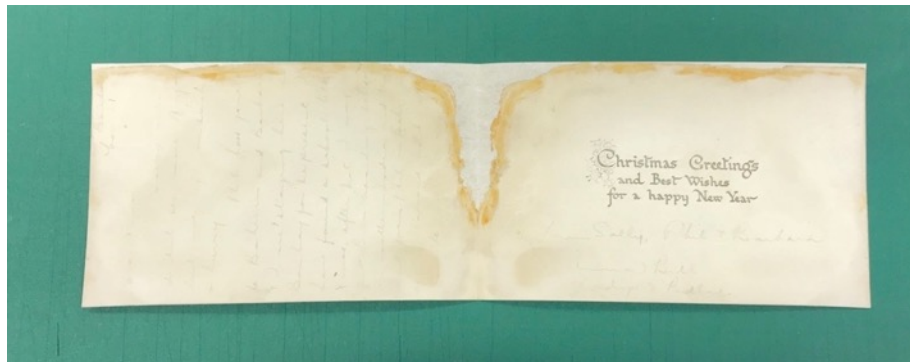
Although the collection had survived remarkably well, given it had been at the bottom of the sea for over 70 years, unsurprisingly the letters were still very fragile and to be safely exhibited the main conservation issues had to be addressed. From handling the letters, it was obvious that the paper had lost all internal size resulting in a feathery absorbent texture very prone to breakage. Brown staining, due to proximity with metal components was evident on almost all items. Some photographs had survived well but most of them were nearly illegible and in some cases image transfer to other items had occurred making the identification of the photo difficult.

The other issue was that the fragmentary state of most of the items required a jigsaw-puzzle approach as in the case of letters of several pages that although luckily kept in the same polyester sleeve needed to be re-assembled before repair could take place. With ink almost completely faded in some sections, assemblage of these letters required a concerted effort with curators and a good eye for old fashion handwriting

As it was immediately clear that we could not conserve all of the items in time for the opening of the exhibition, the first step involved the identification of the items to select for display. The criteria had to take into consideration both the physical state of the items and the relevance to the story that curators

wanted to present. Working with the Postal Museum exhibition officer and the head of collections, a first selection was presented to the studio and from this initial pool the final items were decided.

The Postal Museum



permanence in deep sea, rather than to active mould. We also knew that the papers were going to be kept in a controlled environment with low lighting and optimal relative humidity and temperature, unlikely to present the optimal condition for spores to go from dormant to active.

Methylcellulose in a 0.25% solution was used as a re-sizing agent and was applied by brushing. This imparted the items with strength and flexibility with the coating providing much needed surface protection against abrasion and soiling.

Repairs took the longest time given the fragmentary state of most of the items. Reconstructing some of the envelopes was particularly satisfying given that in some lucky instance we were able to match them with their respective stamps and letter. Repairs were carried out using Japanese hand-made papers of various thickness, applied with Jin Shofu wheat starch paste.

Preliminary work done in Scotland involved the removal of salt deposits through desalination by soaking the objects in fresh water and the removal of a black slime deposit that had formed on the bundles

To keep the workflow as fluid as possible, a selection of items was sent to digitisation while others that had already been digitised received treatment. The main aim in treating the objects was stabilisation; we were not looking at 'beautifying' these items especially given their history, but rather to prevent them from receiving further damage and be safely exhibited. Paradoxically, in some instance letters were immersed in water as floating allowed sheets to be safely separated compared to doing it mechanically. Washing was done only when necessary to remove larger debris and primarily by floating.

When first examined, some of the stains on the letters had the appearance of mould. Multi-coloured patches radiating from a darker central point in a circular fashion could have been caused by mould spores, but we did not possess the capabilities to identify this with certainty, given that at the time of receiving the collection we were in the process of moving to the Postal Museum new building. Basic examination under magnification reassured us that although mould presence could not be excluded, we couldn't detect any dry powdery spores that could be picked up with a brush. Although there still was a smell on the papers, this was most likely due to their

from the deep sea. However, there was a bundle that arrived to us separately that had not gone through the same process, so desalination was performed at the museum using the same methods. This bundle had a very pungent smell that did not wash away with subsequent baths in water. A final bath of 50/50 water and IMS was successful in removing the smell.

Voices from the Deep

Working on this collection was an intense experience and I don't think a more appropriate title for the exhibition that will tell these stories could have been found. These objects do represent voices coming from a not so distant past, from a period that is one of the most tragic in modern history. It was not unusual for ships to carry letters, mail has been carried this way for centuries and it was certainly not unusual for a ship to be sunk and not making it to destination. What is most amazing is that these objects survived to tell the stories of people from all works of life, in their own words. To make the story more poignant is that Christmas was only weeks away when the cargo, with 86 crew members sunk. These letters cover the full spectrum of human emotions – from love to fear to joy and longing – and provide an insight into life and death at the time of WWII.



The letters from the SS Gairsoppa and many other items recovered from the shipwreck can be seen as part of the exhibition *Voices from the Deep* opening in March 2018 at the [Postal Museum](#), London

About the author

.....

Barbara Borghese works as a conservator at the Postal Museum, London and is editor of *News in Conservation*. In 1999 she gained a Bachelor of Arts in Conservation from Camberwell College of Arts, University of the Arts London and in 2005 gained a Master Degree in Museum and Galleries Management from City University London. Previously she worked at the British Library and Historic Royal Palaces. She is a Fellow of IIC.



Scientific approaches to textile conservation –

IIC-ITCC Training Workshop (III)
November 13-23, 2017

By Suzanne Chee

The Palace Museum in Beijing welcomed 23 participants from China and many corners of the world including Australia, Egypt, Argentina, Serbia, Finland, Canada, Austria, France and Vietnam to take part in the third IIC-ITCC Training Workshop. During our 9-day workshop, many interesting and thought-provoking issues were raised by the instructors.



Suzanne Chee

Designed to give us insights into many topics relevant to textile conservation, we attended lectures, site visits, laboratory tours and inspected many unique and well-preserved Imperial robes from The Palace Museum's storage collection. Small working groups were created to discuss various concepts raised during the day. Lively and productive discussions grew from these interactions and the exchange of knowledge and experience amongst the participants was well received.

The opening ceremony was launched in the beautiful Jianfu Palace where the director, Dr Shan Jixiang, spoke eloquently on The Palace Museum, highlighting their goals and achievements, as well as their plans for the future. Dr Shan asserted that the textile collections at the Palace Museum were held in the highest esteem, with over 180 thousand textiles including clothing, banners, fabrics, embroideries, wall hangings and silk scrolls. Setting the workshop on scientific approaches to textile conservation in this remarkable institution could not have been a better choice.



Suzanne Chee

Sarah Staniforth, IIC President, presented a lecture on preventive conservation, targeting important issues we may often overlook. As a group, we analysed and debated the agents of deterioration such as physical disturbances, theft, fire, water, biological and chemical forces, radiation, incorrect relative humidity, fluctuating temperatures and lastly, custodial neglect. We were shown examples of stately homes in the United Kingdom devastated by fire or flood and the aftermath of disaster recovery. They were pertinent examples that highlighted the need for priority lists, environment monitoring and to establish solid action plans.

One of the most remarkable facilities we visited at The Palace Museum was The Hospital for Conservation. Furnished with the latest state-of-the-art analytical equipment and a team of highly skilled staff, they are able to study and research their collection at the highest calibre. Dr Austin Nevin, Researcher at the Institute of Photonics and Nanotechnologies in Milan, Italy was our instructor for the component on the non-destructive analysis for textile conservation. He steered us through the many avenues available for dye analysis, FTIR and ATR material identification and microscopy. Dr Nevin's sessions were engaging and throughout the day we became less intimidated by the array of scientific equipment at hand.

An interesting research project undertaken by Dr Lei Yong from The Palace Museum was his investigation of dyes used on tassels and fringes found on Chinese lanterns. The identification of green, red and yellow dyes was authenticated by ultra-performance liquid chromatography-mass spectrometry. An interesting point to note was that both synthetic and natural dyes were identified which acknowledged that the trade along the Silk Road played an important role in the development of dyeing techniques in ancient China.

The delicacy of Imperial Kesi woven textiles from the Song and Yuan dynasties through to the Qing dynasty was articulately explored by Shi Ningchang, Director of Conservation Department and associate research fellow at The Palace Museum. His presentation addressed the complexities of Kesi weaving techniques and their historical origins. Highly prized and valued as artworks over generations, their long-term exposure to light, harsh environmental conditions and inadequate storage have resulted in damage to many important key pieces. Several case studies were examined where we followed the careful and methodical conservation treatments of these Kesi weavings.

Thangkas have been hanging in the Immortals Pagoda Buddhist Hall of the West Warmth Chamber of the Hall of Mental Cultivation for over 270 years, since the twelfth year of Qianlong's reign (1747). Dr Jirong Song, Deputy Director of The Palace Museum delivered an informative lecture covering the problems associated with their long-term display. Remedial treatments on the textiles stabilised the pigments, reinforced the weakened stitches and secured other decorative elements. Many had problems

associated with mould and damage caused by previous rodent infestations. Thorough investigative research, analysis and countless hours of conservation treatment were applied to the damaged thangkaks. To safeguard their preservation, measures have been initiated to guarantee their longevity and their final return to their rightful place in the Hall of Mental Cultivation.

Another important consideration raised at the workshop was the importance of 'object biography' which was made clear by Dr. Dinah Eastop, UCL Institute of Archaeology UK and Dr. Mary Brooks, Durham University UK. Examining an object with a life story attached certainly gave us a different perspective. To recognise and acknowledge the stages of an object's life and how it had changed over time and place were relevant points to consider. This process can be facilitated by the use of X-radiography to reveal hidden processes and secrets within textiles and dress. It has become a popular method of analysis as it is able to map alterations, former repairs and degradation. It has become a worthwhile communication tool not only for researchers but also for public audiences.

A stimulating exercise for the participants was to define the term, textile. Many objects of all manner were strewn onto the table and our task was to select pieces that we considered to be 'textiles'. Was a beaten bark cloth a textile? Was a plastic net a textile? Could a kitchen strainer made of wire mesh be a textile or could a handbag made from jute be a textile? These questions served as a teaser that divided the room and instigated several dramatic debates. If we follow the definition that is universally accepted, textiles specifically refer to woven fabrics, so was that metal wire kitchen strainer indeed a textile!?

The array of different display techniques was explored by Dr. Brooks. We were asked to question the intention of displayed objects in exhibitions. Concentrating on aesthetic qualities should not be the sole purpose, she argues. We also need to take into account how an object is represented, designed or worn. An acknowledgement of the weaver's intention was a further another important consideration. As textile conservators we treat damaged artefacts, but Dr Brooks stressed we should also preserve the 'Material Memories' as important evidence of past lives.

On a practical note, the importance of work, health and safety were highlighted by Diana Collins, Senior Textile Conservator, Hong Kong. She enlightened us on her quest to find the right chair to sustain long hours at the work table. Drawing from her own experiences we followed her journey through an assortment of ergonomic chairs which were never perfect, never just right, until she settled on a traditional Chinese chair. Her chequered journey segued to informative slides of work tables where conservators work with ease and without strain on their muscles. Another innovative method she presented was the body sling. To access areas that are difficult to reach, body slings enabled conservators to apply treatment while face down and fully stretched along a board suspended above an object.

The intense programme over nine days gave us the opportunity to break down cultural and language barriers and to focus on issues and challenges we face each day as textile conservators and museum professionals. The Palace Museum was an exceedingly generous host, the staff welcomed us warmly and supported us with their time and patience. The opportunity to connect and expand our professional networks with colleagues from many countries and across China was beneficial, resulting in many positive outcomes and goodwill. Memories of roaming the grounds of the Imperial precinct before and after museum hours were poignant experiences we all shared and will greatly treasure.

About the author



Suzanne Chee works as a conservator at the Museum of Applied Arts and Sciences (MAAS) in Sydney, Australia. She gained a Bachelor of Arts at the University of Sydney majoring in art history and began her full-time work in the conservation department at MAAS. She furthered her studies at the Fashion Institute of Technology (FIT), New York where she received a Masters of Arts in Museum Studies (Conservation of Costumes and Textiles). Suzanne plays an important role on many successful exhibitions as well as numerous international shows. She has travelled extensively with many MAAS exhibitions across Australia and international locations. She has presented many lectures and written articles on the care of textiles and dress, the deterioration of 1980s polyurethane Speedo swimwear, the stability of 3D printed textiles in museum collections and conducted tours of the collection storage facilities.

Reviews

Textile Conservators gather in Hong Kong to Unroll and Unfold... IIC-Palace Museum 2017 Hong Kong Symposium

By Alice Tsang



It was such an amazing weekend from 24-26 November 2017 as over 280 textile conservators and practitioners from 24 countries and regions gathered in Hong Kong for the IIC-Palace Museum 2017 Hong Kong Symposium, right after the conclusion of its precursor, the 9-day IIC-ITCC 2017 textile conservation workshop held in Beijing. Pleasant weather, agreeable timing, animated discussions, great enthusiasm, high spirit, reconnecting old acquaintances and expanding connectivity..... contributed to a rewarding, fruitful and memorable Symposium.

Featuring a theme of long-standing interest to conservators and growing interest to other fields and professionals in recent years, "Unroll and Unfold: Preserving Textiles and Thangkas to Last" aimed to encompass a wide spectrum of issues ranging from artistic, historical to conservation, and scientific aspects of textiles. 18 distinguished specialists from different parts of the world shared their inspirational thoughts on the latest methodologies, strategies, and best practices in preserving textiles and thangkas as part of our cultural signifiers and legacies. By virtue of their illuminating presentations and discussions, the Symposium unfolded many unique and unprecedented challenges as faced by textile conservators in the fast-evolving era. It is believed that with the concerted efforts from conservators across boundaries of nations and disciplines, the merits and significance of our valuable yet vulnerable textile heritage can survive the passage of time and be passed down to inspire the future generations.

Adding spice to the delegates' experience in Hong Kong as our valued guests, the welcome reception was complemented with two demonstrations on traditional handcrafts, during which delegates were being



Dr Feng Zhou, Director of the China National Silk Museum presenting his findings in conserving textiles excavated along the Silk Road



Delegates during the event



IIC-Palace Museum 2017 Hong Kong Symposium/LCSD

offered a gift of their names written in Chinese in rainbow ink and auspicious Chinese knots to bring them luck. Furthermore, delegates were invited to visit the behind-the-scenes tour of a Silk Road exhibition, in which over 200 sets of treasures selected from the Routes Network of the Chang'an-Tianshan Corridor were exhibited. Five cultural tours and a textile workshop were brought to some of the lucky delegates (who were fast enough to sign up for the programmes) as a finale of the Symposium before all departed Hong Kong with smiling faces, refreshed minds and new connections for opportunities. To recapture the fond memories of the Symposium, we will put together the event photos for all to share on the symposium's website.

We would like to thank again the 18 distinguished speakers, our sponsors, supporting institutions, and above all, our long-standing partners, IIC and the Palace Museum for their unfailing trust and support since the IIC 2014 Hong Kong Congress. As the event organiser, one of the most rewarding outcomes is to know the event will be a starting point to unfold a series of thematic conservation symposiums of similar nature in the near future! We trust these events will provide the fertile ground needed to foster advancement in the field and continuous professional linkages essential for collaborative journeys within the conservation community. Stay tuned and be included for the next one!

About the author

Alice TSANG is a Conservation Officer at the Chinese Leisure and Cultural Services Department (LCSD) and was part of the Organising Committee of the IIC-Palace Museum 2017 Hong Kong Symposium. Alice is also Fellow of IIC.



Book Reviews

The Diversity of Dyes in History and Archaeology Jo Kirby Atkinson editor

Reviewed by Arie Wallert

Archetype Publications Ltd, London (2017), ISBN 978-1-909492-53-0. Book reviewed by Arie Wallert

It is a peculiar sect DHA. Not many people in the humanities and/or sciences know what the abbreviation stands for: Dyes in History and Archaeology. It is a rather informal group of people with an interest in organic colourants. Somehow, they managed to stay under the radar for some thirty-five years¹. They sometimes have their meetings at remote, but inviting, places like Avignon, Riggisberg, or La Rochelle. Sometimes in Vienna or Amsterdam.

And from time to time, they publish proceedings of their meetings. At first, these proceedings were rather simple and unassuming. But now, their papers are being published at an increasingly high level of sophistication. The present volume is a good example of these accomplishments. This book contains a selection of papers from meetings held from 2003 to 2007.

It is not a very easy read. It is a clunky, heavy volume (1160 grams on my kitchen scales) with some 450 pages in A4 format, containing over 40 refereed papers on very diverse subjects. So diverse, that the intended audience for the book is not immediately obvious. Some papers (Hulme et al.) describe the identification of organic colourants with very sophisticated hyphenated instruments such as HPLC-PDA, and HPLC-ESI-MS, apparently addressing specialist scientists. In general, the emphasis of the book is on the chemistry of organic colourants, but other papers may be more of historical interest. For instance, the paper that discusses the interpretation of mediaeval documents for the identification of an obscure colourant (Krekel et al.), the paper (Minksztyl) on the function of colour in traditional Polish folk attire, or the paper (Verhille) that describes the developments in mediaeval trade routes for dyestuffs, seem to be written primarily for the interest of (art) historians.

This is the book's greatest weakness as well as its great strength. Very few readers will probably be able to fully appreciate each and every paper in its own right. Not everyone is equally equipped to be knowledgeable in the natural sciences as well as conversant with scholarly disciplines. At the same time, it gives you – with some effort – the opportunity to be informed about amazingly diverse aspects of dyes in history and archaeology. I assume that it should be only a dull person who would not find anything of interest here. There is something on the mysterious pigment Maya blue, on dyestuffs on Turkish skull-caps, or on rabbit hair, in printing inks, in seventeenth-century Dutch paint glazes, or in Uzbekan embroideries. And so on. The title of the book is well chosen indeed.

Jo Kirby, who did a wonderful job in editing this book, has chosen to organise its contents chronologically². There is a section on 'Dyes and Dyeing in Classical and Medieval Times', followed by 'The 15th to the 17th Century, and a section on 'The 18th and 19th Centuries and the Rise of Synthetic Dyes'. These chronologically organized sections are preceded by a selection of papers that nicely demonstrate the breadth of the different approaches to the subject at DHA: 'Approaches to the Study of Dyes'. The book ends with a section focused on the (determination of) the specific characteristics of mostly natural, organic colorants: 'Properties, Chemistry and Analysis of Dyes'. This organization has led to seemingly illogical choices.

¹ The Dyes in History and Archaeology meetings have been held since 1982.

² The editor, Jo Kirby, was assisted by Dominique Cardon, Chris Coksey, Vanessa Habib, Richard Laursen, Anita Quye, Terry Schaefer, André Verhecken and Maarten van Bommel.

The paper by Cooksey on the true nature of isatans in the section on 'Properties...', would logically complement the paper on the bacteria in the medieval woad vat by Lawson et al., and the paper on the woad trade by Verhille, both in the 'Medieval' section. Similarly, arguments could have been made to join the wonderful paper by Verhecken on the history and technology of alum (an indispensable prerequisite for almost all European dye-processes), with the paper by Delamare and co-workers on the role of aluminium in the mordanting process of alizarin dyes.

The paper by Ziderman et al., on the thermochromic behaviour of 6-bromoindigotin in the last section could elucidate on the nice findings in the first sections by Andreotti et al., on cyclamen pink pigment cubes found in Pompeii, and by Karapanagiotis et al., on shell-fish purple in Greek prehistoric wall paintings, and the paper (preceded by his obit) by John Edmonds on the use of imperial purple, both as dye and pigment. This is not a great objection. It merely shows the large variety of possible approaches and demonstrates how strongly all these very interdisciplinary areas of research are connected.

All (refereed) papers are, thanks to the editor and her team, well written and give wonderful insight into the tremendously fascinating field of colourants.

If there is one thing I hope that will come from this book, it is that scientists and scholars alike, will not only read this book and the other proceedings of DHA conferences, but will actually be seduced into attending one of them. This person will not be disappointed.



IIC News

January 2018 IIC Council Meeting

IIC Council's January meeting traditionally straddles the AGM, which this year was held at 6pm on Monday 22nd January at the Society of Antiquaries in Piccadilly, London. Thus Council met on Monday and Tuesday 22nd and 23rd January in the Council Room at the Society of Antiquaries. This was the first meeting that our recently appointed Executive Director, Sarah Stannage has attended. It became clear that Sarah had hit the ground running (once Council had resolved the confusion arising from Sarah's name sharing the same first nine letters of our President, Sarah Staniforth!). She presented to Council her initial response to IIC's strategic plan



Mikkel Schartf

and indicated where her energy is going to be focused. Her appointment arose partly from a realisation that the volunteer nature of Council, albeit supported by an able but over-worked secretariat, was significantly limiting what Council could achieve. Over the next two Council meetings, Sarah will be working closely with the Council's officers to develop the plan further.

The IIC Turin Congress in September will be fast upon us, and Council heard from Austin Nevin the Chair of the Technical Committee on the programme, and Jo Kirby Atkinson on the logistics of the event. This included a skype hook up with the highly efficient local Organising Committee, which is chaired by Council member Lorenzo Appolonia, who was present at the meeting. Julian Bickersteth as Director of Communications reported on the IIC website refreshment which is due to be launched in February, and also briefed Council on IIC's new Instagram social media presence to complement IIC's Facebook and Linked In Group profile.

Day two heard reports on the latest Student and Emerging Conservator Conference held in Berne in October and the International Training Centre for Conservation's (IIC's partnership with the Palace Museum, Beijing) latest course in November 2017, both of which were outstanding successes. A significant time was then spent considering no less than 22 applicants for IIC Fellowship.

A session of the meeting was dedicated to training of Council members in their responsibilities as trustees of a charitable organisation. This was undertaken by IIC's legal advisers, Slaughter and May, and was useful in bringing Council members up to speed with the latest legislation, most notably our liabilities under the forthcoming UK Data Protection Act.

Council next meets next September in Turin prior to the IIC Turin Congress.

Establishing IIC's speciality groups

During the January AGM, one of the topic that was up for discussion was the plan to establish 'specialty groups' within IIC. The topic was illustrated by Austin Nevin and followed an online survey circulated among IIC fellows a few months back. The results of this survey overwhelmingly showed that there is a strong interest in the initiative, with over 70% of respondents declaring that they would join one or more groups. It was also clear that some form of repetition of similar specialty groups already offered by other organisations such as ICOM-CC was not desirable and that for IIC to create something relevant such groups would have to be organised around themes.

Some of the themes that were highly ranked in the survey included adhesives and coating; cleaning; collection management and preventive conservation to name a few. During the evening the discussion continued with participants offering other possible themes and also discussing possible formats and outcomes. The discussion will continue, so expect more updates on the matter in the near future.

2018 Keck Award – Call for applications

Every two years an award is offered to the individual or group who, in the opinion of IIC Council, has done most to further public appreciation of what the conservation profession achieves. The award consists of a certificate and a cash prize of £1000, presented at the biennial IIC Congress.

Details of previous award winners can be found on the IIC website at <http://www.iiconservation.org/about/awards-grants> this web address to be confirmed on new site).

We are now seeking nominations for the 2018 award. If you would like to propose yourself, or a colleague or institution, or project, please send your nomination to the IIC office (preferably by email) to arrive by Monday 2nd April 2018. Please send the following:

- a statement of between 500 and 1000 words describing the nominee's public outreach activities
- two or three photographs in support of this statement
- An outline of what supporting material, such as publications, websites, videos, or evidence of media coverage, is available (you may be asked to supply these at a later date).

The nomination should include the name, job title and professional address of the individual (or of all the partners in a group project).

Send your proposal to iic@iiconservation.org with the words 'Keck Award' in the subject line, or by post to IIC, 3 Birdcage Walk, London SW1H 9JJ, UK.

The IIC 2018 Congress is being held in Turin, from the 10 – 14 September, on the topic of Preventive Conservation: The State of the Art. More details may be found at <https://www.iiconservation.org/congresses> (this web address to be confirmed on new site)



The Fellowship corner

Where we keep you up to date with IIC's new Fellows and their achievements

Łukasz Bratasz graduated in physics from the Jagiellonian University in Krakow, Poland in 1996, and received a PhD in 2002 from the same university. In the same year, he joined the staff of the Jerzy Haber Institute, Polish Academy of Sciences. For many years, he headed the Laboratory of Analysis and Non-Destructive Testing of Artefacts in the National Museum in Krakow. Today, he is the head of the Sustainable Conservation Lab, at the Institute for the Preservation of Cultural Heritage, Yale University.

His research and work as a consultant focuses on the environmentally induced degradation of cultural heritage materials, risk assessment and design of sustainable methods of collection care, especially energy efficient strategies for climate control. He has taken part or coordinated 27 national and international research projects in the field of cultural heritage to date.



Sir Neil Cossons has been engaged in museums and heritage since the early 1960s. As first Director of the Ironbridge Museum he convened the first meeting of what is now TICCIH, The International Committee for the Conservation of the Industrial Heritage, with members in some 35 countries. He was Director of the National Maritime Museum Greenwich, and for 14 years Director of the Science Museum London, where he appointed its first Head of Conservation. Knighted in 1994, in 2000 Neil Cossons was appointed Chair of English Heritage, the United Kingdom Government's principal adviser on the historic environment of England and chaired the working party that published *Power of Place*, setting out proposals for historic environment conservation. He was a non-executive director of British Waterways Board, chaired the Council of the Royal College of Art and has worked extensively on World Heritage projects, most notably in Japan.

Graeme Scott started working in conservation in 1978 as a trainee in Dundee Museums. Early on he became interested in ethnographic and preventive conservation and these have remained his main professional interests ever since. After gaining his Museums Association Conservation Certificate Graeme worked in Inverness and again in Dundee, before leaving in 1989 for the Australian Museum in Sydney. Graeme gained a Masters from the University of Canberra researching mould growth in tropical climates. In 1996 moved to the Netherlands as Head of Conservation for the National Museum of Ethnology, a couple of years later becoming head of the Collections Management department. In 2013 he moved back to Scotland to be Conservation Manager for Glasgow Museums. Graeme has served on the committees of the SSCR and the AICCM and helped in setting up ICCROM's 'CollAsia' South East Asian training projects.



What's on

Call for papers

2nd International Conference on Islamic Heritage Architecture and Art (Islamic Heritage 2018)

17-19 April 2018

Malta

Deadline for submissions: 17 March 2018

For more information visit:

<http://www.wessex.ac.uk/conferences/2018/islamic-heritage-2018>

Lessons Learned: Textile Conservation - Then and Now : 12th North American Textile Conservation Conference

23-29 September 2019

Ottawa, Canada

Deadline for submissions: 11 May 2018

For more information visit:

<http://natconference.com/>

Urban Jewish Heritage | Presence And Absence

03-07 September 2018

Krakow, Poland

Deadline for submissions: 9th April 2018

For more information visit:

<https://urbanjewishheritageconference.wordpress.com/>

METAL 2019 : 9th Interim Meeting of the Metals Working Group

02-06 September 2019

Neuchâtel, Switzerland

Deadline for submissions: 31 March 2018

For more information visit:

<https://metal2019.org/>

A comprehensive list of events taking place around the world, in and around the field of conservation. Write to news@iiconservation.org if you wish to add your event

Conferences/Seminars

"Object Biographies" - II International Artefacta Conference

2-3 March, 2018

Helsinki, Finland

For more information about this event see:

<http://www.artefacta.fi/tapahtumat>

Tempera painting between 1800 and 1950 - Experiments and innovations from the Nazarene movement to abstract art

15-17 March, 2018

Munich, Germany

For more information about this event see:

http://www.doernerinstitut.de/tempera_2018/en/index.html

Conservation Day 2018

19 March, 2018

Universalmuseum Joanneum, Graz, Austria

For more information [click here](#)

6th Forbes symposium: Research on early Chinese lacquer Buddhas

25-26 March, 2018

Washington DC

For more information [click here](#)

18th International Course On Wood Conservation Technology - ICWCT 2018

9-29 June, 2018

Oslo, Norway

For more information see:

<https://www.iiconservation.org/node/7062>

44th Annual CAC Conference and Workshops

8 – 12 May 2018

Kingston, Ontario, Canada

For more information visit: <https://www.cac-accr.ca/conferences>

Conservator's conference: Renovated, rebuilt, saved - how they survived WWII. Conservation, preservation and prevention of items from the years 1939-1945
12-13 April, 2018
Warsaw, Poland
For more information [click here](#)

4th International Conference on Integrated Pest Management (IPM) for Cultural Heritage in Stockholm
21-23 May, 2018
Stockholm, Sweden
For more information about this event see:
<https://www.raa.se/>

It's About Time! Building a New Discipline: Time-Based Media Conservation Symposium
21-22 May, 2018
Institute of Fine Arts, New York City, USA
For more information see:
<https://www.tbmsymposium2018.com/>

2018 AIC's 46th Annual Meeting: Material Matters
31 May, 2 June, 2018
Houston, USA
For more information see:
<https://www.iiconservation.org/node/7105>

ENAMEL 2018: 7th Experts' Meeting on Enamel on Metal Conservation - Call for Papers
7-8 June, 2018
Stuttgart, Germany
For more information see:
<https://www.iiconservation.org/node/7056>

Conference on New Trends in Cultural Heritage Biodeterioration
5-7 September, 2018
Coimbra, Portugal
For more information see:
<http://www.ibbs18.com/>

11th International Conference in Structural Analysis of Historical Constructions
13-15 September, 2018
Cuzco, Peru
For more information visit
<http://sahc2018.com/>

Courses/Workshops

Workshop - Solvents and Paint Films: the practical ramifications
23-25 April, 2018
Maastricht
Deadline for applications: 15 March, 2018
For more information see
<https://www.iiconservation.org/node/7294>

Workshop: Modern Resins for Varnishing and Retouching
19-21 March 2018
Maastricht
For more information see: www.sral.nl

Use of Chelating Agents in Paper Conservation Workshop
27- 29 March, 2018
Stanford University, San Francisco, USA
For more information [click here](#)

Compensation for Loss in the Conservation of Photographic Materials Workshop
16-20 April, 2018
Rochester, NY
For more information [click here](#)

Workshop on Nanocellulose films: a mending material for transparent substrates
24-25 May, 2018
Deadline to apply: 15 April, 2018
The National Archives, London, UK
For more information visit:
<https://www.iiconservation.org/node/7391>

For more information about these conferences and courses see the IIC website:
www.iiconservation.org