



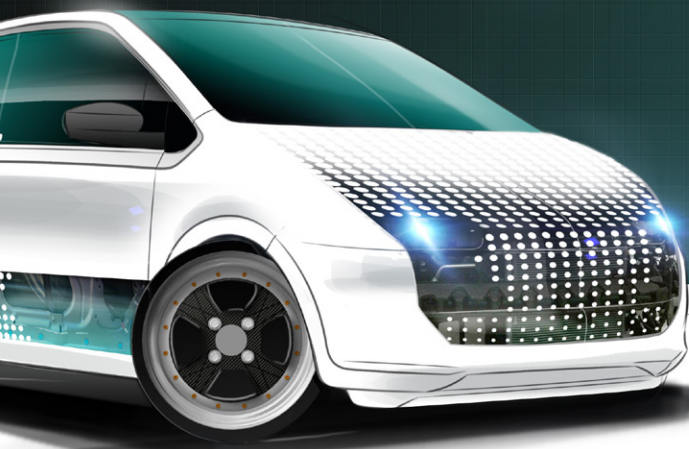
TECHNISCHE UNIVERSITÄT
CHEMNITZ

CLUSTER OF EXCELLENCE

Merge Technologies for Multifunctional Lightweight Structures

IMTC 2019 Lightweight Structures

18th - 19th September 2019 | TU Chemnitz



4th International MERGE Technologies Conference

Invitation & Call for Papers





The Continuous Orbital Wrapping Machine at the MERGE Technology Centre. In the project course of MERGE a pilot plant for a novel wrapping technology was developed, which enables the production of fibre reinforced plastic components with varying profiles as well as convex and concave shapes.



Ladies and Gentlemen,

We cordially invite you to the 4th International MERGE Technologies Conference (IMTC) from the 18th until the 19th of September 2019 at the Chemnitz University of Technology.

In a competitive environment, the strong cooperations, solution-oriented strategies and marketable applications needed, call for close working relationships between research institutions and companies. This is a goal which can be achieved through interdisciplinary thinking and action, knowledge transfer and the networking of numerous actors from the fields of materials and natural sciences, production technology, microelectronics, system integration, design, calculation, simulation and quality assurance. The IMTC therefore welcomes experts from science and industry who share their knowledge and experiences in the research and development of lightweight structures and their manufacturing technologies.

Enjoy an interesting and varied lecture programme, which is centred on topics that are particularly relevant for the sustainable ecological and economic production of hybrid lightweight components and join discussions on the latest developments and trends in lightweight construction.

A colloquium, encapsulating the highlights of six successful years of research at MERGE as well as a poster session and an accompanying fair exhibition will round off the programme of the 2019 conference.

Show us your creative side this year by following our "Call for Creatives". We're looking forward to your contribution in the form of photography, paintings, sculptures as well as films or simulations, which focus on a different side of technology and research. Further information can be found online and in the leaflet, which comes with the conference brochure.

We're looking forward to welcoming you at the 4th IMTC in Chemnitz.

Prof. Lothar Kroll
Coordinator

Dr. Michael Heinrich
Scientific Director

Dr. Isabelle Roth-Panke
Administrative Director



Call for Papers & Posters

You are welcome to give a **20 minute talk or present a poster** at the IMTC. In both cases, you must **first submit an abstract**. After a successful Abstract Review you will be asked to submit a full paper. All accepted papers, which are peer reviewed by the Conference Committee will be **published in the Open Access Journal "Technologies for Lightweight Structures"**.

In addition, the Conference Committee will **award the best posters and paper contributions. Abstracts (two pages) and papers (eight pages) must meet the requirements of the templates**. Further information on deadlines can be found in the graphic below.



Please download the templates and upload the abstracts/papers at www.tu-chemnitz.de/IMTC/template

DEADLINES

2019	until 28/02/2019	Submission of abstracts
	until 30/06/2019	Final full paper submission
	until 31/07/2019	Final creative project submission*
	until 31/08/2019	End of registration
	18/09 - 19/09/2019	IMTC in Chemnitz

*Further information can be found on the leaflet.

CONFERENCE FEE

2-Day Ticket 18 th - 19 th September 2019	350,00 EUR
includes evening event	
1-Day Ticket 18 th September 2019	250,00 EUR
includes evening event	
1-Day Ticket 19 th September 2019	150,00 EUR
2-Day Ticket for the members of Industrial and Scientific Advisory Board and the MTC e. V.	200,00 EUR
includes evening event	
Participants with lecture and poster presentation	150,00 EUR
includes evening event	
Chemnitz University of Technology employees	150,00 EUR
includes evening event	
Students	30,00 EUR
without framework programme and conference documents (not valid for PhD students, certificate of enrolment has to be shown prior to the conference)	

Fees include VAT

REGISTRATION

The online registration will be available starting **February 2019** on our website www.tu-chemnitz.de/IMTC

TERMS OF PAYMENT

Payment is only possible by bank transfer once an invoice has been issued. Cash or card payments at the conference will not be accepted. In case of cancellation until the 15th of August 2019 (date of email receipt) the registration fee will be refunded with a deduction of 10.00 EUR. Cancellations after this date are not possible.

CONFERENCE LANGUAGE

The conference will be held in English.

EXHIBITION & SPONSORSHIP

If you are interested in presenting your company please contact Diana Schreiterer via imtc@tu-chemnitz.de

CHILD CARE

It goes without saying that the implementation and protection of equal rights for scientists is taken seriously at MERGE. If you need someone to look after your child, please let us know.

CONTACT

General Organisation

Diana Schreiterer
Phone: +49 371 531-35267

Dr. Isabelle Roth-Panke
Phone: +49 371 531-35632

Email: imtc@tu-chemnitz.de

Scientific Organisation

Elisa Sommer
Phone: +49 371 531-34923

Dr. Michael Heinrich
Phone: +49 371 531-32318

Preliminary Programme

Wednesday 18/09/2019 from 9.00 am

Opening	Session 1.1 Session 2.1	Lunch	Session 3.1 Session 4.1	Evening programme Best Paper/ Poster Award
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Thursday 19/09/2019 9.30 am - 4.00 pm

Session 1.2 Session 2.2	Lunch	Session 3.2 Session 4.2	Coffee Break Discussion/Closing Remarks
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Conference Topics

The conference covers all aspects of materials, manufacturing technologies and applications for the mass production of lightweight structures. A special focus will be placed on the latest results in the following areas:



SESSION 1

Materials, Semi-Finished Products and Composite Structures for Lightweight Design

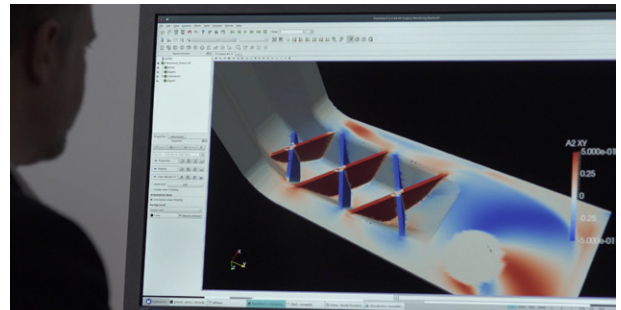
- In-line processes for preforms and prepregs
- Hybrid materials based on textiles, plastics, metals and fibre-reinforced plastics
- Interface design and engineering



SESSION 2

Processing, Systems and Applications for the Mass Production of Lightweight Structures

- Technology fusion and hybridisation
- Manufacturing of hybrid structures with textile, plastic and metal-based technologies
- Manufacturing equipment, automation



SESSION 3

Modelling and Simulation of Hybrid Structures and their Production Processes

- Advanced constitutive laws and experimental characterisations
- Integrative simulation and optimisation
- High-precision FEM

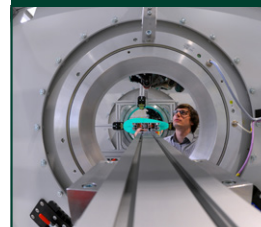


SESSION 4

Smart Systems Integration

- Smart, functional and adaptive structures
- Design, technologies and application of integrated smart systems
- Reliability and robustness of integrated systems

SPECIAL TOPIC at IMTC 2019



Colloquium MERGE Six Successful Years of Research

- Scientific report and outlook
- Selected lectures of all Interacting Research Domains

Industrial Advisory Board

(in alphabetical order)

A&E Produktionstechnik GmbH, DE
 Airbus Operations GmbH, DE
 Apparatebau Gauting GmbH, DE
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 Müller, Manuel
 Dr. Berthold, Udo
 Lehmann, Gerd
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 Obrátil, Lubomír
 Steiner, Ursula
 Grothaus, Raimund
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 Dr. Gärtner, Egbert
 Dziomber, Gerard
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 Rödiger, Herbert
 Dr. Fardi, Basel
 Dr. Heintze, Olaf
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 Dr. Otto, Marcus
 Meurs, Frank J.
 Dr. Köhler, Wolf
 Prof. Achatz, Reinhold
 Dr. Wohlmann, Bernd
 Toscani, Lucie
 Dr. Kolshorn, Kay-Uwe
 Prof. Fiebig, Siegfried
 Dr. Schauerle, Oliver
 Beltrame, Nico

Conference Committee

(in alphabetical order)

Prof. Renata Antoun Simão
 Chair of Metallurgical Engineering and Materials, University of Rio de Janeiro, BR

Prof. Stefania Bruschi
 Full Professor at Centre of Mechanics of Biological Materials, University of Padova, IT

Prof. Arisara Chaikitiratana
 Head of Department of Mechanical & Aerospace Engineering, King Mongkut's University of Technology North Bangkok, TH

Prof. Edward Chlebus
 Professor of Faculty of Mechanical Engineering, Wrocław University of Technology, Wrocław, PL

Prof. Welf-Guntram Drossel
 Executive Director of Fraunhofer Institute for Machine Tools and Forming Technology (IWU), Chemnitz, DE

Prof. Helmut H. Hergeth
 Associate Professor, College of Textiles, Department of Textile and Apparel, Technology and Management, North Carolina State University, US

Prof. Jörn Ihlemann
 Vice President for Research and Junior Researchers, Professorship of Solid Mechanics, Chemnitz University of Technology, Chemnitz, DE

Prof. Lothar Kroll
 Coordinator Cluster of Excellence MERGE, Chemnitz University of Technology, Chemnitz, DE

Prof. Tadeusz Lagoda
 Vice President for Research and Development, Opole University of Technology, Opole, PL

Prof. Thomas Lampke
 Dean of Faculty of Mechanical Engineering, Professorship of Materials and Surface Engineering Chemnitz University of Technology, Chemnitz, DE

Prof. Daisy Nestler
 Head of Endowed Chair Textile Plastic Composites and Hybrid Compounds, Chemnitz University of Technology, Chemnitz, DE

Prof. Thomas Otto
 Director (acting) of Fraunhofer Institute for Electronic Nano Systems (ENAS), Chemnitz, DE

Participating Institutions of MERGE

General Information

CONFERENCE VENUE

Chemnitz University of Technology
Lecture Hall Building
Reichenhainer Straße 90
09126 Chemnitz, Germany

ACCOMMODATION

The following hotels offer special conditions for participants. To obtain the key word and further information, please contact the organisation team:

alexanders Hotel & Boardinghouse 3*

Ludwig-Kirsch-Straße 9, 09130 Chemnitz
Phone: +49 371 431 1111
www.alexanders.de
Distance to the conference venue 3.9 km

Dorint Kongresshotel Chemnitz 3*

Brückenstraße 19, 09111 Chemnitz
Phone: +49 371 683 0
www.hotel-chemnitz.dorint.com
Distance to the conference venue 2.8 km

Seaside Residenz Hotel Chemnitz 4*

Bernsdorfer Straße 2, 09126 Chemnitz
Phone: +49 371 355 10
www.residenzhotelchemnitz.de
Distance to the conference venue 1.5 km

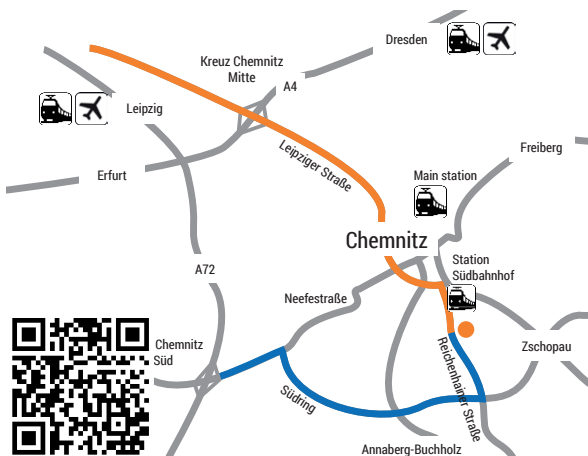
Hotel Chemnitzer Hof 4*S

Theaterplatz 4, 09111 Chemnitz
Phone: +49 371 684 0
www.chemnitzer-hof.de
Distance to the conference venue 3.2 km

ARRIVAL

By Car

Use the following address for your navigation system:
Reichenhainer Straße 90, 09126 Chemnitz
50°48'49.7" N, 12°55'47.9" O.



Only a few parking spaces are available. Current information can be found at www.tu-chemnitz.de/IMTC.

By Train

From the main station you can reach the Lecture Hall Building by taxi or tram. Take the tram line C13, C14, C15 or 3 towards "Technopark" at platform 1-4 and get off at "TU Campus". The Lecture Hall Building is located on the right side of Reichenhainer Straße, facing the direction of travel.

By Plane

Starting from Dresden airport (approx. 84 km by car):
Take motorway A4 and exit at **Chemnitz-Mitte**.

Starting from Leipzig/Halle airport (approx. 95 km by car):

Take the A14 motorway in the direction of Dresden. At the Parthenaue junction take the A38 towards Göttingen/Leipzig-Südost. Exit at Chemnitz/Borna onto the B2/B95/motorway A72 direction Chemnitz and exit at **Chemnitz-Süd**.

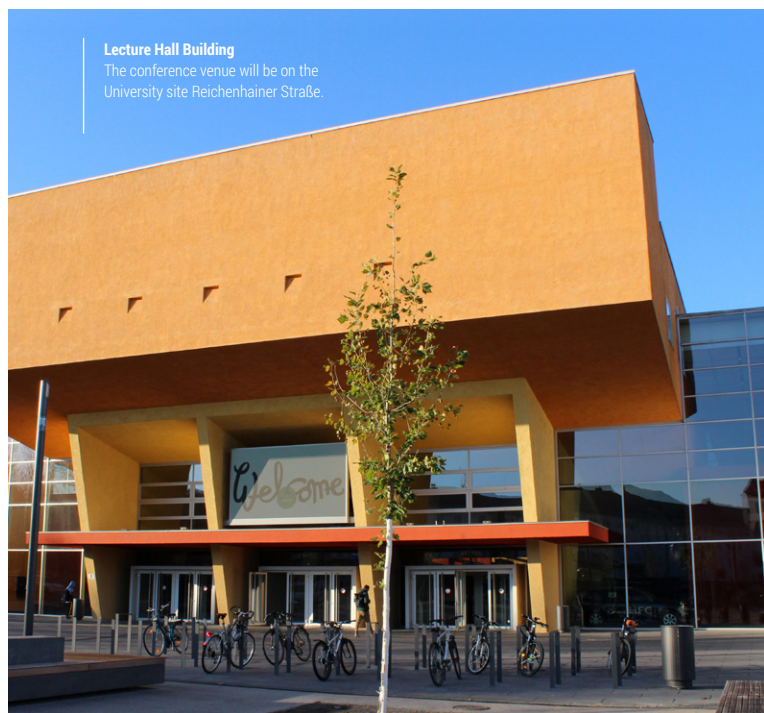
SERVICE

Taxi

Taxi Genossenschaft Chemnitz eG
Phone: +49 371 36 9000
www.taxi-chemnitz.de

Public Transport

CVAG Chemnitzer Verkehrs-AG
Phone: +49 371 2370 333
www.cvag.de



Lecture Hall Building

The conference venue will be on the University site Reichenhainer Straße.

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Subject to modification. Status November 2018.



Federal Cluster of Excellence MERGE
Chemnitz University of Technology
Reichenhainer Straße 31/33
09126 Chemnitz, Germany

Univ.-Prof. Dr.-Ing. habil. Prof. h. c. Dr. h. c. Prof.
Lothar Kroll, Coordinator

Dr.-Ing. Michael Heinrich, Scientific Director

Dr. rer. nat. Isabelle Roth-Panke, Administrative Director

Phone: +49 371 531-13910

Fax: +49 371 531-13919

Email: merge@tu-chemnitz.de

www.tu-chemnitz.de/MERGE



Organisation Team

General Organisation

Diana Schreiterer

Phone: +49 371 531-35267

Dr. Isabelle Roth-Panke

Phone: +49 371 531-35632

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