

## WG-Meeting „Lightweight Design for Hydrogen Systems”

**On September 24, 2024, 1:00 pm – 4:00 pm, Online via CU-MixUp World**

Moderation: Dr. Tobias Reincke, CTC  
 Dr. Joachim Scheller, FFT  
 Dr. Udo Berthold, COTESA

The CU working group “Lightweight Design for Hydrogen Systems” is one of the most active working groups of the Composites United network. Based on the large interest in the upcoming field of Hydrogen technology, multiple players engage and bring in their ideas and knowhow. Lightweight Design with the use of fiber composites is of paramount importance to enable the Hydrogen technologies as foundation for future energy supply.

After a successful CU-Innovation Day in Munich and Augsburg in 2023 and a fruitful working group meeting in spring 2024, the activities progress with this working group meeting. We want to continue with the discussion to promote further collaboration. Also, you can look forward to three interesting presentations. **Join us and CU Online!**

Agenda	WG-Meeting „Lightweight Design for Hydrogen Systems”, 24.09.2024
12:45 pm	<b>Login und and Warm up</b>
1:00 pm	<b>Welcome and News from Composites United e. V.</b> Dr. Tobias Reincke, CTC Dr. Joachim Scheller, FFT Dr. Udo Berthold, COTESA Dr. Bastian Brenken, Composites United e. V.
1:10 pm	<b>Challenges in developing thermoplastic composite hydrogen fuel lines for aerospace applications</b> Alexander Rohkamm, herone
1:30 pm	<b>Novel NDT (non-destructive testing) technology for inspection of hydrogen tanks</b> Eskil Skoglund, Dolphitech
1:50 pm	<b>Production of load-bearing hydrogen tanks with a length of up to 12 m and a max. diameter of 200 mm</b> Sebastian Krieg, FFT Produktionssysteme
2:10 pm	<b>B2B-Speeddating Event in CU MixUp World</b>
2:40 pm	<b>Coffee Break and Networking</b>
3:00 am	<b>Workshop: Group discussion on one or several topics in the MixUp World.</b> Dr. Tobias Reincke, CTC, Dr. Joachim Scheller, FFT, Dr. Udo Berthold, COTESA
3:30 pm	<b>Presentation of the results, Discussion of Follow-up activities</b> Planning of the face-to-face Innovation Day on Hydrogen Technology in February 2025
3:45 pm	<b>Transition to a free networking in the CU-MixUp World</b> In the various seating areas and networking rooms of the MixUp World, suitable partners can meet to have a more detailed exchange and discuss a potential future collaboration.
4:00 pm	<b>End of Event</b>

## CU Innovation Day „Sustainable Composites for future Applications“

**September 25<sup>th</sup> - 26<sup>th</sup> 2024 at Kordsa Advanced Materials, Freisinger Landstraße 50, 85748 Garching**

Moderation: Sven Blanck, MAI Carbon  
Roy Thyroff, CU Bau  
Denny Schüppel, Ceramic Composites

This joint event of MAI Carbon, Ceramic Composites and CU BAU of Composites United e. V. brings together the expertise of the various material classes - carbon fiber-reinforced plastics, ceramic matrix composites and fiber reinforced constructions. Special Focus will be within:

### Resource-saving materials and the circular economy in bulidings

Innovative fiber types such as basalt, glass fibers, carbon fibers and bio-based matrices contribute to the conservation of resources. Recycling processes and the reuse of composite materials are important topics for the circular economy. In the construction sector, corrosion-resistant and weather-resistant composite materials ensure a long service life for buildings and infrastructure.

### Lightweight design in hydrogen storage for mobility and energy technology

Hydrogen as a possible drive concept of the future offers huge opportunities. We want to take a closer look at the potential in transportation, defence technology and aviation.

### Fiber-reinforced ceramics enable leap innovations in the energy transition

As time goes on, new fiber suppliers are entering the European market. In addition to military applications, there are also a number of civilian applications where Ox/Ox can be used. Particularly in the area of the energy transition, Ox/Ox enable completely new ways of making production more sustainable and bringing sustainable products to the market.

#### Agenda on 25.09.2024

#### 11:00 Registration, Snacks & Networking

12:00 Welcome and Opening Remarks  
Roy Thyroff & Sven Blanck, Composites United e. V.

12:10 Welcome and Opening Remarks  
To be defined: Kordsa

12:30 Bavarian Political Welcome Remarks  
To be defined:

12:45 Adhesive & Surface films  
Kordsa

13:00 SMC nish weaving capabilities  
Microtex

#### 13:15 Session 1: Sustainable construction solutions

13:15 tbd  
Prof. Alper Ilki

13:35 Tbd  
Çimsa

13:55 Sustainable Success today, with CO<sub>2</sub> reduced Carbon Fibers

Dr. Sarah Reiser, New Business Development, SGL Carbon Fibers GmbH

14:15 Possibilities of carbon grid reinforcements with mineral binders under consideration of CO<sub>2</sub> reduction  
Dr. Patrick Schäffel, General Manager, PAGEL Spezial-Beton GmbH & Co. KG

14:35 Repair of Bus Lanes using High Performance Fiber Concrete (UHPFRC) as ultrathin whitetopping (UTW)  
Matthias Braun, Division Civil Engineering – Ingenieurbau Deutschland, Implenia Construction GmbH

14:55 **Coffee Break & Networking**

15:15 **Session 2: CFRP for hydrogen applications**

15:15 Biobased & Flame Retardancy Product Portfolio  
To be defined: Kordsa

15:35 Hydrogen tanks for trucks  
Requested: Carolin Cichosz, CTO Voith Composites

15:55 **THOMAS, hier du.**

16:15 CU Wild Card

16:35 **Finish & Transfer to Oktoberfest via Bus**

18:00 **Get Together @ Oktoberfest Munich (Hotel transfer around 21:00 o'clock)**

## Agenda on 26.09.2024

09:00 **Session 3: CMC for sustainable applications**

09:20 Tbd.  
Antonios Tontosakis, VP Technology Materials, Kordsa North America

09:40 Tbd.  
Bill Web, General Manager Axiom

10:00 Continuous oxide-ceramic fibers „Made in EU  
Marco Hildebrandt, Senior R&D Manager, Rath GmbH

10:20 Oxide Fibers 610 and 720 – Whats next?  
Technical Manager, Advanced Materials Division, 3M Deutschland GmbH

10:40 **Coffee Break & Networking**

11:00 Series production for Ox/Ox: iFOX - a new manufacturing process  
Dr. – Ing. Michael Welter & Dr. Ing. Vito Leisner, DLR-WF

11:20 Ox/Ox Produced by Schunk  
Dr.-Ing. Johanna Schmidt, Dr.-Ing. Florian Reichert & Dr.-Ing. Thomas Wamser

11:40 Ceramic Composites as Gamechangers for Thermal Runaway protection in Electric Vehicles  
Dr. Mathias Kunz, CEO of WPX Faserkeramik GmbH

12:00 Functionalized Ox/Ox in Chemical Industry Applications  
Dr. Matthias Sentko, High Temperature Reactions, BASFE SE

12:20 **Wrap-Up & Forecast**

12:30 **Lunch and Networking**

## Hotel Information

Courtyard Munich Garching  
Walther-von-Dyck-Strasse 12 Garching bei Muenchen, Germany 85748

[Book your group rate for Innovation Day 'Sustainable Composites'](#)

You will find the information for your online reservation link below. If you have questions or need help with the link, please hesitate to ask. We appreciate your business and look forward to a successful event.

Event Summary:

Innovation Day 'Sustainable Composites'

Start Date: Wednesday, September 25, 2024

End Date: Thursday, September 26, 2024

Last Day to Book: Wednesday, September 11, 2024

Booking and cancellation policy: A credit card guarantee is required to reserve a room for all guests. Booked rooms can't be free of charge up to 7 days before arrival. For each room canceled after this time, we charge 90% of the room price for the duration of the stay. In the event of a no-show, we will charge 100% of the room price for the entire duration of the stay. In all cases, the guest's credit card will be charged.

Hotel(s) offering your special group rate:

Courtyard Munich Garching for 219 EUR per night

