COMET: K1 Centre

**K1-MET**

**Competence Center for Excellent Technologies in Advanced Metallurgical and Environmental Process Development**

<table>
<thead>
<tr>
<th>Main location</th>
<th>Linz (Upper Austria)</th>
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<tbody>
<tr>
<td>Other locations</td>
<td>Leoben (Styria)</td>
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</tbody>
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**Research programme**

K1-MET has its focus on the modelling and simulation of metallurgical processes, including metallurgical raw materials and refractoriness with the goal of an optimal process control with respect to product quality, zero waste and the minimization of energy and raw materials.

**Planned realisation and outcomes**

- Recycling of residuals from metal production into existing plants and processes;
- Utilization and processing of process and waste gases;
- Combustion reaction modeling of burners for industrial kilns;
- Valuation and optimization of iron carriers in smelting reduction processes;
- Further development of heat treatment processes for high-strength Al-alloys;
- Characterization and further development of metallurgical processes for the production of high-tech steels.

**History of establishment**

Continuation Competence Network „KnetMET“ as Competence Center „K1-MET“

**Selected company partners** (max. 10)

1. Siemens VAI Metals Technologies GmbH
2. voestalpine Stahl GmbH
3. voestalpine Stahl Donawitz GmbH & Co KG
4. RHI AG
5. Boehler Edelstahl GmbH & Co KG
6. Ebner Industriefenbau Gesellschaft m.b.H.
7. Montanwerke Brixlegg AG

**Selected scientific partners** (max. 5)

1. University of Leoben
2. Johannes Kepler University Linz
3. Vienna University of Technology
4. Graz University of Technology
5. FH OOE Forschungs & Entwicklungs GmbH

**Selected international partners** *(max. 5)*

1. RWTH Aachen University (D)
2. Clausthal University of Technology (D)

**Start Date** 07/2008

**Planned number of personnel** 27 full time

**Total costs** EUR 19.418.860 (for the first 4 years)

**Leader of consortium:** Siemens VAI Metals Technologies GmbH & Co, Dr. Karl Moerwald, voestalpine Stahl GmbH, Dr. Peter Schwab

**Contact:**

Dr. Karl Moerwald
Siemens VAI Metals Technologies GmbH & Co
Turmstrasse 44, 4031 Linz
+43(0)732 6592 2374
Karl.Moerwald@siemens.com

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1 Partners with headquarters outside Austria

2 First funding period: K1-Centres: 4 years, K2-Centers: 5 years;