SUNY Potsdam
Chemistry Department
Welcomes Seminar Speaker

Dr. Silvana
Andreescu
Department of Chemistry
and Biomolecular Science

“Nanomaterials for Advanced Biological Sensors. From Basic Research to Practical Applications”

In the last decade, an emerging area of research is the development and implementation of biological sensors that could respond to the today’s needs for low cost, rapid detection, higher selectivity and sensitivity for the analyte of interest. However, despite extensive research in biosensors and their enormous potential compared to laboratory-based analytical techniques, the biosensor market is relatively small and numerous problems still remain to be solved. This presentation will discuss new ways of designing biosensors with improved selectivity and lower detection limits. Novel materials and advanced immobilization methods capable of depositing biologically active material, particularly enzymes, onto or in close proximity of the transducer surface and applications of these devices for the detection of clinically and environmental important analytes will be presented. Problems associated with a direct detection of hydrogen peroxide, enzyme stability, interferences and overlapping signals in clinical samples will also be addressed.

Tuesday, December 8th, 2009
4:15 p.m.
Stowell Hall, Room 211
Light refreshments will be served.
All are welcome.