

# 8th AACHEN-DRESDEN INTERNATIONAL TEXTILE CONFERENCE 2014,

## November 27-28, 2014 in Dresden

We cordially invite you to take part in the Aachen-Dresden International Textile Conference on the 27<sup>th</sup> and 28<sup>th</sup> of November 2014, in the International Congress Center in Dresden.

**Prof. Dr. Chokri Cherif**  
for the organisers of the Dresden area

**Prof. Dr. Martin Möller**  
for the organisers of the Aachen area

With this year's partner country South Korea, we continue our tradition of offering you a platform for new research co-operations and networks beyond Germany by involving annually alternating partner countries.

### TOPICS:

- Composites
- Protective Textiles
- Textile Construction with Membranes and Textile-reinforced Concrete
- Chemistry for Composites, Protective Textiles, and Textile Construction
- Transfer Session „From Idea to Practice“
- Saxomax - Textile Innovations

### PLENARY LECTURES:

**Bernd Mlekusch**; AUDI AG, Ingolstadt. **Lightweight design for the car body – a key factor to turn the weight spiral**

**Jan Knippers**; Institut für Tragkonstruktionen und Konstruktives Entwerfen, Universität Stuttgart, **Biomimetic design and construction principles for complex fiber-based structures in architecture**

**Chul Hwan Moon**; MOTIE, Ministry of Trade, Industry and Energy, Sejong/KR, **The overview and future challenges in Korean textile industry**

**Vladimir Dyakonov**; Bayerisches Zentrum für Angewandte Energieforschung e.V. (ZAE Bayern), Würzburg, **Smart skins: Energy efficient solutions for textile architecture**

### LECTURES, e.g., from:

Aalto University; ALWIT; Arizona State University; CCTT TEC-KNIT; CHT R. Beitlich; Coatema; Complex Fiber Structures; CTC; Continental; Daimler; DLR; DIENES; DSM; DYETEC; DYNAMORE; Empa; ENSAIT; Freudenberg; Ghent University; Hong Kong Polytechnic University; Inha University; KARL MAYER LIBA; KITECH; KOLON; knittec Kobleder; Kyungpook National University; DORNIER; MAGEBA; Herbert Meyer; Nähmaschinenfabrik Emil Stutznäcker; Newcastle University; ontec; PMB; Q-Lab; SAERTEX; SGL Carbon; Stäubli; STUDIO ANDREAS DERKUM; TU Liberec; Toho Tenax; Tokyo Institute of Technology; Trützschler; TU München; Universität Stuttgart; University of Boras; wfk; Zschimmer & Schwarz;

### Selected Lectures

**Peter Wick**; Empa, St. Gallen/CH, **Nanosafety research a new discipline for safe and sustainable nano-applications illustrated for textile industry**

**Patrick Casper, Christina Maggakis-Kelemen**; wfk - Cleaning Technology Institute e.V., Krefeld, **Renewable textile finishing in the context of textile reprocessing**

**Michael Hummel<sup>1</sup>, Anne Michud<sup>1</sup>, Marjaana Tantt<sup>2</sup>, Shirin Asaadi<sup>1</sup>, Yibo Ma<sup>1</sup>, Herbert Sixta<sup>1</sup>**; <sup>1</sup>Department of Forest Product Technology, School of Chemical, Technology, Aalto University, Aalto/FI; <sup>2</sup>Department of Design, School of Arts, Design and Architecture, Aalto University, Aalto/FI, **Ioncell-F: High tenacity textile cellulose fibers from ionic liquid Solutions**

**Hidetoshi Matsumoto<sup>1</sup>, Shinji Imaizumi<sup>1</sup>, Yuichi Konosu<sup>1</sup>, Shohei Masuda<sup>1</sup>, Minoru Ashizawa<sup>1</sup>, Akihiko Tanioka<sup>1</sup>, Wei Lu<sup>2</sup>, James M. Tour<sup>2</sup>**; <sup>1</sup>Tokyo Institute of Technology, Tokyo/JP; <sup>2</sup>Rice University, Houston/US, **Enhancement of electrical and mechanical properties of electrospun composite nanofiber yarns containing oriented graphene nanoribbons**

**Niclas Wiegand<sup>1</sup>, Edith Mäder<sup>1, 2</sup>**; <sup>1</sup>IPF Dresden e.V.; <sup>2</sup>Institute of Materials Science, TU Dresden, **Processing and performance of SpinCOM yarns and their composites**

**Blanka Tomkova<sup>1</sup>, Martin Müller<sup>1</sup>, Jan Gregr<sup>2</sup>**; <sup>1</sup>Dept. of Material Engineering, Technical University of Liberec/CZ, <sup>2</sup>Dept. of Chemistry, Technical University of Liberec/CZ, **C/C composites densified by ground carbon nanoparticles from recycled carbon fibers - changes in mechanical and thermal properties**

**Steffen Müller Probandt, Andreas Desch**, DIENES Apparatebau GmbH, Mühlheim, **Systems for the development of carbon fibers based on PAN and Lignin**

**Johannes Taesler<sup>1</sup>, Wolfgang Trümper<sup>2</sup> et al.**; <sup>1</sup>Knittec Kobleder GmbH, Bad Füssing; <sup>2</sup>ITM, TU Dresden, **Development of a technology enabling highly productive manufacturing of multilayer weft knitted reinforcing structures for lightweight applications**

**Charlotte Eisenhauer<sup>1</sup>, Benedikt Borchert<sup>2</sup> et al.**; <sup>1</sup>TU München; <sup>2</sup>CCTT TEC-KNIT GmbH, München, **Advancements in the development and testing of highly-drapeable tailored textiles**

**Marcus O. Weber<sup>1</sup>, Thorsten Bache<sup>2</sup> et al.**; <sup>1</sup>Hochschule Niederrhein, Fachbereich Textil- und Bekleidungstechnik Mönchengladbach; <sup>2</sup>Bache Innovative, Rheinberg, **Stab resistant knitted clothing**

**Jin-Seok Bae<sup>1</sup>, Sung-Hoon Kim<sup>1</sup>, Do-Hyun Lee<sup>2</sup>**; <sup>1</sup>Kyungpook National University, Daegu/KR, <sup>2</sup>DYETEC, Korea Dyeing Technology Center, Daegu/KR, **Synthesis and application of colorimetric nanofiber Chemosensor**

**Evelyn Lempa<sup>1</sup>, Carsten Graßmann<sup>1</sup>, Kristin Topp<sup>1</sup>, Maike Rabe<sup>1</sup>, Raimund Lintl<sup>2</sup>, Peter Siemens<sup>3</sup>**; <sup>1</sup>Hochschule Niederrhein, Mönchengladbach, <sup>2</sup>Kirson GmbH, Neustadt/Donau, <sup>3</sup>Verseidag-Indutex GmbH, Krefeld, **Electrically conductive functions for innovative construction textiles**

**Angela Geu, Nora Reiz, Oliver Richter, Axel Ritter**; Zschimmer & Schwarz Mohsdorf GmbH & Co KG, Burgstädt, **High permanent flame-resistant fluorocarbon finish for protective clothes – a quadrature of the circle?**

**Nandan Khokar**; School of Textiles University of Borås/SE, **Development of innovative 2D and 3D fabric-forming processes for manufacturing composite reinforcements**

**Thomas Kolbusch**; Coatema Coating Machinery GmbH, Dormagen, **Innovative equipment concepts for coating of composite products with thermosetting and thermoplastic adhesives**

**Jinlian Hu, Jing Lu, Bipin Kumar**; Institute of Textiles and Clothing, Hong Kong Polytechnic University, Hung Hom/HK, **Shape memory polymers and fibers for protective textiles**

**Siegfried Assmann<sup>1</sup>, Susanne Aumann<sup>2</sup>, Andrea Brücken<sup>2</sup>, Andrea Ehrmann<sup>2</sup>, Alexander Büsgen<sup>2</sup>, Dirk Unsenos<sup>3</sup>**; <sup>1</sup>ALWIT GmbH, Emmerich-Elten, <sup>2</sup>HS Niederrhein, FB Textil- und Bekleidungstechnik Mönchengladbach, <sup>3</sup>SIS IC GmbH, Wesel, **Intelligent protective clothing for firefighters on duty**

**Jan Martin, Stephan Fichtner, Ulrike Berger**; KARL MAYER LIBA Textilmaschinenfabrik GmbH, Naila, **Multiaxial technology – flexible modular concept with high innovation potential for composite structures**

**Paul Matthäi, Iris Käppler**; Chokri Cherif, ITM, TU Dresden, **Innovative stich free non crimp fabrics – properties and potential**

**Oliver Döbrich, Georg Bardl, Chokri Cherif**; ITM, TU Dresden, **Multi-scale modelling of reinforcement structures with adjustable drapeability**

**Marcel Hofmann, Bernd Gulich**; STFI e.V., Chemnitz, **Fiber based nonwovens in light weight construction – a transferable concept for the recycling of carbon waste material**

**Frank Schladitz, Matthias Lieboldt, Dominik Schlüter, Manfred Curbach**; Institut für Massivbau, TU Dresden, **Carbon concrete composite – concrete, carbon and the blue ocean**

**Andreas Derkum**; STUDIO ANDREAS DERKUM, Frankfurt/Main, **Behaving fabrics and self-supporting structures in architecture**