COMET-Project

**AMALFI: Aluminium and Magnesium ALloys for Future Industrial applications**

<table>
<thead>
<tr>
<th>Main location</th>
<th>LKR Leichtmetallkompetenzzentrum Ranshofen GmbH, 5282, Upper Austria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other locations</td>
<td>---</td>
</tr>
<tr>
<td>Research programme</td>
<td>Development of light metal materials and processes</td>
</tr>
</tbody>
</table>

**Planned realisation and outcomes**

The Research project AMALFI has the vision to support the Austrian and European Industry in maintaining and expanding their position at the forefront of the international Al and Mg processing industry. AMALFI has three major objectives: (1) improved properties of light metal products; (2) more efficient light-metal processes for gaining this performance gain of semi-finished products for (1); (3) the scientific objective of development of thorough understanding and insight into light-metal semi-finishes, processes and microstructure by means of analytical, experimental, numerical modelling, allowing for virtual investigations to support targeting objectives (1) and (2).

**History of establishment**

The use of lightweight materials is one of the fastest growing key trends in the aeronautic and automotive industry. The application of light metal materials means a huge reduction in weight, which in turn has a positive effect on the energy efficiency and CO₂-emissions of aircrafts and vehicles. AMALFI is a follow-up project of COMET AmorEE (2014-18) with past as well as new industry and university partners. AmorEE consisted of three major research areas: Al processing, Mg processing and through process modelling. Major goal of all developments and research tasks was to contribute to Energy Efficiency. The project proposal AMALFI was developed and established by the consortium to carry on the research and development work in lightweight materials development, to further enhance achieved materials and process technologies, and to give new materials a technological push with the clear strategic goal “for future industrial applications”.

**Selected company partners (max. 10)**
1. ALU MĚNZIKE
2. HPI - High Performance Industrietechnik GmbH
3. Ebner industrieofenbau GmbH
4. Hammerer Aluminium Industries Extrusion GmbH
5. Pankl Racing Systems AG
6. voestalpine Metal Forming GmbH

**Selected scientific partners (max. 5)**
1. Montanuniversität Leoben – Chair for non-ferrous metals
2. Paris Lodron University Salzburg, FB Materials Sciences and Physics
3. Friedrich-Alexander Universität Erlangen (FAU)
4. University of Siegen, Institute of Forming Technology

**Selected international partners ¹ (max. 5)**
1. RECARO Aircraft Seating GmbH&Co.KG

**Start of the COMET-Project**
1.9.2018 (4 years)

**Number of personnel**
17,6 (FTE) are involved (17 FTE are scientists)

**Leader of consortium:**
Dr. Stephan Ucsnik, LKR, Senior Engineer

**Contact:**
Lamprechtshausenerstrasse 61, 5282 Ranshofen; Mobile: +43 664 8251404
Stephan.ucsnik@ait.ac.at; www.lkr.at

¹ Partners with headquarters outside Austria

The COMET Project is funded within COMET – Competence Centers for Excellent Technologies – by BMK, BMDW as well as co-financing federal provinces. The COMET programme is managed by FFG. >> www.ffg.at/comet

Status: 02/2020