



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

Preliminary program

Venue

IHK Haus der Wirtschaft Karlsruhe GmbH

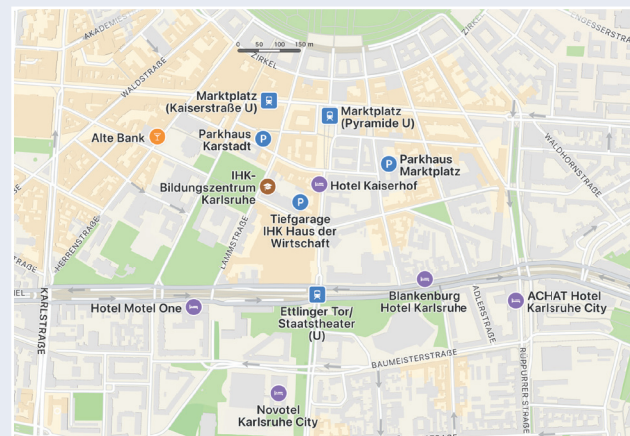
Lammstraße 13 – 17, 76133 Karlsruhe

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

Registration via link or QR-code



www.ict.fraunhofer.de/sampe2024

Conference fees

Regular fee	650 EUR
SAMPE member	550 EUR
University/academic employee	450 EUR
B.Sc./M.Sc. students without conference dinner	75 EUR
SAMPE membership (per year)	80 EUR

Registration deadline: April 1st, 2024

Registration fee includes final program, coffee breaks
and conference dinner.

Sponsoring

Be a part of our event's success story!

Find information on how to become a sponsor by visiting our
website: www.ict.fraunhofer.de/sponsoringampe2024

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”.

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 Potential of AI Methods for Accelerating Process
Maturation
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 Large Tow Carbon Fiber: Tow Format for Impro-
ved Processing and Performance in Industrial
Application
Gábor Kovács, Zoltek Corporation

- 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 Composites Bringing Urban Air Mobility to Life
Dr.-Ing. Bernd Thoma, Volocopter GmbH
- 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 Automated Composite Manufacturing for
Urban Air Mobility
Michael Wilhelm, Fraunhofer ICT
- 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
Dr.-Ing. Philipp Rosenberg,
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