

Amgen Seminar Series in Chemical Engineering
in
Cherry Auditorium, Kirk Hall, 1 PM

Presents on September 27, 2012

Graphene - Calling all Chemical Engineers

By

Professor Robert Hurt
School of Engineering
Brown University

Since its isolation in 2004, graphene has attracted worldwide attention for its unique electronic properties and its potential in a next generation of nanoelectronic devices. The emerging applications of graphene now extend well beyond electronics to include composite materials, barrier coatings, electrodes, catalyst supports, and theranostics. These applications often rely on the atomically thin, two-dimensional plate-like nature of the material, and in practice are often based on graphene oxide or few-layer graphene, which are low-cost, high production volume members of the larger “graphene material family”. This talk describes research on the assembly of graphene building blocks into advanced materials with applications as transport barriers, encapsulation sacks, and cell delivery vehicles. The talk will highlight the important role that chemical engineers can play in this new field, which involves colloid and surface science, transport phenomena, adsorption, aerosol behavior and complex fluids.

This series at the University of Rhode Island is made possible through the generosity of Amgen, West Greenwich, R.I.