

Wetting		
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<b>Summary</b>		
<b>C2.I</b>	<p>Large number of industrial processes, extremely relevant for the world economy, are governed, to a great extent, by interfacial interactions. Among them, those involving the interaction of solid bodies with molten phases pertain to joining processes, metallurgy, glass making, electronics, aerospace and so on. In all these categories, the control of the interactions of molten metals with higher melting point metals and ceramics is the critical step to assure good quality of products and reliability in their performances. These characteristic interactions can be classified, from a general point of view, under the term “wetting phenomena”. In the more broad sense of the word, the term “wetting” includes also the interaction between solid or even amorphous phases. The formation of few nm thin equilibrium interfacial layers, the so-called pre-wetting films, control a broad spectrum of phenomena and technological processes like liquid-phase sintering of ceramics, activated sintering of refractory metals, ferromagnetic properties of pure and doped oxides etc. A quite new field form the interfacial wetting phenomena during the severe plastic deformation of materials. This specific Symposium aims at presenting the most recent advancements related to wetting phenomena at low, medium and high temperatures, from basic studies to applications. Papers will be welcome related to solid-liquid and solid-solid interactions and processes, which could be put in relation to wetting phenomena with a special attention to joining, are the background for applications in the fields of joining.</p>	