

3. European industry and research exchange on Technical Textiles for Health, Medical and Sport Application on 8 and 9 October 2020, online event

Dear Madam or Sir,

it is our pleasure to invite you to the 3rd European meeting of experts for technical textiles, processes, ideas and research. Due to ongoing Covid-19 travel and meeting restrictions we will meet online this year.

In the last years participants and speakers from up to 15 countries attended the meetings in Frankfurt/Germany. We hope that this year's online event will attract even more European and international participants.

The event language is English. Participation is free of charge.

For any enquiries, please contact stefan.schmidt@ivgt.de.

Registration before 6 October 2020 online: <https://forms.gle/qvh7D4bbn5MdcYmP9>

08. October 2020 – 09h00 to 10h30 – TT Health Application 1

Welcome by the Organisers

Keynote: Outlook of the EU Research Activities – **Lutz Walter, ETP**

- RehaProTex - Textiles for Rehabilitation and Prophylaxis - a Saxon Network
Heike Illing-Günther, STFI e.V.
- Application of advanced materials and technologies in the development of smart textiles for health and sport industries. In this sense, wearables and smart textile-based devices obtained through the combination of advanced textile-based processes and printed electronics will be presented.
Marta Midão, CeNTI
- Our technical expertise in tapes and medical lamination textiles for making surgical draps and surgical / medical gowns.
Isabelle Colin, Vetex N.V.

Q&A Panel for TT-Health 1 – **Chair: Lutz Walter, ETP**

08. October 2020 – 11h00 to 12h30 – TT Health Application 2

- Innovative system for the improvement of well-being and living conditions of the so-called "biologically fragile users" based on non-invasive traceability technologies for the evaluation of the effectiveness of non-pharmacological treatments.
Enrico Venturini, Next Technology Tecnotessile
- Medical textiles for cutaneous diseases
Radu Cezar-Doru, "Ghoerghe Asachi" Technical University Iași
- Electro-Conductive Heating Fabrics for Orthopedic Compression Supports
Reazuddin Reon, Kaunas University of Technology
- Textile additive manufacturing technology for automated processing of heart valve and bone implants **Ronny Brünler, ITM TU Dresden**

Q&A Panel for TT-Health 2 – **Chair: Felipe Carrasco, EU-TEXTILE2030 EEIG**

08. October 2020 – 13h00 to 14h45 – TT Health Application 3

- Functional non-wovens and textiles based on colour-changing indicator dyes for monitoring health and wellness
Gerhard Mohr, Joanneum Research Forschungsgesellschaft mbH
- Resorbable fibre based biomaterials for regeneration of bone and cartilage defects
Robert Tonndorf, ITM TU Dresden
- Application potential of (electro-) thermally controlled muscle
Bianca-Michaela Wölfling, Hohenstein Institut für Textilinnovation gGmbH
- Textiles for Biophysical Skin Care **Thomas Grethe, Forschungsinstitut für Textil und Bekleidung, Hochschule Niederrhein**

Q&A Panel for TT-Health 3 – **Chair: Kris Vermoesen, Fedustria**

Summary of the Day – **Stefan Schmidt IVGT**

Please note:

- Information and slides will be available directly from the speakers.
- A list with speaker contacts will be available by the organisers.
- The list of the registered audience will not be made available due to data protection reasons.
- To secure the highest possible band with Microphone and Video of the audience will be deactivated.
- To ensure the time management the presentation length is limited to 15 minutes per speaker.
- Questions to the speakers can be send trough the chat function of the video tool.
- After each session of four presentation a panel with the speakers allows to ask question

09. October 2020 – 09h00 to 10h30 – TT Sports Application

Welcome by the Organisers

Keynote: German Textile Research Outlook to 2035– **Johannes Diebel, FKT**

- Functionalized Cellulose-based Fibres: Innovation approach to develop innovative fibres solutions that are biodegradable and sustainably manufactured for high performance textile applications
Ika Kaczmarek, Kehlheim Fibres
- Hygiene & Freshness for sportswear - **Stephan Müller, RUDOLF GmbH**
- ITA 3D-Knit: High Speed Production of Individual Sports Bras
Christoph Peiner, Institut für Textiltechnik der RWTH Aachen University

Q&A Panel for TT-Sport – **Chair: Johannes Diebel, FKT**

09. October 2020 - 11h00 to 12h45 – TT Technologies

- The Sonochemical Coating of Textiles with Antiviral Nanoparticles
Aharon Gedanken, Bar-Ilan University
- Washable Nonwovens versus Washable Wovens and Knitted Fabrics: State of the art and perspectives in infection control - **Caglar Sivri, Bahcesehir University**
- Review of encapsulation techniques for innovative, sustainable and added value technical textile products for comfort and wellbeing – **Amine Haj Taieb, University of Sfax ISAMS**
- Smart Textiles for Energy Storage: From Advanced Functional Nanomaterials to High-Performance Textile Supercapacitors – **Clara Pereira, University of Porto, Biochemistry**
- 4D textiles: Shape changing textile hybrid structures for medical applications
Hannah Koch, Institut für Textiltechnik der RWTH Aachen University

Q&A Panel for TT-Technology – **Chair: tbd.**

09. October 2020 – 13h00 to 14h45 – TT PPE Application

- The use of personal protective equipment in everyday dental practice in the context of the covid-19 pandemic and the possibility of using smart textiles to facilitate work
Dijana Furundžić and Nikola Furundžić, Dental practice “Furundzic ordinacija”
- Barrier function as an additional alternative to antiviral treatments on medical PPE fabrics
Thomas Seeger, Archroma Management GmbH
- Improving the adhesion of seam sealing tapes for personal protective equipment (PPE) through the use of plasma technology **Kristina Klinkhammer, Forschungsinstitut für Textil und Bekleidung, Hochschule Niederrhein**
- 3D Printed Structures for Customized Protective Elements: Soft Prints with Tough Requirements - **Alexandra Glogowsky, Forschungsinstitut für Textil und Bekleidung, Hochschule Niederrhein**

Q&A Panel for TT-PPE – **Chair: Karine Wallois, CLUBTEX**

Summary of the Day – **Stefan Schmidt, IVGT**