

## **THE ROLE OF NANOTECHNOLOGY TO MINIMIZE THE USE OF PLASTIC WATER BOTTLES & ITS IMPACT ON GLOBAL SUSTAINABLE ENVIRONMENT**

**SHARMA DEEPAK<sup>1</sup> & RAKESH KUMAR<sup>2</sup>**

<sup>1</sup>Department of Applied Science, SRIET CCS UNIV.<sup>TY</sup> Meerut, Uttar Pradesh, India

<sup>2</sup>Dean, Department of Nanotechnology, SRIET CCS UNIV.<sup>TY</sup>, Meerut, Uttar Pradesh, India

Professor, Department of Physics, SRIET CCS UNIV.<sup>TY</sup> Meerut, Uttar Pradesh, India

### **ABSTRACT**

Nanotechnologies assist in solving the environmental challenges. World has over 7 Billion's of population, out of which Million people are in daily life used to purchase plastic water bottles during their travel, in trains, buses, cars, flights, trams during their breakfast, lunch and dinner etc. It will be a crucial/innovative step to introduce the nanotechnology based water filtration system in the means of transport for the minimization of potable drinking water bottles. Due to rapid rate of urbanization and development activities changes in the human life style has led the exponential rise of plastic water bottles. Purification of water is a prerequisite necessity for safe drinking diagnostic for the development of healthy environment. The present study envisages on the improvement of water quality in the provision for safe water supply and treatment. Chemicals released from burning bottles poses a health risk to people and contribute to the break down of Earth's Ozone layer. Nanotechnology for water remediation is playing a crucial role in water filtration. In this paper we also focuses on the use of economic approaches to water management that can increase the efficiency of water use and water security, thus providing to sustainability and economic growth. Sustainability & Economic regulations will promote the market value for development of water filtration technologies.

**KEYWORDS:** Economic Values, Health, Management, Nanotechnology, Plastic Bottles, Purification, Potable Water, Water Resources