



**8<sup>th</sup> International Technical Textiles Congress**  
**13-14 October 2022 - Online Congress - İzmir TÜRKİYE**  
**PROGRAMME**

| <b>13 October 2022 - Thursday</b> |   |
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| 09.30- 10.00                      | <b>Opening Ceremony</b>   |
| <b>10.00- 10.30</b>               | <b>Keynote Speaker: Henry, Yi LI</b><br><b>“Advancement of Textile Biomedical Engineering”</b>  |
|                                   | <b>1<sup>st</sup> Session: Medical Textiles</b>   |
| 10.30 - 10.45                     | <b>ANTIVIRAL FINISHING OF PET TEXTILE BASED ON Ag-TiO<sub>2</sub> DOPED CuO NANOPARTICLES BY SOL-GEL METHOD</b><br>E. TOPEL ZEREN, N. ONAR ÇAMLIBEL, <b>E. CİRELİ*</b> , A. AKŞİT<br>*Jacobs University, Germany  |
| 10.45 - 11.00                     | <b>DEVELOPMENT OF ANTIMICROBIAL FIBERS FOR MEDICAL APPLICATIONS</b><br><b>F. SELLİ*</b> , A. G. TOKTAŞ, M. E. ÜREYEN, A. DOĞAN<br>*Eskişehir Technical University, Türkiye  |
| 11.00 - 11.15                     | <b>INVESTIGATION OF ANTIBACTERIAL AND COMFORT PERFORMANCES OF COTTON-SILVER KNITTED FABRIC</b><br><b>H. AÇIKGÖZ TUFAN*</b> , E. EMEKDAR, U. K. ŞAHİN, S. KURŞUN-BAHADIR, C. BATÇIK-GENÇ, T. K. BAYKAN, E. ÇATAK, Ç. D. ŞENTÜRK, E. ERİCİ<br>*İstanbul Technical University, Türkiye |
| <b>11.15 - 11.45</b>              | <b>Coffee Break &amp; Poster Session</b>  |
|                                   | <b>2<sup>nd</sup> Session: Nano Technical Textiles</b>  |
| 11.45 - 12.00                     | <b>ELECTROSPINNING OF PVP/CARVACROL/LANOLIN COMPOSITE NANOFIBERS</b><br><b>H. K. GÜLER*</b> , M. GEYSOĞLU, F. CENGİZ ÇALLIOĞLU,<br>*Süleyman Demirel University, Türkiye  |
| 12.00 - 12.15                     | <b>ELECTROSPINNING OF PCL/OVALBUMIN NANOFIBERS</b><br>M. GEYSOĞLU, <b>F. CENGİZ ÇALLIOĞLU*</b><br>*Süleyman Demirel University, Türkiye   |
| 12.15 - 12.30                     | <b>TEMPERATURE REGULATING POLYESTER SHORT STAPLE RING SPUN YARNS BY PCM NANOCAPSULE APPLICATION</b><br><b>D. YILMAZ*</b> , S. ALAY AKSOY<br>*Süleyman Demirel University, Türkiye   |
| 12.30- 12.45                      | <b>LAYER BY LAYER SELF-ASSEMBLY APPROACH IN THE UV PROTECTIVE MODIFICATION OF ARAMID BASED MATERIALS</b><br><b>Y. ÜNVAR*</b> , A. M. SARIŞIK, Ş. S. UĞUR<br>*Dokuz Eylül University, Türkiye  |
| <b>12.45 - 13.45</b>              | <b>Lunch Break</b>  |
| <b>13.45- 14.15</b>               | <b>Invited Speaker: Holger Cebulla</b><br><b>“Textile processes for load adapted reinforcing structures”</b>  |
|                                   | <b>3<sup>rd</sup> Session: Composite Materials</b>  |
| 14.15- 14.30                      | <b>INSULATION PROPERTIES OF HEMP WASTE REINFORCED POLYURETHANE FOAM COMPOSITES</b>  |

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|                     | <b>B. KALEBAYIR DAĞPARÇASI*</b> , Ö. B. BERKALP, G. KAYA<br>*Istanbul Technical University, Türkiye   |
| 14.30- 14.45        | <b>AN INVESTIGATION ON 3D PRINTED WALNUT SHELL-REINFORCED POLY (LACTIC ACID) COMPOSITE</b><br>M. DEMİR, <b>A. SÖZEN*</b> , Y. SEKİ, F. SELLİ<br>*Dokuz Eylul University, Türkiye                    |
| 14.45- 15.00        | <b>MODELING THE TENSILE PROPERTIES OF FLAX WOVEN REINFORCED COMPOSITE WITH FINITE ELEMENT METHOD</b><br><b>M. KORKMAZ*</b> , H. KANDAŞ, M. KORKMAZ, R. KARAKUZU<br>*Dokuz Eylul University, Türkiye |
| 15.00 - 15.15       | <b>JUTE FIBER REINFORCED COMPOSITES USING TANNIC ACID AS FLAME RETARDANT</b><br><b>B. KUTLU*</b> , E. SELVER<br>*Dokuz Eylul University, Türkiye  |
| 15.15- 15.30        | <b>IMPROVING THE IMPACT STRENGTH OF HEMP/EPOXY BIO-COMPOSITES BY POLYDIMETHYSILOXANE FABRIC COATING</b><br><b>G. GEDİK*</b> , İ. AĞIR<br>*Pamukkale University, Türkiye                             |
| <b>15.30- 15.45</b> | <b>Coffee Break &amp; Poster Session</b>  |
| <b>15.45- 16.15</b> | <b>Invited Speaker: Rudolf Hufenus</b><br><b>“Liquid-core melt-spun filaments - from research to industrial implementation”</b>   |
|                     | <b>4<sup>th</sup> Session: Functional Fibres</b>  |
| 16.15- 16.30        | <b>DESIGNING FILAMENT BASED ON CONDUCTIVE POLYMER COMPOSITE FOR HEATING APPLICATIONS</b><br><b>A. CAYLA*</b> , L. MARISCHAL, C. CAMPAGNE, E. DEVAUX<br>*Ensait, France                              |
| 16.30- 16.45        | <b>CHARACTERIZATION OF MEDITERRANEAN SEAGRASS POSIDONIA OCEANICA (L.)</b><br><b>H. N. ÖZDEMİR*</b> , G. C. TÜRKOĞLU, Y. SEKİ, G. NEŞER<br>*Dokuz Eylul University, Türkiye                          |
| 16.45- 17.00        | <b>EFFECT OF GRAPHENE-REINFORCED POLYAMIDE 6 FIBER ON STRENGTH AND FUNCTIONAL PROPERTIES OF WOOL BLENDED WOVEN FABRICS</b><br><b>N. ÇAĞLAR CİNERİ*</b><br>*Yünsa San. ve Tic. A.Ş., Türkiye         |
| 17.00- 17.15        | <b>MECHANICAL PROPERTIES OF NONWOVEN FABRICS MADE OF BICOMPONENT MICROFILAMENTS</b><br><b>Ş. KARA*</b><br>*Dokuz Eylul University, Türkiye  |
| 17.15- 17.30        | <b>COMPARISON OF THE FABRICS WOVEN WITH THREE DIFFERENT THERMAL FUNCTIONALIZED POLYESTER FIBERS</b><br><b>N. ÇAĞLAR CİNERİ*</b><br>*Yünsa San. ve Tic. A.Ş., Türkiye                                |

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| <b>14 October 2022 - Friday</b> |  |
| <b>09.30-10.00</b>              | <b>Invited Speaker: Lei Wei</b><br><b>“Thermally drawn multi-material fibers for advanced functional textiles”</b>                           |
|                                 | <b>1<sup>st</sup> Session: Functional Textiles</b>   |
| 10.00 - 10.15                   | <b>A STUDY ON ACOUSTIC PERFORMANCE OF BLACKOUT CURTAINS</b><br><b>H. M. BULUT*</b> , M. KÜÇÜKALİ ÖZTÜRK, C. CANDAN, B. NERGİS, T. ZENGİN, A. |

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|                      | YENİCE, R. BOYACIOĞLU<br>*İstanbul Technical University, Türkiye  |
| 10.15 - 10.30        | <b>EFFECTS OF PATTERN AND RAW MATERIAL ON SOFTNESS AND SMOOTHNESS PROPERTIES OF NONWOVENS</b><br><b>G. BALCI KILIÇ*</b> , E. ÇELİKTEN, T. KAYA NACARKAHYA, D. F. AYDOĞAN<br>*Dokuz Eylül University, Turkey |
| 10.30 - 10.45        | <b>DEVELOPMENT AND PRODUCTION OF BREATHABLE ARTIFICIAL LEATHER WITH MICROPORES</b><br><b>İ. AKKUŞ ALTINDAĞ*</b> , B. B. AVCI, G. ERKAN<br>*Güzelcan Suni Deri Tekstil Tic. A.Ş., Türkiye                    |
| 10.45 - 11.00        | <b>INVESTIGATION OF THE EFFECTS OF FABRIC STRUCTURE ON PEDOT COATED CONDUCTIVE POLYESTER TEXTILE SURFACES</b><br><b>A. YENİCE*</b> , A. HOCKENBERGER<br>*Küçükçalık Tekstil San. ve Tic. A.Ş., Türkiye      |
| 11.00 - 11.15        | <b>THERMOCHROMIC MICROCAPSULE APPLICATION IN POLYESTER DYEING PROCESS</b><br><b>S. MIHÇI*</b> , S. ALAY AKSOY<br>*Başyazıcıoğlu Tekstil San. ve Tic. A.Ş., Türkiye  |
| <b>11.15- 11.30</b>  | <b>Coffee Break &amp; Poster Session</b>  |
|                      | <b>2<sup>nd</sup> Session: Sustainability and Ecological Aspects for Technical Textiles</b>   |
| 11.30 - 11.45        | <b>THE EFFECTS OF USING NONWOVEN STRUCTURES IN AUTOMOTIVE SEAT COVER ON RESILIENCE PROPERTIES</b><br>S. OYLAR, O. AYDIN, D. MECİT, <b>N. C. UYANIKTIR*</b><br>*Martur Fompak International, Türkiye         |
| 11.45 - 12.00        | <b>OBTAINING NANOFIBER TEXTILE SURFACE CONTAINING ANTIBACTERIAL MICROCAPSULES</b><br><b>K. PEKTAŞ*</b> , O. BALCI<br>*Kahramanmaraş Sütçü İmam University, Türkiye  |
| 12.00 - 12.15        | <b>PREPARATION AND CHARACTERIZATION of ELECTROSPUN SURFACES FROM PHB AND ITS BLENDS (PHB/PBS, PHB/PHBV)</b><br><b>H. A. AKDAĞ ÖZKAN*</b> , A. HOCKENBERGER<br>*Bursa Uludağ University, Türkiye             |
| 12.15 - 12.30        | <b>DEVELOPMENT OF BIOBASED WORSTED FABRICS WITH PLA FIBER</b><br><b>B. EROĞLU*</b><br>*Yünsa Yünlü Sanayi ve Ticaret A.Ş., Türkiye  |
| 12.30- 12.45         | <b>POLYVINYL ALCOHOL (PVA) / CELLULOSE ACETATE (CA) BASED ENVIRONMENTALLY FRIENDLY HYBRID FILTER PRODUCTION</b><br><b>D. A. ERTEK*</b> , M. YÜKSEK<br>*Marmara University, Türkiye                          |
| <b>12.45 - 13.45</b> | <b>Lunch Break</b>  |
| <b>13.45- 14.15</b>  | <b>Invited Speaker: George Stylios</b><br><b>“Present Status and Future Potential of Textile Triboelectric Nanogenerators TENGs used for Energy Harvesting from Garments”</b>                               |
|                      | <b>3<sup>rd</sup> Session: Smart and Interactive Textiles</b>   |
| 14.15 - 14.30        | <b>SMART TEXTILE pH SENSOR BASED ON CURCUMIN MICROCAPSULES</b><br><b>F. SALAÜN*</b><br>*Ensait, France  |
| 14.30 - 14.45        | <b>INVESTIGATION OF TEXTILE BASED ELECTRODES FOR MONITORING sEMG MUSCLE SIGNAL</b><br><b>E. GÜLTEKİN*</b> , H. İ. ÇELİK, H. K. KAYNAK<br>*Gaziantep University, Türkiye                                     |
| 14.45 - 15.00        | <b>A SMART TEXTILE SENSOR IMPROVING THAT CAN ANALYZE BODY MOVEMENT MEASURING SLEEP QUALITY</b>  |

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|              | <b>G. AYDEMİR*</b> , M. YILDIRIM, L. ÖZTÜRK<br>*Zorluteks Tekstil Tic. ve San. A.Ş., Türkiye  |
| 15.00- 15.15 | <b>PREPARATION OF PVDF MICROSPHERES BASED ELECTROSPRAYING METHOD WITH HIGH CONTENT OF ELECTROACTIVE PHASE</b><br>Z. HE, E. MOHSENZADEH, F. RAULT, <b>F. SALAÜN*</b><br>*Ensait, France                                |
| 15.15- 15.30 | <b>Coffee Break &amp; Poster Session</b>  |
|              | <b>4<sup>th</sup> Session: Smart and Interactive Textiles &amp; Protective Clothes</b>  |
| 15.30- 15.45 | <b>PRODUCTION OF MULTILAYERED MICROCAPSULES CONTAINING N-EICOSANE AND TEXTILE APPLICATION</b><br>B. B. AVCI*, <b>G. ERKAN*</b><br>*Dokuz Eylül University, Türkiye  |
| 15.45- 16.00 | <b>DEVELOPMENT OF ELECTROTEXTILE SURFACE AND PRODUCT FOR NEWBORN PHOTOTHERAPY TREATMENTS</b><br><b>O. KAYACAN*</b> , F. ERDOGAN, N. DUMAN, B. BOYACI, T. UYSAL<br>*Dokuz Eylul University, Türkiye                    |
| 16.00- 16.15 | <b>POLYURETHANE COATING PERFORMANCE OF HIGH-TENACITY POLYAMIDE FABRICS</b><br><b>A. KURT*</b> , B. BOYACI, S. ÖZTÜRK, S. İNCEOĞLU<br>*Sun Tekstil Tic. ve San. A.Ş., Türkiye  |
| 16.15- 16.30 | <b>INVESTIGATION OF THE PERFORMANCE PROPERTIES OF MEMBRANE STRUCTURES EXPOSED TO HARSH ENVIRONMENTAL CONDITIONS</b><br><b>S. ÖZTÜRK*</b> , B. BOYACI, A. KURT, S. İNCEOĞLU<br>*Sun Tekstil Tic. ve San. A.Ş., Türkiye |

| <b>POSTER PRESENTATIONS</b> |   |
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| <b>1</b>                    | <b>DEVELOPMENT OF A MULTIFUNCTIONAL WEARABLE TECHNOLOGY WITH BUOYANT</b><br><b>Ö. PALAK*</b> , D. YAVUZKASAP AYAKTA, A. İLDENİZ<br>Yünsa San. ve Tic. A.Ş., Türkiye   |
| <b>2</b>                    | <b>DEVELOPMENT OF FUNCTIONAL FINISHING PROCESSES IN DENIM GARMENTS TO REDUCE WATER USAGE DURING HOME CARE</b><br><b>İ. İVEDİ*</b> , Z. SÜMER, A. KOCATAŞ<br>*Roteks Tekstil İhr. San. ve Tic. A.Ş., Türkiye |
| <b>3</b>                    | <b>WATER DECONTAMINATION USING CONDUCTIVE KNITTED FABRIC</b><br><b>M. UĞAN*</b> , A. KOLUMAN, S. ARAS ELİBÜYÜK, M. ÇÖREKÇİOĞLU<br>*Pamukkale University, Türkiye  |
| <b>4</b>                    | <b>ILLUMINATED SMART TEXTILE</b><br><b>T. KARADAG*</b> , O. KARLIK, M. ALTUĞ<br>*İnönü University, Türkiye  |
| <b>5</b>                    | <b>EMBROIDERY THREAD DESIGN WITH BIOCERAMIC ADDED MATERIAL FOR INCREASED BALANCE</b><br><b>N. SERTAÇ ÇAVUŞOĞLU*</b> , M. KUNT HACIOĞLU<br>*Durak Tekstil Tic. ve San. A.Ş., Türkiye                         |
| <b>6</b>                    | <b>INVESTIGATION OF BIOBASED OR BIODEGRADABLE BLEND YARN PRODUCTION AND USAGE PERFORMANCES</b><br><b>G. TANDOĞAN*</b> , K. K. DENGE, A. İBRIKÇI, T. FIDAN<br>*Kipaş Tekstil Tic. ve San. A.Ş., Türkiye      |
| <b>7</b>                    | <b>INVESTIGATION OF THE PERFORMANCE OF ESTERS WITH DIFFERENT</b>  |

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|          | <p style="text-align: center;"><b>STRUCTURES IN TEXTILE APPLICATIONS</b><br/>Z. N. KIR, A. MARTIN, <b>D. ÇELİK*</b><br/>*Eksoy Kimya Tic. ve San. A.Ş., Türkiye</p>   |
| <b>8</b> | <p style="text-align: center;"><b>INVESTIGATION OF THE MECHANICAL PROPERTIES OF NON-WOVEN FABRICS PRODUCED BY USING RECYCLED GRANULAR RAW MATERIAL FROM WASTE PET BOTTLES</b><br/><b>H. C. ATEŞ*</b>, V. BALCI, H. BÖLER, İ. O. ÇEVİK<br/>*Mogul Tekstil Tic. ve San. A.Ş., Türkiye</p> |
| <b>9</b> | <p style="text-align: center;"><b>DEVELOPMENT OF COMPOSITE YARN FOR CUT-RESISTANT SURFACES WITH PARA-ARAMID FIBERS</b><br/><b>İ. T. ÇELİK*</b><br/>*Uğurlular Tekstil Tic. ve San. A.Ş., Türkiye</p>  |