2010 Review/ 2011 Look Ahead

In January of every year, the Center staff and I set out goals/initiatives for the coming year. Our Steering Committee, on a continuous basis, has the opportunity to give input to our activities as well. So, based on all the input, we had several good ideas and directions to pursue. In this Director’s Corner, I would like to point out the successes we have had and the new directions we chose. For 2011, we will convene again looking for new initiatives and building on those we started to grow in 2010.

We took an overall view of the Center activities: Research Activities; Service and Outreach; Training Activities; and Education. Although all areas had improvements and activities during this past year, our research initiatives have been the area with most activities. In March, with the guidance of the Advisory Council we began looking for ways to communicate our expertise in upstream research activities. As many of you are aware, the current research for onshore safety management systems could be adapted for application to offshore processes. This includes holistic process safety management systems; development and implementation of inherently safer process methods; systematic identification and evaluation of risk; process fault diagnosis and recovery; flash points and combustion regions of fluid mixtures; application of computational fluid dynamics for evaluation of congestion and potential for detonation; and formation and flammability behavior of aerosols. Research needs we identified that are unique for the offshore industry include innovative offshore technology, such as 3D seismic analysis and steerable drilling for deepwater production and operations. The goals of such research are to integrate the concepts of process safety into the design and operation of offshore platforms and use this to improve their safety performance such that the unit/process is not vulnerable to certain failures. Areas of research that we still need to address include structural integrity of risers/pipelines; layers of protection; risk assessment and consequence analysis using CFD; novel recovery methods of H₂S; resilient operation of deep-water drilling; human error and safety culture; and novel methods for clean-up of spills. In an effort to expand our expertise and offerings in this area with research to Outreach and Service and Training, MKOPSC partnered in August 2010 with GexCon, one of our Consortium Member companies, to offer a new continuing education class entitled, Gas Explosion Hazards on Offshore Facilities. With over 75 participants, this partnership proved to be a great success, and we will be offering this course again in the spring.

We continue to expand our research initiatives in LNG pool fire data and modeling, extension of IST to security, facility siting using CFD modeling, flammability and flame propagation in aerosols, dust explosion characteristics; flammability limits of hydrocarbon mixtures and many other areas. Over the past couple of months, we received research ideas and had the Steering Committee vote on the research initiatives for the coming year. We had over 30 new areas to think about and vote on. In 2011, we will revisit our goals and initiatives, evaluate the top 3-5 research areas and focus on the new year.

I would like to close this Director’s Corner.
and this year with a special thank you to our Steering Committee members. As you read our newsletters over the year, you are aware of all the hard work and dedication these individuals give to the Center. In October, at the Symposium, the Steering Committee presented me with the *Cedomir “Cheddy” Sliepcevich Trailblazer Award*. At the time of the presentation, I was rendered speechless. No one on the staff at the Center or on the Steering Committee had given any hint or indication that I would be recognized. I am truly grateful to the Committee for their recognition of my efforts and work at the Center. I do what I do because I believe it is right and we are saving people’s lives. That is my mission and I thank the Committee and Mr. Michael O’Connor for the opportunity to fulfill this mission.

*M. Sam Mannan*

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