ITTC-9 Program

ITTC 9th international technical textiles congress

17-18 October 2025

DEÜ Sabanci Cultural Center - Izmir

www.ittc2025.com

PROGRAM

Organization Secretariat

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17-18 October 2025

DEÜ Sabanci Cultural Center - Izmir

1st Day-17th October 2025

09:00-09:30 Registration

09:30-10:30 ***ITTC-9 Opening Ceremony - Hasan Tahsin Hall***
Welcome Speeches:
Prof. Dr. Umit Halis ERDOĞAN, Conference Co-Chair
Aykut ÜSTÜN, Head of Chamber of Textile Engineers
Ahmet Fikret KİLECİ, Türkiye Exporters Assembly, Chairman of Textile and Raw Materials Sector Board
Prof. Dr. Tuba ALPYILDIZ, Head of Textile Engineering Department, Dokuz Eylül University
Prof. Dr. Azize AYOL, Dean of Engineering Faculty, Dokuz Eylül University
Prof. Dr. Mehmet Birhan YILMAZ, Vice Rector of Dokuz Eylül University

Plaque Presentation to Supporters & Sponsors

10:30-10:45 **Coffee Break**

10:45-11:15 ***Keynote Speaker - Hasan Tahsin Hall***
Prof. Dr. Vincent Nierstrasz- *President of AUTEX, University of Boras, Sweden*
Novel and resource effective processes for functional and smart textiles

	Hasan Tahsin Hall	Yüzbaşı Şerafettin Hall
11:15-12:15	**1. *Session:*** ***Smart and Interactive Textiles*** *Chair: Prof. Dr. Savvas Vassiliadis*	**1. *Session:*** ***Composite Materials*** *Chair: Prof. Dr. M. Özgür Seydibeyoğlu*
11:15-11:30	Investigating Wool and Cotton Interactions with PTFE For Energy Harvesting Applications ***Aristeidis Repoulias*** *University of West Attica, Greece*	Development of a sustainable lightweight paddle ***Holger Cebulla*** *Chemnitz University of Technology, Germany*
11:30-11:45	Smart Food Packaging Using Anthocyanin-Loaded Nanofibers ***E. Perrin Akçakoca Kumbasar*** *Ege University, Türkiye*	Radiative cooling for indoor environments by a porous nanocomposite treatment ***Nazife Korkmaz Memiş*** *Suleyman Demirel University, Türkiye*
11:45-12:00	Designing Themoregulated Acrylic Knitting Textile with Microencapsulated Phase Change Materials ***Fabien Salaün*** *ENSAIT, France*	Research On Damping Behaviour of Knitted Fabric Reinforced Composites ***Huriye Eylül Demirtaş*** *Telateks Tekstil Ürünleri, Türkiye*
12:00-12:15	Development Of Thermoregulating Synthetic Leather with Microcapsules for Outdoor Use ***Remziye Yıldız Ceyhan*** *Güzelcan Suni Deri, Türkiye*	Maleic Anhydride Grafted Polypropylene - Calcite Composites and Effect of Jute Fabric Reinforcement ***Görkem Gedik*** *Pamukkale University, Türkiye*

12:15-13:15 **Lunch Break**

13:15-13:45 ***Keynote Speaker - Hasan Tahsin Hall***
Prof. Dr. Amit Rawal- *IIT Delhi, India*
Microplastic Fibres: An Invisible Environmental Crisis

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	Hasan Tahsin Hall	Yüzbaşı Şerafettin Hall	
13:45-14:45	**2. Session:** ***High Function and High - Performance Fibers*** *Chair: Assoc. Prof. Dr. Mohammad Ali Tavanaie*	**2. Session:** ***Sustainability and Ecological Aspects for Technical Textiles*** *Chair: Assoc. Prof. Dr. Yasemin Seki*	***AUTEX GA Meeting***
13:45-14:00	Effect of drawing conditions on the mechanical performance of melt-spun TPU multifilament yarns ***Kerim Kılınç*** *Polyteks Tekstil, Türkiye*	Cutting Geometry impact on fiber retention in single and double-jersey fabrics for high value recycling ***Megi Basho*** *Technische Universität Chemnitz, Germany*	14:00-17:30 AUTEX General Assembly Meeting (AUTEX Members Only) Venue: Best Western Plus Hotel Konak (Next to Congress Building)
14:00-14:15	Development And Characterization Of PP-MWCNT/PBT-BT Sheath-Core Bicomponent Yarns ***Rümeysa Çelen*** *Bursa Uludag University, Türkiye*	Development of Textile coating formulations based on pre-consumed textile wastes and natural rubber ***Gülşah Gök*** *Emirali Tekstil ve Konfeksiyon, Türkiye*	
14:15-14:30	Bio-based composite fibers with body-adaptive multi-responsive shape memory and solar energy conversion capability ***Nazife Korkmaz Memiş*** *Süleyman Demirel University, Türkiye*	Transforming textile waste into performance: Evaluating Saxcell Fiber ***Yiğit Eleman*** *Sun Tekstil, Türkiye*	
14:30-14:45	Interplay of Dope Concentration, Needle Diameter, and Coagulation Strength in Wet-Spun Alginate Fiber ***Cansu Var*** *Pamukkale University, Türkiye*	Development of patterned yarns for the weaving sector with circular yarn dyeing technology ***Neslihan Okyay*** *Karacasu Tekstil, Türkiye*	

14:45-15:00 Poster Presentations, Exhibition and Coffee Break

15:00-15:30 ***Keynote Speaker - Hasan Tahsin Hall***
Prof. Dr. George Stylios- *Heriot Watt University, Scotland*
The Role of Textiles in AI

	Hasan Tahsin Hall	Yüzbaşı Şerafettin Hall
15:30-16:30	**3. Session:** ***Sustainability and Ecological Aspects for Technical Textiles*** *Chair: Assoc. Prof. Dr. Mehmet Korkmaz*	**3. Session:** ***Medical Textiles*** *Chair: Assoc.Prof. Dr. Ozan Kayacan*
15:30-15:45	Supercritical carbon dizoxide dyeing of cellulosic woven textiles using madder dye and gallnut mordant ***Agalawaththage Sasindu Lakhshani Silva*** *University of Borås, Sweden*	Investigation of performance properties of hygenic wipes with different fiber contents ***Dilan Canan Çelikel*** *Gaziantep University, Türkiye*
15:45-16:00	Enhancing Flame-Retardant Properties in Waterborne Polyurethane Dispersions for Automotive Interior Parts ***Derya Sara*** *Denge Kimya, Türkiye*	Development and characterization of boron-enhanced PLA filaments for antibacterial 3d printing applications ***Murat Demir*** *Dokuz Eylül University, Türkiye*

16:00-16:15	UV Curing Polymer Systems ***Seher Şenada Karabulut*** *CHT Kimya, Türkiye*	Green in situ synthesis of zinc oxide nanoparticles on polyester fabrics and their antifungal activity ***Seda Keskin Atak*** *Eren Perakende ve Tekstil, Türkiye*
16:15-16:30	Investigation Of Starch Hydrogels for Textile Wastewater Decolorization ***Gizem Ceylan Türkoğlu*** *Dokuz Eylül University, Türkiye*	Simultaneous Reactive Dyeing and Antibacterial Finishing of Cotton Fabrics Using the Sol-Gel Method ***Çetin AKA*** *Dokuz Eylül University, Türkiye*
16:30-17:30	**Poster Presentations & Exhibition**	
19:30	**Gala Dinner** *Venue: Kat İki Alsancak* *Adress: Alsancak, 1474. Sk. No:9, 35220 Konak/İzmir*	

2nd Day-18th Oct 2025

09:00-09:30	***Keynote Speaker - Hasan Tahsin Hall*** ***Prof. Dr. Yordan Kyosev*** *- TU Dresden, Germany* *Ultrasonic welding process of textiles – modelling and automation aspects*	
	Hasan Tahsin Hall	Yüzbaşı Şerafettin Hall
09:30-10:30	**1. Session:** ***Protective Clothes, Military Textiles*** *Chair: Prof. Dr. Tuba Alpyıldız*	**1. Session:** ***Smart and Interactive Textiles*** *Chair: Prof. Dr. E. Perrin Akçakoca Kumbasar*
09:30-09:45	Development of protective denim clothing by fly repellent properties ***Koray Pektaş*** *Kahraman Maraş Sutcu Imam University* *Baykan Denim Konfeksiyon, Türkiye*	The Influence of Structural Parameters on The Electrical Performance of Knitted Textile Electrodes ***Halil İbrahim Çelik*** *Gaziantep University, Türkiye*
09:45-10:00	Motion Stability of Personal Textile Warning System: Investigation Using High-Speed Body Scanning ***Olena Kyzymchuk*** *TUD Dresden University, Germany*	Designing Of EM Shielding Garment Prototypes for Kids ***Ozan Kayacan*** *Dokuz Eylül University, Türkiye*
10:00-10:15	Impact of full protective gear on microclimate and thermal comfort in CBRN clothing systems ***Solene Champigny*** *ENSAIT, France*	Investigation of dyeing and printing performance of dyestuffs recycled from textile waste ***Merve Yaralı Kınlı*** *Menderes Tekstil, Türkiye*
10:15-10:30	A sustainable approach to impart UV protection to aramid fabrics using green tea extract ***Pınar Parlakyiğit*** *Adıyaman University, Türkiye*	Strategic Expansion in Turkey's Technical Textiles Exports ***Müge Burcu Özdemir*** *İstanbul Aydın University, Türkiye*

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10:30-10:45 | Poster Presentations, Exhibition and Coffee Break

10:45-11:15 | ***Keynote Speaker - Hasan Tahsin Hall***
Dr. Mohammadreza Naeimirad - *Senbis, Holland*
Melt-spun biodegradable fibers: Barriers and potentials for application in technical textiles

	Hasan Tahsin Hall	Yüzbaşı Şerafettin Hall
11:15-12:15	**2. *Session: High Function and High Performance Fibers*** *Chair: Prof. Dr. Sema Palamutçu*	**2. *Session: Sustainability and Ecological Aspects for Technical Textiles*** *Chair: Prof. Dr. Sibel Kaplan*
11:15-11:30	Screening of biobased flame retardant additives for PA11 melt spinning process ***Julie Regnier*** *Ensait, France*	Optimizing laminated knitted fabrics: A study on adhesion strength and technical performance for outdoor applications ***Sinem Öztürk*** *Sun Tekstil, Türkiye*
11:30-11:45	Melt Spinning and Characterization of Poly (D-Lactic acid)-Blended Poly (L-Lactic acid Filament Yarns ***Onur Çelen*** *Korteks, Türkiye*	Utilization of textile industry wastes in cement mortars ***İsmail İvedi*** *Roteks, Türkiye*
11:45-12:00	Impact of fiber crimp on the acoustic performance of nonwoven structures made from aerogel fibers ***Süreyya Kocatepe*** *RWTH Aachen University, Germany*	A comparative study about the usage of different nonwoven type as lamination material in automotive upholsteries ***Nur Ceyda Uyanıktır*** *Martur, Türkiye*
12:00-12:15	Investigation of the usage and properties of hollow section fiber in seat cover fabric ***Selenay Elif İşler*** *Martur, Türkiye*	Carbon-Containing Adsorbents for The Adsorption of Volatile Organic Compounds on Textile Surfaces ***Ekin Nasır*** *Dokuz Eylül University, Türkiye*

12:15-13:15 | Lunch Break

13:15-15:00 | ***Panel: Current Status, Challenges, and Future Perspectives of Technical Textiles***
Moderator: ***Prof. Dr. Gökhan Erkan*** *- Dokuz Eylül University, Türkiye*
Ayşe Nur Kaymak *- AKSA Akrilik Kimya San. A.S. - Technical Fibers Director, Türkiye*
Gizem Çalış *- Ekoten Tekstil - Opex Deputy General Manager, Türkiye*
Samed Uslu *- Solidian Kelteks- General Manager , Türkiye*

15:00-15:15 | Poster Presentations, Exhibition and Coffee Break

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	Hasan Tahsin Hall	Yüzbaşı Şerafettin Hall
15:15-16:15	**3. Session:** ***High Function and High Performance Fibers*** *Chair: Prof. Dr. Amit Rawal*	**3. Session:** ***Sustainability and Ecological Aspects for Technical Textiles*** *Chair: Prof. Dr. Dilek Toprakkaya Kut*
15:15-15:30	Influence Of Process Parameters on Morphological Characteristics and Filtration Performance of Meltblown Polypropylene Nanofibers ***Ali Toptaş*** *TEMAG Laboratories, Istanbul Technical University, Türkiye*	Applying Flame-Retardant Finish to Woven Cotton Fabrics Using Coating Method on A Printing Machine ***Hanife Zeybekçi*** *Halmer Tekstil, Türkiye*
15:30-15:45	Evaluation of Different Dope Solvents for Wet Spinning of Alginate/Keratin Multifilament Yarns ***Ozan Parer*** *Suleyman Demirel University, Türkiye*	Sustainable Textile Products Colored with Soil ***Zeynep Ömeroğulları Başyiğit*** *Bursa Uludağ University & Ağaoğlu Tekstil, Türkiye*
15:45-16:00	Investigating Production Possibilities of 3D Printer Monofilaments from Waste Bags ***Musa Kılıç*** *Dokuz Eylül Üniversity, Türkiye*	Environmentally friendly functionalized knitting fabrics with coating ***Sultan Kanber*** *İstanbul Technical University, Türkiye*
16:00-16:15	Mechanical Performance Improvement of Multifunctional Fabrics Through Graphene Nanoplatelets (GNP) Integration ***Emre Celayir*** *Çalık Denim, Türkiye*	Evaluation Of Roughness Parameters in Wool/Pes Blend Fabrics ***Uğur Onur Çinko*** *Bursa Uludağ University, Türkiye*
16:15-16:30	Developing A Modified Test Method to Determine the Abrasion Properties of Sustainable Alternative Cellulosic Yarns ***Gonca Balcı Kılıç*** *Dokuz Eylül Üniversity, Türkiye*	Investigation Of the Effect of Cyclodextrins in Dyeing of Cotton Fabrics ***Ünay Merde*** *Dokuz Eylül Üniversity, Türkiye*
16:30-17:30	Closing Ceremony	

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POSTER PRESENTATIONS

Alphabetical Order of Surnames

ECE TOSUNOĞLU AKÇAY, *TOSUNOĞLU TEKSTİL, TÜRKİYE*
Sustainable Finishing Of Technical Textiles Using Corona Plasma Technology: A Water And Chemical Saving Approach

MARILES BONET ARACIL, *UNIVERSITAT POLITÈCNICA DE VALÈNCIA, SPAIN*
Eco-Friendly Laser Decoloration of Indigo-Dyed Textiles: Influence of Weave Structure and Process Parameters

IPEK ARIKIL, *ISTANBUL TECHNICAL UNIVERSITY, TÜRKİYE*
Design of Denim Products With Cashmere Blends

ZEYNEP BATUR, *KÜÇÜKÇALIK TEKSTİL, TÜRKİYE*
Investigation of Solar Properties for Screening Applications

DİLARA ÇAKMAK, *, EMIRALI TEKSTİL VE KONFEKSİYON, TÜRKIYE*
Design And Development of a Textile-Based Wearable Monitoring System

SULTAN ARAS ELİBÜYÜK, *OZANTEKS, TÜRKİYE*
Investigation Of the Technical and Functional Properties of Breathable Underwear Products

İSMET EGE KALKAN, *ISTANBUL TECHNICAL UNIVERSITY, TÜRKİYE*
Design Of Avocado-Based Finish for Bamboo-Polyester Fabrics

FADİME K. ÖZMEN, *ESKİŞEHİR TECHNICAL UNIVERSITY, TÜRKİYE*
Sustainable Flame Retardant Finishing of Tencel Fabrics: A Synergistic Approach Toward Green Textile Processing

GONCA YILDIZ PABUŞÇU, *GÜLLE ENTEGRE TEKSTIL İŞLETMELERI, TÜRKİYE*
Analysis Of Biodegradability of Knitted Fabrics Produced by Using 100% Pla Staple Fiber

DERYA SARA, *DENGE KİMYA, TÜRKİYE*
Development Of Sustainable High-Performance Waterborne Polyurethane Coatings For Protective Gloves

PELİN SEVİNÇ, *RUDOLF DURANER, TÜRKİYE,*
Development Of Halogen-Free Flame Retardant Back Coating Chemical for Automotive Interiors

YASEMİN SEKİ, *DOKUZ EYLÜL UNIVERSITY, TÜRKİYE*
Preparation And Physicochemical Characterization Cellulosic Aerogel Derived From Jute Fibers

MARİSA SIGALA, *UNİVERSITY OF WEST ATTICA, GREECE*
A New Paradigm In Training In Eco Fashion and Entrepreneurship: The Fashion.Ed Project

SAYNUR SOBAY, *HALMER TEKSTIL, TÜRKİYE*
Comparison Of Flame-Retardant Properties Imparted by Single-Step Pad Application on Different Types of Cotton Woven Fabrics

HASAN SEMİH TANER, *SASA Polyester Sanayi A.Ş, TÜRKİYE*
The Effect of Ionic Monomer Ratio on the Isothermal Crystallization Kinetics of PET Copolymers

ZEYNEP TEKKOYUN, *DOKUZ EYLÜL UNIVERSITY, TÜRKİYE*
A Comparative Study On The Effects Of Different Compact Spinning Technologies On Yarn Properties

MELİSA YEKE, *TELATEKS TEKSTİL ÜRÜNLERİ, TÜRKİYE*
Greener Flax & Glass Fiber Reinforced Composites

MELİSA YEKE, *TELATEKS TEKSTİL ÜRÜNLERİ, TÜRKİYE*
A Digital Tool in Laminated Composite Design: Application of Metycalc

MELİSA YEKE, *TELATEKS TEKSTİL ÜRÜNLERİ, TÜRKİYE*
Development Of A Liquid Impermeable and Highly Air Permeable Multilayer Breather Fabric for Vacuum Infusion

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