

PAPER ID:132

A Review on Nanoparticles: its Types, Green Synthesis, Advantages and Disadvantages.

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ABSTRACT

The review paper aims at broadening awareness about the enlightenment of nanoparticles and its various uses in the current scenario. Nanoparticles synthesis and the study of their size and properties have importance in various fields but mostly in the biological field using the green synthesis of nanoparticles makes use of environmental favorable. Thus, it becomes necessary to have an insight into the nanoparticles and their applications. The biosynthesis of nanoparticles is a cost- effective and environmentally friendly alternative to chemical and physical methods. Plant-mediated synthesis of nanoparticles is a green chemistry approach that serves as a connection between different types of nanotechnology and plants. Most of the methods work at ambient temperatures, cost effective, neutral pH, and green conditions. Using various routes nanomaterials have been synthesized keeping the above goals in view. Plant extracts is the best option among the biological alternatives. Chemical and physical methods of nanoparticle synthesis are harmful to the environment. The advantages and disadvantages of nanotechnology can be easily enumerated. This study attempts to review the diversity of the field, starting with the brief of nanotechnology, types of nanoparticles, green synthesis of nanoparticles, the properties of the nanoparticle, the many advantages and disadvantages of different methods.

Keywords: Nanoparticle, Biological field, Green Synthesis, Chemical, Environment.

