







# Future Technical Textiles

in conjuction with 6th International Istanbul Textile Conference

## Venue

15<sup>th</sup> and 17<sup>th</sup> October 2014 Sultanahmet, Istanbul - Turkey 16<sup>th</sup> October 2014 ITA R&D Center, Istanbul - Turkey

# Program

- 1. Medical Textiles
- 2. Technical Textiles
- 3. Smart and Interactive Textiles
- 4. Surface Coatings
- 5. Advances in Apparel Design
- 6. Ecological Textiles
- 7. Composites Materials
- 8. Textile Innovations
- 9. Computer Technology for Textiles and Apparel







www.technical-textile.net

Secretariat: m.uzun@marmara.edu.tr



1

	Wednesday, October 15, 2014						
08:00	-10:00			Registration			
			PL	LENARY SESSION			
				(Nihad Sayar Hall)			
09:00	-10:00	Conference Ope	ning Cer	eremony – With Welcome Speeches and Greetings			
10	):00	Yusuf Ulcay Uludağ University, Bursa, Turkey Turkish technical textiles market					
10	):20	Elias Siores University of Bolton, Bolton, UK	ores				
10	):40	Tilak Dias Nottingham Trent University, UK Advanced textiles and wearables	<del>y 11u. 10u</del>	somig. Hem laberater y to common chance and he			
11:00	-11:20	Coffee Break					
,	Wedne	sday, October 15, 2014		Wednesday, October 15, 2014			
	Те	chnical Textiles		Medical Textiles			
		Session (Nihad Sayar Hall)		Parallel Session (Senato Hall)			
11:20			11:20	Costa <sup>2</sup> , M. Periolatto <sup>3</sup> , F. Ferrero <sup>3</sup> <sup>1</sup> CNR-ISMAC, Institute for Macromolecular Studies, Biella, Italy <sup>2</sup> CNR-ISTEC, Institute of Science and Technology for Ceramics, Faenza (RA), Italy <sup>3</sup> Politecnico di Torino, Department of Applied Science and Technology, Turin, Italy  Production of antibacterial textiles with a reduced leaching of biocidal agents			
11:40  Md. Humaun KABIR  National Institute of Textile Engineering and Research, Dhaka, Bangladesh  Future and Prospect of RMG sector of Bangladesh		11:40	R. Erdem¹, M. Akarsu², E.Burunkaya², Ö. Erdem³, M. Akalın⁴ ¹Textile Technology, Serik Vocational School of Higher Education, Akdeniz University, Antalya, Turkey ²Chemistry, Faculty of Science, Akdeniz University, Antalya, Turkey ³Chemistry, Institute of Natural and Applied Science, Cukuorova University, Adana, Turkey ⁴Textile Engineering, Technology Faculty, Marmara University, Istanbul, Turkey Morphological analysis of polycaprolactone nanofibers containing nanohydroxyapatite particles				
12:00	12:00 Fatma GÖKTEPE Namık Kemal University, Turkey Carbon Nanotube Yarns for Artificial Muscles and Flexible Photovoltaics		12:00				
12:20	Centexb Innovat Yarns a	JFINGER pel Gent, Zwijnaarde, Belgium ive Surface Treatments of Textile nd Fabrics	12:20				
12:40 -	14:00	LUNCH					
	Wednesday, October 15, 2014 Wednesday, October 15, 2014						
	Technical Textiles Surface Coatings and Chemistry						
14:00	R. Stolz <sup>1</sup> T. Weiric <sup>1</sup> Institut Universit <sup>2</sup> Central Aachen I <sup>3</sup> Freude Effects of	el Session (Nihad Sayar Hall)  , T. Vad¹, S. Dabringhaus¹, G. Seide¹, T. h², J. Wulfhorst³ für Textiltechnik (ITA), RWTH Aachen y, Aachen, Germany Facility for Electron Microscopy (GFE), F Jniversity, Aachen, Germany nberg & Co. KG, Weinheim, Germany on fiber formation in melt spinning due rticle modification in thermoplastic po	RWTH-	University, Aachen, Germany Digital smart printing – cloud based design and production			

14:20	N. Azizi¹, Y. Chevalier², M. Majdoub¹ ¹ Laboratoire des Interfaces et Matériaux Avancés (LIMA), Faculté des Sciences, Bd. de l'Environnement 5019 Monastir, Tunisia ² Laboratoire d'Automatique et de Génie des Procédés (LAGEP), Université Claude Bernard Lyon 1, UMR CNRS 5007, 69622 Villeurbanne Cedex, France Elaboration and characterization of new microcapsules for cosmeto-textiles	14:20	P. Bigambo¹, C. Carr¹, M. Sumner¹, M. Rigout² ¹University of Leeds, Leeds, LS2 9JT, UK. ²University of Manchester, Manchester, M13 9PL, UK. Stripping of reactive dyes from waste cotton fabrics for reuse through fibre regeneration process
14:40	N. Onar¹, G. Mete¹, A. Akşit², B. Kutlu², E. Çelik³ ¹Pamukkale University, Faculty of Engineering, Textile Engineering Department, Denizli, Turkey ²Dokuz Eylul University, Faculty of Engineering, Textile Engineering Department, Izmir, Turkey ³Dokuz Eylul University, Faculty of Engineering, Materials and Metallurgy Engineering Department, Izmir, Turkey Development of water and oil repellent cotton fabric by sol-gel coating	14:40	S.Canbolat <sup>1</sup> , D.Kut <sup>2</sup> , P.Tiryaki <sup>2</sup> ,F.Demir <sup>2</sup> <sup>1</sup> İstanbul Commerce University, Faculty of Engineering and Design, Department of Fashion and Textile, Istanbul, Turkey <sup>2</sup> Uludag University, Faculty of Engineering, Department of Textile Engineering, Bursa, Turkey Investigation of the effects of oxygen and nitrogen plasma treatment on the flax fabrics
15:00	A. Zulifqar <sup>1</sup> , M. A. Nazeer <sup>2</sup> , M. Abbas <sup>1</sup> , Q. Nawaz <sup>1</sup> , M. A. Raza <sup>1</sup> <sup>1</sup> Faculty of Engineering and Technology, Department of Textile Engineering, National Textile University, Faisalabad, Pakistan <sup>2</sup> Faculty of Engineering, Department of Bio-Medical Sciences & Engineering, KOC University, Istanbul, Turkey  Development and comparison of different sound absorbent woven fabrics	15:00	N. Aral, F.B. Nergis, C. Candan Istanbul Technical University, Faculty of Textile Design and Technology Faculty, Department of Textile Engineering, Istanbul, Turkey X-ray attenuation properties of metal powder-silicone rubber coated fabrics
15:20 -			
	Wednesday, October 15, 2014		Wednesday, October 15, 2014
	Textile Innovations	Con	nputer Technology for Textiles and Apparel
	Parallel Session (Nihad Sayar Hall)		Parallel Session (Senato Hall)
15:40	C. Sasse <sup>1</sup> , C. Leithäuser <sup>2</sup> , D. Hietel <sup>2</sup> , G. Seide <sup>1</sup> , T. Gries <sup>1</sup> <sup>1</sup> Institut für Textiltechnik (ITA) der RWTH Aachen University, Otto-Blumenthal-Straße 1, 52074 Aachen, Germany <sup>2</sup> Fraunhofer Institute for Industrial Mathematics ITWM, Fraunhofer-Platz 1, 67663 Kaiserslautern, Germany  Development of a design tool for polymer spin packets	15:40	O.V.Surikova, G.I.Surikova, Kuzmichev Clothing Design Department, Ivanovo Textile Institute, Ivanovo State Polytechnic University, Russia Data Base for the New Automatic Pattern design Method
16:00	S. Ö. Hacioğullari, O. Babaarslan Çukurova University, Faculty of Engineering and Architecture, Department of Textile Engineering, Adana, Turkey Development of special filament yarns on a newly designed laboratory type yarn drawing machine	16:00	M. Akdere, F. Pohlkemper, G. Seide, T. Gries Institut für Textiltechnik (ITA) of the RWTH Aachen University, Germany Simulation model for stabilization of carbonfibers
16:20	F. Kalli Itru Group Ltd, Istanbul, Topkapı Centre, Turkey Itru UAK-1 +1 fibre length and neps size distribution measurement from fibre beard	16:20	M. Korkmaz, G. Durur Pamukkale University, Department of Textile, Denizli, Turkey Modelling and analysis of three dimensional orthogonal woven fabrics with finite element method
16:40	M. Cetin, C. Niedringhaus, T. Gries Institut für Textiltechnik (ITA) of the RWTH Aachen University, Germany Development of an inline quality measurement system for tufting process	16:40	E. Buyukaslan <sup>1</sup> , S. Jevšnik <sup>2</sup> , F. Kalaoglu <sup>2</sup> <sup>1</sup> İstanbul Bilgi University, Fashion Design, Istanbul, Turkey <sup>2</sup> İstanbul Technical University, Textile Technology and Design Faculty, Istanbul, Turkey  The influence of weave construction on 3d garment

Thursday, October 16, 2014					
08:00 - 09:00	ITA R&D Centre, Halkalı  Transfer: Sultanahmet to the ITA R&D Center, Halkalı				
08:00 - 09:00	,				
	PLENARY SESSION				
	(ITA-Main Hall)				
09:00 - 10:00	Coffee and Welcome Speeches				
10:00	Thomas Gries				
10:00	RWTH Aachen University, Aachen, Germany				
	Materials and Production Technologies for the Future Textile Industry: Innovative, Effective and Intelligent				
10:20	Tahir Shah				
	University of Bolton, Bolton, UK				
40:40	Energy harvesting "3-D spacer" based piezoelectric textiles				
10:40	Asis Patnaik CSIR Materials Science and Manu				
	Alternative Thermal and Sound Insulation Materials for the Building Industries				
11:00	Uwe, Merklein				
	GF 3T GmbH (RWTH Aachen University), Aachen, Germany				
44.00 44.00	An Introduction of Textile Technologie Transfer (3T)  Coffee Break				
11:20 – 11:30	Corree Break				
11:30	Subbiyan Rajendran				
	University of Bolton, Bolton, UK				
	Novel Medical Devices for Healthcare and Wellbeing				
11:50	Prof Corinne Greyling				
	Technology Station in Clothing and Textiles, Cape Peninsula University of Technology, Bellville, 7535, South Africa Electrospinning of Polyacrylonitrile Nanofibres with Additives; Study of Crystallinity and Molecular				
	Orientation				
12:10	Alessio Varesano				
	CNR-ISMAC, Institute for the Macromolecular Studies, Biella, Italy				
12:20	Keratin Nanofibre Membranes With Inorganic Nanoparticles For Filtration				
12:30	Carlos Rovira Borràs Head of Smart Objects & Functional Textiles, CETEMMSA, Spain				
	Smart wearable systems to avoid falling asleep while driving				
12:50 – 14:00	LUNCH				

Thursday, October 16, 2014	Thursday, October 16, 2014				
Smart and Interactive Textiles Parallel Session (ITA-Main Hall)	Technical Textiles Parallel Session (ITA Hall)				
14:00  J. Militký, D. Křemenáková, R. Mishra Textile Faculty, Dept. of Material Engineering, Studentská 2, Liberec 461 17 Czech Republic Side emitting polymeric optical fibres for safety textiles	14:00  F. Varghese¹, C.J. Thampi² ¹Managing Director: Kerala State Industrial Enterprises Ltd., Government of Kerala, Trivandum,Kerala, India ²President: T.M. Natural Resource Research and Development Centre, Trivandum,Kerala, India Coco-eco textiles-golden fiber from god's own country				
14:20  I. Cabral, A.P. Souto University of Minho, Guimarães, Campus de Azurém, 4800-058, Portugal Shape memory textiles: designing origami light filters	14:20 Y. Qin Jiaxing College, Material and Textile Engineering, China Gelling fibers from alginate				
14:40  P. Abel¹, M. Linke², T. Gries¹ ¹Institut fur Textiltechnik (ITA) of RWTH Aachen University, Germany ²Hamburg University of Applied Sciences, Department Fahrzeugtechnik und Flugzeugbau, Germany Reinforcement of co-bonded patch repairs for structural composites	14:40  M.Topalbekiroğlu, C.Gunesoglu, Z.Ünal Gaziantep University, Textile Engineering Department, Gaziantep, Turkey Investigation of the some performance properties of knitted fabrics produced by soybean and organic cotton yarn				
15:00 Y. Ulcay, R. Tural, S. Eren University of Uludag, Bursa, Turkey Investigation of the mechanical and electrical properties of polyester yarns doped barium titanate	15:00  H. Dayioglu <sup>1</sup> , N. Merdan <sup>1</sup> , S. Canbolat <sup>1</sup> , E. D. Kocak <sup>2</sup> <sup>1</sup> İstanbul Commerce University, Faculty of Engineering and Design, Textile Engineering, Istanbul, Turkey <sup>2</sup> Marmara University, Technology Faculty, Textile Engineering, Istanbul, Turkey  Investigation of dyeability behavior of banana fibers with natural dye extract from turmeric plants				
15:20 – 15:40 Coffee Break					

	Thursday, October 16, 2014		Thursday, October 16, 2014
Sı	urface Coatings and Chemistry Parallel Session (ITA-Main Hall)		Textile Innovations Parallel Session (ITA Hall)
15:40	E. Raafat, <u>B.G. Gabr</u> Helwan University, Apparel Design & Technology Dept., Faculty of Applied Arts, Cairo, Egypt Efficiency of nano QACs antibacterial treated garments	15:40	C.Gunesoglu¹, M.Topalbekiroğlu¹, D.Yarbasan¹, O.Dal¹, O.Celen², M.Sezen², A.Kabalcıoğlu³ ¹Gaziantep University, Textile Engineering Department, Gaziantep, Turkey ²Korteks Yarn, BTSO, Sari Cad. No:3, Bursa, Turkey ³Kabalcioglu LTD., 4.Org. San. Bol., No:14, Gaziantep, Turkey The mechanical and emse properties of tufted carpets produced by pet / fe2o3 composite yarn
16:00	W. Enab. M. Mekawy, A. A. Moneim Egypt Japan University of Science and Technology, New Borg El- Arab City, Alexandria, Egypt Surface functional treatment of surgical sutures with antimicrobial agent	16:00	P. Abel¹, P. Kreuer¹, B. Abbas², T. Fuertjes³, T. Gries¹¹Institut fur Textiltechnik (ITA) of RWTH Aachen University, Germany²Institut für Unternehmenskybernetik e.V. (IfU), Germany³Werkzeugmaschinenlabor (WZL) der RWTH Aachen University, Germany Continuous quality control and assurance in mass production of multiaxial non-crimp fabrics
16:20	M. B. Abdelkader <sup>1</sup> , N. Azizi <sup>1</sup> , Y. Chevalier <sup>2</sup> , M. Majdoub <sup>1</sup> ¹Laboratoire des Interfaces et Matériaux Avancés (LIMA), Faculté des Sciences, Bd. de l'Environnement 5019 Monastir, Tunisia  ²Laboratoire d'Automatique et de Génie des Procédés (LAGEP), Université Claude Bernard Lyon1, UMR CNRS 5007, 43bd du 11 Novembre 1918, 69622 Villeurbanne Cedex, France New biobased microparticles: elaboration, characterization and application on polyamide substrate	16:20	E. Papachristou, N.Bilalis Technical University of Crete, Department of Production Engineering and Management, 73100 Chania Greece How to integrate recent development in technology with Digital Prototype textile and apparel applications
16:40	T. Aamir <sup>1</sup> , M. A. Nazeer <sup>2</sup> , A. Hussain <sup>3</sup> , N. Bhatti <sup>3</sup> , Z. Javed <sup>4</sup> , R. Masood <sup>4</sup> <sup>1</sup> National Textile University, Department of Textile & Apparel Design, Pakistan <sup>2</sup> Faculty of Engineering, KOC University, Istanbul, Turkey <sup>3</sup> G.C University, Department of Home Economics, Faisalabad, Pakistan <sup>4</sup> National Textile University, Faculty of Engineering & Technology, Faisalabad, Pakistan  Effect of fragrance finish on mechanical and comfort properties of digitally printed fabric	16:40	A.M. Sarıışık <sup>1</sup> , Ö. Kuş <sup>1</sup> . <u>G.C. Türkoğlu<sup>1</sup></u> , B. Kutlu <sup>1</sup> , S. Sakin <sup>2</sup> , H.A. Karavana <sup>3</sup> <sup>1</sup> Dokuz Eylül University, Department of Textile Engineering, Izmir, Turkey <sup>2</sup> Sun Holding Research&Development Center, Izmir, Turkey <sup>3</sup> Ege University, Department of Leather Engineering, Izmir, Turkey  Antimicrobial applications in three-dimensional knit spacer fabric for footwear

#### Poster Session A on Technical Textiles at ITA R&D Centre (Thursday)

08:30 - 10:00 Poster hanging times 17:00 - 18:00 Poster presentation times 19:00 Poster removal times

<u>NOTE:</u> To ensure that all posters are hung in time for the opening of each Poster Session. Stand by your poster for the duration of the Poster Session.

#### 18:30 - 21:30 Cocktail and Gala Dinner

	Friday, October 17, 2014		Friday, October 17, 2014		Friday, October 17, 2014	
	Ecological Textiles Parallel Session (Nihad Sayar Hall)		Smart and Interactive Textiles  Parallel Session (Senato Hall)		Technical Textiles Parallel Session (YL-DR Hall)	
09:00	Z. Ali Noonari¹, W. H. Solangi¹, A. A. Channa¹, A. H. Memon ¹Pak-Korea Garment Technology Institute, Karachi, Pakistan ²Enviroment Eng. & Management Institute MUET Jamshoro, Pakistan Comparison of natural and synthetic anti migrants in continuous dyeing of 100% polyester	09:00	D. Vatansever Bayramol <sup>1</sup> , N. Soin <sup>2</sup> , T. Shah <sup>2</sup> and E. Siores <sup>2</sup> , R.L. Hadimani <sup>3</sup> , <sup>1</sup> Department of Textile Engineering, Namik Kemal University, Corlu-Tekirdag, TR <sup>2</sup> Institute for Materials Research and Innovation, University of Bolton, Bolton BL3 5AB, UK <sup>3</sup> Department of Electrical and Computer Engineering, Iowa State University, Ames, IA 50011, USA  Piezoelectric characteristics of melt extruded and poled polypropylene monofilaments	09:00	N. D. Gültekin <sup>1</sup> , İ. Usta <sup>2</sup> <sup>1</sup> Marmara University, Department of Textile Education, Istanbul, Turkey <sup>2</sup> Marmara University, Department of Textile Engineering, Istanbul, Turkey Investigation of thermal and electrical conductivity properties of carbon black coated cotton fabrics	
09:20	A. H. Taieb <sup>1,2</sup> , S. Msahli <sup>1</sup> , F. Sakly <sup>1</sup> <sup>1</sup> LGtex Ksar Hellal, Tunisia, <sup>2</sup> Design department of ISAM Sfax,  An eco-design approach for the functional textile	09:20	M.Z. Bilir, F. Duran, B.H. Gürcüm University of Gazi, Ankara, Turkey A Piezo-resistive application in textile design	09:20	S. Mahmoudian <sup>1</sup> , M. Imran <sup>2</sup> , M. R. Sazegar <sup>3</sup> <sup>1</sup> Department of Textile Engineering, Kashan Branch, Islamic Azad University, Kashan, Iran <sup>2</sup> Department of Chemical Engineering, College of Engineering, King Saud University, Riyadh, Saudi Arabia <sup>3</sup> Ibnu Sina Institute for Fundamental Science Studies, Faculty of Science, Universiti Teknologi Malaysia (UTM), Malaysia  Preparation of nanocomposite fibres based on cellulose and graphene nanoplatelets using ionic liquids	
09:40	Z. A. Noonari Pak-Korea Garment Technology Institute Karachi Ministry of Textile Industry Government of Pakistan, Pakistan Effect of different types of washes on the fabric strength of denim	09:40	F. Abidi, T. Hriz, S. Msahli, F. Sakli University of Monastir, Textile Engineering Laboratory of Ksar Hellal, , Tunisia Geometry of handmade carpet	09:40	F.Z.Engin Sagirli <sup>1</sup> , C.Unsal <sup>1</sup> , A.S.Sarac <sup>2,3</sup> , E.S.Kayali <sup>4</sup> <sup>1</sup> Department of Textile Engineering, Faculty of Textile Technology and Design, Istanbul Technical University, Turkey <sup>2</sup> Department of Chemistry, Polymer Science and Engineering, Istanbul Technical University, Turkey <sup>3</sup> Nanoscience & Nanoengineering, Istanbul Technical University, Turkey <sup>4</sup> Department of Metallurgical and Materials Engineering, Faculty of Chemical and Metallurgical Engineering, Istanbul Technical University, Turkey  Effects of surfactant type on poly (acrylonitrile- co-methylacrylate) latex synthesizes	
10:00	E. Buyukaslan¹, S. Jevšnik², F. Kalaoglu² ¹İstanbul Bilgi University, Fashion Design, Istanbul, Turkey ²İstanbul Technical University, Textile Technology and Design Faculty, Istanbul, Turkey A sustainable approach to collect post-consumer textile waste in developing countries  10:40 Coffee Break	10:00	R. Atakan, H. Karakaş Istanbul Technical University of Technology, Istanbul, Turkey Design of nonwoven carpet composites to develop sound insulation for automotive textile applications	10:00	K. V. P. Singh NIT, Jalandhar, India Diagnostic case study by comparing the feel factor of ideal fabric with reference fabric to quantify reduction in harshness of friction spun yarn	

Friday, October 17, 2014		Friday, October 17, 2014			Friday, October 17, 2014	
S	Surface Coatings and Chemistry		Technical Textiles		Technical Textiles	
	Parallel Session (Nihad Sayar Hall)		Parallel Session (Senato Hall)	Parallel Session (YL-DR Hall)		
10:40	W. H. Solangi <sup>1</sup> , A. H. Memon <sup>2</sup> , M. Q. Khan <sup>3</sup> , A. A. Channa <sup>1</sup> <sup>1</sup> Pak-Korea Garment Technology Institute, Karachi, Pakistan <sup>2</sup> Enviroment Engg. & Management Institute MUET Jamshoro, Pakistan <sup>3</sup> NTU-SFDAC Karachi Pakistan  Effect of the sequestering agents on the light fastness of the reactive dyes	10:40	R. Simsek¹, M. Erol², M. Calisir², A. Kilic² ¹Marmara University, Faculty of Technology, Department of Textile Engineering, Istanbul Turkey. ² Istanbul Technical University, TEMAG Labs, Istanbul, Turkey A Novel method to produce hydrophobic surface: inorganic material doped stabilized-PAN nanofiber	10:40	N. Kizildag¹, N. Ucar², N. Demirsoy², E. Sezer², B. Ustamehmetoğlu², O. Eren², A. Onen², İ. Karacan³, S. Guner⁴ ¹İstanbul Technical University, Department of Textile Engineering, Istanbul, Turkey ²İstanbul Technical University, Department of Chemistry, Istanbul, Turkey ³Erciyes University, Department of Textile Engineering, Kayseri, Turkey ¹İstanbul Technical University, Department of Chemical Engineering, Turkey The effects of dopant and solvent on morphology, conductivity and mechanical properties of polyacrylonitrile (PAN) / polyaniline (PANI) composite nanofibers	
11:00	Z. Yildiz¹, I. Usta², A. Gungor³, H. A. Onen⁴ ¹İstanbul Technical University, Institute of Sciences and Technology, Department of Polymer Science and Technology, Istanbul, Turkey ²Marmara University, Faculty of Technology, Department of Textile Engineering, Istanbul, Turkey ³Marmara University, Faculty of Arts and Sciences, Department of Chemistry, Istanbul, Turkey ⁴İstanbul Technical University, Faculty of Arts and Sciences, Department of Chemistry, Istanbul, Turkey Investigation of polypyrrole coated cotton fabrics as electromagnetic shielding material	11:00	N. D. Gültekin <sup>1</sup> , N. Uçar <sup>2</sup> <sup>1</sup> Marmara University, Department of Textile Education, Istanbul, Turkey <sup>2</sup> İstanbul Technical University, Department of Textile Engineering, Istanbul, Turkey  Investigation of thermal properties of polyacrylonitrile (PAN) nanofibers containing zeolite nanoparticles	11:00	H. Jamshaid, R. Mishra Technical University of Liberec, Faculty of Textile Engineering, Department of Material Engineering, Liberec, Czech Republic Thermal and mechanical properties of woven basalt fabric reinforced hybrid & non-hybrid composites	
11:20	E. D. Koçak <sup>1</sup> , M.Kılınç <sup>2</sup> , S.Canbolat <sup>2</sup> , H.Dayıoğlu <sup>2</sup> ,N.Merdan <sup>2</sup> , F.Akın <sup>3</sup> <sup>1</sup> Marmara University, Faculty of Technology, Department of Textile Engineering, Istanbul/Turkey <sup>2</sup> Istanbul Commercial University, Faculty of Design and Engineering, Department of Fashion and Textile, Istanbul, Turkey <sup>3</sup> Abant Izzet Baysal University, Vocational High School, Bolu, Turkey  Investigation of the effect of the dyeing method on wool fabrics dyed with natural dyes extracted from vaccinium corymbosum L.	11:20	M. O. Gök, B. H. Gürcüm Gazi University, Faculty of Art and Design, Department of Textile Design, Ankara, Turkey The new prototype that thermal conductivity measurement with sensors	11:20	A. Bical <sup>1</sup> , E. Çelebi <sup>1,2</sup> , G. Ozcan <sup>1</sup> , N. Soydan <sup>2</sup> <sup>1</sup> Istanbul Technical University, Istanbul, Turkey <sup>2</sup> EKSOY KİMYA SANAYİ VE TİCARET A.Ş., Tekirdağ, Turkey  Improvement of chemical finish for durable flame retardancy of CO/PES blends	
11:40	R. Alkan <sup>1</sup> , E. Torgan <sup>2</sup> , C. Aydın <sup>2</sup> , R. Karadag <sup>2,3</sup> <sup>1</sup> Kocaeli University, Kosekoy M.Y.O., Microbiology Laboratory, 41135 Kocaeli, Turkey <sup>2</sup> TCF-Armaggan, Cultural Heritage Preservation and Natural Dyes Laboratory, Istanbul, Turkey <sup>3</sup> Marmara University, Faculty of Fine Arts, Natural Dyes Laboratory, 34718 Kadıkoy-Istanbul, Turkey  Determination of antimicrobial activity of the dyed silk fabrics with some natural dyes  14:00 LUNCH	11:40	S.İ. Mıstık¹, M. Kayar² ¹Marmara University Faculty of Technology Department of Textile Engineering, Istanbul, Turkey ²Marmara University Faculty of Technical Education Department of Textile Studies, Istanbul, Turkey Effect of surface treatments on tensile and charpy impact strength properties of cotton-viscose waste fiber reinforced polymer composites	11:40	M. E. İnce¹, A.F. M. Seyam², M. H. Mohamed² ¹Gaziantep University, Textile Engineering Department, Gaziantep, Turkey ²North Carolina State University, College of Textiles, Raleigh, 27695, US Generalized geometric modelling of 3d orthogonal woven preforms: the rectangular cross section case	

Friday, October 17, 2014	Friday, October 17, 2014
Advances in Apparel Design	Medical Textiles
Parallel Session (Nihad Sayar Hall)  14:00 E. Akcagun¹, V. Dal², N. Oz Ceviz³, Z. Yildiz⁴⁴ ¹Mimar Sinan Fine Arts University, Vocational School, Istanbul, Turkey ²Marmara University, Faculty of Technology, Department of Textile Engineering, Istanbul, Turkey ³Marmara University / Vocational School of Technical Sciences, Istanbul, Turkey ⁴İstanbul Technical University, Institute of Sciences and Technology, Department of Polymer Science and Technology, Istanbul, Turkey The effects of physical properties of woollen fabrics on thermal comfort	of the medical textile material designed for providing peristaltic motion
14:20 M. Akalın <sup>1</sup> , G. Turhan <sup>2</sup> <sup>1</sup> Marmara University Faculty of Technology Department of Textile Engineering, Istanbul, Turkey <sup>2</sup> Marmara University Faculty of Technical Education Department of Textile Studies, Istanbul, Turkey An exploratory study on the effects of consumer demographics on purchase intention: smart t- shirt product for Turkish men	14:20  M. H. Peerzada¹, P Potluri², P. Withers³, Sadaf A. Abbasi¹  ¹Department of Textile Engineering, Mehran University of Engineering & Technology Jamshoro. Pakistan  ²North West Composites Centre  ³University of Manchester Aerospace Research Institute (UMARI) University of Manchester, Manchester, UK  Tomography based analysis of Uni-directional woven composites
14:40 D. T. Cebeci Marmara University , Technical Sciences Vocational School of Higher Education, Istanbul, Turkey Sustainable textiles and life-cycle processes in infant clothing	14:40 A.M. Sarıışık, <u>G.E. Kartal</u> Dokuz Eylül University, Faculty of Engineering Department of Textile Engineering, Izmir, Turkey Disposable mask design for odour pollution in the work environment
15:00  S. Mokhtar, E.R. Ramirez School of Design, Victoria University of Wellington, Wellington, NZ. 'Empathear' - A wearable technology scarf simulating auditory hallucinations to affect empathy in siblings of voice hearers.	15:00  E. K. Zadeh, S. Mojtaba. Zebarjad, K.Jjanghorban Shiraz University, Department of Materials Science and Engineering, School of Engineering, Shiraz, Iran Nitrogen-doped titanium dioxide photocatalysts for visible response applicable on self-cleaning property of textiles
15:30 Closing Ceremony	

#### Poster Session B on Textile Chemistry and General Textiles at Sultanahmet Campus (Friday)

08:30 - 10:00 Poster hanging times

12:00 - 13:00 Poster presentation times

15:00 Poster removal times

**NOTE:** To ensure that all posters are hung in time for the opening of each Poster Session.

Stand by your poster for the duration of the Poster Session.

	Poster Sessions A, Thursday, October 16, 2014
	ITA R&D Center, Halkali
	A. Ragaišienė, J. Rusinavičiūtė
	Kaunas University of Technology, Kaunas, Studentų str. 56, Lt-51424, Lithuania
P-01	Design and analysis of protein fiber yarn for medical textiles
	D. Milasiene, R. Ivanauskas
P-02	Kaunas University of Technology, Kaunas, K. Donelaičio St. 73, LT-44029, Lithuania
P-02	Peculiarities of formation the silver selenide layer on the silicone coated polyamide cloth  E. Mbise¹, R. Morris², T. Dias¹, W. Hurley¹
	<sup>1</sup> School of Art & Design, Nottingham Trent University, Burton Street, Nottingham NG1 4BU, UK
	<sup>2</sup> School Science and Technology, Nottingham Trent University, Clifton campus, Nottingham, UK
P-03	Design and manufacture of heated textiles
	H. Yalcin <sup>1</sup> , Y. Akgul <sup>1,2</sup> , R. Simsek <sup>1</sup> , A. Hassanin <sup>1,3</sup> , A. Kilic <sup>1</sup> , A. Demir <sup>1</sup>
	<sup>1</sup> TEMAG Labs, Istanbul Technical University, Istanbul, Turkey
	<sup>2</sup> Karabuk University, Karabük, Turkey
D 04	<sup>3</sup> Alexandria University, Textile Engineering Department, Alexandria, EGYPT.
P-04	Mechanical properties of centrifugally spun nanofibers
	T. Schlüter <sup>1</sup> , J. Struebig <sup>1</sup> , G. Seide <sup>1</sup> , Y. Gloy <sup>1</sup> , T. Gries <sup>1</sup> , L. Van der Schueren <sup>2</sup> , T. Krooß <sup>3</sup>
	<sup>1</sup> Institut fur Textiltechnik of RWTH Aachen University (ITA), Otto-Blumenthal-Strasse 1, 52074 Aachen, Germany. <sup>2</sup> Centexbel, Technologiepark 7, 9052 Gent, Belgium
	<sup>3</sup> Institut für Verbundwerkstoff GmbH, Erwin-Schrödinger-Straße 58, D-67663 Kaiserslautern
	Characterization of mono- and multifilament yarns based on polymer blend systems for the textile and
P-05	composite market
	J. Lemm, K. Lee, G. Seide, T. Gries
	Institut für Textiltechnik
P-06	Trends in Ambient Assistant Working - Current and future utilization rates of intelligent assistance systems in work clothes for production and logistics
1 00	Y. Büyükakıncı <sup>1</sup> , H. Güçlü <sup>2</sup>
	<sup>1</sup> İstanbul Aydın University Engineering Faculty, Department of Textile Engineering, Istanbul, Turkey
	<sup>2</sup> Marmara University, Vocational School of Health Related Professions Istanbul, Turkey
P-07	Antibacterial properties of tin-finished textiles
	V. Yalı, F. Göktepe Namık Kemal University, Çorlu Faculty of Engineering, Tekirdağ, Turkey
	Investigation of structural and mechanical properties of high performance yarns produced by spinnable carbon
P-08	nanotubes
	R. Stolz <sup>1</sup> , T. Vad, W <sup>1</sup> . Steinmann <sup>1</sup> , G. Seide <sup>1</sup> , T. Gries <sup>1</sup> , K. Klopp <sup>2</sup> , K. Bender <sup>3</sup>
	<sup>1</sup> Institut für Textiltechnik (ITA), RWTH Aachen University, Aachen, Germany <sup>2</sup> Heimbach GmbH & Co. KG. Düren, Germany
	<sup>3</sup> EMS-CHEMIE AG, Domat/Ems, Switzerland
P-09	Effects on fiber properties of meltspun PA6 fibers due to modification with 2-D nanoparticles
	M. Uzun¹, C. Bach¹, T. Gries¹, S. Jockenhoeve¹¹,²
	<sup>1</sup> Institut für Textiltechnik (ITA), RWTH Aachen University, Aachen, Germany <sup>2</sup> Department of Applied Medical Engineering, Helmholtz Institute for Biomedical Engineering, RWTH Aachen University,
	Aachen, Germany
P-10	A study on the effect of vitamins on PH properties of wound dressings under controlled temperature
	M. Uzun <sup>1</sup> , C. Bach <sup>1</sup> , T. Gries <sup>1</sup> , S. Jockenhoeve <sup>1,2</sup>
	<sup>1</sup> Institut für Textiltechnik (ITA), RWTH Aachen University, Aachen, Germany <sup>2</sup> Department of Applied Medical Engineering, Helmholtz Institute for Biomedical Engineering, RWTH Aachen University,
	Aachen, Germany
P-11	A Comparative Study on Conventional and Hollow Viscose Fibres based Nonwoven Fabrics
	I. Noll, N. Vestweber, G. Seide, Prof. Gries
	Institute for Textiles of the RWTH Aachen University, Otto-Blumenthal-Str. 1,52074 Aachen, Germany  Polytherimide fibers and polyetherimide/carbon composites as innovative solutions for transportation and safety
P-12	applications in the framework of the COURSE Program
	R. Erdem <sup>1</sup> , M. Akarsu <sup>2</sup> , E. Burunkaya <sup>2</sup> , Ö. Erdem <sup>3</sup> , M. Akalın <sup>4</sup>
	Textile Technology, Serik Vocational School of Higher Education, Akdeniz University, Antalya, Turkey
	<sup>2</sup> Chemistry, Faculty of Science, Akdeniz University, Antalya, Turkey
	<sup>3</sup> Chemistry, Institute of Natural and Applied Science, Cukuorova University, Adana, Turkey <sup>4</sup> Textile Engineering, Technology Faculty, Marmara University, Istanbul, Turkey
P-13	Morphological analysis of polycaprolactone nanofibers containing nanohydroxyapatite particles
	R. Erdem <sup>1</sup> , Y. Özyiğit <sup>2</sup>
	1 Textile Technology, Serik Vocational School of Higher Education, Akdeniz University, Antalya, Turkey
P-14	2Agriculture, Korkuteli Vocational School of Higher Education, Akdeniz University, Antalya, Turkey Investigation of rosemary and origami oil added polyurethane based electrospun nanofibers morphology
	gan

	A. Mutlu
	Kadifeteks Mensucat San. A.S., Istanbul, Turkey
P-15	The development of easy cleanable upholstery fabrics
	N. Demirsoy <sup>1</sup> , N. Ucar <sup>2</sup> , A. Onen <sup>1</sup> , N. Kizildag <sup>2</sup>
	<sup>1</sup> Istanbul Technical University, Department of Chemistry, Istanbul, Turkey <sup>2</sup> Istanbul Technical University, Department of Textile Engineering, Istanbul, Turkey
	Nanocomposite nanofibers of polyacrylonitrile (PAN) and silver nanoparticles (AgNPs) electrospun from
P-16	dimethylsulfoxide
	O. Eren <sup>1</sup> , N. Ucar <sup>2</sup> , A. Onen <sup>3</sup> , N. Kizildag <sup>2</sup>
	<sup>1</sup> Istanbul Technical University, Polymer Science and Technology, Istanbul, Turkey
	<sup>2</sup> Istanbul Technical University, Department of Textile Engineering, Istanbul, Turkey
	<sup>3</sup> Istanbul Technical University, Department of Chemistry, Istanbul, Turkey
- 4-	Composite nanofibers of polyacrylonitrile (PAN) and amino-functionalized carbon nanotubes electrospun from
P-17	dimethylsulfoxide
	E. Üstüner
P-18	Kadifeteks Mensucat San. A.S., Istanbul, Turkey The development of flame retardant upholstery fabrics
1-10	E. Batuk, E.C. Sabir
	University of Cukurova, Department of Textile Engineering, 01330, Adana, Turkey
P-19	Simulation model of production cost for a selected dying-finishing textile mills
	S.M. Yukseloglu <sup>1</sup> , M. Caliskan <sup>2</sup>
	<sup>1</sup> Marmara University, Faculty of Technology, Textile Engineering Department, Istanbul, Turkey
	<sup>2</sup> Isiksoy Tekstil, DOSAB, No 20, Osmangazi, Bursa, Turkey
P-20	Mechanical and thermal properties of wool waste fabric reinforced composites
	R. Simsek <sup>1</sup> , M. Calisir <sup>2</sup> , M. Erol <sup>2,3</sup> , A. Kilic <sup>2</sup>
	¹Marmara University, Faculty of Technology, Department of Textile Engineering, Istanbul, Turkey
	<sup>2</sup> Istanbul Technical University, TEMAG Labs, Istanbul, Turkey
P-21	<sup>3</sup> Nevsehir Haci Bektas Veli University, Metallurgical and Materials Engineering, Nevsehir, Turkey  Phosphorescent composite nanofibers: effect of polymer type
	Ž. Rukuižienė
	Kaunas University of Technology, Kaunas, Studentu str.56, Lithuania
P-22	Influence of reed on filter fabric structure
	S. Canbolat <sup>1</sup> , N.Merdan <sup>1</sup> , M. Kılınç <sup>1</sup> , F. Akın <sup>2</sup>
	¹Istanbul Commerce University, Faculty of Engineering and Design, Department of Fashion and Textile, Istanbul, Turkey
	<sup>2</sup> Abbant Izzet Baysal University, Vocational High School, Bolu, Turkey
P-23	The effect of the ultrasonic energy on dyeing a polyamide material with reactive dyes, including a different chromophore and a reactive group
1 23	O. Ağma <sup>1</sup> , E. Pampal <sup>1,2</sup> , A.Hassanin <sup>1,3</sup> , R. Şimşek <sup>1</sup> , A.Kılıç <sup>1</sup> ,A.Demir <sup>1</sup>
	<sup>1</sup> Temag Labs, Faculty of Textile Technology and Design, Istanbul Technical University, Istanbul, Turkey
	<sup>2</sup> Textile Engineering Department, Bartin University, Bartin, Turkey
	<sup>3</sup> Textile Engineering Department, Alexandria University, Egypt
P-24	Effect of SWCNT on PAN based carbon nanofiber
	Y Polat, A. Kücüksari, E. Pampal, E. Canbay, S. Yilmaz, A. Kılıc, A. Demir
P-25	TEMAG Labs, Istanbul Technical University, Istanbul, Turkey Solution blown nanofibers for photocatalytic water filtration applications
1-23	E. H. Peker
	Tekstil Araştırmaları Derneği
P-26	Protective clothes from insects
	E. H. Peker <sup>1</sup> , V. Özyazgan <sup>2</sup>
	<sup>1</sup> Tekstil Araştırmaları Derneği
	<sup>2</sup> İstanbul Aydın University Engineering Faculty, Department of Textile Engineering, Istanbul, Turkey
P-27	Obtaining fibers from stinging nettle
	A.M. Abdel-Mohsen <sup>1,2</sup> , L. Vojtova <sup>1</sup> , J. Jancar <sup>1,3</sup>
	¹Central European Institute of Technology (CEITEC), Brno University of Technology, Brno, Czech Republic
	<sup>2</sup> National Research Centre-Textile Research Division- El-Buhoth St., 12311 Cairo, Egypt
	<sup>3</sup> Institute of Materials Chemistry, Brno University of Technology, Czech Republic.  Biomedical textiles through multifunctioalization of cotton fabrics using innovative methoxypolyethylene
P-28	glycol-N-chitosan graft copolymer
	R. M. A. Rahman, R. Hrdina
	Institute of Organic Chemistry and Technology, Faculty of Chemical Technology, University of Pardubice, Studentská
	573, Pardubice CZ-532 10, Czech Republic
P-29	Biological activity of chitosan extracted from crawfish shell
P-30	E.D. Koçak <sup>1</sup> , M. Akalın <sup>1</sup> , N. Merdan <sup>2</sup> , <u>B. Y. Şahinbaşkan<sup>3</sup></u>
	<sup>1</sup> Marmara University, Faculty of Technology, Department of Textile Engineering, Goztepe, Istanbul, Turkey
	<sup>2</sup> Istanbul Commerce University, Faculty of Engineering and Design, Department of Textile Engineering, Istanbul, Turkey
	<sup>3</sup> Marmara University, Faculty of Technical Education, Department of Textile Studies, Goztepe, Istanbul, Turkey <b>Effect of microwave energy on disperse dyeability of polypropylene fibers</b>
P-31	B. Y. Şahinbaşkan
1.21	Marmara University, Faculty of Technical Education, Department of Textile Studies, Goztepe, Istanbul, Turkey
	The effect of ultrasonic treatment on dyeing properties of luffa cylindrica fibers

### Poster Sessions B, Friday, October 17, 2014 Sultanahmet Campus, Sultanahmet

P-32	S. Canoğlu
	Marmara University, Department of Textile Engineering, Istanbul, Turkey
	The comparison of compact (com 4) yarns with conventional ring yarns
P-33	N. D. Gültekin, <u>B. C. Gültekin</u>
	Marmara University, Department of Textile Education, Istanbul, Turkey
	The effect of functionalized multi-walled carbon nanotubes (MWCNTs) on properties of polyester fabric dyed with MWCNTs
P-34	S.O. Eruslu <sup>1</sup> , A.O. Agırgan <sup>2</sup> , E. Taskin <sup>1</sup>
F-34	Namık Kemal University Mechanical Engineering Corlu, Turkey
	<sup>2</sup> Namık Kemal University Textile Engineering Corlu, Turkey
	Thermal stability and residual effects on carbon/kevlar fabric composites
P-35	U. Dönmez <sup>1</sup> , E.C. Sabır <sup>2</sup>
	¹University of Kahramanmaraş Sütçü İmam, Kahramanmaraş, Turkey
	<sup>2</sup> University of Çukurova, Adana, Turkey
D 3C	A fuzzy logic application on statistical process control of a selected textile mill  A. Özbek, N. Erdoğan, Y. Doğdu
P-36	University of Sinop, Gerze Vocational School, Gerze, Sinop, Turkey
	Investigation of comfort properties of fisherman clothing used in turkey with a survey study
P-37	B. Z. Ünal, P. D. Baykal, E. Karazincir, E. Kalkanli
• • •	Çukurova University, Department of Textile Engineering, Adana, Turkey
	An investigation about the effects of selected parameters on the seam performance for denim fabrics
P-38	G. K. Günaydın, R. Erdem
	Akdeniz University, Textile Technology, Serik Vocational School of Higher Education, Antalya, Turkey
	The influence of nozzle pressure and yarn count on the evenness and imperfection properties of vortex spun
D 30	yarn produced by MVS machine  N. Merdan, S. Canbolat, H.Dayıoğlu
P-39	Istanbul Commerce University, Faculty of Engineering and Design, Department of Fashion and Textile, Istanbul, Turkey.
	The effects of enzymatic and ultrasonic energy on pilling properties of cotton fabrics
P-40	S.Canbolat <sup>1</sup> , N.Merdan <sup>1</sup> , H.Gezer <sup>2</sup> , F. Akın <sup>3</sup>
P-40	<sup>1</sup> İstanbul Commerce University, Faculty of Engineering and Design, Department of Fashion and Textile, Istanbul,
	Turkey.
	<sup>2</sup> Marmara University, Faculty of Fine Arts, Industrial Product Design, Istanbul, Turkey
	<sup>3</sup> Abbant Izzet Baysal University, Vocational High School, Bolu, Turkey
	The ultraviolet protection of cotton fabrics in the interiors
P-41	M. Uzun <sup>1</sup> , C. Bach <sup>1</sup> , T. Gries <sup>1</sup> , S. Jockenhoeve <sup>1,2</sup>
	<sup>1</sup> Institut für Textiltechnik (ITA), RWTH Aachen University, Aachen, Germany
	<sup>2</sup> Department of Applied Medical Engineering, Helmholtz Institute for Biomedical Engineering, RWTH Aachen University,
	Aachen, Germany
	Antibacterial activity of vitamin-treated alginate and carboxymethylcellulose wound dressings
P-42	G.Gülşen, F.D. Kadem
	University of Çukurova, Technical Sciences Vocational School, Adana, Turkey
	A study about sewability properties of 100% cotton woven fabric with different construction
P-43	E.G. Saraç, F.D. Kadem
	University of Çukurova, Technical Sciences Vocational School, Adana, Turkey
D 44	An experimental study about improvement of denim fabric's thermal comfort  Ö. Ay, G. Çetin
P-44	Trakya University, Edirne Vocational College Of Technical Science, Department of Textile Technology, Edirne, Turkey
	Performance comparison of fabrics weaved using Aegean and Egyptian cotton yarns
P-45	L. M. Ozer <sup>1</sup> , E. Torgan <sup>2</sup> , C. Aydın <sup>2</sup> , R. Karadağ <sup>2,3</sup>
-43	<sup>1</sup> Department of Textile Engineering, Faculty of Technology, Marmara University, Kadikoy, Istanbul, Turkey
	<sup>2</sup> Turkish Cultural Foundation, Cultural Heritage Preservation and Natural Dyes Laboratory, Istanbul, Turkey
	<sup>3</sup> Marmara University, Laboratory of Natural Dyes, Faculty of Fine Arts, Istanbul, Turkey
	Investigation of the effect of Turkey red oil on colour, fastness properties and HPLC-DAD analysis of silk
	fabrics dyed with madder
P-46	F. Citoglu <sup>1</sup> , H. Temel <sup>1,2</sup>
	<sup>1</sup> Marmara University, Faculty of Technology, Textile Engineering Department, Istanbul, Turkey
	<sup>2</sup> Marmara University, Institute of Pure and Applied Sciences, Istanbul, Turkey
	Comparison of children's clothing patterns on different systems
P-47	M. Akkaya¹, M. Akalin², Z. Yildiz³
	<sup>1</sup> Marmara University, Technical Education Faculty, Department of Textile Education, Istanbul, Turkey <sup>2</sup> Marmara University, Faculty of Technology, Department of Textile Engineering, Istanbul, Turkey
	<sup>3</sup> Istanbul Technical University, Institute of Sciences and Technology, Department of Polymer Science and Technology, Istanbul, Turkey
	The effects of various bleaching formulations on physical properties of woollen fabrics
P-48	M. Kayar <sup>1</sup> , S. İ. Mıstık <sup>2</sup>
	¹Marmara University Faculty of Technical Education Department of Textile Studies, Kadikoy, Istanbul, Turkey
	<sup>2</sup> Marmara University Faculty of Technology Department of Textile Engineering, Kadikoy, Istanbul, Turkey
	Effect of surface treatments on flexural strength properties of cotton-polyester waste reinforced polymer composites

	<u></u>
P-49	F. Çitoğlu <sup>1</sup> , H. Akkuş <sup>2</sup>
	<sup>1</sup> Marmara University, Faculty of Technology, Department of Textile Engineering, Istanbul, Turkey
	<sup>2</sup> Bartın University, Institute of Pure and Applied Sciences, Department of Textile Education Ulus/BARTIN, Turkey Importance of body sizes and figure types on clothing fitting
P-50	inportance of body sizes and righte types on clothing fitting  i. Tiyek <sup>1</sup> , R. Gemci <sup>1</sup> , M. Kilinçkiran <sup>2</sup> , U. Dönmez <sup>2</sup> , B. Yildirim <sup>2</sup>
F-30	<sup>1</sup> University of Kahramanmaraş Sütçü İmam, Faculty of Engineering and Architecture, Department of Textile
	Engineering, Kahramanmaraş, Turkey
	<sup>2</sup> University of Kahramanmaraş Sütçü İmam, Institute of Natural Sciences, Department of Material Science and
	Engineering, Kahramanmaras, Turkey
	Comparison of strength properties of polypropylene-based spunbond textile surfaces with different values of
	MFI and weight
P-51	A. Koruyucu <sup>1</sup> , A.Ö. Ağırgan <sup>1</sup> , M. Ağırgan <sup>2</sup>
	¹Departments of Textile Engineering, Namık Kemal University, Corlu, Turkey
	<sup>2</sup> Textile Technology Dept. Kırklareli University Lüleburgaz Vocational school Luleburgaz, Turkey
	Investigation of mechanical properties of al2o3/pu coated pes fabric
P-52	R. Halfaoui
	M'Hamed Bougarra University, Faculty of Engineering Sciences, Department of Engineering Process,
	Laboratory of Processing and Shaping of Fibrous Materials and Polymers, Boumerdes, Algeria.
D F2	Modelling and characterization of elastic bands in the therapeutic treatment of venous leg ulcers  O. Peker
P-53	Chemical Engineering, Turkey
	Having heat saving and preventing corrosion on machines by using nano technogical dyes
P-54	S. Er
	Er GmbH Obermarkt 33, 6410 Telfs \ Tirol, Austria
D EE	E-Textiles for Spiritual Purposes  A. F. Khan
P-55	National Textile University, Pakistan
	Adsorption behavior of congo red from aqueous solutions on visil fibers and antimicrobial activity assessment
	of cr dyed visil fabric towards E-coli
P-56	R. Masood, Z. Shahzadi, Azeemullah, T. Hussain, Z.A Raza, N. Ahmad
	National Textile University, Faisalabad Faculty of Engineering and Technology, Pakistan  A natural polysaccharide extracted from brown seaweed
P-57	Z. A. Raza, F. Anwar, A. Rehman, M. T. Hussain, R. Masood
F-37	Chemistry Research Laboratory, National Textile University, Faisalabad, Pakistan
	In situ fabrication and impregnation of silver nanoparticles on enzymatic treated cotton fabric
P-58	F. Anwar, Z. A. Raza, A. Rehman, M. T. Hussain and R. Masood
	Chemistry Research Laboratory, National Textile University, Faisalabad, Pakistan Optimization of chitosan nanoparticles fabrication by using taguchi approach and its application on cotton
	fabric
P-59	M. M. A. Sayeed <sup>1</sup> , A. Rawal <sup>2</sup> , L. Onal <sup>3</sup> , Y. Karaduman <sup>4</sup>
	<sup>1</sup> Textile Physics Division, Bangladesh Jute Research Institute, Manik Mia Avenue, Dhaka-1207, Bangladesh
	<sup>2</sup> Department of Textile Technology, Indian Institute of Technology Delhi, Hauz Khas, New Delhi,India
	<sup>3</sup> Department of Textile Engineering, Erciyes University, Kayseri, Turkey <sup>4</sup> Department of Textile Technology, Akdagmadeni Vocational High School, Bozok University, Yozgat, Turkey
	Mechanical properties of surface modified jute fibre/polypropylene nonwoven composites
P-60	M. Q. Khan, M. Sabeeh ul Hassan, S. Hafeez, F. ur Rehman, M. A. Shaikh, M.Y. Zaman
	National Textile University Karachi, Pakistan
	Manufacturing of industrial fire retardant gloves using blends of cotton and synthetic
D C1	fibers M. Q. Khan, M. Faizan, S. Hafeez, M. S. Hassan, W. Husain, M. Umer
P-61	National Textile University Karachi, Pakistan
	The development of the winter jogging cap
P-62	M. Q. Khan <sup>1</sup> , M. Umar <sup>2</sup> , M. <u>H. Peerzada<sup>3</sup></u>
	¹National Textile University Karachi, Pakistan
	<sup>2</sup> Student of Master degree in National Textile University, Pakistan
	Chairman Textile Engg. Department MUET Jamshoro, Pakistan     Effect of cost of poor quality at apparel manufacturing industry
P-63	M. Q. Khan, A. Daud, H. M. Zaheer, M. J. Saleem, M. H. Peerzada
1-03	National Textile University Karachi, Pakistan
	Development of wearable textile jacket embedded with traffic signals for a traffic warden
P-64	F. Ahmad <sup>1</sup> , M. Tausif <sup>2</sup> , M. H. Malik <sup>1</sup> , T. Hussain <sup>1</sup> , A. Afzal <sup>1</sup>
	<sup>1</sup> Faculty of Engineering & Technology, National Textile University Faisalabad, Pakistan.
	<sup>2</sup> Department of Textile Engineering, University of Engineering and Technology, Lahore (Faisalabad Campus), Faisalabad, Pakistan.
	Effect of process variables on mechanical and comfort properties of cotton hydroentangled nonwoven fabrics
L	P. C. C. C. C. C. C. C. C. C. C. C. C. C.