



Objects from Indigenous and World Cultures: Conservation Newsletter

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Newsletter foreword

Dear Colleagues,

We are happy to share with you this second and last newsletter of this term. Even though these three years have been quite hectic due to various reasons beyond our control, it has been a pleasure to join forces for this working group, whether to update our social media pages on

facebook and LinkedIn (do not hesitate to join us there!), to compile these yearly newsletters or to accompany contributors who shared very interesting research projects for the next Triennial conference.

As a matter of fact, preparations for the Valencia Triennial are on the home stretch. The selected contributions are currently being peer-reviewed. Authors have proposed very diverse case studies that will offer interesting topics for reflection during the conference meetings. For early bird registration to attend to Triennial, do not miss the 15 April deadline!

Special thanks to the three contributors of this newsletter who share with us research topics that lead to reflect upon different aspects of our work. Ellen Carrlee invites us to connect with a collaborative project on the conservation of gut that is in the spotlight of a new exhibition at the Alaska State Museum in Juneau. This exhibition is created in collaboration with artist Sonya Kelliher-Combs who explores indigenous issues of identity and trauma through this highly distinctive material. Differently, Christine Mueller-Radloff reflects upon her 40-year experience of documenting conservation work and demonstrates the importance of systematizing and digitising object-related knowledge to make it accessible, sustainable and meaningful. Finally, Nina Olsson and Tomas Markevicius introduce us to the research project Moxy that is developing a new and sustainable technology using atomic oxygen (AO) to remove carbon-based contaminants from sensitive materials.

We wish you a very good reading and we look forward to other interesting projects to share in the next term's newsletter. In the meantime, we look forward to meeting as many of you as possible during the next Triennial Conference in September in Valencia.

Sabine Cotte and Lucie Monot

Gut Collaboration in Alaska

by Ellen Carrlee

Alaska State Museum, Juneau, Alaska USA

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The Alaska State Museum (ASM) in Juneau is working on a research and collaboration project involving gut. Conservator Ellen Carrlee is co-curating an exhibition with Inupiaq/Athabascan contemporary artist Sonya Kelliher-Combs titled *Visceral: Verity, Legacy, Identity. Alaska Native Gut Knowledge and Perseverance*, May 5 – October 9, 2023.

Kelliher-Combs is one of the few Alaskan artists working with gut today. The exhibit will include both her own work exploring indigenous issues of identity, truth, trauma, and transparency as well as nearly 100 items made of gut the artist has selected from the museum collection. These historical items include drums, containers, wall pockets, hunting floats, windows, and more than twenty gut parkas.



Figure 1. "Gold Idiot Strings" 2013 installation by Sonya Kelliher-Combs.

With the rise of waterproof synthetic textiles, gut parkas slowly disappeared from active use in the mid- 20th century, although some Alaska Native women of the grandmother generation still know how to make them. In today's art market, gut use is rare and usually limited to components of dolls, baskets, or jewelry. In addition to its scarcity in contemporary use, many historical gut items in museum collections are poorly attributed. The examination of cross-

cultural features of gut parkas such as seam, pattern, stitch, and embellishments aid in attribution.

Ellen Carrlee’s conservation research brings perspectives from her Ph.D. dissertation in anthropology: “The Yup’ik Relationships of *Qiluliuryaraq* (Processing Intestine)” and fieldwork studies of gut processing alongside cultural experts. For example, the curved intestinal tube is often cut on its outer curve, giving a strip of processed material with a tighter region along its center line where the mesentery tissue was attached. But occasionally in the Bering Strait region, the intestinal tube was preferentially cut on the inner curve, resulting in more material along the centerline and a distinctive billowing, puffy look.

A variation in the drying step of intestine production results in either translucent or opaque gut. Summer-processed (translucent) gut raincoats meant to be waterproof are often sewn with a reinforcement of some kind in the seams. Yup’ik parkas from Western Alaska typically use beach grass reinforcement on each side of the seam in combination with a stab stitch. Along the Aleutian Islands and Gulf of Alaska area, a two-needle technique with a couched stitch is usually seen. On the far north coast of Alaska, reinforcement is less common.

Winter-processed (freeze-dried) opaque white parkas were not used as raincoats, since wetting the material causes loss of opacity. These garments are typically from Siberian/ St. Lawrence Island Yupik communities around the Bering Strait, but also from Cup’ik communities in the Nunivak Island area. Treatment protocols to reshape such garments must use



Figure 2. Inupiaq gut parka on exhibit mount to showcase the translucency of the material. (ASM II-A-5805).



Figure 3. Detail from the back of the hood of a Yup’ik gut parka. Hood is inverted, showing seams sewn with a sinew stab stitch and grass reinforcement. (ASM II-A-4720).

humidity chambers or localized humidification through synthetic membranes, as even vapor mist from a Preservation Pencil can alter opacity. Re-freezing winter gut that has lost its opacity does not fully restore the original appearance.

Collaborator Dr. Daniel Kirby is analyzing samples with peptide mass fingerprinting for species identification. Typically, Alaskan gut items are made from marine mammals such as seal, walrus, whale, and sea lion, but bear has also been used in some areas. The range of these animals and hunting practices of specific cultures help with object attribution. There is hope that certain visual features of the intestine might also correlate to certain species, making attribution easier. Ellen Carrlee has an ongoing dialog with conservators experienced in gut treatment, such as Amy Tjong (American Museum of Natural History, New York) and Kelly McHugh (National Museum of the American Indian, Washington). At the Alaska State Museum, she worked with interns Stephanie Guidera, J. Kae Good Bear, and Meghan Abercrombie to understand the care of this material and refine conservation techniques such as cleaning, reshaping, and repair. For example, repair adhesives that can be applied to damp summer-processed gut allow ideal alignment of tears. But once those repairs have dried, humidification for re-shaping could compromise repairs that remain water-soluble. Conversations about what interventions are culturally appropriate are underway with several Alaska Native artists and culture bearers.



Figure 4. Intern Meghan Abercrombie treats the sleeve of a walrus intestine parka at the Alaska State Museum. (LC.453-34).



Figure 5. Treatment of a hood and cape made of whale intestine, showing clips and blotter paper to reshape humidified areas. (TD.2023-7-7).

Public programs planned at the Alaska State Museum for 2023 include bear gut processing with Dr. Sven Haakanson, Jr. (Alutiiq/Sugpiaq), gut sewing with Sonya Kelliher-Combs (Inupiaq/Athabaskan), a sinew workshop with Coral Chernoff (Alutiiq/Sugpiaq), and a community-based walrus stomach workshop in Nome with Benjamin Payenna (Inupiaq).

Since United States legislation to protect marine mammal species is now 50 years old (the Marine Mammal Protection Act and the Endangered Species Act), the project is cultivating relationships with federal entities to help educate the public about the use of marine mammal parts and protect the animals. These protections prevent non-Native people in the United States from working with marine mammal gut. Thus, gut is a specifically indigenous material. Native artists and culture bearers have interest in the revitalization of gut practices as a way to assert sovereignty, pride, and cultural identity as well as explore symbolic and spiritual meanings associated with gut properties such as translucency/opacity and permeability/protection.

Conservators and other allied professionals interested in the history, technology, treatment and cultural revitalization of gut are warmly invited to connect with this collaboration project at Ellen.Carrlee@alaska.gov.

Contributions to Sustainability - Conservation and Research Data Management

by **Christine Mueller-Radloff**

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Museum fuer Voelkerkunde/ Museum of Ethnology Dresden, Germany*

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This article is based on the presentation I gave with my colleague Marita Andó under the same title at the ICME Annual Meeting and online conference "The Power of Museums, to be continued" on 22 and 23 November 2022.

From Handwritten Notes to Digital Database

Museums are usually composed of a team of professionals with different qualifications: Scientists, curators, conservators, documentarians, librarians, archivists, etc. Each of them has their own field of expertise regarding the objects that are preserved, researched and made available to the public. In this respect, the collection of a museum is like a "three-dimensional library".

In 1982, I started working with ethnologists as a textile scientist and later as a textile conservator in Leipzig. From this perspective, one describes the stages of documentation of conservation work in the Leipzig Museum of Ethnology to date as follows.

From the last third of the 20th century, we started with handwritten records of the condition of the objects and notes on the work steps carried out on the object, which were initially recorded in a workbook with the corresponding date and later on index cards. Then the index cards were replaced by quick-fill paper forms, which were archived in special hanging pockets in a register cabinet arranged by inventory number and used for local use in the museum. Subsequently, these reports were supplemented with drawings and/or photographs of the condition, initially in analogue and later in digital form.

In the early 1990s, conservation/restoration information began to be recorded in a digital Access database, and reports were generated automatically. At the same time, not only overall images, but also detail photos of the objects for condition documentation were digitally created, printed and manually inserted into the created reports. These documents were kept both in printed form in the hanging pockets and in digital folders sorted by inventory numbers.

For about 15 years, the digital museum database "Daphne" (<https://www.robotron-daphne.de/>) has been gradually introduced for all museums of the Staatliche Kunstsammlungen Dresden/ Dresden State Art Collection. This is an association of more than 15 museums spread throughout Saxony. The three associated ethnographic museums are located in Leipzig, Dresden and Herrnhut. This digital database has been developed specifically to record existing museum information and documents, to store this knowledge systematically, to link it to the findings of other disciplines, and to prepare it for cross-museum or international cooperation in the future.

Various modules have been gradually created for this purpose, including the conservation module.

The Daphne data are published in the SKD online collection, which is currently under construction. (<https://skd-online-collection.skd.museum>). Initially, both the "Daphne" database and the online collection were only available in German, but they will be available in other languages in the future.

Special Conservation Module

The documentation of the conservation work since 1985 of a garment from Uzbekistan is given here as an example to describe how conservation documentation has changed over the years. Initially, the notes were written by hand in a personal work diary (fig. 1) and later transferred to an index card (fig. 2).

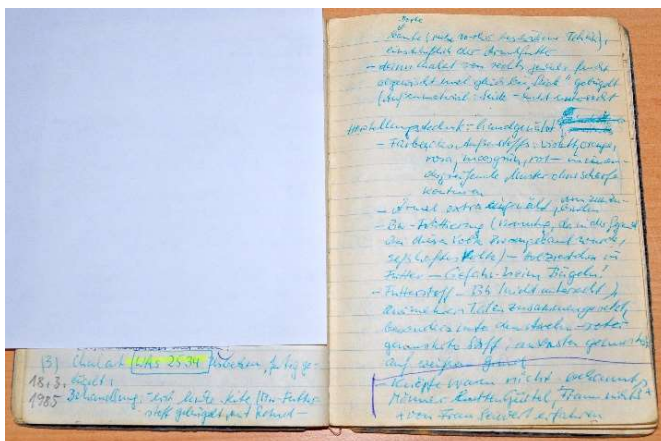


Figure 1. Mueller, C., Work diary 1982-1986, 18 March 1985.

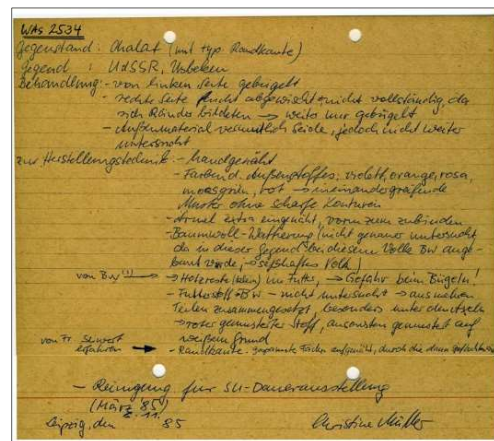


Figure 2. Conservation report card, MVL, 6 November 1985.

This was the first step in systematizing conservation information and it served as more than just a personal working record. However, at the time, photography was uncommon and time consuming. Until the 1990s, analogue photography was used to take pictures of the objects and their details. The images were collected as film negatives and positive prints on paper. After 2000, the use of digital photography also began for the documentation of conservation work in daily use. The number of photos has increased rapidly and has required even more systematic archiving. All these documents, whether images, multimedia files or text files from the past, are now gradually being recorded in the corresponding digital asset management database and linked to the "Daphne" object database via the inventory number. It contains a section for basic information about the object and several other modules for the different areas of museum work such as scientific processing, object history, value, loans and exhibitions. One module is dedicated to conservation. It consists of a generally accessible main section and a listing of the various interventions, which can be sorted in chronological order. For our example, these are

the conservation processes from 1985 and 2007, in which all existing documents were incorporated (fig. 3).

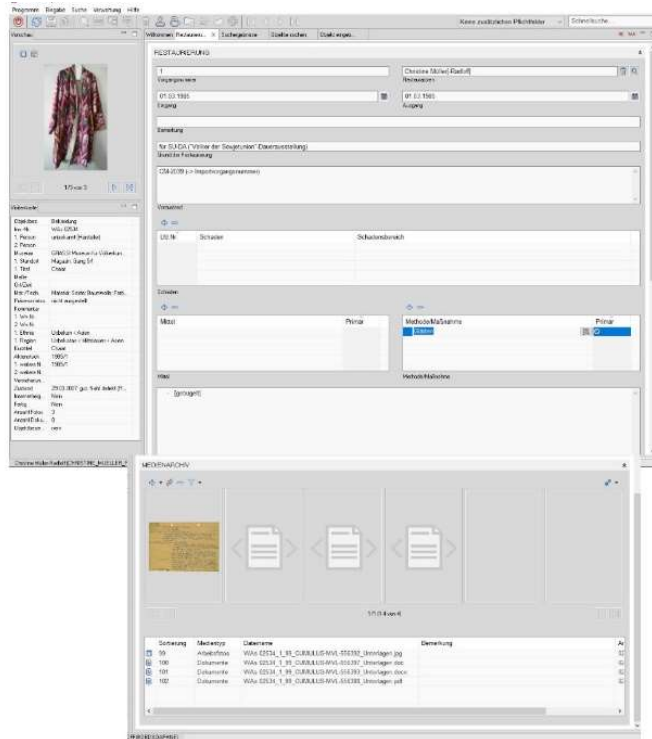


Figure 3. Conservation from 1985-in Daphne database.

List of Pollutants

In addition, the "Daphne" database contains other interesting information that was found in existing documents during internal research on the history of conservation and the conservation agents used, e.g. information on pest control treatments with agents that are now considered poisons and were already recorded in old inventory books (fig. 4). Since 2016, the information was first noted in the general data field "Restoration Notes". Subsequently, a special list of pollutants was created in which additional notes on the pollutant, source of information, potential hazard, and other notes could also be added. This list of pollutants is be found in the general part of the conservation module. It is used to inform employees in other departments of the museum about possible hazards from these objects (fig. 5).

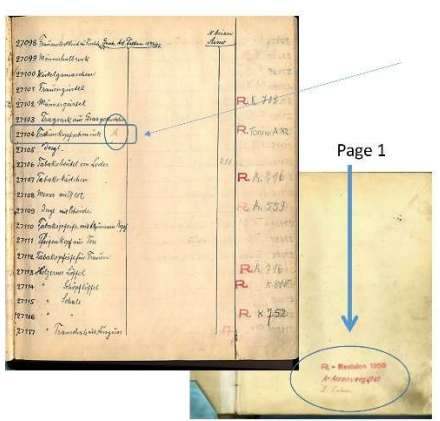


Figure 4. Old depot book, MVD.

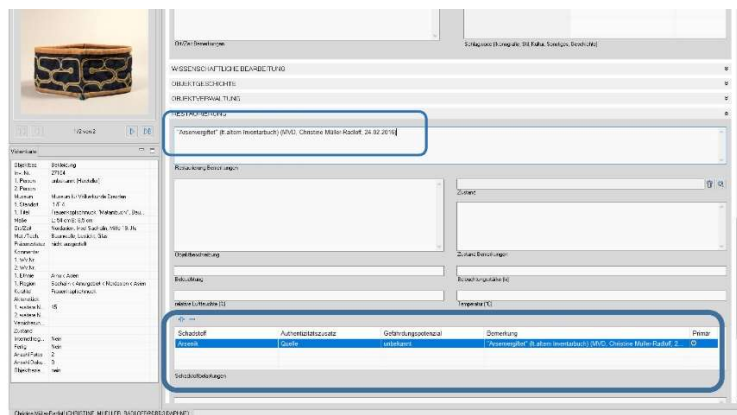


Figure 5. List of poisons.

Compare – Correct

Furthermore, good data management is a crucial contribution to conservation research. It has revealed obvious mistakes in the presentation of military clothing for example. When comparing several photos of two Chinese general uniforms from the ethnological museums in Leipzig and Dresden (fig. 6), errors in presentation were found, comparing images 6 and 7.



Figure 6. Uniforms from Leipzig and Dresden presented in an incorrect way.

Figure 7. Uniform from Dresden correctly presented.

This had been passed on for over 100 years (fig. 7). The associated bow was also shown incorrectly on several occasions, presumably also on the basis of the 1883/1884 photos and an earlier conservator's ignorance of the function of a composite bow. The above examples illustrate that not every supposedly historical photo is credible. This result was presented as a poster at the ICOM-CC conference in Melbourne 2014 and documented in the museum database.

Gathering and Preserving Experience is Sustainability

Long-standing museum staff have a great deal of experience in collecting, systematizing, digitising and storing object-related knowledge. This is an ongoing process. Collecting this in the museum-wide database and thus preserving it for future generations is a crucial contribution to sustainability.

Systematic processing of historical documents allows comparison of existing records and leads to know about the correctness of past decisions, which must be preserved for present and future generations.

Information found in old inventory books about the contamination of objects with insecticides, which has been entered in the list of harmful substances in the conservation module of the digital database, can also be used for occupational health and safety, as well as for the health and safety of museum employees in their workplace. This is also an important information for

other museum departments and other museums that, for example, use the loan and exhibition module of the database to prepare loans or exhibitions.

In contrast to long-term employees, museum staff who is employed for specific projects are usually not familiar with the background of the collections and often work under time pressure to move quickly on to the next project. Therefore, digital and systematised data is an important support for the work of project staff and external researchers, at any time and from anywhere.

In summary, conservation data in any form is also a valuable treasure trove of knowledge for museum work. Therefore, this data must be collected, sorted, stored and brought into the digital age in order to make it accessible to a wide audience with the help of databases.

Notes and references

Mueller-Radloff, Christine. *Not every photograph can be believe: On the decoration of two Chinese' uniforms*. Poster presented at ICOM-CC 17th Triennial Conference, Melbourne, 15–19 September 2014.

Rückwardt, Herrmann. *Die Sammlung des Herrn Dr. Emil Riebeck ausgestellt im Kunstgewerbe-Museum zu Berlin Winter 1883/84*, Berlin 1884.

Documents and images from MVD and MVL

SKD - Staatliche Kunstsammlungen Dresden (www.skd.museum)

MVL - Grassi Museum fuer Voelkerkunde zu Leipzig,

MVD - Museum fuer Voelkerkunde Dresden

www.robotron-daphne.de/en

MOXY: Green Atmospheric Plasma Generated Monoatomic Oxygen Technology for the Restoration of Works of Art (2022-2026)

by Nina Olsson and Tomas Markevicius

ICOMOS Lietuva, Moxy Project

Contact: www.moxyproject.eu

Cultural heritage plays an important role in addressing multiple global crises of our time, from climate change to political unrest, and is a societal driver of change to reduce our impact on the environment and to improve the health and working conditions of conservators while striving for ever better results. Conservators tasked with preserving objects of Indigenous and world cultures confront non-material challenges related to complex cultural dimensions that may not be adequately addressed using previously available means and approaches. The demand for green and sustainable approaches and technologies for cultural heritage conservation has intensified in the past decade, enshrined in policy documents such as ICOM-CC's Declaration on Environmental Guidelines (2014), the UN's Sustainable Development Goals (2015), and the European Green Deal (2019).

Yet progress has been slow in bringing green innovation to the bench practice. The climate crisis, unsustainable living, and social unrest increasingly threaten tangible cultural heritage globally through the deposition of carbon-based contaminants from pollution, fires, wildfires, and vandalism, among others. Many porous and fragile materials often cannot tolerate mechanical "wet" or "dry" cleaning using currently available methods. CH professionals increasingly encounter surfaces where soiling cannot be removed at all.

The lack of green alternative technologies has particular implications for conservators working in the realm of Indigenous and world cultures. The unique ethical parameters involved in the decision-making process must align the scope of treatment with the desires of community representatives regarding the non-physical attributes of objects, which may limit treatment options, and raises new demands to limit the use of synthetic chemicals. For example, the use of plastic containers for storage or the use of petrochemical distillates or organic solvents is not considered culturally appropriate by numerous North American tribes for Indigenous material culture. Laser cleaning has proven an acceptable alternative for cleaning, and is often employed to remove spray paint vandalism on pictograph and petroglyph sites and other cultural places.

In this context, the MOXY project aims to lead the green and social sustainability transformation in cultural heritage conservation, and empower practitioners with a new clean technology, which uses atomic oxygen (AO) to remove carbon-based contaminants from sensitive cultural heritage materials in a contact-free, non-mechanical, solvent and liquid-free action. MOXY will develop a lab-scale portable system for the generation of oxygen atoms at ambient pressure, tailored for CH cleaning. The AO cleaning process results in the ablation of contaminants into

benign gases and vapors, forming CO₂, and H₂O, without health or environmental concerns, or other waste. MOXY's AO will open new paths to treat smoke and fire damage, vandalism, organic particle pollution, and biological contamination, as well as remove unwanted past conservation materials from porous substrates.

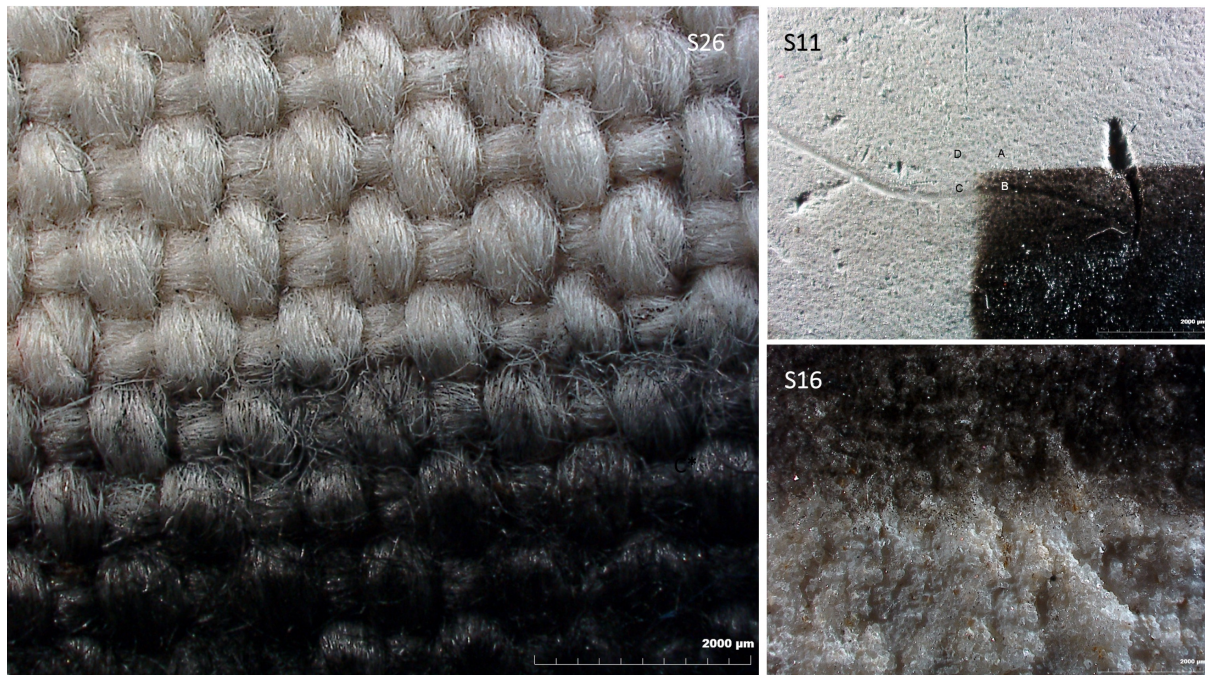


Figure 1. Detail of preliminary cleaning tests using MOXY monoatomic oxygen (AO) to remove carbon soot from archetypal porous substrates: cotton canvas (S26), plaster (S11), and sandstone (S16). S11 is labeled with four sectors: A: Control. This area was masked prior to soiling. B: Soiled with candle soot. C: Cleaned with atomic oxygen. D: Unsoiled area treated with AO. S11 and S16 samples show the comparison of soot-soiled areas and after treatment of AO-cleaned areas.

The MOXY research project is funded by the Horizon Europe program and coordinated by Ghent University's Research Unit for Plasma Technology. The MOXY project will present a paper at the 2023 ICOM-CC's 20th Triennial meeting in Valencia, and we hope to see you there to discuss the project as applied to the treatment of objects of indigenous and world Cultures.

M O X Y Green Atmospheric Plasma-Generated
Monoatomic Oxygen Technology
for Restoration of the Works of Art

Conferences

AIC 51st Annual Meeting

16 – 20 May 2023 in Jacksonville, Florida, USA

The American Institute for Conservation's annual meeting is a three-day conference on a variety of conservation and collection care topics around the theme of conservation in the age of environmental, social, and economic climate change.

APTCCARN 6 - Creative Conservation Initiatives: Collective approaches for material culture and living heritage

3 - 5 July 2023 in Bali, Indonesia

APTCCARN (Asia Pacific Tropical Climate Conservation Art Research Network) and Institut Konservasi gather together in organizing this three-day event to bring together conservation and heritage professionals from the Indo-Pacific region with practitioners in Indonesia to engage, exchange and create conservation initiatives.

IRUG 15th International Conference & Workshop

25-29 September 2023 in Tokyo, Japan

The IRUG (Infrared & Raman Users Group)'s 15th International Conference and Workshop is being organized by the Tokyo University of the Arts and The Tokyo National Research Institute for Cultural Properties. The in-person conference also features a hands-on workshop with training on portable ATR and reflectance instruments and data acquisition, processing, and interpretation.

NATCC 2023 - Considering Costume: The conservation of apparel, adornment and accessories

22 - 26 October 2023 in Williamsburg, Virginia, USA

The 14th biennial North American Textile Conservation Conference (NATCC) is held at Colonial Williamsburg. Considered the oldest and largest living history museum, The Colonial Williamsburg Foundation has a long tradition of studying and collecting historic textiles, costumes and accessories to inform and create a more authentic costumed living history.

Faic Symposium: Photomechanical Prints: History, Technology, Aesthetics, and Use

31 October - 3 November 2023 at the National Gallery of Art in Washington, DC

The FAIC (Foundation for Advancement in Conservation)'s symposium is a three-day conference flanked by two days of optional hands-on workshops and tours of local collections. The program provides an opportunity for conservators, curators, historians, scientists, collections managers, catalogers, archivists, librarians, educators, printmakers, artists, and collectors to convene and collaborate while exploring all aspects of photomechanical printing.

20th ICOM-CC Triennial Conference: Working toward a Sustainable Past

18 - 22 September 2023 in Valencia, Spain

WORKING TOWARDS A SUSTAINABLE PAST

The 20th ICOM-CC Triennial Conference will explore how conservation can become greener, more efficient and how it might remake itself to become a more sustainable undertaking all around.

➤ **Do not miss Early Bird Registration until 16 April !**



Call for ICOM-CC Candidates

The Calls for Candidates to the ICOM-CC Directory Board and for ICOM-CC Working Group Coordinators is now open. The candidacy period will run to 22 May, 2023.

Voting will take place electronically prior to and during the ICOM-CC 20th Triennial Conference in Valencia, Spain, in September 2023.

Please go to the [ICOM-CC website](#) for procedures, eligibility requirements, deadlines and submission forms. The website also contains information on the working Groups and the ICOM-CC activities.

Please do not hesitate to contact your ICOM-CC Working Group Coordinator or an ICOM-CC Directory Board member if you have any questions.

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