

COLLOQUIUM

On

" Shape and Morphology Controlled Nanomaterials for Energy and Environment"

by

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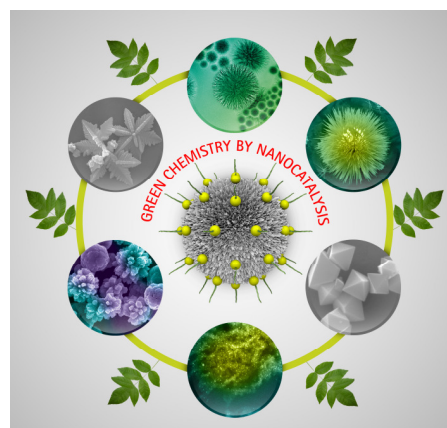
Nanotechnology have been unquestionably thriving over the last few decades. One of the most stimulating features of nanotechnology is, its potential use in almost any field. The discovery of nanoparticles with varied size, shape and composition has stretched the limits of technology in ways that scientists would never have dreamt of a century ago. Nature makes and chemistry re-shapes; huge varieties of nanoparticles have emerged in our daily life, in every field from drugs and electronics to paints and beauty care, and they are now emerging in the field of catalysis, energy and environment.

They have emerged as sustainable alternatives to conventional materials, as robust, high surface area heterogeneous catalysts and catalyst supports.[1-5] We recently discovered new class of fibrous nano-silica (KCC-1).[6] Such a fibrous morphology observed in these nanospheres has not been seen before in silica materials. We also showed successful utilization of nano-silica as efficient nano-catalyst for various important reactions [7-11]. KCC-1 also possess high DNA and gene adsorption capacity [12] as well as was also found suitable to capture CO₂ from the environment.[13] In this presentation, I will present use of fibrous nano-silica (KCC-1) based materials for various energy and environmental applications.

Day & Date: Tuesday (Sep 15, 2015)

Venue: PF-AG-14

Time: 4:00 PM



All are welcome