

## Keynote Address 2

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### **RECENT ADVANCES IN NANOTECHNOLOGY RESEARCH**

Nanotechnology is the technology of manipulating materials at nanoscale. At nanoscale, materials behave very different to their bulk counterparts. The differences are often very attractive and bring the promise of smaller, smarter, lighter, more efficient, and user-friendly products. Potential applications for nanotechnology range from healthcare to robotics, and, water purification to fertilizer. There's a place for nano in every application in essence. Nanoparticles are highly reactive with the surroundings due to their tiny sizes. These tiny sizes also cause the mode of energy transport in them distinct. What make the nanomaterials very special are the reactivity and energy transport mechanism. We are in the third decade of popular nanotechnology. The number of research papers and patents seeing the light of the day easily outnumber the product varieties coming to the market. In a way, this shows the enthusiasm and hope the researchers have placed on nanotechnology. But more importantly, it sets the prelude for new and more advanced nano-enhanced products to enter the consumer market.