

| Materials and devices for sensing | | |
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| Summary | | |
| A1.III | <p>This Symposium will focus on the synthesis, processing, characterization and modelling of materials and their functionalization as active elements in chemical and biological sensors. This will also include the field of organic bioelectronics concerning the applications of organic electronic devices to biology, which is a rapidly growing one.</p> <p>Some of the Hot topics to be covered by the symposium are: Bio and/or nano organic or inorganic systems as receptors. Inorganic and organic functionalized materials; Micro-electrochemical and bio-electrochemical detecting systems. Integrated analytical systems; Advanced autonomous integrated systems, Advanced self-powered systems, microgenerators and harvesting systems; Hybrid and nanostructured materials for sensing applications; Synthesis and; analytical characterisation of chemical sensing nano materials; Interaction of inorganic and biological materials in composite; Label-free biological sensors and Immunosensors; New signal transduction technology Sensor array technologies for multiplex detection; Self-assembled monolayer and multilayer structures; Organic / Inorganic CMOS technology for sensing applications; Functional polymeric and hybrid materials for electronic detection Conducting polymer based sensors; Nanodevices as active sensing elements; Flexible and wearable sensing systems; Microfluidic systems; Optical functional materials for chemical and biological sensors; Metal oxides nano materials for chemical and biological sensors; Organic conjugated materials for transistor sensing devices; Ion-selective and molecular-selective field effect transistors and their application for chemical and biochemical analysis.</p> | |