

A pyramid within a pyramid? – New discoveries at ‘El Castillo’ in Chichén-Itzá



©Daniel Schwen - Own work, CC BY-SA 4.0

El Castillo, Chichen-Itza

MEXICO - A multidisciplinary group of scientists from the National Autonomous University of Mexico (UNAM) and the National Institute of Anthropology and History (INAH), has confirmed the existence of a second substructure located inside the Kukulcan pyramid also known as *el Castillo* in the archaeological site of Chichén-Itzá in Mexico. The structure was built between 550 and 800 AD, during the earliest and least known stage of this Mayan settlement.

The investigation was conducted using three-dimensional electrical tomography and results indicate that the substructure would measure 13 meters high, 12 in a south-north direction and 18 in an east-west direction.

Continued...

Conservation of ephemeral art –

Ioseba Soraluze, Yu-chun Chen and Chien-hua Lu on restoring banana skin in works by Lo Yi-chun. Feature from page 8

Conservation, collaboration and colour at the Fitzwilliam Museum -

Edward cheese on working for *COLOUR: The Art and Science of Illuminated Manuscripts* Article from page 11

International training in conservation -

Tanushree Gupta, Johanna Wilk and Gabriela Krist talk about the Impulse Summer School 2016. Read feature from page 14

>>



The results of the project were presented at a press event attended by experts from the various institutions involved including archaeologist Denisse Argote Espino from INAH. Speaking about the significance of this discovery, Dr Argote Espino said that through the new data, more can be established with regard to the first

monumental building stage of Chichén-Itzá, a period prior to contact with foreign civilizations. Like other pre-Hispanic archaeological sites, the original pyramid and other constructions of the city were built over during a second residential phase, between the years 800 and 1,000 AD, and again by the third and now visible stage, developed between the years 1,050 and 1,300 AD.

UNAM academics described the innovative technology they developed using commercial and non-invasive tools of superficial geophysical exploration, placing electrical detectors around the pyramid and transmit current in order to "illuminate" the interior of the temple and obtain data such as potential difference and resistivity of the subsoil.

The analysis of changes in underground physical properties allowed them to establish the dimensions of a second substructure on the southeast side of the pyramid, which would measure approximately 13 metres high, 12 metres in a south-north direction and 18 in an east-west direction.

Given the proximity of this second substructure to the location of a *cenote*, a natural water-filled sink hole, in the subsoil, scientists hypothesised that the first inhabitants of the city knew the existence of this body of water, which they not only saw as a key element for their agricultural subsistence, but as a cosmogonic representation of the origin of life and, at the same time, of the underworld.

The team is hopeful that future archaeological exploration work will be able to locate the access to the area's original worship core.

El Castillo served as a temple to the god Kukulcán, the Yucatec Maya Feathered Serpent deity closely related to the god Quetzalcoatl known to the Aztecs and other central Mexican cultures of the Post-classic period.

For more information about this projects visit: <http://www.inah.gob.mx/>

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
(February 2017)
Editorial: 1 January 2017
Advertising: 15 January 2017

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.

© 2016 The International Institute for Conservation of Historic and Artistic Works

Editorial

Welcome to the December issue of *NiC*, the last one of 2016.

Invariably this time of the year tends to be a time to reflect on the events of the past twelve months, at personal and professional level. I was browsing old covers of *NiC* and had very mixed feelings about 2016 with so much of the world's political events having a direct effect in the world of conservation and preservation! While more news of heritage destruction in the Middle East have kept coming in, I was also happy to share positive news of international collaboration aimed at saving the world's endangered patrimony.

Destruction came in many forms including catastrophic earthquakes, especially the ones that shook Myanmar, Italy and more recently Japan and New Zealand. While these are clearly devastating events, and not just for the communities directly involved, they can also present an opportunity to establish co-operations and develop solutions to mitigate the effects of future calamities.

In this issue we have two interesting articles, discussing very different topics; the first looks at the work of artist Lo Yi-chun and the conservation of one of his works made of banana skins. The second article looks at the exhibition currently taking place at the Fitzwilliam Museum and the behind-the-scenes conservation of objects now on display.

Don't miss the IIC News section with details of the forthcoming AGM and please remember to cast your vote for the next Council elections.

I wish you all a fantastic end of year and hope to see as many of you as possible at the AGM in London!

Barbara Borghese
Editor

Japanese/Italian collaboration to survey quake-damaged structures in central Italy



©Zepelli

Inside the Church of St. Francis in Amandola

ITALY – A team of Japanese experts from the Architectural Institute of Japan has carried out a survey in October 2016, following a series of devastating earthquakes in Central Italy.

Part of the team also comprised experts in masonry structures and seismic evaluation from the Nagoya City University, Kinki University and private architectural firms and institutes.

Eisuke Nishikawa, Project Manager, Sites Unit and newly seconded ICCROM staff member from Japan, joined the Japanese survey effort in the historic city of Amandola, located about 30 km north of the epicentre. In this village, the survey focused mainly on two historic brick structures: the Monastero Benedettine di San Lorenzo and the Church of St. Francis.

Many projects have been carried out in Japan concerning the strengthening of traditional wooden structures, yet there is also a need to develop strategies for historic brick buildings. Like Italy, Japan is located in a strongly seismic area and collaborating with a country with similar issues could result in the development of common solutions for historic masonry structures.

This collaboration was the subject of a seminar which took place in Rome on the 1st December, organised by the Ministry of Foreign Affairs of Italy and the Japanese Embassy in Italy. The seminar, entitled *La Prevenzione del Rischio Sismico in Italia e in Giappone* (the Prevention of Seismic Risk in Italy and Japan) addressed the need to exchange experience and knowledge in the field of disaster prevention and protection of cultural heritage, and envisaged co-operation in this field between the two countries.

News in Brief...

Vasari's Last Supper is back on display - 50 years after flood

FLORENCE - After the conclusion of a lengthy conservation project, the Italian president Sergio Mattarella attended the unveiling of Giorgio Vasari's Last Supper (1543).

The panel painting, which is housed in the Museo dell'Opera di Santa Croce, was famously damaged during the flood that caused destruction in Florence in 1966. During the flood, the panel was submerged in polluted water for 12 hours and the unveiling of the restored painting is to coincide with the 50th anniversary of the flood.

The work was carried out by conservators from the Opificio delle Pietre Dure ([News in Conservation, Issue 40, February 2014](#)), a government-funded conservation laboratory which undertook the conservation of the five-panel, 8ft by 12ft painting. The work first started in 2010 thanks to an initial grant from the Getty Foundation followed by funds donated by fashion house Prada to allow conservators to repair the painting's poplar panels and re-join them for the first time since the flood. One of the preventive measures adopted is a system of counterweights to raise the painting off the ground in the event of another flood.

The final stage of the project was supported again by Prada, by Italy's National Civil Protection unit and the Getty Foundation. The Getty involvement in the project is part of its Panel Painting Initiative, launched in conjunction with the J. Paul Getty Museum and the Getty Conservation Institute, in 2009.



©Opificio delle Pietre Dure

Conservators from the Opificio delle Pietre Dure at work on *The Last Supper*

©Staff Sgt. JoAnn Makinano
via Wikimedia Commons (Public Domain)



U.S. Air Force Tech. Sgt. Adrienne Brammer entering Nimrud during the war in 2008

Ancient Nimrud is liberated by Iraq's army

IRAQ - Partly destroyed by ISIS, the ancient Assyrian city of Nimrud is now under the control of the Iraqi army, international media sources have confirmed early in November.

Since the liberation, the Army has been cautious to allow soldiers to enter the site for fear of hidden mines. The site, located 30km south of Mosul, is feared to have been almost entirely destroyed although for now it is still difficult to assess the damage giving that access is still not allowed for security reasons.

In the spring of 2015, the conquest of Nimrud by ISIS, and specifically the destruction of the archaeological site, had alarmed the international community. In a video broadcast the jihadists were

seen attacking monuments and sculptures and subsequently the city was said to have been completely razed when satellite images emerged. UNESCO denounced the destruction as a "war crime" against the World Heritage site. It is hoped that specific information about the condition of the site will be available shortly when drones will be deployed to collect images and videos.

>>

Conservation project to protect early-Islamic caliphate palace in Israel

ISRAEL – In September 2016, archaeologists from Johannes Gutenberg University Mainz (JGU) resumed excavations at Khirbat al-Minya, an early-Islamic caliphate palace on the shore of the Sea of Galilee in Israel.

Led by PD Dr Hans-Peter Kuhnen of the Department of Ancient Studies at JGU, the team is hoping to find out how the site looked before the palace was built and whether the building was used for different purposes after the catastrophic earthquake of 749 AD. The palace, which was still under construction at the time, suffered major damage during the quake. Findings from the new excavations show that the building lost its palatial function as a result of the earthquake and was subsequently only used by craftsmen, traders, and sugar cane farmers.

In addition to the excavations, a conservation project is also taking place with financial support from the Cultural Preservation Programme of the German Federal Foreign Office. The objective is to prevent further deterioration of the ruins. Mainz University has commissioned a German-Israeli restoration team to carry out reinforcement work to consolidate the structures most at risk of collapsing. In preparation for the job, the Laboratory for Building Research at the Rhein Main University of Applied Sciences in Wiesbaden has begun a new and precise survey of the structures in order to get a clear idea of their construction technique as well as to ensure optimal planning for the type and scope of the upcoming restoration work.



© Khalid Mahmood via Wikimedia Commons

Decoration from the Umayyad Palace at Khirbat ul Minya



Madonna with Childs and Saints, oil on panel, 1502, ©Berlin State Museums

16th Century painting raises hopes for a 'lost' Raphael

FRANCE - An oil painting entitled *Noli me tangere* was recently reported as possibly be a renaissance work resembling the style of the great master Raphael. Bought at an antique fair in Avignon by its current owner, the painting was first dismissed as a Victorian copy by experts from various U.K. Institutions including Sotheby's, The National Gallery, Oxford and Cambridge Universities.

However, a recent article, published by the journal *Transactions of the Royal Society*, seem to describe a different scenario. The study, conducted by a team from the University of Bradford, employed Raman spectroscopy to identify pigments used on the painting and concluded that no synthetic pigments had been detected and that all the pigments found were commonly used in the renaissance. Professor Howell Edwards, from the team at the University of Bradford, said: "No trace of any synthetic pigment that appeared post-Renaissance has been found in our studies, which, when taken with the obvious lack of restorative procedures, implies strongly that the painting is correctly placed as an artwork from the Renaissance period."

Other clues are in the composition of the work; on Christ's right foot for example we can count six toes, which was a familiar device used by Renaissance artists, and the face of Christ has similarities with a male figure in Raphael's *Madonna with the Christ Child*, which dates from 1502. There is also what appears to be a signature on the painting, though giving the poor state of conservation of the painting it is difficult to confirm without further research.

>>

Risk of decay for the oldest mummies in the world

CHILE - A collection of mummified human remains found in northern Chile has been rapidly deteriorating due to rising humidity levels and they are at risk of being damaged irreparably if a solution to stop the decay is not found.

The mummies are at least 7,000 years old and around 100 of them are showing signs of decay in the form of a gelatinous substance which is replacing the mummified flesh. The gelatinous substance is thought to be the result of colonies of bacteria thriving in the mummified skin.

Local officials have applied to UNESCO to have the collection recognised as a world heritage site which could be the first step in highlighting the issue to the international community which in turn could help in the efforts to find a solution.

Sergio Medina Parra, an anthropologist from the University of Tarapaca said: "The application is not a goal in itself, but the start of a process of improved conservation tools, with the Chilean state and the international community".

Some of the mummies dated to as far back as 5050 BC, placing them as the oldest known mummies discovered in the world to date. They belong to the Chinchorro people, a group of hunter-gatherers who were mummifying their dead well before the ancient Egyptians perfected the practise 2,000 years later.

The reason the mummies have been so well preserved is due to the dry sands of the Atacama Desert where they lay protected for thousands of years. But once excavated, the mummies were exposed to altogether different conditions and started to deteriorate.

Tissue sample analysis from the mummies revealed that they were covered with bacteria which had started feeding on human tissue as soon as the right environmental conditions had presented.



© Pablo Trincado via Wikimedia Commons

Head of a mummy from the Chinchorro culture, found in Northern Chile

Europa Nostra to kick off protection of endangered 'Kamos' area in Chios



©Courtesy of Elliniki Etairia - Society for the Environment and Culture

GREECE – The Kampos area on the Greek island of Chios is listed in the 2016 list of 'The 7 Most Endangered' heritage sites in Europe.

The site, comprising rural areas together with Byzantine, Genoese and local architectural buildings was visited by a team of heritage and financial experts from Europa Nostra, the European Investment Bank Institute and Elliniki Etairia – the Society for the Environment and Cultural Heritage, which nominated the site for the programme.

The delegation visited several estates, with mansions dating from the 16-19th centuries, built in a unique mixture of Genoese, Byzantine and Ottoman styles, and discussed the situation in Kampos with representatives from the local authorities and with NGOs already actively involved in the area. The key findings and

recommendations of the expert mission to the site will be presented by the end of the year 2016.

The Kampos of Chios faces serious challenges because of its proximity to the city of Chios and its airport, the past mismanagement of natural resources and the current economic crisis striking Greece, which is made even worse by the refugee crisis in Chios itself.

Europa Nostra is a not-for-profit organisation working to safeguarding Europe's cultural and natural heritage. It is composed of 250 member organisations, 150 associated organisations (governmental bodies, local authorities and corporations) and also 1500 individual members who directly support the organisation's mission.



12-foot-tall Syrian mural travels 10,000 kilometres to the Aga Khan Museum

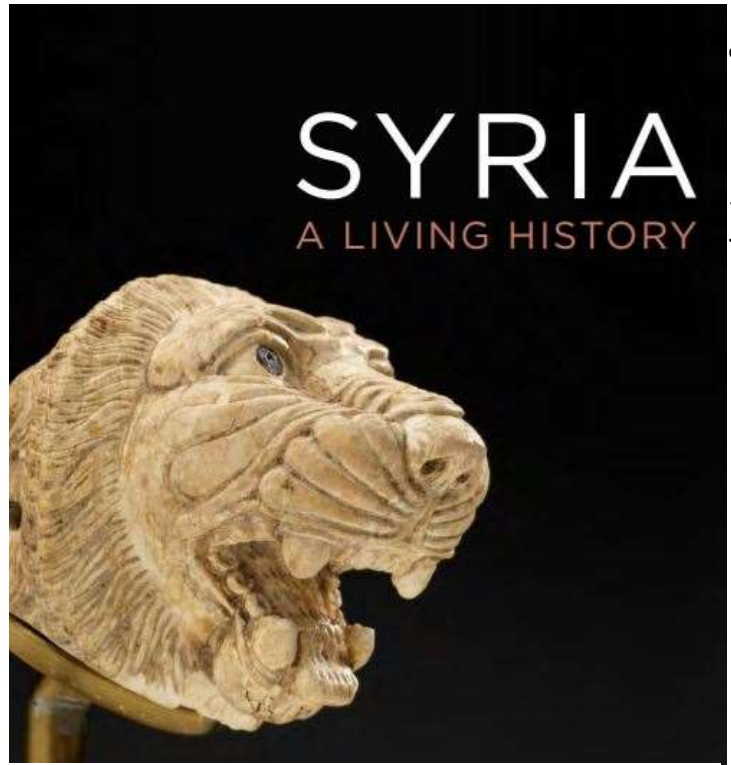
TORONTO - The Aga Khan Museum in Toronto has unveiled its newest exhibition called *Syria: A Living History*. The exhibition features a collection of art and artifacts from across the world stretching 5,000 years into the country's past.

This is the first major international show focusing exclusively on Syria showing paintings, sculptures and objects lent from private collectors and major institutions.

One of the show's highlights is *Deluge: The Gods Abandon Palmyra*, a 12-foot-tall mural by contemporary Syrian artist Elias Zayat. In order to document the work that went into the installation of the showpiece, the whole process, from getting it out of the transport crate to the actual installation in the gallery was recorded and made into a video.

The curator of the exhibition, Filiz Çakir Phillip, felt very strongly in favour of having the painting in the exhibition despite the difficulties in arranging its physical removal and transportation to the venue.

The painting is on loan from the Atassi Foundation, an organization in Dubai dedicated to preserving Syria's creative legacy. It is a depiction of the Mesopotamian tale of Gilgamesh, which Zayat situated in Palmyra as a way to link Syria's past, present and future: Palmyra is both an ancient city and a symbol of resistance in Syria's current circumstances.



Front cover of the exhibition companion book showing a 9th–8th centuries BCE Archaic Period Ivory, carved

©Aga Khan Museum, Royal Ontario Museum

London's Manet *Le déjeuner sur l'herbe* predates the Paris version



Déjeuner sur l'herbe by Édouard Manet (1862–1863).

LONDON – A version of Édouard Manet's once scandalous painting *Le Déjeuner sur l'Herbe* has been analysed by conservators from the Courtauld Institute in London and it is now believed to be a preparatory work rather than a replica of a larger painting at Paris's Musée d'Orsay. The new theory contradicts the accepted view from the major UK expert on impressionism, John House, who, until his death in 2012, remained convinced that the London's version was a replica.

The Courtauld picture underwent a series of conservation interventions, first in 1890 when it was re-varnished and subsequently in 1952 and 1976, when it was cleaned and again varnished. During the new intervention, a conservator at the Courtauld, removed the varnish and examined the

painting using macro X-ray fluorescence scanning and scanning multispectral infrared reflectography and revealed *pentimenti* including alterations to the curve of the back of the female nude and Leenhoff's cap, suggesting that the Courtauld picture is a preparatory work. The Louvre picture does not appear to show *pentimenti* and the handling of the paint is more uniform, which suggests that it is the final version.

During the recent restoration, it was discovered that the signature of the artist was added after the picture was completed and dried, suggesting an original work rather than a replica. Further research on the Paris version could potentially provide more insights and clarify the origins of the two works.



Conservation of ephemeral art: restoring banana skins in works by Lo Yi-chun



by Ioseba I. Soraluze + Yu-chun Chen + Chien-hua Lu

This project was first presented as a poster at the 2016 IIC Los Angeles Congress. The poster was the runner-up to the Student Poster Prize and the version presented here is an article update from the original work.



Process art deals often with unpredictable materials, such as living matter, including vegetables and animals. These organic components contain *the experience of life* and using those means accepting a degree of unpredictability and questionable permanency. However, placing process art objects in a museum context has introduced significant controversies about conservation and concepts of acceptable degradation, and requires a

>>

balance between conceptualism and materiality. The conservation of ephemeral art converges to satisfy the museum's requirements without renouncing an artist's intention.

The aim of our research was to study conservation approaches in ephemeral artworks by Lo Yi-chun. The artworks studied belong to the Kaohsiung Museum of Fine Arts, Kaohsiung City, Taiwan, as well as the artist's private collection, and they are made exclusively with banana skins. The conservation project has been a collaboration between the Conservation Centre of Cheng Shiu University, Kaohsiung Museum of Fine Arts, and the artist herself. The works had mould and insect damage, including broken and detached skins. Furthermore, the configuration for the installation of the artwork chosen by the artist affects the preservation of the pieces. The project was focused around an interview held with the artist to learn and understand her intentions, in order to carry out treatment. The talk with the artist revealed that the artworks were produced while she was living in Japan and that she used bananas imported from the Philippines. The artist was very concerned about the origin of the bananas and felt that they could only be replaced if they came from the Philippines since otherwise the time-space concept would be lacking. She believes the material has its own life cycle and the bananas will thus have changed by the time they arrive. However, mould growth was seen as an aesthetic disturbance and a distraction for viewers. The artist hopes that her banana skin artworks may last at least 50 years and so she dried and waxed the skins to delay complete degradation.

This project worked on three of Lo's installations with similar patterns of damage that were on display in the museum's gallery. Each was hanging from the ceiling by nylon threads that were fixed to the skins and this system affected the structural stability of the works, causing the deformation of several skins.

Nonetheless, the intervention was addressed specifically at the elimination of mould that altered the appearance of many parts of the installation.



>>

The main deterioration consisted of large areas of mould growth spread across the works. The mould infection was not only attacking the pieces but had spread around the gallery, and the museum was worried about contamination of other exhibits in the collection. Knowing that the mould growth was damaging the aesthetic and



was not wished by the artist, it was removed using quaternary ammonium salts after considerable testing. Moreover, the benefits on future growth of increasing airflow were evaluated, but it was concluded that further damage could result, due to the weakness of the works. Changing the environmental conditions in the gallery was rejected as Lo's installations are exhibited alongside objects with different environmental requirements in the gallery. A combination of the brittleness of the skins and the installation system adopted by the artist made the bananas easier to tear. The breaks were fixed using new banana skins supplied by the artist. A polyvinyl acetate (PVA) glue was used instead of a water-based adhesive, to avoid adding humidity to the system.

The case study of the restoration of banana skins in works by Lo Yi-chun has demonstrated contradictions in the conservation of ephemeral art. Organic materials are intended to decay and have a short life span; however the

>>

artist expects her works to last for several decades. Furthermore, the artist only allows broken pieces to be fixed if the stability of the work is in danger, and refuses a complete replacement of any skin to avoid changes in the space-time meaning of the work. In galleries without other objects, climate control will prove a key means not only to prevent mould growth but also to impede possible new deformation of the banana skins.

All images used in this article are copyright of the authors



Dr Ioseba I. Soraluze is a contemporary art conservator and Head of the Painting Department at the Conservation Centre of Cheng Shiu University. He received his PhD from the Polytechnic University of Valencia and has worked in several contemporary art museums in Spain. Since 2006 he has been based in Taiwan and has carried out conservation and research projects with different museums, galleries and institutions in the country. He also does consulting related to acquisitions and conservation of contemporary Chinese art for auction houses in Hong Kong.

Lu Chien Hua is a graduate conservator from the Institute of Conservation of Cultural Relics, Tainan National University of the Arts. Since 2007 she has been working as oil painting conservator at Conservation Center of Cheng Shiu University. During this time, she has been in charge of different restoration projects related to national heritage. Previously, she worked as conservator and curator at Kaohsiung County Cultural Affairs Bureau.



Hera Chen is conservator of paintings. She earned her Diploma in art conservation and Masters in management of cultural and artistic events from the Institute Palazzo Spinelli for Art and Restoration in Florence, Italy. She has gained various conservation experiences of both traditional and contemporary art in different countries since 2007. She has worked on large on-site institutional projects as well as for museums, auction houses and galleries.



Conservation, collaboration and *colour* at the Fitzwilliam Museum

by Edward Cheese

Founded by Richard, 7th Viscount Fitzwilliam of Merrion, in 1816 'for the Increase of Learning', the Fitzwilliam Museum in Cambridge is celebrating its bicentenary with a special exhibition, COLOUR: The Art and Science of Illuminated Manuscripts. Viscount Fitzwilliam's magnificent library was at the very heart of his bequest and many of the 130 manuscripts it included – which, by a clause in his will, can never leave the Museum building – are displayed in the current exhibition, alongside important later bequests of illuminated books and cuttings, and a small number of generous loans from institutions across Europe.



© Fitzwilliam Museum, Cambridge

Manuscripts on display date from the sixth to the sixteenth centuries and have been chosen to demonstrate not only the development and range of artists' techniques, but to showcase the cross-disciplinary research, scientific analysis and conservation work which they inspire.

COLOUR has grown out of two major collaborative research projects run from the Fitzwilliam Museum and led by Stella Panayotova, Keeper of Manuscripts and Printed Books: the Cambridge Illuminations Project, which is

>>

publishing the illuminated manuscripts at the Museum and the Cambridge Colleges in a multi-volume catalogue series; and the MINIARE Project, which is at the forefront of a rapidly developing field of research, the non-invasive scientific analysis of illuminators' materials and techniques (<http://www.fitzmuseum.cam.ac.uk/research>).

Art-historical research and scientific analysis complement each other to allow visitors to understand the complex and subtle materials and techniques employed by artists in the creation of some of the best-preserved examples of medieval and renaissance art in existence. From initial analysis to catalogue contributions and final mounting in the display, the Museum's book and manuscript conservators have been closely involved with all aspects of the exhibition, advising on the preservation needs of the material and carrying out frequently complex practical conservation of works in need of treatment.

Painted on parchment - one of the most durable supports - and preserved between the heavy boards of their bindings from the damaging influences of exposure to light, abrasion and dramatic fluctuations in relative humidity, illuminated manuscript books represent the richest source of medieval and renaissance colours to have come down to us. In-fact textiles have faded, stained glass has been smashed, and panel- and wall-paintings have been exposed to physical damage followed by repeated campaigns of restoration. Although the great majority of original bindings have been lost, the books on display in *COLOUR* show off the rich colours and superb technical skill of their illuminators. It is a cruel irony, then, that



Re-sewing the conserved leaves of MS 251

© Fitzwilliam Museum, Cambridge

these generally high levels of preservation encouraged collectors to break up the books, using them as a source of jewel-like works of art feeding the enthusiasm for 'monuments of a lost art' that developed towards the end of the eighteenth century. Alongside the bound volumes, the exhibition provides a rare opportunity to see illuminated fragments from two of the most significant private collections amassed in the nineteenth and early twentieth centuries, bequeathed to the Museum by Frank McClean and Charles Brinsley Marlay.

The challenges of displaying these fragments and making them accessible in the best possible way for their long-term preservation, and of dealing with eighteenth- and nineteenth-century bindings applied – often inappropriately – to much older manuscript text blocks, were among the most exciting elements for the conservators and technician who worked on the show.

Manuscript cuttings on parchment removed from the context of their original bound volumes are exposed to much greater fluctuations in relative humidity than originally anticipated. As a result, parchment can become distorted, with dangerous consequences for the delicate pigment layers on the surface.

In order to counteract this problem, previous generations glued manuscript cuttings to stiff mount boards or inset them into album leaves, but this process in itself frequently induced tensions (and therefore yet more distortion) in the works. Consequently, a significant element of the conservation work undertaken for *COLOUR* was the reduction or complete removal of backings from cuttings and the provision of new mount for some the objects. Painstaking work to remove multiple layers of acidic cardboard revealed text on the reverse of the images and allowed their exact positions in their parent books to be established accurately.

After gentle humidification and flattening, followed by a period of stabilisation, the cuttings were mounted in archival support cards individually cut to fit each fragment, which was then held in position with Japanese paper tabs. The support cards were hinged into archival window mounts, a system which allows for exhibition framing as well as long-term storage, and gives researchers easy access to both sides of each work.

Although illuminations in the collection display a remarkably good state of preservation in general, a few examples had suffered damage, either through the powdering of pigments or flaking of the paint layers. In these cases the conservators worked under high magnification to apply a very dilute solution of *isinglass* (an adhesive often used for consolidation) using a nebuliser or a very small-size miniaturist's brush, depending on the type of

>>

damage. We do not retouch losses, preferring instead to collaborate with colleagues in other disciplines to reconstruct works in a digital form.

The largest single intervention undertaken for the preparation of this exhibition took 214 hours, spread over the course of a year, to complete, and involved a rather more interventive approach. The exquisite half-page miniature of God with Adam and Eve in the Garden of Eden in the opening exhibit (MS 251, an early fifteenth-century French manuscript), has, fortunately, survived in the context of its book; but as is the case with so many manuscripts, the original binding was removed in the mid-eighteenth century to be replaced by a tanned calfskin binding with a gold-tooled spine, the fashion of the day for a gentleman's library. In order to compensate for a weak sewing structure and to preserve the gold on the spine, the eighteenth-century binder applied thick layers of hide glue and heavy textile linings to the spine to stop it flexing when opened. Heavy-handed use of a backing hammer to shape the spine compounded this problem, leaving a book which opened poorly and with its inner margins, some of them highly decorated, almost completely obscured. Earlier attempts by frustrated readers to see the full area of the leaves had resulted in the spine splitting and tears developing in the spine margins.

Book conservators dealing with this sort of problem are faced with stark challenges: is it better to preserve a fairly common, mechanically inadequate, old but non-original binding at the expense of being able to study the hugely more significant manuscript it contains; or to remove that damaging binding to be preserved separately, allowing the manuscript to be conserved properly and rebound in a structure informed by binding techniques from the time it was produced? In the case of MS 251 curator and conservator agreed that rebinding would be the best option, but that the whole process, from decision-making to the completion of the new binding and its bespoke storage box, should be published as an online resource to allow new conservators, manuscript researchers and interested members of the public to understand in greater depth some of the complexities involved in the work.

The resource, *Under the Covers: The Conservation and Rebinding of Fitzwilliam MS 251* is available on the Museum's website (<http://www.fitzmuseum.cam.ac.uk/gallery/utc>), along with the major digital legacy of the exhibition, *Illuminated: Manuscripts in the Making*. Both resources are the result of projects which draw their strength from multi-disciplinary collaborations, and are designed to give free access to high quality digital images of sensitive works alongside the latest research.

Viscount Fitzwilliam's vision of learning is alive and well after 200 years: it is surely fitting that his manuscripts are made available to new audiences in richly stimulating ways.

Colour: The Art and Science of Illuminated Manuscripts runs at the Fitzwilliam Museum, Cambridge, until 30 December 2016. A digital version of the exhibition is available on the Museum's website (www.fitzmuseum.cam.ac.uk/COLOUR) along with the resources *Illuminated: Manuscripts in the Making* and *Under the Covers: The Conservation and Rebinding of Fitzwilliam MS 251*.



Edward Cheese, MA, ACR, is Conservator of Manuscripts and Printed Books at the Fitzwilliam Museum. Before joining the museum in 2015 he was employed at the Cambridge Colleges' Conservation Consortium for eight years, the last three as Conservation Manager.



© Fitzwilliam Museum, Cambridge

Flaking white pigment in MS 164 is consolidated to prevent further losses but not retouched, allowing the under-drawing to be studied



Reviews

International training in conservation - Impulse summer school 2016

by Tanushree Gupta + Johanna Wilk + Gabriela Krist

The Institute of Conservation, University of Applied Arts Vienna, hosted its first international summer school from July 11 – 22, 2016 with participants from Belarus (Belarusian State Academy of Arts, Minsk, Belarus), Ukraine (Lviv Polytechnic Institute, Faculty of Architecture, Department of Restoration and Reconstruction of Architectural Complexes, Lviv, Ukraine), China (Northwest University, School of Cultural Heritage, Xian, China) and India (National Museum Institute, New Delhi, India).



Participants and team of the Summer School 2016

Dignitaries from respective embassies and the OeAD - Austrian Agency for International Cooperation in Education and Research joined for the inauguration of this event. Prof Gabriela Krist, Head of Institute of Conservation, and her team offered training in art conservation to 26 participants on variety of materials in their specialized laboratories. Participants from different cultures worked two weeks together with a common objective to preserve the past for the future. For the National Museum Institute, New Delhi, this was the third summer school as the established co-operation between India and Austria had allowed annual summer schools for Indian students in Vienna over the past two years. As an exchange, in February 2016, an Indo – Austrian summer school took place in India where faculty from Institute of Conservation, University of Applied Arts Vienna, participated in symposiums and excursions in Delhi and Jaipur and held a workshop on structural conservation of canvas paintings (see <https://www.iiconservation.org/node/6473>).

Dr Satish Pandey, Assistant Professor, and five postgraduate students from the Department of Conservation, National Museum Institute News Delhi joined the Summer School. Partner institutions were, among other things,



interested in learning practical skills because they do not have fully equipped laboratories as the development of this discipline is comparatively recent in their home countries.

The training in Vienna provided exposure to elements of preventive and remedial conservation. Based on their interests, participants were divided into three groups – each focusing on a conservation specialty including textile conservation, object conservation and stone conservation. All sessions were structured with a balance of essential theory, demonstration and hands-on exercise. Participants were provided with original artefacts and asked to analyse their technological aspects, damages and deteriorations; and to formulate a conservation assessment and treatment proposal. This step required skills in compiling condition reports of objects.

Participants were introduced to various conservation treatments, which they practised while conserving their artefacts. Preventive conservation methodology was applied to assembling, packing, labelling and storing of artefacts and the participants were encouraged to prepare dummies which they could take back with them to refer again in future. They were also provided with samples of various materials which are successfully being used in exhibition and storage of museum collection across Europe, so that similar material could be sourced for use in their home countries. In addition, reading material pertinent to the topics covered during the summer school was circulated to all.

The international group was welcomed by two major museums in Vienna – Kunsthistorisches Museum and Museum of Applied Arts, where, in addition to the guided tours, participants were given a unique opportunity to visit the storage and conservation laboratories. Furthermore, a visit was made to Schönbrunn Palace where various conservation projects carried out by the University of Applied Arts were shown. Additionally, guided tours of the gardens, fountains and the palace were offered together with a city tour to introduce participants to the historical, social and cultural richness of Vienna. This was further enriched with an evening of traditional Austrian cuisines. The Vice Chancellor of the University of Applied Arts, Dr Gerald Bast, graced the concluding ceremony by awarding certificates to the summer school group and participants shared their learning experiences and suggestions for the next summer school.

The common objective to preserve tangible heritage brought like-minded people from different cultures together and they opened various avenues for discussions by exchanging information and ideas of their respective research areas.

This event was made possible by IMPULSE - International Co-operation and Mobility Programme of OeAD, and additional sponsorship by the University of Applied Arts Vienna. The next session will be held in summer 2017, hopefully as successfully and fruitfully as the one in 2016.



IIC News

Notice of IIC Annual General Meeting 2017

Notice is hereby given that the sixty-sixth Annual General Meeting of the International Institute for Conservation of Historic and Artistic Works will be held at the Society of Antiquaries of London, Burlington House, Piccadilly, London W1J 0BE, on Monday 23rd January 2017 at 6.00 pm for the following purposes:

1. To receive and consider the Reports of the Council and the Auditors and the Financial Statements for the year ended 30 June 2015 (downloadable at the announcement on IIC web-site front page).
2. To re-appoint Kingston Smith as Auditors to The Institute and to authorise the Council to fix their remuneration for the ensuing year.
3. To consider and if thought fit to pass a Special Resolution THAT the Articles of Association produced to the meeting and signed by the Chairman for the purposes of identification be approved and adopted as the new Articles of Association of the Company in substitution for, and to the exclusion of, the existing Articles of Association.
4. To elect four Ordinary Members of the Council
5. To transact any ordinary business of The Institute

By Order of the Council

Jo Kirby Atkinson

Secretary-General

12 December 2016

This notice was sent by post to all eligible members on 19th December 2016.

Explanatory Note to Special Resolution 3:

A copy of the amended articles, marked to show changes against the previous version, is available to view on the IIC web-site with the announcement of this Annual General Meeting. In summary, the changes provide to formalise and enhance the co-option as well as election of members to Council. Other amendments are consequential or clarificatory.

Voting at the AGM

Honorary Fellows, Fellows and Individual Members in good standing are able to vote at the AGM either in person at the meeting or by using the form posted to all eligible members; these may also be downloaded at the announcement on IIC web-site front page. If you are planning to attend the 2017 AGM it would be helpful if you could notify the IIC office in advance by e-mail to iic@iiconservation.org. If you intend to vote in person at the AGM you should not, of course, make use of the postal or proxy voting form.

For postal voting and proxy votes the form can be returned by post to IIC, 3, Birdcage Walk, London SW1H, 9JJ, UK, by fax to +44 20 7799 4961 (020 7799 4961 within the UK) or may be scanned by the voter and sent by email to iic@iiconservation.org. Please remember that votes and proxy votes must reach IIC 48 working hours before the meeting, that is, by 5.00 pm on Thursday 19th January at the latest; votes and proxies received after then will not be counted.

Proxies

Individual Fellows, Fellows and Honorary Fellows may appoint a proxy to exercise all or any of his rights to attend and to speak and vote at the AGM.

Please use your vote!

>>

Candidates for Election

A total of four places as Ordinary members of Council are available for ballot. Tiina Sonninen is retiring from Council at this meeting. There are four candidates for the four places: Lorenzo Appolonia, Barbara Reeve and Stavroula Golfomitsou are standing for re-election and Eleonora Nagy is standing for election as an Ordinary member of Council for the first time.

Their manifestos are printed below:

Lorenzo Appolonia

The experience I have in working with the IIC Regional Italian Group for over 14 years is very useful for the internal discussions of the Council of IIC. As part of this high-level, scientific group I can contribute to its discussions about the strategies or policies that Council can adopt to improve the interest from an international audience of experts in conservation in IIC membership.

The conservation profession has gone through a recent change of mentality and cultural approach towards methods of communication. This is a generational change in the way that we all communicate. The presence of web groups could reduce the need for people to join IIC. This is a challenge that IIC must face – and we know that IIC must start

from a recognition that it has a tradition of quality that these new kinds of information media can't offer with any certainty. The work of IIC, over the years, and the experience

accumulated in the field by IIC, must be communicated as necessities for the next generation.

Conservation needs and requires the presence of a united community, where differences of professional focus or divisions between scientists and humanities specialists, public and private sector conservators, are put to one side. The importance is that as conservation work is very complex that the object is conserved, and not that professional differences are barriers to this. Conservation needs concrete collaboration and discussion between restorers, scientists, humanities specialists and others involved in the conservation process.

As a member of Council I would like to improve the discussion of and diffusion of good practice via access to direct knowledge about the issues encountered 'between hand and object'. The quality and the strategy of the IIC publications must to follow this and must use this to reinforce and emphasise its special role and place in the conservation community, to help improve the quality of conservation and also provide wider dissemination of knowledge of technologies and practices old and new.

As President of the Italian regional Group of the IIC, I will strive to improve the collaboration between the different IIC Regional Groups and also between the Regional Groups and the IIC. This particular set of relationships must become more concrete and help IIC relate the international community and provide support and direction.



Stavroula Golfomitsou



I have been a member of the IIC Council since 2014, a role to which I am very dedicated and would like to continue, as an opportunity to play an active part in the functioning of this organisation and contribute positively to its development. IIC has embarked on a new journey embracing the new challenges we face in the field of cultural heritage conservation. I believe that IIC has a unique and important role to play within heritage conservation and as an advocate for conservation around the world.

Increased challenges in terms of resources dictate the need to look for new creative ways to collaborate and share knowledge. These challenges can be viewed as opportunities to revise and expand the role of conservation in the ever expanding field of cultural heritage. IIC because of its mandate can be a central point of reference and promote new ways of thinking, working and connecting as professionals. It is clear that

>>

there are a lot of professionals without access to resources and IIC can play an increasingly important role in providing opportunities for further training, sharing knowledge and mentorship. Online information channelled through a well-respected organisation like IIC also provides a platform for continuous professional development.

I have been coordinating the MSc in Conservation Studies at UCL Qatar since 2011 and have worked both as an academic and as a conservator in Greece, Malta, Peru, Egypt, Italy, France and UK. My experiences working in different countries has enhanced my appreciation of the role international organisations can play in professional development throughout different regions of the world. Accordingly, at IIC I have worked with various regional groups and hope to continue doing so for the next 3 years as part of the IIC Council.

I believe that IIC furthers forward thinking in the conservation field. Raising awareness of issues conservators face, along with providing new IIC activities and services is vital to help professionals and organisations around the world. As part of the Council I am committed to continue playing an active part in the growth of IIC with new ideas to serve professionals with online activities, resources and tools.

Eleonora Nagy

After more than three decades of international experience in both institutional and private sectors of art conservation I would be honoured to become an Ordinary member of IIC's Council. Now that I have acquired some experience and understanding of the conservation world, it is time for me to return the kind support, thoughtful guidance and encouragement I was fortunate to receive as an aspiring conservator.

Born and raised in the Eastern Block I established and successfully ran one of the first five private conservation companies in a socialist country. Working in the private sector in various western European countries, followed by earning a second degree in conservation in Canada and working in various institutes including Tate Britain, Canadian Conservation institute (4 years), Centre de Conservation de Quebec and S.R Guggenheim Museum (10 years) has exposed me to a wide range of economical settings, and approaches and practices in art conservation.

For the last decade my ownership of Modern Sculpture Conservation, a limited liability company with international clientele, and part time position at the Whitney Museum of American Art as their inaugural Research Conservator has given me a broad understanding of conservation in North America. I believe that my first-hand experience in both institutional and private sectors on both sides of the Atlantic, in different political, social and economic circumstances and education systems could be an asset to further the goals of IIC.

While I am open to handle any issues IIC sees imperative to concentrate on, I would be particularly interested in supporting conservation and raising conservators in disadvantaged situations; in second and third world countries, and paying more attention to participation of the private sector in IIC.



Barbara Reeve, FIIC, M ICOMOS



I want to continue to serve as an Ordinary Member of Council to further develop the Opportunity Fund's support for world heritage and to help strengthen conservation as an effective cross-disciplinary profession demonstrating the benefits of eco-efficient, eco-effective practices across the cultural heritage sector.

During a half year sabbatical as a Visiting Scholar at Wolfson College, Cambridge (2010) I pursued research in the UK and Europe on cradle-to-cradle and *passivhaus* initiatives applicable to museums and heritage management. Currently the Manager of Heritage Preservation Projects at the Australian War Memorial – with projects ranging from architectural restoration to the construction of an environmentally sustainable collection storage facility – I believe that the heritage sector can and should play a major role in the preservation of national and local identity through the sustainable preservation of cultures within the context of their native natural environments.

My professional training began with an undergraduate degree in Classical and Near Eastern Archaeology from Bryn Mawr College, followed by a BSc in Archaeological Conservation and Materials Science from the Institute of Archaeology, University of London. Working in private practice for museums, collectors, and on archaeological sites

>>

in England, Australia, New Zealand, the United States, Hong Kong, and the Mediterranean, exposed me to the huge challenges of private sector work, and informed my appreciation of object care and conservation across the world's climate zones. I devised and taught *Introduction to the Ethics and Practice of Art Preservation* at the University of Hong Kong (1989 – 1993), educating collectors and museum staff in collections care in semi-tropical climates.

Moving to the public sector developed my understanding of the importance of public expenditure for cultural heritage. Spending 21 years leading the conservation and collection management teams of the Australian National Maritime Museum, Sydney, and the Australian War Memorial, Canberra, I dealt first-hand with the steady reduction of heritage sector funding. I believe that conservators have an important role to play in demonstrating that sustaining the world's diverse cultures and natural environments leads to good social and economic outcomes.

IIC Vice President Julian Bickersteth's Council meeting update

IIC Council meets three times a year, generally for two days. However every two years we coincide our meetings with the IIC Biennial Congress, and meet for only one day prior to the Congress. So this year saw us meet on Sunday 11th September in the grand surroundings of the Roman Room at the historic Biltmore Hotel in downtown Los Angeles.



A packed session at the 2016 IIC Congress

Our focus was particularly on arrangements for the Congress, on which Jerry Podany as IIC President Emeritus and chair of the local organising committee updated us.

With almost 500 delegates from over 45 countries attending and a packed technical and social programme, it promised to be a great event. We then moved onto consider plans for our next Congress in Turin in 2018, which was to be announced the next day, as well as options for the Congress location in 2020.

The Strategic Plan for IIC is the core document which guides future actions, and at each Council meeting we spend significant time reviewing progress and updating our action plans. Inevitably with an organisation that is run by volunteers supported by a small office, we have to be realistic about what can be achieved, so we focused this time on the implications of the IIC re-branding report recently undertaken by Tangible (IIC President Sarah Staniforth's article will follow in the next issue of *NiC*).

The foot print that IIC established in South East Asia as a result of the 2014 Hong Kong Congress continues to be built upon. In November 2016 IIC will be running its second course at the ITCC - the joint IIC and Palace Museum, Beijing International Training Centre for Conservation - on non-destructive testing of materials, and the IIC Chinese Group now have plans in place to run a textile seminar in Hong Kong in November 2017.

With the standing items of our financial and risk position, our publications schedule, and our web site and social media presence covered, and a raft of new fellows nominated for election, the day was quickly consumed. Council next meets in London on 23rd and 24th January 2017 with the AGM on the evening of 23rd January.



The Fellowship corner

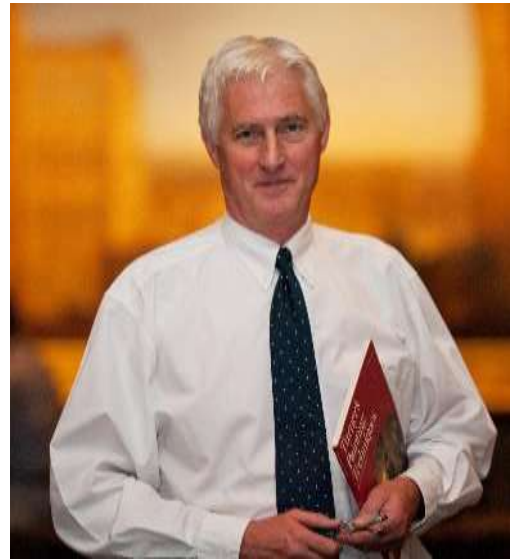
Where we keep you up to date with IIC's new Fellows
and their achievements

This issue NiC congratulates new Fellows:

Andrew Durham has been Director of Artlab Australia in Adelaide since 2005. Graduating from Cambridge University with an MA in Art History, he trained as a paintings conservator with Prof Stephen Rees-Jones at the Courtauld Institute and with Theo-Antoine Hermanes in Switzerland. After positions as paintings conservator in Leicester and at the Tate Gallery in London, he was appointed Head of Conservation at the Australian National Gallery in Canberra.

Returning to the UK he worked with English Heritage before spending ten years as Keeper of Conservation at the National Museums Liverpool where in 1998 The Conservation Centre won the prestigious European Museum of the Year Award and IIC's Keck Award.

He is a Board member of AusHeritage and of the Contemporary Arts Centre of South Australia, with a keen interest in modern art and Asian civilisation and culture. Both Artlab Australia and AusHeritage are participants in several conservation projects in India, China and the countries of South East Asia.



Kristiane Strætkevorn is a conservator at the National Museum of Denmark. She was born in Norway, but has been living in Denmark since 1985. She graduated as Bachelor in conservation from The Royal Danish Academy of Fine Arts, the School of Conservation in 1988 and employed to work in the waterlogged wood laboratory at the Conservation Department at the National Museum of Denmark. Kristiane obtained a professional diver license in 1993

In 2001 she was awarded a Master in conservation with the thesis: Aspects of high- and low-molecular weight Polyethylene glycols in relation to pre-freeze-drying treatments of semi-degraded waterlogged wood.

From 2004 to 2011 she has been a coordinator for the ICOM-CC Working Group Wet Organic Archaeological Materials (WOAM) and from 2011 to 2014 a Member of the ICOM-CC Directory Board. From

2014 she has been the Chair of the ICOM-CC Directory Board, a position she will hold until 2017

Since 2013 she has been the Danish expert member of the CEN /TC346 - Conservation of Cultural Heritage Working Group 9 on waterlogged wood.

To all IIC Fellows – This space is for you! Send your updates and news you want to share at news@iiconservation.org and remember - you've won your bragging rights...



Call for Papers – News in Conservation

News in Conservation (*NiC*), the e-paper from the International Institute for Conservation of Historic and Artistic Works, is looking for contributions in the form of articles, long features, news, and reviews to be published in one of the future issues. Topics of interest can be discussed with the editor and can range from treatment papers to opinion pieces.

NiC enjoys a wider international audience from very diverse backgrounds. Published six times per year in digital format, it is delivered via an email alert to members and freely downloadable from the IIC website in open access.

NiC is an evolving project, one that exists thanks to the support of authors and writers that contribute articles and other informative material guaranteeing a steady flow of relevant content. IIC aims to mould our e- paper to fit our community's evolving interests and preferences; for this reason we invite comments and feedback and we maintain a continuous link with our social media activities.

Since being launched as an electronic publication, *NiC* has been growing steadily and in the past year has increased its readership and its overall reach. *NiC* has been praised on various social media networks by comments left by users and often cited as a good example of successful conservation outreach effort.

With continuous help and support, *NiC* will continue to deliver conservation news to the world of conservation, aiming to grow and reach further afield.

If you want to contribute please contact Barbara Borghese

news@iiconservation.org

To download a free issue visit: <https://www.iiconservation.org/publications/nic>

What's on + NiC's List

Call for papers

3D Digital Documentation Summit

18-20 April, 2017

New Orleans, USA

Deadline: 9 January, 2017

For more information [click here](#)

CIC 25: Twenty-fifth Color and Imaging Conference

11-15 September, 2017

Society for Imaging Science and Technology,

Lillehammer, Norway

Deadline: 1 March, 2017

For more information, [click here](#)

HYDROPHOBE 2017 - 8th International Conference on Water Repellent Treatment and Protective Surface Technology for Building Materials

7-9 December, 2017

Hong Kong

Deadline for submission of abstract: 31 January 2016

For more information visit:

<https://www.iiconservation.org/node/6703>

4th International Meeting on Retouching of Cultural Heritage - RECH4

20-21 October, 2017

Split, Croatia

Deadline: 31 January, 2017

For more information visit:

<https://www.iiconservation.org/node/6702>

13th Conference of the International Committee for the Conservation of Mosaics

15-20 October 2017

Barcelona, Spain

Deadline for abstracts: 15 February 2017

For more information visit: <http://iccm-mosaics.org/conferences/barcelona-2017/>

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

Queen Sirikit Museum of Textiles (QSMT) Symposium 2017

8-13 January, 2017

Bangkok, Thailand

For more information visit:

<http://www.qsmtsymposium2017.com/>

Paintings on metal plate - Symposium

23-27 January, 2017

Valencia, Spain

For more information visit:

<https://www.iiconservation.org/node/6289>

The Shock of the New: Modern Materials, Media and Methods

8-10 February, 2017

Melbourne, Australia

For more information [click here](#)

Association of Print Scholars Symposium, CAA 2017

15-18 February, 2017

New York, USA

For more information [click here](#)

Illumination of Material Culture: A Symposium on Computational Photography and Reflectance Transformation Imaging (RTI)

7-8 March, 2017

The Metropolitan Museum of Art, New York, USA

For more information [click here](#)

The 6th International Architectural Paint Research Conference 2017

15-17 March, 2017

New York, USA

For more information visit:

<http://www.apr2017.org/registration/>

ALA Annual Conference and Exhibition

22-27 June 2017

Chicago, United States

For more information [click here](#)**Asociación Cubana de Bibliotecarios Encuentro Científico Bibliotecológico 2017**

14-18 February 2017

Biblioteca Nacional de Cuba José Martí Subsede de la Feria del Libro de La Habana, Cuba

For more information [click here](#)**Conservation of Historic Interiors**

19 May 2017

Greenwich, United Kingdom

For more information write to: gsmith@rmg.co.uk**19th International Congress of Classical Archaeology: Archaeology and Economy of the Classical World**

22-26 May 2017

Cologne, Bonn, Germany

For more information visit:

<http://www.aiac2018.de/>**21st SEAPAVAA Conference : Imaging a AV Archive of the Future**

3-8 April 2017

Manila, Philippines

For more information visit:

<http://seapavaa.net/annual-conferences/>**A contemporary provocation: reconstructions as tools of future-making**

13-15 March 2017

Paris, France

For more information visit: www.icomos.org**VI Latin-American symposium of physics and chemistry in archaeology, art and conservation of cultural heritage – LASMAC 2017**

10-14 July 2017

La Paz, Bolivia

For more information [click here](#)**Recent Advances in Characterizing Asian Lacquer**

15-19 May 2017

Amsterdam, The Netherlands

For more information [click here](#)**Courses/Workshops****Nanotechnologies Workshop at Pratt Institute**

25-28 January, 2017

Brooklyn, NY

For more information visit:

Textile Wet Cleaning with Richard Wolbers

23-28 January, 2017

Berlin, Germany

For more information visit:

<https://www.iiconservation.org/node/6586>**Framing techniques and microclimate enclosures for Panel Paintings**

20-22 February, 2017

Maastricht, Netherlands

Deadline for application: 31 January, 2017

For more information [click here](#)**Managing Collection Environments: Preserving Collections in the Age of Sustainability**

1 March, 2017

Pennsylvania, USA

For more information visit:

http://bit.ly/MCE_Education**For more information about these conferences and courses see the IIC website:****www.iiconservation.org**