

Department of Physics & Astronomy

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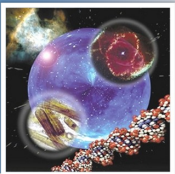
Friday September 24, 2010

Time: 3:00 p.m.-4:00 p.m.

BB 3.03.02

Cancer Disease and Multiple Drug Resistance Bacteria (MDRB) Present Greatest Challenges in Public Health Care in Today's World

Cancer is accounted for 13% of all worldwide deaths in 2007 and it is projected to continue rising, with an estimated 12 million deaths in 2030. Since last two decades, multiple drug resistance bacteria have been a grave public health threat and a new approach for the treatment that do not rely on traditional therapeutic regimes is very urgent for public health as well as world economy. In this talk, we will discuss our recent report of multifunctional gold nano-material based SERS and NSET approach for targeted sensing, nanotherapy treatment and in-situ monitoring of photothermal nanotherapy response during the therapy process for MDRB and different cancer cells. Ideally, our nanotechnology based reported assay would have enormous potential for providing effective, noninvasive treatment of cancer and MDRB infection diseases.



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