



5th International Conference & Exhibition on Thermoplastic Composites

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Dear Ladies and Gentlemen,

We are pleased to present to you the programme of **ITHEC 2020, 5th International Conference & Exhibition on Thermoplastic Composites**. With the 2020 event, we continue a unique series launched in 2012 focusing on the most promising aspects of lightweight constructions. For the first time **ITHEC** will be held as a virtual event, which is a challenge for both participants and hosts but is taking advantage of intelligent personal networking opportunities and interactive live presentations.

Thermoplastic composites (TPC) and their production processes are steadily evolving and are continuing to gain more and more importance in a wide area of applications.

We express our thanks to our International Programme Committee for their enormous commitment, ensuring a competent evaluation procedure and compiling a high quality conference programme, that will showcase the latest results, highlight new perspectives and give impulses for all fields of application.

We are sure you will have an interesting networking event with stimulating discussions, many new ideas and inspirations and we encourage you all to take full advantage of the possibilities of this virtual event.

See you soon at ITHEC!

Prof. Dr. Axel Herrmann
Chairman of the ITHEC
Steering Board

Daniel Schäfer
Project Manager
of ITHEC

Join us and register now!

Registration is very easy and fast through our online system, and you can choose to use credit card, SEPA authorisation, or bank transfer with invoice.

Explore our packages, starting from EUR 590,00 – that is only 6,00 EUR per session.

[click here!](#)

The Conference

The **5th International Conference on Thermoplastic Composites** covers the latest developments in high performance thermoplastic composite applications in aerospace, automotive and energy applications, as well as transport & engineering. The official conference language is English; there will be no simultaneous translation.

The high quality deeply technical content in combination with live networking and matchmaking ensures a unique experience. Enjoy our interactive lectures and Q&A sessions, 1:1 & group video networking meetings, Business Speed Datings, full attendee list and profiles, and much more!

ITHEC Conference focuses on new results on

- Thermoplastic Composites Lightweight Structures
- Manufacturing & Process Technologies
- Simulation & Modelling
- Raw Materials & Standardisation
- Process Automation & Production Machinery
- Process Monitoring / Material Quality & Testing
- Eco Balance & Recycling

Experience a new level of networking and personal interaction:

LIVE



Business speed datings



Poster presentations



Q&A sessions with all speakers



1:1 and group video matchmaking



Product and machine presentations

Time Zone Model

In Session 2, the content of Session 1 will be repeated; the lectures will be available in both sessions! This will assure that there will be numerous interaction opportunities in each time zone and even between the Conference Sessions. Be active in your time zone, connect to your continental community and be even able to meet the time-fitting other continents!



Conference Session 1 for Asia & Europe

09 AM – 01 PM
German time:
CEST / GMT+2



In-between interactive Networking Session

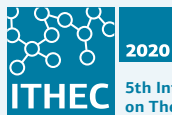
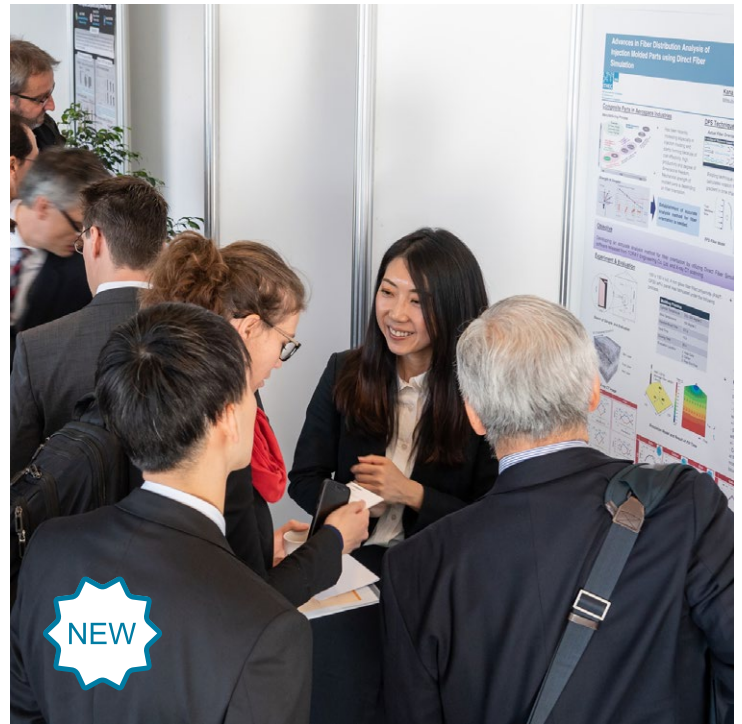
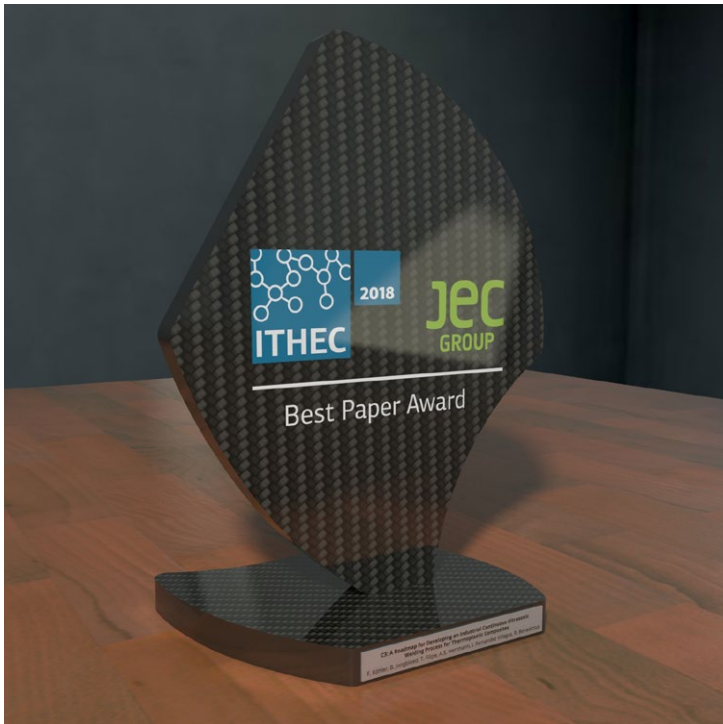
and

Virtual Round Tables



Conference Session 2 for the Americas & Europe

03 PM – 07 PM
German time:
CEST / GMT+2



5th International Conference & Exhibition on Thermoplastic Composites

JEC Best Paper Award

Again, there will be a Best Paper Award in close cooperation with the **JEC Composites Magazine**. Based on the manuscript quality 3–4 ITHEC 2020 manuscripts will be nominated for this award. The winner will receive a publication in the **JEC Composites Magazine**.

Poster Presentation

The poster sessions will be live and interactive! During the conference, all posters will be available for download, and most of the presenters will show highlight videos. On the second day, there will be live and interactive poster break-outs, here you can talk directly to the poster presenter and ask your questions! You can find the overview of posters and the times on page 10.

Best Poster Award

Using the poster point system on the platform participants are able to vote for their favourite poster. The ceremony will be **Thursday, 15th at 01:15 PM and 07:15 PM**.

Committees ITHEC 2020

Steering Board

I. Fernandez Villegas

Delft University of Technology, Delft, NL

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Evonik Industries AG, Marl, DE

D. Schäfer

CONGRESS BREMEN, Bremen, DE
(until Juli 2020: Dr. Hubert Borgmann, now retired)

Programme Committee

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The Boeing Company, Seattle, WA, USA

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Institut für Verbundwerkstoffe GmbH, Kaiserslautern, DE

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Kanazawa Institute of Technology, Hakusan, JP

M. Würtele

KraussMaffei Technologies GmbH, München, DE

Tuesday, 13 October 2020

Conference Session 1	Conference Session 2	Aerospace I	Automotive I	Emerging Technologies I
09:50 AM – 10:15 AM	03:50 PM – 04:15 PM	AE I – 1	AU I – 1	ET I – 1
10:15 AM – 10:40 AM	04:15 PM – 04:40 PM	AE I – 2	AU I – 2	ET I – 2
10:40 AM – 11:05 AM	04:40 PM – 05:05 PM	AE I – 3	AU I – 3	ET I – 3
11:35 AM – 12:00 PM	05:35 PM – 06:00 PM	AE I – 5	AU I – 4	ET I – 4
12:00 PM – 12:25 PM	06:00 PM – 06:25 PM	AE I – 5	AU I – 5	ET I – 5

Wednesday, 14 October 2020

Conference Session 1	Conference Session 2	Aerospace II	Automotive II	Emerging Technologies II
09:35 AM – 10:00 AM	03:35 PM – 04:00 PM	AE II – 1	AU II – 1	ET II – 1
10:00 AM – 10:25 AM	04:00 PM – 04:25 PM	AE II – 2	AU II – 2	ET II – 2
10:25 AM – 10:50 AM	04:25 PM – 04:50 PM	AE II – 3	AU II – 3	ET II – 3
11:20 AM – 11:45 AM	05:20 PM – 05:45 PM	AE II – 4	AU II – 4	ET II – 4
11:45 AM – 12:10 PM	05:45 PM – 06:10 PM	AE II – 5	AU II – 5	ET II – 5

Postersessions

Conference Session 1		Conference Session 2	
12:40 PM - 12:50 PM	Poster 01 – 04	6:40 PM - 6:50 PM	Poster 14 – 16
12:50 PM - 1:00 PM	Poster 05 – 07	6:50 PM - 7:00 PM	Poster 17 – 19
1:00 PM - 1:10 PM	Poster 08 – 10	7:00 PM - 7:10 PM	Poster 20 – 22
1:10 PM - 1:20 PM	Poster 11 – 13	7:10 PM - 7:20 PM	Poster 23 – 25

Thursday, 15 October 2020

Conference Session 1	Conference Session 2	Aerospace III – Welding	Emerging Technologies III – 3D Printing
09:35 AM – 10:00 AM	03:35 PM – 04:00 PM	AE III – 1	ET III – 1
10:00 AM – 10:25 AM	04:00 PM – 04:25 PM	AE III – 2	ET III – 2
10:25 AM – 10:50 AM	04:25 PM – 04:50 PM	AE III – 3	ET III – 3
11:20 AM – 11:45 AM	05:20 PM – 05:45 PM	AE III – 4	ET III – 4
11:45 AM – 12:10 PM	05:45 PM – 06:10 PM	AE III – 5	ET III – 5

Networking Sessions

To further enhance your networking experience within the virtual environment we offer several Business Speed Dating slots, where all participants, speakers and exhibitors are matched with each other, based loosely on their interests and specialties. The short video calls make it possible to network with like-minded people all around the globe and create lasting connections.

13.10.	14.10.	15.10.
11:10 AM	10:55 AM	10:55 AM
12:35 PM	12:15 PM	04:55 PM
06:35 PM	04:55 PM	

Interactive Live Session

A new addition to our technical conference lectures are the Interactive Live Sessions, providing our partners, sponsors and exhibitors with the opportunity to host virtual round tables, interactive presentations or thematic break-outs. Our Masterclasses/Virtual Round Tables take place on Tuesday at 01:30 PM and 02:00 PM CEST. The Interactive Live Sessions are scheduled as follows:

13.10.	14.10.	15.10.
11:10 AM	10:55 AM	10:55 AM
12:35 PM	12:15 PM	01:30 PM
05:10 PM	04:55 PM	04:55 PM
06:35 PM	06:15 PM	

Starttime	Aerospace	Automotive	Emerging Technologies
Tuesday, 13 October 2020			
Conference Session 1			
08:45 AM	Good Morning Coffee with the ITHEC Team		
09:00 AM	Official Conference Opening Day 1		
09:20 AM	KEYNOTE Thermoplastic Composites - suited for all Aerospace Markets! Kosta Sumilias, GKN Aerospace		
09:50 AM	Formation of in-plane Waviness in Thermoplastic Composite Laminate Consolidation Erik Krämer – ThermoPlastic composites Research Center, Enschede, Netherlands, and University of Twente, Enschede, The Netherlands	Manufacturing of an Automotive Rear Seat Structure with one Shot Hybrid Thermoplastic Composites Thierry Renault – Faurecia Zero Emissions, Saint Malo, France	Qualification of Unidirectional Carbon Fiber Reinforced PA12 Material for the Use in Thermoplastic Composite Pipes Alexander Brack – Evonik Resource Efficiency, Marl, Germany
10:15 AM	Interface Properties & Improvements in Overmoulded Composites Silviu Ivan – Victrex, Thornton Cleveleys, United Kingdom	ARWeS – Automatic Roving Changing System for Continuous Textile Processes Sebastian Nendel – Cetex Institut gGmbH, Chemnitz, Germany	Development of a Structural Subframe for a Battery Electric Vehicle using Continuous Fibre Reinforced Thermoplastics Sebastian Iwan – thermoPre GmbH, Chemnitz, Germany
10:40 AM	Application of Lightning Strike Protection on Thermoplastic Structures by Automated Fiber Placement Chinh Nguyen – DLR e. V., Stade, Germany	Tailor-made Thermoplastic Rods and Application in Winding Michael Holzinger – SGL Technologies GmbH, Meitingen, Germany	Optimised Design for Hybrid Structural Thermoplastic Composite Part Yves Becker – Institut für Verbundwerkstoffe GmbH, Kaiserslautern, Germany
Business Speed Dating			
11:10 AM	Interactive Session: Lighter, faster, stronger: Solvay's thermoplastic composites collaboration strategy Johannes Treiber – Solvay		
	Interactive Session: MULTILAYER: From part-design to tailored blanks Lukas Sumereder - Fill GmbH		
11:35 AM	Increasing the Performance of CCM Technology Florian Piott – Neue Materialien Fürth GmbH, Fürth, Germany	Methodology for Material Selection in Skeleton Design Andreas Maier – BMW Group, München, Germany	Natural Fibre Reinforced Bioplastics for Use in High Performance Structural Parts Sebastian Heßner – Evonik Nutrition & Care GmbH, Essen, Germany
12:00 PM	Post Flight Analysis of an in situ Consolidated Thermoplastic Rocket Module with Integrated Fiber Optic Temperature Sensors Ralf Engelhardt – Technische Universität München, Garching, Germany	Online Analysis of Geometrical Inaccuracies During the in-situ Automated Fiber Placement of Tailored Composite Blanks out of Thermoplastic Tape Malena Schulz – Fraunhofer IPT, Aachen, Germany	Difficulties on Testing Fibre Reinforced Thermoplastic Nuoping Klemm-Zhao – IMA Materialforschung und Anwendungstechnik GmbH, Dresden, Germany
Business Speed Dating			
12:35 PM	Interactive Session: Conbility GmbH Kai Fischer, Michael Emonts - Aachener Zentrum für Integrativen Leichtbau, Conbility GmbH		
	Interactive Session: AGC Chemicals Europe Chris Kent – AGC Chemicals Europe		
01:00 PM	JEC Best Paper Award		
01:30 PM	Masterclass & Virtual Round Table: Thermoplastic material technology advancement – key enablers for the next generation of composite materials Hans Luinge – Toray Advanced Composites		
02:00 PM	Masterclass & Virtual Round Table: Advanced Forming of Thermoplastic Composites Sebastiaan Wijskamp – TPRC		

Starttime	Aerospace	Automotive	Emerging Technologies
Tuesday, 13 October 2020			
Conference Session 2			
01:30 PM	Masterclass & Virtual Round Table: Thermoplastic material technology advancement – key enablers for the next generation of composite materials Hans Luinge - Toray Advanced Composites		
02:00 PM	Masterclass & Virtual Round Table: Advanced Forming of Thermoplastic Composites Sebastiaan Wijskamp - TPRC		
02:45 PM	Good Morning Coffee with the ITHEC Team		
03:00 PM	Official Conference Opening Day 1		
03:20 PM	KEYNOTE Thermoplastic Composites - suited for all Aerospace Markets! Kosta Sumilias, GKN Aerospace		
03:50 PM	Formation of in-plane Waviness in Thermoplastic Composite Laminate Consolidation Erik Krämer – ThermoPlastic composites Research Center, Enschede, Netherlands, and University of Twente, Enschede, The Netherlands	Manufacturing of an Automotive Rear Seat Structure with one Shot Hybrid Thermoplastic Composites Thierry Renault – Faurecia Zero Emissions, Saint Malo, France	Qualification of Unidirectional Carbon Fiber Reinforced PA12 Material for the Use in Thermoplastic Composite Pipes Alexander Brack – Evonik Resource Efficiency, Marl, Germany
04:15 PM	Interface Properties & Improvements in Overmoulded Composites Silviu Ivan – Victrex, Thornton Cleveleys, United Kingdom	ARWeS – Automatic Roving Changing System for Continuous Textile Processes Sebastian Nendel – Cetex Institut gGmbH, Chemnitz, Germany	Development of a Structural Subframe for a Battery Electric Vehicle using Continuous Fibre Reinforced Thermoplastics Sebastian Iwan – thermoPre GmbH, Chemnitz, Germany
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05:10 PM	Interactive Session: Thermoplastic Composites – finally skilfully processed Norbert Müller – Engel Austria GmbH		
	Interactive Session: New Opportunities with Carbon Fiber and Polypropylene in the field of Thermoplastic Composites Christos Karatzias - Mitsui Chemicals Group		
05:35 PM	Increasing the Performance of CCM Technology Florian Piott – Neue Materialien Fürth GmbH, Fürth, Germany	Methodology for Material Selection in Skeleton Design Andreas Maier – BMW Group, München, Germany	Natural Fibre Reinforced Bioplastics for Use in High Performance Structural Parts Sebastian Heßner – Evonik Nutrition & Care GmbH, Essen, Germany
06:00 PM	Post Flight Analysis of an in situ Consolidated Thermoplastic Rocket Module with Integrated Fiber Optic Temperature Sensors Ralf Engelhardt – Technische Universität München, Garching, Germany	Online Analysis of Geometrical Inaccuracies During the in-situ Automated Fiber Placement of Tailored Composite Blanks out of Thermoplastic Tape Malena Schulz – Fraunhofer IPT, Aachen, Germany	Difficulties on Testing Fibre Reinforced Thermoplastic Nuoping Klemm-Zhao – IMA Materialforschung und Anwendungstechnik GmbH, Dresden, Germany
06:35 PM	Business Speed Dating		
	Urban Air Mobility: How thermoplastics enable the step change from prototyping to high rate industrialization Raoul Starmans – Toray Advanced Composites		
	Interactive Session: tba		
07:00 PM	JEC Best Paper Award		

Starttime	Aerospace	Automotive	Emerging Technologies
Wednesday, 14 October 2020			
Conference Session 1			
08:45 AM	Good Morning Coffee with the ITHEC Team		
09:00 AM	Official Conference Opening Day 2		
09:05 AM	Virtual Exhibition Tour		
09:35 AM	T – Profile with Effective Lay-up in one Shot Josef Křena – Latecoere Czech Republic, Prague, Czech Republic	Integrated Process Simulation as Key for the Efficient Product and Process Development Martin Hohberg – SIMUTENCE GmbH, Karlsruhe, Germany, and Karlsruher Institut für Technologie, Karlsruhe, Germany	Laser-assisted Tape Placement with in-situ Consolidation for the Production of Thermoplastic Tailored Blanks – 2 new Machine System Innovations from Aachen Michael Emonts – Aachener Zentrum für Integrativen Leichtbau, Aachen, Germany and Conbility GmbH, Aachen, Germany
10:00 AM	Out of Autoclave Consolidation of Fiber Placed Thermoplastic Composite Structures Jagadeesh Narayana Swamy – ThermoPlastic composites Research Center, Enschede, Netherlands, and University of Twente, Enschede, The Netherlands	Process and Bonding Modification for Media-based Forming of Complex Continuous Fiber Reinforced Hybrid Parts Udo Engelmann – Technische Universität Chemnitz, Chemnitz, Germany	High-precision Stacking of Thermoplastic Composite Tapes using Image Processing Norbert Müller – ENGEL AUSTRIA GmbH, St. Valentin, Austria
10:25 AM	The Influence of Material and Blank on Rapid Fabrication of Continuous Fiber Reinforced Thermoplastic Composites Trevor McCrea – ATC Manufacturing, Post Falls, USA	Experimental Study and Numerical Simulation of Interface Failure of Injection over-molded Thermoplastic Composites Ali Rezaei – TNO/Brightlands Materials Center, Geleen, The Netherlands	A Review of the A+ Glide Forming Manufacturing Process and its Adaptation to CFRP Thermoplastic Composite Materials Daniel Campos – Applus+ Laboratories, Bellaterra, Spain, and University of Girona, Girona, Spain
Business Speed Dating			
10:55 AM	Interactive Session: Tired of wavy surfaces? – How to process aesthetical thermoplastic composites Andreas Kolf – INEOS Styrolution Group GmbH		
Interactive Session: Innovative Composite Materials Research and Development Center (ICC)			
11:20 AM	High speed thermoplastic tape placement with CoRe Heat Yannis Grohmann – DLR e. V., Stade, Germany	The “Digital Friend”: Towards a Sensor-supported Simulation and the Establishment of a new Thermoplastic C-RTM Process with Caprolactam Matthias Beyrle – DLR e. V., Augsburg, Germany	Thermoplastic Fiber – Metal Laminates for Automated Production Fabian Schubert – SGL Carbon GmbH, Meitingen, Germany
11:45 AM	Development of a Sandwich Panel with Carbon Fiber-reinforced Thermoplastic Skins Marina Heim – CNES, Toulouse, France	Simulation of Thermoforming Process of Thermoplastic based Sandwich Laminates made of Cross-ply and Honeycomb Core Varun Kumar Minupala – Fraunhofer IMWS, Schkopau, Germany, and Fraunhofer PAZ, Schkopau, Germany	Impact Modification of CF/PPS with Functional Fluoropolymers Claus-Peter Keller – AGC Chemicals Europe, Amsterdam, The Netherlands
Business Speed Dating			
12:15 PM	Interactive Session: Large format 3D printing with Thermoplastic Composites Charléne van Wingerden – CEAD B.V.		
Interactive Live Session - Advanced thermographic NDT applied to composite aircraft components Philippe Capon – Pinette Emidecau Industries, Jérôme Raynal – Institut de Soudure Groupe			
12:40 PM	Postersession		
01:30 PM	Individual Networking Time		

Starttime	Aerospace	Automotive	Emerging Technologies
Wednesday, 14 October 2020			
Conference Session 2			
01:30 PM	Individual Networking Time		
02:45 PM	Good Morning Coffee with the ITHEC Team		
03:00 PM	Official Conference Opening Day 2		
03:05 PM	Virtual Exhibition Tour		
03:35 PM	T – Profile with Effective Lay-up in one Shot Josef Křena – Latecoere Czech Republic, Prague, Czech Republic	Integrated Process Simulation as Key for the Efficient Product and Process Development Martin Hohberg – SIMUTENCE GmbH, Karlsruhe, Germany, and Karlsruher Institut für Technologie, Karlsruhe, Germany	Laser-assisted Tape Placement with in-situ Consolidation for the Production of Thermoplastic Tailored Blanks – 2 new Machine System Innovations from Aachen Michael Emonts – Aachener Zentrum für Integrativen Leichtbau, Aachen, Germany and Conbility GmbH, Aachen, Germany
04:00 PM	Out of Autoclave Consolidation of Fiber Placed Thermoplastic Composite Structures Jagadeesh Narayana Swamy – ThermoPlastic composites Research Center, Enschede, Netherlands, and University of Twente, Enschede, The Netherlands	Process and Bonding Modification for Media-based Forming of Complex Continuous Fiber Reinforced Hybrid Parts Udo Engelmann – Technische Universität Chemnitz, Chemnitz, Germany	High-precision Stacking of Thermoplastic Composite Tapes using Image Processing Norbert Müller – ENGEL AUSTRIA GmbH, St. Valentin, Austria
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Business Speed Dating			
04:55 PM	Interactive Session: Applying Induction Welding of Thermoplastic Composites Maarten Labordus, Maarten Bach – KVE Composites Group		
	Interactive Session: DLR's thermoplastic hotbed: The Center for Lightweight Production Technology in Augsburg Frederic Fischer – DLR – Deutsches Zentrum für Luft-und Raumfahrt e.V. / Inst. f. Bauweisen und Strukturtechnologie		
05:20 PM	High speed thermoplastic tape placement with CoRe Heat Yannis Grohmann – DLR e.V., Stade, Germany	The “Digital Friend”: Towards a Sensor-supported Simulation and the Establishment of a new Thermoplastic C-RTM Process with Caprolactam Matthias Beyrle – DLR e.V., Augsburg, Germany	Thermoplastic Fiber – Metal Laminates for Automated Production Fabian Schubert – SGL Carbon GmbH, Meitingen, Germany
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06:15 PM	Interactive Session: Cost-effective TPUD for efficient processing technologies Pascal Kube, Henrik Peters – Teijin Carbon Europe GmbH		
	Interactive Session – Organosheets in Structural Automotive Applications Dana Miloaga – Johns Manville		

Starttime	Aerospace – Welding	Emerging Technologies – 3D Printing
Thursday, 15 October 2020		
Conference Session 1		
08:45 AM	Good Morning Coffee with the ITHEC Team	
09:00 AM	Official Conference Opening Day 3	
09:05 AM	KEYNOTE Additive manufacturing (AM) – New thought-provoking impulse for future concepts and today’s challenges Marc Mayer, CTC GmbH	
09:35 AM	Process Data Driven Advancement of Robot-based Continuous Ultrasonic Welding for the Dust-free Assembly of Future Fuselage Structures Lars Larsen – DLR e. V., Augsburg, Germany	New Technique for Impregnating Rovings with High Viscous Melts Maik Titze – DLR e.V., Braunschweig, Germany
10:00 AM	Recent Developments in Ultrasonic Welding of Epoxy-to Thermoplastic-based Composites Eirini Tsiangou – Delft University of Technology, Delft, The Netherlands	Characterization of Additively Manufactured Endless Fiber Reinforced Multi-material Composites Mathias Czasny – Technische Universität Berlin, Berlin, Germany
10:25 AM	Resistance Welding Simulation through Application and Modification of Crystallisation Models Alexander Sanger – Premium AEROTEC GmbH, Augsburg, Germany	Seamless Solution for Industrial-grade Continuous Carbon Fibre 3D-printed Composites Yannick Willemin – 9T Labs AG, Zurich, Switzerland
Business Speed Dating		
10:55 AM	Interactive Session: Advanced composite manufacturing – Roundtable with 9T Labs’ engineers Martin Eichenhofer, Yannick Willemin – 9T Labs	
	Interactive Session: 3D Printing by Mark3D Joachim Kasemann – Mark3D GmbH	
11:20 AM	Focused Inductive Heat Generation in Weld Zones of Carbon Fibre Laminates by Magnetic Field Manipulation and Carbon Fibre Susceptors Niklas Menke – DLR e. V., Stade, Germany	Development of a Test Bench for Fused Filament Fabrication Alexander Matschinski – Technische Universitat Munchen, Garching, Germany
11:45 AM	Industrialisation Aspects for Ultrasonic Welding of Large Thermoplastic Aerospace Structures Filipp Kohler – CTC GmbH, Stade, Germany, and Delft University of Technology, Delft, The Netherlands	Large Scale 3D Printed Thermoplastic Composite Forms for Precast Concrete Structures Roberto Lopez-Anido – University of Maine, Orono, USA
12:15 PM	PANEL DISCUSSION: Advanced Thermoplastic Composite 3D Printing	
01:15 PM	ITHEC Best Poster Award	
01:30 PM	Interactive Session: tba	
	Interactive Session: tba	
02:00 PM	Individual Networking Time	

The 3D Printing Forum & Exhibition

Don’t miss this years’ special – the **Advanced Thermoplastic Composite 3D Printing Forum, powered by CompositesWorld.**

Exhibitors like 9T Labs, CEAD, CTC and more will showcase their latest developments in continuous fiber and industrial processes, and listen

to technical conference lectures and a 60-minute panel discussion with leading 3D printing companies from the U.S. and Europe.



powered by CompositesWorld

Panel 1

Panel 2

Exhibitors

Starttime	Aerospace – Welding	Emerging Technologies – 3D Printing
Thursday, 15 October 2020		
Conference Session 2		
01:30 PM	Interactive Session: tba	
	Interactive Session: tba	
02:00 PM	Individual Networking Time	
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	Business Speed Dating	
04:55 PM	Interactive Session: DLR Innovation Lab EmpowerAX – Strengthened accessibility of Additive Extrusion for industry Xenia Stumpf – DLR – Deutsches Zentrum fur Luft-und Raumfahrt e.V. / Inst. f. Faserverbundleichtbau und Adaptronik	
	Interactive Session: Supporting industrial innovation with R&D in Continuous Fiber Additive Manufacturing Tessa ten Cate – Brightland Materials Additive Manufacturing	
05:20 PM	Focused Inductive Heat Generation in Weld Zones of Carbon Fibre Laminates by Magnetic Field Manipulation and Carbon Fibre Susceptors Niklas Menke – DLR e. V., Stade, Germany	Development of a Test Bench for Fused Filament Fabrication Alexander Matschinski – Technische Universitat Munchen, Garching, Germany
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06:15 PM	PANEL DISCUSSION: Advanced Thermoplastic Composite 3D Printing	



Wednesday, 14 October 2020

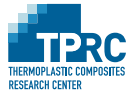
01	12:40 PM – 12:50 PM	CAE Tools for Overmoulded Thermoplastic Composites – State-of-the-art and Future Developments Robert Enderle – Faserinstitut Bremen e.V., Bremen, Germany
02	12:40 PM – 12:50 PM	Out-of-autoclave Manufacturing of Thermoplastic Fuselage Skins with Integrated Stringers Georg Doll – DLR e.V., Stuttgart, Germany
03	12:40 PM – 12:50 PM	Evaluation on Rivet Fastening by Ultra-compact Servo Press Thermoforming Takeshi Eguchi – Dai-Ichi Dentsu Ltd., Kani-shi, Japan
04	12:40 PM – 12:50 PM	The Investigation of Advanced Thermoplastic Composite Materials in Aerospace Applications Zelal Yavuz – Turkish Aerospace Inc., Ankara, Turkey
05	12:50 PM – 01:00 PM	Investigation of Material Extrusion based Print Heads for Thermoplastic Composites by Internal Pressure Analysis Onur Kaba – Technische Universität Berlin, Berlin, Germany
06	12:50 PM – 01:00 PM	eVTOL Fan Casing with Integral Stiffeners and Attachment Points Christian Garthaus – herone GmbH, Dresden, Germany
07	12:50 PM – 01:00 PM	Welding of UD Carbon LM-PAEK and PEKK Tapes Maarten Labordus – KVE Composites Group, The Hague, The Netherlands
08	01:00 PM – 01:10 PM	Experimental and Numerical Research of the MM Welding® Joining Technology for Sandwich Panels Igor Zhilyaev – Fachhochschule Nordwestschweiz, Windisch, Switzerland
09	01:00 PM – 01:10 PM	Polyamide 6 Carbon Fiber Composites obtained by T-RTM: Thermal, Chemical and Mechanical Characterization Filipe P. Martins – University of Aveiro, Oliveira de Azeméis, Portugal
10	01:00 PM – 01:10 PM	Towards an Increased Reliability of Resistance Welded Joints for Aircraft Assembly Manuel Endrass – DLR e.V., Augsburg, Germany
11	01:10 PM – 01:20 PM	Consolidation Behavior of Fiber Steered Thermoplastic Automated Fiber Placement Preforms Thomas Zenker – Fraunhofer IGC, Augsburg, Germany
12	01:10 PM – 01:20 PM	Density Influence on the Formation of Skin Layers in Integral Sandwich Structures based on Open Pore PESU Foams Maximilian Salmins – Institut für Verbundwerkstoffe GmbH, Kaiserslautern, Germany
13	01:10 PM – 01:20 PM	Development of High Cycle Rivet Fastening Process by Ultra-compact Servo Press Machine using Unidirectional CFRTP Rivet Takeshi Eguchi – Dai-Ichi Dentsu Ltd., Kani-shi, Japan
14	06:40 PM – 06:50 PM	Mechanical Properties of Carbon-Fiber Thermoplastic Composites Manufactured by Laser Assisted Fiber Placement (LAFP) Dan Ursebach – Collins Aerospace, Chula Vista, United States
15	06:40 PM – 06:50 PM	ConThP: Consolidation of Thermoplastic Hybrid Yarn Materials Richard Vocke – Faserinstitut Bremen e.V., Bremen, Germany
16	06:40 PM – 06:50 PM	Resistance Welding of Primary Aircraft Structures Simon Bauer – DLR e.V., Augsburg, Germany
17	06:50 PM – 07:00 PM	Efficient Determination of Material Parameters for Robust Process Simulation of Semi-crystalline Thermoplastic Composites Daniel Fricke – DLR e.V., Stuttgart, Germany
18	06:50 PM – 07:00 PM	Applying Digital Twin Technology in Thermoplastic Composites Production Jeroen Oosterhof – Boikon B.V., Leek, The Netherlands
19	06:50 PM – 07:00 PM	Plasma Treatment of Carbon Fiber for Extrusion Based Additively Manufactured Thermoplastic Composites Nishant Jain – Technische Universität Berlin, Berlin, Germany
20	07:00 PM – 07:10 PM	Laser Drilling of CFRP for Aerospace Applications – High Quality and yet Fast? Richard Staehr – Laser Zentrum Hannover e.V., Hannover, Germany
21	07:00 PM – 07:10 PM	Multiaxial Thermoplastic Prepregs – Assessment of Manufacturing Strategies with Focus on Fiber Laying, Spreading and Impregnation Jürgen Tröltzsch – Laser Zentrum Hannover e.V., Hannover, Germany
22	07:00 PM – 07:10 PM	New Trends and Standards in the Tailored Blank Manufacturing Marco Hahn – Dieffenbacher Maschinen- und Anlagenbau GmbH, Eppingen, Germany
23	07:10 PM – 07:20 PM	Improved Quality of Nonwovens made from Recycled Carbon Fibres by Processing Line with on-line Control of Wear Level Marcel Hofmann – Sächsisches Textilforschungsinstitut e.V., Chemnitz, Germany
24	07:10 PM – 07:20 PM	Simulation of the VCSEL-Assisted In Situ Tape Placement Process Philipp Striet – Aachener Zentrum für Integrativen Leichtbau, Aachen, Germany
25	07:10 PM – 07:20 PM	Closed-form Solutions for Spring-in Prediction in Thermoplastic Forming Davide Nardi – Delft University of Technology, Delft, The Netherlands

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