

# LIGHT CON

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US!

23-24 JUNE 2020  
HANNOVER | GERMANY

INTERNATIONAL  
CONVENTION FOR  
LIGHTWEIGHT SOLUTIONS



Partner Country  
South Korea

## Call for Papers

[WWW.LIGHTCON.INFO](http://WWW.LIGHTCON.INFO)



Deutsche Messe



Founding  
Partner

# LIGHTS ON FOR LIGHTCON!

## INTERNATIONAL CONVENTION FOR LIGHTWEIGHT SOLUTIONS

The first solution-oriented cross-material and cross-technology platform for all user sectors of lightweight construction. Two full days of conference program with top-class keynotes, panels, best practices and workshops, an accompanying exhibition with exciting showcases and a special evening event are waiting for you!

### Enabling your business with sustainable lightweight solutions

Lightweight materials can help to save energy and protect our climate, especially when used in mobility applications. With LightCon we start a material and process competition in order to find your lightweight solution with optimal consideration of your technical, economic and ecological requirements. Mainly composites, plastics, steel, aluminum, magnesia and wood are the competitors. In many applications experience has shown that hybrids can be the winners.

Significant and fast developments in material and process technology give you multiple options. The processing and usage of new innovative materials and their many hybrid options are challenging and require a new thinking. Therefore, LightCon will provide you with multi-material based state-of-the-art technology insights and best practice demonstrations to give you confidence for the right lightweight decision on the way to business success, energy savings and climate protection.

Shape **LightCon 2020** and submit your presentation!

SUBMISSION  
DEADLINE  
**30 JAN  
2020**

# FOCUS TOPICS

1

## Innovative Material Solutions

*„You cannot build it without Materials“*

- o Thermoplastic Composites – The Matrix of the Future?
- o Thermoset Composites – Are they still competitive?
- o Lightweight Plastic Solutions – Do you always need a Fibre?
- o Hybrid Solutions – The Best of it all?
- o New Lightweight Metal Solutions – Superior to Composites?
- o Materials for Additive Manufacturing – Which Role plays the Material Development?
- o Glass Fiber vs. Carbon Fiber – Exciting Competition through novel Innovations?
- o Self-Healing Materials – What are the Potentials today?

2

## Advanced Manufacturing Innovations

*“Novel manufacturing Technologies for the optimal Solution”*

- o New Tooling Technologies – From Smart Tooling to no Tooling at all?
- o Additive Manufacturing (Metal & Polymers) – Revolutionizing Manufacturing?
- o Machining Technologies – Where are the Innovations?
- o Hybrid Molding – Key Technology for Large Series Production?
- o Joining Technologies – Adhesion or Welding or None of it?
- o Automation – Is the Human dispensable?
- o Industry 4.0 – What are the Key Challenges today?
- o Simulation Innovations – The Digital Twin as Disruption of Traditional Engineering?
  - Materials
  - Products
  - Processes
  - Virtual Factory



## 3

## Sustainability & Recycling

*“Innovations towards a circular Economy”*

- o Recycling & Recovery of Fiber-based Materials – Full Efforts or Simple Incineration?
- o Recycling of Hybrids – What is possible today?
- o Advancements in Metal Recycling – What are the latest Innovations?
- o Solutions for a True Circular Economy –  
How to achieve maximum Competitiveness of recycled Products?
- o LCA for Lightweight Materials in Specific Applications – The same Rules for all Materials?
- o Repair of Composite and Metal Lightweight Structures – Key Technologies for a Sustained Utilization?
- o Bio-based Materials – A real Option for Technical Solutions?

## 4

## Key Materials for Novel Mobility Concepts

*“Future Mobility through Lightweight Innovations”*

- o CNG for Ships – Only possible with state-of-the-art Composite Materials?
- o Alternative Engine Solutions for Aircraft – How can Lightweight Materials enable a Revolution?
- o Automobile Weight Reduction – What are Innovations and Trends?
- o Fuel Cell & Electric Engine for Automotive – Which role does Lightweight Construction play?
- o Air Taxis – What are Key Materials and Technologies?
- o Shared Mobility Concepts – Enabling optimal Lightweight Technologies in the Automotive Sector?
- o Last Mile Transportation – Novel Material Technologies as Key Driver?

## 5

## Materials for Novel Construction Concepts

*“More Design Options by New Materials”*

- o Fiber Reinforced Concrete – Is Corrosion still a Problem?
- o Flame Retardance for Composites in Construction – Challenge or Show Stopper?
- o Competing Materials for Bridges – What is the Potential of New Materials?

Please send the completed application form  
with the optional auxiliary material file to

**lightcon@messe.de**

SUBMISSION  
DEADLINE

**30 JAN  
2020**

## FURTHER INFORMATION AND CONDITIONS

Lectures and Best Practice Sessions of high quality are expected that focus on a novel technical aspect or an innovation. Make sure to emphasize your technical innovation and the added value and benefits to the industry. Keep commercial aspects to a minimum. The presentation is neither intended to be a commercial talk, nor should it be too scientific with detailed equations or models.

The official language of the LightCon is English. Therefore, please provide your information in English only.

All abstract submissions will be reviewed by a board of experts from industry, science and excellence clusters. For this purpose, your application will be forwarded to the advisory board.

Speakers participate for free at the whole event (one person per lecture). Travel expenses will not be refunded. The number of participants is limited due to organizational reasons.

Speakers agree that photos and film material of him or her may be produced and published in print/online publications.

You will find the **application form** on the following two pages.



☐ **YES, I want to contribute to the LightCon 2020 with a**

☐ Lecture    ☐ Best Practice Session and Live Presentation in the exhibition area

**PLEASE CHOOSE ONE TOPIC**

- |  |  |
|--|--|
| <input type="checkbox"/> Innovative Material Solutions | <input type="checkbox"/> Advanced Manufacturing Innovations            |
| <input type="checkbox"/> Sustainability & Recycling    | <input type="checkbox"/> Key Materials for Novel Mobility Concepts     |
|  | <input type="checkbox"/> Key Materials for Novel Construction Concepts |

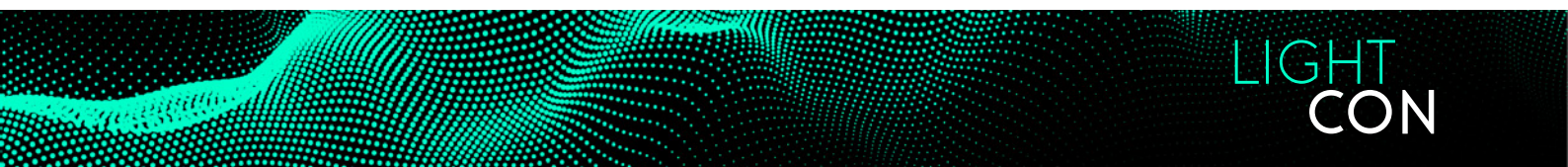
**TITLE OF THE LECTURE** (max. 100 characters incl. blanks)

**ABSTRACT** (max. 2,000 characters incl. blanks)

Please describe the content of your lecture with a focus on technical innovations and solutions in a concise way. Relevant figures, tables and/or other auxiliary material that support the significance of your topic can be provided as links. Alternatively, you may submit auxiliary material as one combined file by email. Multiple attachments will not be considered.

**NOVELTY OF THE LECTURE** (max. 200 characters incl. blanks)

Please highlight the novelties and innovations of your presented topic.



## CONTACT INFORMATION



Complete Name (incl. title, if necessary)

Position

Company / Organization

Street / P.O. Box

Postal code / Town / Country

Phone / Mobile

E-mail

## SPEAKER BIOGRAPHY (max. 500 characters incl. blanks)

Relevant experience and qualifications related to the proposed lecture.

Additional references (e.g. a short video, homepage) can be provided as links.

## DATA PRIVACY POLICY

The current data protection declaration of Deutsche Messe AG with details of how we process your personal data in accordance with the General Data Protection Regulation of the EU (GDPR) can be found at: [www.messe.de/en/privacy-policy](http://www.messe.de/en/privacy-policy).

The information here also covers your rights under the GDPR and other information. In addition, the personal data you provided will also be forwarded to our founding partner Composites United e.V. for the coordination and control of the Call for Papers procedure and to the advisory board for reviewing the entries (Art.6 (1) b GDPR).

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