

Multiferroic single-phase and composite materials for novel magnetoelectric technologies			
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A2.III	Summary		
	<p>The field of multiferroics is currently at a crossroads, and faces a number of long-standing and new challenges: novel single phase materials that show multiferroism at room temperature, along with significant magnetoelectric coupling are required; bulk magnetoelectric composites and cermets, an already demonstrated technology, needs to bridge the gap to application; feasible composite film technologies have to be developed; magnetoelectric effects at interfaces, either domain walls or in heterostructures also have to be fully explored and tailored; specific characterization tools, specially at the nanoscale are necessary.</p> <p>These challenges can only be faced with interdisciplinary approaches. In the symposium, we aim at bringing together the research community active in the field that encloses chemists involved in crystallochemistry and synthesis, applied physicists approaching multiferroics from magnetism and ferroelectricity, solid state physicists carrying out first-principles studies, and materials scientists addressing processing issues, and preparation-properties relationships.</p>		