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Special Session

Nanocomposite materials: from design to applications

Session Organizers:

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Session Abstract:

Material development under the shape of nanocomposite materials or nano hybrid materials are gaining more and more interest as such materials have been found useful for various innovative applications starting from electronics to optics. Nanocomposite materials allow the innovative property generation by the flexible combination of materials at various scales. This special session will focus on the different methods nowadays employed to produce new nanocomposite materials and will described their wide field of applications. Several skills in different fields from chemistry, physics to material science are required. Scientists and industrial partners involved in these topics are welcome keeping in mind that the main idea is to share and discuss advances and innovations for the community.

The special session will include, but will not be exclusively limited to, the following topics:

Synthesis of nanoparticles in embedded polymers, Metallic, inorganic or organic nanoparticles embedded in polymers, Electronics, Optoelectronics, Optics, Dielectrics, Sensors, Biosensors, Capacitive or resistive sensors, Conductive materials, Plasmonics, Photonics, Optical amplifiers, Waveguides, Surface properties, Light amplification in nanocomposite materials, Integrated components