## APMT

**Advanced Polymeric Materials and Process Technologies**

<table>
<thead>
<tr>
<th>Main location</th>
<th>Linz (Upper Austria); Johannes Kepler University (JKU)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other locations</td>
<td>Wels (Upper Austria)</td>
</tr>
<tr>
<td>Research programme</td>
<td>Materials and products for advanced structural applications; establishment of „material-structure/property/performance relationships”; strong focus on polyolefins (PE, PP) including aspects of polymer chemistry and synthesis as well as polymer processing.</td>
</tr>
</tbody>
</table>

### Planned realisation and outcomes

Novel, multi-functional polymeric materials with improved, application defined property and performance profiles for the construction and automotive industries (e.g., high-performance polyolefins, heterogeneous metal-particle/polymer compounds in electrical and magnetic fields). Improved quality of injection moulding and extrusion products through a better understanding of plastification related melt quality and degradation. Advanced material laws and failure criteria along with more efficient testing and characterization methods.

### History of establishment

Significant expansion of activities in the field of polymer chemistry and engineering at the JKU Linz over the past 2 years (currently 9 chairs/institutes, one more planned) and implementation of new study programmes (100 student enrolments in fall 2009/10). Organisational, institutional and thematic separation of previous collaboration activities with a K plus centre due to decisions on behalf of the partner companies and based on strategic considerations of the scientific partners of the K-project.

### Selected company partners (max. 10)

1. Borealis Polyolefine GmbH, Upper Austria
2. ENGEL Austria GmbH, Upper Austria
3. Greiner Bio-One GmbH, Upper Austria
4. OMV Exploration & Production GmbH, Vienna
5. POLOPLAST GmbH & Co KG, Upper Austria
6. SML Maschinengesellschaft mbH, Upper Austria
7. Starlinger & Co Gesellschaft mbH, Vienna
8. FH Oberösterreich Forschungs & Entwicklungs GmbH
9. Eckart GmbH, Bavaria, D
10. partners with headquarters outside Austria

### Selected scientific partners (max. 5)

1. JKU Linz, Institute of Polymeric Materials and Testing
2. JKU Linz, Institute of Polymer Product Engineering
3. JKU Linz, Institute of Polymer Extrusion and Buildings Physics
4. JKU Linz, Institute of Injection Moulding and Process Automation
5. FH Oberösterreich Forschungs & Entwicklungs GmbH

### Selected international partners (max. 5)

1. Eckart GmbH, Bavaria, D

### Planned Start of the K-Project

2010-09-01

### Planned number of personnel

15 (FTE) thereof researcher 12

### Total costs

EUR 4,794,000.-

### Leader of consortium:

JKU Linz, Institute of Polymeric Materials and Testing, Prof. Dr. Reinhold W. Lang

### Contact:

o.Univ.-Prof. Dipl.-Ing. Dr. Reinhold W. Lang  
JKU Linz, Institute of Polymeric Materials and Testing  
Altenberger Strasse 69  
4040 Linz, Austria  
+43 (0)732 2468-6610  
reinhold.lang@jku.at; www.jku.at/ipmt

---

1 Partners with headquarters outside Austria