

Colloquium Notice

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Nanomaterials Composed of Nanocomponents: Assembly, Optics, Catalysis, and Thermoelectrics

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New materials with potentially new properties and applications can be formed by linking nanocomponents. The assembly of three-dimensional ordered arrays of CdSe and of Fe₂O₃ nanoparticles by a microfluidics technique is described, along with the formation of hybrids of CdSe nanoparticles and single-walled carbon nanotubes. Coupling between the nanocomponents is important in understanding the new properties these nanomaterials may possess, as is demonstrated by how FRET coupling affects the Stokes shift in photoluminescence from these hybrids. Such systems are also potentially useful in several applications. Nanoparticles are coupled to achieve improved thermoelectric performance. Improved catalytic activity can be achieved using nanoparticles, as is probed by using Raman scattering.
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Monday

October 17, 2011

Starts at 12:15 PM

Coffee at 12:00 PM

Physics Conference Room, SB B326