

# EUROMAT 2019 / Area A

## SYMPOSIUM: A5

Title: A6 Advanced materials for sensors and actuators		
Organizer	Institution	Contact email
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Abstract		
<p>Process control becomes increasingly important in almost all industrial areas as well as in energy conversion and storage. As a consequence reliable sensors and actuators that are able to operate in a wide range of temperature, pressure etc. are required.</p> <p>The symposium focuses on the latest progress and developments related to microstructure, processing, properties and applications of materials for sensors and actuators with special emphasis on high-temperature aspects. Thereby, the close relationship between functionality of materials and operation principles must be regarded. The presentation of new materials and functions will be especially acknowledged. Recent results on sensor and actuator materials related to their preparation, characterization and application including disclosure of atomistic transport processes are requested.</p> <p>Contributions should include but are not limited to:</p> <ul style="list-style-type: none"><li>• Novel and emergent sensor materials for fuel cells, turbines and combustion systems</li><li>• Materials for gas, pressure and temperature sensors</li><li>• Actor materials and integrated sensor actor systems</li><li>• Actor materials for high-temperature applications</li><li>• Active piezoelectric and electronic structures</li><li>• Thin-film sensors and actuators</li><li>• Compatibility of functional materials</li><li>• Smart sensor and actuator systems</li><li>• Modelling and simulation</li></ul>		

