

**TRADITION AND HIGH-TECH DEVELOPMENT**  
**KEYS TO THE TEXTILE MARKET**
**PRE-LIMINARY PROGRAMME \***
**MONDAY JUNE 13**

- 14:00 - 18:00 Registration  
19:00 - 22:00 Welcome drink

**TUESDAY JUNE 14**

- 8:00 - 9:00 Registration  
9:00 - 10:00 OPENING CEREMONY  
10:00 - 10:10 Liška, Josef

SPEECH BY DIRECTOR-GENERAL OF SYNTHESIA A.S. PARDUBICE

**Plenary lectures**

- 10:10 - 10:40 Marek, Jan (President of IFATCC and STCHK, Czech Republic)  
TRADITION AND HIGH-TECH DEVELOPMENT – KEYS TO THE CHANGING TEXTILE MARKET
- 10:40 - 11:10 Walter, Lutz (The European Technology Platform for the Future of Textiles and Clothing, Belgium)  
CAN THE EUROPEAN TEXTILE INNOVATION ECOSYSTEM SUCCESSFULLY MEET THE CHALLENGES OF RAPIDLY EVOLVING GLOBAL MARKETS?
- 11:10 - 11:30 *Coffee break*
- 11:30 - 11:50 Braz Costa, Antonio (CeNTI - Centre for Nanotechnology and Smart Materials, Portugal)  
TEXTRANET – A SYSTEMATIC APPROACH TO THE INTERNATIONAL AND INTERDISCIPLINARY INNOVATION ACTIVITIES IN TEXTILES
- 11:50 - 12:10 Zschenderlein, Dirk (CeNTI - Centre for Nanotechnology and Smart Materials, Portugal)  
CHALLENGE FUTURE – INDUSTRIE 4.0 IN THE TEXTILE INDUSTRY
- 12:10 - 12:40 Beran, Miloš (ČTPT and CLUTEX, Czech Republic)  
COLLECTIVE RESEARCH IN THE CZECH REPUBLIC – INFLUENCE OF CLUTEX AND ČTPT TO INTENSIFY THE RDI ACTIVITIES IN CZECH TEXTILE AND CLOTHING INDUSTRY
- 12:40 - 14:00 *Lunch and POSTERS section*

**SECTION 1 - Advanced fibres**

- 14:00 - 14:20 Zápotocký, Vojtěch (Contipro Pharma a.s., Czech Republic)  
NEW MEDICAL STAPLE MICRO-FIBRES
- 14:20 - 14:40 Pitucha, Tomáš (Contipro Pharma a.s., Czech Republic)  
MANUFACTURING, TEXTILE PROCESSING AND PROPERTIES OF HYALURONAN BASED MONOFILAMENT FIBERS
- 14:40 - 15:00 Pokorný, Marek (Contipro Pharma a.s., Czech Republic)  
KEY ASPECTS OF ELECTROSTATIC SPINNING OF BIO-POLYMER NANOFIBRES
- 15:00 - 15:20 Knotkova, Katerina (Contipro Biotech, Czech Republic)  
SCALE-UP OF 4SPIN TECHNOLOGY
- 15:20 - 15:40 Abdel-lattif, Abdel-Mohsen (CEITEC-BUT University, Czech Republic)  
NOVEL CHITIN/CHITOSAN-GLUCAN WOUND DRESSING: ISOLATION, CHARACTERIZATION AND MEDICAL APPLICATIONS
- 15:40 - 16:10 *Coffee break*
- 16:10 - 16:30 Kubáč, Lubomír (Centre for Organic Chemistry Ltd., Czech Republic)  
CONDUCTIVE POLYMERS – MATERIALS FOR SMART TEXTILE SYSTEMS
- 16:30 - 16:50 Khajeh Mehrizi, Mohammad (Yazd University, Iran)  
NANOFIBROUS SCAFFOLDS FROM ELECTROSPUN COMPOSITE NANOFIBERS
- 16:50 - 17:10 Kimmer, Dušan (SPUR a.s., Czech Republic)  
MODELING AND PREPARATION OF NANOFIBRE AND COMPOSITE NANOSTRUCTURES
- 17:10 - 17:30 Mousavi Shoushtari, Ahmad (Amirkabir University of Technology, Iran)  
FABRICATION OF MULTI-WALLED CARBON NANOTUBES/POLYVINYLPIRROLIDONE COMPOSITE NANOFIBERS FOR EMI SHIELDING APPLICATION
- 17:30 - 17:50 Barani, Hossein (University of Birjand, Iran)  
ANTIBACTERIAL POLY-L-LACTIDE ACID / POLYVINYL ALCOHOL NANOFIBROUS HYBRID YARNS

**SECTION 2 - Dyes and dyeing**

- 14:00 - 14:30 Youssef, Yehya (National Research Centre, Egypt)  
ADDED-VALUE PRODUCTS FOR SUSTAINABLE TEXTILE DEVELOPMENTS IN EGYPT
- 14:30 - 15:00 Mehta, Janak (Dyestuffs Manufacturers Association of India, India)  
GLOBAL SCENARIO OF TEXTILE DYESTUFFS
- 15:00 - 15:20 Erkan, Gökhan (Dokuz Eylül University, Turkey)  
THE INVESTIGATION OF POSSIBLE USE OF OLIVE OIL PRODUCTION WASTES IN WOOL DYEING
- 15:20 - 15:40 Estapé, Núria (Archroma Distribution and Management Germany GmbH, Austria)  
ARCHROMA'S EARTHCOLORS
- 15:40 - 16:10 *Coffee break*
- 16:10 - 16:30 Gomes, Jaime (University of Minho, Portugal)  
DEVELOPMENT ON DYEING AND PRINTING WITH DYES IN NANOPARTICLES
- 16:30 - 16:50 Agnhage, Tove (ENSAIT-GEMTEX, France)  
DYEING OF POLYESTER FABRIC WITH BIOBASED DYE AND ASSESSMENT OF ENVIRONMENTAL IMPACTS USING LCA TOOL
- 16:50 - 17:10 Martinková, Lenka (INOTEX spol. s r.o., Czech Republic)  
ALTERBIO – ENVIRONMENT FRIENDLY FUNCTIONAL BARRIER TEXTILES BASED ON PHOTOACTIVE PHTHALOCYANINE DYEINGS
- 17:10 - 17:30 Karadag, Recep (Marmara University, Faculty of Fine Arts, Turkey)  
SUSTAINABILITY OF NATURAL DYES NOWADAYS
- 17:30 - 17:50 Moldovan, Simona (AITEX, Spain)  
DEMONSTRATION OF NEW NATURAL DYES FROM ALGAE AS SUBSTITUTION OF SYNTHETIC DYES ACTUALLY USED BY TEXTILE INDUSTRIES, SEACOLORS PROJECT

**SECTION 3 - Functional textiles (nano)**

- 14:00 - 14:20 Militký, Jiří (Technical University of Liberec, Czech Republic)  
LIGHT SIDE EMITTING TEXTILE STRUCTURES
- 14:20 - 14:40 Tunáková, Veronika (Technical University of Liberec, Czech Republic)  
ADVANCED TEXTILES WITH ENHANCED ELECTRICAL CONDUCTIVITY
- 14:40 - 15:00 Bele, Vijay (Technical University of Liberec, Czech Republic)  
DEVELOPMENT OF SELF REINFORCED POLYPROPYLENE COMPOSITES FROM POLYPROPYLENE MICRO POWDER
- 15:00 - 15:20 Periyasamy, Aravin Prince (Technical University Liberec, Czech Republic)  
OPTICAL PROPERTIES OF PHOTOCROMIC PIGMENT INCORPORATED FABRICS: INFLUENCE OF PIGMENT CONCENTRATIONS
- 15:20 - 15:40 Rástočná Illová, Dana (VÚTCH-CHEMITEK, spol. s r.o., Slovakia)  
NANOMATERIALS AND INNOVATIVE TECHNOLOGIES IN TEXTILE INDUSTRY
- 15:40 - 16:10 *Coffee break*

**SECTION 4 - Production sustainability tools**

- 16:10 - 16:30 Gebhardt, Rainer (Saxon Textile Research Institut Chemnitz (STFI), Germany)  
MASS CUSTOMIZED PRODUCTS - CHALLENGES TO THE TEXTILE INDUSTRY FOR TOMORROW'S PRODUCTION
- 16:30 - 16:50 Moldovan, Simona (AITEX, Spain)  
DEMONSTRATION OF CYCLODEXTRIN TECHNIQUES IN TREATMENT OF WASTE WATER IN TEXTILE INDUSTRY TO RECOVER AND REUSE TEXTILE DYES
- 16:50 - 17:10 Braz Costa, Antonio (CeNTI - Centre for Nanotechnology and Smart Materials, Portugal)  
ENHANCED LIGHT RESPONSIVE FIBRES FOR THERMAL APPLICATIONS
- 17:10 - 17:30 Erth, Holger (Textilausrüstung Pfand GmbH, Germany)  
REQUIREMENTS FOR R&D IN DIFFERENT TECHNICAL APPLICATIONS
- 17:30 - 17:50 Chybová, Olga (INOTEX spol. s r.o., Czech Republic)  
"ECWRTI" AND "SET" – THE PROJECTS SUPPORTING THE EFFICIENT USE OF RESOURCES IN TEXTILE INDUSTRY
- 17:50 - 18:10 Kupka, Karel (TriloByte Statistical Academy, Czech Republic)  
MODELING OF MULTICOMPONENT TEXTILE WASTE RECYCLING

20:00 - 24:00 *Social Event at The Pardubice Chateau*

**WEDNESDAY JUNE 15****Plenary lectures**

- 9:00 - 9:30 Vermandel, Fanny (DyStar Colours Distribution GmbH, Germany)  
DyStar's CONTRIBUTION TO INNOVATION & BAT FOR THE TEXTILE INDUSTRY
- 9:30 - 10:00 Aneja, Arun (East Carolina University, USA)  
TOWARDS A CIRCULAR ECONOMY IN TEXTILES: RESYNTEx AND THE EUROPEAN UNION
- 10:00 - 10:30 Hinestroza, Juan P. (Cornell University, USA)  
TEACHING COTTON NEW TRICKS: MOLECULAR STRATEGIES FOR CREATING SMART FIBERS VIA MANIPULATION OF NANOSCALE PHENOMENA
- 10:30 - 11:00 *Coffee break*
- 11:00 - 11:30 Gedanken, Aharon (Bar-Ilan University, Israel)  
MAKING THE HOSPITAL A SAFER PLACE BY THE SONOCHEMICAL COATING OF THE TEXTILES WITH ANTIBACTERIAL NANOPARTICLES
- 11:30 - 12:00 Hirogaki, Kazumasa (University of Fukui, Japan)  
SYNTHESIS OF NANO-POROUS ARAMID AEROGEL FIBRE THROUGH SUPERCRITICAL DRYING
- 12:00 - 13:00 *Lunch and POSTERS section*

**SECTION 5 - Efficient processing / Testing**

- 13:00 - 13:20 Vik, Michal (The European Technology Platform for the Future of Textiles and Clothing, Belgium)  
NOVEL METHOD OF IN-LINE COLOR MEASUREMENT
- 13:20 - 13:40 Kämpf, Karin (Lenzing AG, Austria)  
TENCEL® COMBIPOLISH PROCESS AN ALTERNATIVE FINISHING FOR TENCEL®/ COTTON JERSEY
- 13:40 - 14:00 Khajeh Mehrizi, Mohammad (Yazd University, Iran)  
ALLICIN-CONJUGATED NANOCELLULOSE AS A FINISHING FOR IMPARTING ANTIBACTERIAL PROPERTIES TO POLYESTER AND CELLULOSE-POLYESTER FABRICS
- 14:00 - 14:20 Erdogan, Umit Halis (Dokuz Eylul University, Turkey)  
CELLULOSE FROM WASTE JUTE FIBERS: EXTRACTION AND CHARACTERIZATION
- 14:20 - 14:40 Quill, Jeffrey (Q-LAB Corp., USA)  
ESSENTIALS OF LIGHT STABILITY TESTING OF TEXTILES
- 14:40 - 15:00 Olschewski, Fred (DATACOLOR GmbH, Germany)  
COLOR COMMUNICATION IN TEXTILE AND AUTOMOTIVE SUPPLY CHAINS
- 15:00 - 15:20 Zahour, Sélim (University and INSA of Rouen / PEG S.A.S, France)  
PHYSICAL CHARACTERIZATION OF A SHEATH/CORE LOW MELT POLYESTER FIBRE USED IN THERMAL INSULATION NONWOVENS
- 15:20 - 15:40 *Coffee break*
- 15:40 - 16:00 Křemenáková, Dana (Technical University of Liberec, Czech Republic)  
PREDICTION OF TEXTILE STRUCTURES' THERMAL COMFORT
- 16:00 - 16:20 Thilagavathi, Govindharajan (PSG College of Technology, India)  
DESIGN AND DEVELOPMENT OF EMBROIDERED TEXTILE ELECTRODES FOR ECG AND BREATH RATE MEASUREMENT
- 16:20 - 16:40 Arumugan, Veerakumar (Technical University of Liberec, Czech Republic)  
EFFECT OF 3-DIMENSIONAL KNITTED SPACER FABRIC CHARACTERISTICS ON ITS THERMAL AND COMPRESSION PROPERTIES
- 16:40 - 17:00 Thilagavathi, Govindharajan (PSG College of Technology, India)  
INVESTIGATIONS ON ACOUSTIC PROPERTIES OF COIR AND LUFFA FIBROUS MATS
- 17:00 - 17:20 Nasadil, Petr (Textile Testing Institute, Czech Republic)  
SYMBIOSIS OF APPLIED RESEARCH AND TECHNICAL STANDARDISATION
- 17:20 - 17:40 Visileanu, Emilia (INCDTP, Romania)  
CORRELATIONS OF THE CHARACTERISTICS OF WORK UNIFORMS

**SECTION 6 - Efficient dyestuff's application / Testing**

- 13:00 - 13:20 Zhong/Yang, Bowen/ C.D. (Cooltrans/OGD, China/Taiwan)  
ECO-FRIENDLY COOL TRANSFER PRINTING TECHNOLOGY FOR POLYAMIDE FABRIC
- 13:20 - 13:40 Tolkendorf, Peter (A. Monforts Textilmaschinen GmbH & Co.KG, Germany)  
CONTROLLED MINIMAL APPLICATION ON KNITWEAR
- 13:40 - 14:00 Sirbiladze, Konstantine (Akaki Tsereteli State University, Georgia)  
LIGHT STABILIZATION OF REACTIVE AZO DYES BY SCREENING OF THE PHOTOCHEMICALLY ACTIVE LIGHT
- 14:00 - 14:20 Mauro, Fassi (LORIS BELLINI SRL, Italy)  
PULSAR: A TRUE REVOLUTION IN YARN PACKAGE DYEING TECHNOLOGY
- 14:20 - 14:40 Khan, Nayab (Technical University of Liberec, Czech Republic)  
COMPARISON OF DIFFERENT METHODS USED FOR THE COLOR MEASUREMENT OF COTTON
- 14:40 - 15:00 Korger, Michael (Hochschule Niederrhein - University of Applied Sciences, Germany)  
FUNCTIONALIZATION OF TEXTILES USING 3D PRINTING – ADD-ON TECHNOLOGY FOR TEXTILE APPLICATIONS TESTING NEW MATERIAL COMBINATIONS
- 15:00 - 15:20 Yildirim, Bekir (Erciyes University, Turkey)  
COLOUR SEGMENTATION IN YARN-DYED WOVEN FABRIC IMAGES BY USING K-MEANS CLUSTERING
- 15:20 - 15:40 *Coffee break*

**SECTION 7 - Sustainable processing**

- 15:40 - 16:00 Němec, Martin (Synthesia a.s., Czech Republic)  
THE FUTURE OF ORGANIC COLORANTS IN CZECH REPUBLIC, INFLUENCE OF EU LEGISLATION, END-USERS REQUIREMENTS AND STANDARDS
- 16:00 - 16:20 Patra, Arun (The Technological Institute of Textile & Sciences, India)  
COMPARATIVE STUDY OF DYEING PERFORMANCE OF SOYBEAN FIBRE AND WOOL
- 16:20 - 16:40 Ruse, Mircea (ICECHIM, Romania)  
AMPHIPHILIC POLYMERIC MICROCOMPOSITES FOR NATURAL FIBERS DYEING
- 16:40 - 17:00 Surdu, Lilioara (INCDTP, Romania)  
COMPARATIVE LIFE CYCLE ASSESSMENT STUDY FOR PLASMA AND CONVENTIONAL TREATED FABRICS
- 17:00 - 17:20 Nagy, Henrietta J. (Budapest University of Technology and Economics, Hungary)  
TWO SUSTAINABLE DEVELOPMENTS OF THE CHEMICAL WASTEWATER TREATMENT IN TEXTILE FINISHING
- 17:20 - 17:40 Bilińska, Lucyna (Textile Company Biliński, Poland)  
TEXTILE WASTEWATER TREATMENT SYSTEM BASED ON THE IDEA OF CLOSED WATER CIRCUIT IN THE TEXTILE COMPANY BILIŃSKI POLAND

**SECTION 8 - Surface textile treatment**

- 13:00 - 13:20 Perwuelz, Anne (ENSAIT, France)  
HYDROPHILIC TO SUPERHYDROPHILIC PET TEXTILE SURFACES
- 13:20 - 13:40 Haji, Aminoddin (Islamic Azad University, Birjand Branch, Iran)  
IMPROVED ATTACHMENT OF TITANIUM DIOXIDE NANOPARTICLES ON COTTON FABRIC USING PLASMA TREATMENT AND CHITOSAN COATING
- 13:40 - 14:00 Canal, Jose M. (UPC (Polytechnical University of Catalonia), Spain)  
LOW-TEMPERATURE PLASMA TREATMENTS IN THE DESIGN OF POLYPROPYLENE SURGICAL MESHES FOR HERNIA REPAIR
- 14:00 - 14:20 Haji, Aminoddin (Islamic Azad University, Birjand Branch, Iran)  
EFFECT OF OXYGEN AND NITROGEN PLASMA TREATMENTS ON NATURAL DYEING AND TENSILE PROPERTIES OF SILK YARN
- 14:20 - 14:40 Grancaric, Ana Marija (University of Zagreb, Croatia)  
ELECTROKINETIC PHENOMENA OF 3-AMINOPROPYLTRIEHOXYSILANE-BASED COTTON FINISHING
- 14:40 - 15:00 Haji, Aminoddin (Islamic Azad University, Birjand Branch, Iran)  
PLASMA AND CHITOSAN TREATMENTS FOR IMPROVEMENT OF NATURAL DYEING AND ANTIBACTERIAL PROPERTIES OF COTTON AND WOOL
- 15:00 - 15:20 Mousavi Shoushtari, Ahmad (Amirkabir University of Technology, Iran)  
EFFECT OF OXYGEN PLASMA ON SURFACE PROPERTIES AND ADHESION OF CARBON FIBERS TO EPOXY RESIN

15:20 - 15:40 *Coffee break*

**SECTION 9 - Emerging technologies**

- 15:40 - 16:00 Martí, Meritxell (Institute of Advanced Chemistry of Catalonia (IQAC-CSIC), Spain)  
NEW WOOL DRY SCOURING PROCESS
- 16:00 - 16:20 McNeil, Steven (AgResearch, New Zealand)  
TECHNOLOGIES TO ENHANCE THE ENVIRONMENTAL PROFILE OF WOOL FLOORCOVERINGS
- 16:20 - 16:40 Terzioğlu, Fikret (Hochschule Niederrhein - Research Institute for Textile and Clothing (FTB), Germany)  
FUNCTIONAL AND ENERGY EFFICIENT TEXTILE COATING SYSTEMS BY RADIATION INITIATED PHOTOPOLYMERIZATION OF MULTI-FUNCTIONAL ACRYLIC ESTERS
- 16:40 - 17:00 Lungwitz, Ralf (Saxon Textile Research Institut Chemnitz (STFI), Germany)  
UV-LED-CURABLE COATINGS FOR TECHNICAL TEXTILES – AN ECOLOGICAL AND ENERGY EFFICIENT TECHNOLOGY
- 17:00 - 17:20 Ruano, Marta (LEITAT Technological Center, Spain)  
INNOVATIVE ENCAPSULATION PROCEDURES OF BIOCIDES FOR APPLICATION IN TEXTILE PROTECTION AGAINST BEDBUGS AND TICKS
- 17:20 - 17:40 Csiszár, Emília (Budapest University of Technology and Economics, Hungary)  
PRODUCTION AND PROPERTIES OF NANOCELLULOSE WHISKERS PREPARED FROM BLEACHED CELLULOSIC FIBRES

19:30 - 23:00 *Evening Party at the Kunětická Hora Castle*

**THURSDAY JUNE 16****Plenary lectures**

- 9:00 - 9:30 Hu, Junyan (Hong Kong Polytechnic University, Hong Kong)  
FABRIC TOUCH COMFORT TESTER: A NEW APPROACH FOR FABRIC-SKIN TOUCH COMFORT CHARACTERIZATION
- 9:30 - 10:00 Tempesti, Aldo (TexClubTec, Italy)  
NEW HORIZONS OF THE ITALIAN TEXTILE AND CLOTHING INDUSTRY
- 10:00 - 10:30 Nousiainen, Pertti (Tampere University of Technology, Finland)  
NEW ROUTES FROM CELLULOSE TO TEXTILE FIBER AND READY PRODUCTS
- 10:30 - 11:00 *Coffee break*
- 11:00 - 11:30 Filarowski, Andrew (Society of Dyers and Colourists, UK)  
A MODEL OF EDUCATION FOR YOUNG PEOPLE WORKING IN A DYEHOUSE
- 11:30 - 12:00 Tajitsu, Yoshiro (Kansai University, Japan)  
SMART PIEZOELECTRIC FABRIC AND ITS APPLICATION
- 12:00 - 12:30 Van Parys, Marc (UNITEX - TexZeppelin, Belgium)  
EMERGING TECHNOLOGIES FOR THE TEXTILE FACTORY OF THE FUTURE
- 12:30 - 13:30 *Lunch and POSTERS section*

**SECTION 10 - Functionalisation**

- 13:30 - 13:50 Rosace, Giuseppe (University of Bergamo, Italy)  
NEW HALOGEN-FREE AND ENVIRONMENTALLY-FRIENDLY FLAME RETARDANT FINISHING FOR POLYESTER FABRICS
- 13:50 - 14:10 Erkan, Gökhan (Dokuz Eylül University, Turkey)  
ENCAPSULATION OF HYPERICUM PERFORATUM L. AND SANTALUM ALBUM L. OILS BY SPRAY DRYING AND THEIR APPLICATIONS IN TEXTILES
- 14:10 - 14:30 Rovira, Angels (LEITAT Technological Center, Spain)  
INNOVATIVE FUNCTIONAL FINISHES FOR TEXTILES AGAINST BEDBUGS AND TICKS
- 14:30 - 14:50 *Coffee break*
- 14:50 - 15:10 Janičková, Martina (INOTEX spol. s r.o., Czech Republic)  
DEVELOPMENT OF TICK REPELLENT PROTECTIVE TEXTILE MATERIALS
- 15:10 - 15:30 Hanczvikkel, Adrienn (Óbuda University, Hungary)  
SURVIVABILITY OF HIGH RISK, MULTIRESISTANT BACTERIA ON COTTON TREATED WITH COMMERCIALY AVAILABLE ANTIMICROBIAL AGENTS
- 15:30 - 16:30 CLOSING CEREMONY

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