

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

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 Krahnert, Fraunhofer IGCV



Invitation and Agenda

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**
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?



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

Invitation and Agenda

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»

18:30 **Dinner @ Hopfengut No. 20**

HOPFENGUT

N°20

Hopfengut 20
88069 Tett nang

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

Invitation and Agenda

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	<i>Lightweight</i>
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 Bückner, 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 Krahnert, 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	

Invitation and Agenda

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

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

Invitation and Agenda

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.



Invitation and Agenda

ONIX
TECHNOLOGY & DESIGN CENTER

COMPPAIR

Ensinger

Fraunhofer
ICT

Fraunhofer
IGCV

Hochschule Aalen

Bcomp[®]

sgl carbon

BEHtec
sustainable materials for a better future

MAMMUT
SWISS 1862

OST
Eastern Switzerland
University of Applied Sciences

ANTEFIL
COMPOSITE TECH

herone

silbærg
SNOWBOARDS

University of Stuttgart
Institute of Aircraft Design

sens XPERT

Lightweight

LEHVOSS
Group

**BIKE
AHEAD
COMPOSITES**

FORWARD
ENGINEERING

BIONTEC

n|w

symate

KVB
KONSTRUKTION
UND
VERBUNDBAUWEISEN

JACOMET

VAUDE

Mitsui Chemicals
Europe

HEAD

**Forschungszentrum
Ultraschall**

ITA
Institut für
Textiltechnik
Augsburg gGmbH

ONE-K
WHEELS

TEIJIN
TEIJIN CARBON EUROPE GMBH

FES

ipf
Leibniz-Institut
für Polymerforschung
Dresden