

Multifunctional Nanocomposites

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Description

GDR Polynano 2 and ITN NMC gather scientific communities in France and in Quebec around nanocomposites. By coupling their mechanical behavior with interesting physical properties, these materials exhibit really innovative multi-functionalities in bulk or for coating applications. The concentration, size, shape and distribution of nanoparticles together with the characteristics of the polymer matrix and the nanoparticle-matrix interface are all key parameters contributing to the overall properties.

This session will be focused on different topics concerning:

- the processing of nanocomposite materials (from the functionalization of nanoparticles to the processing of thin-film or bulk materials)
- their microstructural characterization
- the study of their surface or volume physical and mechanical properties and/or their multi-physical coupling.

Keywords

nanocomposite; coatings; bulk materials; characterization; properties; electro-mechanical coupling

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In partnership with:

- the international CNRS research network GDRI controlled multifunctional Nanomaterials
- the CNRS research network GDR Polynano 2

GDRI Nanomatériaux Multifonctionnels Contrôlés

ou le déploiement de nano-objets aux propriétés multifonctionnelles

