Efficient production and operation of structures means saving resources and avoiding environmentally harmful effects. Done smartly, both lead to cost advantages. Fiber reinforced polymer composites are predestined for eco-efficient solutions. In our colloquium, we present you with the latest developments from our research areas of Materials Science, Component Development, Manufacturing Science and Digitalization, as well as development work from industry. In our laboratories, you will learn about the latest testing and manufacturing technologies in conversation with our experts.
The conference will be held on-site.

**Registration closing date**
18 August 2023

**Please register online:**
**www.ivw.uni-kl.de/en/registration-ivw-colloquium**

**Registration fee**
**incl. Evening Reception & Lab Tour**
100 €

**Accomodation**
A limited number of hotel rooms are reserved

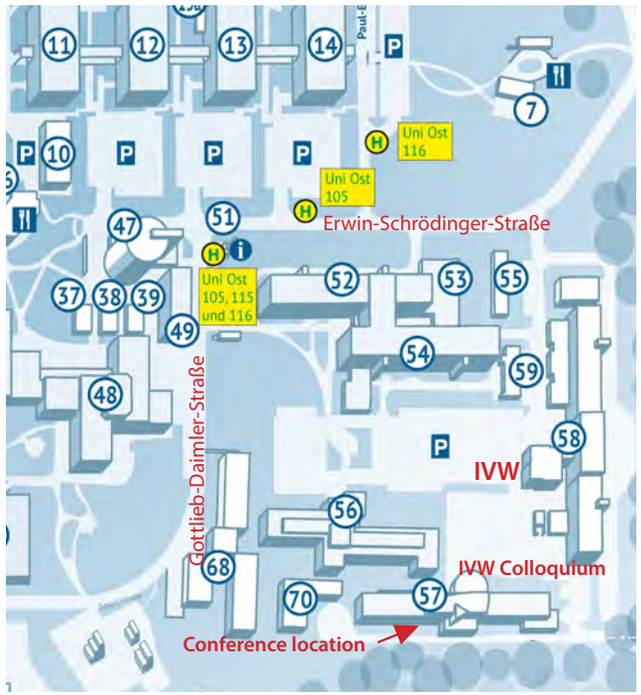
**Contact**
colloquium@leibniz-ivw.de

**We are looking forward**
**to welcoming you in Kaiserslautern!**

**Conference language**
English

**How to find us:**
Leibniz-Institut für Verbundwerkstoffe
Erwin-Schrödinger-Straße 58
67663 Kaiserslautern

**Conference location:**
Rotunde Building 57




**By motorway**
A6 – exit Kaiserslautern-Centrum or Kaiserslautern-West
– follow the signs "Technische Universität"

**By train**
Hauptbahnhof Kaiserslautern.
Take bus no. 105 (direction "Uni-Wohnstadt")
bus stop "Universität Ost"

**Contact person**
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Leibniz Gemeinschaft

Leibniz-Institut für Verbundwerkstoffe

# Colloquium

## 14 and 15 September 2023

www.thefutureiscomposite.com | www.leibniz-ivw.de

## Day 1, Thursday, September 14

**11:30 h** **Registration**
Building 57

**12:00 h** **Lunch and Expo**
Building 58

**13:00 h** **Opening**
Building 57

**Ulf Breuer**
*Scientific Director of IVW*

**13:05 h** **Component Development**
Chair: Joachim Hausmann, IVW

**Ralph Funck**
*Albany*
"Carbon fiber composite components in sustainable aviation"

**Konstantin Mehl, Vinay Nagaraj**
*IVW*
"Topology optimization of hybrid components"

**Egon Moos**
*Röchling*
"Sustainability in composites for automotive applications"

**Christian Andriß**
*IVW*
"An integral method for the efficient characterization and modeling of the nonlinear, rate-dependent behavior of continuous fiber-reinforced thermoplastics"

**Christian Becker**
*IVW*
"In-situ damage detection in rCFRP using X-ray microscopy"

**15:05 h** **Coffee Break**
Foyer 57

**15:30 h** **Material Science**
Chair: Bernd Wetzel, IVW

**Eckhard Thines, Stefan Jacob, Luis Antelo**
*Institut für Biotechnologie und Wirkstoff-Forschung*
"Fungal biotechnology: versatile chemists as a tool for sustainable materials science"

**Emmanuel Akpan**
*IVW*
"High performance wood composites"

**Bernd Wetzel, Jan-Kristian Krüger, Andreas Klingler**
*IVW*
"Advanced measurement of thermomechanical properties"

**Andreas Gebhard**
*IVW*
"Transfer films and their influence on friction"

**Julia Jungbluth**
*IVW*
"In-situ interface characterization of SMA polymer composites"

**17:30 h** **Lab Tour**

18:30 h Bus transfer from IVW to hotels

19:30 h Bus transfer from hotels to evening reception

**20:00 h** **Evening Reception at Pfalzgalerie**

22:30 h Bus transfer from Pfalzgalerie to hotels

## Day 2, Friday, September 15

**08:00 h** **Keynote**
Building 57

**Jose Sanchez**
*Airbus*
"Composite airframe applications – lessons learnt and new challenges"

**08:30 h** **Manufacturing Science**
Chair: Peter Mitschang, IVW

**Jens Schlimbach**
*IVW*
"Digital integration of winding hydrogen storage tanks"

**Jörg Strohhäcker**
*Hexagon*
"Composite pressure vessels: State-of-the-art, challenges, and future"

**Florian Gortner**
*IVW*
"Translucent SMC with flame retardant properties"

**Christian-André Keun**
*Comprisetec*
"Materials for interiors in aerospace industry"

**Martin Detzel**
*IVW*
"rCF staple fiber tapes"

**10:30 h** **Coffee Break**
Foyer 57

**10:45 h** **Digitalization**
Chair: David May, IVW

**Suresh Advani**
*University of Delaware*
"Advances in liquid composite molding simulations for automation and digitization"

**Tim Schmidt**
*IVW*
"Machine learning-boosted process simulations from fiber to part"

**Andreas Wiegmann**
*Math2Market*
"A digital material laboratory for composites"

**Dominic Schommer**
*IVW*
"Pushing the limits in compression molding simulation"

**Miro Duhovic**
*IVW*
"Applied machine vision for carbon composites manufacturing"

**12:45 h** **Farewell Peter Mitschang**
**Ralf Schledjewski**
*Montanuniversität Leoben*

**13:15 h** **Lunch and Expo**
Foyer 58

**14:00 h** **End of Colloquium**