Tata Institute of Fundamental Research
Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad - 500107

Colloquium

Big things come in Small packages: Research at the Clemson Nanomaterials Institute

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Clemson University, SC

Our history is defined by the materials we use, starting with those used during the Stone Age up until the present age of nanoscience and nanotechnology. It is getting harder to find scientific problems that aren't in some way linked to nanomaterials, and that is both good and bad news. To a physicist, these nanomaterials provide "labs at the atomic scale" for realizing the elegance and beauty of quantum mechanics. More importantly, harnessing unique properties of nanomaterials is critical to realize new technologies, from energy storage to cancer drug delivery. On the other hand, nanomaterials also pose environmental and physiological toxicity challenges. As I will discuss in this talk, my lab focuses on multidisciplinary research to identify novel phenomena in benign nanomaterials that could be transformed into high impact and commercially and environmentally viable products such as batteries, supercapacitors, triboelectric nanogenerators, biosensors. I will also briefly discuss our work on understanding biological interactions of engineered nanomaterials.

Thursday, Jan 4th 2018

11:30 AM (Tea/Coffee at 11:00 AM)

Auditorium, TIFR-H