Journal of Nanotechnology and Applications (JNA)
Vol. 5, Issue 1, Jun 2015, 1-12
TJPRC Pvt. Ltd.

NANOTECHNOLOGY APPLICATION IN WATER SECTOR:

AN OPPORTUNITY AND RISK ANALYSIS

MADHULIKA BHATI[1], PUSHKAR BANSAL[2] & SAURABH KUMAR RAM[3]

[1]Scientist, National Institute of Science, Technology and Development Studies [CSIR-NISTADS], New Delhi, India

[2] Project Fellow, National Institute of Science, Technology and Development Studies [CSIR-NISTADS], New Delhi, India

[3] Research Scholar, Water Science, INRS-ETE, Quebec, G1K9A9, Canada, North America

ABSTRACT

In the last decade nanotechnology entered the policy arena as a technology that is presumably well known promising candidate for solving one of the most important issues such as ensuring the quality and quantity of potable water for the world society in the XXI century.

This articles gives the comprehensive overview of state of art technologies available for water purification, worldwide. It draw insight the recent contamination scenario of water and challenges ahead and how nanotechnology is developing in country like India across the this water sector from the beginning to end of value chain to serve for bottom of Pyramid society. It also addresses the potential nanotechnology risks and outlines risk data gap challenges for existing regulatory framework. In summary, we suggest some ways government agencies can move forward responsibly so that ultimately nanotechnology and its products can succeed in developers', researchers', regulators', and the public's eyes.

KEYWORDS: Developing Countries, India, Nanotechnology, Water Remediation, Value Chain, Risk Analysis