LIGHTer is the national multi-sectorial lightweight arena in Sweden. With partners from industry, academy, research institutes and trade organisations, we effectively create competitiveness on behalf of the Swedish industry. We have the honour of inviting you to submit an abstract to LIGHTer's International Conference 2019 in Gothenburg, Sweden.

#### Tomorrow's challenges

Environmental challenges and technological development make way for groundbreaking trends such as electrification, multifunctional materials and biobased materials - all essential to green lightweight innovations. At the LIGHTer International Conference 2019, we offer a state-of-the-art of the current lightweight landscape, and glimpse at the megatrends affecting long-term lightweight innovations.

#### The way forward

Chains of collaboration need to be strengthened at all levels – between industrial sectors, between OEMs and their suppliers, between institutes and universities, and between authorities and stakeholders within the field.

#### Gothenburg

Gothenburg is the heart of western Sweden where leading lightweight products such as cars, trucks, aircraft engines, marine vessels, and offshoreand shipping equipment are produced. The conference venue will be Chalmers University of Technology in Gothenburg. We are looking forward to seeing you there!

Kaj Fredin, Manager, Strategy, Concepts & Advanced Engineering Painted Body & Closures at VolvoCar Group Chairman of the Board of LIGHTer



# Call for Abstracts

Be an inspiring part of LIGHTer International Conference 2019 by taking the chance to share your knowledge where future lightweight solutions really are top of mind.

# LIGHTer International Conference

## LIGHTer

Hosted by RISE

LIGHTer International Conference, 20-21 November 2019, is a two-day conference, lunch to lunch, including conference dinner and matchmaking at the end of day two. The purpose of LIGHTer International Conference is to create opportunities for valuable international networking among world leading lightweight actors – from industry, academy and institutes. A preliminary programme will be available in May 2019.

## A conference of four innovation themes

#### Theme 1 50% lighter with lower costs

New innovative lightweight solutions are too often not commercialised due to cost reasons. This innovation theme focuses on new more effective materials, manufacturing processes and design methodologies that will lower the cost, thus enabling new lightweight solutions to enter the market.

#### Theme 2 50% lighter with shorter development times

Another hurdle to overcome is the often longer product design and development time for new and innovative lightweight components. These can be reduced by, for instance, enhanced use of simulation tools and optimization in early stages of product development.

#### Theme 3 50% lighter using mixed materials

The ability to use the right material in the right place in a product design is an important possibility for weight reduction. The aim is to achieve improved performance by combining different materials in lightweight components. Some key challenges are joining, prediction of product properties and creating circular material loops.

### Theme 4 50% lighter using improved properties and innovative solutions

Improved material properties enable lighter components. Some examples are thinner product designs, optimised designs thanks to better abrasion or corrosion resistance, and combined or innovative functions within the mechanical structure (so-called multi-functionality). New technological solutions can open up for radically lighter products.

## **About LIGHTer International Conference**

The LIGHTer International Conference is LIGHTer's main platform for international collaborations for new lightweight solutions. At the core of the conference are LIGHTer's research innovation themes, which we have identified as our main ways to reach our goals concerning competitiveness and cross-industrial collaborations. Our last conference in 2017 attracted close to 100 participants.



#### **Venue/Location**

The conference will take place at Chalmers University of Technology at the heart of Gothenburg. You can easily reach Chalmers via bus or tramway.

#### **General guidelines**

- Submission of an abstract acknowledges your consent for the abstract to be published in the official programme. The corresponding author must ensure, that all co-authors are aware of the content of the abstract and that they consent to its submission.
- The Scientific Committee of LIGHTer International Conference 2019 will determine whether the abstract will be accepted or not.
- Authors will be notified by e-mail no later than May 15th, 2019, whether their abstract has been accepted or rejected.

#### **Abstract Preparation and Format**

Your abstract should be no longer than 300 words. An image, graph, diagram or table may be included, provided the full abstract (title, author information, text, figures, references, etc.) fits into an A4 sheet.

Conference fee: (excl VAT) € 700 (SEK 7 000) LIGHTer member € 560 (SEK 5 600) PhD student: € 160 (SEK 1 600) (No early bird discount) Early bird fees until August 31st, 2019 20 % discount.

### Send your abstract to info@lighterarena.se

To cover all aspects of future lightweight solutions we encourage abstracts from both academia and industry presenting the latest scientific results and industrial achievements. Deadline for receipt is April 15th, 2019.

#### **Further information**

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