



CU Innovation Day „Tailored Structures“

on 19th October 2023

online at **Leibniz-Institut für Polymerforschung Dresden e. V. (IPF)**

The already 2nd edition of the successful CU Innovation Day “Tailored Structures” focuses on the lightweight design of fibre-reinforced composites (FRP) based on minimal material usage. Exploiting the anisotropic properties of unidirectional composites plays a key role in this respect. At the event, recent developments in the design, manufacture, and use of such ultra-lightweight structures will be presented and discussed with international partners from science and industry. This will form the basis for sustainable and resource-conserving product development of future lightweight FRP applications.

The event will be held in English language.



Agenda

08:00 **Get together, warm up, networking**

08:30 **Welcome note and introduction**

Thomas Heber, Composites United

Axel Spickenheuer, Leibniz-Institut für Polymerforschung Dresden e. V. (IPF)

Session 1 Chair: Axel Spickenheuer, IPF

08:40 **Development of CFRTP molding technology with Commingled Yarn and TFP**

Asami Nakai, Gifu University

09:00 **The known TFP technology becomes TFP(hv)**

Dirk Feltin, Hightex Verstärkungsstrukturen GmbH

09:20 **Development of Tailored Fiber Placement Technology Using the Hybrid Fiber consisted of Poly(xylylene sebacamide) PA-XD10 and Carbon Fiber**

Kaisuke Itou, Mitsubishi Gas Chemical (MGC)

09:40 **Challenge of textile load introductions for sandwich panels and pultrusion profiles,**
Mareike Woestmann, Faserinstitut Bremen (FIBRE)

10:00 **Coffee break, networking**

Session 2 Chair: Adli Dimassi, FIBRE

10:30 **Knowledge Transfer Partnership for UK TFP centres**
Ruth Curtney, National Composites Centre Bristol

10:50 **Wet Fiber Placement: Deposition of in-line impregnated rovings for manufacturing of material-efficient composite structures**
Maximilian Eckrich, Leibniz-Institut für Verbundwerkstoffe GmbH

11:10 **TFP@Institute of Aircraft Design: Review, current focus und future topics**
Johannes Baur, Stefan Carosella, Universität Stuttgart, Institut für Flugzeugbau (IFB)

11:30 **Continuous Fibre Injection Process: the new technology for reinforcing 3D printed parts with carbon fibres**
Marc Crescenti, Reinforce3D

11:50 **Lunch break, networking**

Session 3 Chair: Stefan Carosella, IFB

13:20 **Laser assisted tape placement as a sustainable manufacturing process for lightweight composite structures**
Paul M. Weaver, University of Limerick

13:40 **Efficient manufacturing of composite parts through TFP**
Sebastian Bühler, BIONTEC Bionic Composite Technologies AG

14:00 **TFP: CAE software and manufacturing machines - latest innovations**
Martin Hoffmann, Filacon

14:20 **Automated manufacturing of variable-axial multi-matrix composites**
Simon Konze, Leibniz-Institut für Polymerforschung Dresden e. V. (IPF)

14:40 **Closing note, networking, open end**

Exhibition options in CU MixUp.world

How does the CU MixUp.world work? Participants can freely move around in a browser-based 3D world, visit your individual booth online and interact directly with you as well as with other guests via ad-hoc video conference.



Small booth

Banner on top of the booth (4x1) / Landscape format image (16x9) with link to your website / Colours of wall and floor in your company colours / Choose table or counter



Large booth

3 Banners on top of the booth and counters (4x1) / Landscape format video (16x9) / 4 pictures (1x1, can be different) / Colours of wall and floor in your company colours / Welcome pop-up with company name, logo (1x1), description (140 characters), 3 links (website etc.)



For the detailed conditions, please refer to the registration tool on the event website. For each registered booth at least one participant is necessary for the booth support. Booth bookings without participants are not permitted.