

**Advanced Technology for Diagnosis, Preservation and Management of Historical and  
Archaeological Parchment, Leather and Textile Artefacts**

October 15 – 18, 2014

ASTRA Centre for Heritage - CePCoR, ASTRA National Museum Complex, Sibiu, Romania

## Programme

### Wednesday, October 15<sup>th</sup>, 2014

- 16.00 – 18.00 **ROUND TABLE: Moderators Concepció Casas and Elena Badea**  
NANOMATERIALS AND NANOTECHNOLOGIES FOR CULTURAL HERITAGE.  
HORIZON 2020 PERSPECTIVES
- 15.00 – 17.00 **REGISTRATION**

### Thursday, October 16<sup>th</sup>, 2014

#### Conference Hall, CePCoR

- 09.00 **REGISTRATION**
- 09.30 **OPENING AND ADDRESSES** Chair **Andrea Bernath**
- 10.00 **BILATERAL COOPERATION PROGRAMS**  
Mircea Segărceanu
- SESSION 1** Chair **Alessandro Vitale Brovarone**
- 10.15 **INFLUENCE OF ETHYLENE OXIDE FUMIGATION AGAINST MOULD IN  
PARCHMENT AND LEATHER OF HISTORICAL BOOKS AND CHARTRES**  
Patricia Engel
- 10.30 **ANALYSIS OF ORGANIC MATERIALS IN HERITAGE OBJECTS**  
Marta Guttman
- 10.45 **SIMULATION OF THE DEGRADATION PHENOMENA IN LEATHER AGEING**  
Anna Bacardit, Concepció Casas, Carmen Gaidau, Lucretia Miu, Luis Ollé
- 11.00 **Coffee break**
- SESSION 2** **CHAIR Patricia Engel**
- 11.20 **CONVENTIONAL METHODS AND MODERN APPROACHES IN CURATIVE  
CONSERVATION OF TEXTILES**  
Carmen Marian
- 11.35 **EXAMINATION OF HISTORIC PARCHMENT MANUSCRIPTS BY NON-INVASIVE  
REFLECTION-FTIR: POSSIBILITIES AND LIMITATIONS**  
Wilfried Vetter, Bernadette Frühmann, Gunn Pöllnitz, Manfred Schreiner
- 11.50 **EFFECTS OF AEROSOL PARTICLES ON COLLAGEN MATERIALS**  
Magda Souckova, Ludmila Maskova, Jiri Smolik

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12.05 AGILENT TECHNOLOGIES PRESENTATION

Alin Mogoş

12.20 **Visit to the new facilities of CePCoR**

13.30 **Lunch break**

**SESSION 3 Chair CARMEN MARIAN**

14.30 LEATHER AND PARCHMENT ANALYSIS BY UV-VIS-NIR REFLECTANCE  
SPECTROSCOPY: FIRST RESULTS

Laurianne Robinet, Chantal Garnier, Lucreția Miu, Elena Badea

14.45 POSSIBLE METHODOLOGIES FOR IDENTIFYING THE PROVENIENCE OF  
LITURGICAL EMBROIDERIES WORKED IN THE BYZANTINE TECHNIQUE

Ileana Crețu, Mihai Lupu, Irina Petroviciu, Zizi Ileana Balta

15.00 DIFFERENTIAL SCANNING CALORIMETRY. A VALUABLE TECHNIQUE FOR  
CHARACTERISING VEGETABLE TANNED LEATHER

Cristina Carsote, Elena Badea, Lucreția Miu, Giuseppe Della Gatta, Petru Budrugeac

15.10 THERMAL CHARACTERIZATION OF NEW, ARTIFICIALLY AND NATURALLY  
AGED LEATHER AND PARCHMENT SAMPLES

Zoltán Sebestyén, Zsuzsanna Czégény, Claudiu Șendrea, Cristina Carsote, Eszter Barta-Rajnai,  
Lucreția Miu, Elena Badea, Emma Jakab

15.20 PRELIMINARY STUDIES ON GAMMA RADIATION INFLUENCE ON THE PHYSICAL-  
MECHANICAL CHARACTERISTICS OF TEXTILE

Ana-Maria Mocioiu

15.30 **POSTER PRESENTATION**

**Chairs Irina Petroviciu and Wilfried Vetter**

*P1* ILLUMINATED MANUSCRIPTS ON PARCHMENT: AN ANALYTICAL STUDY ON  
THE MATERIALS FROM TEXTS AND DECORATIONS

Cristina Marta Ursescu, Sorin Ciovica

*P2* A UNIQUELY EMBROIDERED TRADITIONAL ROMANIAN BLOUSE:  
DEGRADATION AND CONSERVATION ISSUES

Ioana Cova

*P3* REVIVING ANCIENT CRAFTS WITH NEW TECHNOLOGIES AND IDEAS.  
EVALUATION OF FURSKINS BIODEGRADABILITY AS AN ECOLOGICAL TOOL  
FOR NATURAL PRODUCTS VALORIZATION

Carmen Gaidau, Mihaela Niculescu, Andreea Georgiana Vesa, Stefana Jurcoane,  
Petruta Cornea, Florentina Israel-Roming

*P4* "PROCOVĂȚI" FROM THE 13<sup>TH</sup> CENTURY, FROM THE COTROCENI MONASTERY

Aurora Florentina Ilie

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- P5* RESTORATION OF A FLAG BELONGING TO THE TOWN HALL OF RĂȘNOV,  
BRAȘOV  
Vasilica Izdrailă, Cornelia Kertesz
- P6* THE ISSUE OF CONSERVING THE MEDALLIONS OF HISTORICAL FLAGS  
M-Kiss Hedy
- P7* X-RAY FLUORESCENCE (XRF) - COMPOSITIONAL ANALYSIS METHOD APPLIED  
FOR TEXTILE AND LEATHER OBJECTS AT ASTRA NATIONAL MUSEUM  
COMPLEX, SIBIU  
Daniela Adela Lăzureanu
- P8* ASSESSMENT AND INVESTIGATION TECHNIQUES FOR BUILT HERITAGE  
CONSERVATION  
Claudiu-Lucian Matei
- P9* BIODEGRADATION OF OLD BOOK COVERS FROM CHURCH COLLECTIONS  
Mina Adriana Moșneagu, Elena Ardelean, Oana Mirela Chachula
- P10* THE RESTORATION OF A WIDE LEATHER BELT FROM THE COLLECTION OF  
ASTRA MUSEUM, SIBIU  
Florența Moga
- P11* "DIFFERENT" RESTORATION OF A 18<sup>th</sup> CENTURY LEATHER BOOKBINDING  
Cristina Petcu, Lucreția Miu
- P12* SYNERGETIC EFFECT OF TEMPERATURE, RELATIVE HUMIDITY AND LIGHT  
IRRADIATION ON VEGETABLE TANNED LEATHER BY NMR MOUSE AND MHT  
METHOD  
Claudiu Sendrea, Elena Badea, Lucretia Miu, Madalina Fleancu Ignat
- 16.15 **Coffee break**
- 17.00 **KICK-OFF MEETING** of the PNII 325/2014 Project INTELLIGENT STRATEGY FOR  
MOVABLE CULTURAL HERITAGE MONITORING IN CHANGING CLIMATE (INHerit)

**Friday, October 17<sup>th</sup>, 2014**

**SESSION 4 Chair Laurianne Robinet**

- 09.30 WHAT DO HUMANISTIC STUDIES EXPECT FROM SCIENTIFIC ANALYSIS, AND  
WHAT CAN THEY OFFER IN EXCHANGE.  
Alessandro Vitale Brovarone
- 09.45 BIOLOGICAL DECAY OF CULTURAL HERITAGE MADE OF ORGANIC MATERIALS  
Livia Bucsa

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10.00 NON-DESTRUCTIVE INVESTIGATION OF 11-12TH C. PARCHMENT DOCUMENTS  
PRESERVED IN THE STATE ARCHIVES OF TURIN

Irina Petroviciu, Cristina Carșote, Elena Badea, Petru Budrugeac, Alessandro Vitale Brovarone

10.10 MULTISPECTRAL IMAGING AND IDENTIFICATION OF WRITERS OF HISTORICAL  
DOCUMENTS

Fabian Hollaus and Robert Sablatnig

10.20 **Coffee break**

**SESSION 5 Chair Ileana Crețu**

10.50 MICROSCOPIC AND MOLECULAR NOVEL DISCOVERIES ON PARCHMENT  
BIODETERIORATION

Flavia Pinzari, Katja Sterflinger, Guadalupe Piñar

11.05 PARCHMENT: DAMAGE ASSESSMENT AND EVALUATION OF CONSERVATION  
TREATMENT AT THE COLLAGEN FIBRIL LEVEL USING ATOMIC FORCE  
MICROSCOPY AND AT THE MACRO LEVEL USING MECHANICAL TESTING

Marianne Odlyha, Laurent Bozec, Angelica Bartoletti, L.N.Melita, René Larsen, Kathleen  
Mühlen Axelsson, Elin Dahlin, Terje Grøntoft, Piero Baglioni, Roderico Giorgi, David  
Chelazzi,

11.20 DECONTAMINATION OF TEXTILE, LEATHER AND PARCHMENT ARTEFACTS BY  
GAMMA IRRADIATION

Ioana Stanculescu, Valentin Moise, Laurent Cortella, Quoc-Khôi Tran

11.30 EVALUATION OF SOME CONSERVATION TREATMENTS FOR PARCHMENT  
ARTEFACTS

Andrei Cucuș, Elena Badea, Lucreția Miu, Cristina Carșote, Irina Petroviciu, Petru Budrugeac

11.40 **Coffee break**

**WORKSHOP Chairs Elena Badea and Silviu Ciobanu**

12.00 MEMORI DOSIMETER

Terje Grøntoft

12.30 ImageMHT: A NEW AUTOMATED, PORTABLE INSTRUMENT FOR *IN SITU* DAMAGE  
DIAGNOSIS OF COLLAGEN-BASED MATERIALS

MHT METHOD

Cristina Carșote and Lucreția Miu

12.45 USE OF A BACKGROUND ESTIMATION ALGORITHM FOR THE AUTOMATIC  
DAMAGE ASSESSMENT OF COLLAGEN BASED HISTORICAL OBJECTS

Andreea Oana Miu, Elena Badea, Cristina Carșote, Silviu Ciobanu

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- 13.00            **NEW HOTPLATE PROTOTYPE FOR AUTOMATIC MEASUREMENT OF SHRINKAGE  
ACTIVITY**  
Ionuț-Vlad Bornoiu, Valentin Velican, Ovidiu Grigore
- 13.10            **CLOSING CEREMONY**
- 13.20            **Lunch break**
- 14.00            **Guided visit of Astra Museum Complex**
- 16.00            **Joint meeting – Bilateral Cooperation projects**
- 17.00            **Annual Assembly of the Romanian Association *Science and Cultural Heritage in  
Connection* (i-CON)**
- 20.00            **Social Dinner**

**Saturday, October 18<sup>th</sup>, 2014**

- 10.30            **Guided visit to the Brukenthal National Museum**  
<http://www.brukenthalmuseum.ro/>