



# DIRECTOR'S CORNER



I am pleased to report that we continue to make headway in our mission and the various activities that support our mission. In the last year, four additional students completed their PhD's and three students completed their Masters degrees. These degrees contributed to advances in the understanding of many topics in process safety engineering. Equally significantly, these graduates have now moved into their careers as ambassadors of the Center spreading the mission of the Center. These research activities also led to the publication of several peer-reviewed papers and other publications. In 2005-2006, the Center research program also continued to show success: Various research activities at the Center include *Practical Risk Reduction; LNG Vapor Cloud Control and Mitigation Research; Fault Diagnosis for Plant Operations and HAZOP Design/Improvement; Quantitative Risk Analysis on Hydrolysate Post-Treatment Process; Small Business Process Safety Programs; Engineering for Sustainable Development; Propane Incident Data Collection Project; Chemical Stability and Reactivity Analysis for Storage of HAN; Safety Climate, Attitudes, and Decision Making*

During 2005-2006, the Center developed outreach programs with various national and international organizations. The Center is also maintaining an active involvement with the Reactive Chemical Alliance and Reactivity Management Roundtable. On the international front, the Center is continuing its collaborative partnerships with Korea Gas Safety Corporation and Seoul National University, both from South Korea. Currently, we have a sponsored graduate researcher from Korea and another post-doctoral research associate is expected to join the Center in September 2006. Dr. Adam Markowski from the University of Lodz in Poland finished a six-month stay at the Center. Dr. Mannan visited the University of Lodz

and established agreements for long-term research collaboration. The Center has also developed exchange programs with Universidad del Santander in Bucaramanga, Colombia and Las Universidad del Zulia in Maracaibo, Venezuela.

The Center continues to provide cost-effective short courses at various Houston locations as well as tailored courses at various plant sites throughout the United States. Recent events in industry have brought additional focus on specific areas of process safety and plant operations that need renewed and focused attention. These areas include facility siting, atmospheric venting and process upset management. To address this need, the Center organized 1-day workshops on each one of these topics. The objective was to provide an open forum for discussion of the issues, gaps in technology, and path forward.

Some of the other outreach and service activities accomplished during 2005-2006 include the following:

- Development of research collaboration with Dr. Maria Papadaki of Leeds University, United Kingdom
- Review and input to the Government Accountability Office report on Chemical Infrastructure Protection
- Review of the National Academy report on, "Terrorism and Chemical Infrastructure – Protecting People and Reducing Vulnerabilities."
- Provide input to curriculum and program development at the University of Missouri-Rolla.
- Development and implementation of Ethics training course as required by Texas Administrative Code
- Coordination of research and other activities with CCPS

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- Continuing collaboration and exchange programs with organizations in Canada, Columbia, India, Indonesia, Japan, Mexico, Poland, Qatar, South Korea, United Kingdom, and Venezuela.

The Center also maintains close relationship and participates in the activities of many professional organizations as well as government agencies. These include the Agency for Toxic Substances and Disease Registry, the American Institute of Chemical Engineers, the American Society of Safety Engineers, the International Institute of Ammonia Refrigeration, the National Fire Protection Association, the Occupational Safety and Health Administration, the UK Health and Safety Executive, the UK Institute of Chemical Engineers, the US Chemical Safety and Hazard Investigation Board, and US Environmental Protection Agency.

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