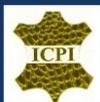
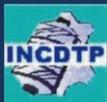


**ORGANIZED BY:**

NATIONAL RESEARCH & DEVELOPMENT  
INSTITUTE FOR TEXTILES  
AND LEATHER (INCDTP) - DIVISION  
LEATHER AND FOOTWEAR  
RESEARCH INSTITUTE (ICPI)



# ICAMS 2022

## ADVANCED MATERIALS AND SYSTEMS

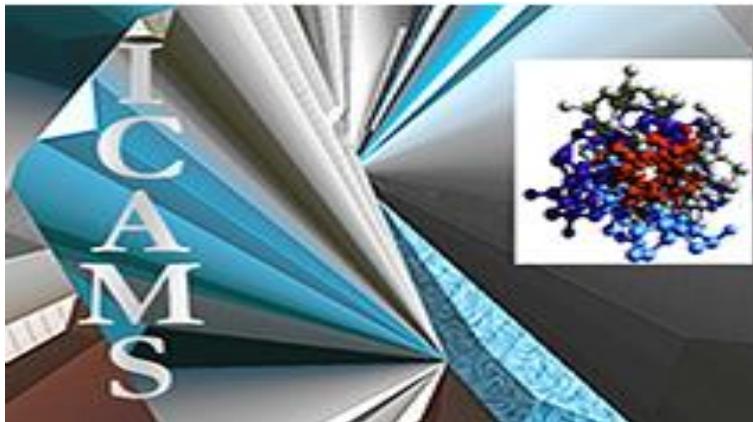
Programme of the 9th International Conference

October 26th - 28th, 2022

Online Event



National Research & Development Institute for Textiles and Leather (INCDTP),  
Division Leather & Footwear Research Institute (ICPI), Bucharest, Romania



# ICAMS 2022

**9<sup>th</sup> International Conference  
on Advanced Materials and Systems**

**CONFERENCE PROGRAM**

**26-28 October 2022**

**Bucharest, Romania**

**[www.icams.ro](http://www.icams.ro)**

# Partners

## ORGANIZED BY:



**National Research & Development  
Institute for Textiles and Leather  
(INCDTP), Bucharest, Romania**



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Romanian  
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**Confederation of National  
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and Dressers of the  
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The Romanian Leather  
Manufacturers Organization**



## FOREWORD

ICAMS 2022 is offering the framework for presenting the latest results in research, focusing on the field of Materials Science and Innovative Technologies, which records an impressive dynamics and is recognized as a current national and European priority.

The ICAMS 2022 international event, organised by the National Institute for Research and Development for Textiles and Leather - Division Leather and Footwear Institute (INCDTP-ICPI) takes place online on 26-28 October 2022. ICAMS 2022 brings together different stakeholders and provides a platform for a better understanding of the European innovation ecosystem while raising awareness of the actions needed to enable synergies and drawing lessons for future actions.

The conference provides the opportunity for exchanging ideas and experience with researchers, scientists and experts at international level, and for developing new scientific contributions.

Around 100 participants will virtually attend the event from several academic and research institutions, public and private sectors, as well as Managing Authorities. Participants will present their experience on research, innovation, policies and the creation of synergies. All these inputs offer insightful elements for discussion in the different participatory sessions throughout the event.

The conference topics include, but are not limited to:

**Advanced Materials and Nanomaterials**

**Biomaterials and Biotechnologies**

**Innovative Systems, Technologies and Quality Management**

**Ecological Processes for Circular and Neutral Economy**

**Creative Industries and Cultural Heritage**

**Education and Digitalization**

We would like to thank all the participants, the International Scientific Committee, and the partners that made this scientific event possible. ICAMS Conference has already become a tradition, contributing to the advancement of Materials Science in research, academic, social and business environments worldwide.

**EDITORS,**

**Dr. Laurenția ALEXANDRESCU**

**Director, INCDTP – Division: Leather and Footwear Research Institute (ICPI), RO**

**Dr. Gheorghe COARĂ**

**INCDTP – Division: Leather and Footwear Research Institute (ICPI), RO**

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# Short Program

Wednesday, October 26 <sup>th</sup> 2022	
10:00 - 10:10	OPENING CEREMONY
10:10 – 11:25	Oral presentations TOPIC 1: ADVANCED MATERIALS AND NANOMATERIALS
11:25 – 11:45	SHORT BREAK
11:45 – 12:55	Oral presentations TOPIC 2: BIOMATERIALS AND BIOTECHNOLOGIES - Part 1
12:55 – 13:15	SHORT BREAK
13:15 – 14:15	Oral presentations TOPIC 2: BIOMATERIALS AND BIOTECHNOLOGIES – PART 1 (CONTINUED)
15:00 – 17:30	<b>WORKSHOP</b> <i>MUSEION IoT-BASED SYSTEM FOR UNDERSTANDING AND CONTROLLING THE ENVIRONMENTAL QUALITY IN MUSEUMS</i>

Thursday, October 27 <sup>th</sup> 2022	
10:00 – 10:55	Oral presentations TOPIC 2: BIOMATERIALS AND BIOTECHNOLOGIES - Part 2
10:55 – 11:00	SHORT BREAK
11:00 – 12:15	Oral presentations TOPIC 3: INNOVATIVE SYSTEMS, TECHNOLOGIES AND QUALITY MANAGEMENT
12:15 – 12:30	SHORT BREAK
12:30 – 13:10	Oral presentations TOPIC 3: INNOVATIVE SYSTEMS, TECHNOLOGIES AND QUALITY MANAGEMENT (CONTINUED)
13:10 – 14:00	SHORT BREAK
14:00 – 15:25	Oral presentations TOPIC 4: ECOLOGICAL PROCESSES FOR CIRCULAR AND NEUTRAL ECONOMY

Friday, October 28 <sup>th</sup> 2022	
10:00 – 11:00	Oral presentations TOPIC 5: CREATIVE INDUSTRIES AND CULTURAL HERITAGE
11:00 – 11:15	Oral presentations TOPIC 6: EDUCATION AND DIGITALIZATION
11:15-11:30	CLOSING CEREMONY

## OPENING CEREMONY

10:00 - 10:10 Dr. eng. Laurentia ALEXANDRESCU; INCDTP-Division ICPI

**10:10** **TOPIC 1: ADVANCED MATERIALS AND NANOMATERIALS**

**11:25** *Chairs: Carmen GAIDĂU, Maria STANCA*

## INVITED LECTURE

10:10 – 10:30 Giuseppe LAZZARA, Giuseppe CAVALLARO, Lorenzo LISUZZO, Maria Rita CARUSO, Martina CALVINO  
**Preparation of Wax Microparticles Stabilized by Halloysite Nanotubes: A Versatile Material for Restoration of Cultural Heritage**

## PRESENTATIONS

10:30 – 10:35 Anna BONDARYEVA, Maryna ZHALDAK, Olena MOKROUSOVA, Olena OKHMAT  
**Nanopigments for Leather Finishing Coating**

10:35 – 10:40 Demetra SIMION, Carmen GAIDAU, Mariana Daniela BERECHET, Maria STANCA, Rodica Roxana CONSTANTINESCU  
**Modeling the Encapsulation of Turmeric in Nanoemulsions**

10:40 – 10:45 Dilsat BOZDOGAN KONUSKAN  
**Influence of Olive Maturity on some Physicochemical Properties and Fatty Acid Composition of Monovarietal Olive Oil of Extracted from Halhali Cultivar**

10:45 – 10:50 Elena Cristina STROE, Raluca Maria AILENI  
**The Influence of Additive Manufacturing in the Textile Industry**

10:50 – 10:55 Ion Razvan RADULESCU, Emilia VISILEANU, Razvan SCARLAT, Cristian MORARI, Cristian STANCU, Bogdana MITU  
**Stainless Steel and Copper Magnetron Plasma Coating of Fabrics with Metallic Yarns for Electromagnetic Shielding Applications**

10:55 – 11:00 Laurentia ALEXANDRESCU, Mihai GEORGESCU, Maria SONMEZ, Anton FICAI, Roxana TRUSCA, Ioana Lavinia ARDELEAN  
**Polyamide/Polyethylene/Carbon Fibre Polymer Nanocomposites**

11:00 – 11:05 Maria SONMEZ, Cristina-Elisabeta PELIN, Mihai GEORGESCU, George PELIN, Maria Daniela STELESCU, Mihaela NITUICA (VILSAN), George STOIAN, Laurentia ALEXANDRESCU, Dana GURAU  
**Unmanned Aerial Vehicles – Classification, Types of Composite Materials Used in Their Structure and Applications**

11:05 – 11:10 Olga SHYDLOVSKA, Yevhen KHARCHENKO  
**Review of Green Methods of Synthesis of Silver Nanoparticles**

<b>10:10</b>	<b>TOPIC 1: ADVANCED MATERIALS AND NANOMATERIALS (CONTINUED)</b>
<b>11:25</b>	<i>Chairs: Carmen GAIDĂU, Maria STANCA</i>
11:10 – 11:15	<u>Raluca Maria AILENI</u> , Elena Cristina STROE, Cristian MORARI <b>Predictive Analysis of the Electromagnetic Shields Effectiveness</b>
11:15 – 11:20	<u>Suresh ALUVIHARA</u> , C. S. KALPAGE, P.W.S.K. BANDARANAYAKE W.M.A.T. BANDARA, Ciprian CHELARU <b>Investigations and Analysis of Earth Materials Towards the Developments in Some Advanced Chemical and Catalytic Uses</b>
11:20 – 11:25	<u>Teodor SARBU</u> <b>Smart Textiles Based on Conductive Woven Structures</b>
<b>11:25 - 11:45</b>	<b>SHORT BREAK</b>

# Wednesday, October 26<sup>th</sup> 2022

11:45

## TOPIC 2: BIOMATERIALS AND BIOTECHNOLOGIES – PART 1

12:55

*Chairs: Madalina Georgiana ALBU-KAYA, Ciprian CHELARU*

### INVITED LECTURE

11:45 – 12:05

Maria G. KATSIKOIANNI

**Development of Sub-micron Patterned Polymeric Surfaces that Enhance Cell Adhesion for Orthopaedic Applications**

### PRESENTATIONS

12:05 – 12:10

Andreea TIGAU, Georgiana VASILE, Alina POPESCU, Rodica Roxana CONSTANTINESCU, Laura CHIRILA

**Hydrogel Dressings with Antimicrobial and Healing Properties**

12:10 – 12:15

Ciprian CHELARU, Maria Minodora MARIN, Madalina IGNAT

**Thermostability Study of Natural Polymer Microcapsules**

12:15 – 12:20

Darina ZHELEVA, Margarita KOLEVA, Desislava ANGELOVA, Desislava GRABCHEVA, Petar TODOROV

**Methods for Modification of Cotton Fabrics with Gelatin – Glutaraldehyde and ZnO Nanoparticles**

12:20 – 12:25

Demetra SIMION, Carmen GAIDAU, Mariana Daniela BERECHET, Maria STANCA, Cosmin Andrei ALEXE, Gabriela PAUN

**The Influence of Surfactants in Obtaining New Byproducts for Agriculture Applications**

12:25 – 12:30

Durmuş Alpaslan KAYA, Musa TÜRKMEN

**Comparing of Eucalyptus (*Eucalyptus camaldulensis* and *Eucalyptus grandis*) Essential Oil Compositions Growing in Hatay Ecological Conditions**

12:30 – 12:35

Durmuş Alpaslan KAYA, Yelda GÜZEL, Musa TÜRKMEN

**Determination of Essential Oil Components Obtained from Leaves and Aerial Parts of *Ferulago syriaca***

12:35 – 12:40

Ece ÖZTOPRAK, Kaan ÖZTOPRAK

**Comparison of Two Different Etch Systems as Adhesion Resistance in Dental Adhesive Systems**

12:40 – 12:45

Elena-Emilia TUDOROIU, Mihaela-Violeta GHICA, Madalina Georgiana ALBU-KAYA, Cristina-Elena DINU-PIRVU, Lacramioara POPA, Valentina ANUTA, Bruno Ștefan VELESCU, Durmuş Alpaslan KAYA, Maria Minodora MARIN, Razvan Mihai PRISADA

**Rheological Characterization of Some Cellulose Derivatives-Based Hydrogels**

12:45 – 12:50

Georgiana VASILE, Andreea TIGAU, Alina POPESCU, Rodica Roxana CONSTANTINESCU, Laura CHIRILA

**Hydrogels-Based Textile Materials for Treatment of First-Degree Burn Injuries**

12:50 – 12:55

Ilaria QUARATESI, Filip ION-ANGI, Cristina CARSOTE, Sebastian-Bogdan TUTUNARU, Mihaela-Doina NICULESCU, Elena BADEA

**Synthesis and Characterization of Alginate-Gelatin Hydrogels with Potential Use in Biomedical Field**

12:55 – 13:15

**SHORT BREAK**

<b>13:15</b>	<b>TOPIC 2: BIOMATERIALS AND BIOTECHNOLOGIES – PART 1 (CONTINUED)</b>
<b>14:15</b>	<i>Chairs: Madalina Georgiana ALBU-KAYA, Ciprian CHELARU</i>
13:15 – 13:20	Larisa SABLIY, Veronika ZHUKOVA, Lyubov KIKA <b>Effective Biological Treatment of Tannery Wastewater from Nitrogen Compounds</b>
13:20 – 13:25	<u>Kaan ÖZTOPRAK</u> , Ece ÖZTOPRAK <b>Comparison of Surface Processes Applied to Preserve the Hydrophilic Property of Implants</b>
13:25 – 13:30	<u>Kaan ÖZTOPRAK</u> , Ece ÖZTOPRAK <b>Investigation of Acid Residue on the Surface of Dental Implants after Different Surface Cleaning Processes</b>
13:30 – 13:35	Madalina Georgiana ALBU-KAYA, Mihaela-Violeta GHICA, Cristina-Elena DINU-PIRVU, Lacramioara POPA, Elena DANILA, Ciprian CHELARU Valentina ANUTA, Durmuş Alpaslan KAYA, <u>Marina-Theodora TALIANU</u> , Ana-Maria STAVRI <b>Hair Masks Based on Keratin and Collagen</b>
13:35 – 13:40	<u>Mahmoud Ali AHMED HUSSEIN</u> , <u>Habiba Sherif EL ROUBY</u> , Mahmoud Ramadan BARAKAT <b>The Impact of Environmental Knowledge on Recycling Intention: The Mediating Role of Perceived Behavioural Control</b>
13:40 – 13:45	Mariana CONSTANTIN, Rodica Roxana CONSTANTINESCU, Mihaela GANCIAROV, Raluca SUICA-BUNGHEZ, Ana-Maria GURBAN, <u>Cristina FIRINCA</u> , Gelu VASILESCU, Luiza JECU, Iuliana RAUT, Madalina IGNAT <b>Eco-Friendly Biodegradation of Skins and Hides by Keratinolytic Fungus <i>Cladosporium</i> sp.</b>
13:45 – 13:50	<u>Mariana Daniela BERECHET</u> , Demetra SIMION, Rodica Roxana CONSTANTINESCU, Maria STANCA, Cosmin Andrei ALEXE <b>Active Principles in Basil Essential Oil - <i>Ocimum basilicum</i> L. Cotton Linings with Antibacterial Properties</b>
13:50 – 13:55	<u>Maria Minodora MARIN</u> , Georgeta BUMBENECI, Rodica Roxana CONSTANTINESCU, Ciprian CHELARU, Madalina Georgiana ALBU-KAYA <b>New Cosmetics Based on Collagen and Caffeine with Antimicrobial Activity</b>
13:55 – 14:00	<u>Mohammed Shaymaa OMAR MOHAMMED</u> , Nicoleta RADU, Verginica SCHRODER, Rodica Roxana CONSTANTINESCU, Narcisa BABEANU <b>Antimicrobial Properties of the Bioproducts Formulated with Chitosan and Collagen</b>
14:00 – 14:05	<u>Musa TÜRKMEN</u> , Durmuş Alpaslan KAYA, Filiz AYANOĞLU <b>Variations in Essential Oil Main Components of Native Grown <i>Salvia aramiensis</i> Rech Fil. Genotypes Depending on Years</b>
14:05 – 14:10	<u>Olga IUNGIN</u> , Lesia MAISTRENKO, Kateryna RUDNIEVA, Olena MOSHYNETS, Viktoriia POTOCHYLOVA, Olena MOKROUSOVA <b>Collagen-Based Gel with Antimicrobial Activity from Leather Waste</b>
14:10 – 14:15	<u>Olga IUNGIN</u> , Prekrasna IEVGENIIA, Bortyanuy IHOR, Valeriia MASLAK, Saulius MICKEVIČIUS <b>Plant Growth-Promoting Characteristics of Antarctic Endophytic Bacteria</b>

MUSEION



*AN INTERNATIONAL  
IMPLEMENTATION AS  
INTERACTION OF RESEARCH,  
PRACTICE, AND CURRENT  
EUROPEAN GREEN DEAL*

**MUSEION IoT-BASED SYSTEM FOR  
UNDERSTANDING AND  
CONTROLLING THE  
ENVIRONMENTAL QUALITY IN  
MUSEUMS**

**WORKSHOP**

*This Workshop is organised within the Eureka project E!13370 **IoT-based system for monitoring museum environment** supported by a grant of the Ministry of Research, Innovation and Digitization, CNCS/CCCDI – UEFISCDI, project number PN-III-P3-3.5-EUK-2019-0211, within PNCDI III.*

**WORKSHOP PROGRAM**

**26 October 2022**

**Bucharest, Romania**

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**National Research & Development  
Institute for Textiles and Leather  
(INCDTP), Bucharest, Romania**



**Division Leather & Footwear  
Research Institute (ICPI)  
Bucharest, Romania**



**9<sup>th</sup> International Conference  
on Advanced Materials and Systems**



**National Museum of Romanian  
Literature, Bucharest, Romania**



**BEIA Research, Bucharest, Romania**



**Seacon Europe, Székesfehérvár,  
Hungary**

15:00	<b>WELCOME</b>
15:00 – 15:15	Cristina BALACEANU (Beia Consult), Elena BADEA (ARCH Lab, INCDTP-ICPI), Zsolt VINICZAY (Seacon Europe) <b>Presentation of the Project: State of the Art, Objectives, Partnerships</b>
15:15 – 15:30	Elena BADEA (ARCH Lab, INCDTP-ICPI) <b>Presentation of the Characteristics of the Collection of the Memorial Houses “Ion Minulescu” and “Liviu Rebreanu” of the National Museum of Romanian Literature, and Their Peculiar Environmental Requirements</b>
15:30 – 15:45	Cristina BALACEANU, George SUCIU (Beia Consult) <b>Technical Aspects of the System Implemented in the MUSEION Project</b>
15:45 – 16:00	Cristina CARSOTE (ARCH Lab, INCDTP-ICPI) <b>Key Risk Indicators (KRI) Concept and Indoor Air Quality Index (IAQ index) Calculation</b>
16:00 – 16:15	Zóra BARTA (Seacon Europe) <b>Supporting IAQ Analysis and Visualization Based on Real Measurements</b>
<b>16:15 – 16:30</b>	<b>Coffee Break</b>
16:30 – 17:00	Discussion
17:00 – 17:30	Feedback Survey Questions Addressed to the Museum Professionals

<b>10:00</b>	<b>TOPIC 2: BIOMATERIALS AND BIOTECHNOLOGIES – PART 2</b>
<b>10:55</b>	<i>Chairs: Minodora Maria MARIN, Rodica Roxana CONSTANTINESCU</i>
<b>INVITED LECTURE</b>	
10:00 – 10:20	<u>Ana Francisca BETTENCOURT</u> <b>Multifunctional Advanced Drug Delivery Systems: From Nano to Macro</b>
<b>PRESENTATIONS</b>	
10:20 – 10:25	<u>Olga SHYDLOVSKA, Yuliia KHMELNYTSKA</u> <b>L. Lactis Bacteriophages and Methods of their Elimination from Dairy Products</b>
10:25 – 10:30	<u>Ömer KONUSKAN, Durmuş Alpaslan KAYA</u> <b>The Effect of Different Sowing Times on Corn Silk Tea</b>
10:30 – 10:35	<u>Ovidiu IORDACHE, Elena-Cornelia TANASESCU, Elena PERDUM, Lucia SECAREANU, Mihaela-Cristina LITE, Irina-Mariana SANDULACHE</u> <b>Antimicrobial Activity of FIR Functionalized Textile Materials against Pathogenic Fungi Strains</b>
10:35 – 10:40	<u>Ovidiu IORDACHE, Ioana-Corina MOGA, Elena-Cornelia TANASESCU, Elena PERDUM, Lucia SECAREANU, Mihaela-Cristina LITE, Irina-Mariana SANDULACHE, Elena-Laura TROANCA</u> <b>Reduction of Residual Tannins Concentration using <i>Ceriporus squamosus</i> Bio-Augmented Polymeric Carriers</b>
10:40 – 10:45	<u>Rodica Roxana CONSTANTINESCU, Mariana FERDES, Madalina IGNAT, Ciprian CHELARU, Ana-Maria CIOBANU, Denis-Andrei DRUSAN</u> <b>Isolation and Characterization of Bacterial Protease Enzyme of Leather Waste</b>
10:45 – 10:50	<u>Yelda GÜZEL, Durmuş Alpaslan KAYA, Musa TÜRKMEN</u> <b>Comparison of Aerial Parts Essential Oils of Purple and White Flowered <i>Vitex Agnus-Castus (Lamiaceae)</i> Populations</b>
10:50 – 10:55	<u>Yelda GÜZEL, Durmuş Alpaslan KAYA, Musa TÜRKMEN</u> <b>Essential Oil Composition of <i>Teucrium montbretii</i> Subsp. <i>Montbretii</i> Benth. (<i>Lamiaceae</i>)</b>
<b>10:55 - 11:00</b>	<b>SHORT BREAK</b>

<b>11:00</b>	<b>TOPIC 3: INNOVATIVE SYSTEMS, TECHNOLOGIES AND QUALITY MANAGEMENT</b>
<b>12:15</b>	<i>Chairs: Mădălina IGNAT, Ciprian CHELARU</i>
<b>INVITED LECTURE</b>	
11:00 – 11:20	<u>Viorica ROSCULET</u> , Laurentia ALEXANDRESCU <b>Quality Management in Leather and Footwear Research Institute (ICPI)</b>
<b>PRESENTATIONS</b>	
11:20 – 11:25	<u>Adrian SALISTEAN</u> , Doina TOMA, Mihaela JOMIR, Ionela BADEA <b>The Development of a Small-Scale PPG-UAV for Emergency Response Actions</b>
11:25 – 11:30	<u>Emrah AY</u> , Nizami DURAN <b>Resistance of SARS CoV-2 to Seawater</b>
11:30 – 11:35	<u>Emrah AY</u> , Nizami DURAN <b>Synergistic Efficacy of Eucalyptol with Acyclovir against HSV-2</b>
11:35 – 11:40	<u>Durairaj DHANAPAL</u> , Sitawala MUNDIA <b>Footwear Industry Leather Cutting Issues and Recommendation of Wastage Minimization Research Innovative Techniques</b>
11:40 – 11:45	Doina TOMA, <u>Adrian SALISTEAN</u> , Georgeta POPESCU, Sabina OLARU, Ionela BADEA <b>A New Modular Solution of Personnel Protective Equipment for the Emergency Responders</b>
11:45 – 11:50	<u>Elif YAPRAK</u> , Nizami DURAN <b>Activity of Oleic Acid on Biofilm Formation of <i>S. aureus</i></b>
11:50 – 11:55	<u>Erhan TEK</u> , Nizami DURAN <b>Efficacy of Capsaicin on Cell Adhesion and Invasion of Oral Pathogens</b>
11:55 – 12:00	<u>Fulya ADIGÜZEL</u> , Cemile Ceren TOSUN, Gökhan ZENGİN, Arife Candaş ADIGÜZEL ZENGİN <b>Grain Characteristics Comparison of Different Types of Shoe Upper Leathers</b>
12:00 – 12:05	<u>Georgeta POPESCU</u> , Doina TOMA, Claudia NICULESCU, Alina POPESCU, Adrian SALISTEAN, Ionela BADEA, Minela NENECIU, Sara WECHSLER, Ionut Daniel ION, Mirela Greti PUIU, Cristina RAICAN <b>3D Virtual Prototyping of Functional Knitted Garments for Persons with Special Needs</b>
12:05 – 12:10	Gerda ŠLEKIENE, Renata BIŠKAUSKAITE, Viktoriia PLAVAN, <u>Virgilijus VALEIKA</u> <b>Neutralisation and Bating of Hide Unhaired Using Sodium Silicate and Sodium Sulphide</b>
12:10 – 12:15	Ilyos ISMATULLAEV, Jurabek ULUGMURATOV, Avaz KENJAEV, <u>Khashim BEGALIEV</u> , Fazli AKYÜZ <b>Investigation of the Process of Soaking when Processing Ostrich Skins</b>
<b>12:15 - 12:30</b>	<b>SHORT BREAK</b>

<p><b>12:30</b></p> <p><b>13:10</b></p>	<p><b>TOPIC 3: INNOVATIVE SYSTEMS, TECHNOLOGIES AND QUALITY MANAGEMENT (CONTINUED)</b></p> <p><i>Chairs: Mădălina IGNAT, Ciprian CHELARU</i></p>
<p>12:30 – 12:35</p>	<p><u>Liliia CHERTENKO</u>, Dariia KAPTIUROVA, Olexander BONDAR  <b>Improving the Footwear Ergonomics by Personalizing iTs Shape</b></p>
<p>12:35 – 12:40</p>	<p><u>Nataliia PERVAIA</u>, Olga ANDREYEVA, Natalia BORSICHEVSKA, Tymofii LYPSKYI  <b>Laser Finishing in the Decoration of Leather Products</b></p>
<p>12:40 – 12:45</p>	<p><u>Nizami DURAN</u>  <b>New Approaches to the Treatment of Drug-Resistant Bacteria</b></p>
<p>12:45 – 12:50</p>	<p><u>Nizami DURAN</u>  <b>New Formulation Effective against SARS COV-2 and H1N1</b></p>
<p>12:50 – 12:55</p>	<p><u>Renata BIŠKAUSKAITE</u>, Virgilijus VALEIKA  <b>Effect of Enzymatic Bating on Wet Blue Leather Properties</b></p>
<p>12:55 – 13:00</p>	<p><u>Sebastian SBIRNA</u>, Simona SBIRNA  <b>Accomplishing and Optimizing Robotic Self-Navigation Intelligence for Warehouse Logistics through Sensor Fusion and Antenna Localization</b></p>
<p>13:00 – 13:05</p>	<p><u>Sebastian SBIRNA</u>, Simona SBIRNA  <b>Technical and Hardware Implementation of a Modular TMS Prototype System by Using Data Modeling, Sensor Computing and Warning Systems</b></p>
<p>13:05 – 13:10</p>	<p><u>Sultan ÇIVI</u>, Anil ÖZÇELIK, Eser EKE BAYRAMOGLU  <b>The Effects of Different Lacquers Used in Finishing on Leather Color Change</b></p>
<p><b>13:10 - 14:00</b></p>	<p><b>SHORT BREAK</b></p>

**14:00** **TOPIC 4: ECOLOGICAL PROCESSES FOR CIRCULAR AND NEUTRAL ECONOMY**

**15:25** *Chairs: Mihaela NITUICA (VILSAN), Mihai GEORGESCU*

**INVITED LECTURE**

14:00 – 14:20 Enrica VESCE, Rosalia Stella EVOLA, Carlo INGRAO  
**Assessment and Life Cycle Costing as Decision-Making Tools for a Suitable Leather Industry**

**PRESENTATIONS**

14:20 – 14:25 Ciprian CHELARU, Madalina IGNAT, Rodica Roxana CONSTANTINESCU, Ana-Maria CIOBANU, Denis-Andrei DRUSAN, Virginia BURGHELEA  
**Decorative Plates from Epoxydic Composites**

14:25 – 14:30 Claudia Monica DUMITRA, Laurentia ALEXANDRESCU, Mirela PANTAZI-BAJENARU, Dana Corina DESELNICU, Augustin SEMENESCU  
**Leather Industry in Romania - An Overview**

14:30 – 14:35 Cristina SECAN, Sunhilde CUC  
**Aspects Regarding the Physiological and Comfort Parameters in Shoes Made of Leather Substitutes**

14:35 – 14:40 Doina CONSTANTINESCU, Bogdan BOATA, Mihaela IORDACHE, Maria Daniela STELESCU, Mihai GEORGESCU, Maria SONMEZ  
**Technological Considerations Regarding the Mechanical Recycling of Waste from Polyethylene and Polypropylene Packaging**

14:40 – 14:45 Mihaela-Doina NICULESCU, Brandusa Georgiana DUMITRIU, Madalina IGNAT, Simona SAVIN, Cosmin Andrei ALEXE, Gabriela PAUN  
**Protein Composites from Collagen By-Products for Safe Use in Circular Economy**

14:45 – 14:50 Gheorghe LAZAROIU, Lucian MIHAIESCU, Gabriel-Paul NEGREANU, Ionel PISA, Rodica Manuela GRIGORIU, Elena-Adriana JARCU  
**Benefits of Hydrogen-Rich Gas (HRG) on Biomass Combustion Performances**

14:50 – 14:55 Maria Daniela STELESCU, Mihaela NITUICA (VILSAN), Mihai GEORGESCU, Dana GURAU, Laurentia ALEXANDRESCU, Maria SONMEZ  
**Behaviour of Nitrile Rubber-Based Mixtures to Composting Tests**

14:55 – 15:00 Maria José FERREIRA, Vera V. PINTO, Patricia COSTA, Albano FERNANDES, Tiago MACHADO  
**Strategies to Make Footwear Sustainable and Circular: A New Walk Towards the European Green Rules**

15:00 – 15:05 Mariana Daniela BERECHET, Demetra SIMION, Maria STANCA, Cosmin Andrei ALEXE  
**Protein Extracts from Fish Head as Natural Fertilizer for Corn Plants**

14:00 15:25	<b>TOPIC 4: ECOLOGICAL PROCESSES FOR CIRCULAR AND NEUTRAL ECONOMY (CONTINUED)</b> <i>Chairs: Mihaela NITUICA (VILSAN), Mihai GEORGESCU</i>
15:05 – 15:10	Maryna ROHOVA, Vladyslav KOVALENKO, Volodymyr TKACHENKO, Inna LYCH, <u>Iryna VOLOSHYNA</u> <b>Green Biosynthesis of Zinc Nanoparticles</b>
15:10 – 15:15	<u>Sengoda Gounder RAJAMANI</u> , Arnold MULDER <b>Ecological Friendly Production Process and Waste Treatment for Circular Economy in Leather Tanning Industries</b>
15:15 – 15:20	<u>Mihaela NITUICA (VILSAN)</u> , Maria SONMEZ, Maria Daniela STELESCU, Laurentia ALEXANDRESCU, Mihai GEORGESCU, Ciprian CHELARU, Denis-Andrei DRUSAN, Ana-Maria CIOBANU, Dana GURAU <b>Obtaining and Characterizing a Polymer Compound Based on NBR Elastomer and Functionalized Post-Consumer Rubber Waste</b>
15:20 – 15:25	<u>Mirela PANTAZI-BAJENARU</u> , Mihai GEORGESCU, Laurentia ALEXANDRESCU, Dana GURAU <b>Making Footwear Based on Circular Economy – REWEART</b>

<b>10:00</b>	<b>TOPIC 5: CREATIVE INDUSTRIES AND CULTURAL HERITAGE</b>  <i>Chairs: Elena BADEA, Ilaria QUARATESI</i>
<b>11:15</b>	
<b>INVITED LECTURE</b>	
10:00 – 10:20	<u>Cristina CARSONE</u> , Elena BADEA, Noemi PROIETTI, Valeria Di TULLIO, Sebestyen ZOLTAN, Zsuzanna CZEGENY <b>Leather and Parchment Making and Their Preservation over Millennia – Enhanced Data by Analytical Methods Coupling</b>
<b>PRESENTATIONS</b>	
10:20 – 10:25	<u>Muhammad Naimul HASAN</u> , Anower Jahan TAMANNA, Md. Armanul HAQUE <b>Divergence of Upper Materials to Specific Footwear Construction: Seeking a Culture of Sustainable Material Solicitation</b>
10:25 – 10:30	<u>Elena-Cornelia TANASESCU</u> , Mihaela-Cristina LITE, Elena PERDUM, Lucia Oana SECAREANU, Ovidiu IORDACHE, Irina-Mariana SANDULACHE, Lucian Gabriel RADU <b>Overview on the New Generation of Extraction Technique: Fabric Solid-Phase Extraction</b>
10:30 – 10:35	Lucretia MIU, Ioana Lidia ILEA, Rodica Roxana CONSTANTINESCU, Madalina IGNAT, Nicolae CATRINA, Marcel IONESCU, Doina CREANGA, <u>Emanuel VACALIE</u> <b>Case Study – Basement of the National Museum of Cotroceni</b>
10:35 – 10:40	<u>Maryna LESHCHYSHYN</u> , Antonia BABYCH, Victoria KERNESH <b>Shaping the Range of Footwear in Different Materials According to a Person's Psycho-Type</b>
10:40 – 10:45	<u>Maryna LESHCHYSHYN</u> , Antonia BABYCH, Victoria KERNESH, Polina BILOUS <b>Use of Creative Methods and Untypical Materials in the Design of Fashion Industry Products</b>
10:45 – 10:50	Olga NICULESCU, Elena BADEA, Ilaria QUARATESI, Rodica Roxana CONSTANTINESCU, <u>Dana GURAU</u> <b>Materials for Surface Design and Finishing for Contemporary Footwear-Part 1</b>
10:50 – 10:55	Olga NICULESCU, Elena BADEA, Ilaria QUARATESI, Rodica Roxana CONSTANTINESCU, <u>Dana GURAU</u> <b>Materials for Surface Design and Finishing for Contemporary Footwear-Part 2</b>
10:55 – 11:00	<u>Wehandaka PANCAPALAGA</u> , JAMROJI, Tutik SULISTYOWATI, Harinni. A RIRIN, Rini Pebri UTARI, Khoirul Fuddin MUHAMMAD, Achmad ROBERTH, Fathoni RINALDY, Endang Sri HARTAT, Asmah HIDAYATI <b>Eco-Printing Leather Quality in Different Mordant Methods</b>

<b>11:00</b>	<b>TOPIC 6: EDUCATION AND DIGITALIZATION</b>
<b>11:15</b>	<i>Chair: Dana GURAU</i>
11:00 – 11:05	<u>Ion Razvan RADULESCU</u> , Emilia VISILEANU, Razvan SCARLAT, Marian Catalin GROSU, Ana DIAS, Benny MALENGIER, Zoran STJEPANOVIC, Mirela BLAGA, Radek POLANSKY <b>Impact of Intensive Study Programs on Higher Education Students in the Field of Design and Modelling of Textile Materials</b>
11:05 – 11:10	<u>Marian Catalin GROSU</u> , Ion Razvan RADULESCU, Emilia VISILEANU, Irina IONESCU, Manuela AVADANEI, Sabina OLARU, Xianyi ZENG, Sheila ODHIAMBO <b>Analysis of the Learning Requirements of Less Advantaged Groups on the Romanian Level</b>
11:10 – 11:15	<u>Raluca Maria AILENI</u> , Elena Cristina STROE <b>Smart Textiles Digitalization Using Creative Methods</b>
<b>11:15 – 11:30</b>	<b>CLOSING CEREMONY</b>

**PARTNERS:**



**LEATHER  
ENGINEERING  
DEPARTMENT  
EGE UNIVERSITY,  
TURKEY**



**MUSTAFA  
KEMAL  
UNIVERSITY,  
TURKEY**



**CHINA LEATHER &  
FOOTWEAR  
RESEARCH INSTITUTE Co. Ltd.,  
CHINA**



**"POLITEHNICA" UNIVERSITY  
BUCHAREST, ROMANIA**



**"GH. ASACHI"  
TECHNICAL UNIVERSITY  
OF IASI, ROMANIA**



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