Raman P Yadav, Health Care: Current Reviews 2015, 3:3
http://dx.doi.org/10.4172/2375-4273.C1.011

OMICS International
conferenceseries.com

3rd Indo-Global Summit & Expo on
Healthcare
October 05-07, 2015 New Delhi, India

Multifunctional nanoparticles: Perspectives in health care

Raman P Yadav
MGM Institute of Health Sciences, India

With the understanding of etiology of disease many potential targets are identified and their role in disease progression and development are highlighted. Disease development with initiation of allied events has inspired material science researchers for designing and development of multitasking molecules for better management of diseases. In recent years, various nanoparticles have gained importance as advanced nanomaterials for their mutifunctionality. Although cerium oxide nanoparticle has emerged as an interesting material in biological sciences including biomedicine, the biogenic synthesis and application of multifunctional cerium oxide nanoparticle has not been well explored. CeO2NPs are generally synthesized by physical and chemical methods. However, most of the techniques are complex, expensive and hazardous. Number of methods has been also reported for synthesis of biocompatible cerium nanoparticle for biological use in pure water or with the protection of polyethylene glycol, dextran, glucose, cyclodextrin, polyacrylic acid etc. Recently, there has been an increasing attention towards eco-friendly synthesis of all types of metal oxide nanoparticles. The presentation will be in two parts. In 1st part, the general aspects of various multifunctional nanoparticles will be highlighted in reference to their health perspective and in 2nd part; our research work i.e., generation of multifunctional CeO2NPs by simple and green methods using aqueous plant extract will be presented. A novel synthesis of multifunctional CeO2NP with enhanced anti-oxidant property will be the major highlights of the presentation. Potential applications of these generated multifunctional CeO2NPs will be presented in reference to their uses in various domains of biomedical field.

Biography

Raman P Yadav has completed his PhD from Department of Microbiology, University of Delhi. He is the Technical Director of MGM Central Research Laboratory, MGM Medical College and Hospital, MGM Institute of Health Sciences, India. He has also worked earlier at Reliance Life Sciences Pvt. Ltd., Navi Mumbai. He has published several papers in peer reviewed national and international journals of repute. He has got several patents including United States Patent for scientific work and also recognized for several awards including AMI, Fermentation and Food Microbiology Young Scientist Award.

raman.yadav@mgmmumbai.ac.in

Notes: