



CHEMICAL AND BIOLOGICAL ENGINEERING DEPARTMENT SEMINAR SERIES

Six Sigma and Innovative R&D

Presented by: Dr. Jane C. Li, NL Chemical Technology, Inc.

Time: Wednesday, March 4; 3:15 – 4:30 pm

Location: Perlstein Hall Auditorium

Abstract

In the last decade, Six Sigma quality management system has been implemented in most of SP500 companies, as a management strategy focused on improving efficiency, decreasing cost, increasing speed to market, and improving product and process quality. Many companies have integrated Six Sigma into their company culture. In other words, it has become “a way of life” for conducting business and R&D.

For R&D, Six Sigma provides a framework for disciplined quantitative problem solving and decision making, and strategies for improving R&D cycle time, more robust manufacturing, and higher profit margins.

In addition to the important financial metrics used to gauge the benefits of applying Six Sigma, Six Sigma effectiveness in R&D is also measured by the explicit knowledge generated, effective data-driven reviews with the use of stage-gate system, and improved project success rates.

Examples of how Six Sigma enhanced execution of business strategies in speeding up R&D innovations will be presented and discussed.

Biography

Dr. Jane Li is the vice president of NL Chemical Technology, Inc., Mount Prospect, Illinois. It is a company focused on the development of advanced membrane technology for water treatment. Previously, she was director of Six Sigma and Statistical Science center at UOP Company, Des Plaines, Illinois. Under her leadership at UOP, Six Sigma initiative grew from manufacturing to R&D and to business processes throughout the company. It became a strategic imperative for the company and created significant business value. Prior to joining UOP in 1981, she was the chief statistician and a manager at Exxon Chemical company, and was on the faculty of Rutgers University.

Dr. Li holds a Ph.D. degree in applied statistics from Rutgers University, New Brunswick, NJ and BS degree in Chemistry and mathematics from Hunter College, New York, NY. She and her husband, Dr. Norman Li, have two married children, Rebecca and David, both are chemical engineers.