





Special Issue Reprint

Manufacturing, Characterisation and Properties of Advanced Nanocomposites

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In recent years, advanced nanocomposites have attracted a great deal of attention from materials engineers and industrialists due to numerous advantages, including the use of a small amount of nanofillers to significantly enhance the material properties of resulting nanocomposites, widespread applications in a range of fields, such as automobiles, aerospace and aerocrafts, building structures, biomedical devices, etc., as well as easy processibility based on current manufacturing technologies, such as melt compounding, solution casting, in situ polymerisation and electrospinning.

Advanced nanocomposites reinforced with carbon nanotubes (CNTs), graphene oxides (GOs), nanoclays, nanocellulose, and nanofibres demonstrate excellent multifunctional properties, consisting of better mechanical, thermal, electrical, and barrier properties. The key issue is still the encountered challenge of homogeneous filler dispersion in morphological structures for tailored advanced nanocomposites. Hence, processing-structure-property nanocomposite relationship is crucial for their future development as innovative hybrid material systems.

This Special Issue will address above-mentioned points in relation to manufacturing, characterisation, and properties of advanced nanocomposites to offer an insight into this te family with the incorporation of nanofiller@rderaYoupartiolles.ppyind in order to eventually achieve the nanotechnologicare www.mdpi.com/books/reprint/750



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