

# TEXAS TECH UNIVERSITY

Department of Chemical Engineering

2006/2007  
Seminar Series

New Frontiers of  
Chemical Engineering



Friday, September 8th

**Professor Steve Cramer**

Acting Chair, Department of Chemical and  
Biological Engineering  
*Rensselaer Polytechnic Institute*

*Prediction of protein affinity and displacer  
selectivity in chromatographic systems using  
structure-property multi-scale modeling  
techniques.*

Wednesday, September 13th

**Professor Rakesh Agrawal**

Winthrop E. Stone Distinguished Professor  
School of Chemical Engineering  
Member, National Academy of Engineers  
*Purdue University*

*Energy supply challenges and opportunities.*

This is co-sponsored by the College of Engineer-  
ing in connection with the Energy Summit.

Friday, September 15th

**Professor Michael Deem**

John W. Cox Professor  
Department of Bioengineering  
*Rice University*

*Quantifying influenza vaccine efficacy and  
antigenic distance.*

Friday, September 22nd

**Professor Bob Nerem**

Institute Professor  
School of Chemical and  
Biomolecular Engineering  
Member, National Academy of Engineers  
*The Georgia Institute of Technology*

*The vascular endothelial cell: from basic  
research to vascular implants.*

Friday, September 29th

**Professor Doug Clark**

Department of Chemical Engineering  
*University of California, Berkeley*

*Organic-soluble proteins (and other extreme  
adaptations): biocatalyst engineering enters a  
new phase.*

Friday, October 6th

**Professor Sangtae Kim**

Donald W. Feddersen Distinguished Professor  
School of Chemical Engineering  
Member, National Academy of Engineers  
*Purdue University*

*Fluidic self assembly and the network of  
things.*

Friday, October 20th

**Professor Terry Papoutsakis**

Walter P. Murphy Professor  
Department of Chemical and Biological  
Engineering  
*Northwestern University*

*Experimental and computational innovation  
and quality control in dna-microarray  
analysis.*

Friday, November 10th

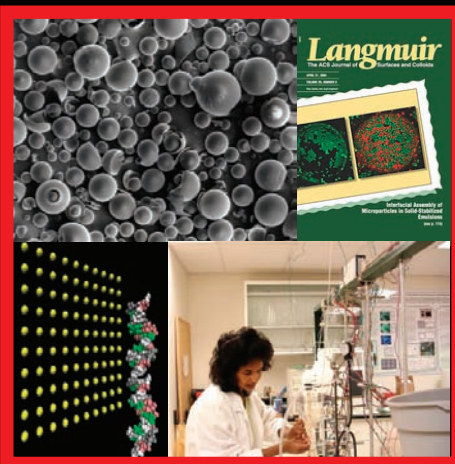
**Professor Rafiqul Gani**

Department of Chemical Engineering  
*Technical University of Denmark*

*Systematic computer aided approach to  
product-process analysis and design.*

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Friday, December 1st

**Jim McMillan**  
Manager  
*National Renewable Energy Laboratory*

*Technical advances in cellulosic ethanol research and development.*

Friday, February 9th

**Professor T. J. "Lakis" Mountziaris**  
Head, Department of Chemical Engineering  
*University of Massachusetts, Amherst*

*Synthesis, functionalization, and clinical diagnostic applications of semiconductor nanocrystals.*

Friday, March 9th

**Professor Jeff Derby**  
Department of Chemical Engineering and Materials Science  
*University of Minnesota, Twin Cities*

*Modeling the interaction of multiple scales in melt and solution crystal growth.*

Friday, March 30th

**Professor Arvind Varma**  
R. Games Slayter Distinguished Professor  
Head, School of Chemical Engineering  
*Purdue University*

*Combustion of condensed systems for oxygen and hydrogen generation.*

Friday, April 6th

**Professor Frank Doyle**  
Department of Chemical Engineering  
*University of California, Santa Barbara*

*Systems approaches to robustness analysis of circadian oscillators.*

Friday, April 27th

**Professor D. Ranjan**  
Head, Department of Computer Science  
*New Mexico State University*

*Methods and tools for identifying cis-elements in promoter regions.*

## Enquiries

*Department Chairman*

**Dr. M. Nazmul Karim**

806 742-3553

naz.karim@ttu.edu

*Seminar Co-ordinator*

**Dr. Lenore Dai**

806 742-1757

lenore.dai@ttu.edu