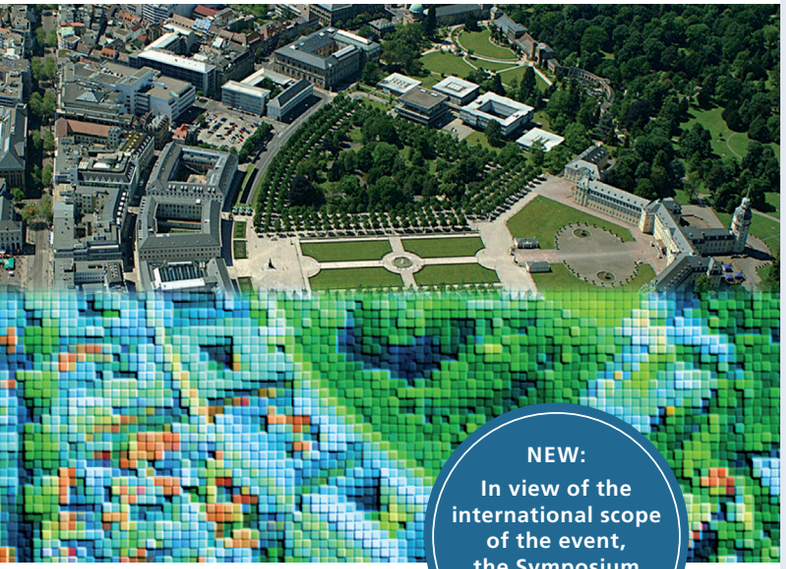
sampe Deutschland



NEW:
In view of the international scope of the event, the Symposium will be held in English

28th National SAMPE Symposium

Karlsruhe | April 9 – 10, 2024

Virtual Goes Real – Efficient Process Chains

KIT Karlsruhe Institute of Technology

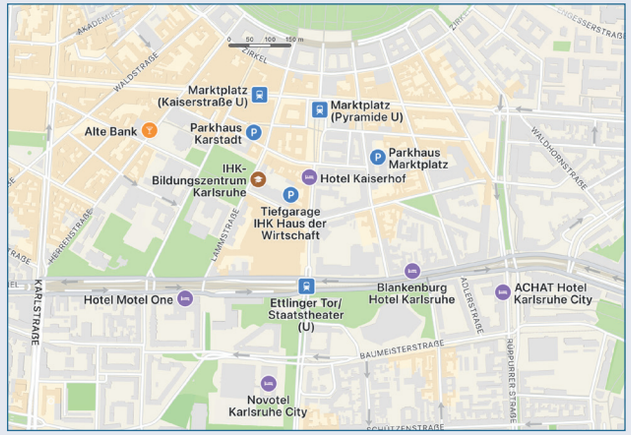
Venue

IHK Haus der Wirtschaft Karlsruhe GmbH
Lammstraße 13 – 17, 76133 Karlsruhe

Conference dinner

Alte Bank
Herrenstraße 30, 76133 Karlsruhe

Hotels and venues



Arrival by public transport

- Marktplatz (Pyramide U)
- Ettlinger Tor/Staatstheater (U)

Nearest car parks

- Underground car park IHK Haus der Wirtschaft (open 24h)
- Underground car park Friedrichsplatz (open 06:30 – 00:00)
- Ettlinger Tor – Underground car park (open 08:00 – 20:30)

Contact

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SAMPE Deutschland e.V.
Find more information on **www.sampe.de**

Sponsors SAMPE Symposium

Main sponsors

HRC ACTC Advanced Composite Technology Center

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Supporting sponsors

DIEFFENBACHER MOVE FORWARD. TOGETHER.

GREENING

KAUTEX A Textron Company

SIMUTENCE Digital Composites Engineering

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Institute and lab tours

Fraunhofer Institute for Chemical Technology ICT
Joseph-von-Fraunhofer-Straße 7, 76327 Pfinztal
Karlsruhe Research Factory
Rintheimer Querallee 2/Building 70.41, 76131 Karlsruhe

Local organizers

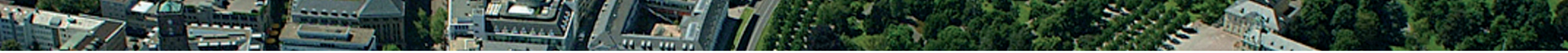
KIT – Institute of Vehicle System Technology
Lightweight Design Division, Prof. Dr.-Ing. Frank Henning
KIT – Institute of Engineering Mechanics
Continuum Mechanics, Prof. Dr.-Ing. Thomas Böhlke

In cooperation with

DFG International Research Training Group GRK 2078 "Integrated engineering of continuous-discontinuous long fiber reinforced polymer structures".

CoDiCo FRP

Funded by DFG Deutsche Forschungsgemeinschaft German Research Foundation



Tuesday 9 April, 2024

Welcome and introduction

08:00 Registration

09:00 Opening and Welcome
Prof. Dr. Thomas Hirth,
KIT Vice-President Transfer and International Affairs
Prof. Dr.-Ing. Frank Henning,
President SAMPE Germany e.V.
Prof. Dr.-Ing. Thomas Böhlke,
Speaker GRK 2078

GRK 2078 (see cooperation overleaf)

09:30 Overview Presentation on GRK 2078 (2015 – 2024)

10:00 Overview Research Area Technology

10:30 Overview Research Area Characterization

11:00 Coffee break

11:30 Overview Research Area Simulation

12:00 Overview Research Area Design

12:30 Lunch

Thermoplastic composite applications

13:30 Continuous-Fiber-Reinforced Composites in Combination with Direct Compression Molding – a Perfect Match for Structural Composites in Automotive Industry
Dr.-Ing. Julius Rausch, AUDI AG

13:50 Development of a Thermoplastic Composite Underbody Protection for BEVs
Dr.-Ing. Tobias Link, ElringKlinger AG

14:10 Towards a Virtual Process Chain for Simulation of GMT Compression Molding and Warpage
Prof. Dr. Andrew Hrymak, FIP Western

14:30 Endless-Fiber-Reinforced Automotive Parts made from D-LFT
Dr.-Ing. Ivano Costa, Autoneum Management AG

14:50 Composite Underbody Protection Systems for BEVs
Daniel Heidrich, Jonatan Schdanow,
KAUTEX TEXTRON GMBH & CO. KG

15:10 Coffee break

Digitalization

15:40 Using Advanced Molding Simulation for the Virtual Design and Optimization of Automotive Structures with Long and Continuous Fiber-Reinforced Thermoplastics
Dr.-Ing. Dominik Dörr, SIMUTENCE GmbH

16:00 Use-Cases for Machine Data Collection in Pultrusion
Oliver Kuppler, Selfbits GmbH

16:20 Advancing Immature Production Processes: Exploring an AI-Assisted Methodology
Georg Zeeb, Karlsruhe Institute of Technology (KIT)

16:40 Smart Digitalization for the Next Generation of Compression Molding
Marco Hahn,
DIEFFENBACHER GmbH Maschinen- und Anlagenbau

Scientific keynote

17:00 Optimization of Fiber-Reinforced Components Using Fast Surrogate Models for the Injection Molding Process
Prof. Dr.-Ing. Nils Meyer, MRM Augsburg

Poster session

17:30 Poster session

Social events

18:30 Karlsruhe downtown walking tour

19:30 Conference dinner at Alte Bank

Wednesday 10 April, 2024

Innovation awards

09:00 Student Innovation Award Winner – PhD

09:20 Student Innovation Award Winner – Master

Advances in composite materials and applications

09:40 3D Skeleton Winding (3DSW) – Local Continuous Fiber Reinforcements for Structural Injection Molded Components
Dr.-Ing. Björn Beck, Fraunhofer ICT

10:00 Breaking Barriers to Adoption of PA6 Organosheet
Dany de Kock, Johns Manville

10:20 Coffee break

10:50 Innovative Lightweight Solutions – Key Factor for Sustainable Mobility
Dr.-Ing. Timo Huber, HRC Group/ACTC

11:10 Advanced Composite Solutions for Access to Space
Dr.-Ing. Bernd Thoma, MT Aerospace AG

11:30 Functionalization of Thermoplastic In-Situ Pultruded Profiles as an Enabler for Innovative Applications in Maritime, Mobility and Infrastructure
Dr.-Ing. Christian-André Keun, CompriseTec GmbH

11:50 Enhancing Lightweight Potential Through Modularization in Battery Casings for Special Purpose Vehicles
Dr.-Ing. Uwe Kehn, GreenIng GmbH & Co. KG

12:10 Application Potentials of Lightweight Composite Solutions for Battery Components
Dr.-Ing. Felix Behnisch, Röchling Automotive SE

12:30 Lunch

Manufacturing of advanced composite systems

13:30 HP-RTM for AAM & Aviation Applications
Sebastian Schmidhuber, KraussMaffei Technologies GmbH

13:50 Geminus a Technologie to get Sustainability on 2 Weels
Hans Lochner, KTM TECHNOLOGIES GmbH

14:10 Mono-Material Sandwich Structures – a Possible Path to Close the Loop?
Sascha Kilian, Fraunhofer ICT

14:30 SMC Press Automation with Limited Space
Michael Ochs,
Schmidt & Heinzmann GmbH & Co. KG

14:50 Closing

Institute tours

15:30 Parallel institute and lab tours at Fraunhofer Institute for Chemical Technology ICT and Karlsruhe Research Factory

17:30 End of the 28th National SAMPE Symposium