

CU Innovation Day „Tailored Structures”



7th – 8th October 2026

Universität Stuttgart

Institute of Aircraft Design (IFB)

Universitätsstraße 28-34

70569 Stuttgart



Organized by the CU “Tailored Structures” working group and the IFB at the University of Stuttgart, this event once again provides a platform for professional exchange on the topic of fiber-reinforced composite structures with the greatest possible lightweight design potential and their variable-axial properties. The focus is on current advances in the design, fabrication, and application of ultralight structures.

Wednesday 7th October 2026	
12:00 – 13:00	Arrival: Networking / Lunch
13:00 – 13:20	Welcome Note AG Tailored Structures
13:20 – 13:40	Mechanical and Environmental Performance of Tailored Natural Fiber Reinforced Thermoplastics Amna Ramzy, The German University in Cairo
13:40 – 14:00	How materials selection for TFP allows innovative industrial parts Aymeric Azran/Valia Neury, NOBRAK
14:00 – 14:20	Experimental Manufacturing of Selectively Reinforced Sandwich Structures Using TFP Johannes Baur , IFB, Universität Stuttgart
14:20 – 15:20	Coffee Break / Networking
15:20 – 15:40	Fibronic Fiber Placement: Tailored Fiber Architectures for Scalable Lightweight Structures Joanna Geschev, fibonic GmbH
14:40 – 16:00	TBD
16:00 – 16:20	Integration of Local Tailored Fiber Placement Reinforcements into Filament-Wound Structures Tales Lisboa, Leibniz-Institut für Polymerforschung Dresden e. V.
16:20 – 16:40	Tailored Fibre Architectures for Additively Manufactured Bistable Lattice Booms Joanna Wong, University of Calgary
16:40 – 18:00	Lab tour and Networking

Thursday 8th October 2026	
08:30 – 08:40	Von der industriellen Herausforderung zum Tailored-Ansatz Christoph Lahmeyer, Recaro Aircraft Seatings
08:40 – 09:00	Tailored Fiber Placement (TFP) for Advanced Ballistic Protection Systems Martin Hofmann, FilaCon Systems
09:00 – 09:20	Consolidation behavior of Tailored Fiber Placement LM-PAEK Hybrid preforms for complex-shaped structures Marius Möller, Faserinstitut Bremen
09:20 – 09:40	High-fidelity card sliver for realigned carbon staple fibre products in structural applications - Closing the loop on tailored fiber placement Sebatian Bühler, BIONTEC: HiCarR
09:40 – 10:00	Development of Methods and Processes for the Infiltration of High-Strength, Topology-Optimized Fiber-Plastic Composite Components with Variable Axial Fiber Architecture Cameron Welker, Leibniz-Institut für Polymerforschung Dresden e. V.
10:00 – 11:00	Coffee Break / Networking
11:00 – 11:20	EDOstructure and EDOPath – Recent Advances in the Leading CAE Solution for Tailored Fiber Placement Lars Bittrich, Complex Fiber Structures GmbH
11:20 – 11:40	Multi-Objective Optimization of Natural Fiber-Reinforced Composites with Tailored Carbon Fiber Reinforcements Niklas Frank, IPEK, Karlsruher Institut für Technologie
11:40 – 12:00	TBD
12:00 - 12:30	Closing Note and Departure

