



The Macrogram

Hartford Chapter of the ASM International
Build on our Strengths - Leverage our Diversity - Network to Succeed

MONTHLY MEETING – TOPIC

March 20, 2007

Topic: Connecticut is Fertile Ground for the Biofuels Revolution

Speaker: Dr. Richard Parnas
Associate Professor
Director of Chemical Engineering
Chemical, Materials and Biomolecular Engineering
University of Connecticut

Directions: Zenny's Restaurant, 625 Middle Turnpike (Route 44), Storrs/Mansfield, CT 06268
Ph: 860-429-7510
On Route 44 at the intersection of Routes 195 and 44.

Agenda:

Cocktails: 5:30-6:30 PM
Dinner: 6:30-7:30 PM
Program: 7:30-8:30 PM

Program Charges:

Regular Members - \$28.00
Retirees - \$15.00
Full Time Students - \$15.00
CMBE Students - \$10.00

Technical Chairperson: Mark Aindow

Reservations: Call Shirley at Dynamic Metals (860) 583-3336 by noon, March 15th. **Thanks!**

Abstract:



Imagine an agriculturally based energy industry in Connecticut. The increasing cost and geopolitical uncertainty of petroleum is driving changes in world energy markets. Many states are beginning to invest in new, homegrown energy alternatives, such as biofuels.

Connecticut has been active through several legislative and executive branch task forces. But it's imperative that we make the investment and act now. If we fail to act, the jobs will go to other states and we will miss an opportunity to establish our own measure of energy freedom right in our backyard.

The University of Connecticut Biofuels Consortium produces 50 gallons of biodiesel a week from restaurant waste oil for use in UConn vehicles. We estimate that 15 percent of the

state's imported petroleum fuels could be displaced if 10 percent of Connecticut's land were devoted to the cultivation of energy crops, and those crops were converted to fuels such as ethanol and biodiesel.

That is with existing technology. We estimate that the displacement of petroleum could surpass 25 percent on the same amount of land as new agricultural technologies are developed in the next decade.

Acting on this opportunity would enable us to preserve open spaces, generate jobs, reduce respiratory illness, bolster our farming sector, reduce global warming and contribute to geopolitical stability. Connecticut can do more than simply imagine it. We have a once-in-a-lifetime chance to start something new, important and beneficial in the state.

Bio:



Dr. Richard Parnas is an Associate Professor and Director of Chemical Engineering at the University of Connecticut and the head of the university's biofuels program. He has the following degrees in

Chemical Engineering: Ph.D. UCLA, M.S. UCLA, B.S. MIT. His research interests include: In-situ Membrane Diagnostics for Fuel Cells, Flow in Porous Media, New Feedstocks for the Commodity Plastics Market and Biofuels.

ASM Hartford recognizes that the Department of Chemical, Materials & Biomolecular Engineering will generate significant opportunities for cross-cutting research in many exciting areas, particularly in nanomaterials including biomaterials and nanoscale processes in biomaterials. Key to this process will be synergy forged by strong relationships with industry among the interdisciplinary fields under this new umbrella.

This is the inaugural meeting in what we hope will be an annual presentation on a topic both of interest to and helpful in building relationships among those in these disciplines.