

EUROMAT 2019 / Area E Energy and Environment

SYMPOSIUM: E4

| Title: Materials for energy harvesting and conversion | | |
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| Abstract | | |
| <p>Population growth and continued depletion of natural resources create an increasing demand for the development of materials with enhanced properties, enabling higher efficiencies in energy-harvesting and energy-conversion devices. These high-performance materials will be utilized in efficient, stable and affordable devices, which will assist in the urgent transition towards more sustainable technologies. The devices of interest include, but are not limited to, solar cells, fuel cells, light-emitting devices and electrolyzers. Within these domains, the symposium invites contributions covering the various innovative materials under development and the realization of functional devices based on such materials. Session topics will include:</p> <ul style="list-style-type: none">• Polymer Electrolyte Membrane Fuel Cells: catalysts and electrolytes for acidic and alkaline systems.• Nanomaterials for Solid Oxide Fuel Cells and Electrolyzers.• Polymer electrolytes and electrocatalysts for low-temperature water electrolysis.• Photocatalysts for solar-energy conversion.• High-efficiency light-emission devices based on organic materials and fabricated with sustainable methods.• Advanced materials for improving third generation photovoltaics | | |