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## **Seminar**

# **Multifunctional Nanocrystals for Application in Energy & Medicine**

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The genesis of nanoscale materials research was based on the unique properties obtained at this scale, which could be further tuned to specific needs by changing the shape or size of these materials. Colloidal synthesis of inorganic nanostructures has developing into a new branch of synthetic chemistry. Starting with preparations of simple objects like monodisperse spherical nanoparticles, the field is now evolving toward more and more sophisticated structures where size, shape, and connectivity of multiple parts of a multicomponent structure can be tailored in an independent and predictable manner. In this presentation, synthesis and optimization of such sophisticated nanoscale structures would be discussed followed by a note on the multitude of applications they possess. Main emphasis would be given to biological applications concerning medicine and the energy harvesting applications.

***Thursday, May 7<sup>th</sup> 2015***

***11:30 AM (Tea/Coffee at 11:15 AM)***

***Seminar Hall, TCIS***