DEPARTMENT OF CHEMISTRY AND ENVIRONMENTAL SCIENCE
SEMINAR SERIES
SPRING 2019

DATE: WEDNESDAY, APRIL 10
LOCATION: WEC-MARJORIE PERRY THEATER
TIME: 11:00am

GUEST SPEAKER

Omowunmi "Wunmi" Sadik
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TOPIC

Nanomaterials for Sensing and Environmental Applications

ABSTRACT

In the last decades, we have developed robust methods for creating advanced functional materials, which are compatible with the biological systems. These include electrochemical syntheses to phase inversion processes and photosynthesis. We recently developed new classes of nanostructured, conjugated, poly (amic) acid membranes (PAA) in which the electro-optical properties are controlled by the composition and processing conditions. PAA properties can be tuned via electronic coupling between the sequestered nanoparticles and their neighboring moieties, and where relevant, they can be interfaced with the biological systems. This presentation will focus on how the delocalized electron system in the PAA has been exploited as sensors for pain biomarkers, catalytic reduction, and detoxification of Cr (VI and in hybrid, paper-based bio-batteries.

Seminar Series Coordinator:
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