

T. MICHAEL O'CONNOR

Research Associate
Mary Kay O'Connor Process Safety Center
Texas A&M University

EDUCATION

B.S., 1977, Chemical Engineering, University of Missouri, Rolla.

POSITIONS HELD

M.W. Kellogg, June 1977-July 1992.

President, O'Connor Ventures, Inc., August 1992- to present

OTHER ACHIEVEMENTS

US Patent Number 4,726,826 - Method for Partial Condensation of Hydrocarbon Gas Mixtures for Use in LNG Plants

US Patent Number 5,362,454 - High Temperature Heat Exchanger

Chairman, Shellside Flow and Vibration Sub-Committee, Heat Transfer Research Institute, 1989-1992.

Board Member, Heat Transfer Research Institute, June 2004-present.

Member, Advisory Council, Look College of Engineering, Texas A&M University, 1999-present

Member, Advisory Council, Artie McFerrin Department of Chemical Engineering, Texas A&M University, 1999-present

PROFESSIONAL AFFILIATIONS

American Institute of Chemical Engineers

National Fire Protection Association

PEER-REVIEWED PUBLICATIONS

1. Mannan, M.S., T.M. O'Connor, and H.H. West, "Accident History Database: An Opportunity," Environmental Progress, vol. 18, no.1, Spring 1999, pp. 1-6.

2. Mannan, M.S., W.J. Rogers, M. Gentile, and T.M. O'Connor, "Inherently Safer Design: Implementation Challenges Faced by New and Existing Facilities," *Hydrocarbon Processing*, vol. 82, no. 3, March 2003, pp. 59-61.
3. Anand, S., N. Keren, M.J. Tretter, Y. Wang, T.M. O'Connor, and M.S. Mannan, "Harnessing Data Mining to Explore Incident Databases," *Journal of Hazardous Materials*, vol. 130, no. 1-2, March 2006, pp. 33-41.
4. Olive, C., T.M. O'Connor, and M.S. Mannan, "Relationship of Safety Culture and Process Safety," *Journal of Hazardous Materials*, vol. 130, no. 1-2, March 2006, pp. 133-140.
5. Mannan, M.S., T.M. O'Connor and N. Keren, "Patterns and Trends in Injuries Due to Chemicals Based on OSHA Occupational Injury and Illness Statistics," *Journal of Hazardous Materials*, vol. 163, no. 1, April 2009, pp. 349-356.

UNREFEREED PUBLICATIONS and TECHNICAL MEETING PROCEEDINGS

1. Mannan, M.S., M. Gentile, and T.M. O'Connor, "Chemical Incident Data Mining and Application to Chemical Safety Analysis," Proceedings of the CCPS 2001 International Conference and Workshop, Toronto, Ontario, Canada, October 2-5, 2001, pp. 137-156.
2. Anand, S., N. Keren, M.J. Tretter, Y. Wang, T.M. O'Connor, and M.S. Mannan, "Harnessing Data Mining to Explore Incident Databases," *Proceedings of the 7th Annual Mary Kay O'Connor Process Safety Center Symposium – Beyond Regulatory Compliance: Making Safety Second Nature*, College Station, Texas, October 26-27, 2004, pp. 250-267.
3. Olive, C., T.M. O'Connor, and M.S. Mannan, "Relationship of Safety Culture and Process Safety," *Proceedings of the 7th Annual Mary Kay O'Connor Process Safety Center Symposium – Beyond Regulatory Compliance: Making Safety Second Nature*, College Station, Texas, October 26-27, 2004, pp. 432-444.
4. Mannan, M.S., H.H. West, N. Keren, and T.M. O'Connor, "Process Safety Issues for Small Businesses," *Proceedings of Hazards XVIII, Institution of Chemical Engineers*, Manchester, United Kingdom, November 22-25, 2004.

MAJOR REPORTS

1. "National Chemical Safety Assessment Report - 2001," Mary Kay O'Connor Process Safety Center, College Station, Texas, April 2002

2. "Challenges in Implementing Inherent Safety Principles in New and Existing Chemical Processes," White Paper, Mary Kay O'Connor Process Safety Center, College Station, Texas, August 2002.
3. "Challenges of Regulating or Implementing a Reactive Chemicals Hazard Management Program," Comments provided to the United States Chemical Safety and Hazard Investigation Board, Reactive Chemicals Public Hearing, Houston, Texas, September 17, 2002.
4. "Best Practices in Prevention and Suppression of Metal Packing Fires," Mary Kay O'Connor Process Safety Center, College Station, August 2003.
5. Propane Incident Data Collection Project, prepared for the Propane Education and Research Council, November 2005.
6. "Developing a Roadmap for the Future of National Hazardous Substances Incident Surveillance," White Paper, Mary Kay O'Connor Process Safety Center, College Station, Texas, May 2009

BIOGRAPHICAL INFORMATION

Mr. T. Michael O'Connor has 25 years of wide-ranging experience covering process design of chemical plants and refineries, cryogenic processes, safety engineering, incident databases, risk analysis, and correlation of extreme events.

After obtaining his BS in Chemical Engineering, Mr. O'Connor served in various capacities at M.W. Kellogg from 1977-1992. His primary interest areas during his work at M.W. Kellogg were high temperature heat exchangers and furnaces in ethylene and ammonia plants, heat exchangers and heat transfer applications for LNG liquefaction, metallurgy associated with these applications, and finite element analysis of LNG tank floors. His work led to two patents, one for a Method for Partial Condensation of Hydrocarbon Gas Mixtures for Use in LNG plants, and another one for High Temperature Heat Exchangers

Mr. O'Connor received his B.S. in chemical engineering from the University of Missouri in Rolla, Missouri in 1977.