

# NOVEL APPROACHES TO NANOBIOCOMPOSITES

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## ABSTRACT

Nanobiocomposites have been found to be important for many applications and also the bottom-up approach for their preparation has received special attention [1-3]. Novel approaches for the synthesis of interesting nanobiocomposites can be designed and developed by using the concept of supramolecularity. When employing nanosized building blocks in conjunction with other components such as macrocycles, metals, and biopolymers, these concepts can be translated into reality and new classes of nanobiocomposites fabricated. These fundamentally novel concepts are presented and highlighted both as synthetic approaches and in the context of their applications. Several model systems with carbon and non-carbon nanotubes as well as nanoparticles have been studied and examples of their interaction products based on different types of reactions and syntheses are given [4]. The novel nanobiocomposites are expected to have an application potential in many areas such as the biomedical and electronic areas.

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