



Editor-In-Chief

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## Content

Editorial	3
Article	6
The Characterization and Synthesis of CdTe Quantum Dots in Liquid Paraffin Baruah L. <sup>1</sup> , Nath S. S. <sup>2</sup> Bhattacharjee R <sup>1</sup> .	6
Preparations of Stable Aqueous Dispersions of Calcium Carbonate and Clay Nanoparticle Mende M., Schwarz D., Schwarz S.*	15
Magnetic Field Effects on the Optical Absorption and Polarizability of Donor in Quantum Dot Zorkani I., * Mmadi A., Didi Seddik A., Jorio A.	28
Review	
The Quest for Nanotechnology: The United States of America Experience Ugbolue, S. C.	36

## Editorial

New developments in the subject of nanoparticle are ever increasing due to their crucial importance in the field of nanoscience and nanotechnology. To harness the crucial benefits of nanoparticles; various studies are being undertaken including synthesis and characterization. United States of America (USA) is a global leader in the field of nanosciences and nanotechnology; current review is necessary to understand the successes and failures and lessons learnt for the best future results.

Characterization of quantum dots(QD) as nanoparticles includes calculation of the polarizability of a shallow donor placed at the centre of a cylindrical quantum dots (CQD) with infinite and finite barrier, as a function of the dot sizes and for various values of the magnetic field. Precipitated calcium carbonates (PCC) and china clays nanoparticle were characterized using laser light diffraction technique. The streaming potentials and net charges of all china clay nanoparticle dispersions were studied. Rheological measurements and the determination of the sedimentation behavior by centrifugal separation analyses allow the investigation of the dispersions in an expanded concentration region under real conditions. This issue of JONPI publishes results on these investigations. All these studies among others can be applied in nanoenergy, nanocoating, etc.

Further this issue reports on nanotechnology and nanosciences development in USA being a global frontrunner with multibillion dollar investments annually in an alliance of academia, public and private partnerships. The journal continues its tradition of publishing high quality results in the emerging field of nanosciences and nanotechnology. My appreciation goes to those editors and authors who made this issue possible.

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