



# TEXTILE & CHEMISTRY EVOLUTION

New  
Generation  
of Textiles  
and  
Processes


**XXV<sup>th</sup> IFATCC**  
INTERNATIONAL CONGRESS

**27-29**

**APRIL 2021**

**ENSAIT - FRANCE**





**IFATCC (International Federation of Associations of Textile Chemists and Colourists) International congresses concern Chemistry applied to textiles:** fibre spinning, dyeing and finishing, and manufacturing of multi-functional textiles, for both conventional and high-performance textiles.

**Environmental planetary Challenges** require Innovation in **Chemistry and Textile**. It is becoming essential to reconsider the design and manufacturing of textiles. Eco designing is indeed required for textile functionalisation to limit environmental impacts.

**This [R]evolution is radically shaking up production methods and defining new technical and technological limits.**

Many companies have innovative solutions to offer in response to these expectations. Studies carried out in research labs are also essential in anticipating these changes, particularly in the field of clothing.

*For this reason over a three-day period, companies, experts, technical centres and research laboratories will discuss the evolution of textile chemistry to generate new fibres, innovative fabrics and sustainable processes, for revolutionising the textile businesses and the apparel market.*

#### **ORGANISATION**

**National Organisation Committee:** **ACIT** (Association of Textile Industry Chemists), France

**Scientific Committee:** Coordination








**Prof. Anne PERWUELZ and Dr. Nemeshwaree MASSIKA BEHARY**, ENSAIT / GEMTEX, France

#### **PRACTICAL INFORMATION & REGISTRATION**

[www.ifatcc2021-roubaix-acit.fr](http://www.ifatcc2021-roubaix-acit.fr)

# CONFERENCES SCHEDULE




## TUESDAY 27<sup>TH</sup> APRIL 2021: MORNING

09:00 to 09:20:	Introduction	
09:20 to 09:55:	Plenary conference Collaborative innovation for future textile	 <b>Louis VOVELLE,</b> Elkem, Techtera (France)
09:55 to 10:20:	Improvement of the flame retardancy of cork by phosphorylation – Application to artificial turf structures	 <b>Angeline PATUREL,</b> Lille University (France)
10:20 to 10:45:	Monitoring and strain sensing of bio-based fabrics with conductive sisal yarns	 <b>Ahmed ABED,</b> ENSAIT, Gemtex (France)
10:45 to 11:10:	Production and evaluation of antibacterial microcapsules impregnated to different fabrics	 <b>Arianne LOPEZ,</b> INTEXTER UPC (Spain)
11:10 to 11:30:	Break	
11:30 to 11:55:	The Archroma Way "Color Source": An infinite flow of colors engineered to bring your inspiration to life into achievable and sustainable designs & collections	 <b>Christophe MAESTRIPIERI,</b> Archroma (Switzerland)
11:55 to 12:20:	Eco-dyeing by cationization – The challenging way towards the sustainable fashion	 <b>Jan MAREK,</b> InoTEX (Czech Republic)
12:20 to 12:45:	Natural antimicrobials for functionalizing polyester textiles: methods and toxicological comparison	 <b>Nemeshwaree MASSIKA BEHARY,</b> ENSAIT, Gemtex (France)
12:45 to 13:00:	Research project pitches	









## TUESDAY 27<sup>TH</sup> APRIL 2021: AFTERNOON

14:00 to 14:35:	Plenary conference Circular economy for fashion and textiles	 <b>Chiara CATGIU,</b> Ellen MacArthur Foundation (UK)
14:35 to 15:00:	Building bridges between circular economy and bio-based economy	 <b>Mattia COMOTTO,</b> Aquafil (Italy)
15:00 to 15:25:	Sustainability of resources and readiness to follow circular economy - The existencial tasks of TC	 <b>Jan MAREK,</b> InoTEX (Czech Republic)
15:25 to 15:50:	A novel and sustainable technology for development of durable and flexible smart textiles: 3D printing onto textiles	 <b>Prisca EUTIONNAT-DIFFO,</b> ENSAIT, Gemtex (France)
15:50 to 16:10:	Break	
16:10 to 16:35:	Smart Chemistry with Character - From the vision of a sustainable future to specific products and processes	 <b>Andreas TROSCHT,</b> CHT Germany GmbH (Germany)
16:35 to 17:00:	Studies on denim washing with enzyme	 <b>Arun PATRA,</b> Uttar Pradesh Textile Technology Institute (India)
17:00 to 17:25:	A facile approach to elaboration of multifunctional highly hydrophobic textile fabric: synthesis, characterization and application	 <b>Ghizlane ACHAGRI,</b> Faculty of Sciences and Techniques of Mohammedia (Morocco)
17:25 to 17:50:	Impact of melt spinning parameters on the physical properties of an immiscible PLA/PCL bioresorbable textile scaffold	 <b>Vivien BARRAL,</b> ENSAIT, Gemtex (France)

### CONFERENCE TOPICS LEGEND:

-  "High Performance Textiles for Technical Applications" conferences
-  "Green Chemistry and Biotechnology" conferences
-  "Sustainability and Circularity" conferences

## WEDNESDAY 28<sup>TH</sup> APRIL 2021: MORNING

9.00 to 9.35:	Plenary conference Green shades of wool	 <b>Crisan POPESCU,</b> DWI (Germany)
9.35 to 10.00:	Development of reactive dyes for sustainable textiles through ERC solution	 <b>Wen-Jang CHEN,</b> Everlight (Taiwan)
10.00 to 10.25:	Present situation of supercritical fluid dyeing and finishing	 <b>Teruo HORI,</b> University of Fukui (Japan)
10.25 to 10.50:	Sustainability in a textile dyehouse	 <b>Utku VAROL,</b> Ekoten (Turkey)
10.50 to 11.10:	<i>Break</i>	
11.10 to 11.20:	Research project pitches	
11.20 to 11.45:	Capture and pilotage of drops on a fiber	 <b>David QUERE,</b> ESPCI & Ecole Polytechnique (France)
11.45 to 12.10:	Novel flexible aerogel fiber constructed from p-aramid nano fibrils	 <b>Kazumasa HIROGAKI,</b> University of Fukui (Japan)
12.10 to 12.35:	Investigating ionic liquid-based click-ionogels by thiol-ene photopolymerisation onto textile yarns/fibres	 <b>Claude HUNIADE,</b> University of Borås (Sweden)
12.35 to 13.00:	In-situ one bath dyeing and reduction of graphene oxide on knitted (cotton/lycra) fabrics - Towards highly stretchable self-powered washable e-textiles	 <b>Nazakat KHOSO,</b> Balochistan University of Information Technology-, Engineering and Management Sciences (Pakistan)

## WEDNESDAY 28<sup>TH</sup> APRIL 2021: AFTERNOON

14.00 to 14.35:	Plenary conference Traceability: the enabler of sustainable fashion	 <b>Stéphane POPESCU,</b> COSE361 (France)
14.35 to 15.00:	Wool Up – The Sustainable re-wool-ution	 <b>Begoña GARCIA,</b> Jeanologia (Spain)
15.00 to 15.25:	Sustainable dyeing of PLA fibres using natural colourants	 <b>Naveen Kumar BALAKRISHNAN,</b> Maastricht University (Netherlands)
15.25 to 15.50:	Thermal and hydric characterization of innovative insulation material from recycled textile	 <b>Oly VOLOLONIRINA,</b> Junia HEI Lille (France)
15.50 to 16.10:	<i>Break</i>	
16.10 to 16.35:	Fashion show	<b>Márcia de CARVALHO,</b> Chaussettes Orphelines (France)
16.35 to 17.00:	Tackling the formaldehyde challenge: new latex binder innovation for technical textiles	 <b>Daniele ZIMMERMANN,</b> Synthomer (Germany)
17.00 to 17.25:	Functional finishing of cotton fabric by water-based formulations of sol-gel premodified polysaccharides	 <b>Lenka MARTINKOVA,</b> InoTEX (Czech Republic)
17.25 to 17.50:	Valve-jet printing of redox enzyme on polyester textile: a sustainable enzyme immobilization approach	 <b>Mohammad Neaz MORSHED,</b> ENSAIT, Gemtex (France)

### CONFERENCE TOPICS LEGEND:



"High Performance Textiles for Technical Applications" conferences











"Green Chemistry and Biotechnology" conferences



"Sustainability and Circularity" conferences



## THURSDAY 29<sup>TH</sup> APRIL 2021: MORNING

9.00 to 9.35:	Plenary conference Roadmap to Zero	 <b>Frank MICHEL,</b> ZHDC (Netherlands)
9.35 to 10.00:	Sustainability assessment of biobased colorants in the textile value chain	 <b>Matilde DELLA FONTANA,</b> Maastricht University (Netherlands)
10.00 to 10.25:	Sustainable recovery process orange peel-based for disperse dyes of textile industry effluents	 <b>Marta RIBA-MOLINER,</b> INTEXTER UPC (Spain)
10.25 to 10.50:	Dyeing of cellulosic fibres by dyes obtained from biosources	 <b>Gabriela MIJAS,</b> INTEXTER UPC (Spain)
10.50 to 11.10:	<i>Break</i>	
11.10 to 11.35:	Electrochemistry for clean industrial productions in textile industry	 <b>David CRETENAND,</b> RedElec Technologie SA (Switzerland)
11.35 to 12.00:	Melt spinning of multifilament filled with nanoparticles for textile reflecting human body infra-red	 <b>Joseph LEJEUNE,</b> ENSAIT, Gemtex (France)
12.00 to 12.25:	Graft-copolymerization of vinyl monomers for intumescent flame retardant cellulose fabrics	 <b>Giuseppe ROSACE,</b> University of Bergamo (Italy)
12.25 to 12.50:	Interest of carbon fibers as electrochemical biosensors	 <b>Natalie PERRAULT,</b> CEA LETI DTBS, Grenoble (France)
12.50 to 13.00:	Conclusion	

Following the uncertainty regarding the evolution of Covid 19, the IFATCC Congress 2021 is planned both in form of Webinars and in Live Conference at ENSAIT, in Roubaix, France.

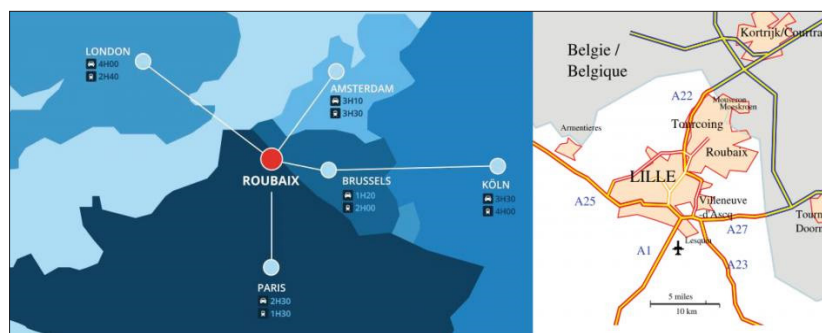
All lectures will be broadcast in Webinars.

If the pandemic prevents physical meetings, the Live Conference option will be abandoned.




### LOCATION

ENSAIT - 2 Allée Louise et Victor Champier - 59056 Roubaix – France

Roubaix is situated in the Lille Metropole (MEL) in the North of France.



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