

A novel and comprehensive study on manufacturing and fabrication nanoparticles methods and techniques for processing cadmium oxide (CdO) nanoparticles colloidal solution

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Nanoscience and nanotechnology are theoretical, computational and experimental fields of medicine, pharmacology, genetics, chemistry, physics, biology, optics, materials, technology, industries and so on. They involve a wide area of researches and are centralized on manufacturing, fabrication, synthesis, controlling and exploiting the structure of materials and compounds on a nano-scale. Two principal and fundamental prospects are used in nanoscience and nanotechnology. First is "bottom-up" outlook where materials, compounds and devices are built from smaller and molecular components which assemble themselves chemically and physically using principles such as molecular recognition. The other being a "top-down" view where they are synthesized or constructed from larger entities through an externally-controlled process. The other research methods and techniques are sub-divided the mentioned above methods and techniques include Plasma Arcing, Chemical Vapor Deposition (CVD), Electro Deposition, Sol-Gel methods for materials processing and Ball Milling [1-212].

Our Editorial is about Plasma Arcing, Chemical Vapor Deposition (CVD), Electro Deposition and Sol-Gel methods for processing Cadmium Oxide (CdO) nanoparticles colloidal solution (Figures 1 and 2) with various gelling agents. It should be noted that we investigated size and stability parameters of Cadmium Oxide (CdO) nanoparticles colloidal solution at 25°C temperature and 150 (atm.) pressures.

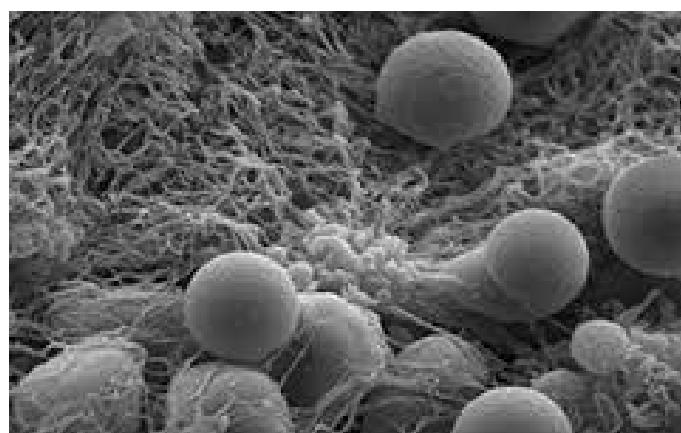


Figure 1. Scanning Electron Microscope (SEM) image of Cadmium Oxide (CdO) nanoparticles colloidal solution with 300000x zoom

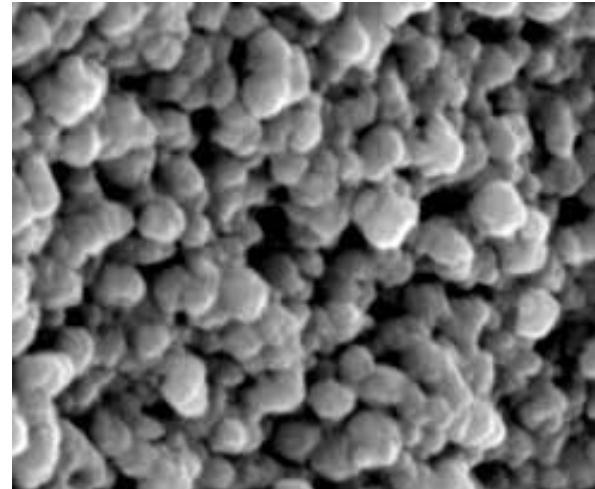


Figure 2. Transmission Electron Microscopy (TEM) image of Cadmium Oxide (CdO) nanoparticles colloidal solution with 300000x zoom

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