

EUROMAT 2017 / Symposia Structure / Area C

C.6	<b>Title: Joining</b>		
	<b>Organizer</b>	<b>Institution</b>	<b>Contact email</b>
	Ivan Kaban	IFW Dresden, DE	<a href="mailto:i.kaban@ifw-dresden.de">i.kaban@ifw-dresden.de</a>
	Christof Sommitsch	TU Graz, AT	<a href="mailto:christof.sommitsch@tugraz.at">christof.sommitsch@tugraz.at</a>
	<b>Summary</b>		
	<p>This symposium considers all kind of research in the field of similar and dissimilar welding and joining techniques. Advanced and new processes as well as hybrid processes are of interest. Process development, process simulation, the structure analysis and the properties of both the weld/joint and the thermo-mechanically affected zone shall be covered.</p>		
	<p>Considered processes and topics:</p> <ul style="list-style-type: none"> <li>- WELDING <ul style="list-style-type: none"> <li>▪ Arc welding</li> <li>▪ Energy beam welding</li> <li>▪ Resistance welding</li> <li>▪ Solid-state welding</li> <li>▪ Friction stir welding</li> </ul> </li> <li>- BRAZING AND SOLDERING</li> <li>- PLASTIC JOINING <ul style="list-style-type: none"> <li>▪ Adhesive bonding</li> <li>▪ Welding</li> </ul> </li> <li>- CERAMIC JOINING</li> <li>- MECHANICAL JOINING <ul style="list-style-type: none"> <li>▪ Riveting</li> <li>▪ Clinching</li> <li>▪ Flow drilling</li> </ul> </li> <li>- ARC PHENOMENA AND WELD POOL</li> <li>- MICROSTRUCTURE AND MECHANICAL PROPERTIES</li> <li>- POST WELD HEAT TREATMENT</li> <li>- HOT AND COLD CRACKING</li> <li>- RESIDUAL STRESSES AND DISTORTION</li> <li>- HYDROGEN IN WELDING</li> <li>- NANOMATERIALS IN JOINING</li> <li>- PHYSICAL PROPERTIES CONTROLLING JOINING PROCESS (WETTING, DIFFUSION, DISSOLUTION)</li> <li>- ECOLOGICAL AND ECONOMICAL ASPECTS OF JOINING</li> </ul>		
	<p><b>Special Issue publication</b></p> <p>The Symposium Organisers will invite a selected number of authors to submit their full paper for consideration in a special issue of <b><u>Journal of Materials Engineering &amp; Performance (JMEP)</u></b>.</p>		