

# Toxicology of Nanomaterials

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In recent years, developments in nanotechnology have led to more widespread use of nanomaterials and these materials are finally released to the environment. Therefore, before employing nanomaterials in biological and environmental medium, the biocompatibility of these materials must be evaluated. Toxic effects of nanomaterials on the living organisms and environment has been studied by many researchers, however, there are still uncertainties about the effects and mechanisms of nanomaterials toxicity. The unique characteristics of nanomaterials and their interaction with biological systems are criteria for the safe using these materials. Nanomaterial properties such as size, shape, aspect ratio, density and surface effects cause to cell toxicity and symptom effects. Nanomaterials can cause a range of acute and chronic effects such as inflammation, exacerbation of asthma and cancer.

**Keywords:** Nanomaterials, Nanotechnology, Toxicity, Safety, Biocompatibility, Nanobiomaterials.

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