

October 21-22,

2021

Online

# TEX TEH X

INTERNATIONAL CONFERENCE  
ON TEXTILES AND CONNECTED R&D DOMAINS

## FINAL PROGRAM

FIRST DAY - 21.10.2021

JOIN WEBEX MEETING

<https://incdtp.my.webex.com/incdtp.my/j.php?MTID=m728bbfde8f11d965e9a58e5d732fa671>

Meeting number (access code): 2364 311 6325

Meeting password: M9s8Fjfc9gr (69783532 from phones and video systems)

Eastern European  
Summer Time  
(EEST)  
09:00 – 09:20

### INTRODUCTION & OPEN CEREMONY

**Chairperson:** PhD. Eng. Carmen Ghituleasa, Special invited guest

### KEYNOTE SESSION

**Chairperson:** PhD. Eng. Carmen Ghituleasa

*Electrospinning of nanofiber materials: applications from sensors over composites to filtration*

**Prof. K. De Clerck**, Ghent University (UGENT), Belgium

*Closed loop post-consumer cotton textile recycling*

**Dr. J. Oelerich**, Associate Professor Sustainable Textiles, Saxion UAS, Netherlands

*Design of garments using adaptable digital body models*

**A. Rudolf**, Z. Stjepanović, A. Cupar, University of Maribor, Slovenia

*Novel approaches for sustainable dyeing of textiles*

**A. Haji**, Yazd University, Iran

9:20-9:40

9:40-10:00

10:00-10:20

10:20-10:40

### PLENARY SESSIONS

**Chairperson :** PhD. Eng. Alexandra Ene

*Development and characterisation of stitch-based sensors*

S.A. Odhiambo, S. Vasile, J. Sarrazyn, I. Rottiers, A. De Raeve

*Development of multilayer textile structures for filtering applications – A new surgical mask approach*

R.V. Costa, C. Silva, T. Sousa, J. Bessa, F. Cunha, J. Belino, R. Fangueiro

10:40-10:50

10:50-11:00

<b>11:00-11:10</b>	<i>Development of multifunctional yarn from the functionalization of organic raw cotton fibers with zinc nanoparticles</i> S. Ferreira, P. Silva, J., Bessa, F. Cunha, C. Castro, A. Aguilar, R. Fangueiro
<b>11:10-11:20</b>	<i>A sustainability approach: integration of a microencapsulated phase change material to a recycled PES nonwoven fabric to develop a heat storing recycled material</i> E. G. Saraç, E. Öner, M. V. Kahraman
<b>11:20-11:30</b>	<i>Recycled textiles: evolving design practices for changing the circular future of fashion sector</i> E. D'Itria, C. Colombi
<b>11:30-11:45</b>	<i>Water repellent breathable PET/wool fabric via plasma polymerisation technology</i> A. Haji, M.K. Mehrizi, M.A. Tavanai, M. Gohari
<b>11:45-11:55</b>	<i>Development of ecological denim bleaching methods</i> İ. İvedi, K. Yağcı, E. Tağaç
<b>11:55-12:05</b>	<i>A new approach for classification of different woven fabric patterns and thread densities with convolutional neural networks</i> E. Gültekin, H.İ. Çelik, H.K. Kaynak
<b>12:05-12:15</b>	<i>Research regarding new sustainable methods of garment pattern drafting</i> I.E. Marin
<b>12:15-12:25</b>	<i>Selective deposition of nanofibers net on textile structures</i> D. Minguez, E. Bou-Belda, I. Montava, P. Díaz-García, M. Bonet-Aracil, J. Gisbert-Payá
<b>12:25-12:35</b>	<i>Effects of aramid sewing yarn type and fabric compositions on some seam properties of high performance fire retardant fabrics</i> S. Kara
<b>12:35-13:30</b>	<b>Lunch break</b>

## PLENARY SESSIONS

**Chair Person:** PhD. Eng. Alina Popescu

<b>13:30-13:40</b>	<i>Electrospinning of antibacterial polyurethane/ZnO nanofibers</i> İ.Y. Mol, F.C. Çallioğlu
<b>13:40-13:50</b>	<i>Aqueous solutions of chitosan: viscometric and flocculation properties</i> C.-E. Brunchi, L. Ghimici
<b>13:50-14:00</b>	<i>A research on the breathability property of baby diaper backsheet</i> H.K. Kaynak, M. Alsayed
<b>14:00-14:15</b>	<i>Encapsulation lavender oil by spray drying for sportswear</i> G. Erkan, G.C. Türkoğlu, S.Y. Karavana, A.M. Sarişik, B. Ütebay, A.Ç. Bakadur, A. Popescu
<b>14:15-14:25</b>	<i>Growing materials: exploring new design practices towards a sustainable fashion sector</i> E. D'Itria, P. Bolzan, F. Papile
<b>14:25-14:35</b>	<i>Two-step crosslinking of PVP/gel nanofibers</i> H.K. Güler, F.C. Çallioğlu
<b>14:35-14:45</b>	<i>Electrospinning of St. John's wort oil loaded microcapsules based PVA nanofibers</i> H.K. Güler, F.C. Çallioğlu, İ.Y. Mol, M. Geysoglu
<b>14:45-14:55</b>	<i>Solvent optimization of electrospun poly(acrylic acid) nanofibers</i> M. Geysoglu, F.C. Çallioğlu
<b>14:55-15:05</b>	<i>Carbon fibre alignment for reinforced composites using embroidery technology</i> J. Domenech-Pastor, P. Diaz-Garcia, D. Garcia

15:05-15:15

## Coffee Break

### PLENARY SESSIONS

**Chairperson:** PhD. Eng. Sabina Olaru

15:15-15:25

*Emulsion electrospinning of polyvinylpyrrolidone (PVP)/paracetamol nanofibers*  
M. Geysoglu, H.K. Güler, F.C. Çallioğlu, İ.Y. Mol

15:25-15:35

*Paracetamol Drug Loaded Microcapsule Based Nanofiber Production*  
İ.Y. Mol, F.C. Çallioğlu, H.K. Güler, M. Geysoglu

15:35-15:40

*Performance properties of knitted fabrics produced from r-PET and cotton/r-PET blended vortex and ring yarns*  
A. Oruç, Y. Arıkan, E. İlanbey, K. Özşahin

15:40-15:55

*Optimization of some weaving machine parts design. Theoretical approach*  
A. Mostafa, W. Hashima, M. Hassan, S. El-Gholmy, A. Eloufy

15:55-16:05

*Development of textile-rubber composite materials using recycled rubber and textiles with applications in industry*  
F.St.C. Mustata, A. Curteza

16:05-16:15

*The effect of plasma treatment on the printability of polyester fabric using cochineal natural dye*  
M. Khajeh Mehrizi, A. Haji, Z. Shahi, M. Golshan

16:15-16:25

*A study on enhancing the flame retardancy of polypropylene yarn with boron compounds*  
E. Eskiyapar, Hatice K. Kaynak, Halil İ. Çelik, E. Sarıoğlu

16:25-16:35

*Behaviour assessment of tridimensional multilayer fibrous structures as respiratory protection substrates*  
C. Silva, T. Sousa, J. Bessa, F. Cunha, M. Costa, A. Roças, R. Fangueiro

## SECOND DAY - 22.10.2021

### JOIN WEBEX MEETING

<https://incdtp.my.webex.com/incdtp.my/j.php?MTID=mc2e48e51c9002c592c707353d45c5afa>

Meeting number (access code): 2368 959 3382

Meeting password: 7kgChp9kuW6 (75424795 from phones and video systems)

### PLENARY SESSIONS

**Chairperson:** PhD. Eng. Emilia Visileanu

Eastern European  
Summer Time  
(EEST)

9:00-9:20

*Magurele Science Park Association - we develop community and create connections*  
Paula Badinu, MSP Romania

9:20-9:35

*Degradation of nonwoven fabrics suitable for wet wipes buried in soil*  
V. Sülar, B. Keçeci

9:35-9:45

*Theoretical considerations regarding virtual methods to obtain the garment prototype (2D/3D and 3D/2D)*  
M. Avadanei, A. Talpa, A. Curteza, D. Viziteu, I. Dulgheriu

9:40-9:45

*Active principles applied on biomaterials for the curative therapy of inflammatory skin diseases - a review*  
A. Țigău, G. Vasile, L. Chirilă, A. Popescu, S. Olaru

9:45-9:55

*A case study for water footprint assessment of a denim product*  
V. Sülar, B. Soy, K. Yağci

9:55-10:00	<i>Overview of the knitted materials with vibrations damping capacity</i> C. Grosu, M. Blaga
10:00-10:10	<i>Analysis of the physico-mechanical properties of different woven structures with potential applications in the healthcare and hygiene sector</i> C.E. Stroe, T. Sârbu
10:10-10:20	<i>An integrated solution for the online marketing of custom-made garments that incorporates a virtual fitting room</i> M. Avadanei, A. Matasel, I. Ionescu, E. Loghin, D. Ionesi
10:20-10:25	<i>Characterization of airborne particles in mechanical textile yarns processing</i> E. Visileanu, C. Mihai, A. Ene, C. Grosu, R. Scarlat, A. Vladu
10:25-10:35	<i>Virtual 3D kinematic human model prototype</i> D.-R. Viziteu, A. Curteza, M. Avadanei
10:35-10:45	<i>Analysis of the mechanical properties of some high-tech yarns with different functions</i> T. Sârbu, C.E. Stroe
10:45-10:50	<i>The gain in shielding effectiveness achieved by superposition of stainless steel plasma coated woven fabrics</i> I.R. Radulescu, L. Surdu, E. Visileanu, I. Sandulache, C. Morari, B. Mitu
10:50-10:55	<i>Correlative and covariance analysis of the electroconductive fabrics</i> R.M. Aileni, L. Chiriac
10:55-11:00	<i>Integration of magnetic materials with actuator role on textile supports</i> C. Grosu, R.M. Aileni, S. Olaru
11:00-11:05	<i>Role of the e-learning courses for capacity building in the field of advanced materials development</i> R.M. Aileni, L. Chiriac
11:05-11:10	<i>Accessibility and usability of the learning tools to accelerate innovation in the field of smart materials development</i> R.M. Aileni, L. Chiriac
11:10--11:20	<i>Development of jacket patterns for teenagers using Optitex flattening module</i> G. Popescu, S. Olaru, C. Grosu, I. Badea
11:20-11:25	<i>Training of textile creatives in the field of e-textiles design software</i> I.R. Radulescu, R.M. Aileni, A. Salistean, S. Olaru, C. Grosu, R. Scarlat, I. Sandulache
11:25-11:30	<i>Review on different types of clay and their use as antimicrobial agents for textiles treatment</i> M.C. Lite, E.C. Tănăsescu, L.O. Secăreanu, I.M. Săndulache, O. Iordache, E. Perdum
11:30-11:35	<i>Antimicrobial properties of rabbit collagen glue-chitosan biomaterial loaded with cymbopogon flexuosus essential oil</i> M. Râpă, M.D. Berechet, C. Gaidău, R.R. Constantinescu, A. Moșuțiu
11:35-11:45	<i>Interaction of clothing in thermoregulation in the case of preterm infants</i> V. Danila, A. Curteza, S. Balan
11:45-11:55	<i>Clothes development based on methods of handling of premature babies in the intensive care unit</i> V. Danila, A. Curteza, S. Balan
11:55-12:00	<i>Floating tank for transporting oil and hydrocarbons following a maritime disaster</i> M. Jomir, D. Zamfirache, A. Ene, C. Mihai
12:00-12:05	<i>Predictive mathematical model for absorbant substrate achievement, through electrospinning process</i> C. Mihai, A.G. Ene, R.-G. Hertzog, D. Popescu, A.F. Vladu