

Joining Technologies		
Organiser	Institution	Contact
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Comments on candidate and symposium structure		
C2.III	<p>Joining is a key technology for fabrication of multi-component and multi-phase complex-shaped products for automotive, aerospace, building, energy and electronic industry, etc. Depending on application, joints of dissimilar materials (e.g. metals, ceramics, glasses or composites in various combinations) must meet different technical requirements such as, for example, high mechanical strength, high-temperature, corrosion or wear resistance, vacuum tightness. This symposium will address scientific and engineering issues of joining, especially in relation to the new emerging materials and ever-increasing requirements on performance, reliability and durability of joints. The symposium will provide an attractive forum for presentation and discussion of recent advances in joining technologies, materials and characterization. It will include, but will not be limited to, the following topics:</p> <ul style="list-style-type: none"> ○ Joining technologies and applications (soldering, brazing, diffusion bonding, transient liquid phase bonding); ○ Characterization of joints (methods; mechanical properties, thermal, corrosion and wear resistance); ○ Nanomaterials in joining ○ Physical properties controlling joining process (wetting, diffusion, dissolution); ○ Modelling of joining and life-time prediction; ○ Ecological and economical aspects of joining. 	