Hybrid-Nanorod Polymer Solar Cells

Paul Alivisatos¹ ¹University of California Department of Chemistry B-62 Hildebrand Hall Berkeley, CA 94720

This talk will describe our recent work related to the fabrication of solar cells, based upon blends of inorganic semiconductor nanorods with semiconductor polymers, such as P3HT. Such blends offer the possibility of paint-on type cells that combine high electron and hole mobilities, but require the development of methods to reliably control the dispersion of the two materials on the nanometer scale. Several approaches will be described, including the incorporation of so-called tetrapods, branched four armed inorganic nanocrystals that spontaneously align on a substrate.