Nanotechnology for Global Health and a Sustainable World

ENGRI 1110
Fall 2014  MWF 10:10-11:00

How engineering at the scale of a handful of atoms enables technological advances with global impact

Energy: photovoltaics, fuel cells, batteries, exploration and recovery of petrofuels

Pollution: carbon sequestration, sensing of hazardous chemicals, control of automobile emissions

Resource Management: water purification, desalinization, precision agriculture, remote sensing

Disease Diagnosis and Treatment: nanoparticles in the body, low-cost genomic analysis

cornell Dot (C-Dot), a fluorescent nanoparticle from the lab of Prof. Wiesner, Cornell MS&E

Water purification membrane with nanoscale pores made from a polymer solution by the Wiesner group

For more information go to www.mse.cornell.edu/about/discovering