Prof S.S ISLAM

Ancient philosophers like Democritus and Kanada were the first to talk about the atomic scale of the macroscopic entities that we see around us all the time. As per Democritus, "To understand the very large, we must understand the very small". The word 'nano' is the Greek for 'dwarf', signifying one billionth of something. While the concept itself was introduced (rather reintroduced in the modern times) by Richard Phillips Feynman in his famous 1959 talk "There's Plenty of Room at the Bottom"; it was Kim Eric Drexler, an American engineer, who gave it shape in his thesis which was later published as a book entitled "Nanosystems: Molecular Machinery Manufacturing and Computation". Since then there have been numerous efforts undertaken by the research community to 'better' the existing systems by getting down to the manipulation at the atomic scale. Particularly, the last few years have witnessed zealous development of nanoscience and nanotechnology offering immense opportunities. It is interdisciplinary, encompassing physics, chemistry, biology, materials as well as engineering. There can be scarcely any facet of our lives that nanotechnology would not revolutionize in the times to come. This has fueled intense research investigations all over the world as well as in India.