

## CCST Seminar:

- › Thursday, September 18, 2008
- › 2:00 P.M. (refreshments available at 1:45 p.m.)
- › 366 Colburn Laboratory

### Jeffrey J. Sirola

*Past President of AIChE*

*Eastman Chemical Company*

Jeff Sirola is currently a Technology Fellow in the Eastman Research Division of Eastman Chemical Company in Kingsport, Tennessee, where he has been for 34 years. He received a B.S. in chemical engineering from University of Utah in 1967 and a Ph.D. in chemical engineering from the University of Wisconsin-Madison in 1970. His areas of interest include chemical process synthesis, computer-aided conceptual process engineering, engineering design theory and methodology, chemical process development and technology assessment, resource conservation and recovery, sustainable development and growth, artificial intelligence, non-numeric computer programming, and chemical engineering education.

Sirola is an international program evaluator and past engineering accreditation commissioner for the Accreditation Board for Engineering and Technology. He is also a trustee and past president of CACHE (Computer Aids for Chemical Engineering Education), and a member of the American Chemical Society, the American Association for Artificial Intelligence, and the American Society for Engineering Education. He has served on numerous National Science Foundation and National Research Council panels, and on the advisory boards of several journals and chemical engineering departments.

Sirola is a member of the National Academy of Engineering and was the 2005 President of the American Institute of Chemical Engineers.

### “Chemicals from Coal”

This presentation is an intertwining of two histories - the history of chemicals that have been derived from coal over the years, and also the history of Eastman Kodak and its chemical subsidiary Eastman Chemical Company, including its first adventures into coal reactions, then its exit from coal, and then its return to coal as a chemical feedstock some 25 years ago. The chemistry and engineering involved in that venture to make acetic anhydride from coal will be described in some detail. Current research to screen other processes that are becoming attractive coal-based alternatives will be discussed, including a novel superstructure optimization process economics screening application of generalized disjunctive programming.