

### About this organisation

#### Machine translation

This profile has been machine-translated based on data provided in German.

The Chair of Materials Science and Testing of Plastics sees itself as an integral and central part of the Department of Plastics Technology at the University of Leoben, which acts as a link between material synthesis and modification on the one hand and plastics and composite material processing as well as construction and component design on the other.

Determination of morphology and composition using state-of-the-art methods. Mechanical behaviour under complex stress conditions (mechanical loads, temperature, media). Fracture mechanics Establishment of material laws, failure criteria and service life modelling

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[www.kunststofftechnik.at](http://www.kunststofftechnik.at)



WERKSTOFFKUNDE UND  
PRÜFUNG DER KUNSTSTOFFE

#### Organisation type

University or higher education institution

#### Sectors

No specific sector

#### Employees

10 up to 49

#### Turnover

n/a

#### Funding

n/a



### About this organisation

**Main areas covered** Material characterisation, Testing technology, Material models, Reliability predictions

**Infrastructure** Structural analysis, Mechanical analysis, Thermal analysis

**Certifications**

**Keywords**

**Memberships**

### Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
<b>Offer</b>			
<b>Products</b> Materials	✓	✓	
<b>Services &amp; consulting</b> Training, Consulting, Testing and trials, Funding, Standardisation, Validation, Simulation, Technology transfer	✓	✓	

## Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
<b>Field of technology</b>			
<i>Design &amp; layout</i>			
<b>Functional integration</b> Material functionalisation	✓	✓	
<b>Measuring and testing technology</b> Component and part analysis, Visual analysis (e.g. microscopy, metallography), System analysis, Materials analysis, Destructive analysis, Non-destructive analysis	✓	✓	
<b>Modelling and simulation</b> Crash behaviour, Life-cycle analysis, Structural mechanics, Materials, Reliability validation	✓	✓	
<i>Plant construction &amp; factory automation</i>			
<b>Recycling technologies</b> Downcycling, Recycling, Upcycling	✓	✓	
<b>Manufacturing process</b>			
<i>Additive manufacturing</i>			
<i>Coating (surface engineering)</i>			
<i>Fibre composite technology</i>			
<i>Forming</i>			
<b>Joining</b> Adhesive bonding	✓	✓	
<i>Material property alteration</i>			
<i>Primary forming</i>			
<i>Processing and separating</i>			
<i>Textile technology</i>			

### Overview of lightweighting expertise

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	Research	Development	Manufacturing & Supply
<b>Material</b>			
<b>Biogenic materials</b> Bioplastics, Biocomposites	✓	✓	
<b>Cellular materials (foam materials)</b> Closed-pore, Open-pore, Syntactic foams	✓	✓	
<b>Composites</b> Aramid fibre composites, Glass-fiber reinforced plastics (GFRP), Carbon-fiber reinforced plastics (CFRP), Metal-fibre-polymer composite, Nanocomposites, Natural fibre reinforced plastics (NFRP), Laminates, Particulate composites	✓	✓	
<b>Fibres</b> Aramid fibres, Glass fibres, Carbon fibres, Metal fibres, Natural fibres	✓	✓	
<i>Functional materials</i>			
<i>Metals</i>			
<b>Plastics</b> Thermoset plastics, Elastomers, Thermoplastics	✓	✓	
<i>Structural ceramics</i>			
<i>(Technical) textiles</i>			

### Contacts

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### Contacts

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