

Special Issue: NCNN-2014

(National Conference on Nanoscience and Nanotechnology - 2014)

Fullerene: A Wonder Carbon Nanoparticle

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The primary advantages of using carbon nanoparticle are their bioactivities which are not found in any other existing compounds. Fullerene is a carbon allotrope like diamond and graphite. All the electrons in fullerene are delocalized and spread over the whole molecule periphery as clouds. These electrons demonstrate antioxidative potency when they react with free radicals and active oxygen. Its use is not restricted to any one industry but can be extended to many other industries including cosmetics industry, non-linear optics, surface coatings, artificial photosynthesis and various biological applications including drug delivery and cosmetics. Henceforth, research institutions worldwide are continuously investigating more potential applications of fullerene. Major limitations in its use include insolubility in water and nonbiodegradability. Various approaches have been made for increasing its solubility and processibility.