

October 12-13

2023

Online

# TEX TEH XI

## INTERNATIONAL CONFERENCE ON TEXTILES AND AFFILIATED R&D AREAS

**Bucharest, Romania, 12-13 October 2023**

### PRELIMINARY PROGRAM

#### FIRST DAY - 12.10.2023

#### JOIN WEBEX MEETING

<https://incdtp.my.webex.com/incdtp.my/j.php?MTID=m4fe6ef3e73131bb92d27a44ee229ef80>

Meeting number (access code): 2375 193 0654

Meeting password: fqPkNihd288 (37756443 from phones and video systems)

Eastern European  
Summer Time  
(EEST)

10:00 – 10:15

#### INTRODUCTION & OPEN CEREMONY

**Chairperson:** PhD. Eng. Alexandra-Gabriela ENE, General Manager INCDTP,  
Bucharest, Romania

#### KEYNOTE SESSION

**Chairperson:** PhD. Eng. Alexandra ENE

10:15-10:35

1

*Characterization of Textile Materials for Protection in the Vibration  
Environment*

Prof. dr. Habil Mirela Blaga, Technical University G. Asachi, Iasi, Romania

10:35-11:00

2

*Advances and Challenges in Wastewater Recycling and Reuse in the Textile  
Industry*

Associate Prof. Dr. Seyed Mansour Bidoki, Textile Engineering Dept., Yazd  
University, Iran

#### PLENARY SESSIONS

**Chairperson:** PhD. Eng. Alexandra ENE

#### Topic 1: ADVANCED TEXTILE MATERIALS AND TECHNOLOGIES

11:00-11:10

1

*Conductive Textiles Obtained by Unconventional Methods*

Emilia Visileanu, Carmen Mihai, Ion Răzvan Rădulescu, Cătălin Grosu, Răzvan  
Scarlat  
Romania

11:10-11:20

2

*Sports Textiles with Adaptive Water Absorption and Transfer Capability*

Nazife Korkmaz Memiş, Sibel Kaplan, Mehmet Kertmen  
Turkey

11:20-11:30	3	<i>Analytical Relations and Integration Techniques of Thermocouples in Smart Textiles for Autonomous Energy Harvesting - A Short Review</i> Ion Răzvan Rădulescu, Cristina Stroe, Laurențiu Dincă, Elena Perdum, Ciprian Chelaru, Teodor Sârbu, Raluca Maria Aileni Romania
11:30-11:40	<i>Coffee break</i>	
11:40-11:50	4	<i>Experimental Design for Wearable Textile Supercapacitors</i> Raluca Maria Aileni, Ion Răzvan Rădulescu Romania
11:50-12:00	5	<i>Advanced Energy-Thermal Treatment of Waste from the Textile Industry</i> Sorin Mihai Radu, Ioan I. Gâf-Deac, Ioan Petru Scutelnicu, Alexandra Lihoacă, Alina Vladu Romania
12:00-12:10	6	<i>Capacitors - Advanced Materials – Review</i> Ciprian Chelaru, Raluca Maria Aileni Romania
12:10-12:20	7	<i>Effect of UVC Irradiation for Prevention of Bacterial Biodeterioration of Vegetable Tanned and Chrome Tanned Leather</i> Rodica Roxana Constantinescu, Emanuel Văcălie, Lucreția Miu, Mădălina Ignat Romania
12:20-12:30	8	<i>Design of New “Smart” Membranes as Advanced Materials and Separation Mechanism of Turmeric from Waste Waters</i> Demetra Simion, Carmen Gaidău, Gabriela Păun, Daniela Berechet Romania
12:30-13:00	<i>Lunch break</i>	

## PLENARY SESSIONS

**Chairperson:** PhD. Eng. Raluca Maria AILENI

### Topic 2: NANOMATERIALS AND ELECTROSPINNING

13:00-13:10	1	<i>Fabrication of TiO<sub>2</sub> Loaded PVDF Nanofibers</i> Hülya Kesici Güler, Funda Cengiz Çallioğlu, Banu Esencan Türkaslan Turkey
13:10-13:20	2	<i>Sound Absorption Properties of Nanofiber Coated Textile Materials</i> Hülya Kesici Güler, Funda Cengiz Çallioğlu Turkey
13:20-13:30	3	<i>Chromatic Evaluation of the Effect of Green Silver Nanoparticles Dispersions on Textiles Exposed to Accelerated Aging</i> Mihaela-Cristina Lite, Rodica Roxana Constantinescu, Elena-Cornelia Tănăsescu, Laura Chirilă, Alina Popescu, Ovidiu Iordache, Nicoleta Badea Romania
13:30-13:40	4	<i>Development of Self-cleaning and UV-blocking Textiles with a Mixture of TiO<sub>2</sub>:N and SiO<sub>2</sub> Nanoparticles via Ultrasonication Method</i> Laura Chirilă, Alina Popescu, Doina Toma, Mihaela-Cristina Lite Romania

13:40-13:50	5	<i>Selenium Nanoparticles Synthesis Aimed for Antiviral and Antimicrobial Textiles</i> Elena Perdum, Mădălina Ignat, Alina Popescu, Laura Chirilă Romania
13:50-14:00	<i>Coffee break</i>	
<b>PLENARY SESSIONS</b> <b>Chairperson:</b> PhD. Eng. Raluca Maria AILENI		
<b>Topic 3: INDUSTRY, EDUCATION AND DIGITALISATION</b>		
14:00-14:10	1	<i>Prototyping Garments Digitally – E+ Digitalfashion Project</i> A. Rudolf, Z. Stjepanović, T. Penko Slovenia
14:10-14:20	2	<i>Design and Virtual Simulation of Knitted Orthotic Support Devices</i> C. Niculescu, G. Popescu, D. Toma, A. Popescu, A. Salistean, M. Neneciu, S. Wechsler, I.D. Ion, M.G. Puiu, C. Raican Romania
14:20-14:30	3	<i>Research on Thermal Insulation Properties of Coarse Wool Textile Layers</i> Cătălin Grosu, Ioan Hossu, Emilia Visileanu, Dorin Avram, Florin Breabăn, Didier Defer, Emmanuel Antczak Romania
14:30-14:40	4	<i>Ready-made Garment Transformed in 2D Pattern Making Design</i> Ruzica Stevkovska Stojanovska, Maja Jankoska Macedonia
14:40-14:50	5	<i>Digital Risks in the Textile Sector in Romania and the EU</i> Carmen Mihai, Sorin Mihai Radu, Ioan I. Gâf-Deac, Teodora Odett Breaz, Perino-Constantin Baraga, Ciprian Coandreș, Daniela Furdui (Peagu) Romania
14:50-15:00	<i>Coffee break</i>	
<b>PLENARY SESSIONS</b> <b>Chairperson:</b> PhD. Eng. Alina POPESCU		
<b>Topic 4: BIOMATERIALS AND BIOTECHNOLOGIES</b>		
15:00-15:10	1	<i>Environmentally Friendly Approach for Improving the Dyeability of Cotton Fabric with Direct Dyes Using Cationic Starch</i> Aminoddin Haji, Fatemeh Zarei Iran
15:10-15:20	2	<i>Biodegradation of Dye Pollutants in Water: Harnessing the Capabilities of Filamentous Fungi</i> Ovidiu Iordache, Bogdan Cazan, Elena Perdum, Cornelia Tănăsescu, Lucia Secăreanu Romania
15:20-15:30	3	<i>From Fungi to Biomaterials: Exploiting Filamentous Fungi Strains for Sustainable Applications</i> Ovidiu Iordache, Bogdan Cazan, Elena Perdum, Cornelia Tănăsescu, Lucia Secăreanu Romania

15:30-15:40	4	<i>Screening of Polyhydroxyalkonates (PHAs) Accumulating Bacteria from Textile Waste</i> Z. Shahi, M. Khajeh Mehrizi, M.S Mirbagheri Firoozabad Iran
15:40-15:50	5	<i>Natural Dyeing of Different Fabric Types with Rubia Cordifolia Extract</i> E. Dilara Koçak, Pelin Altay, Tuğba Ofluoğlu, Özlem Tektaş Çelikkanat Turkey

## SECOND DAY - 13.10.2023

### PLENARY SESSIONS

**Chairperson:** PhD. Eng. Emilia VISILEANU

#### Topic 5: CIRCULAR ECONOMY

10:00-10:10	1	<i>Kimono Design with Recycled Fabric</i> Meltem Gülmez Turkey
10:10-10:20	2	<i>Advancing Sustainability through Material Innovation: Case of All Blue Collection</i> Özgür Ceylan, Irmak Taş, Emel Aydın, Neslihan Ak, Nurten Yılmaz, Özgen Özturan Turkey
10:20-10:30	3	<i>The Environmental Impact of Sustainable Footwear</i> Mirela Pantazi-Băjenaru, Mihai Georgescu, Dana Gurău, Traian Foaiași Romania
10:30-10:40	4	<i>The Importance and Recycling Procedures of Lithium-Ion Batteries</i> Teodor Sârbu Romania
10:40-10:50	5	<i>The Circular Economy and the Impact of the Textile Sector on the Environment</i> Carmen Mihai, Sorin Mihai Radu, Teodora Odett Breaz, Alexander Eliyahu Flinker, Simona Ceuță, Valentina Bocsitan, Ioan Petru Scutelnicu, Marioara Benea Romania
10:50-11:00	6	<i>Recovery of Waste from Fur Processing - Keratin Dyeing Agent</i> Mariana Daniela Berechet, Carmen Gaidău, Demetra Simion Romania

### PLENARY SESSIONS

**Chairperson:** PhD. Eng. Carmen MIHAI

#### Topic 6: SECURITY AND AERONAUTICS

11:00-11:10	1	<i>Autonomous Foil Kite - Wind Energy Generator - ATOL Concept</i> Adrian Săliștean, Constantin Jomir Romania
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11:10-11:20	2	<i>The Generative Development of a Naval Emergency Shuttle to Generate Dynamic Responses of the Joint Panels Characteristics</i> Mihaela Jomir, Răzvan Scarlat, Sorin Mihai Radu, Constantin Nite, Dan-Ovidiu Zamfirache Romania
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11:20-11:30	<i>Coffee break</i>	
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**PLENARY SESSIONS**  
**Chairperson:** PhD. Eng. Carmen MIHAI

**Topic 7: INNOVATIVE SYSTEMS, TECHNOLOGIES AND QUALITY ASSURANCE**

11:30-11:40	1	<i>Evaluation of Skin Irritation Potential of Airborne Particles</i> Alina Florentina Vladu, Emilia Visileanu, Radu Nicolae Albulescu, Adrian Albulescu Romania
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11:40-11:50	2	<i>Environmental Impact of Footwear Using LCA Methodology</i> A. Bodoga, A. Nistorac, M.C. Loghin Romania
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11:50-12:00	3	<i>Life Cycle Assessment for Textile Materials Functionalised with Ni Microparticles in RF Plasma</i> Raluca Maria Aileni, Laura Chiriac, Ion Răzvan Rădulescu Romania
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12:00-12:10	4	<i>Case Study of Women Body Shapes</i> Tadeja Penko, Andreja Rudolf Slovenia
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**PLENARY SESSIONS**  
**Chairperson:** PhD. Eng. Ion Răzvan RĂDULESCU

**Topic 8: RESOURCE MANAGEMENT AND SOCIAL CHALLENGES**

12:00-12:10	1	<i>Overview of the Romanian Mountain Entrepreneurship Commerce: An Apparel Case Study</i> Brîndușa Covaci, Mihai Covaci Romania/USA
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12:10-12:20	2	<i>Forecasting regarding Romanian Mountain Business Trade: Evidences from Leather Industry</i> Brîndușa Covaci, Mihai Covaci Romania/USA
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12:20-12:30	3	<i>Inclusive Valuation Methodology (IVM) for Management of Intangible Capital Growth through Techno-Textil-Smart-Evolutions</i> Alexandra Gabriela Ene, Sorin Mihai Radu, Teodora Odett Breaz, Alexandru A. Burian, Mădălina Ioniță Romania
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