

关于 Texas A&M University Virender K. Sharma 教授学术报告的通知

报告题目： Natural inorganic nanoparticles: Formation, fate, and toxicity in environment

报告时间： 9 月 16 日(周六)15:00-16:30

报告地点： 浙江大学紫金港校区环境与资源学院 B110 室

主办单位： 浙江大学环境过程研究所（联系人：林道辉，88982582）

内容简介： Nanoparticles (NPs) are present in almost all compartments of environment (river, atmosphere, ocean, wastewater, hydrothermal vents, rocks, and ores). The presentation will demonstrate the examples of natural existence of metal nanoparticles and their oxides/sulfides forms in waters, wastewaters, ore deposits, mining regions, and hydrothermal vents, as exemplified by the formation of AgNPs and AuNPs, Fe, Mn, pyrite (FeS₂), Ag₂S, CuS, CdS, and ZnS, is dictated largely by environmental conditions (temperature, pH, oxic/anoxic, light, and concentration and characteristics of natural organic matter, NOM). The presentation will give pathways of mechanisms that contribute to the natural existence of AgNPs and AuNPs. The characterization and fate of the nanoparticles under environmental conditions will be shown. Toxicity of natural nanoparticles to Gram positive and Gram negative bacteria will also be presented.

报告人简介： Dr. Virender K. Sharma received his Ph.D. from Rosenstiel School of Marine and Atmospheric Science, University of Miami, Florida, USA. His postdoctoral work was at Brookhaven National Laboratory and the State University of New York, Buffalo, New York. He is currently a professor at the Department of Environmental and Occupational Health, School of Public Health (SPH), Texas A&M University. He is also serving as the Director of the Program of Environment and Sustainability of the SPH. Dr. Sharma



has made seminal contributions in the areas of chemistry and environmental applications of ferrates. Dr. Sharma has also made key contributions in understanding the fate and toxicity of natural nanoparticles in an aquatic environment, resulting in an impact on human and ecological health. He is also working on understanding mechanism of the formation of disinfection byproducts in water. His research also includes studying environment fate of environmentally persistent free radicals and antibiotics resistant bacteria and genes. He has published more than 270 peer-reviewed publications. Dr. Sharma has also published 54 book chapters, 36 proceedings, and authored/edited eight books. His distinguish awards include Faculty Excellence in Research by Florida Tech, Outstanding Chemist by the American Chemical Society (Orlando Section), Certificate of Merit Award by the Environmental Chemistry Division of the American Chemical Society, Excellence in Review by *Environmental Science & Technology*, and International Fellowship awarded by the Chinese Academy of Sciences.

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