Texas Industries of the Future
And the Institute for Industrial Productivity Presents

Technology Forum: Sustaining Industrial Energy Efficiency in Process Cooling in a Potentially Water-Short Future
8:30 am-4 pm
June 19, 2013
Houston, Texas

7:30  Coffee and Visit with Exhibitors
8:30  Goals of Forum and Case for Action
      Frank Roberto, Chair, Texas IOF Advisory Committee
      ExxonMobil Chemical Co.
      Kathey Ferland, Texas Industries of the Future
      The University of Texas at Austin

Jim Quinn, Institute for Industrial Productivity

9:00  Current Situation
      Update from LyondellBasell
      Matthew Michnovicz, Principal Engineer
      Equistar Chemicals, LP, a LyondellBasell Industries Company

9:45  Clarifying the Situation
      Attendee go-round on following questions:
      • What is your biggest concern and challenge with respect to the energy impacts of water availability/quality?
      • How does your plant currently use water?
      • What is expected to happen to your water source over time (quantity and quality)?
      • How will this impact your plant cooling or plant expansion plans?
      • What are you doing to manage this threat?
      • Which technologies for process cooling are you evaluating?

10:45  The Big Picture on Research and Evaluating Trade-offs

Potential Game Changing Cooling Technology Development for Power Plant Water Conservation
Electric Power Research Institute
Jessica Shi, Ph.D.  Technical Lead, Technology Innovation Water Conservation Program

*Metrics for Evaluating Alternatives in a Typical Chemical Plant*
Johnson Controls, Inc.
Tom Carter, P.E.  Senior Program Manager, Heat Rejection Technology

11:45  *Lunch Provided. Brady’s Landing Buffet*
Visit with exhibitors and speakers

12:45  *Process Cooling Technologies, Part 1*

*Evaporative Cooling Systems*
Phelps Engineering, Pete Phelps

*Air-cooled Heat Exchangers*
Hudson Products Corporation
Robert J. (Bob) Giammaruti, VP & GM - FIN-FAN® Air-Cooled Heat Exchangers

*EVAPCO Dual Coil Cooler*
Hunton Specialty, Ron Sheppard

1:35  *Process Cooling Technologies, Part 2*

*Advanced Dew Point Cooling Tower Fill*
Gas Technology Institute
Yaroslav Chudnovsky, Ph.D.  Senior R&D Staff, End-Use Industrial Solutions

*Wet Surface Air Coolers*
Niagara Blower
Chuck Marchetta, Senior Applications Engineer

*Thermosyphon Cooler Hybrid System*
Johnson Controls, Inc.
Tom Carter, P.E.  Senior Program Manager, Heat Rejection Technology

2:40  *Break Out Groups: Discussion on Next Steps*

3:40  *Report Out and Closing*

4:00  *Adjourn*