



TECHNISCHE UNIVERSITÄT
CHEMNITZ

CLUSTER OF EXCELLENCE

Merge Technologies for Multifunctional Lightweight Structures

IMTC 2017 Lightweight Structures

21st - 22nd September 2017 | TU Chemnitz



MERGE

3rd International MERGE Technologies Conference

Conference Programme



MERGEurope

Lightweight Innovation Network



MERGEurope forms a network for international competitiveness of the leading european regions of lightweight design and aims to bridge the gaps between science and industry.

www.tu-chemnitz.de/MERGE/MERGEurope



Dear Ladies and Gentlemen,

We cordially invite you to the **3rd International MERGE Technologies Conference (IMTC) from 21st to 22nd September 2017**, at the Chemnitz University of Technology. Enjoy an interesting and varied programme of lectures and participate in discussions all around the latest developments and trends of the key technology "Lightweight Design".

Large-scale suitable **production processes** for the manufacturing of **hybrid lightweight components** are key technologies for the future. In this context, the variety of the used materials, structures and technologies and their applications have to meet various demands. Thus, topics such as **recycling, sustainability and mass customisation** will be of great importance in the future. A successful interaction of research institutes and companies in competition require strong cooperation, **solution-oriented strategies and marketable applications**. By interdisciplinary thinking and acting, knowledge transfer and the networking of numerous actors in the fields of material and natural sciences, production technology, micro electronics, systems integration, design, calculation, simulation and quality assurance we can achieve this goal.

The conference invites **experts of science and industry** to share their knowledge and experience in the research and development of lightweight structures and their manufacturing technologies. The **sessions focus** on topics that are especially relevant for a sustainable **ecological and economical production of hybrid lightweight components**. Furthermore, one main focus of the conference is the **cooperation in alliance of the Federal Cluster of Excellence MERGE with international partners, transnational network structures** and competitive cluster alliances. Within this, novel scientific and technological solution approaches for the improvement of resource and energy efficiency in the future-oriented field of lightweight design will be demonstrated on an international level.

A poster-session and an accompanying fair exhibition complete the conference's agenda.

We gladly welcome you to the 3rd IMTC in Chemnitz.

A handwritten signature in blue ink, appearing to read "L. Kroll".

Prof. Lothar Kroll
Coordinator

A handwritten signature in blue ink, appearing to read "J. Tröltzsch".

Dr. Jürgen Tröltzsch
Scientific Director

A handwritten signature in blue ink, appearing to read "Roth-Panke".

Dr. Isabelle Roth-Panke
Administrative Director



Conference Topics

The conference covers all aspects of materials, manufacturing technologies and applications for the mass production of lightweight structures. Special focus is on new results in the following topics:



SESSION 1

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

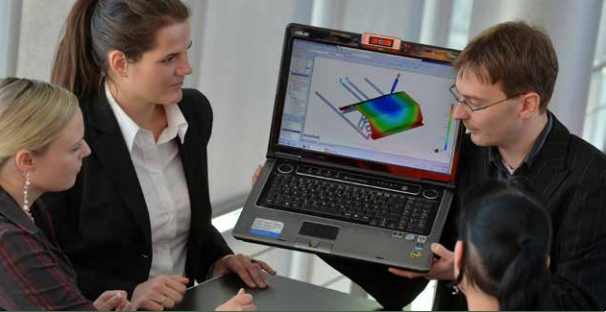
- In-line processes for preforms and prepregs
- Hybrid materials based on textiles, plastics, metals and fibre-reinforced plastics
- Interface design and engineering



SESSION 2

Processing, Systems and Application for 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

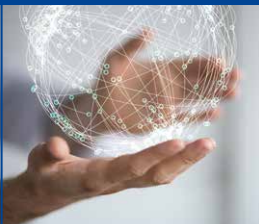


SESSION 4

Smart Systems Integration

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

SPECIAL SESSION at IMTC 2017



International Lightweight Innovation Networks

- MERGEurope: report and outlook
- European Lightweight Clusters Alliance
- International innovation and cooperation opportunities

pumpwerk eins
Location of the
Conference dinner

PROGRAMME

Thursday, 21st September

Opening | Parallel Sessions

10:00 - 18:00

Conference Dinner

from 19:30



First Conference Day

Thursday, 21st September

Registration from 9:00			
Room N114	Welcome and Opening Keynote speeches		10:00 - 12:00
Lunch			
Room N111 Session 1.1 Preform Materials, Semi-Finished Products and Composite Structures	Room N112 Session 2.1 Processing, Systems and Application for Mass Production	Room N113 Session 4.1 Smart Systems Integration	13:00 - 14:30
Networking coffee			
Room N111 Poster session	Room N112 Session 2.2 Processing, Systems and Application for Mass Production	Room N113 Special Session International Lightweight Innovation Networks	15:00 - 16:30
Networking coffee			
Room N111 Session 3.1 Modelling and Simulation of Hybrid Structures and their Production Processes	Room N112 Session 1.2 Bio-based Composite Structures		17:00 - 18:00
Conference dinner at pumpwerk eins Best Paper/Poster Award			19:30
Parallel Events			
SAB-Meeting (only for Members of the Scientific Advisory Board) 17:00 - 18:00			

Conference Dinner

We would like to welcome you at 19:30 in the pumpwerk eins for the conference dinner. www.pumpwerk-eins.de

By Car: pumpwerk eins, Zschopauer Straße 209, 09126 Chemnitz
(on-site parking available)

By Public Transport: Station Central Interchange Point **Tram 2**, Direction Bernsdorf until Station Wartburgstraße, walk uphill the Wartburgstraße and turn right on Zschopauer Straße (10 min walk)

Thursday, 21st September

Registration, Opening, Welcome and Keynote Speeches 09:00 - 12:00

from 09:00	Registration	Central Lecture Hall Building: Foyer
10:00	Opening	Central Lecture Hall Building: N114
	Prof. Lothar Kroll, Coordinator Cluster of Excellence MERGE Prof. Gerd Strohmeier, President of Chemnitz University of Technology	
	Welcome	
	Uwe Gaul, Saxon State Secretary, Ministry for Higher Education, Research and the Arts Sören Uhle, Managing Director of Economic Development Corporation, City of Chemnitz	
	Keynote speeches	
	Materials Meet Changes in Automotive Applications	
	Dr. Olaf Täger, Volkswagen Aktiengesellschaft	
	Industry 4.0: Impacts on control and switchgear construction	
	Uwe Scharf, RITTAL GmbH & Co. KG	
12:00	Lunch	
13:00	Begin of the parallel sessions	

Dinner speeches in the evening at pumpwerk eins

Thomas Schmidt, Saxon State Minister of Environment and Agriculture
 Frank Heinrich, Member of the German Bundestag (MdB)

Opening



Prof. Lothar Kroll



Prof. Gerd Strohmeier

Welcome



Saxon State Secretary Uwe Gaul



Sören Uhle

Keynote speeches



Dr. Olaf Täger



Uwe Scharf

Dinner speeches



Saxon State Minister Thomas Schmidt



Member of the Bundestag Frank Heinrich

Thursday, 21st September

Three Parallel Sessions 13:00 - 14:30

Session 1.1 Preform Materials, Semi-Finished Products and Composite Structures

Chairman:
Prof. Daisy Nestler
Room: N111

13:00 Tailored fibre placement in thermoplastic composites

Dr. A. Spickenheuer, et al., Leibniz Institute of Polymer Research Dresden; R. Haase, Fraunhofer IWU; D. Garray, SIRRIS (BE)

13:25 Comparison of manufacturing fiber metal laminates based on thermoplastic and thermosetting material: Analyses of mechanical properties and economic effects

M. Trautmann, C. Symmank, Dr. A. Schmidt, et al., CUT

13:45 Automated orbital winding of fiber reinforced structural components

R. Wallasch, R. Tirschmann, C. Teichgraeber, CUT

14:10 Influence of the cooling behaviour on the mechanical properties of hybrid laminates with carbon fibre-reinforced plastics

C. Zopp, Prof. D. Nestler, et al., CUT; S. Nendel, Cetex Institute of textile- and processing machines non-profit GmbH

14:30 - 15:00 Networking coffee

Session 4.1 Smart Systems Integration

Chairman:
Prof. Sven Rzepka
Room: N113

13:00 Development of activated carbon web for effective EMI shielding applications

Dr. V. Baheti, Prof. J. Militky, S. Naaem, et al., Technical University of Liberec (CZ)

13:25 Integrated platform for advanced smart textile applications

Dr. H. Illing-Guenther, F. Weigand, et al., Saxon Textile Research Institute; F. Ebert, CUT

13:45 Enhanced lightweight design by composites: Results of the EU project ENLIGHT

Dr. D. Mayer, Prof. T. Bein, Fraunhofer LBF

14:10 Hybrid hierarchical composite material based on carbon nanostructures

E. Y. Matsubara, J. M. Rosolen, University of São Paulo (BR)

14:30 - 15:00 Networking coffee

Session 2.1 Processing, Systems and Application
for Mass Production of Lightweight Structures

Chairman: Prof. Welf-
Guntram Drossel
Room: N112

13:00 **Additive manufactured structures with improved properties for tissue engineering**

Prof. A. Lanzotti, M. Martorelli, Fraunhofer JL IDEAS—University of Naples Federico II; A. Gloria, National Research Council of Italy (I)

13:25 **The most filigree structure made by remote laser cutting**

R. Baumann, Prof. E. Beyer, Technische Universität Dresden, Fraunhofer IWS; Dr. P. Herwig, et al., Fraunhofer IWS

13:45 **New additive manufacturing technology for fiber reinforced plastics in skeleton structure**

M. Holzinger, BMW Group; J. Blase, Fraunhofer IWU; Prof. L. Kroll, CUT

14:10 **High-performance machining of fiber-reinforced materials with hybrid ultrasonic-assisted cutting**

Dr. A. Stoll, C. Rüger, A. Busch, et al., Fraunhofer IWU

14:30 - 15:00 Networking coffee



Manufacturing of a novel rotor blade
for small wind power plants
with added functions

Thursday, 21st September

Three Parallel Sessions 15:00 - 16:30

Two Parallel Sessions 17:00 - 18:00

Session 2.2 Processing, Systems and Application for Mass Production of Lightweight Structures

Chairman:
Dr. Rafael Codeiro
Room: N112

- 15:00 **FAUSST: Bridging the gap between steel and fibre reinforced materials**
Dr. R. Luterbacher, Dr. L. Molter, Center of Maritime Technologies e.V.

- 15:25 **Advanced joining technology for the production of highly stressable lightweight structures, with fiber-reinforced plastics and metal**
Prof. H. Seidlitz, F. Kuke, N. Tsombanis, Brandenburg University of Technology Cottbus-Senftenberg

- 15:45 **Investigation of integral endless fibre reinforced aluminium-polyamide 6 hybrid joints**
R. Van der Auwera, et al., Fraunhofer IFAM; T. Gebken, et al., Technische Universität Braunschweig; M. Busse, University of Bremen

- 16:10 **Life Cycle Engineering and Management methods for designing hybrid structures: Cases, potentials and challenges**
Prof. U. Götze, C. Symmank, Dr. A. Schmidt, CUT

16:30 - 17:00 Networking coffee

Poster Session 15:00 - 16:30

Chairman:
Dr. Verena Kräusel
Room: N111

16:30 - 17:00 Networking coffee

Session 3.1 Modelling and Simulation of Hybrid Structures and their Production Processes

Chairman:
Prof. Jörn Ihlemann
Room: N111

- 17:00 **Methodological approach to investigate the behavior of the structure under dynamic loading using multiple criteria decision making method**
J. Oleksik, S. Natarajan, Prof. T. Vietor, Technische Universität Braunschweig

- 17:20 **Lightweight car door made out of a net shape and load adapted hybrid fabric**
M. Fleischmann, L. Bratge, et al., CUT; Dr. A. Spickenheuer, Leibniz Institute of Polymer Research Dresden

- 17:40 **Residual stress analysis of fibre-reinforced structures with fibre BRAGG grating sensors**
E. Peretzki, N. Schramm, Prof. J. Ihlemann, et al., CUT

19:30 Conference dinner at pumpwerk eins, Awarding Best Paper & Poster Award
Dinner speeches: Saxon State Minister Thomas Schmidt; Frank Heinrich, MdB

Special Session International Lightweight Innovation Networks

Chairman:
Dr. Katharina Schöps
Room: N113

- 15:00 **European future challenges for lightweight innovation networks**
Dr. J. Tröltzsch, Scientific Director Cluster of Excellence MERGE, CUT

- 15:25 **MERGEurope: Lightweight Innovation Network mastering the challenges**
A. Bochmann, Project coordinator MERGEurope, CUT

- 15:45 **Good practice for Lightweight Innovation Networks in Upper Austria**
Mag. B. Löw-Baselli, Johannes Kepler University Linz
A2LT – Austrian Advanced Lightweight Technology
F. Danmayr, Automotive Cluster of the Business Upper Austria agency

- 16:10 **Good practices for pan european cooperation in lightweight application**
I. Magallón, Senior Consultant, BAX & COMPANY, Barcelona

16:30 - 17:00 Networking coffee

SAB Meeting (only for Members of SAB) 17:00 - 18:00, Room N113

Session 1.2 Bio-based Composite Structures

Chairman:
Prof. André Wagenführ
Room: N112

- 17:00 **Optimisation of fibre reinforced plastics by using the life cycle engineering methodology**
Dr. J. Kaufmann, CUT, silbaerg GmbH; Prof. I. Ribero, et al., Instituto Superior Técnico (P); Prof. U. Götze, et al., CUT

- 17:20 **Investigation of bio-based polyamide with short fibers for lightweight structures**
Dr. R. Rinberg, T. Hartmann, et al., CUT; A. Nikiforov, et al., Kazan National Research Technological University (RUS)

- 17:40 **Natural fibre reinforced biocomposites: Innovative and optimized processes for series production**
A. A. Quali, Dr. R. Rinberg, Prof. W. Nendel, et al., CUT

**19:30 Conference dinner at pumpwerk eins, Awarding Best Paper & Poster Award
Dinner speeches: Saxon State Minister Thomas Schmidt; Frank Heinrich, MdB**

MERGE Technology Centre

Research complex
equipped with pilot plants
and unique machinery

PROGRAMME

Friday, 22nd September

Parallel Sessions

09:30 - 16:30

Tour MERGE Technology Centre

11:00 - 13:00



Second Conference Day

Friday, 22nd September

Registration from 08:30			
Room N111 Session 1.3 Interface Design, Adhesives and Joining Technologies	Room N112 Session 2.3 Processing, Systems and Application for Mass Production	Room N113 Session 4.2 Smart Systems Integration	09:30 - 11:00
Guided tour MERGE Technology Centre Lunch			11:00 - 13:00
Room N111 Session 3.2 Modelling and Simulation of Hybrid Structures and their Production Processes	Room N112 Session 2.4 Processing, Systems and Application for Mass Production		13:00 - 14:30
Networking coffee			
Room N113 Session 4.3 Smart Systems Integration	Room N112 Session 1.4 Preform Materials, Semi-Finished Products and Composite Structures		15:00 - 16:30
Discussion/Closing remarks			

Parallel Events

Guided tour MERGE Technology Centre 11:00 - 13:00
„MERGE Unternehmerforum“ including World-Café 10:00 - 14:00

Friday, 22nd September

Three Parallel Sessions 09:30 - 11:00

Session 1.3 Interface Design, Adhesives and Joining Technologies

Chairman:
Prof. Thomas Lampke
Room: N111

09:30 **Enka® TecTape – a ready to use hybrid roving with unidirectional glass and thermoplastic fibers**

Dr. S. Volta, A. Flachenecker, C. Vieth; PHP Fibers GmbH

09:55 **Cold surface treatments on fiber-reinforced plastics by pulsed laser**

J. Gebauer, V. Franke, Dr. U. Klotzbach, et al., Fraunhofer IWS

10:15 **Prefinished metal polymer hybrid parts**

Dr. I. Kühnert, Dr. M. Gedan-Smolka, et al., Leibniz Institute of Polymer Research Dresden; P. Scholz, et al., Fraunhofer IWU

10:40 **Microstructuring of joining areas in aluminum alloy sheets by jet electrochemical machining**

R. Schimmelpfennig, Dr. M. Hackert-Oschätzchen, A. Martin, et al., CUT

11:00 - 13:00 Guided tour MERGE Technology Centre/Lunch

Session 4.2 Smart Systems Integration

Chairman:
Prof. Jan Mehner
Room: N113

09:30 **Material-integrated composite humidity sensors for condition monitoring of fiber-reinforced plastics**

Dr. J. Martin, et al., Fraunhofer ENAS; K. Shetty, et al., CUT;
S. Neukirchner, et al., Saxon Textile Research Institute

09:55 **Development and characterization of highly sensitive thin film strain sensors consisting of nickel-carbon composite for integration in thermoplastic-based hybrid laminates**

C. Karapepas, Prof. D. Nestler, Dr. D. Wett, et al., CUT

10:15 **Design and economic evaluation of synthetic jet actuators for the integration in heterogeneous composite structures**

M. Schüller, M. Lipowski, et al., Fraunhofer ENAS; M. Walther, et al., CUT

10:40 **Additive manufacturing of capacitive humidity sensors by screen printing for condition monitoring of FRP composites**

T. Seifert, Dr. J. Martin, et al., Fraunhofer ENAS; Prof. T. Otto, CUT

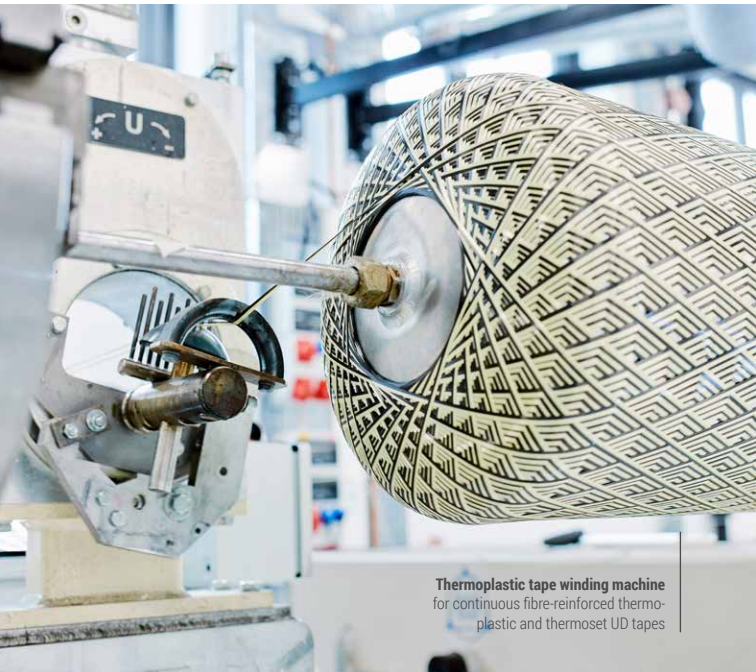
11:00 - 13:00 Guided tour MERGE Technology Centre/Lunch

Session 2.3 Processing, Systems and Application
for Mass Production of Lightweight Structures

Chairman:
Prof. Holger Seidlitz
Room: N112

- 09:30 **Lightweight piston design in hand-held power tools**
Dr. C. Karrar, S. Meuser, Dr. A. Wolf, ANDREAS STIHL AG & Co. KG
-
- 09:55 **Evaluation of process chains for manufacturing hybrid structures in early design stages: A source of impulses to R&D activities**
J. Boll, A. Graf, C. Symmank, et al., CUT
-
- 10:15 **Product-oriented turn-key solutions for fiber-reinforced thermoplastic components**
Dr. M. Cetin, KraussMaffei Automation GmbH; S. Fenske, KraussMaffei Technologies GmbH
-
- 10:40 **Multifunctional FRP-aluminium foam setup for battery housings of electric vehicles**
R. Schmerler, C. Lies, et al., Fraunhofer IWU; T. Gebken, et al., Technische Universität Braunschweig
-

11:00 - 13:00 Guided tour MERGE Technology Centre/Lunch



Thermoplastic tape winding machine
for continuous fibre-reinforced thermo-
plastic and thermoset UD tapes

Friday, 22nd September

Two Parallel Sessions 13:00 - 16:30

Session 3.2 Modelling and Simulation of Hybrid Structures and their Production Processes

Chairman:
Dr. Sascha Müller
Room: N111

13:00 **Modelling the deformation of continuous fibre-reinforced thermoplastics subjected to hygrothermal loading**

T. Grätzl, M. Hille, BMW Group; N. Schramm, et al., CUT

13:25 **Integrating models for fiber reinforced materials into finite element simulations**

Dr. M. Hofmann, R. Dietze, N. Goldberg, et al., CUT

13:45 **Simulation of solid tire curing process for quality improvement**

Asst. Prof. A. Chaikittiratana, et al., King Mongkut's University of Technology North Bangkok (TH)

14:10 **Modelling damage and failure in composite materials with probabilistic approach**

Prof. V. V. Astanin, Dr. G. O. Shchegel, National Aviation University Kiev (UA)

14:30 - 15:00 Networking coffee

Session 4.3 Smart Systems Integration

Chairman:
Dr. Steffen Kurth
Room: N113

15:00 **Investigation on inkjet printing for electromagnetic compatibility application**

M. Hartwig, M. Polomoshnov, et al., CUT; Dr. R. Zichner, et al., Fraunhofer ENAS

15:25 **Realization of sensitive functionality by integration of electromagnetic resonators in composite materials**

T. D. Großmann, et al., CUT; M. Heinrich, et al., Fraunhofer IWU; Dr. S. Kurth, et al., Fraunhofer ENAS

15:45 **Technologies for the integration of miniaturized silicon sensor systems in fiber reinforced composites**

B. Arnold, A. Bauer, et al., CUT; F. Rost, et al., Fraunhofer ENAS

16:10 **Mass production enabled manufacturing and measurement technologies for hybrid laminates with sensory function**

Dr. V. Kräusel, A. Graf, et al., CUT; M. Heinrich, et al., Fraunhofer IWU

Discussion/Closing remarks

Session 2.4 Processing, Systems and Application for Mass Production of Lightweight Structures

Chairman:
Dr. Jürgen Tröltzsch
Room: N112

- 13:00 **Automated composite production - in-situ processing of (epsilon) caprolactam and structures made of thermoplastic tapes**
Dr. N. Müller, Dr. L. Reith, P. Zwicklhuber, ENGEL AUSTRIA GmbH (AT)
-
- 13:25 **Smart process combination for aluminium/plastic hybrid components**
A. Albert, W. Zorn, et al., Fraunhofer IWU; M. Layer, et al., CUT
-
- 13:45 **Potentials of the modular injection molding system solution MXW 2500 for lightweight and multi-material moldings**
S. Fenske, KraussMaffei Technologies GmbH; Prof. W. Nendel, CUT;
Dr. V. Reichert, A&E Produktionstechnik GmbH
-
- 14:10 **Multi-material design for physiologically optimised lightweight car seat**
S. Ren, K. Schäfer, Prof. D. Nestler, et al., CUT
-

14:30 - 15:00 Networking coffee

Session 1.4 Preform Materials, Semi-Finished Products and Composite Structures

Chairman:
Prof. Holger Cebulla
Room: N112

- 15:00 **Mikrosandwich: Lightweight for the automotive interior**
C. Menzel, Dr. B. Stamp, H. Bieder, et al., Daimler AG
-
- 15:25 **Impregnability and performance of rCF-nonwovens with epoxy resin**
J. Mankiewicz, Prof. E. Cleve, Prof. M. Heber, University of Applied
Sciences Krefeld
-
- 15:45 **Manufacturing of lightweight parts by sandwich injection molding of metal-replacement plastics combined with light foams**
A. Hüttel, N. Pönisch, Dr. P. Bloß, Kunststoff-Zentrum in Leipzig gGmbH
-
- 16:10 **Laser beam melting of complexly curved honeycomb structures**
G. Schlick, M. Binder, M. Illgner, Fraunhofer IGC V
-

Discussion/Closing remarks

Parallel Event

Friday, 22nd September 10:00 - 14:00

„MERGE Unternehmerforum“ including World-Café

This event is only available in German language.

Im Rahmen der 3rd IMTC veranstalten wir ein MERGE Unternehmerforum inklusive eines World-Cafés. Gemeinsam mit der „StrategieWerkstatt: Industrie der ZUKUNFT“ des Sächsischen Staatsministeriums für Wirtschaft, Arbeit und Verkehr (SMWA) greifen wir darin inhaltlich das bedeutende Thema der Internationalisierung auf und bieten vor allem Vertretern von regionalen Kleinen und Mittleren Unternehmen (KMU) die Möglichkeit, sich über zukünftige technologische, wirtschaftliche und demografische Herausforderungen zu informieren, auszutauschen und zu diskutieren.



StrategieWerkstatt
Industrie der ZUKUNFT.



ANMELDUNG

Bitte registrieren Sie sich auf unserer Homepage:

www.tu-chemnitz.de/IMTC

Die Teilnahme ist kostenfrei.

ZIELGRUPPE/TEILNEHMER

Vertreter von regionalen Kleinen und Mittleren Unternehmen (KMU)

SPRACHE

Die Veranstaltung wird in deutscher Sprache durchgeführt.

VERANSTALTUNGSORT

Technische Universität Chemnitz

Neues Hörsaalgebäude

Reichenhainer Straße 90

09126 Chemnitz

Raum N005

ANSPRECHPARTNER

Anja Bochmann

Telefon: +49 371 531-30268

E-Mail: anja.bochmann@mb.tu-chemnitz.de

Programm Raum N005

- 10:00 **Begrüßung und Vorstellung StrategieWerkstatt: Industrie der Zukunft**
Julian Stubbe, VDI/VDE Innovation + Technik GmbH
- 10:10 **Impulsreferat**
Zukünftige Herausforderungen für den Leichtbau in Europa
Dr. Jürgen Tröltzsch, Exzellenzcluster MERGE, TU Chemnitz
- 10:30 **MERGEurope: Internationalisierungskonzept des Exzellenzclusters**
Anja Bochmann, Exzellenzcluster MERGE, TU Chemnitz
- 10:45 **Internationalisierung in der Praxis: Neues Zentrum für Kunststoff-technologien in Polen**
Paulina Paniok, Firma Dopak Sp. z o.o.
- 11:00 **World-Café zu folgenden Fragestellungen:**
- Wertschöpfung**
In welchen Bereichen industrieller Wertschöpfung ist eine internationale Unternehmensstrategie relevant?
- Region**
Welches Potenzial bietet grenzüberschreitende Zusammenarbeit für die wirtschaftliche Stärkung ländlicher Grenzregionen? Können Kooperationen z. B. bei der Abmilderung der Folgen des demografischen Wandels und des Fachkräftemangels helfen? Wie kann das gelingen?
- Netzwerk**
Welche Akteure sollten in Netzwerken zur Förderung der Kooperation in Innovationsbereichen wie Digitalisierung, Cross-Innovation oder Kreativwirtschaft sowie Startup-Szene integriert werden? Welche Herausforderungen und Barrieren sind bei der Internationalisierung zu überwinden?
- Förderung**
Welche Unterstützung der öffentlichen Hand brauchen Unternehmen beim Ausbau internationaler Kooperationen? Können Fördermaßnahmen im Rahmen der Europäischen Fonds für regionale Entwicklung (EFRE) besser genutzt werden?
- 12:00 **Zusammenfassung der Ergebnisse**
Julian Stubbe, VDI/VDE Innovation + Technik GmbH
- 12:15 **Mittagspause inmitten der Posterausstellung**
- 13:15 **Führung durch das MERGE-Technologiezentrum**
Norbert Schramm, Exzellenzcluster MERGE, TU Chemnitz



Industrial Advisory Board

(in alphabetical order)

Prof. Dr. Reinhold Achatz	ThyssenKrupp AG, DE
Nicolas Beltrame	Westfalia Presstechnik GmbH & Co.KG, DE
Dr. Udo Berthold	Cotesa GmbH, DE
Nicolas Beyl	KraussMaffei Technologies GmbH, DE
Dr. Klaus-Dieter Debschütz	Daimler AG, DE
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Dr. Michael Fiedler	Heckert GmbH, DE
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Dr. E. h. Georg P. Holzinger	KraussMaffei Technologies GmbH, DE
Stefan Jugel	P-D Glasseiden GmbH Oschatz, DE
Dr. Wolf Köhler	TER Plastics Polymer Group, DE
Dr. Jochen Kopp	BMW Group, DE
Dr. Georg Kormann	John Deere GmbH & Co. KG, DE
Dr. Michael Korte	Audi AG, DE
Reiner Krause	Voith Turbo Scharfenberg GmbH & Co. KG, DE
Adam Kurowski	Kompozyty Sp. z o.o., PL
Gerd Lehmann	COVAC GmbH, DE
Prof. Jürgen Lehold	Volkswagen Group, DE
Swen Malkus	Daimler AG, DE
Dr. Fritz P. Mayer	Karl Mayer Textilmaschinenfabrik GmbH, DE
Frank J. Meurs	TenCate Advanced Composites bv, NL
Dr. Peter Neumann	Engel Austria GmbH, AUT
Prof. Christian Obermann	Bond-Laminates GmbH, DE
Lubomír Obrátil	DIPEX, spol. s r.o., SK
Jacek Polaszewski	GRAFORM, PL
Dr. Volker Reichert	A&E Produktionstechnik GmbH, DE
Prof. Bertram Reinhold	Audi AG, DE
Thierry Renault	Faurecia Automotive Seating, FR
Hans Ulrich Richter	richter & heiß VERPACKUNGEN, DE
Ralph Rumberg	KOKI Technik Transmission Systems GmbH, DE
Herbert Rödig	Infineon Technologies AG, DE
Hans-Tobias Schicktanz	Schicktanz GmbH, DE
Josef Schwuger	MPT Group GmbH Mittweida, DE
Dr. Thomas Steffen	Rittal GmbH & Co. KG, DE
Ursula Steiner	DOPAK Sp. z o. o., PL

Participating Institutions of MERGE

Lucie Toscani	Veritas AG, DE
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Peter Weber	FEP Fahrzeugelektrik Pirna GmbH & Co. KG, DE
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Dr. Joachim Wicke	Siemens AG, DE
Dr. Bernd Wohlmann	Toho Tenax Europe GmbH, DE
Dr. Olaf Zöllner	Covestro AG (ehem. Bayer MaterialScience AG), DE

Conference Committee

(in alphabetical order)

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Prof. Stefania Bruschi	Full Professor at Centre of Mechanics of Biological Materials, University of Padova, IT
Assoc. Prof. Arisara Chaikitiratana	Head of Department of Mechanical & Aerospace Engineering, King Mongkut's University of Technology North Bangkok, TH
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Prof. Narongrit Sombatsompop	Professor in Materials Technology, King Mongkut's University of Technology Thonburi (KMUTT), Bangkok, TH

General Information

CONFERENCE VENUE

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

CONFERENCE FEE

2-Day Ticket 21 st - 22 nd September 2017	350.00 EUR
includes evening event	
1-Day Ticket 21 st September 2017	250.00 EUR
includes evening event	
1-Day Ticket 22 nd September 2017	150.00 EUR
2-Day Ticket for the members of MTC Lightweight Structures e. V. and the Industrial/Scientific Advisory Board ...	180.00 EUR
includes evening event	
Participants with oral or poster presentation	150.00 EUR
includes evening event	
Employees Chemnitz University of Technology	150.00 EUR
includes evening event	
MERGE employees	FREE
includes evening event	
Students	30.00 EUR
without framework programme, conference documents and refreshments	
Special Session and World-Café MERGE	FREE
Fees include VAT	

REGISTRATION

The online registration is available on our website
www.tu-chemnitz.de/IMTC

TERMS OF PAYMENT

Payment is only possible by bank transfer after accounting. During the conference, payment in cash or by card will be not accepted. In case of cancellation until 15th August 2017 (date of E-mail 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 Ruder via imtc@tu-chemnitz.de

CHILDCARE

At the Cluster of Excellence MERGE the implementation and protection of equal rights for male and female scientists is a matter of course. In case you need someone to take care of your child, please let us know.

CONTACT DURING THE CONFERENCE

Diana Ruder (General Organisation)

Phone: +49 371 531-35267

Susi Tosch (Scientific Organisation)

Phone: +49 371 531-32368

Email: imtc@tu-chemnitz.de

INTERNET

Wi-Fi will be available for all conference participants. The necessary login details will be given to you on the day of the event.

ARRIVAL

Because of extensive construction measures around the conference venue, we strongly recommend using public transport.

By Car

Please follow the redirection signs. Only a few parking spaces are available. Please find current information at www.tu-chemnitz.de/IMTC.

Address for navigation system:

Reichenhainer Straße 90, 09126 Chemnitz
50°48'49.7" N, 12°55'47.9" O.

By Train

From the central station you can reach the Lecture Hall Building by taxi or bus (2-minute walk to the bus station). Take bus line 51 towards Altchemnitz/Reichenhain (get off at 'TU Campus'). Then go about 200 m to the right downhill. The Lecture Hall Building is located on the left side of Reichenhainer Straße.

By Plane

Starting from Dresden airport (approx. 84 km by car):

Take freeway A4 and A72 direction Hof. Exit at Chemnitz-Süd.

Starting from Leipzig-Schkeuditz airport (approx. 95 km by car):

Take freeway A14 first direction Dresden. At the interchange Parthenaue please take the freeway A38 direction Göttingen/Leipzig-Südost. Exit at Chemnitz/Borna onto B2/B95/freeway A72 towards Chemnitz and exit at Chemnitz-Süd.

SERVICE

Taxi

Taxi Genossenschaft Chemnitz eG

Phone: +49 371 369000

www.taxi-chemnitz.de

Public Transport

CVAG Chemnitzer Verkehrs-AG

Phone: +49 371 2370-333

www.cvag.de

General Information

ACCOMMODATION

The following hotels offer special conditions for participants. For getting the key word and further information please contact the organisation team or visit www.tu-chemnitz.de/IMTC/hotels.

Hotel Chemnitzer Hof 4*S

Theaterplatz 4, 09111 Chemnitz
Phone: +49 371-68 40
www.chemnitzer-hof.de
Distance to the conference venue 3.2 km

Hotel an der Oper 4*

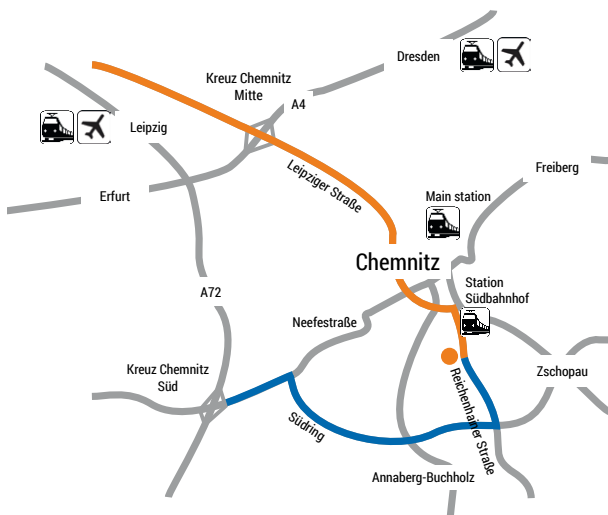
Straße der Nationen 56, 09111 Chemnitz
Phone: +49 371-68 10
www.hoteloper-chemnitz.de
Distance to the conference venue 3.3 km

Seaside Residenz Hotel Chemnitz 4*

Bernsdorfer Straße 2, 09126 Chemnitz
Phone: +49 371-35 510
www.residenzhotelchemnitz.de
Distance to the conference venue 1.5 km

Mercure Kongress Chemnitz 3*

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



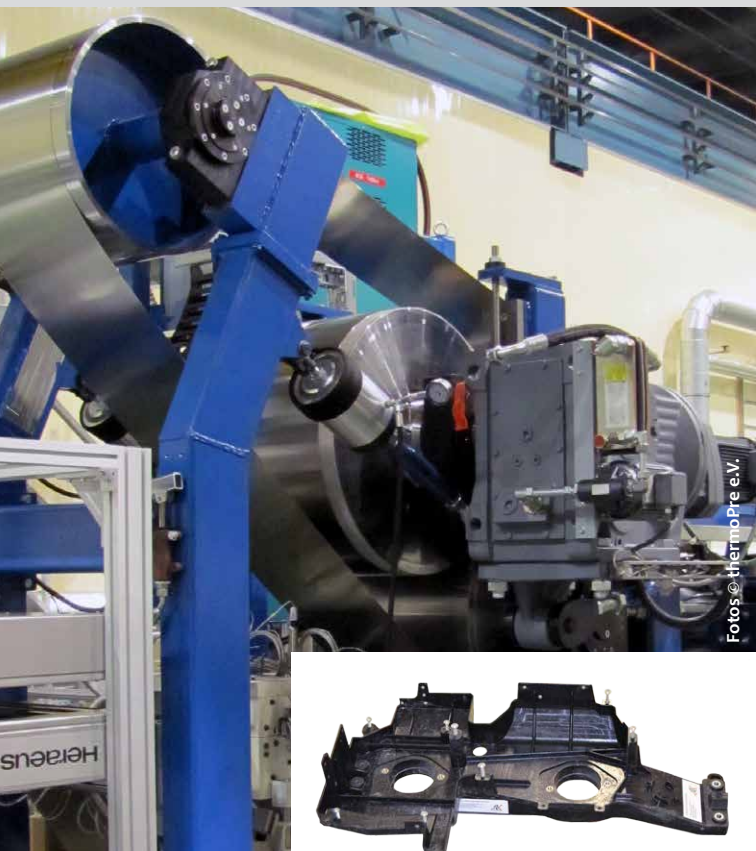
Due to construction works traffic will be rerouted in several areas. Please have a look at www.tu-chemnitz.de/IMTC/journey to find the up-to-date directions to the venue.

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

Univ.-Prof. Dr.-Ing. habil. Prof. E. h. Prof. Lothar Kroll, Coordinator
Dr.-Ing. Jürgen Tröltzsch, 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

Diana Ruder (General)
Phone: +49 371 531-35267

Susi Tosch (Scientific)
Phone: +49 371 531-32368

Email: imtc@tu-chemnitz.de
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