

Open Hybrid LabFactory e.V.

Association

About this organisation

The Open Hybrid LabFactory (OHLF) in Wolfsburg enables the research and development of innovative lightweight construction concepts for the coming vehicle generations and other mobility carriers. The OHLF is funded by the German Federal Ministry of Education and Research (BMBF) as part of the funding initiative "Research Campus - Public-Private Partnership for Innovation".

The particular strength of the research factory is based on combined production technologies and the use of multi-material for function integrated components as well as the complete component consideration over the entire product life cycle; from conceptual design, textile semi-finished and organic sheet production as well as manufacturing processes, to life cycle design & engineering.

Hermann-Münch-Straße 2
38440 Wolfsburg
Lower Saxony
Germany
open-hybrid-labfactory.de

Main areas covered

Infrastructure

Certifications

Keywords

Memberships



Organisation type

Programme administration, PPP

Sectors



Employees

50 up to 249

Turnover

n/a

Funding

n/a

Open Hybrid LabFactory e.V.

Association

| Overview of lightweighting expertise | | | |
|--|----------|-------------|------------------------|
| | Research | Development | Manufacturing & Supply |
| Offer | | | |
| <i>Products</i> | | | |
| Services & consulting Validation | ✓ | | |
| Field of technology | | | |
| Design & layout Hybrid structures, Lightweight construction concepts, Lightweight material construction | ✓ | | |
| <i>Functional integration</i> | | | |
| Measuring and testing technology Component and part analysis, Visual analysis (e.g. microscopy, metallography), Materials analysis, Destructive analysis, Non-destructive analysis | ✓ | | |
| Modelling and simulation Crash behaviour, Loads & stress, Life-cycle analysis, Optimisation, Structural mechanics, Materials | ✓ | | |
| Plant construction & automation Automation technology, Handling technology | ✓ | | |
| Recycling technologies Material separation, Recycling | ✓ | | |

Open Hybrid LabFactory e.V.

Association

| Overview of lightweighting expertise | | | |
|---|----------|-------------|------------------------|
| | Research | Development | Manufacturing & Supply |
| Manufacturing process | | | |
| <i>Additive manufacturing</i> | | | |
| <i>Coating (surface engineering)</i> | | | |
| Fibre composite technology Others | ✓ | | |
| Forming Impact extrusion, Compression moulding, Thermal converting, Deep-drawing, Others | ✓ | | |
| Joining Hybrid joining, Adhesive bonding, Others | ✓ | | |
| <i>Material property alteration</i> | | | |
| Primary forming Extrusion, Casting, Pultrusion, Injection moulding | ✓ | | |
| <i>Processing and separating</i> | | | |
| Textile technology Textile surface treatment and finishing, Others | ✓ | | |

Open Hybrid LabFactory e.V.

Association

Overview of lightweighting expertise

| | Research | Development | Manufacturing & Supply |
|--|----------|-------------|------------------------|
| Material | | | |
| Biogenic materials Bioplastics, Biocomposites, Wood | ✓ | | |
| <i>Cellular materials (foam materials)</i> | | | |
| Composites Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP), Others | ✓ | | |
| Fibres Glass fibres, Carbon fibres, Others | ✓ | | |
| <i>Functional materials</i> | | | |
| <i>Metals</i> | | | |
| Plastics Thermoplastics, Others | ✓ | | |
| <i>Structural ceramics</i> | | | |
| (Technical) textiles Laid webs, Woven fabrics, Others | ✓ | | |

Contacts

Mr Dr. Stefan Schmitt

stefan.schmitt@open-hybrid-labfactory.de

Mr Dr. Marko Gernuks

marko.gernuks@volkswagen.de