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



# ICAMS 2020

## **ADVANCED MATERIALS AND SYSTEMS**

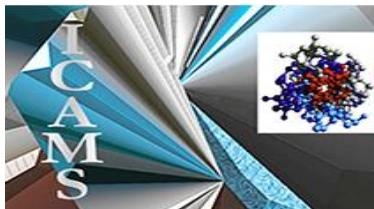
Programme of the 8th International Conference

October 1st - 3rd, 2020

Online Event



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



# **ICAMS 2020**

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

**CONFERENCE PROGRAM**

**01-03 October 2020**

**Bucharest, Romania**

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

# Partners

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**National Research & Development  
Institute for Textiles and Leather  
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## FOREWORD

ICAMS 2020 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 2020 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 01-03 October 2020. ICAMS 2020 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.

Participants will virtually attend the event from several academic and research institutions, public and private sectors. Participants will present their experience on research, innovation, policies and the creation of synergies. All these inputs will 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, partners and all the sponsors 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.

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# Short Program

Thursday, October 1 <sup>st</sup> 2020	
09:00-09:30	OPENING CEREMONY
09:30-10:30	PLENARY SESSION
10:30-10:40	SHORT BREAK
10:40-13:30	Presentations / Questions & Answers TOPIC 1: ADVANCED MATERIALS AND NANOMATERIALS
13:30-14:00	BREAK
14:00-16:40	Presentations / Questions & Answers TOPIC 2: BIOMATERIALS AND BIOTECHNOLOGIES
16:40-16:50	SHORT BREAK
16:50-18:10	Presentations / Questions & Answers TOPIC 3: INNOVATIVE SYSTEMS, TECHNOLOGIES AND QUALITY MANAGEMENT - Part 1
Friday, October 2 <sup>nd</sup> 2020	
09:00-11:00	Presentations / Questions & Answers TOPIC 3: INNOVATIVE SYSTEMS, TECHNOLOGIES AND QUALITY MANAGEMENT - Part 2
11:00-11:10	SHORT BREAK
11:10-13:40	Presentations / Questions & Answers TOPIC 4: ECOLOGICAL PROCESSES FOR CIRCULAR AND NEUTRAL ECONOMY
13:40-14:10	BREAK
14:10-16:50	Presentations / Questions & Answers TOPIC 5: CREATIVE INDUSTRIES AND CULTURAL HERITAGE
16:50-17:00	SHORT BREAK
17:00-17:50	Presentations / Questions & Answers TOPIC 6: EDUCATION AND DIGITALIZATION
Saturday, October 3 <sup>rd</sup> 2020	
09:00-10:00	Presentations/ Questions & Answers TOPIC 1: ADVANCED MATERIALS AND NANOMATERIALS
10:00-11:50	Presentations/Questions & Answers TOPIC 2: BIOMATERIALS AND BIOTECHNOLOGIES
11:50-12:00	SHORT BREAK
12:00-13:50	Presentations/ Questions & Answers TOPIC 4: ECOLOGICAL PROCESSES FOR CIRCULAR AND NEUTRAL ECONOMY
13:50-14:20	CLOSING CEREMONY



OPENING CEREMONY	
09:00-09:30	Dr. eng. Carmen GHIȚULEASA, INCDTP Romania
PLENARY SESSION	
09:30-10:00	Key lecturer Gheorghe BOSTACA, APPBR Romania <b>SER 2020 - A comparative approach proving the EU tanning industry's continuous striving towards sustainable development</b>
10:00-10:30	Key lecturer Anton FICAI, UPB Romania <b>Chemical surface modification and nanotechnological approaches in designing composite materials</b>
10:30-10:40	<b>SHORT BREAK</b>  <b>TOPIC 1: ADVANCED MATERIALS AND NANOMATERIALS</b>  <i>Chairs: Carmen GAIDĂU, Mihaela-Doina NICULESCU</i>
10:40-13:30	
10:40-10:50	<u>Ovidiu IORDACHE</u> , Elena Cornelia MITRAN, Irina SANDULACHE, Maria MEMECICA, Lucia Oana SECAREANU, Cristina LITE, Elena PERDUM <b>An overview on far-infrared functional textile materials</b>
10:50-11:00	Ion DURBACĂ, Radu IATAN, Elena SURDU, <u>Dana-Claudia FARCAȘ-FLAMAROPOL</u> <b>Approaches to the evaluation of the mechanical properties of single-layer composite plates made of recyclable polymeric and protein materials</b>
11:00-11:10	Laura CHIRILA, Alina POPESCU, Sabina OLARU, Angela DANILA, Rodica Roxana CONSTANTINESCU, <u>Andreea TIGAU</u> <b>Bioactive textiles obtained by applying cinnamon essential oil-based emulsions</b>
11:10-11:20	Laura CHIRILA, Marcela Corina ROSU, Sabina OLARU, Cristian TUDORAN, Dragos-Viorel COSMA, Alexandra URDA, Alice-Ortansa MATEESCU, Gheorghe MATEESCU, <u>Georgiana VASILE</u> <b>Cotton fabrics coated with Ag-TiO<sub>2</sub> and Ag-TiO<sub>2</sub>/reduced graphene oxide nanocomposites</b>
11:20-11:30	<u>Carmen MIHAI</u> , Madalina Alice RUS, Alexandra Gabriela ENE, Razvan SCARLAT <b>Digital construction of the signaling/ rescue system located in coastal aquatic areas</b>
11:30-11:40	<u>Petruta PREDA</u> , Bianca TINCUI, Marioara AVRAM, Ioana TUTUNARU, Iuliana MIHALACHE, Ana-Maria ENCIU, Cristina PACHIUI, Anton FICAI <b>Investigation of the single layer graphene film functionalized with 1-pyrenebutyric acid for use in biomedical application</b>

10:40-13:30	<b>TOPIC 1: ADVANCED MATERIALS AND NANOMATERIALS (CONTINUED)</b>  <i>Chairs: Carmen GAIDĂU, Mihaela-Doina NICULESCU</i>
11:40-11:50	Raluca Maria AILENI, Laura CHIRIAC, Irina SANDULACHE <b>Perspective in using chitosan films for sensors</b>
11:50-12:00	<u>Durairaj DHANAPAL</u> , Bahiru MELESE, Liya SHAWEL, Kumaravel SANMUGAM <b>Research comparison of foot plantar pressure on polyurethane visco elastic foam insole and EVA insole materials</b>
12:00-12:10	Maryna LESHCHYSHYN MYKOLAIVNA, Svitlana Stepanivna HARKAVENKO, Antonina Ivanivna BABICH <b>Studying the similarities of deformation properties of leather materials in the process of creating a model of shoes</b>
12:10-12:20	<u>Marius-George PARVAN</u> , Georgeta VOICU, Alina-Ioana BADANOIU, Victor OPRISAN FRUTH <b>Self-sensing piezoresistive composites based on cement incorporating low dosage of carbon black used as multifunctional construction materials</b>
12:20-12:30	Ana-Alexandra SORESCU, Alexandrina NUTA, Valentin RADITOIU, Rodica Mariana ION <b>Silver nanoparticles from aqueous extracts: advanced materials for wastewater treatment</b>
12:30-12:40	Maryna LESHCHYSHYN MYKOLAIVNA, Svitlana GARKAVENKO, Victoria KERNESH, Borys ZLOTENKO, Tetiana KULIK, Anastasia GLIONIK <b>Transformation of art objects in the 3D design process of shoe parts</b>
12:40-12:50	Anna BONDARYEVA, Olena MOKROUSOVA <b>The acrylic/montmorillonite nanocomposites for leather finishing</b>
12:50-13:00	<u>Suresh ALUVIHARA</u> , C.S. KALPAGE, P.W.S.K. BANDARANAYAKE <b>The elementary characterization of Anthill Clay for composite materials</b>
13:00-13:30	<b>QUESTIONS AND ANSWERS</b>
13:30-14:00	<b>BREAK</b>



14:00-16:20	<p><b>TOPIC 2: BIOMATERIALS AND BIOTECHNOLOGIES</b></p> <p><i>Chairs: Minodora Maria MARIN, Rodica Roxana CONSTANTINESCU</i></p>
14:00-14:10	<p>Ionut-Cristian RADU, Catalin ZAHARIA, Bianca GALATEANU, Horia IOVU, Anca HERMENEAN</p> <p><b>Biological assessment of silk fibroin-5 fluorouracil drug delivery formulations</b></p>
14:10-14:20	<p><u>Mariana FERDEȘ</u>, Rodica Roxana CONSTANTINESCU</p> <p><b>Biological pretreatment of waste from the leather industry to obtain biogas through anaerobic co-digestion processes - A review</b></p>
14:20-14:30	<p>Ovidiu IORDACHE, Ioana Corina MOGA, Elena Cornelia MITRAN, Irina SANDULACHE, Maria MEMECICA, Lucia Oana SECAREANU, Cristina LITE, Elena PERDUM</p> <p><b>BOD &amp; COD reduction from textile wastewater using bio-augmented HDPE carriers</b></p>
14:30-14:40	<p>Lesia MAISTRENKO, Olga IUNGIN, Oleksii SAVCHUK, Olena OKHMAT</p> <p><b>Collagen matrices from leather industry wastes for biomedical application</b></p>
14:40-14:50	<p>Yılmaz EREN, Durmuş Alpaslan KAYA</p> <p><b>Determination of yield and yield components in different sowing times of black seed (<i>Nigella sativa</i> L.) in Hatay ecological conditions</b></p>
14:50-15:00	<p>Gresy GRIYANITASARI, Emiliana KASMUDJIASTUTI, Ragil YULIATMO, Mohammad Zainal ABIDIN</p> <p><b>Evaluation of combination tanning and natural finishing on sheep leather with <i>Uncaria Gambir Roxb</i> extract</b></p>
15:00-15:10	<p><u>Elena DĂNILĂ</u>, Mădălina Georgiana ALBU KAYA, Mihaela Violeta GHICA, Ana-Maria BUNEA, Lăcrămioara POPA, Durmuş Alpaslan KAYA, Şevket ÖZTÜRK, Maria-Minodora MARIN, Cristina-Elena DINU-PÎRVU, Valentina ANUȚA</p> <p><b>Formulation and characterization of anti-aging cosmetic emulsions based on collagen hydrolysate and caffeine</b></p>
15:10-15:20	<p><u>Darina ZHELEVA</u>, Margarita KOLEVA</p> <p><b>Influence of type of pre-hair treatment from different types of animal sources on the degree of hydrolysis of keratin</b></p>
15:20-15:30	<p><u>Mariana FERDEȘ</u>, Rodica Roxana CONSTANTINESCU</p> <p><b>Isolation and characterization of fungal and bacterial proteolytic strains from chrome shavings</b></p>
15:30-15:40	<p><u>Maria-Roxana MARINESCU</u>, Elena DAVID, Liviu-Daniel GHICULESCU</p> <p><b>Obtaining of high density carbon materials by coke sintering resulting from heat treatment of tar for applications in sensors manufacture</b></p>
15:40-15:50	<p>Durmuş Alpaslan KAYA, Filiz AYANOĞLU</p> <p><b>Oil glands number and oil glands diameters of <i>Thymbra spicata</i> var. <i>Spicata</i> L. leaves</b></p>

14:00-16:20	<b>TOPIC 2: BIOMATERIALS AND BIOTECHNOLOGIES (CONTINUED)</b>  <i>Chairs: Minodora Maria MARIN, Rodica Roxana CONSTANTINESCU</i>
15:50-16:00	Maria-Cristina ANICESCU, Cristina-Elena DINU-PÎRVU, Mihaela Violeta GHICA, Valentina ANUȚA, Răzvan Mihai PRISADA, <u>Marina-Theodora TALIANU</u> , Lăcrămioara POPA  <b>Preliminary analysis of emulsion-based formulations containing pumpkin seed oil and hemp seed oil for internal use</b>
16:00-16:10	Meryem KARAÇAM, Durmuş Alpaslan KAYA <b>The effect of some essential oils on pathogenes that cause eczema</b>
16:10-16:20	Kazim MAVİ, Durmuş Alpaslan KAYA, Musa TÜRKMEN, Filiz AYANOĞLU <b>The variation of essential oil and carvacrol contents of native grown <i>Thymbra Spicata</i> var. <i>Spicata</i> L.</b>
16:20-16:40	<b>QUESTIONS AND ANSWERS</b>
16:40-16:50	<b>SHORT BREAK</b>
16:50-17:50	<b>TOPIC 3: INNOVATIVE SYSTEMS, TECHNOLOGIES AND QUALITY MANAGEMENT - Part 1</b>  <i>Chairs: Viorica ROȘCULEȚ, Mădălina IGNAT</i>
16:50-17:00	Ion DURBACĂ, Nicoleta SPOREA, <u>Dana-Claudia FARCAȘ-FLAMAROPOL</u> , Elena SURDU <b>Application of the "SIX SIGMA" method for the analysis of the improvement of the environmental air quality parameters at the municipality of Bucharest, by monitoring the pollutances of NO<sub>x</sub> pollutants</b>
17:00-17:10	<u>Alaa OTHMAN</u> , Ahmed DABEES, Baher RAHMA, Matjaz KNEZ <b>Factors influencing the purchasing decisions of low emission cars: comparing study between Egypt and Slovenia</b>
17:10-17:20	<u>Jilan KESHTA</u> , Hebatallah ELMESMARY, Matevž OBRECHT <b>Investigating the impact of COVID-19 on maritime supply chain sustainability and technology: a review</b>
17:20-17:30	<u>Engy BAYOUMI</u> , Sara ELGAZZAR, Matevž OBRECHT <b>Investigating the impact of Internet of Things on Egyptian ports sustainability</b>
17:30-17:40	<u>Alexandra LUCA</u> , Alina Iovan DRAGOMIR <b>Quality management and footwear value chain. A case study of Fibalco</b>
17:40-17:50	<u>Anna BACARDIT</u> , Sílvia SOROLLA, Concepció CASAS, Lluís OLLÉ, Mireia CONDE <b>Synthesis of polyurethanes with low volatile organic compounds content for upholstery and automotive articles</b>
17:50-18:10	<b>QUESTIONS AND ANSWERS</b>

09:00-10:40	<b>TOPIC 3: INNOVATIVE SYSTEMS, TECHNOLOGIES AND QUALITY MANAGEMENT (CONTINUED) - Part 2</b>  <i>Chairs: Viorica ROȘCULEȚ, Mădălina IGNAT</i>
09:00-09:10	<u>Jingjing LI</u> , Jie ZENG, Keyu HOU, Jin ZHOU, Rui WANG <b>Application of Openpose algorithm to detect consumer behavior in store</b>
09:10-09:20	<u>Dana Corina DESELNICU</u> , Mihaela-Ramona BULBOACĂ, Dan DUMITRIU, Laurentia ALEXANDRESCU <b>Analysis of the bakery industry strategic groups in Romania</b>
09:20-09:30	<u>Sandra Samy George HADDAD</u> <b>Developing an E-Business system to improve the downstream pharmaceutical supply chain (A study on the Egyptian market)</b>
09:30-09:40	Nermin GOHAR, <u>Hany HANNA</u> , Mai.H. HAROUN <b>Factors affecting startups survival in the MENA region in the presence of COVID19</b>
09:40-09:50	Vera RADNAEVA, <u>Dmitry SHALBUEV</u> , Nikolay SOVETKIN, Khurelsukh GAANBAATAR, Solongo KHOSBAYAR, Suvda DASHDORJ, Victoriy ALEKHINA <b>Horse paws as raw material for fur industry</b>
09:50-10:00	<u>Sengoda Gounder RAJAMANI</u> <b>Innovative ecological processes with recovery of chemicals and water for reuse in leather sector - an economical and sustainable approach</b>
10:00-10:10	<u>Keyu HOU</u> , Shunxun LI, Jingjing LI, Wei XU, Rui WANG, Jin ZHOU <b>Research on consumer portraits of offline fast fashion shoe stores based on IoT smart hardware</b>
10:10-10:20	<u>Mahmoud BARAKAT</u> , <u>Ahmed ALI</u> , Islam ABDELBARY, Mai HAROUN <b>The impact of supply chain integration on operational performance through resilience under COVID-19 pandemic</b>
10:20-10:30	<u>Islam Saleh HASSANIN</u> <b>The role of Internet of Things on intelligent transport system: A traffic optimization model</b>
10:30-10:40	<u>Adrian SALISTEAN</u> , Carmen MIHAI, Doina TOMA, Sabina OLARU <b>Theoretical and practical aspects of the design phase for a single skin textile wing</b>
10:40-11:00	<b>QUESTIONS AND ANSWERS</b>
11:00-11:10	<b>SHORT BREAK</b>
11:10-13:20	<b>TOPIC 4: ECOLOGICAL PROCESSES FOR CIRCULAR AND NEUTRAL ECONOMY</b>  <i>Chairs: Dana GURĂU, Mihai GEORGESCU</i>
11:10-11:20	<u>Sabina OLARU</u> , Ionela BADEA <b>Circular product design assessment applied to clothing products</b>

11:10-13:20	<b>TOPIC 4: ECOLOGICAL PROCESSES FOR CIRCULAR AND NEUTRAL ECONOMY (CONTINUED)</b>  <i>Chairs: Dana GURĂU, Mihai GEORGESCU</i>
11:20-11:30	Karolis KUBILIUS, Violeta VALEIKIENE, <u>Virgilijus VALEIKA</u> <b>Collagen hydrolysate from chromed shavings for leather finish</b>
11:30-11:40	Gheorghe LAZAROIU, <u>Dana-Alexandra CIUPAGEANU</u> , Lucian MIHAESCU, Rodica-Manuela GRIGORIU <b>Comparative analysis of carbon dioxide methanation technologies for low carbon society development</b>
11:40-11:50	Dana Corina DESELNICU, <u>Beatrice Alexandra ALEXANDRESCU</u> <b>Comparative analysis of sustainable development indicators at E.U. and Romanian level</b>
11:50-12:00	<u>Ion Razvan RADULESCU</u> , Emilia VISILEANU, Razvan SCARLAT, Bogdana MITU <b>Comparative life cycle assessment study for fabric based electromagnetic shielding</b>
12:00-12:10	<u>Hany HANNA</u> , Paul XIROUCHAKIS, Athanasios RENTIZELAS <b>Developing integrated green supply chain drivers and barriers framework for green supply chain adoption, Mena region</b>
12:10-12:20	Gheorghe LAZAROIU, Lucian MIHAESCU, <u>Rodica-Manuela GRIGORIU</u> , Dana-Alexandra CIUPAGEANU, Iulia SIMION <b>Efficient poultry industry waste management approach in the bioeconomy framework</b>
12:20-12:30	<u>Teodor SÂRBU</u> , Angela DOROGAN, Cristina GROSU, Cristina Elena STROE <b>Innovative tool for the circular design of technical textiles</b>
12:30-12:40	<u>Maria José FERREIRA</u> , Vera V. PINTO, Patrícia COSTA <b>LIFE GREENSHOES4ALL – Footwear environmental footprint</b>
12:40-12:50	<u>Carlos RUZAFÁ-SILVESTRE</u> , Pilar CARBONELL-BLASCO, Elena ORGILÉS-CALPENA, Francisca ARÁN AÍS <b>Low-pressure plasma treatment applied to polymeric materials for a sustainable footwear industry</b>
12:50-13:00	<u>Olga BALLUS</u> , Anna BACARDIT <b>Sustainable products in the leather industry</b>
13:00-13:10	Auksė ŠLIBURYTĖ, <u>Virgilijus VALEIKA</u> <b>Treatment of hide liming wastewater by carbon dioxide</b>
13:10-13:20	<u>Mircea Constantin OPRIS</u> , Dana Corina DESELNICU <b>Wool processing outcomes and opportunities</b>
13:20-13:40	<b>QUESTIONS AND ANSWERS</b>
13:40-14:10	<b>BREAK</b>

14:10-16:30	<p><b>TOPIC 5: CREATIVE INDUSTRIES AND CULTURAL HERITAGE</b></p> <p><i>Chairs: Elena BADEA, Claudiu ŞENDREA</i></p>
14:10-14:20	<p>Lucreția MIU, Rodica Roxana CONSTANTINESCU, Alpaslan Durmuş KAYA, Emanuel HADIMBU, <u>Claudiu ŞENDREA</u>, Maria-Cristina LUPAŞ, Simona Maria PĂUNESCU, Iulia Maria CANIOLA, Elena BADEA</p> <p><b>Aspects regarding the effectiveness of volatile oils of the <i>Tanacetum vulgare</i> kind in the conservation of heritage objects</b></p>
14:20-14:30	<p>Iulia-Maria CANIOLA, Cristina CARSOTE, Simona-Maria PĂUNESCU, Maria-Cristina MICU, Elena BADEA</p> <p><b>A glimpse into the past: the investigation of a XVII century parchment document from the National Museum of Romanian History</b></p>
14:30-14:40	<p>Lucreția MIU, <u>Simona-Maria PĂUNESCU</u>, Maria-Cristina MICU, Iulia-Maria CANIOLA, Madalina IGNAT, Claudiu ŞENDREA, Elena BADEA</p> <p><b>Chemical and physico-mechanical characterizations of leather for restoration</b></p>
14:40-14:50	<p>Lucreția MIU, Mariana GIURGINCA, <u>Iulia-Maria CANIOLA</u>, Maria-Cristina MICU (LUPAŞ), Simona-Maria PĂUNESCU, Claudiu ŞENDREA, Elena BADEA</p> <p><b>Chromatic assessment of newly manufactured leather and parchment for museum purposes</b></p>
14:50-15:00	<p><u>Mirela PANTAZI-BAJENARU</u>, Traian FOIASI</p> <p><b>Design and manufacture of products with Romanian cultural identity</b></p>
15:00-15:10	<p>Marlena POP</p> <p><b>Design thinking in product development - case study: leather library</b></p>
15:10-15:20	<p><u>Irina SANDULACHE</u>, Mihaela-Cristina LITE, Lucia-Oana SECAREANU, Elena-Cornelia MITRAN, Ovidiu IORDACHE, Elena PERDUM</p> <p><b>Effects of UV, humidity, and high temperature exposure on linen fibers</b></p>
15:20-15:30	<p>Traian FOIASI, <u>Mirela PANTAZI-BAJENARU</u></p> <p><b>Innovative and sustainable models in the ecodesign of green-vegan footwear</b></p>
15:30-15:40	<p><u>Maria-Cristina MICU</u>, Elena BADEA, Marian CRUDU, Claudiu ŞENDREA, Cristina CARŞOTE, Simona Maria PĂUNESCU, Iulia Maria CANIOLA</p> <p><b>Interaction of collagen with natural compounds and nanoparticles in leather making process</b></p>
15:40-15:50	<p><u>Claudiu ŞENDREA</u>, Maria-Cristina MICU, Emanuel HADIMBU, Simona Maria PĂUNESCU, Iulia Maria CANIOLA, Madalina IGNAT, Lucretia MIU, Elena BADEA</p> <p><b>Micro DSC and NMR mouse studies of collagen–vegetable tannin interaction mechanism during leather making</b></p>

14:10-16:30	<p><b>TOPIC 5: CREATIVE INDUSTRIES AND CULTURAL HERITAGE</b></p> <p><b>(CONTINUED)</b></p> <p><i>Chairs: Elena BADEA, Claudiu ȘENDREA</i></p>
15:50-16:00	<p><u>Alina Iovan DRAGOMIR</u>, Alexandra LUCA</p> <p><b>Product development of the leather good using Walton Walton's matrix</b></p>
16:00-16:10	<p><u>Lucia-Oana SECAREANU</u>, Irina-Mariana SANDULACHE, Elena-Cornelia MITRAN, Mihaela-Cristina LITE, Adrian Alexandru APOSTOL, Ovidiu IORDACHE, Elena PERDUM</p> <p><b>Protocol for identification and assessment of natural and synthetic textile fibers</b></p>
16:10-16:20	<p><u>Mircea Constantin OPRIS</u>, Dana Corina DESELCU</p> <p><b>Start-up investment for a sheep wool processing line</b></p>
16:20-16:30	<p><u>Madalina IGNAT</u>, Lucretia MIU, Emanuel HADIMBU, Claudiu ȘENDREA, Maria-Cristina MICU, Simona Maria PĂUNESCU, Iulia Maria CANIOLA, Elena BADEA</p> <p><b>The influence of TiO<sub>2</sub> and N-TiO<sub>2</sub> nanopowders in natural leather finishing for heritage or modern binding</b></p>
16:30-16:40	<p>Mahmoud A. HAMMAD, Sonja MLAKER KAČ, Sandra S. G. HADDAD, <u>Habiba S. EL ROUBY</u></p> <p><b>Investigation of energy resources and gas discoveries in the Eastern Mediterranean region: the case of people's expectations and social impacts in Egypt</b></p>
16:40-16:50	<b>QUESTIONS AND ANSWERS</b>
16:50-17:00	<b>SHORT BREAK</b>
17:00-17:30	<p><b>TOPIC 6: EDUCATION AND DIGITALIZATION</b></p> <p><i>Chairs: Dana GURĂU, Ciprian CHELARU</i></p>
17:00-17:10	<p><u>Raluca Maria AILENI</u>, Laura CHIRIAC, Razvan Ion RADULESCU</p> <p><b>Fostering advanced textile centers through e-learning in Morocco and Jordan</b></p>
17:10-17:20	<p><u>Ion Razvan RADULESCU</u>, Luis ALMEIDA, Benny MALENGIER, Zoran STJEPANOVIC, Mirela BLAGA, Jitka JERABKOVA</p> <p><b>Skills improvement of VET students by means of smart textiles</b></p>
17:20-17:30	<p>Marlena POP, Dorina HORATAU</p> <p><b>The iteration method for developing creativity in ecodesign</b></p>
17:30-17:50	<b>QUESTIONS AND ANSWERS</b>



## Presentations

09:00-09:40	<p><b>TOPIC 1: ADVANCED MATERIALS AND NANOMATERIALS</b></p> <p><i>Chair: Dana GURĂU</i></p>
09:00-09:10	<p><u>Ciprian CHELARU</u>, Madalina-Camelia IGNAT, Rodica Roxana CONSTANTINESCU</p> <p><b>Comparative study of the surface properties for some different types of leather finishes</b></p>
09:10-09:20	<p><u>Maria SÖNMEZ</u>, Mircea JUGANARU, Anton FICAI, Denisa FICAI, Ovidiu OPREA, Dana GURAU, Laurentia ALEXANDRESCU, Maria Daniela STELESCU, Mihai GEORGESCU, Mihaela NITUICA, Alina MELINESCU, Minodora MARIN</p> <p><b>Dolomite surface modification with titanium and silicon precursors and its morphostructural and thermal characterisation</b></p>
09:20-09:30	<p><u>Maria SÖNMEZ</u>, Mircea JUGANARU, Anton FICAI, Ovidiu OPREA, Roxana TRUSCA, Mihai GEORGESCU, Dana GURAU, Denisa FICAI, Laurentia ALEXANDRESCU, Doina CONSTANTINESCU, Maria Daniela STELESCU, Mihaela NITUICA, Minodora MARIN</p> <p><b>Improvement of mechanical, thermal and morphostructural properties of SBS thermoplastic elastomer using kaolin and dolomite microparticles with modified surface</b></p>
09:30-09:40	<p><u>Simona-Maria PAUNESCU</u>, Emanuel HADIMBU, Iulia-Maria CANIOLA, Maria-Cristina MICU, Cristina CARSOTE, Claudiu SENDREA, Lucretia MIU, Elena BADEA</p> <p><b>Physical-chemical and morpho-structural characterization of modern alum-tawed leather treated with various halloysite nanotubes dispersions</b></p>
09:40-10:00	<p><b>QUESTIONS AND ANSWERS</b></p>
10:00-12:00	<p><b>TOPIC 2: BIOMATERIALS AND BIOTECHNOLOGIES</b></p> <p><i>Chair: Mihai GEORGESCU</i></p>
10:00-10:10	<p><u>Mariana Daniela BERECHET</u>, Demetra SIMION, Maria STANCA, Cosmin-Andrei ALEXE, Rodica Roxana CONSTANTINESCU, Maria RÂPĂ, Andreea ȚURCANU</p> <p><b>Antibacterial and antioxidant activities of lemon balm (<i>Melissa officinalis</i> L.) essential oil</b></p>
10:10-10:20	<p><u>Demetra SIMION</u>, Carmen GAIDĂU, Jianzhong MA, Zhang WENBO</p> <p><b>New nanostructured composite obtained by innovative technologies</b></p>

10:00-12:00	<b>TOPIC 2: BIOMATERIALS AND BIOTECHNOLOGIES (CONTINUED)</b>  <i>Chair: Mihai GEORGESCU</i>
10:20-10:30	Mihaela-Doina NICULESCU, Cristina Emanuela ENASCUTA, Maria STANCA, Carmen Cornelia GAIDAU, <u>Cosmin ALEXE</u> , Mihai GIDEA, Marius BECHERITU <b>Complexes based on collagen and keratin for applications in agriculture</b>
10:30-10:40	<u>Maria-Minodora MARIN</u> , Mădălina Georgiana ALBU KAYA, Mihaela Violeta GHICA, Elena DĂNILĂ, Gheorghe COARĂ, Lăcrămioara POPA, Ciprian CHELARU, Durmuş Alpaslan KAYA, Valentina ANUȚA, Cristina-Elena DINU-PÎRVU, Ioan CRISTESCU <b>Design and evaluation of doxycycline/collagen/chondroitin sulfate delivery systems used for cartilage regeneration</b>
10:40-10:50	Olga NICULESCU, Carmen GAIDAU, Elena BADEA, Lucretia MIU, <u>Dana GURAU</u> , Mariana Daniela BERECHET <b>Ecological approaches for protecting and perfuming natural sheepskin fur</b>
10:50-11:00	<u>Ciprian CHELARU</u> , Madalina IGNAT, Minodora MARIN, Dana GURAU <b>Natural polymers for microcapsules manufacture</b>
11:00-11:10	<u>Rodica Roxana CONSTANTINESCU</u> , Gabriel ZAINESCU, Mariana FERDES <b>Pelt waste degradation using active microbial consortia</b>
11:10-11:20	Olga NICULESCU, Carmen GAIDAU, Elena BADEA, Lucretia MIU, <u>Dana GURAU</u> , Demetra SIMION <b>Special effect finish for bookbinding leather</b>
11:20-11:30	<u>Mariana Daniela BERECHET</u> , Demetra SIMION, Maria STANCA, Ciprian CHELARU, Cosmin-Andrei ALEXE, Maria RÂPĂ <b>The influence of alkaline extraction on some keratin hydrolysates properties</b>
11:30-11:40	Carmen GAIDAU, <u>Maria STANCA</u> , Demetra SIMION, Olga NICULESCU, Cosmin-Andrei ALEXE, Concepcio CASAS, Anna BACARDIT, Stoica TONEA, Gabriela PAUN <b>Olipo-wet olive pomace, a new renewable source for leather retanning</b>
11:40-11:50	<b>QUESTIONS AND ANSWERS</b>
11:50-12:00	<b>SHORT BREAK</b>
12:00-13:50	<b>TOPIC 4: ECOLOGICAL PROCESSES FOR CIRCULAR AND NEUTRAL ECONOMY</b>  <i>Chair: Ciprian CHELARU</i>
12:00-12:10	<u>Laurentia ALEXANDRESCU</u> , Maria SONMEZ, Mihaela NITUICA, Maria Daniela STELESCU, Mihai GEORGESCU <b>Biodegradable polymeric composites based on butadiene-co-acrylonitrile rubber and functionalized post-consumer elastomer waste</b>

12:00-13:50	<b>TOPIC 4: ECOLOGICAL PROCESSES FOR CIRCULAR AND NEUTRAL ECONOMY (CONTINUED)</b>  <i>Chair: Ciprian CHELARU</i>
12:10-12:20	<u>Mihaela (VILSAN) NITUICA</u> , Laurentia ALEXANDRESCU, Mihai GEORGESCU, Maria SONMEZ, Maria Daniela STELESCU, Dana GURAU, Carmen CURUTIU, Stefania STOLERIU <b>Biodegradable polymeric composite based on EPDM rubber and functionalized elastomeric waste</b>
12:20-12:30	<u>Mihaela (VILSAN) NITUICA</u> , Laurentia ALEXANDRESCU, Mihai GEORGESCU, Maria SONMEZ, Maria Daniela STELESCU, Dana GURAU, Carmen CURUTIU, Stefania STOLERIU <b>Development and characterization of biodegradable compound based on EPDM and wood waste</b>
12:30-12:40	<u>Laurentia ALEXANDRESCU</u> , Mihai GEORGESCU, Maria SONMEZ, Mihaela NITUICA, Maria Daniela STELESCU <b>Development and characterization of biodegradable polymeric composites based on butadiene-co-acrylonitrile rubber and functionalized post-consumer wood waste</b>
12:40-12:50	Maria Daniela STELESCU, Daniela Ioana CONSTANTIN, Maria SONMEZ, Laurentia ALEXANDRESCU, <u>Mihaela NITUICA</u> , Mihai GEORGESCU <b>Development of elasto-plastic eco-nano-materials for the footwear industry</b>
12:50-13:00	Mihai GEORGESCU, Maria SONMEZ, Laurentia ALEXANDRESCU, Mihaela NITUICA, Maria Daniela STELESCU, Dana GURAU <b>Designing and obtaining wood waste and chloroprene rubber-based composites</b>
13:00-13:10	Maria Daniela STELESCU, Mihai GEORGESCU, Maria SONMEZ, <u>Mihaela NITUICA</u> , Adriana STEFAN <b>Elastomeric nanomaterials based on natural rubber for the food industry</b>
13:10-13:20	<u>Mihai GEORGESCU</u> , Maria SONMEZ, Laurentia ALEXANDRESCU, Mihaela NITUICA, Maria Daniela STELESCU, Dana GURAU <b>Obtaining and characterisation of elastomeric waste and chloroprene rubber-based composites</b>
13:20-13:30	Mirela PANTAZI-BAJENARU, Enrique MONTIEL PARRENO, Traian FOIASI, <u>Dana GURAU</u> <b>REWEART - A 100% real circular economy manufacturing process for vegan-organic-recycled footwear</b>
13:30-13:40	<u>Rodica Roxana CONSTANTINESCU</u> , Gabriel ZAINESCU <b>Smart biopolymers from protein wastes used in agriculture</b>
13:40-13:50	<b>QUESTIONS AND ANSWERS</b>
13:50-14:20	<b>CLOSING CEREMONY</b>

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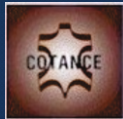
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