

**EUROMAT 2017/ Symposia Structure/Area B**

<b>B.9</b>	<b>Title:</b>		
	<b>Bulk Metallic Glasses</b>		
	<b>Organizer</b>	<b>Institution</b>	<b>Contact email</b>
	Jürgen Eckert	Erich Schmid Institute of Materials Science, Leoben, Austria	juergen.eckert@unileoben.ac.at
	Jörg F. Löffler	Laboratory of Metal Physics and Technology, Dept. of Materials, ETH Zürich, Switzerland	joerg.loeffler@mat.ethz.ch
<b>Summary</b>			
<p>Stimulated by the high demand for new materials with enhanced mechanical, chemical and physical properties, metallic glasses and composites containing glassy or metastable phases are currently at the cutting edge of metal research. These materials exhibit unique properties which often surpass those of conventional structural materials and are therefore attractive for “high-end” applications. The close links between the thermodynamic, kinetic, elastic, and plastic properties of metallic glasses are remarkable, and appear to provide predictability for these apparently disordered systems at a level that far exceeds that for their ordered crystalline counterparts. A key challenge is to understand these correlations, which may have common structural origins, and exploit such understanding to develop new glass compositions that combine a good glass forming ability with desirable mechanical properties. This would permit a more widespread application of these paradigm-shifting materials.</p> <p>The symposium aims to promote international scientific and technological exchange on the recent progress in synthesis, processing, properties and applications of these exceptional materials. It covers topics (but is not limited to) such as rapid solidification, powder metallurgy, bulk metallic glasses, thin films and coatings, thermoplastic forming, glass-forming ability, thermal stability, structure, and physical, chemical, thermal, magnetic, mechanical and biological properties. Contributions from both theoretical and experimental points of view are welcome. Interaction between academia and industry is highly encouraged.</p> <p>.</p>			