

Premiere:

Market/Technology Study  
»COMPOSITES IN 3D –  
HOW TO GET SAFELY INTO  
THE FUTURE?«

# LIGHTWEIGHT DESIGN SYMPOSIUM

Thursday, 09. September 2021

EVENT FOR SCIENCE

&

TECHNOLOGY

Supported by:



on the basis of a decision  
by the German Bundestag

SUSTAINABLE ULTRA-LIGHTWEIGHT DESIGN –  
OUR RESPONSIBILITY AFTER CORONA

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SUSTAINABLE ULTRA-LIGHTWEIGHT DESIGN  
– OUR RESPONSIBILITY AFTER CORONA



EDUCATION – LIGHTWEIGHT DESIGN – SUSTAINABILITY



## The AMC cordially invites you to the LIGHTWEIGHT DESIGN SYMPOSIUM.

As you can see from our invitation, we take the highly technical top of the local lightweight design into the idyllic and tranquil world between the Moselle, Ruwer, vineyards and forests - and for good reason: Far away from any industrial fast and hectic pace, a deepening, focusing and concentration on the latest trends, innovations and perspectives in lightweight design is more effectively possible.

Be there when our highly esteemed and equally renowned speakers present the »Game-Changer-Technology Lightweight Design« from various perspectives. Corona has uncovered many grievances and thus changed the world - and will now continue to change it sustainably. We are very aware of this responsibility and give lightweight design the platform and importance it has long been entitled to: In our highly industrialized and technically advanced world, environmental and climate protection, energy and resource efficiency are not possible without lightweight design. Lightweight Design is the »lowest common denominator« of sustainability. Our LIGHTWEIGHT DESIGN SYMPOSIUM will contribute to clearly present the central key role of lightweight design and to demanding lightweight design solutions in all industrial branches and market segments.

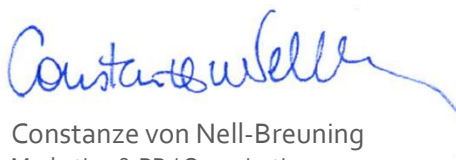
As natural fibers will gain a significant importance for three-dimensional composites applications, we will hold the LIGHTWEIGHT DESIGN SYMPOSIUM against the background of the increasing awareness for energy and resource efficiency, environmental & climate protection under the title **»Sustainable ultra-lightweight design – our responsibility after Corona«**. Nature is full of brilliant ideas that also serve the excellence of lightweight design.

And since we are dedicated ourselves in the winegrowing region and among other things, unimagined, and multi-dimensional lightweight capabilities of the vines, we are also hosting the symposium in the winery in keeping with its status and will of-course also be tasting light, elegant Rieslings at the end of the LIGHTWEIGHT DESIGN SYMPOSIUM with an evening barbecue.

**We look forward to seeing you – finally LIVE suburb again, because life means (personal) encounter!**

A handwritten signature in blue ink, appearing to read 'Rainer Kurek'.

Dipl.-Ing. (FH) Rainer Kurek  
Managing Partner  
Automotive Management Consulting GmbH

A handwritten signature in blue ink, appearing to read 'Constanze von Nell-Breuning'.

Constanze von Nell-Breuning  
Marketing & PR / Organisation

A handwritten signature in blue ink, appearing to read 'Chary Ambarepeta'.

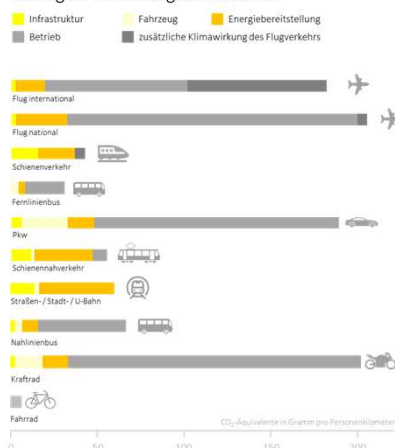
Chary Ambarepeta  
Technology Development  
Ultra-Lightweight Design

# Program

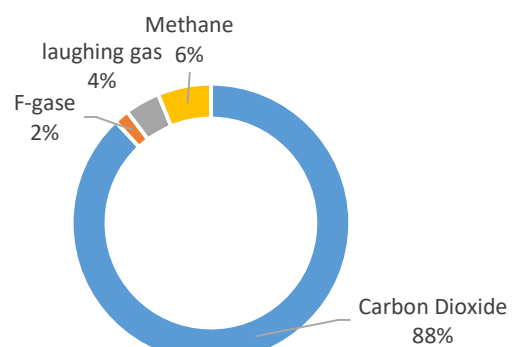
## Morning

- from 8:45 a.m. Arrival of guests at the Pauliner Hof, registration in the atrium
- from 9:00 a.m. Meet & greet in the atrium of the exhibition stands
- 9:30 a.m. Welcome in the Congress Hall  
by Rainer Kurek, Managing Director AMC
- 9:45 a.m. »Lightweight design in Luxembourg«  
**Christian Tock, Deputy Director General for Research, Ministry of the Economy Luxembourg**
- 10:00 a.m. »The strategic importance of lightweight design«  
**Ministerial Councillor Werner Loscheider, BMWi**
- 10:15 a.m. Lectures – Part 1  
»Urban Air Mobility and Lightweight Design«  
**Jannis Töpfer, Urban Air Mobility Division, Hyundai Motor Group**
- 10:45 a.m. Coffee break in the atrium of the exhibition stands
- 11:15 a.m. Lectures – Part 2  
»Step change in lightweight design«  
**Peter Pirklbauer, AIRBUS**
- 11:45 a.m. »Lightweight Design for a lighter World - Step Change Automotive«  
**Keytalk of Mitch Mitländer with Jeroen Bleekemolen, Professional Race Driver**
- 12:15 p.m. Lunch break in the atrium of the exhibition stands and vineyard

Beitrag zu Treibhausgasemissionen



Greenhouse gases  
Total (2018): 858 million tonnes



# Program

## Afternoon

- 1:00 p.m. Moderated exhibitor tour (Moderation: Rainer Kurek)
- 2:00 p.m. Lectures – Part 3  
»FK in 3D Natural Fiber, Industrialization, Sustainability«  
**Claude Maack, Director General GRADEL SÀRL**
- 2:30 p.m. »CAD-CAM-chain for 3D filament winding: Design – FEM Optimization – Robotics«  
**Dr.-Ing. Philipp Gebhardt, LASSO**
- 3:00 p.m. »Material-appropriate force introduction for wound fiber composite structures«  
**Patrick Kaiser, DITF / Pascal Mindermann, ITFT**
- 3:30 p.m. Coffee break in the atrium of the exhibition stands and vineyard
- 4:00 p.m. Lectures – Part 4  
»Composites in 3D – How to get safely into the future?«  
**Chary Ambarepeta / Sai Chennaju, Technology Development, AMC**
- 4:30 p.m. **Keynote speech by Prof. Dr.-Ing. Markus Milwich, DITF**
- 5:00 p.m. Fireside chat moderated by **Claus-Peter Köth, Editor-in-Chief AUTOMOBIL INDUSTRIE**  
(»Lessons Learned« - Management Summary)

approx. 6 p.m. End of conference

Afterwards (optional for all guests): Guided tour through the wine cellar / "Matchmaking" in the winery / free time ("Hotel check-in", walk through the vineyards)

from 6:30 p.m. Barbecue with wine tasting





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in cooperation with



## OUR PARTNERS



**vdL Composites**  
lightweight panel solutions



Since 2004, we have regularly organized LIGHTWEIGHT DESIGN SYMPOSIA. Our core competence is the development, marketing, technologization and industrialization of lightweight design innovations. That is why our LIGHTWEIGHT DESIGN SYMPOSIA are a valuable platform to draw attention to the central importance of this »Game-changing Technology«.

This year's LIGHTWEIGHT DESIGN SYMPOSIUM »SUSTAINABLE ULTRA-LIGHTWEIGHT DESIGN« brings together highly reputable and renowned lightweight design experts and »lightweight design pioneers and cross-thinkers« in an inspiring winery environment far removed from the industrial world.

## OUR AWARDS



## OUR SPEAKERS – Politics, Science, Industry, Media



Rainer Kurek  
Managing Partner AMC,  
Lightweight Design Expert,  
Consultant, Entrepreneur



Ministerial councillor  
Werner Loscheider,  
Federal Ministry for Economic  
Affairs and Energy (BMWi)



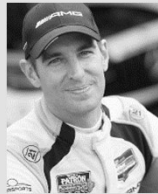
Christian Tock, PhD  
Deputy Director General,  
Ministry of the Economy  
Luxembourg



Claus-Peter Köth  
Chief Editor "Automobil  
Industrie" & "Next Mobility",  
Vogel Communications Group



Jannis Töpfer  
Hyundai Motor Group,  
Urban Air Mobility Division,  
Manager Vehicle &  
Subsystem Partnerships



Jeroen Bleekemolen  
Two-time Le Mans winner,  
world's most successful  
endurance driver



Peter Pirklbauer  
AIRBUS, Innovation  
Manager, Emerging  
Technologies & Concepts



Dr. Philipp Gebhardt  
LASSO Ingenieurges. mbH,  
Calculation / simulation  
expert



Claude Maack  
Managing Director  
GRADEL SÀRL  
Natural Fiber-/xFK in 3D-  
industrialization



Prof. Dr.-Ing. Markus Milwich  
Competence Center Poly-  
mers & Fiber Composites,  
Deutsche Institute für Textil-  
und Faserforschung (DITF)  
Denkendorf



Pascal Mindermann  
Research Assistant in the  
Cluster of Excellence IntCDC,  
Institute of Textile and Fiber  
Technologies (ITFT)



Patrick Kaiser  
Competence Center Poly-  
mers & Fiber Composites,  
Deutsche Institute für Textil-  
und Faserforschung (DITF)  
Denkendorf



Chary Ambarepeta  
Technology Consultant  
AMC GmbH  
Education, Lightweight  
Design, Sustainability



Sai Chennaju  
Technology Consultant  
AMC GmbH  
Education, Lightweight  
Design, Sustainability

## REGISTRATION: via our website [www.automotive-management-consulting.com](http://www.automotive-management-consulting.com)

The LIGHTWEIGHT DESIGN SYMPOSIUM will take place on **September 9, 2021**, in the Landgasthaus Pauliner Hof and the associated Dominikaner Weingut in D-54317 Kasel near Trier. The conference language is English.

**Participation fee on site: 549,00 EUR plus VAT.** The "participation fee on site" includes participation in the symposium as well as in the evening event, champagne reception, drinks, refreshments and dinner buffet. (ATTENTION: Against the background of general hygiene rules, there is a STRICTLY LIMITED number of places suburban. It decides the order of registrations.)

**Participation fee Online: 129,00 EUR plus VAT.**