

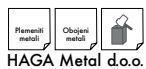
# 14<sup>th</sup> International Conference of Conservation – Restoration Studies Zagreb, April 20<sup>th</sup> – 22<sup>nd</sup> 2017

Department for Conservation and Restoration of Works of Art,  
Academy of Fine Arts, Zagreb

[www.konferencija-restauracija.com](http://www.konferencija-restauracija.com)



SPONZORI



Sveučilište u Zagrebu  
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DONATORI



# 14<sup>th</sup> International Conference of Conservation – Restoration Studies Zagreb, April 20<sup>th</sup> – 22<sup>nd</sup> 2017

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## ORGANISER

Department for conservation -  
restoration of art  
Academy of Fine Arts  
University of Zagreb

[www.konferencija-restauracija.com](http://www.konferencija-restauracija.com)

## PARTICIPANTS

Department of Conservation-Restoration, Arts Academy,  
University of Split

Department of Art and Restoration, University of Dubrovnik

Faculty of Restoration, University of Pardubice

Conservation Institute, Hungarian University of Fine Arts,  
Budapest

Department of Conservation and Restoration of Works of  
Art, Jan Matejko Academy of Fine Arts, Kraków

Department of Conservation and Restoration of Works  
of Art, Academy of Fine Arts and Design, University of  
Ljubljana

Department of Conservation and Restoration, Academy of  
Fine Arts, University of Sarajevo

Department of Conservation and restoration, Faculty of Ap-  
plied Arts in Belgrade, Academy of Applied Arts, University  
of Arts in Belgrade

Department for Conservation and Restoration of Works of  
Art, Academy of Fine Arts, Zagreb

# Conference Programme

## Thursday - April 20<sup>th</sup> 2017

09:00 Registration desk | Breakfast | Tea & Coffee

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09:45 OPENING CEREMONY

ALEKSANDAR BATTISTA ILIĆ, Dean of Academy of Fine Arts in Zagreb, ALU - Welcome speech

DOMAGOJ ŠATOVIĆ, Head of Department for Conservation and Restoration of Works of Art, ALU - Welcome speech, acknowledgements and information

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### PRESENTATIONS

10:30 ALICJA SAWONIUK - Titanium Dioxide Photocatalytic Coatings for Cleaning Wall Painting Surfaces

10:45 IVA CAREVIĆ, KATIJA MAŠKARIĆ, MIA PERKOVIĆ - Importance of restoration and conservation of the historical book

11:00 MARCELL MIKLÓS - The conservation of an African sword with scabbard made of skins of Nile reptiles

11:15 MAJA POTRAWIAK - The conservation of the painting with the depiction of Madonna and Child of Cracow Hodegetria type from church in Przyłęk Szlachecki. The reconstruction of the background based on existing grounds.

11:45 Coffee Break | 1st Poster Session | Introducing Archetype Publications Ltd. | workshop visit

12:00 MIA PRAHIN - The examples of detachment of wall paintings practices on Department for Conservation and Restoration of Works of Art

12:15 TEA BOROVIKA - Conservation and Restoration of an Oleography

12:30 KATARINA MILOSAVLJEVIĆ - Carved stone from the archaeological collection of the late Middle Ages, Grave stone - Krstaca

12:45 PAULINA KRÁLKA - The wayang klitik (kerucil) javanese puppet theatre – research and conservation of five puppets from the National Museum of Ethnography in Warsaw collection.

13:00 Information on second day activities | 2nd Poster Session | Workshop visit

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13:30 Lunch at the Academy of Fine Arts, Ilica 85 | Free time

16:00 Round table concerning current issues in the Conservation-Restoration profession in Croatia | Discussion of the proposed Regulations on professional vocations in Conservation-Restoration field | Meeting with the Croatian Conservation-Restoration Association

# Conference Programme

## Friday - April 21<sup>st</sup> 2017 - EXCURSION

The second day of the conference is reserved for an excursion for active participants (i.e. presentation and poster authors, their mentors and guests) to the area south and southeast of Zagreb that encompasses the confluence of the rivers Sava and Kupa and the historical region of Turopolje. This area is rich in multiple cultural influences spanning from prehistory over the Celtic Age and the Antiquity to Late Antiquity and the Migration Period, with the medieval culture being extensively researched lately.

The focal point, Segestica to the Celts, Siscia to the Romans and an early medieval Christian centre, the city of Sisak, known today for its early industrial architecture and its rapid decline after the fall of the socialist regime, is being recognised of late and efforts are put into its validating and conservation. During the Ottoman conquest, the region, once covered in forests, fields, pastures and inhabited by lower nobility, was devastated and depopulated, up until the Baroque era, when under the influence of traditional culture we see a re flourishing of authentic religious and secular art. Quaint wooden churches, with ornamentally decorated exteriors and lavishly painted interiors and rich polychrome furnishings represent extremely valuable ensembles, well coalesced with their surroundings. Unfortunately, during the Croatian War of Independence, many of the buildings were targeted and their frailty in today's eroded cultural and ecological system demands of our profession exemplary activity for their preservation.

The chapel of Saint Barbara in Velika Mlaka, once an unassuming village chapel, was constructed in the 17th century, with additions made throughout the 18th and 19th century. Conservation-restoration work was carried out during the 1990s and the church now represents a uniform complex of exceptional value, with a few iconographical curiosities that will surely pique our interest.

The chapel of Saint John the Baptist (Saint Apostle) in Buševac is an example of recent conservation work, that has seen this piece of folk religious architecture be rescued from deterioration. The chapel was erected in the 17th century and extended in the 18th, so that the chapel space became its new sanctuary. It is lavishly painted in the folk manner, dating from the second half of the 17th century. It is home to a valuable altar from the end of the 17th century, that by a Johannes Komersteiner's follower. The unknown sculptor from Tyrol introduced this region with elements of European Baroque sculpture.

Letovanić is a village near the river Kupa, and the chapel of Saint Fabian and Sebastian, built in the 18th century with a 20th-century porch, resonates even today with the traditional way of life in this area. The recent renovation of the chapel and restoration of its completely painted interior introduced a spirit of renewal into the village, once known for its traditional architecture and richly embroidered clothing. The ethnographic collection in a nearby traditional wooden house preserves fragments of rural life.

Conservation-restoration work in the Chapel of Saint Martin in Stari Brod has been awarded this year's Europa Nostra award in the category of heritage preservation. The work was carried out by the Croatian Conservation Institute in cooperation with the Diocese of Sisak. The chapel was built in the early 17th century, and expanded, painted and furnished during the 18th century. Over time it had been exposed to numerous floods, it deteriorated, and during the War of Independence its furnishings were evacuated. Despite all this, it has been in liturgical function all that time and can be seen today in its entirety.

The chapel of Saint John the Baptist in Stara Drenčina displays a historical stratigraphy from the 17th century till today, including the injuries it had suffered in 1991, during the War of Independence. The damage brought forward older layers and painted surfaces of its interior. The construction of the chapel was taken apart during the renovation and again assembled into a representative whole, together with its valuable interior.

The chapel of Saint Peter and Paul in Bok Palanječki is situated in the middle of the village at the bend of river Sava. Next to it are a few traditionally built village houses, called čardak, with stone spolia from ancient Siscia that were discovered in the foundations of one of them. The chapel and its rich polychrome furnishings are undergoing very complex conservation-restoration work, as a result of years of neglect, including its wooden construction being overlaid with inadequate plaster that has drastically deteriorated the wood.

The excursion will end in Sisak, with lunch at a local restaurant.

(ZVJEZDANA JEMBRIH)

# Conference Programme

Saturday - April 22<sup>nd</sup> 2017

- 09:00 Tea & Coffee
- 09:30 PETRA BOHINC, Helena Pucelj Krajnc - Issues on preservation of heritage in Plečnik's house
- 09:45 ANA OBLAK - The Ecce Homo Painting by Leopold Layer: Identifying Problems and Solutions
- 10:00 BARBARA DRAGAN - Consolidation of Stone Sculptures Using the Biomineralization Method
- 10:15 Introduction into the 'Zvonimir Wyroubal' award - voting
- 
- 10:30 Coffee Break | 3<sup>st</sup> Poster Session | workshop visit
- 11:00 'Zvonimir Wyroubal' award
- 12:00 Conference conclusion
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# Visiting workshops | 'Zvonimir Wyroubal' Award

## Visiting workshops and studios of the Department for Conservation and Restoration of Works of Art

The Department for Conservation and Restoration of Works of Art is located in the former master's studio of renown Croatian painter, illustrator and theater designer Krsto Hegedušić (1901-1975). In 1945, Hegedušić was appointed professor at the Zagreb Academy of Fine Arts and in 1950 he founded the master's studio in Zamenhofova Street. The master's studio eventually gathered an impressive list of notable Croatian painters.

During the Conference, all workshops and studios of the Department for Conservation and Restoration of Works of Art will be open to participants, with our students ready to answer any questions. Participants will be free to look around and see how and where our students perform their daily work and studies.

## 'Zvonimir Wyroubal' Award

The 'Zvonimir Wyroubal' Award is given for the best oral presentation, the best Power Point presentation and the best poster. The award was introduced at the 9th International Conference in Split. It bears the name of Zvonimir Wyroubal (1900-1990), a distinguished Croatian conservator-restorer, co-founder and head of the first public conservation studio in Croatia, which was part of the Museum of Arts and Crafts in Zagreb, the foundation for the organization of conservation-restoration service in Croatia. Wyroubal was also the first director of the Conservation Institute of the Yugoslav Academy of Sciences and Arts, and had occupied that post for much of his career.

This year's award is made by Prof. Alem Korkut, renowned Croatian sculptor. Along with the sculpture, the awarded students will receive a gift of select conservation literature donated to the Conference by Archetype Publications Ltd. Students participating at the conference will have a chance to vote for the best oral presentation, Power Point presentation and poster. The voting will take place after all the lectures have finished and all the posters have been viewed and presented. The voting will be anonymous. The votes will be collected and calculated and the awards presented on Saturday April 22<sup>nd</sup>, before the Conference conclusion.



# Titanium Dioxide Photocatalytic Coatings for Cleaning Wall Painting Surfaces

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AUTHOR ALICJA SAWONIUK

MENTOR ASSOC. PROF. MAG. ART. SUZANA DAMIANI

STUDY STUDY PROGRAMME: CONSERVATION AND RESTORATION OF WORKS OF ART MA PROGRAMME

SPECIALIZATION: CONSERVATION OF PAINTINGS

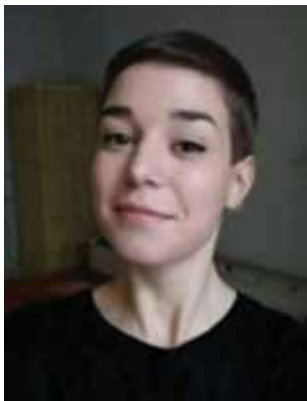
YEAR OF STUDY: 5TH YEAR

DEPARTMENT OF CONSERVATION AND RESTORATION OF WORKS OF ART; SPECIALIZATION:, JAN MATEJKO ACADEMY OF FINE ARTS IN KRAKÓW

## ABSTRACT

The presentation concerns the research carried out by the author at the Academy of Fine Arts in Zagreb during her Erasmus+ exchange period, under the mentorship of professor Suzana Damiani. The project was dealing with self-cleaning coatings based on aqueous dispersions of titanium dioxide nanoparticles. Two products were analysed: CristalACTiV™ PC-S7 and CristalACTiV™ S5-300B.

Titanium dioxide is considered to be very promising material for cleaning organic pollutants: it is efficient, inexpensive, non-toxic, compatible with lots of materials. Due to its photocatalytic properties and super-hydrophilic values it is commonly used in industry, especially in outdoor environment. The present work was carried out in order to verify the effectiveness of titania dispersion with interior wall paintings in buon fresco technique. The aim of the project were experimental tests with cleaning and protecting painted surfaces from soot. The photocatalytic activity of the coating on treated surfaces was raised under natural and artificial UV irradiation. Several laboratory tests and analysis (wettability, colorimetry, water vapour transmission) were taken.





# Importance of restoration and conservation of the historical book

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AUTHORS IVA CAREVIĆ, KATIJA MAŠKARIĆ, MIA PERKOVIĆ

MENTOR SANJA SERHATLIĆ, EXPERT ASSOCIATE

STUDY STUDY PROGRAMME: GRADUATE STUDY OF CONSERVATION AND RESTORATION

SPECIALIZATION: CONSERVATION AND RESTORATION OF PAPER MATERIALS

YEAR OF STUDY: 1ST YEAR

DEPARTMENT OF ART AND RESTORATION, UNIVERSITY OF DUBROVNIK

## ABSTRACT

The subject of our presentation is a book *Breve Compendium Nationis Glorissae Totius Linguae Illyricae* by the author Martin Rosa. It was published in 1638 and is situated in Franciscan monastery in Rožat. Martin Rosa was representative of Franciscan Illyrism. The book is written in Latin and tells about creation of the world, Slavic cultural and political history, their language, geographical position and it is the only remained copy in Croatia.

Process of restoration took place in workshop of paper at University of Dubrovnik. The book is made of three parts which vary in dimension, thickness and in type of print. Through this presentation we'll show the difference between the state of the book when it first arrived in the workshop and after the restoration, as well the old techniques of making water marks, print, etc... Every part of the book required a different approach in restoration process. The book was in very poor state and had many mechanical and chemical damages, especially book cover and binding, because of bad conditions in which it was kept.



# The conservation of an African sword with scabbard made of skins of Nile reptiles

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AUTHOR MARCELL MIKLÓS

MENTORS MÁRTA KISSNÉ BENEDEFY, SENIOR CONSERVATOR, HEAD OF SPECIALIZATION OF LEATHER CONSERVATION

STUDY STUDY PROGRAMME: INTEGRATED STUDY PROGRAMME, APPLIED ARTS OBJECT CONSERVATION

SPECIALIZATION: WOODEN OBJECTS AND FURNITURE CONSERVATION

YEAR OF STUDY: 4TH YEAR

DEPARTMENT OF CONSERVATION, FACULTY OF APPLIED ARTS OBJECT CONSERVATION, HUNGARIAN UNIVERSITY OF FINE ARTS

## ABSTRACT

The topic of this presentation is the difficulties of the conservation (2015/16) of an exotic African sword with scabbard made of Nile crocodile and monitor skins being kept in the Museum of Ethnography. Through the cultural and historical classification and the identification of the reptile skins, this sword with its scabbard was turned out to be a very unique and special artefact originated back to the colonial period of Sudan.

In the presentation the main tasks of the conservation will be discussed, such as the taking out the corroded and highly decorated sword from the sheath, the humidification and consolidation of the dried and fragile leather parts (including more than 100 strips), fixing other broken or damaged parts (horn, reptile fingers or the tail part of the sheath) and lastly, taking care of the safe storage of the object.



# The conservation of the painting with the depiction of Madonna and Child of Cracow Hodegetria type from church in Przyłęk Szlachecki. The reconstruction of the background based on existing grounds.

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AUTHOR MAJA POTRAWIAK

MENTOR PHD ANNA SĘKOWSKA

STUDY STUDY PROGRAMME: CONSERVATION AND RESTORATION OF WORKS OF ART MA PROGRAMME

SPECIALIZATION: CONSERVATION OF PAINTINGS

YEAR OF STUDY: 6TH YEAR

ABSTRACT

DEPARTMENT OF CONSERVATION AND RESTORATION OF WORKS OF ART; JAN MATEJKO ACADEMY OF FINE ARTS IN KRAKÓW

Cracow Hodegetria type painting is an example of the phenomenon of a widespread repetition of one image that in such scale is uncommon in the history of art. The original, probably not preserved until today, was imported to Poland in the end of 15th century. The painting from the church in Przyłęk Szlachecki dated circa 1500 that is discussed in this presentation is an example of its copy. Its study and conservation was carried as a part of the master thesis at Jan Matejko Academy of Fine Arts in Krakow under the guidance of Anna Sękowska (PhD). The research revealed a complete overpainting of the image. The main issue was the 19th century background with chess board ornament due to its discordant style with no artistic values. Gathered information led to the complex intervention aiming to unveil the original painting layer and remove the later background. During the process, the traces of the original design of the background drawn on the panel were uncovered. This disclosure, along with an exemplar of the ornament from the painting from Chomentów created in the same workshop, served as the key indications for the reconstruction of the background in its possible original shape.



# Examples of Transfer of Wall Paintings Practices at the Department of Conservation and Restoration of Works of Art

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AUTHOR MIA PRAHIN

MENTOR SUZANA DAMIANI, MA, ASSOC. PROFESSOR

STUDY STUDY PROGRAMME: INTEGRATED STUDY PROGRAMME, CONSERVATION AND RESTORATION OF WORKS OF ART

SPECIALIZATION: CONSERVATION AND RESTORATION OF PAINTINGS

YEAR OF STUDY: 4TH YEAR

DEPARTMENT FOR CONSERVATION AND RESTORATION OF WORKS OF ART, ACADEMY OF FINE ARTS, ZAGREB

## ABSTRACT

The detachment of wall paintings from the original support and their transfer are measures that have a major impact on the wall painting and the architectural object which they are an integral part of. Those measures fundamentally change the composition and the structure of the original work of art. Detachment and transfer are dangerous, drastic and irreversible methods that severely affect the physical composition, material structure and aesthetic characteristics of wall paintings. Therefore, these procedures are justified only in extreme cases when none of the in situ treatment options are possible. From the beginnings of study at the Department of Conservation and Restoration, as part of the course Conservation and restoration of wall paintings, exercises of transferring wall paintings are performed. These exercises are performed on paintings that were painted by students of previous generations. They covered all three ways of detachment: stacco a massello (paint layer, layer of plaster and part of the support), stacco (paint layer with a plaster layer) and strappo (only painted layer). In this presentation, only selected examples of different techniques of detachment of wall paintings and transfer to a new support are shown, together with various problems that occurred during the work, as well as the proposed ways in which they can be avoided.



# Conservation and Restoration of an Oleography

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AUTHOR    TEA BOROVINA

MENTOR    TANJA DUJAKOVIĆ, MAG. ART. ASSISTANT

STUDY      STUDY PROGRAMME: GRADUATE STUDY OF CONSERVATION AND RESTORATION  
SPECIALIZATION: CONSERVATION AND RESTORATION OF PAPER MATERIALS  
YEAR OF STUDY: 2ND YEAR  
DEPARTMENT OF ART AND RESTORATION, UNIVERSITY OF DUBROVNIK

## ABSTRACT

The theme of this presentation is Conservation and Restoration of an Oleography, which dates back to 19th century, and depicts the 3rd station of the cross – Jesus falls the first time. The object is part of a unit of altogether 14 oleographs, each of them showing one station of the cross. Some of them had already been restored, while others are still in the process of restoration. One of the restored oleographs will be presented here. The presentation will show complete process of a restoration treatment on the object. It will include examination of the object together with the analysis, which are done prior to any treatment. Furthermore, it will show the complete treatment (including tools and materials used) and explain each step that needs to be undertaken to preserve the object in the best possible way.



# Carved stone from the archaeological collection of the late Middle Ages, Gravestone - Krstaca

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AUTHOR KATARINA MILOSAVLJEVIC

MENTOR ASSIS. PROFESSOR MIINA JOVIC KATARINA MILOSAVLJEVIĆ

STUDY STUDY PROGRAMME: CONSERVATION AND RESTORATION

SPECIALIZATION: CONSERVATION AND RESTORATION OF SCULPTURES AND ARCHAEOLOGICAL ARTIFACTS

YEAR OF STUDY: 4TH YEAR

DEPARTMENT OF CONSERVATION AND RESTORATION, FACULTY OF APPLIED ARTS IN BELGRADE, ACADEMY OF APPLIED ARTS,  
UNIVERSITY OF ARTS IN BELGRADE

## ABSTRACT

Gravestone monument - Krstaca belongs to the group of stone sculptures from the archaeological collection of the late Middle Ages. Finding site of the Cross was a cemetery at St. Peter's Church near Novi Pazar. Gravestone monument dates back from XVII/XVIII century. The object was found covered with deposits of calcination and surface impurities. On the back side three iron anchors, attached by an additional cement binder, were spotted. Ultraviolet and Infrared recordings, USB camera and photo documentation of the object were performed. Impurities were also photographed using an USB camera. After the sample was cleaned, it was determined that the object should be treated with alcohol, ultrasound and EDTA. Missing parts (lower right corner, entire left wing of the cross) were fixed with brass anchors to the original and painted in colors similar to those of the marble original. The mold was taken from the sculpted positives and mass made of marble flour, cement, quartz sand and silicate solution was poured into moulds. Documentation of the entire conservation and restoration process was submitted to the National Museum of Belgrade, along with the object.



# The wayang klitik (kerucil) javanese puppet theatre – research and conservation of five puppets from the National Museum of Ethnography in Warsaw collection.

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AUTHOR PAULINA KRALKA

MENTORS JAROSŁAW ADAMOWICZ, PhD

STUDY STUDY PROGRAMME: CONSERVATION AND RESTORATION OF WORKS OF ART MA PROGRAMME

SPECIALIZATION: CONSERVATION OF PAINTINGS

YEAR OF STUDY: 5TH YEAR

DEPARTMENT OF CONSERVATION AND RESTORATION OF WORKS OF ART; JAN MATEJKO ACADEMY OF FINE ARTS IN KRAKÓW

## ABSTRACT

Wayang klitik is a rare and underresearched type of traditional javanese puppet theatre. The puppets are carved out of wood and have leather arms attached to the corpus. They are also polychromed on both sides. Study and conservation of five puppets from the National Museum of Ethnography in Warsaw collection, that is discussed in this presentation, was conducted as a part of the master thesis at Jan Matejko Academy of Fine Arts in Krakow under the guidance of Jarosław Adamowicz (PhD). It aims to provide a comprehensive insight into the technology of wayang klitik puppet making. Therefore, an extensive research has been carried out on identification of the materials used as well as the evaluation of the puppets' state of preservation and the extent of previous alterations and restorations. The gathered data enabled to propose and undertake the proper conservation treatment. A lot of consideration in the project is given to the design of suitable exhibit method that would ensure proper conditions and enable viewers to admire the puppets polychromy on both sides. Removable prosthetics of the missing pieces of puppets to assist interpretation during the exhibit are also discussed.



# Issues on preservation of heritage in Plečnik's house

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AUTHOR     **PETRA BOHINC, HELENA PUCELJ KRAJNC**

MENTORS    **ASSOC. PROF. TAMARA TRČEK PEČAK**

STUDY       **STUDY PROGRAMME: SECOND-CYCLE MASTER'S STUDY PROGRAMME CONSERVATION AND RESTORATION OF WORKS OF ART**

**SPECIALIZATION: CONSERVATION-RESTORATION OF WALL PAINTINGS AND STONE PLASTICS**

**YEAR OF STUDY: PETRA BOHINC - 1ST YEAR, HELENA PUCELJ KRAJNC - 2ND YEAR**

**DEPARTMENT OF CONSERVATION AND RESTORATION OF WORKS OF ART, ACADEMY OF FINE ARTS AND DESIGN, UNIVERSITY OF LJUBLJANA**

## ABSTRACT

The theme of this presentation is our individual involvement in a project called Conservation-restoration of Plečnik's house. The project was run by Institute for protection of cultural heritage, the conservation department of Galleries and museums of city Ljubljana and Museum of architecture and design. The project includes preservation and conservation-restoration of the house itself and its garden, stabilizing indoor climate conditions (air temperature and relative humidity), managing all movable items and integration of Plečnik's heritage in the life of our society. The presentation will include examples of some problems and complications during the execution of conservation-restoration plan. Petra will explain the overall issues of the climate state inside the house and achievements after the preservation works and Helena will talk about specific objects in the house which require more contemplative approach. We will also try to define our opinions on the matter and present possible solutions.





# The Ecce Homo Painting by Leopold Layer: Identifying Problems and Solutions

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AUTHOR ANA OBLAK

MENTOR ASSOC. PROF. LUCIJA MOČNIK RAMOVŠ, MFA

STUDY STUDY PROGRAMME: SECOND-CYCLE MASTER'S STUDY PROGRAMME CONSERVATION AND RESTORATION OF WORKS OF ART

SPECIALIZATION: CONSERVATION-RESTORATION OF PAINTINGS AND POLYCHROME PLASTIC

YEAR OF STUDY: 1ST YEAR

DEPARTMENT OF CONSERVATION AND RESTORATION OF WORKS OF ART, ACADEMY OF FINE ARTS AND DESIGN, UNIVERSITY OF LJUBLJANA

## ABSTRACT

The subject of this presentation is a Baroque painting entitled Ecce homo painted by Leopold Layer. Initial examination of the painting has showed the condition of the painting is unsatisfactory, which can partially be contributed to the previous conservation work. In the continuation, two main issues were discussed. Due to high sensitivity of the cinnabar pigment used mainly on red surfaces, it was necessary for us to consider carefully, which cleaning method would not compromise the original material. Another significant issue was the highly deteriorated original canvas, as well as choosing the proper lining technique and materials. Also practical aspects of the conservation treatment were considered. The purpose of conservation-restoration intervention was to alleviate the obtrusive effects of the ageing process, including the unsuitable past interventions, by taking into account the basic conservation principles of reversibility and minimal intervention.



# Consolidation of Stone Sculptures Using the Biomineralization Method

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AUTHOR BARBARA DRAGAN, ACAD. RESTORER

MENTORS ASSIST. PROFESSOR, PHD BLAŽ ŠEME, ASSIST. PROFESSOR, PHD SABINA KRAMAR

STUDY STUDY PROGRAMME: FIRST -CYCLE MASTER'S STUDY PROGRAMME CONSERVATION AND RESTORATION OF WORKS OF ART

SPECIALIZATION: CONSERVATION -RESTORATION OF PAINTINGS AND POLYCHROME PLASTIC

YEAR OF STUDY: 1ST YEAR

DEPARTMENT OF CONSERVATION AND RESTORATION OF WORKS OF ART, ACADEMY OF FINE ARTS AND DESIGN, UNIVERSITY OF LJUBLJANA

## ABSTRACT

The biomineralization method uses carbonatogenic bacteria to form biocalcite for the purpose of consolidating cultural heritage objects made of carbonate stones. The paper sums up my bachelors' thesis, where I examined the effect of the consolidation of objects made of carbonate stones by the method of biomineralization. The very definition of the methods' concept as well as the short process of the operation is presented. For the experiment, the commercial product Calcite Bioconcept, which contains two components: lyophilised bacteria *Bacillus Cereus* named Biocal and a nutrient called Nutrical, was used. The paper encompasses the presentation and the analysis of the results of colorimetry, drilling resistance measurements (DRMS) and the ultrasound velocity measurements (USV) before and after the consolidation. Measurements were carried out on laboratory samples of limestone and marble. Moreover, the description of the process of consolidation of a damaged marble relief, which is kept in Museum & Galleries of Ljubljana, is also included. Consolidation of the object proved to be successful, however, some improvements should be made.



# Posters

## **Conservation-restoration of the wall painting »Mladina se vključuje v proizvodnjo« (Youth are Getting Involved in the Production) by Maksim Sedej and Dana Pajnič**

Authors: Čila Berden, academic restorer, Barbara Škander, academic restorer  
Mentor: Blaž Šeme, PhD, acad. painter, assist. prof.

First-Cycle Master's Programme Conservation and Restoration of Works of Art, specialization: Conservation-restoration of wall paintings and stone

1st study year

Department of Conservation and Restoration of Works of Art, Academy of Fine Arts and Design, University of Ljubljana

## **The restoration of old print Georgica Curiosa from year 1716**

Author: Anežka Jadlovska

Mentor: Radomir Slovik, MS

Fine Arts study programme, specialization: Restoration and conservation of paper, bookbinding and documents

Absolvent of bachelor study, 4th study year

Faculty of Restoration, University of Pardubice

## **The unknown Saint, the wooden sculpture with polychrome, gilding and silvering; 16th/17th century (?)**

Author: Alicja Sawoniuk

Mentors: Assoc. Prof. Mag. Art. Andrej Aranicki; Assoc. Mag. Art. Ana Božičević

Conservation and Restoration study programme, specialization: Conservation of Paintings

5th study year

Department of Conservation and Restoration of Works of Art, Jan Matejko Academy of Fine Arts in Kraków

## **Saving the letters of Illyric history**

Author: Iva Carević, Katija Maškarić, Dora Franetović, Mia Perković

Mentor: Expert associate Sanja Serhatlić

Conservation and Restoration study programme, specialization: Paper

1st study year

Department of Art and Restoration, University of Dubrovnik

**Archaeological Fragments From The Sea Bottom To Museum Show Cases**

Authors: Tamara Kaličanin, Marita Marković, Emma Biuk, Karmen Bušić  
Mentor: J. Katunarić Kirjakov, senior lecturer  
Conservation and Restoration Integrated study programme, specialization: Archaeology heritage  
2nd study year  
Department of Conservation-Restoration, Arts Academy of the University of Split

**Conservation and restoration of Tomos Colibri 03 moped**

Author: Angel Oblak  
Mentor: Assoc. Prof. Tamara Trček Pečak, Assist. Prof. Jurij Smole  
Conservation and Restoration of Works of Art study programme  
Graduated  
Department of Conservation and Restoration of Works of Art, Academy of Fine Arts and Design, University of Ljubljana

**CRUCIFIXION GROUP: Conservation of polychrome sculptures from St. James chapel at Očura**

Author: Sonja Pavin  
Mentor: Assoc. Professor Zvezdana Jembrih, MA, Assist. Professor Ana Božičević, MA  
Conservation and Restoration of Works of Art Integrated study programme, specialization: Sculpture  
4th study year  
Department for Conservation and Restoration of Works of Art, Academy of Fine Arts, University of Zagreb

**Restoration of the ancient Roman sculpture Augustus from Narona**

Author: Josip Nižetić  
Mentor: Ivo Donelli, Associate professor, Siniša Bizjak, assistant professor  
Conservation and Restoration Integrated study programme, specialization: Stone conservation  
5th study year  
Department of Conservation-Restoration, Arts Academy of the University of Split

**Restoration of Mosaic Replica from Stolac**

Authors: Anđela Aćimović, Monika Sarana

Mentor: Darko Šobot, MA, Professor Conservation and Restoration Integrated study programme  
2nd study year

Department of Conservation and Restoration, Academy of Fine Arts, University of Sarajevo

**Conservation and restoration works carried out on two wooden, polychrome sculpture of angel torchbearer from the church of St. Margaret in Štinjan**

Author: Lucija Roce

Mentor: Nada Lučić, conservation-restoration

Conservation and Restoration study programme, specialization: Wood  
1st study year

Department of Art and Restoration, University of Dubrovnik

**Diocesan Museum Waterfalls**

Authors: Andrea Šafran, Luka Krešimir Stipičić, Marko Rizvić, Ante Pereza

Mentors: Assoc. Professor Zvezdana Jembrih, MA, Assist. Professor Ana Božičević, MA

Conservation and Restoration of Works of Art Integrated study programme:  
specialization: sculpture

2nd study year  
Department for Conservation and Restoration of Works of Art, Academy of Fine Arts, University of Zagreb

**Conservation and restoration works on the icon „Crucifixion with Saints“**

Author: Ana Štimac

Mentor: Associate Professor, mr. art. Tamara Ukrainčik

Conservation and Restoration of Works of Art Integrated study programme,  
specialization: painting

5th study year  
Department for Conservation and Restoration of Works of Art, Academy of Fine Arts, University of Zagreb

**Restoration of San Giovanni in Fonte baptistery mosaics**

Authors: Giulia Allegretti De Lista, Elena Fondacaro, Valeria Pappalardo

Mentor: Francesco Esposito, Assist. Prof.

Conservation and restoration of Arts  
Specialization: stone materials and derivatives; decorated architectural surfaces

Suor Orsola Benincasa University, Naples





University of Zagreb  
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