Workshop: Neutral Lightweight Design – Progressive Approach for Sustainable Mobility

Contact:
Prof. Dr.Ing. habil. Maik Gude
Institute of Lightweight Engineering and Polymer Technology
Technische Universität Dresden
maik.gude@tu-dresden.de

In Cooperation with
Prof. Dr.-Ing. Olaf Helms
University of Applied Science Emden/Leer
olaf.helms@hs-emden-leer.de

Workshop topics:

- Novel vehicle designs for urban and regional mobility
- Modular systems towards the design of products for a circular economy
- Low-emission propulsion for vehicles of different traffic systems
- Sustainable materials and technologies with negative CO_2 footprint
- Market potential of Neutral Lightweight Design in Central Europe
- Role of SMEs in a changing mobility market

Structural component for bicycle made of renewable raw materials

Sustainability will establish itself worldwide as a social challenge and key competitive driver for innovative products and will prevail in the long term. The application scenarios for products are changing in many areas of life, especially in mobility. Lightweight design – aiming to reduce the use of resources regarding utility benefits – epitomizes the "prime example" of sustainable action.

Current efforts are hardly sufficient to meet the ecological challenges of climate change and resource consumption. With an increasing world population, it will be necessary to create products without footprint in the sense of Neutral Lightweight Design (Neutralleichtbau).

The workshop will discuss the challenges and opportunities of Neutral Lightweight Design, especially for SMEs in Central Europe.