ME DEPARTMENTAL SEMINAR

Friday, April 2, 2004

1:30pm – 2:30pm

2233 GG BROWN

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Wilmington, DE

"Industrial Analytical Science - Analysis of Nanostructures of Relevance to Catalysis in DuPont"

Catalyst-driven chemical reactions are of significant importance to chemical companies such as DuPont. In this presentation, I will address the key role of the structure of the catalyst involved in two of our processes – carbon for the synthesis of phosgene with reduced side-production of carbon tetrachloride and a family of chromium-containing compositions for the processing of halogenated hydrocarbons. The research involved with these programs clearly demonstrated the importance of the structure of the individual catalysts at the nanometer-level, and this talk will highlight the role of the corporate analytical organization in working closely with the lead researchers in these programs to successfully characterize these catalysts. Characterization of these catalysts using state-of-the-art analytical tools was a key component in the development of the necessary structure-property relationships for the respective processes as well as the appropriate intellectual property estate.