"Data Required for Predicting Reactive Chemical Pathways,"

To Mary Kay O'Connor Process Safety Center Home Page To Program details for Day 1 To Program details for Day 2



Data Required for Predicting Reactive Chemical Pathways

Dr. Sam Mannan and Dr. Ken Hall Department of Chemical Engineering Texas A&M University College Station, Texas 77843-3122

> Dr. Harry West Shawnee Engineers 1415 N Loop W, Suite 1150 Houston, Texas 77008

Paper presented at the 1st Annual Symposium of the Mary Kay O'Connor Process Safety Center, "Beyond Regulatory Compliance, Making Safety Second Nature", George Bush Presidential Conference Center, College Station, Texas March 30-31, 1998.

ABSTRACT

Extensive reactivity data for a particular mixture of chemicals at the potential operating conditions of a process under consideration are rarely available. The impact of vessel size, catalytic contaminants, and other potential reactivity parameters must be extrapolated from available data. The high cost of obtaining laboratory data on all possible combinations forces consideration of predictive techniques.

The focus of this presentation is the available reactive chemical predictive techniques and the basic thermodynamic and physical properties needed by these fundamental predictive

"Data Required for Predicting Reactive Chemical Pathways,"

methods.

To Mary Kay O'Connor Process Safety Center Home Page To Program details for Day 1 To Program Program details for Day 2