

Abstract Submitted
for the MAR16 Meeting of
The American Physical Society

Layer-by-Layer Assembly Onto Gold Nanoparticles of Various Size ANDREW KILROY, SARAH KESSLER, TABBETHA DOBBINS, Rowan University, Dept. of Physics Astronomy — This research focuses on the potential applications of coated gold nanoparticles in medicine. By coating gold nanoparticles in layers of polyelectrolytes, with a final layer of antibodies which targets chemicals uniquely exhibited by cancer cells, we eventually hope to selectively attach the nanoparticles to the cancer cells. The coated nanoparticles are assembled through layer-by-layer coulombic attraction due to the passive zeta potential of the particle and the charged nature of the polyelectrolytes. This poster will explore the potential usefulness of variously sized nanoparticles with various thickness of polyelectrolyte layers.

Tabbatha Dobbins
Rowan University, Dept. of Physics
Astronomy

Date submitted: 06 Nov 2015

Electronic form version 1.4