

SCIENTIFIC PROGRAM

LECTURES

MONDAY, JUNE 13, 2016

BUILDING A

17.00	Registration
19.00 – 22.00	Welcome drink

TUESDAY, JUNE 14, 2016

BUILDING A

MAIN CONGRESS HALL

9.00 – 10.00 OPENING CEREMONY

Jan Marek | IFATCC President

Bohuslav Sobotka | Prime Minister of the Czech Republic

Martin Netolický | President of the Pardubice Region

Lubomír Franc | President of the Hradec Králové Region

Martin Charvát | Mayor of the City of Pardubice

Petr Kalenda | Dean of Faculty of Chemical Technology,
University of Pardubice

Josef Liška | Synthesia a.s., Pardubice

10.10 – 12.40 PLENARY LECTURES

Chairman: R. Hrdina | Czech Republic

10.10

Tradition and High-Tech Development – Keys to the Changing
Textile Market

J. Marek | Dvůr Králové nad Labem, Czech Republic

10.40

Can the European Textile Innovation Ecosystem Successfully
Meet the Challenges of Rapidly Evolving Global Markets?

W. Lutz | Brussels, Belgium

11.10 – 11.30 *Coffee break*

Chairman: A. Braz Costa | France

11.30

Textranet – A Systematic Approach to the International and
Interdisciplinary Innovation Activities in Textiles

A. Braz Costa | Textranet, Paris, France

11.50

Challenge Future – Industrie 4.0 in the Textile Industry

G. Zeidler, S. Döhler, D. Zschenderlein | Chemnitz, Germany

12.10

Collective Research in the Czech Republic – Influence of Clutex and ČTPT to Intensify the RDI Activities in Czech Textile and Clothing Industry

L. Fouňová, M. Beran | Liberec, Czech Republic

12.40 – 14.00

Lunch and **POSTER Section**

Detailed POSTER program can be found on pages 25 – 30.

BUILDING B

HALL A

14.00 – 17.50

SECTION 1 – ADVANCED FIBRES

Chairman: R. Hrdina | Czech Republic

14.00

New Medical Staple Micro-Fibres

R. Hrdina¹, L. Burgert¹, V. Velebný², V. Zápotocký^{2,3}, V. Štěpánková² |

¹Pardubice, ²Dolní Dobrouč, ³Prague, Czech Republic

14.20

Manufacturing, Textile Processing and Properties of Hyaluronan Based Monofilament Fibers

T. Pitucha, J. Betak, K. Lipenska, D. Svadlak, V. Zapotocky, V. Velebny |

Dolní Dobrouč, Czech Republic

14.40

Key Aspects of Electrostatic Spinning of Bio-Polymer Nanofibres

M. Pokorny, J. Rebicek, J. Klemes, A. Kotzianova, K. Knotkova,

V. Velebny | Dolní Dobrouč, Czech Republic

15.00

Scale-Up of 4spin Technology

K. Knotkova, M. Pokorny, K. Adela, V. Velebny | Dolní Dobrouč,

Czech Republic

15.20

Novel Chitin/Chitosan-Glucan Wound Dressing: Isolation, Characterization and Medical Applications

A.M.Abdel-Mohsen^{1,2}, J. Jancař¹, A. Hebeish², R.Hrdina³ | ¹Brno,

Czech Republic, ²Cairo, Egypt, ³Pardubice, Czech Republic

15.40 – 16.10

Coffee break

Chairman: L. Kubáč | Czech Republic

16.10

Conductive Polymers – Materials for Smart Textile Systems

L. Kubáč, J. Akrman, F. Josefík, D. Dvorský, L. Martinková, J. Marek |
Rybitví, Dvůr Králové Nad Labem, Czech Republic

16.30

Nanofibrous Scaffolds from Electrospun Composite
Nanofibers

A. Mahmudi, M. K. Mehrizi, M. A. Tavanaie | Yazd, Iran

16.50

Modeling and Preparation of Nanofibre and Composite
Nanostructures

D. Kimmer¹, I. Vincent¹, L. Lovecká¹, W. Sambaer¹, M. Zatloukal¹,
J. Ondráček², J. Lev³, T. Kazda⁴, T. Syrový⁴, J. Mališ² | ¹Zlin, ²Prague,
³Brno, ⁴Pardubice, Czech Republic

17.10

Fabrication of Multi-Walled Carbon Anotubes/
Polyvinylpyrrolidone Composite Nanofibers for EMI Shielding
Application

A. M. Shoushtari¹, K. Nasouri^a, A. Haji² | ¹Tehran, ²Birjand, Iran

17.30 – 17.50

Antibacterial Poly-L-Lactide Acid / Polyvinyl Alcohol
Nanofibrous Hybrid Yarns

H. Maleki¹, H. Barani² | ¹Rasht, ²Birjand, Iran

HALL B

14.00 – 17.50

SECTION 2 – DYES AND DYEING

Chairman: Z. Youssef | Egypt

14.00

Added-Value Products for Sustainable Textile Developments
in Egypt

Z. Youssef | Giza, Egypt

14.30

Global Scenario of Textile Dyestuffs

J. Mehta | India

15.00

The Investigation of Possible Use of Olive Oil Production
Wastes in Wool Dyeing

G. Erkan¹, B. B. Avci¹, E. Torgan², R. Karadağ² | ¹Izmir, ²Istanbul, Turkey

15.20

Archroma's Earthcolors

N. Estapé | Vienna, Austria

15.40 – 16.10

Coffee break

Chairman: J. Rocha Gomes | Portugal

16.10

Development on Dyeing and Printing with Dyes in Nanoparticles

J. Rocha Gomes | Guimarães, Portugal

16.30

Dyeing of Polyester Fabric with Biobased Dye and Assessment of Environmental Impacts Using LCA Tool

T. Agnhage, A. Perwuelz, N. Behary | Lille, France

16.50

Alterbio – Environment Friendly Functional Barrier Textiles Based on Photoactive Pthalocyanine Dyeings

L. Martinková¹, R. Kořínková², M. Karásková², M. Vrtalová³, V. Špelina³ | ¹Liberec, ²Pardubice, ³Prague, Czech Republic

17.10

Sustainability of Natural Dyes Nowadays

R. Karadag | Istanbul, Turkey

17.30 – 17.50

Demonstration of New Natural Dyes from Algae as Substitution of Synthetic Dyes Actually Used by Textile Industries

S. Moldovan¹, M. Ferrándiz¹, E. Mira¹, K. L. Gómez Pinchetti¹, T. Rodriguez¹, H. Abreu², A. M. Rego², B. Palomo², P. Caro¹ | ¹Spain, ²Portugal

HALL C

14.00 – 15.40

SECTION 3 – FUNCTIONAL TEXTILES (NANO)

Chairman: J. Militký | Czech Republic

14.00

Light Side Emitting Textile Structures

D. Křemenáková, J. Militký, R. Mishra | Liberec, Czech Republic

14.20

Advanced Textiles with Enhanced Electrical Conductivity

V. Tunáková, J. Militký | Liberec, Czech Republic

14.40

Development of Self Reinforced Polypropylene Composites from Polypropylene Micro Powder

V.S.Bebe, J. Militký | Liberec, Czech Republic

15.00

Optical Properties of Photochromic Pigment Incorporated Polypropylene Filaments: Influence of Pigment Concentrations and Drawing Ratios

A.P. Periyasamy, M. Viková, M. Vik | Liberec, Czech Republic

15.20

Nanomaterials and Innovative Technologies in Textile Industry

D. Rástočná Illová, J. Šesták, L. Balogová | Žilina, Slovak Republic

15.40 – 16.10

Coffee break

16.10 – 18.10

SECTION 4

PRODUCTION SUSTAINABILITY TOOLS

Chairman: R. Gebhardt | Germany

16.10

Mass Customized Products – Challenges to the Textile Industry for Tomorrow's Production

R. Gebhardt | Chemnitz, Germany

16.30

Demonstration of Cyclodextrin Techniques in Treatment of Waste Water in Textile Industry to Recover and Reuse Textile Dyes

E. Franco¹, M. Ferrándiz¹, S. Moldovan¹, P. Cosma², P. Semeraro², V. Rizzi², P. Fini², E. Núñez¹, J. A. Gabladón¹, I. Fortea¹, E. Pérez¹, M. Ferrándiz¹ | ¹Spain, ²Italy

16.50

Enhanced Light Responsive Fibres for Thermal Applications

A. Braz Costa | Famalicão, Portugal

17.10

Requirements for R&D in Different Technical Applications

H. Erth | Lengenfeld, Germany

17.30

“ECWRTI” and “SET” – The Projects Supporting The Efficient Use of Resources in Textile Industry

O. Chybová, P. Janák, P. Bartušek, M. Beran | Liberec, Czech Republic

17.50 – 18.10

Modeling of Multicomponent Textile Waste Recycling

K. Kupka¹, A. Aneja², J. Militky³ | ¹Pardubice, Czech Republic, ²Greenville, NC, USA, ³Liberec, Czech Republic

WEDNESDAY, JUNE 15, 2016

BUILDING A

MAIN CONGRESS HALL

9.00 – 12.00

PLENARY LECTURES

Chairman: F. Vermandel | Singapore

9.00

DyStar's Contribution to Innovation & Bat for the Textile Industry

F. Vermandel | Singapore

9.30

Towards a Circular Economy in Textiles: Resyntex and the European Union

A. P. Aneja | Greenville, USA

10.00

Teaching Cotton New Tricks: Molecular Strategies for Creating Smart Fibers via Manipulation of Nanoscale Phenomena

J. P. Hinestroza | Ithaca, NY, USA

10.30 – 11.00

Coffee break

Chairman: A. Gedanken | Israel

11.00

Making the Hospital a Safer Place by the Sonochemical Coating of the Textiles with Antibacterial Nanoparticles

A. Gedanken | Ramat-Gan, Israel

11.30

Synthesis of Nano-Porous Aramid Aerogel Fibre Through Supercritical Drying

K. Hirogaki, L. Du, Y. Suzuki, I. Tabata, T. Hori | Fukui, Japan

12.00 – 13.00

Lunch and POSTER Section

Detailed POSTER program can be found on pages 25 – 30.

HALL A

13.00 – 17.40

SECTION 5 EFFICIENT PROCESSING / TESTING

Chairman: M. Vik | Czech Republic

13.00

Novel Method of In-Line Color Measurement

M. Vik, F. Founě, P. Škop | Liberec, Czech Republic

13.20

Tencel® Combipolish Process an Alternative Finishing for Tencel®/ Cotton Jersey

K. Kämpf, M. Köllerer, J. Liggins, J. Kuilderd | Lenzing, Austria

13.40

Allicin-Conjugated Nanocellulose as A Finishing for Imparting antibacterial Properties to Polyester and Cellulose-Polyester Fabrics

M. K. Mehrizi, S. H. H. Moghaddam, R. Jafary, A. Jebali | Yazd, Iran

14.00

Cellulose from Waste Jute Fibers: Extraction and Characterization

Ü. H. Erdoğan, H. Duran | Izmir, Turkey

14.20

Essentials of Light Stability Testing of Textiles

J. Quill¹, S. Fowler¹, A. Giehl², J. Regan³ | ¹Ohio, USA, ²Saarbrücken, Germany, ³Bolton, United Kingdom

14.40

Color Communication in Textile and Automotive Supply Chains

F. Olschewski | Datacolor

15.00

Physical Characterization of a Sheath/Core Low Melt Polyester Fibre Used in Thermal Insulation Nonwovens

S. Zahour^{1,2,4}, B. Mazian^{1,2,3}, J. A. Turner³, A. Saiter^{1,2}, J. M. Saiter^{1,3} | ¹Cean, France, ²Saint Etienne du Rouvray, France, ³Nebraska, USA, ⁴Dénestanville, France

15.20 – 15.40

Coffee break

Chairman: D. Křemenáková | Czech Republic

15.40

Prediction of Textile Structures' Thermal Comfort

D. Křemenáková, J. Militký, R. Mishra, G. Zhu | Liberec, Czech Republic

16.00

Design and Development of Embroidered Textile Electrodes for ECG and Breath Rate Measurement

T. Kannaian¹, K. Sonica², G. Thilagavathi¹ | ¹Coimbatore, ²Bangalore, India

16.20

Effect of 3-Dimensional Knitted Spacer Fabric Characteristics on Its Thermal and Compression Properties

V. Arumugam, R. Mishra, J. Militky, D. Kremenakova,
V. B. R. Subramanian | Liberec, Czech Republic

16.40

Investigations on Acoustic Properties of Coir and Luffa Fibrous Mats

G. Thilagavathi, S. NeelaKrishnanan | Coimbatore, India

17.00

Symbiosis of Applied Research and Technical Standardisation

P. Nasadil, H. Polášková | Brno, Czech Republic

17.20 – 17.40

Correlations of the Characteristics of Work Uniforms

E. Visileanu, C. Mihai, A. Ene, L. Surdu | Bucharest, Romania

HALL B

13.00 – 15.20

SECTION 6 EFFICIENT DYESTUFFS APPLICATION / TESTING

Chairmen: B. Zhong, C.D. Yang | China

13.00

Eco-Friendly Cool Transfer Printing Technology for Polyamide Fabric

B. Zhong, C.D. Yang | Shanghai, China

13.20

Controlled Minimal Application on Knitwear

P. Tolksdorf | Mönchengladbach, Germany

13.40

Light Stabilization of Reactive AZO Dyes by Screening of the Photochemically Active Light

K. Sirbiladze¹, A. Vigi², T. Sirbiladze¹, I. Rusznak² | ¹Kutaisi, Georgia,
²Budapest, Hungary

14.00

Pulsar: A True Revolution in Yarn Package Dyeing Technology

D. Bellini, M. Fassi | Italy

14.20

Comparison of Different Methods Used for the Color Measurement of Cotton

M. Vik, N. Khan, M. Vikova | Liberec, Czech Republic

14.40

Functionalization of Textiles Using 3D Printing – Add-On Technology for Textile Applications Testing New Material Combinations

M. Kogger, M. Lutz, M. Rabe | Mönchengladbach, Germany

15.00

Colour Segmentation in Yarn-Dyed Woven Fabric Images by Using K-Means Clustering

B. Yildirim¹, B. Kolčavová Sirková² | ¹Erciyes, Turkey, ²Liberec, Czech Republic

15.20 – 15.40

Coffee break

15.40 – 17.40

SECTION 7 – SUSTAINABLE PROCESSING

Chairman: M. Němec | Czech Republic

15.40

The Future of Organic Colorants in Czech Republic, Influence of EU Legislation, End-Users Requirements and Standards

J. Minaříková, M. Němec | Pardubice, Czech Republic

16.00

Comparative Study of Dyeing Performance of Soybean Fibre and Wool

A. K. Patra¹, Astha² | ¹Bhiwani, India, ²Panipat, India

16.20

Amphiphilic Polymeric Microcomposites for Natural Fibers Dyeing

M. Ruse, S. Peretz, V. Raditoiu, A. A. Athanasiu, L. C. Oproiu, M. Deaconu, C. Filipescu, R. Senin | Bucharest, Romania

16.40

Comparative Life Cycle Assessment Study for Plasma and Conventional Treated Fabrics

L. Surdu, C. Ghituleasa, I. R. Radulescu, O. Iordache | Bucharest, Romania

17.00

Two Sustainable Developments of the Chemical Wastewater Treatment in Textile Finishing

H. J. Nagy¹, K. Órsi¹, V. M. Levente¹, Á. Orbán¹, Á. Tóth², I. Rusznák¹, P. Sallay¹, A. Víg¹ | ¹Budapest, Hungary, ²Tanakajd, Hungary

17.20 – 17.40

Textile Wastewater Treatment System Based on the Idea of Closed Water Circuit in the Textile Company Biliński Poland

L. Bilińska, K. Biliński, S. Ledakowicz | Łódź, Poland

13.00 – 15.20**SECTION 8****TEXTILE SURFACE TREATMENT***Chairman: A. Perwuelz | France*

13.00

Hydrophilic to Superhydrophilic Pet Textile Surfaces**A. Perwuelz, N. B. Massika, C. Campagne | Lille, France**

13.20

Improved Attachment of Titanium Dioxide Nanoparticles on Cotton Fabric Using Plasma Treatment and Chitosan Coating**A. Haji¹, S. Hashemizad², S. Dehkani² | ¹Birjand, ²Tehran, Iran**

13.40

Low-Temperature Plasma Treatments in the Design of Polypropylene Surgical Meshes for Hernia Repair**C. Labay^{1,2}, C. Canal², A. Navarro¹, M. Modic³, U. Cvelbar³, M. Quiles⁴, M.A. Arbos², F.J. Gil², J.M. Canal¹ | ¹Terrassa, ²Barcelona, Spain, ³Ljubljana, Slovenia**

14.00

Effect of Oxygen and Nitrogen Plasma Treatments on Natural Dyeing and Tensile Properties of Silk Yarn**A. Haji, H. B. Harati | Birjand, Iran**

14.20

Electrokinetic Phenomena of 3-Aminopropyltriethoxysilane-Based Cotton Finishing**A. M. Grancarić¹, G. Rosace², A. Tarbuk¹, C. Colleoni² | ¹Zagreb, Croatia, ²Bergamo, Italy**

14.40

Plasma and Chitosan Treatments for Improvement of Natural Dyeing and Antibacterial Properties of Cotton and Wool**A. Haji¹, M. K. Mehrizi², S. Hashemizad³ | ¹Birjand, ²Yazd, ³Tehran, Iran**

15.00

Effect of Oxygen Plasma on Surface Properties and Adhesion of Carbon Fibers to Epoxy Resin**A. M. Shoushtari^{1*}, M. B. Borooj¹, A. Haji², E. N. Sabet¹ | ¹Tehran, ²Birjand, Iran**

15.20 – 15.40

Coffee break

15.40 – 17.40

SECTION 9 – EMERGING TECHNOLOGIES

Chairman: M. Martí | Spain

15.40

New Wool Dry Scouring Process

LL. Alerm¹, J. Iglesias¹, M. Tavares², S. Balsells³, M. Jorba³, L. Coderch⁴, M. Martí⁴ | ¹Santa Eulàlia de Ronçana, Spain, ²Guarda, Portugal, ³Terrassa, ⁴Barcelona, Spain

16.00

Technologies to Enhance the Environmental Profile of Wool Floorcoverings

S.J. McNeil, M. R. Sunderland | Christchurch, New Zealand

16.20

Functional and Energy Efficient Textile Coating Systems by Radiation Initiated Photopolymerization of Multi-Functional Acrylic Esters

F. Terzioglu¹, E. Rohleder¹, M. Rabe¹, C. Schmitz², T. Brömme², B. Strehmel² | ¹Mönchengladbach, ²Krefeld, Germany

16.40

UV-Led-Curable Coatings for Technical Textiles – An Ecological and Energy Efficient Technology

R. Lungwitz¹, F. Goethals², J. Marek³ | ¹Chemnitz, Germany, ²Zwijnaarde, Belgium, ³Dvůr Králové nad Labem, Czech Republic

17.00

Innovative Encapsulation Procedures of Biocides for Application in Textile Protection against Bedbugs and Ticks

C. Sanfona¹, G. Romero², M. Ruano², G. Borja¹, A. Tolentino² | ¹Barcelona, ²Terrassa, Spain

17.20 – 17.40

Production and Properties of Nanocellulose Whiskers Prepared from Bleached Cellulosic Fibres

E. Csiszár, P. Kalic, Á. Köböl, B. Koczka | Budapest, Hungary

BUILDING A

MAIN CONGRESS HALL

9.00 – 12.30

PLENARY LECTURES

Chairman: A. Filarowski | United Kingdom

9.00

Fabric Touch Comfort Tester: A New Approach for Fabric-Skin Touch Comfort Characterization

J. Hu, Y. Li, X. Liao, Q. Li, X. Wu | Kowloon, Hong Kong

9.30

New Horizons of the Italian Textile and Clothing Industry

A. Tempesti | Milano, Italy

10.00

New Routes from Cellulose to Textile Fiber and Ready Products

P. Nousiainen, M. Rissanen, A. Michud, H. Sixta, M. Hummel, H. Setälä | Finland

10.30 – 11.00

Coffee break

11.00

A Model of Education for Young People Working in a Dyehouse

A. Filarowski, M. Clark | Bradford, UK

11.30

Smart Piezoelectric Fabric and Its Application

Y. Tajitsu | Kansai, Japan

12.00

Emerging Technologies for the Textile Factory of the Future

M. V. Parys | Deinze, Belgium

12.30 – 13.30

Lunch and POSTER Section

Detailed POSTER program can be found on pages 25 – 30.

13.30 – 15.30

SECTION 10 – FUNCTIONALISATION

Chairman: G. Rosace | Italy

13.30

New Halogen-Free and Environmentally-Friendly Flame Retardant Finishing for Polyester Fabrics

E. Guido¹, J. Alongi², C. Colleoni¹, G. Malucelli², G. Rosace¹ | ¹Dalmine (BG), ²Alessandria, Italy

13.50

Encapsulation of *Hypericum Perforatum* L. and *Santalum Album* L. Oils by Spray Drying and Their Applications in Textiles

A. Öge, G. Erkan, A. Merih Sarişik, B. Eser | Turkey

14.10

Innovative Functional Finishes for Textiles against Bedbugs and Ticks

C. Sanfona¹, K. Sica², L. Font², M. Brouta-Agnésa², À. Rovira² | ¹Barcelona, Spain, ²Terrassa, Spain

14.30 – 14.50

Coffee break

14.50

Development of Tick Repellent Protective Textile Materials

M. Janícková¹, J. Marek¹, F. Rettich², B. Basim³ | ¹Dvůr Králové nad Labem, ²Prague, Czech Republic, ³Turkey

15.10

Survivability of High Risk, Multiresistant Bacteria on Cotton Treated With Commercially Available Antimicrobial Agents

A. Hanczvikkel¹, A. Vigh¹, Á. Tóth^{1,2} | ¹Budapest, Hungary, ²Stockholm, Sweden

15.30

CLOSING CEREMONY

SCIENTIFIC PROGRAM

LIST OF POSTERS

P1

Novel Nonwoven Fabrics Containing Hyaluronan/Chitosan for Wound Dressing Purposes

R. M. Abdel-Rahman¹, A. M. Abdel-Mohsen^{2,3}, R. Hrdina¹ |

¹Pardubice, ²Brno, Czech Republic, ³Egypt

P2

The Intensification of the Processes of Dyeing and Printing of Natural Protein Fibers Using Redox Systems

A. Aitova, A. Burinskaia | Saint-Petersburg, Russia

P3

New Chitosan Fluorescent Derivatives

N. Almonasy¹, F. Alafid¹, H. Přichystalová¹, A.M. Abdel-Mohsen^{2,3} |

¹Pardubice, ²Brno, Czech Republic, ³Egypt

P4

Recycling of an Agricultural Residue Biosorbent for the Elimination of Cationic Dyes of the Waste Water of Dyeing

A. Arjona, J. M. Canal, J. G. Raurich | Brcelona, Spain

P5

Preparing a Self-Dispersible Carbon Black Pigment for Natural Leather Dyeing

A. A. Athanasiu, M. Crudu, D. Rosu, S. Doncea, M. Deaconu,

L. C. Oproiu, M. Ruse, C. Filipescu | Bucharest, Romania;

P6

High Performance Fluorescence Whitening and UV Blocking Materials for Synthetic Fibers Application

T. Aysha, M. El-Sedik, Y. A Youssef | Giza, Egypt

P7

Application of Silver Nanoparticles as Metal Mordant and Antibacterial Agent in Wool Natural Dyeing Process

H. Barani¹, M. N. Boroumand² | ¹Birjand, ²Kerman, Iran

P8

Modified Bentonite with Different Surfactant and Used as a Mordant in Wool Natural Dyeing

H. Barani | Birjand, Iran

P9

The Effect of Prepared Samples of Sequestering Agents and Chelating Surfactants on Model Washing

P. Bayerová, L. Burgert, M. Černý, R. Hrdina, A. Vojtovič | Pardubice, Czech Republic

P10

The Importance of Oil Content to Obtain Microcapsules

E. Bou-Belda, M. Bonet-Aracil, P. M. Pérez, J. G. Bonet | Alcoy, Spain

P11

Whiteness Index on Cotton Fabrics Due to Chitosan Curing Temperature

E. Bou-Belda, M. Bonet-Aracil, P. Díaz -García, I Montava | Alcoy, Spain

P12

New Types of Sequestering Agents and Chelating Surfactants

L. Burgert, P. Bayerová, M. Černý, R. Hrdina, A. Vojtovič | Pardubice, Czech Republic

P13

Ecological Auxiliaries

F.J. Carrión Fite | Terrassa, Spain

P14

Intensification of the Enzyme-Aided Textile Processes by Low Frequency Ultrasound and Non-Thermal Air-Plasma

E. Csiszár, O.E. Szabó, S. Klébert, B. Koczka | Budapest, Hungary

P15

Optimisation of Hatband Dyeing Conditions

M. Černý, M. Korbelová, P. Bayerová, L. Burgert, A. Vojtovič | Pardubice, Czech Republic

P16

Utilization of Dyeing Apparatus with Infrared Heating for Dyeing of Felt Materials

M. Černý, M. Korbelová, P. Bayerová, L. Burgert, A. Vojtovič | Pardubice, Czech Republic

P17

Dyeing and Printing of Aramide Textile Materials

T. Diankova¹, A. Ostanen¹, N. Fjodorova² | ¹St. Petersburg, Russia, ²Ljubljana, Slovenia

P18

The Method of Coloration of High Performance Fibers Using Nano-Sized Pigment Dispersions

T. Diankova¹, A. Ostanen¹, N. Fjodorova^{2*}, M. Novic² | ¹St-Petersburg Russia, ²Slovenia

P19

Cationization of Natural Fibres

D. Dvorský, J. Marek | Dvůr Králové nad Labem, Czech Republic

P20

Antimicrobial Treatment of Cellulosic Textile Materials Using Sol-Gel Process

K.Zh. Dyussenbiyeva, B.R. Taussarova, A.Zh. Kutzhanova | Almaty, Republic of Kazakhstan

P21

New Solid State Fluorescence Reactive Disperse Dyes for Wool and Polyamide Fibers

M. El-Sedik¹, T. Aysha², Y. Youssef¹, R. Hrdina² | ¹Giza, Egypt, ²Pardubice, Czech Republic

P22

Development of an Innovative Digital Printing Unit for Digitising the Complete Process Chain in Clothing Manufacturing Using the Example of Natural Fibres

M. Ernst, D. Güntzel, C. Steinem, M. Lutz, B. Karmann, M. Niggeweg, M. Schlütter, B. Mussmann, S. Jug, S. Rose, D. Bos | Mönchengladbach, Germany

P23

Reuse of Recovered Disperse Dyes with Cyclodextrins in Dyeing Process

E. Franco¹, M. Ferrandiz¹, S. Moldovan¹, P. Fini², P. Semeraro², P. Cosma², E. Núñez³, J. A. Gabaldón³, I. Fortea³, E. Pérez¹, M. Ferrándiz¹ | ¹Alcoy, Spain, ²Bari, Italy, ³Murcia, Spain

P24

Antimicrobial Activity of Some Novel 2-Amino-5-Arylazothiazole Disperse Dyes and Their Applications for Dyeing Polyester Fabrics

H. E. Gaffer¹, M.M.G. Fouda¹, M. Khalifa² | ¹Giza, Egypt, ²New Damietta, Egypt

P25

Reactive Absorption of H₂S by ZnO and Fe₂O₃ Particles on a Textile Surface

A. Glogowsky, T. Grethe, B. Karmann, M. Rabe | Germany

P26

Hemin-Fixed Nonwoven Fabrics for Removing a Trace of CO Gas Contained in H₂ Gas

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P27

Methods of Preparation Polypropylene Fibers with Photochromic Pigments

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P28

Properties of PP/Photochromic Pigment Fibres

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P29

Project Guidenano

Assessment and Mitigation of Nano-Enabled Product Risks on Human and Environmental Health: Development of New Strategies and Creation of a Digital Guidance Tool for Nanotech Industries

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P30

Health-Care Service Functional Textiles Re-Activation by Laundry Maintenance Services

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P31

Comparison of Three Different Methods for Immobilizing Redox Enzymes on Multi-Filament Conductive Carbon Yarns

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P32

Preparation and Characterization of PVA Twisted Yarns Using Electrospinning Method

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P33

Effect of Fatliquoring and Finishing on Moisture Absorption-Desorption of Leather

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P34

Selective Enzymatic Treatment – An Emerging Tool of Pet Hospital and Cr Garment Functionalization

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P35

Biofunctional Textiles: Assessment of Drug Release

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P36

Mitigation of Environmental Impact Caused by Dwo Textile Finishing Chemicals Studying Their Nontoxic Alternatives

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P37

Demonstration of New Natural Dyes from Algae as Substitution of Synthetic Dyes Actually Used by Textile Industries

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P38

Polymer Nanocomposite Based on Chitosan for Acquiring Textile Surface Self-Cleaning and Antibacterial Activity Properties

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P39

Removal of Methylene Blue from Aqueous Solution by Using Iron Impregnated Activated Carbon Web from Waste Acrylic Fibers

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P40

New Testing Method for the Evaluation of Biocide Efficacy of Antimicrobial Finished Fabrics

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P41

Ecological Treatments in Wool Fibers Processing

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P42

The Reduction of Waste Waters Loading by an Increasing Fixation of Reactive Dyes on Functionalized Cotton

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P43

Polyester Spacer Fabrics for Ensuring Thermo-Physiological Comfort

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P44

New Aspects in Cationization of Cotton

S. Pruś, E. Matyjas-Zgondek | Łódź, Poland

P45

Development of Continuous Twisted Nanofiber Yarn Containing Microencapsulated Phase Change Materials (PCMS)

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P46

Chitosan Nanofibers and Nanoparticles Modified by Microbial Collagenase for Biomedical Application

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P47

Enzymatically Enhanced Adhesion of Cellulosic Woven Fabrics Composites

T. Linhares, A. Zille, G. Soares | Guimarães, Portugal

P48**The Textile Wastewater Recycling**

J. Sójka-Ledakowicz, L. Kos, R. Żyła, K. Paździor, S. Ledakowicz²,
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P49**Reactive Dyes: Deep Shades in Pad Batch Dyeing Method**

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P50**Polypropylene Crystallization in Presence of Inorganic Additive**

A. Ujhelyiová, Ľ. Horbanová, M. Petková, J. Ryba, J. Anus | Bratislava, Slovakia

P51**Optical Properties of Photochromic Pigment Incorporated Fabrics: Influence of Pigment Concentrations**

M. Viková, M. Vik, A.P. Periyasamy | Liberec, Czech Republic

P52**Electrobleaching of Cotton Fabrics in Sodium Chloride Solution**

F. Vitero, P. Monllor, M. Bonet, E. Morallon, C. Quijada | Alcoi, Spain

P53**Microencapsulation of Acid Dyestuff**

A. Vojtovic, M. Cerny, L. Burgert | Pardubice, Czech Republic

P54**Antimicrobial Finishing of Multilayer Knitted Fabrics**

A. Walawska, B. Filipowska, J. Lewartowska, I. Oleksiewicz, A. Pinar | Łódź, Poland

P55**Added-Value Products for Sustainable Textile Developments in Egypt**

Y. Youssef | Giza, Egypt

P56**Removal of Acid Dyes from Aqueous Effluents Using Ionic Liquids**

T. Weidlich, M. Šimek, J. Vyňuchal | Pardubice, Czech Republic

P57**Effect of Skewness on Image Processing Methods for Woven Fabric Density Measurement**

B. Yildirim, M. Eren | Turkey