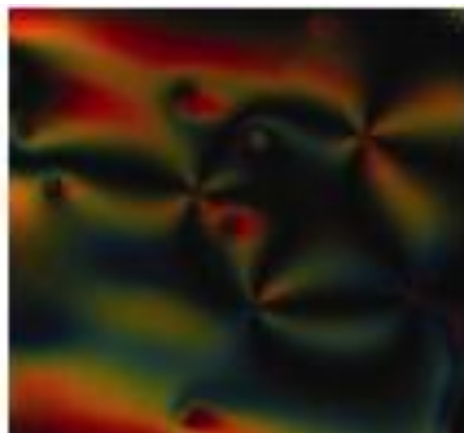
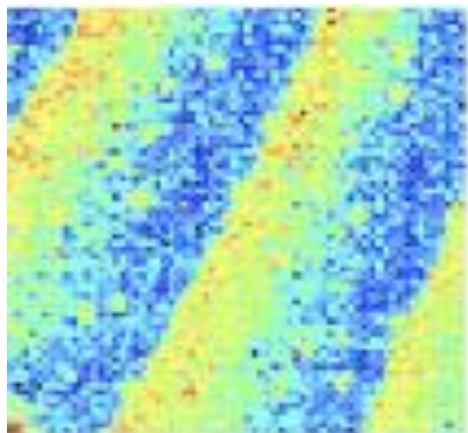




COLLOQUIUM



Dr. Sayantani Ghosh
UC Merced

More is different: study of the collective properties of nanostructures for opto-electronic and photovoltaic applications

Abstract

Low dimensional nanostructures have generated significant interest due to their unique properties and functionalities that can be finely controlled by quantum confinement. These nanostructures have been applied as model systems for various fundamental studies as well as building blocks for applications such as opto-electronic devices, drug-delivery systems and biochemical sensors. I will discuss our study of ensembles of semiconducting quantum dots (QDs) in the context of varied applications. To develop interactive opto-electronic devices, we have designed and fabricated liquid crystal based matrices into which chemically synthesized CdSe QDs are uniformly dispersed.

3-4 p.m., Friday, Mar. 16th, 2012 McLane Hall 162
Refreshments will be served. All welcome!