

DAY 1 | 1st July 2019

8h00

Registration

9h00

Opening Session

Keynote Lecture

9h30

Microscale natural fibers for large-scale nanotechnology

Lars Berglund, KTH Royal Institute of Technology | Sweden

Chair: Raul Fangueiro

Room Infante

Room Miragaia

Room S. João

10h15

Session: Properties & characterization of natural fibers & structures
Chair: Maria José Araújo Marques Abreu

ID 8

Biodesign - Dyeing Natural Fibres With Living Organisms-Bacteria

Sandra Heffernan, Massey University | New Zealand

10h30

ID 28

Uv Protection From Polyamide And Wool Fabrics Dyed With Teak Leaves

Nivea Tais Vila, Universidade Estadual de Maringa | Brazil

10h45

ID 253

Rapid Microwave Assisted Flame Retardant Treatment for Cotton Fabric by an Industrial Byproduct – Phytic Acid

Ramaswamy Nagarajan, University of Massachusetts | USA

Session: Textile processing of natural fibers
Chair: Vincent Placet

ID 22

Yield Potential Of Hemp Cultivars (Cannabis Sativa L.) For Textile Applications In Belgium

Veronique Troch, University College Ghent | Belgium

ID 161

Hemp Retting : Quality Management Of Hemp Straw Used In Agro-Materials

Arnaud Day, Fibres Recherche Development | France

ID 137

Polyethylene Composites With Hemp Natural Fillers

Szymon Rojewski, Institute of Natural Fibres & Medicinal Plants | Poland

Session: Functional natural fibers
Chair: Greg Holt

ID 124

Incorporation Of Lipid Nanosystems Containing Omega-3 Fatty Acids In Textile Substrates For Wound Healing Applications

Graça Soares, University of Minho | Portugal

ID 147

Modified Cotton Textile With Hap-Agnps Nanocomposite Aiming Antimicrobial Properties For Medical Textile Gown

Jefferson Souza, Federal University of Piauí | Portugal

ID 203

Modification Of Spartium Junceum L. Fibers By Nanoparticles

Sandra Bischof, University of Zagreb | Croatia

11h00

**Coffee-Break
& Poster Session**

11h30

Invited Lecture
Preparation and Applications of Cellulose Nanomaterials
 Alain Dufresne, Université Grenoble Alpes | France

11h45

ID 271
Electrospun Natural Nanofibres With Bioactive Plant Extracts For Therapeutic Applications
 Diana P. Ferreira, University of Minho | Portugal

12h00

ID 218
Genetically Engineered Protein-Based Polymers For The Development Of Antimicrobial Materials
 Margarida Pereira, CBMA - University of Minho | Portugal

12h15

ID 187
Effects Of Cellulose Nanofibrils On The Structure And Properties Of Poly(Vinyl Alcohol) Electrospun Nanofibers
 Andrea Zille, 2C2T - University of Minho | Portugal

12h30

Session: Nanodimensional natural fibers
Chair: Lars Berglund

ID 71
Effects Of Water Immersion Ageing On Composites Made Of Non-Pre-Dried Flax Fibres
 Maria Morissa Lu, KU Leuven R&D | Belgium

ID 86
Natural Fibre Composites Manufacture Using Wrapped Hemp Roving With PA12
 Manuela Ferreira, ENSAIT/GEMTEX | France

ID 182
Impact Of The Fibre Extraction Processing Steps Using A Labscale Scutching/Hackling Equipment On The Mechanical And Morphological Properties Of Hemp Fibres
 Pierre Ouagne, Ecole Nationale d'Ingénieurs de Tarbes | France

ID 183
The Effect Of Silicone Coatings On The Durability Of Natural Fibre Composites When Subjected To Hygrothermal Aging
 Gilles Koolen, KU Leuven R&D | Belgium

ID 151
Study Of Solutions To Optimize The

Session: SSUCHI
Chair: John Summerscales

ID 30
Influence Of Processing Method On The Properties Of Paper-Fiber-Reinforced Composites
 Martina Prambauer, Transfercenter für Kunststofftechnik GmbH | Austria

ID 42
Effect Of Particulate Fillers On Creep Behavior Of Epoxy Composites
 Vijay Baheti, Technical University of Liberec | Czech Republic

ID 47
Estimation Of Tensile Properties Of Flax Fibers Using Impregnated Fiber Bundle Test: Influence Of Resin Cure Cycle
 Anurag Pisupati, IMT Lille Douai | France

ID 51
Improvement Of Physico-Mechanical Properties Of Particleboard Made From Bagasse And Peanut Shells Fibers
 Zeinab Osman, Institute Engineering Research and Materials Technology | Sudan

ID 63
Are Nettle Fibres Produced On Metal-Contaminated Lands Suitable For Composite Applications?
 Thomas Jeannin, FEMTO-ST | France

Session: Natural fiber based polymeric composites
Chair: Mohammad Jawaid

12h45 **ID 216**
**Multifunctional Bio-Hybrid
Nanocomposites Using Silk/Elastin
Copolymers**
Raul Machado, CBMA - University of Minho |
Portugal

**Study Of Solutions To Optimize The
Extraction Of Hemp Fibers For Composite
Materials**
Marie Gregoire, Ecole Nationale d'Ingénieurs
de Tarbes | France

ID 70
**Effect Of Zeolite On Properties Of Rice
Husk Flour- Polypropylene Composites**
Poonsub Threepopnatkul, Silpakorn University
| Thailand

13h00 **Lunch**

14h00 **ID 282**
**The Effect Of Silane Modification On The
Performance Of Nanocellulose-Reinforced
Adhesives For Composite Wood Panels**
Patrycja Hochmańska, Łukasiewicz Research
Network-Wood Technology Institute | Poland

ID 302
**Effects Of Polyelectrolytes On Dyeing Of
Cotton Fabric With Acid Dyes**
Miguel Granato, Universidade Federal de
Santa Catarina | Brazil

ID 101
**Effect Of The Grid Spacing Of Figue
Textiles On The Bending Behaviour Of
Mortar/Fiber Laminates**
Patricia Luna, Universidad Nacional de
Colombia | Colombia

14h15 **ID 27**
**Preparation And Characterization Of Air
Filtering Membranes Based On Pet, Castor
Oil And Cellulose Nanocrystals:
Electrospun Mats**
Rachel Passos de Oliveira Santos, University
of São Paulo | Brazil

ID 181
**Surface Modification And Structural
Investigation Of Spiders Silk Through Non-
Thermal Plasma Sources**
Nicola Stehling, University of Sheffield | United
Kingdom

ID 37
**Simulation Of The Morphology Changes Of
Lignocellulosic Fibers During Twin-Screw
Extrusion Of Composites With
Petro/Biosourced Matrices**
Loubna Lemkhanter, INRA, France

14h30 **ID 129**
**Cellulose Nanofibril Films Treated With
Tannin-Stabilized Silver Nanoparticles:
Effect On Antimicrobial Properties**
Lina Bufalino, Federal Rural University of
Amazonia | Brazil

ID 82
**Effect Of Xylanase Treatment On Retama
Monosperma Fibers Dyeing**
Djamel Eddine Aizi, Laboratoire des
Productions Valorisations Végétales et
Microbiennes | Algeria

ID 186
**Ultraviolet Light Treatment To Enhance
Interfacial Adhesion In Bamboo Fibre
Polymer Composites**
Carlos Fuentes, KU Leuven R&D | Belgium

14h45 **ID276**
**Biodegradable Films Reinforced With
Cellulose Nanocrystals And Natural
Extracts For Food Packaging Applications**
Sofia Costa, University of Minho | Portugal

ID 77
**Optimizing Enzymatic Dyeing Of Wool And
Leather**
Andrea Zille, 2C2T - University of Minho |
Portugal

ID 95
**Acoustic Evaluation Of A Mycological Bio-
Composite As A Natural Fiber Alternative**

Functional natural fibers
Chair: Raechel Laing

Jral fiber modification techniques
Silgia Aparecida da Costa

Session: Natural fiber based polymeric composites
Chair: Carlo Santulli

Session C

15h00

ID 226

Plasma Pretreatment And Digital Ink Jet Technology: A Tool For Long-Lasting Microbial Barrier On Cellulose Knitwear?
Sanja Ercegović Ražić, University of Zagreb | Croatia

15h15

ID 210

Facile Functionalization Of Cotton With Nanostructured Silver/Titania For Visible-Light Plasmonic Photocatalysis
Marwa Abid, Faculty of Sciences of Sfax | Tunisia

15h30

ID 117

Development Of Shoe Insole With Natural Fibers
Hafsa Jamshaid, National Textile University | Pakistan

Session: Natl
Chair: :

ID 298

Influence Of Plasma Treatment On The Resulting Useful Properties Of Tapes Made Of Glass Fibers
Karolína Voleská, Technical University of Liberec | Czech Republic

ID 130

Influence Of Physical Sputtering Plasma Treatment On The Tensile Strength Of Bamboo Fibers And Bamboo/Polyester Composites
Patricia Luna, Universidad Nacional de Colombia | Colombia

ID 94

Halogen Free Flame Retardant Finishing Of Wool And Wool Rich Fabrics For Aircraft Seats
Elif Kaynak Uraz, Eskisehir Technical University | Turkey

Session: DNFI - Discover Natural Fibers Initiative

To Petroleum Based Closed-Cell Foam

Greg Holt, USDA-ARS | USA

ID 143

Bast Fiber Circular Economy
Malgorzata Zimniewska, Institute of Natural Fibres & Medicinal Plants | Poland

ID 154

Sustainable Solutions Need To Be Smarter
Magdalena White, International Wool Textile Organisation | Belgium

15h45

Coffee-Break
& Poster Session

16h15

ID 175

Fibre Area Correction Factors (Fact) For The Extended Rules-Of-Mixtures For Natural Fibre Reinforced Composites
John Summerscales, University of Plymouth | United Kingdom

ID 192

The Influence Of Textile Materials On Flame Speed Tests Of Professional Uniforms
Marcia Cristina Silva-Santos, University of Sao Paulo | Brazil

16h30

ID 81

Aging Behaviour Of Poly(Lactic Acid) Bleached Softwood Kraft Cellulose (Bskp) Composite Containing Epoxy Modified Linseed Oil As A Coupling Agent
Lisa Wikström, VTT Technical Research Centre of Finland | Finland

ID 194

Optimum Conditions For Measuring Thermal Resistance On Thermal Foot Model
Abdelhamid R. R. Aboalasaad, Technical University of Liberec | Czech Republic

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Invited Leacture

Cellulose innovations: from nanoscale to novel functions

You-Lo Hsieh, University of California, Davis | USA

16h45	ID 213 Transverse Compressive Properties Of Natural Fibres Determined Using Micro Mechatronics Systems And 2D Full-Field Measurements Vincent Placet, FEMTO-ST France	ID 169 Noise Control Optimization In A Hemp Fibrous System Valentina Mazzanti, Università degli Studi di Ferrara Italy	ID 93 Extraction And Evaluation Of Industrial-Waste Derived Cellulose For Novel Bioapplications Rachel Cordeiro, Instituto Politécnico de Leiria Portugal
17h00	ID 87 Water Absorption And Effect Of Temperature On The Characteristics Of Flax/Hemp Reinforced Composites Opukuro David-West, University of Hertfordshire United Kingdom	ID 11 Improvement Of The Wrinkling Behavior Of A Cotton Shirting Fabric Using A Novel Measurement Method Charles Lanceron, ENSAIT/GEMTEX France	ID 248 Characterization Of Lignocellulosic Residues Of Linseed For Application In Biomaterials Luciana G. Angelini, University of Pisa Italy
17h15	ID 96 Stabilization Of Hybrid Prepreg Composite Tapes For Industrial Applications Mohanapriya Venkataraman, Technical University of Liberec Czech Republic	ID 83 Weavability Of Flax Fibre For 3D Warp Interlock Preform: Effect Of The Weft Layers Number On The Physical And Mechanical Properties Of The Preform Ahmad Rashed Labanieh, ENSAIT France	ID 269 Synthesis Of Cellulose Acetate Using As Raw Material Textile Wastes Natália Cândido Homem, 2C2T - University of Minho Portugal
17h30	ID 127 The Effect Of Thermal Treatment And Microwave Curing To The Mechanical Properties Of Flax Epoxy Composites Chrysoula Saridaki, University of Patras Greece	ID 262 Nonwoven Of Posidonia Oceanica Fibers As Substratum For Agriculture Maria Angeles Bonet-Aracil, Universitat Politècnica de València Spain	ID 274 Using Computed Tomography To Characterize Manicaria Saccifera Natural Fabric Alicia Porras, Universidad de los Andes Colombia
17h45	ID 145 Influence Of Composite Architecture And Interfacial Bonding Strength On Their Impact Properties Mahadev Bar, École Nationale D'ingénieurs de Tarbes France	ID 171 Textile Fibers Production Regarding The Agroforestry Approach Larissa Oliveira Duarte, University of Sao Paulo Brazil	ID 150 Thermal And Physical Characterization Of Bleached Cellulose From Orange Bagasse Using Chlorine Free Method Paulo Fernandes, UNESP Brazil
18h00	Closing		
18h30	Social Program - Porto 6 Bridges Cruise		

Session: Natural fiber based polymeric composites
 Chair: Aart Van Vuure

Session: Textile processing of natural fibers
 Chair: Pirjo Heikkilä

Session: New processes for natural fiber agriculture extraction and pro
 Chair: Miguel Gama

9h00

Conference Announcements

Keynote Lecture

Processing and Applications of Biomimetic Spider Silk

Thomas Scheibel, University of Bayreuth | Germany

9h30

Chair: Raul Fangueiro

Room Infante

Room Miragaia

Room S. João

10h15

ID 250

Multipurpose Hemp For Industrial Bioproducts And Biomass – “Mid-Performance” Bio-Based Composites Applications

Jörg Müssig, Bremen City University of Applied Sciences | Germany

ID 111

Laccase Enzyme Treatment For Improved Flax Fibre – Epoxy Adhesion In Composites

Anne Hennig, Leibniz-Institut für Polymerforschung Dresden e.V. | Germany

ID 172

A Material Proposed For Re-Use Of Hemp Shives As A Waste From Fiber Production

Carlo Santulli, Università di Camerino | Italy

Session: Natural fiber reinforced biopolymers
Chair: Pierre Ouagne

Session: Sustainability of natural fibers: life cycle assessment studies
Chair: Vinay Midha

ID 92

Environmental Impact Of Cotton Fibre Production In Brazil

Luis Almeida, University of Minho | Portugal

ID 48

Amazonian Tucum (Astrocaryum Chambira Burret) Leaflet Fiber And Artisanal Yarn Characterization

Lais Pennas, University of Sao Paulo | Brazil

ID 103

The Properties Of The Mesocarp Fibers Of Pataua, A Multiple-Use Palm From The Amazonia Forest

Lina Bufalino, Federal Rural University of Amazonia | Brazil

Session: Textile processing of natural fibers
Chair: Ramaswamy Nagarajan

ID 280

Natural Fibres In Next-To-Skin Textiles: Current Perspectives On Human Body Odour

Raechel Laing, University of Otago | New Zealand

ID 39

BODY ODOUR MANAGEMENT PERFORMANCE OF DIFFERENT FIBRES AND BLENDS

Xungai Wang, Deakin University | Australia

ID 118

Simultaneous Dyeing And Flame Retardant Finishing Of Silk Fabric: An Ecofriendly Approach

Goutam Bar, National Institute of Fashion Technology | India

11h00

Coffee-Break
& Poster Session

11h30
ID 153
A Biosorbent Films Based On Nanocellulose And Lysozyme Nanofibers For Efficient Removal Of Mercury (II) From Natural Waters
 Carmen Freire, University of Aveiro | Portugal

11h45
ID 85
Impregnation Of Cellulose Fibers With Charged Nanocellulose For Water Filters
 Andreas Mautner, University of Vienna | Austria

12h00
ID 61
Effect Of Alternative Electric Field And Elongational Flow On Control Of Cellulose Nano Fibril
 Hidemasa Takana, Tohoku University | Japan

12h15
ID 2
Enhancement Of Nanocellulosic Films Surface Properties By TiO2 Sol-Gel Coating
 Rajini Priya Malladi, University of Sherbrooke | France

12h30
ID 227
Preparation Of Hydrophobic Nanocrystals Of Vegetable Cellulose For The Retention Of Oils
 Denise Abatti Kasper Silva, University of the Joinville Region | Brazil

Session: Nanodimensional natural fibers
 Chair: Alain Dufresne

Session: Properties & characterization of natural fibers & structures
 Chair: Sandra Bischof

ID 273
Environmental And Socio-Economic Impact Assessment Of The Production Of Kenaf (Hibiscus Cannabinus L.) In Heavy Metal Contaminated Soils
 Ana Luisa Fernando, Universidade Nova de Lisboa | Portugal

ID 13
Characterization Of Agave Americana L. Plant As Potential Source Of Fibres For Composites Obtaining
 Zaida Ortega, Universidad de Las Palmas de Gran Canaria | Spain

ID 257
Dyeing Performance Of Brazilian Pineapple Leaf Fibers For Textile Application
 Rayana Santiago De Queiroz, Institute for Technological Research | Brazil

ID 239
Natural Dyeing Of Cotton With Anadenanthera Macrocarpa (Benth)
 Nivea Tais Vila, Universidade Estadual de Maringá | Brazil

ID 16
Dyeing Cotton With Dye Extracted From Fallopia Japonica Leaves
 Marija Gorjanc, University of Ljubljana | Slovenia

Session: Natural fiber based polymeric composites
 Chair: António Marques

Invited Lecture
Sustainable Development Of Transtibial Protheses – Application Of Appropriate Technologies
 António Marques, FEUP | Portugal

ID 180
The Effect Of The Flax Fibre Extraction Method On Mechanical Properties Of The Composites Containing The Fibres
 Wanda Rózańska, Institute of Natural Fibres & Medicinal Plants | Poland

ID 31
Accelerated Aging Versus Natural Aging Of Flax Fiber / Unsaturated Polyester Composites
 Moussa Gomina, CNRS | France

ID 34
Fungal Degradation Of Flax Fibre Reinforced Composites Made Using Vegetable Oil Based Epoxy Resin
 Arunjunai Raj Mahendran, Kompetenzzentrum Holz GmbH | Austria

12h45 **ID 308**
Synthesis And Characterization Of Lithium Iron Phosphate Nanowires From Sago Pith Cellulose Nanofibril Aerogel
 Jau Choy Lai, Universiti Teknologi Malaysia | Malaysia

ID 266
Needle Punching Machine At Laboratory Scale To Manufacturing Fique Fiber Nonwovens
 Adriana Restrepo-Osorio, Universidad Pontificia Bolivariana | Colombia

ID 240
Experimental Analysis Of Clay Boards Made With Coir
 Daniela Cenci, University of Minho | Portugal

13h00 Lunch

14h00 **Invited Leacture**
Bacterial Nanocellulose: Last But Not The Least
 Miguel Gama, University of Minho | Portugal

ID 164
Flax Cell Wall Ultrastructure Modifications During Retting
 Johnny Beaugrand, INRA | France

Invited Leacture
The use of lignocellulosic fibers in cement based materials – challenges and achievements
 Holmer Savastano, University of São Paulo | Brazil

14h15 **ID 223**
Bacterial Cellulose Membrane With Functional Properties
 Andreia Monteiro, Institute of Chemistry | Brazil

ID 57
Modeling Draw Process Of Flax Fibers
 Moussa Gomina, CNRS | France

14h30 **ID 313**
Multilayer Bacterial Cellulose With Confined Nanoparticle Distribution
 Soledad Roig, ICMAB-CSIC | Spain

ID 144
Measurement Of The Lenght Of Short Animal Fibers: A Comparison Of Almeter And Classifiber Instruments
 German Escobar, INTI | Argentina

ID 208
Evaluating The Thermal Comfort Properties Of Rize's Traditional Hemp Fabric (Feretiko) Using A Thermal Manikin
 Maria José Araújo Marques Abreu, University of Minho | Portugal

ID 6
The Use Of Natural Fibers In Repairing And Strengthening Of Cultural Heritage Buildings
 Ali Abbass, University of Minho | Portugal

ID 116
Study Of The Common Reed Phragmite Australis For A Valorisation In Biocomposites And Building Materials
 Mathilde Honoré, Institut de Recherche Dupuy de Lôme | France

innovative natural fibers & structures
 Chair: You-Lo Hsieh

modeling and prediction of properties and behavior
 Chair: Patricia Marino

fiber based cementitious composites
 Chair: Jan Broda

15h00	Session: Inno C	ID 122 Development Of Textile-Based Hydrogel Dressings Used In Burn Treatment Gizem Ceylan Türkoğlu, Dokuz Eylul University Turkey	Session: Analytics, model CI	ID 35 Improving Friction Yarn Qualities For Its Use In Foundation Garments – Part 3 Kanwar Varinder Singh, National Institute of Technology India	Session: Natural	ID 215 Structural Sandwich Composites Out Of Wood-Foam Core And Textile Reinforced Concrete Sheets For Versatile And Sustainable Use In The Building Industry Frauke Bunzel, Fraunhofer Institute for Wood Research Germany
		ID 60 Fibers Of Cellulose Sugar Cane Bagasse With Bromelain Enzyme Immobilized To Application In Dressing Silgia Aparecida da Costa, São Paulo University Brazil		ID299 Influence Of The Addition Of Nettle And Hemp Fibers To Cotton Based Yarns On The Moisture Management Properties Miguel Navarro, Universidade do Minho Portugal		ID 202 Characterization Of Coconut Fibers For Use As Reinforcement In Cement Matrix Composites Lina Bufalino, Federal Rural University of Amazonia, Brazil
		ID 26 New Method To Produce Poly(Vinyl Alcohol)/Cellulose Acetate Films With Improved Antimicrobial Action Marta A. Teixeira, 2C2T - University of Minho Portugal		ID293 Superhydrophobic Cotton Fabrics Based On ZnO Nanoparticles Functionalization Inês Boticas, University of Minho Portugal		ID 126 Investigation Of The Interfacial Bonding Between Natural Fibres And Various Cementitious Matrices In Mortar Composites Seyed Ghaffar, Brunel University London United Kingdom
15h45 Coffee-Break & Poster Session						
16h15		ID 5 Hybrid Fabrics For Use In Bio-Based Composites And Their Applications Jana Winkelmann, Fraunhofer WKI Germany		ID 3 Evaluation Of Injection Moulded Natural Fibre-Polyolefin For Potential In Automotive Applications James Thomason, University of Strathclyde United Kingdom		ID 46 Material Sorting Using Hyperspectral Imaging For Biocomposite Recycling Tuomas Sormunen, VTT Technical Research Centre of Finland Ltd Finland
		ID 32 Copy Paper As An Alternative Reinforcement For Biodegradable PLA And PBAT Composites Nina Graupner, Bremen City University of Applied Sciences Germany		ID 191 2D Native Fibrous Vegetable Material As Reinforcement Of Textile Composites Materials Cristel Onesippe Potiron, Université des Antilles Guadeloupe (FWI)		ID 67 Absorption Properties Of Fabricated Film From Cotton Gin Trash Abu Naser Md Ahsanul Haque, Deakin University Australia

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16h45	<p>ID 38 Main Criteria Of Sustainable Plant Fibre For Efficient Unidirectionnal Biocomposites Alain Bourmaud, University of South Brittany France</p>	<p>ID 291 Potential Use Of Leaf Fiber Of Azores' Pineapple In Reinforcement Of Composite Materials João Bessa, Fibrenamics Portugal</p>	<p>ID 160 Fibrous Waste From The Crabwood (Carapa Guianensis) Seed: Morphological Potential For Exfoliating Purposes Driss Pena, University of Amapá State Brazil</p>
17h00	<p>ID 62 Creating An All Natural Composite Using Random Chopped Banana Fibers And PLA William Jordan, Baylor University USA</p>	<p>ID 209 Potential Of Date Palm Flour As A Natural Filler For Virgin And Recycled Polypropylene Bio-Composites Mahmoud Nassar, Sultan Qaboos University Oman</p>	<p>ID 198 Assessment Of Hemp Based Sorbents For Industrial Spill Response John Wolodko, University of Alberta Canada</p>
17h15	<p>ID 69 Transmission Loss Of Nap Cores Made With Cotton (Co) And Polylactic Acid (PLA) For Application In Lightweight Construction Franziska Stehle, Faserinstitut Bremen e.V. Germany</p>	<p>ID 220 The Influence Of Hornification Of Luffa Fiber On The Water Absorption Of Polymeric Composites Diana Carolina Quinayá, PUC-RIO Brazil</p>	<p>ID 141 Recycled Cotton Fibres In Technical And Clothing Applications Pirjo Heikkilä, VTT Technical Research Centre of Finland Ltd. Finland</p>
17h30	<p>ID 247 Assessment Of Extended Retted Hemp Fibres For Composite Reinforcement: Fibre Properties And Adhesion With Polyactide Matrix Laetitia Marrot, InnoRenew Center of Excellence Slovenia</p>	<p>ID 237 Hygrothermal Degradation Effects On A Rubber Toughened WPC Francesco Mollica, Università degli Studi di Ferrara Italy</p>	<p>ID 120 Greening Of Road Slope Reinforced With Wool Fibres Jan Broda, University of Bielsko-Biala Poland</p>
17h45	<p>ID 119 Influence of weft yarn diameter and weft yarn density of coir and jute geomeshes on soil erosion control Vinay Midha, Dr B R Ambedkar National Institute of Technology Jalandhar India</p>	<p>ID 286 Development Of Mainly 'Green' Sandwich Structure Cores Based On Modified Expanded Corkboard António Marques, FEUP Portugal</p>	<p>ID 265 Behavior Of Externally Strengthened Structural Elements By Local Natural Reinforced Composites Aladdin Sharkawi, Tanta University Egypt</p>
18h00	Closing		
20h00	Social Program - Conference Dinner		

9h00

Conference Announcements

Keynote Lecture

Functionality and Sustainability of Natural Fibre Materials

Xungai Wang, Deakin University | Australia

9h30

Chair: Raul Fangueiro

Room Infante

Room Miragaia

Room S. João

10h15

ID 188

Influence of ethanol post-treatments on the properties of silk protein materials

Adriana Restrepo-Osorio, Universidad Pontificia Bolivariana | Colombia

ID272

In Situ Synthesis Of Cao And Sio2 Nanoparticles Onto Jute Fabrics: Exploring The Multifunctionalities

Joana Araújo, Universidade do Minho | Portugal

Session: Advanced fibrous structures based on natural fibers
Chair: Holmer Savastano

Invited Leacture

The Intrinsic Charecteristics and Idiosyncratic Application of Natural Coir Fibre

Febi Varghese, Government of Kerala, India

10h30

ID 283

Plantain Fibers Used As Immobilization Support Of Laccase For Dye Degradation

Sara Lucia Mora Gordillo, Universidad Nacional de Colombia | Colombia

Session: Functional natural fibers
Chair: Hidemasa Takana

ID 228

Biomordants And New Alternatives To The Sustainable Natural Fiber Dyeings

Luciano Pinheiro, University of São Paulo | Brazil

10h45

ID 267

Development And Characterization Of Chitosan/Mmtca++ Bionanocomposites Incorporated With Two Different Essential Oils

Ana Luisa Fernando, Universidade Nova de Lisboa | Portugal

ID 288

Study Of Fibre, Fabric Weight And Functional Finishes On Comfort Properties Of Woven Shirting Fabrics

Awadhesh Choudhary, Nit Jalandhar | India

ID 107

Strength Behaviour Of Cohesionless Soil Reinforced With Coconut Leaf- Let As A Natural Material

Chandrakaran Sreedharan, National Institute of Technology | India

11h00

Coffee-Break
& Poster Session

11h30

Invited Leacture

Conductive Carbon Microfibers Derived From Wet-Spun Lignin/Nanocellulose Hydrogels

Orlando J. Rojas, Aalto University | Finland

11h45

ID 139

Properties of ring, rotor and Dref-II spun conductive cotton yarn

Atin Chaudhuri, University of Calcutta | India

12h00

ID 65

Electrical Properties Of Graphene-Treated Wool Knit

Sophie Wilson, University of Otago | New Zealand

12h15

ID 173

Silk Fibroin Proton Conducting Membranes

Tomás Almeida, CICECO-Aveiro Institute of Materials | Portugal

12h30

Session: Functional natural fibers
Chair: Diana Ferreira

ID 152

Vinyl Acetate Modified Microfibrillated Lignocellulose And Application In Polylactic Acid Biocomposites

Ferhat Yetis, University of Manchester | United Kingdom

ID 162

Investigation Of Fermentation Residue Of Biogas Plants For The Production Of Sustainable Fibre Reinforced Composites

Marion Lütz, German Institutes of Textile and Fiber Research | Germany

ID 170

Development And Chatacyerization Of A Recycled PVC Filledcomposite With Eucalyptus Globulus Fibres

Diana Pais, INEGI | Portugal

ID 311

Preparation And Characterization Of A Novel Starch - Chestnut Husk Biocomposite

Pamela Castro, Pontificia Universidad Católica del Perú | Peru

ID 296

Lightwood: Innovative Wood And Polyurethane Based Composites

Jorge Martins, Instituto Politécnico de Viseu | Portugal

Session: Natural fiber based polymeric composites
Chair: Alain Bourmaud

ID 108

Use Of Bamboo Mat As A Potential Soil Reinforcement Material- An Experimental Study

Chandrakaran Sreedharan, National Institute of Technology, India

ID 241

Homo Sustentabilis: Circular Economy And New Business Models In Fashion Industry

António Marques, University of Minho | Portugal

ID 53

Homewear In Brazil: Evolution From 1976 To Present

Mariana Costa Laktim, University of Sao Paulo, Brazil

ID 100

Natural Textile Fibers In Contemporary Brazilian Jewelery

Ivete Cattani, University of Sao Paulo | Brazil

Session: Textile processing of natural fibers
Chair: Júlia Baruque

ID 109

Cognitive System Engineering: Cocreation For Auxetic Garment Design

Kanwar Varinder Singh, National Institute of Technology | India

12h45 ID 113
Development of moisture vapour permeable waterproof cotton fabric by coating with blend of natural Rubber and chloroprene Containing Ammonium Acetate
 Debasish Das, University of Calcutta | India

114
Winding Filament Fabrication For Fibrous Structures In Architecture
 Hannah Arkell, KADK | Denmark

ID59
State-Of-The-Art Test Equipment For Modern Materials
 Andreas Giehl, Q-Lab Deutschland GmbH | Germany

13h00	Closing Cerimony
13h30	Lunch
14h30	Social Program - Walking Tour

ID12

Ecofibras Project: A Strategy To Improve Ecosystems Affected By Invasive Plant Species In Macaronesia

Luis Suárez, Universidad de Las Palmas de Gran Canaria | Spain

ID19

Panorama Of Natural Fibers Applied In Footwear: Materials And Brazilian Market

Lais Kohan, University of Sao Paulo | Brazil

ID21

Composite Nonwovens With The Addition Of Keratin Fibers Produced By The Spun-Bonded Method

Ewa Wesolowska, Institute of Biopolymers and Chemical Fibres | Poland

ID44

Bioethanol 2Nd Generation From Hemp Biomass

Weronika Gieparda, Institute of Natural Fibres & Medicinal Plants | Poland

ID45

Halophyte Biomass For 2Nd Generation Biofuels

Weronika Gieparda, Institute of Natural Fibres & Medicinal Plants | Poland

ID49

Contribution To The Reduction Of Poverty In The Lac Region Through The Sericulture With Sustainable And Added Approach To Local Value Project Europeaid/150248/Dh/Act/Alc

Patricia Marino, INTI | Argentina

ID52

Influence Of The Granulometry Of Palm Fibers On Sorption Of Diesel Oil In Palm Fibers

Daniella Mulinari, Universidade do Estado do Rio de Janeiro | Brazil

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Vincenzo Fiore, University of Palermo | Italy

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Szymon Rojewski, Institute of Natural Fibres & Medicinal Plants | Poland

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Rita De Castro Engler, rita.engler@gmail.com | Brazil

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German Escobar, INTI | Argentina

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Daniel Magalhães De Oliveira, Sao Paulo State University | Brazil

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Anne Shayene Campos De Bomfim, São Paulo State University (UNESP) | Brazil

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Breno Abreu, University of Brasília | Brazil

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Anda Ščerbaka, Riga Technical University | Latvia

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Jongshin Park, Seoul National University | Republic of Korea

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Marta A. Teixeira, 2C2T - University of Minho | Portugal

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Tajana Krička, University of Zagreb - Faculty of Agriculture | Croatia

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Rosamaria Codispoti, University of Calabria | Italy

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Hanieh Kargarzadeh, Center of Molecular and Macromolecular Studies, Polish Academy of Sciences | Poland

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Denise Abatti Kasper Silva, University of the Joinville Region | Brazil

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Daiva Milasiene, Kaunas University of Technology | Lithuania

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Olga Belukhina, Kaunas University of Technology | Lithuania

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Remo Merijs-Meri, Institute of Polymer Materials, Faculty of Materials Sciences and Applied Chemistry | Latvia

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Alicia Reyes Samilpa, Instituto Politécnico Nacional | México

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Jānis Zicāns, Institute of Polymer Materials, Faculty of Materials Sciences and Applied Chemistry | Latvia

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Malgorzata Zimniewska, Institute of Natural Fibres & Medicinal Plants | Poland

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Lourival Mendes, Universidade Federal de Lavras | Brazil

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Anett Kondor, Surface Measurement Systems | United Kingdom

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Alexandre De Moraes, Federal Institute of Education, Science and Technology of Bahia (IFBA) | Brazil

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Leticia Galatti, University of Sao Paulo | Brazil

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Ana Sofia Ribeiro, University of Minho | Portugal

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Pedro Pereira, University of Minho | Portugal

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Iury Korting De Abreu, Universidade do Minho | Portugal

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Diana Dias, Fibrenamics | Portugal

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Jorge Teixeira, Sonae Indústria de Revestimentos, SA | Portugal

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João Bessa, Fibrenamics | Portugal

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Fernando Leite, Fibrenamics | Portugal

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Vânia Pais, Centre for textile Science and Technology (2C2T), University of Minho | Portugal

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Miguel Granato, Universidade Federal de Santa Catarina | Brazil

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