## 2020 CONFERENCE PROGRAM Wednesday September 23, 2020

10:20 - 11 :00 Conference # 1

#### BI-AXIAL OR TRI-AXIAL TEST: A NEW WAY OF CHARACTERIZING MATERIALS

As an essential part for characterizing the physical behavior of materials, the dynamometer makes it possible to reproduce mechanical stresses under the actual conditions of their use. Until today, tests have only been carried out on one axis.

This new tri-axial technology consists in exerting stresses in several perpendicular directions on the same test piece in tensile strength, compression, force regulation, fatigue, creep...

The tests make it possible to measure the mechanical stresses or the aging of the product. This technology can be used in many fields such as geotextile, medical or any other field of application including technical fabric. Examples will illustrate these different applications during the conference.

Philippe OLIVIER Technical and Commercial Director **EMI DEVELOPPEMENT** 

11:40 - 12 :20 Conference # 2

### SMART TEXTILES

Presentation of a panorama of connected textiles supported by testimonials from start-ups.

Virginie CANART Project Manager **EURAMATERIALS** 

**13:40 – 14:00** Conference # 3

### **TWINE : DIGITAL THREAD DYEING SYSTEM**

Twine's TS-1800 is the world's first digital thread dyeing system. It produces a small quantity of polyester yarn in any colour on demand. Twine is the solution to meet your sampling, prototyping, customization, small series manufacturing needs. Discover the many applications in knitting, sewing and embroidery.

Vincent GURDAL CEO, VVC

**17:00 – 17 :40** Conference # 4

### FUNCTIONALIZATION OF SURFACES BY NANO-STRUCTURING

The functionalization of surfaces is a generic request from manufacturers and users of materials, in order to give value by adding new properties to steels, textiles, glasses or polymers.

Combining the chemical / mass properties of surfaces with physical functions, created by modifying the organized topography of surfaces, opens up tremendous possibilities.

We will present some advances regarding injection and texturing processes for textiles, flexible materials or composite materials developed by SILSEF: optical functions (anti-reflection, decoration, anti-counterfeiting marking) or controlled wettability.

Daniel TUROVER CEO – **SILSEF** 

# **Thursday September 24, 2020**

10:20 – 11 :00 Conference # 5

### CIRCULAR ECONOMY & RECYCLING: PRESENTATION OF THE RESULTS OF THE RETEX PROJECT

The RETEX project gives you its results!

The objective of the project is to integrate the circular economy into the textile sector with a cross-border approach, Hauts-de France / Belgium.

The focus is to identify sustainable solutions for recycling cotton and polyester.

EuraMaterials presents the results of its value chains which are screened at the technical, environmental and economic levels:

- Hospital clothing recycled in a closed loop
- Cotton scraps used in knitting
- Recycled polyester textile scraps to the plastics processing industry

The RETEX project benefits from European funds within the INTERREG France Wallonia Flanders cross-border program - Operator partners: EuraMaterials, Centexbel, CD2E, FEDUSTRIA

More info on www.dotheretex.

Jeanne MEILLIER Project Manager **EURAMATERIALS** 

### **11:40 – 12 :20** Conference # 6

## METALLIZATION AT THE SERVICE OF FUNCTIONALITY

The deposition of thin metallic layers by cathode sputtering was reserved some time ago in the space and aeronautical fields. This process, although it is still widely used in mechanics, is now usable for other sectors of activity as varied as decoration, biomedical or textiles. The aim of this presentation is to give an overview of the benefits of this technology for textiles, both technically and environmentally, and to illustrate its potential with examples of applications.

Isabelle FERREIRA

PhD, Materials Research and Innovation Manager - Surface and Interface, IFTH

13:40 – 14:00 Conférence # 7

### P3 INNOVATION : PRESENTATION OF MEMOFIBRE -

P3 Innovation presents its technology. With the addition of several types of marine minerals at the heart of synthetic fibers, the material acts with a natural ionizing action that allows synthetic fibers to regulate the pH of intracellular fluids. From these properties, the textile offers perspectives on the treatment of pain of inflammatory origin and on stress reduction.

Dominique PICARD CEO, **P3 INNOVATION**