Special Guest Lectures

Atomistic Simulation Studies of Interfacial Phenomena in Biomolecular Systems

Dorel Moldovan, Louisiana State University

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Johnston Hall 338
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Abstract:
Biomolecular systems such as membranes, DNA, and proteins have unique attributes that make them suitable for a large number of applications of great importance in pharmaceuticals and biosciences. Much of the advancements in these applications are hindered by our limited understanding of the fundamentals of interactions of these biosystems with various chemicals and surfaces. In this seminar, we give a brief overview of our recent investigations, using large-scale atomistic simulations, into a host of open research problems pertaining to the areas of cryopreservation, DNA sequencing, biomolecular machines, and drug delivery.

Speaker's Bio:
Dorel Moldovan's research interests are in Atomistic and mesoscale modeling and simulation of materials (interfacial materials, thin films, membranes, and biomolecules confined in nanoscale systems). He received his BS in Engineering Physics from the University of Bucharest in 1989 and his PhD in Physics from West Virginia University in 1999. He is a member of the Materials Research Society.

Refreshments will be served.
This lecture has a reception.

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