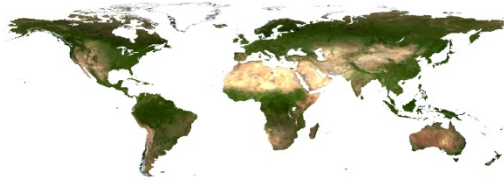


THE FIBER SOCIETY



*Advancing Scientific Knowledge
Pertaining to Fibers and Fibrous Materials*



Materials Science & Technology

The Fiber Society 2012 Spring Conference

Fiber Research for Tomorrow's Applications

May 23–25, 2012

Conference Chairs

Dr. Rudolf Hufenus

Dr. René Rossi

Empa

Venue

Empa Facilities
St. Gallen, Switzerland

Program

Tuesday, May 22

1:00 PM–5:00 PM Governing Council Meeting

Wednesday, May 23

8:00 Registration and Coffee
 9:00 Welcoming Remarks, Business, and Announcements *Rudolf Hufenus, Conference Co-chair*
Cheryl Gomes, President, Fiber Society
Dr. Harald Krug, Board of Directors, Empa
Erika Forster, former Council of States: Textiles in St. Gallen

Morning Session

9:30	Keynote Speaker: Dr. Martin King, North Carolina State University, USA <i>The Contribution of Biotextiles to Human Health</i> (Foyer Auditorium)	
10:15	Break	
	Foyer	Gallery
	Session: New Materials for Fibers <i>Phillip Gibson, Chair</i> <i>Natick</i>	Session: Comfort and Health <i>Jin-tu Fan, Chair</i> <i>Cornell University</i>
10:45	<i>Encapsulation of PCM for Thermo-regulating Fabric Application</i> <u>Subhas Ghosh</u> and Prasad Bhatkhande, Eastern Michigan University	<i>Measurement of Garment Tensile Force by a Newly Developed Nonelastic String Method</i> <u>Chao Sun</u> ¹ , Jin-tu Fan ^{1,2} , and Jessie Kar ¹ , ¹ Hong Kong Polytechnic University, ² Cornell University
11:05	<i>Surface Roughness Characterization of Nephila Clavipes Dragline Silk with Atomic Force Microscopy</i> <u>Michael Ellison</u> , B. Faugas, M. Kennedy, and D. Dean, Clemson University	<i>Analysis of Thermal Comfort Properties of Chemical Protective Clothing Using Thermal Manikin</i> <u>Chi Chung Wong</u> ¹ , Hing Leung Chan ¹ , Shuqin Wen ² , Guowen Song ² , ¹ SGS Hong Kong Limited, ² University of Alberta
11:25	<i>Impact Performance and Energy Absorption Modes of Kevlar Fabrics Treated with Shear Thickening Fluid</i> <u>Abhijit Majumdar</u> , Bhupendra Butola, and Ankita Srivastava, Indian Institute of Technology	<i>The Evaluation of Moisture Management Fabrics</i> <u>Li-Chu Wang</u> ¹ , Yun-Chi Chang ¹ , and Yang-Cheng Shih ² , ¹ Taiwan Textile Research Institute, ² National Taipei University of Technology
11:45	<i>A Novel, Environmentally Friendly Process for the Extrusion of UHMWPE Fibres</i> <u>Abdul Rajput</u> and Alex Fotheringham, Heriot Watt University	<i>Air Permeability of Windproof Polyester Microfilament Fabrics at Different Pressure Drop Values</i> <u>Kübra Kaynak</u> and Osman Babaarslan, Çukurova University
12:05	<i>Influence of Shell Number on Capacity of Microcapsules Containing Fragrance</i> <u>Arunee Kongdee</u> , Wijitra Chockbundit, and Aksom Saengsom, Maejo University	<i>Thermal Comfort of Biking Dresses at Real Conditions for Their Use</i> <u>Lubos Hes</u> ¹ and Pavol Lizak ² , ¹ Technical University of Liberec, ² University of Alexander Dubček
12:25	<i>Dynamics of Electrochemical Polymerization of Pyrrole</i> <u>Kushal Sen</u> , Dipayan Das, and Syamal Maiti, Indian Institute of Technology	<i>Pushing the Functional Limits of Clothing</i> <u>Jin-tu Fan</u> , Cornell University
12:45–2:00	Lunch (Foyer and Gallery)	

Afternoon Session

1:30– 2:00	Poster Session (Gallery)	
2:00	Keynote Speaker: Dr. Vladan Koncar, Ensait, France <i>Textile Electronics—Flexible Circuits</i> (Foyer Auditorium)	
	Foyer	Gallery
	Session: Electrospinning <i>Juan Hinestroza, Chair</i> <i>Cornell University</i>	Session: Protection <i>Cheryl Gomes, Chair</i> <i>QinetiQ North America</i>
2:45	<i>Thermo-responsive Electrospun Membranes for Applications in Medical Textiles</i> <u>Ana Maria Popa</u> , Stefanie Zuber, Francisco Teixeira, and René Rossi, Empa	<i>Measurement and Simulation of the Fabric and Clothing Performance on Electromagnetic Radiation</i> <u>Yan Chen</u> and Li Li Zhang, Soochow University
3:05	<i>Prediction of PAN Nanofibers Diameter and Defects Using Neural Network</i> <u>Maryam Yousefzadeh</u> , Amirkabir University of Technology	<i>Prediction Models for Effective Auditory Camouflage Performance of Korean Military Combat Uniform Fabrics</i> <u>Jeehyun Lee</u> , Eunjung Jin, Kyulin Lee, and Gilsoo Cho, Yonsei University
3:25	<i>Understanding the Effect of Electrospinning Distance on the Morphology of PAN Nanofibers</i> <u>Manjeet Jassal</u> , Sandip Basu, and Ashwini Agrawal, Indian Institute of Technology	<i>Influence of Water Repellent Finishing on Outer Water Sportswear Regarding Thermal Insulation</i> <u>Maria Jose Abreu</u> ¹ , A. Catarino ¹ , C. Cardoso ¹ , and S. Kueblbeck ² , ¹ University of Minho, ² Fachhochschule fuer Technik und Wirtschaft
3:45	Break	Break
4:15	<i>Fabrication and Characterization of Chitosan-Gelatin Nanofibers</i> <u>Sima Habibi</u> , Zahra Rezvani, and Sadaf Samimi, Islamic Azad University	<i>Analyzing Impact Penetration Performance of Fabrics Used in Protective Clothing</i> <u>Guowen Song</u> ² , Yehu Lu ^{1,2} , Jun Li ¹ , and Wei Cao ³ , ¹ Donghua University, ² University of Alberta, ³ California State University-Northridge
4:35	<i>Electrospinning of Cyclodextrin Functionalized Nanofibers</i> <u>Zeynep Aytac</u> , Fatma Kayaci, Asli Çelebioğlu, Yelda Ertaş and Tamer Uyar, Bilkent University	<i>Analyzing the Discharged Energy and Its Contribution to Thermal Performance of Protective Clothing Upon Hot Liquid Splash</i> <u>Farzan Gholamreza</u> , Guowen Song, and Mark Ackerman, University of Alberta
4:55	<i>Blend Electrospinning of Polycaprolactone/Chitosan Nanofibres</i> <u>Karen De Clerck</u> , I. Steyaert, L. Van der Schueren, Ghent University	<i>Electronic Textile Cables for Advanced Soldier Systems</i> <u>Cheryl Gomes</u> , Brian Farrell, Richard Streeter, Mike Morkos, and Dave McDonald QinetiQ North America, Inc.

5:15 Transfer to Town (Chartered Bus)

6:00 Walking Guided City Tour

7:00 Reception

Welcome: Dr. René Rossi, Conference Co-chair

Mr. Benedikt Würth, Member of the Cantonal Government of St. Gallen, Head of the Department of Economic Affairs, Representing the City of St. Gallen

Speaker: Dr. Reto Malsina, *No Fibers to Save Resources*

Banquet

Entertainment: Traditional Swiss Music

10:45 Evening Concludes

Thursday, May 24

8:00 Registration and Coffee

Morning Session

8:30	Keynote Speaker Dr. Urs Meier, Empa, Switzerland <i>R&D Needs for Advanced Fibrous Composites in Construction</i> (Foyer Auditorium)	
	Foyer	Gallery
	Session: Fiber Development <i>Yimin Wang, Chair</i> <i>Donghua University</i>	Session: Coating and Finishing <i>Urs Meyer, Chair</i> <i>ETH Zurich</i>
9:15	<i>Pretreatment and Pyrolysis of Rayon-based Precursor for Carbon Fibers</i> <u>Gajanan Bhat</u> ¹ , Kokouvi Akato ¹ , and Wesley Hoffman ² , ¹ University of Tennessee-Knoxville, ² AFRL	<i>Fabrication, Characterization and Applications of Ultrafine Cashmere Guard Hair Powder</i> <u>Kiran Patil</u> ¹ , Rangam Rajkhowa ¹ , Takuya Tsuzuki ¹ , Suzanne Smith ^{2,3} , Xungai Wang ¹ , and Tong Lin ¹ , ¹ Deakin University, ² Australian National Laboratory, ³ Brookhaven National Laboratory
9:35	<i>Flat Fibers: From Fibers to Unidirectional Foils</i> <u>Jan Giesbrecht</u> ¹ , Jérôme Lefèvre ¹ , Theo Tervoort ¹ , Kirill Feldman ¹ , Paul Smith ¹ , and Han Meijer ² , ¹ ETH Zurich, ² Technical University Eindhoven	<i>Textiles with Thermo-adaptive IR-transmission for Heat Insulation in Buildings</i> <u>Stefan Gierling</u> ¹ , Jürgen Meyer ² , Jan Beringer ¹ , and Andreas Schmidt ¹ , ¹ Hohenstein Institut für Textilinnovation GmbH, ² Eberhard Karls Universität Tübingen
9:55	<i>Engineering Melt Spinning Modeling and Mechanical Properties of Polyester Fully Drawn Yarn</i> <u>Chaosheng Wang</u> ¹ , Wei Kong ¹ , Rui Song ¹ , Jingping Ye ² , Huaping Wang ¹ , ¹ Donghua University, ² Fujian Baihong Polyester Fiber Industrial Co.	<i>Methacrylic Acid Finish of Cotton-based Garments</i> <u>Debasish Das</u> and Rajiv Munsri, University of Calcutta
10:15	Break	Break
10:45	<i>Finest Fiber Technologies</i> <u>Martin Dauner</u> , Till Batt, Angela Funk, Martin Hoss, Christoph Rieger, Andreas Ullrich, Heinrich Planck, Institut für Textil- und Verfahrenstechnik Denkendorf	<i>Droplet on a Fiber: Beyond the Barrels and Clam Shells, the Spreading Dynamics</i> <u>David Seveno</u> and Joël Coninck, Université de Mons
11:05	<i>Development of New Functional Fibers for Composites in Aerospace and Railway Industries</i> <u>Jonas Bouchard</u> ^{1,2} , Aurélie Cayla ^{1,2} , Eric Devaux ^{1,2} , and Christine Campagne ^{1,2} , ¹ Université Lille Nord de France, ² ENSAIT	<i>Approach of Wetting Properties of a Plasma-treated Flocked Pile Fabric Under Stress</i> <u>Safi Melki</u> ¹ , B. Biguenet ¹ , D. Dupuis ¹ , and V. Roucoules ² , ¹ ENSISA, ² Institut de Science des Matériaux de Mulhouse

11:25	<i>Structure and Properties of MWNTs Modified UHMWPE Fibers</i> <u>Junrong Yu</u> ² , Xinge Yang ¹ , Yan Li ² , Lei Chen ² , Jing Zhu ² , and Zuming Hu ² , ¹ Linyi University, ² Donghua University	<i>pH Sensitivity of Azo Dyes</i> <u>Thierry De Meyer</u> , Lien Van der Schueren, Karen Hemelsoet, Veronique Van Speybroeck, and Karen De Clerck, Ghent University
11:45	<i>Process Technologies for Biopolymer Staple Fibres in Healthcare Applications</i> <u>Sangeetha Ramaswamy</u> , Jennifer Arif, Mohit Raina, and Thomas Gries, RWTH Aachen University	<i>Enzymatic Hydrolysis of Waste-dyed Cotton Fabrics Enhanced by Ionic Liquid Dissolution for Bacterial Cellulose Production</i> <u>Xiang Guo</u> , Jing Yu Tang, Shan Ming Ruan, Feng Hong, Donghua University
12:05	<i>Properties of POY and Textured Yarn with Different Cross-sectional Shapes</i> <u>Selcen Özkan Hacıoğulları</u> and Osman Babaarslan, Çukurova University	<i>Surface Modification of Cotton Fabrics by a New Reactive Cyclodextrin</i> <u>Malihe Nazi</u> ^{1,2} , Reza Mohammad Ali Malek ¹ , Richard Kotek ³ , ¹ Amirkabir University of Technology, ² Standard Research Institute, ³ North Carolina State University
12:25	<i>Structure, Mechanical and Thermal Properties of a Novel Thermotropic Liquid-Crystalline (TLCP) Polyester Fiber</i> <u>Yimin Wang</u> ¹ , Weimin Qin ² , Yumin Xia ¹ , Yan-Ping Wang ¹ , and Weibiao Zhu ¹ , ¹ Donghua University, ² Engineering Research Center of Technical Textiles	<i>High-speed Impact Resistant Properties of Hybrid Soft Armor Fabrics Coated with Shear Thickening Fluid</i> <u>Tae Jin Kang</u> , Jong Lyoul Park, Seoul National University
12:45–2:00	Lunch (Foyer and Gallery)	

Afternoon Session

1:30–2:00	Poster Session (Gallery)	
2:00	Keynote Speaker: Dr. Thomas Scheibel, University of Bayreuth, Germany <i>Inspired by Nature: Proteins as Biopolymers for Fiber Applications</i> (Foyer Auditorium)	
	Foyer	Gallery
	Session: Smart Fibers and Textiles <i>Dominique Adolphe, Chair</i> ENSISA	Session: Medical Textiles <i>Gang Sun, Chair</i> University of California-Davis
2:45	<i>Electrode Materials for Wearable Electronics</i> <u>Zijian Zheng</u> , Hong Kong Polytechnic University	<i>Polymeric Optical Fiber Fabrics for Medical Applications</i> <u>Lukas Scherer</u> ¹ , Marek Krehel ¹ , Bastien Schyr ² , Stéphanie Pasche ² , Rudolf Hufenus ¹ , and René Rossi ¹ , ¹ Empa, ² CSEM
3:05	<i>Responsive Camouflage Textiles</i> <u>Bhupendra Butola</u> , Muksit Ahamed Chowdhury, and Mangala Joshi, Indian Institute of Technology	<i>New Method of Evaluation of Permethrin-treated Fabrics</i> <u>Laurence Schacher</u> and Dominique Adolphe, ENSISA

3:25	<i>Protective and Insulative Coatings for e-Fibers</i> <u>Sabyasachi Gaan</u> ¹ , Sumedh Ganu ¹ , H�el�ene Ritter ¹ , Patrick Rupper ¹ , Felix Reifler ¹ , Markus Faller ¹ , and Christian Roth ² , ¹ Empa, ² ETH Zurich	<i>Analysis of Sub-bandage Pressure Generated by Compression Bandages Under Dynamic Conditions</i> <u>B. Kumar</u> , A. Das, and R. Alagirusamy, Indian Institute of Technology
3:45	Break	Break
4:15	<i>Design and Material Consideration for Multifunctional Mass-customized Smart Sportswear: Diet-facilitating Suit</i> <u>Hoon Joo Lee</u> ² , Junghyun Park ¹ , and Robert Fornaro ² , ¹ Pusan National University, ² North Carolina State University	<i>Bioactive Textiles from Ratanjot</i> <u>Anjali Arora</u> , Deepali Rastogi, Deepti Gupta, and M. L. Gulrajani, Indian Institute of Technology
4:35	<i>DSSC Textiles with Arranged Colors</i> <u>Youngjin Chae</u> and Eunae Kim, Yonsei University	<i>Biodegradable Fibres for Cardiac Repair</i> <u>G�eraldine Guex</u> ^{1,2} , A. Frobert ³ , S. Cook ³ , G. Fortunato ² , E. K�orner ² , D. Hegemann ² , C. Fouassier ¹ , J. Valentin ³ , T. Carrel ¹ , H. Tevaearai ¹ , and M. N. Giraud ³ , ¹ Clinic of Cardiovascular Surgery, ² Empa, ³ University of Fribourg
4:55	<i>Plasma Coating of Fibers: Specifics and Opportunities</i> <u>Dirk Hegemann</u> , Martin Drabik, Barbara Hanselmann, and Martin Amberg, Empa	<i>Protein Nanofibers Fabricated by Extruding Immiscible Polymer</i> <u>Gang Sun</u> , Ang Lu, and Abolfazl Aghanouri, University of California-Davis

5:15 Empa Lab Tour

6:30–9:00 Foyer: Catwalk and Poster Awards with Hors d’oeuvres & Beverages

Friday, May 25

8:00 Coffee

8:30	Keynote Speakers: Dr. Phillip Gibson, Natick, USA, and Dr. Ren�e Rossi, Empa, Switzerland <i>Modeling of Thermal Comfort: From Microscale to Macroscale</i> (Foyer Auditorium)	
	Foyer	Gallery
	Session: Fiber-related Nanotechnology <u>Yusuf Ulcay</u> , Chair <i>University of Uluda�</i>	Session: New Characterization Methods <u>Ian R. Hardin</u> , Chair <i>University of Georgia</i>
9:15	<i>Self-healable, Robust Superamphiphobic Fabrics from a Nanocomposite Coating</i> <u>Tong Lin</u> , Hongxia Wang, and Hua Zhou, Deakin University	<i>Morphological Defects of Cotton Fibers</i> <u>Adkham Paiziev</u> , Shukhrat Abdullaev, and Sarvar Khalilov, Uzbek Academy of Sciences

9:35	<i>Application of Nanodispersions of Silicon Dioxide for Treatment of Textile Materials</i> <u>Svitlana Karvan</u> ¹ , Olga Paraska ¹ , Andrii Marynin ² , and Valentin Olishchevskiy ² , ¹ Khmelnitsky National University, ² National University of Food Technologies	<i>Objective Evaluation of Fabric Hand Characteristics Using Extraction Principle</i> <u>Apurba Das</u> , Indian Institute of Technology
9:55	<i>Development and Characterization of Novel Carbon Nanomaterial-based Multiscale Composites</i> <u>Alagirusamy Ramasamy</u> ² , Sohel Rana ¹ , Raul Fanguero ¹ , and Mangala Joshi ² , ¹ University of Minho, ² Indian Institute of Technology	<i>Thermal Degradation of Heterocyclic Aramid Fibers in AIR</i> <u>Lei Chen</u> , Chengcheng Hu, Junrong Yu, Jing Zhu, and Zuming Hu, Donghua University
10:15	Break	Break
10:45	<i>Measuring Electrostatic Forces on Fibers at the Nanoscale</i> <u>Juan Hinestroza</u> ³ , Alba Avila ¹ , and Sebastian Bonilla ² , ¹ Universidad de los Andes, ² University of Oxford, ³ Cornell University	<i>Study on Physical and Structural Properties of Modified Finer, Low-torque Ring Yarns</i> <u>Feng Jie</u> , Bingang Xu, and Xiaoming Tao, Hong Kong Polytechnic University
11:05	<i>A Study of Pyrolysis Conditions on Carbon Nanofiber Properties Produced from Freeze-dried Cellulose Nanofibers</i> <u>Ehsan Jazaeri</u> , Takuya Tsuzuki, and Xungai Wang, Deakin University	<i>Fibre Orientation-induced Mechanical Anisotropy in Needle-punched Nonwovens</i> <u>S. M. Ishtiaque</u> , Dipayan Das, and Shivendra Yadav, Indian Institute of Technology
11:25	<i>Aggregation Behaviour of Silver Nanoparticles of Different Shapes in Liquid Media and Its Effect on Antimicrobial Activity</i> <u>Sangita Paul</u> , Manjeet Jassal, and Ashwini Agrawal, Indian Institute of Technology	<i>Atomic Force Microscopy for the Characterization of Fibers and Functionalized Surfaces</i> <u>Jörn Lübben</u> , Albstadt-Sigmaringen University of Applied Sciences
11:45	<i>Development of PET Fibers for Photocatalytic Degradation of Organic Molecules</i> <u>Giuseppino Fortunato</u> , A. Tenniche, L. Gottardo, F. A. Reifler, K. Michalow, and R. Hufenus, Empa	<i>Chemical and Mechanical Characterization of Textile Fibers from Caribbean Saccharum Officinarum</i> <u>Davina Michel</u> , J. Y. Drean, and O. Harzallah, Université de Haute Alsace
12:05	<i>Bionanocellulose Fabrication and Functionalization</i> <u>Shiyan Chen</u> , Weili Hu, Na Yin, Feng Hong, Bin Ding, and Huaping Wang, Donghua University	<i>Studies on Multicomponent Nonwoven Filter Media</i> <u>Rabisankar Chattopadhyay</u> , Dipayan Das, Arun Kumar Pradhan, and S. N. Singh, Indian Institute of Technology
12:25	<i>Preparation and Properties of Poly(ethylene terephthalate)/Nanoclay Nanocomposites Fibers</i> <u>Yusuf Ulcay</u> ^{1,2} , Rustam Hojiyev ¹ , and Şule Altun ¹ , ¹ University of Uludağ, ² Bursa Technical University	<i>Noncontact Ultrasonic Characterization Techniques for Fibrous Materials Analysis</i> <u>Thamizhisai Periyaswamy</u> ¹ , Karthikeyan Balasubramanian ² , and Christopher Pastore ³ , ¹ Central Michigan University, ² Temple University, ³ Philadelphia University
12:45	Concluding Remarks and Farewell (Foyer Auditorium)	

Poster Presentations (Gallery)

Session Chairs

Laurence Schacher, ENSISA; Michael Ellison, Clemson University; and Stephen Michielsen, North Carolina State University

Name	Title
01 Dominic Kehren	<i>Microgel-based Fibers</i>
02 Seung Jin Kim	<i>The Physical Property of Aramid/Nylon ATY According to the Process Parameters</i>
03 Leszek Jarecki	<i>Modeling of Pneumatic Melt Spinning of Fibers in the Laval Nozzle: Effects of the Die Assembly Geometry</i>
04 Chui Ha Au	<i>Investigation of Ultraviolet Protective Cotton Knitwear Fabric with Chemical Approach</i>
05 Wai Yin Wong	<i>A Study on Fabric Porosity and UV Protection of Knitted Fabrics</i>
06 Ka Po Maggie Tang	<i>Water Transport Property and Wetness Sensation of Fabrics</i>
07 Hoon Joo Lee	<i>Self-cleaning Superoleophobic Surfaces</i>
08 Bianca-Michaela Wölfling	<i>Improvement of Temperature and Moisture Management of Personal Protective Equipment for Fire Fighters</i>
09 Magdalena Zwolińska	<i>The Study of Effectiveness of PCM Used in Protective Clothing</i>
10 Hadj Latroch	<i>Contribution to the Development of New Tools for Mechanical Characterization of Fabrics and Textiles Sensory Profiles</i>
11 Zhi-juan Pan	<i>Effect of Spinning Technological Conditions on the Mechanical Properties of PA6/SWNTs Nanofiber Filaments</i>
12 Foued Khoffi	<i>Viscoelastic Behavior of Textile Vascular Prostheses</i>
13 Mathieu Coquelle	<i>Fire Retardant Nano-architected Polyamide-6 Fibers</i>
14 Tieling Xing	<i>Surface-initiated ATRP on Cotton Fabric in Water Aqueous</i>
15 In-Sook Kang	<i>Studies on the Detergency of Films Treated with Plasma as a Function of the Soil Components in Aqueous and Nonaqueous Media for Developing Self-cleaning Industrial Materials</i>
16 Maofei Mei	<i>Nonrotationally Symmetrical Droplet on Nylon Fiber</i>
17 Yuti Zhang	<i>The Cultural Interpretation of the Silk Elegant Characteristic from Chinese Ancient Culture Perspective</i>
18 Haewon Chung	<i>Adsorption and Removal of Volatile Organic Compounds on β-Cyclodextrin Finished Fabrics</i>

- 19 Yidan Zheng *Modification of Silk Fabric with Gold Nanorods*
- 20 Emel Mert *Thermal Comfort Properties of Wool and Regenerated Fibers Blended Woven Fabrics*
- 21 Ian R. Hardin *Analysis of Structure of Graphene-coated Fibers*
- 22 Xinhou Wang *Simulation of Melt-blown Fiber Foundation Using SLS Model*
- 23 Fumei Wang *Hand Comparison of PTT and Nylon Fabrics in Extremely Cold Environment*
- 24 Xuemei Ding *Data Uncertainty Simulation for Textile Carbon Footprint*
- 25 Baturalp Yalçınkaya *Fabrication of Electrospun PVB/Epoxy/MWCNT Composite Nanofibers*
- 26 Fatma Kayacı *Encapsulation of Vanillin/Cyclodextrin Inclusion Complexes in Electrospun Nanowebs: High-temperature Stability and Slow Release of Vanillin*
- 27 Aslı Çelebioğlu *Polymer-free Cyclodextrin Nanofibers via Electrospinning*
- 28 Yelda Ertas *Electrospun Nanowebs Incorporating Essential Oil/Cyclodextrin Inclusion Complexes*
- 29 Ganna Ungur *Polyurethane Nanofibers Containing the Nanoparticles of Metal Oxides*
- 30 Kyung Lee *Changes in Performance Characteristics of Vapor-permeable Waterproof Materials Based on Electrospun Nanofibers After Repeated Laundering*
- 31 Guira Park *Heat and Moisture Transfer Properties of SMA-attached Cold Protective Fabrics Determined by Human-Clothing-Environment Simulator*
- 32 Youngmi Park *Extraction of the Dye from Dendropanax by Fermentation of Phellinums linteus Cultivation*
- 33 Tiago Sotto Mayor *A Cooling Solution for Footwear—Numerical Analysis*
- 34 Duckwon Lee *Effect of Slit and Motion on the Heat and Moisture Transport of Fabrics Using Human-Clothing-Environment Simulator*
- 35 Yusuf Ulcay *Sound Absorptive Nonwovens for Indoor Structures*
- 36 Mohamed Dallel *Processing and Characterization of a New Ring-spun Yarn Based on Alfa Fiber (Stipa Tenacissima L.)*
- 37 Mohamed Kechiche *Mechanical Characterization of Composite Polyethylene Terephthalate/Copper Filaments*
- 38 Maria Jose Abreu *Influence of Different Finishing Treatments Over Mechanical and Thermal Properties of Bed Linen*
- 39 Thamizhisai Periyaswamy *Analyzing the Bioharmony of Battle Dress Uniforms (BDUs) Through Human Activity Index (HAI)*
- 40 Qing Chen *An Investigation of Water Transport Properties of Polyester Knitted Fabrics*

- 41 Dominique Adolphe *On Compression/Recovery of Goose Down*
- 42 Fatma Yener *Effect of Jet Electric Current on Jet Regimes in Electrospinning of Polyvinyl Butyral Solutions*
- 43 Małgorzata Matusiak *New Applications of Cotton Fibres*
- 44 Yongchun Zeng *Study on Airflow Field of the Melt-blowing Slot Die via CFD and Genetic Algorithm*
- 45 Jinping Guan *Synergistic Flame Retardancy Modificatin of Silk Fabric with Phosphorus/Nitrogen-based Vinyl Monomers*
- 46 Swapna Mishra *Strain Distribution in Woven Fabrics Under Uniaxial Tensile Deformation: Effect of Construction*
- 47 Dahua Shou *Dual-scale Modeling of Porous Fibrous Materials*
- 48 Mustafa Kahraman *Development of Polymer-based Carbon Nanofiber Production*
- 49 Y. Emre Kiyak *Contributions to Modeling of Jet Route of Electrospinning Process*
- 50 Masoud Hezari *Combustion Characterization and Dye Ability of PA6/MMT/MH Fibers*
- 51 Yanping Liu *Nonlinear Compression Behavior of Warp-knitted Spacer Fabric*
- 52 Osman Armağan *Plasma-induced Adhesion Improvement on Laminated Fabrics*
- 53 Na Liu *Modification and Fiber Formation of Cellulose Acetate*
- 54 Wai Fong Lau *Design and Development of Seamless Knitted Bra*
- 55 Aysin Dural Erem *Antimicrobial Activity of PP/TiO₂ Films*
- 56 Feng Hong *Effects of Six Sugars from Straw on Bacterial Cellulose Production*
- 57 Karen De Clerck *A New Tool to Evaluate Reactivity of Novel Bioengineered Cotton Fibers*
- 58 Andrea Weber Marin *Characteristic of Bamboo Fibers for the European Market and Contemporary Textile Design*
- 59 Sangeetha Ramaswamy *Customer-oriented Quality Characterization of Technical Nonwoven Textiles*
- 60 Mazeyar Gashti *UV Radiation-induced Flame Retardant Cellulose Fiber by Using Polyvinylphosphonic Acid/Carbon Nanotube Composite Coating*
- 61 Maryam Yousefzadeh *Fabrication of Vertically Aligned Electrospun Anatase TiO₂ Nanotubes for Dye-sensitized Solar Cells*
- 62 Engin Akçagün *Investigation of Fabric Stiffness on Tencel Fabrics in Terms of Clothing Comfort*
- 63 Zehra Yildiz *Investigation of the Properties of Core Spun Yarn Containing a Metal Wire*
- 64 Patrycja Bosowski *Acceptability Studies on Smart Textiles: An Interdisciplinary Cooperation to Understand Users' Acceptance*
- 65 Priscilla Reiners *Chemical Retting of Apocunum Venetum Fibers*

- 66 Long Wu *Effects of Moulding Conditions and Scanning Positions on 3D Geometric Shape of Polyurethane Moulded Bra Cups*
- 67 Romain Bocquet *Friction Mechanisms of Hairy Fabrics*
- 68 Frank Hermanutz *Cellulosic Fibres with New Properties Based on Ionic Liquid Technology*
- 69 Farzaneh Alihosseini *Effect of Tanning Agent on Electrospinning of Gelatin Nanofibers and Their Stability*
- 70 Michel Tournalonias *Velvet Simulation by a Tactile Actuator: STIMTAC*
- 71 Marie-Ange Bueno *Compression/Indentation of Velvet Fabrics*
- 72 Guowen Song *Evaluating the Physiological Performance of Thermal Protective Clothing to Control Heat Stress*
- 73 Ghada Soliman *Synthesis of Quaternised Tertiary Amine s-Triazine Reactive Dyes and Their Application*
- 74 Urs Meyer *Yarn Tension on the Spinning Triangle*
- 75 Manjeet Jassal *Interaction and Self-cleaning Activity of Titania Nanoparticles on Undyed and Dyed Cotton*

2012 Fiber Society Officers

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