**Preliminary programme**

**WEDNESDAY 30 SEPTEMBER**

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<td>09.00 - 09.30</td>
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<td>09.30 - 10.00</td>
<td>Opening &amp; Plenary Session</td>
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<td>10.30 - 11.00</td>
<td>Coffee Break</td>
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<td>11.00 - 13.00</td>
<td>3 Parallel Sessions</td>
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**Room 1**

**THERMOPLASTIC COMPOSITES**
- Session chair: Prof. Ronald O’Brien, Edinburgh University, UK
- Study on bending of Thermoplastic-Tissue-Bonded CNT Nanocomposite Structure by Yulian Wielen, NEXA Technologies, Germany
- Direct strain measuring of flexible single fibre performance for thermoplastic composites by Christoph, Schneidmeier, ETH Zurich, Switzerland
- Raman Methods and an experimental and numerical study of new applications by Björn Wielen, Aachen University, Germany

**Room 2**

**GENERAL MANUFACTURING & TOOLING**
- Session chair: Prof. Christiane Rosenthal, Stuttgart University, Germany
- Metallization of thermoset and thermoplastic composite structures through local deposition by Mario Schaller, Fraunhofer IFAM, Germany
- Image recording algorithms for automatic inspection of thermoplastic composites based on micro X-ray computed tomography by Björn Riecken, CompriseTec GmbH, Germany

**Room 3**

**AUTOMATION**
- Session chair: Bert Reitsma, SBMBC, Netherlands
- Control technologies for the production of thermoset composite products with 3D Printech by Clemens Dransfeld, TU Dresden, Germany
- Composites Manufacturing Technology with Integrated Process Monitoring for Production of Large Fiber Placement with Tailored Properties by Bernd T. Riecken, CompriseTec GmbH, Germany
- Compositional optimization of thermoplastic sintered components using an approach for a high performance composites company by Thomas Keller, École Polytechnique Fédérale de Lausanne, Switzerland

**Room 4**

**CIVIL ENGINEERING**
- Session chair: Ronald Berghout, Eindhoven University of Technology
- Introduction to structural analysis of thermoset composites for predicting the fatigue life of composite structures in real service by Nicholas Rozo Lopez, TU München, Germany
- Infrastructures for sustainable civil engineering: a new generation of FRP materials for civil engineering applications by Carlos Langer, KU Leuven, Belgium
- Engineering of thermoplastic fibre reinforced composites for structural applications by Thomas Keller, École Polytechnique Fédérale de Lausanne, Switzerland
- Use of advanced composite materials for civil engineering applications by Björn T. Riecken, CompriseTec GmbH, Germany

**13.00 - 14.00**
- Lunch

**14.00 - 15.20**
- 4 Parallel Sessions

**Room 1**

**3D PRINTING**
- Session chair: Bert Thuis, Royal NLR, Netherlands
- Solution for industrial grade additive manufacturing of composite parts by Vincent Wijnen, VU Amsterdam, Netherlands
- Fabrication of highly oriented discontinuous fibre thermoplastic composites by Pascal Prévost, Supergen Smart Materials Centre, University of Bath, UK
- Optimization and evaluation of manufacturing performance of 3D printed fibre-reinforced parts by Tessa Cats, Bioglitch Materials Centre, Netherlands
- Nanoindentation measurement of structural and mechanical properties of printed polymers, an experimental and numerical study by the University of Manchester, UK

**Room 2**

**AUTOMATION**
- Session chair: Prof. Tjerk van Hoorn, M logic, Belgium
- Understanding the influence of the fuselage structure on the global stiffness of the fuselage by Peter Peitz, Aachen Center for Lightweight Construction, Germany
- Process Simulation of the Automated Tooling Manufacturing of Advanced Composite Structures by Matthias Kopp, Fraunhofer IFAM, Germany
- Do-ing robotics: one robot’s way of helping the realization of complex composite parts by Bertrand Dejon, Technische Universiteit Delft, Netherlands
- A joint-up to lend the best for superior performance printing by Robert Eden, Technical University of Munich, Germany

**Room 3**

**SUSTAINABLE COMPOSITES**
- Session chair: Prof. Arvind Vemuri, KU Leuven, Belgium
- Improvement of the energy efficiency of large structures by Kim Franssen, VITO, Belgium
- Development of high performance, environmentally friendly, water-based systems by Wilko Manders, Royal Haskoning, the Netherlands
- A fully biobased, biodegradable, sustainable, glass fibre composite by Carlos Langer, KU Leuven, Belgium
- Wood-based biofiber for high performance composite applications by Carlos Langer, KU Leuven, Belgium

**Room 4**

**INDUSTRIAL INNOVATION**
- Session chair: Ben van Heusen, Boeing, Belgium
- Producing Pressure Vessels by Roll Forming by Filip Walraven, R&D Technology Centre, Belgium
- Requirements and performance of high performance liquid sheet forming for the production of thermoplastic thermosetting applications by Andrea Middendorf, TNO-Brightlands Materials Centre, Netherlands
- Thermoset and thermoplastic原型 for forming plastic sheets and composites associated with automated manufacturing of composite aircraft structures by Kees Haenen, Corebon, Sweden

**Room 2**

**TELECOM SESSION**
- Session chair: Qin Feng, Tunghsu University, China
- Pouring 3D printing metal templates in plastic injection molding: Additive Manufacturing in the automotive Industry by Marco Galli, University of Parma, Italy

**Room 3**

**JOINING & BONDING**
- Session chair: Hendrik Schmelzer, Lufthansa, Germany
- Joining of thermoplastic composites for aerospace applications by Alice van der Wel, Lufthansa, Germany
- Mechanical properties of several thermoset composite systems by Christopher van der Wel, Lufthansa, Germany
- Innovative adhesives and resin systems for accurate control of the curing process of thermosetting polymers by Philip Duff, National Composites Centre, the Netherlands
- A new nosing technology for the production of metal connecting elements by Jakob Winter, Leuphana University, Germany

**15.20 - 15.50**
- Tea Break

**15.50 - 17.30**
- 4 Parallel Sessions

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Coffee Break 11:30 - 12:30
Room 1 3D PRINTING
Room 2 SPACE APPLICATIONS
Room 3 AUTOMATION
Room 4 TEXTILE COMPOSITES
ROOM 1A 9:00 - 9:30
Session chair: Thierry Dくだ田, University of Aachen, Germany
Session chair: Diederik J. Suurmeijer, Technische Universiteit Eindhoven, Netherlands
Session chair: Reiner Wunnicke, Delft University of Technology, Netherlands
Session chair: Samy Mahmoud, Ain Shams University, Egypt
Session chair: Omer Kiper, Technische Universität München, Germany

Panel Discussion: Material & Process Challenges in 3D Printed Structures - A Developmental Perspective

The Future of 3D Printing in Aerospace: Challenges and Opportunities

Space Applications of Fiber Reinforced Composites: An Emerging Technology

3D Printing in Automotive Industry: Current Trends and Future Prospects

Robotics and Automation in the Manufacturing Process of 3D Printed Parts

Panel Discussion: New Materials and Technologies for Textile Composites: Opportunities and Challenges