

Composites United Innovation Day

Composites/Materials in the Sports Industry

Performance, Sustainability and Synergy Effects along the Value Chain



When: Tuesday/Wednesday, 28./29. January 2025

Where: VAUDE Sport GmbH Co. KG,
Vaude-Straße 2, 88069 Tett nang, Germany
<https://maps.app.goo.gl/xePQe7ibidDgm9dQ8>



Presented by: Composites United

Invitation and Agenda

Focus/Details

The working group "Composites/Materials in Sports" of Composites United invites you to the Initial Conference. We look forward to welcoming you to an inspiring and forward-looking exchange centered around the development and application of (composite) materials in various sports sectors.

Our working group is dedicated to researching and optimizing innovative materials, material combinations and production techniques. With a particular focus on performance, sustainability and synergy effects along the entire value chain, we pursue the goal of increasing the performance of sports equipment while fully utilizing ecological and economic benefits.

Sustainability is a central focus of our work. We analyze and improve the entire life cycle of sports products - from material procurement, production and use through to disposal and recycling. The use of bio-based and recyclable materials helps us to reduce our ecological footprint and promote the circular economy. We also develop production processes that consume less energy and resources.

The working group networks material manufacturers, sports equipment producers, scientists and users to exchange knowledge and experience and jointly develop innovative solutions. Through this close co-operation, we achieve efficiency gains and cost reductions that ultimately benefit all those involved.

Our working group takes an interdisciplinary approach and combines expertise from materials science, engineering, sports science and sustainability research. Through close collaboration between industry partners and research institutions, we act as a catalyst for progress and sustainability and strive to take the sports industry to a new level of ecological and economic efficiency.

At the Innovation Day we schedule a total of 4 Keynotes (20-25 minutes) and 28 presentations (10-12 minutes), each followed by a short and dynamic panel and Q&A session.

Additionally, we will have a informal dinner party, where all participants can network and discuss on various topics.

Confirmed Keynote Speakers

Dr. Antje von Dewitz
CEO, VAUDE



Dr. Stefan Mohr

R&D Manager Predevelopment, HEAD SPORT GmbH



Christian Gemperlein

Founder & CEO, all ahead composites GmbH



Prof. Dr.-Ing. Iman Taha, Professorship
“Sustainable Materials in Polymer Engineering”,
Hochschule Aalen



Quirin Niederauer, Hochschule Aalen



Lucas Krahner, Fraunhofer IGCV



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09:30	Welcome coffee	
10:00	Welcome, news from CU Network and goal of the day Prof. Dr.-Ing. Marc Siebert, Leader AG «Sport»	
10:10	Keynote: How can revenue be decoupled from emissions? Dr. Antje von Dewitz, CEO, VAUDE	
10:40	Healable Composites: revolutionising durability and performance in sports equipment Dr. Amaël Cohades, CEO and co-founder, CompPair Technologies	
10:55	Play Naturally Smart - with natural fibre technical fabrics Patrick Vuagnat, Manager Sports & Leisure, Bcomp Ltd.	
11:10	Coffee break	
11:25	Sustainable Composites Materials Solutions Dr. Steffen Janetzko, Vice President – Head of Business Line Textiles, SGL TECHNOLOGIES GmbH	
11:40	Sustainable and Efficient Manufacturing of Natural Fiber Composites with Tailored Prepregs at the Example of a Canoe Paddle Mathias Engelfried, CTO and co-founder, BEHtec	
11:55	Mammut LOOPINSULATION - Transforming rope offcuts and recycled materials into cutting-edge cold weather protection Sophie Renot, Senior Innovation Manager / Helena Perez, Material Developer, Mammut Sports Group AG	
12:10	Tour @Vaude	
13:00	Lunch Break	
14:30	Keynote: Overview on Sustainable Lightweight Engineering Trends in Sports Industry <i>Modern Trends in long fiber reinforced plastics for sustainable Sporting Goods are presented. How to reduce the environmental impact of FRPs in lightweight engineering examples?</i> Dr. Stefan Mohr, R&D Manager Predevelopment, HEAD SPORT GmbH	
15:00	Sustainable High-Performance Composites for Sports Applications Dr. Christian Garthaus, Managing Partner, herone GmbH	
15:15	Riding old bottles – Recycled PET in Surf Industry Dominik Stapf, Senior Researcher, Institute for materials technology and plastics Processing (IWK), OST Rapperswil	
15:30	Emerging material technologies for easy back-injection of composites: realizing affordable and circular high-performance components for sporting and consumer goods Dr. Christoph Schneeberger, Executive lead & co-founder Prof. em. Dr. Paolo Ermanni, Technology lead & co-founder, Antefil Composite Tech AG	
15:45	Coffee break	

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16:00	Green Composites for Sporting Goods Dr.-Ing. Jörg Kaufmann, CEO Silbaerg GmbH	
16:15	Real-time process control for optimized composite manufacturing in the sports industry Dominik Riescher, Sales Engineer, NETZSCH Process Intelligence GmbH	
16:30	Cirub - Circular Rubber Material from Post Consumer Waste Robert Maier, Managing Partner, Forward Engineering GmbH	
16:45	One step ahead, bio-based engineering compounds in sports applications Erik Folz, Senior Market Development Manager, Lehmann&Voss&Co. KG	
17:00	A thermoplastic composite diving fin blade as a case study to demonstrate the benefits of thermoplastic processing and the use of carbon fibres Dr. Christos Karatzias, Senior Manager Composites & Mobility Group, MITSUI CHEMICALS EUROPE GMBH	
17:15	Journey towards sustainable-based and lower CO2 footprint Carbon Fibre Composites Gisbert Henke, Senior Account Manager, Industrial Sales, EMEA, Teijin Carbon Europe GmbH	
17:30	Outro – End of Day 1 Prof. Dr.-Ing. Marc Siebert, Leader AG «Sport»	

**18:00 Get together @ Hopfengut No. 20,
Dinner starting at 19:30**

HOPFENGUT

Nº20

Hopfengut 20
88069 Tettnang

<https://maps.app.goo.gl/RCBZv2ANZ7NezwuQ7>

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09:30	Welcome coffee		
10:00	Welcome back Prof. Dr.-Ing. Marc Siebert, Leader AG «Sport»		
10:10	Keynote: CFRP bicycle frames/parts Made in Europe instead of Asia - An experience report Christian Gemperlein, Founder & CEO, all ahead composites GmbH		
10:40	Pioneering Sustainable Innovation in Ski Technology Simon Jacomet, Founder & CEO, Jacomet Ski		
10:55	Composite brake lever stitched with recycled Carbon Fibres Sebastian Bühler, CTO, BIONTEC Bionic Composite Technologies AG		
11:10	Coffee break		
11:40	Thermoplastic Composites – the key to “Made in Europe”? Christian Braun, Managing Director, Ensinger Composites Schweiz GmbH		
11:55	Pumpfoils 100% Made in Europe Zeno Davatz, ONIX ENTERPRISES		
12:10	Lightweight – Bicycle wheel production made in Germany for 30 years Borris Köpper, Vice President Murtfeldt Composites		
12:25	Maximum Efficiency in High-Tech Sports Equipment Manufacturing with AI-Driven Process Control: The Case of Black East Alexander Scherer, Symate GmbH		
12:40	Fully Automatable Combination of Winding and Forming for the Efficient Production of Spoked Wheels from Fiber-Reinforced Plastics Dr.-Ing. Marcel Bucker, Managing Director / Co-Founder, ONE-K WHEELS		
12:55	Fun is not a straight line, the complexity of a handlebar Oliver Hecken, Institut für Forschung und Entwicklung von Sportgeräten (FES)		
13:10	Lunch break		
14:30	Keynote: State of the art in the field of natural fiber-reinforced plastics – opportunities and challenges in the sports sector Prof. Dr.-Ing Iman Taha, Quirin Niederauer, HS Aalen Lucas Krahner, Fraunhofer IGCV	 	
15:00	Discontinuous fibre architectures: Enabler for sustainable composites? Dr.-Ing. Julian Kupski, Prof. Dr.-Ing. Christian Brauner, FHNW		
15:15	Revolutionizing Sports Gear with Automated Fiber Patch Placement Dr.-Ing. Renato Bezerra, Kevin Scheiterlein, Fraunhofer IGCV		
15:30	Circular-ready and biobased materials for the sports industry Anna Krüger, Fraunhofer ICT		

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15:45 ***Use of rCF fiber materials in sports goods industry to build up a circular economy***

Martin Zießler, KVB non-profit GmbH



16:00 Coffee break

16:15 **Sustainable Manufacturing of a Composite Skateboard Using a Near-Net Shape Automated Process Chain**

Gerd Falk / Benjamin Grisin,
Institute of Aircraft Design - University of Stuttgart



16:30 **Development of extreme lightweight carbon sport parts: from bow riser to sledge**

Dr.-Ing. Kai Uhlig,
IPF - Leibniz-Institut für Polymerforschung Dresden e. V.



16:45 **A Sonic View into Quality: Examples for Air-coupled Ultrasonic Testing**

Dr. Yury Golitsyn, Division Manager NDT,
Forschungszentrum Ultraschall gGmbH (Research Center for Ultrasonics)



17:00 **EcoBoard – Development of a fully ecological compact board**

Prof. Dr. Ing. Stefan Schlichter
Institut für Textiltechnik Augsburg gemeinnützige gGmbH



17:15 **Outro – End of Event**

Prof. Dr.-Ing. Marc Siebert, Leader AG «Sport»

End of Innovation Day

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Registration Types and Rates

Participation fee is 590* Euro, 290* Euro for CU-members and includes.

2 days at the event, including food and beverage on site

1 dinner (Tuesday evening)

Please note that the available number of participants is strictly limited. Don't miss your spot and register soon.

For all further details, the up-to-date agenda and to register, please use this [link](#).

Theo Sandu, theo.sandu@composites-united.com

* Speaker/Presenter get 50% discount on participation fee. All prices are net prices, excl. tax

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Parking Situation

The car parks at Vaude itself are very limited. Visitors are therefore requested to use the two car parks at

Vaude Outlet Obereisenbach, Siggenweiler Str. 25, 88069 Tett nang, or

Freibad Obereisenbach, An der Schule 9, 88069 Tett nang

Both are about 300-350 meters from the center.



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UNITED

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TECHNOLOGY & DESIGN CENTER

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ICT

 **Fraunhofer**
IGCV

 **Hochschule Aalen**

 **Bcomp**[®]

 **sgl carbon**

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 **OST**
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 **herone**

 **silbærg**
SNOWBOARDS

 **University of Stuttgart**
Institute of Aircraft Design

 **sensPERT**

Lightweight

 **LEHVOSS**
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