

# International Summit on Industrial Engineering

December 08-10, 2014 DoubleTree by Hilton Hotel San Francisco Airport, USA



*Susan Lu*

Binghamton University, SUNY, USA

## Smart sensors in healthcare

Smart or intelligent sensors have played an important role in different industries. In the recent years, research on smart medical sensors is gaining increasing attention for health screening, diagnosis, monitoring, and treatment purposes, such as glucose monitoring, cancer screening, and automatic drug delivery. The coupling of sensor technology with nanotechnology, microelectromechanical systems (MEMS), flexible electronics, smart phones, and wireless sensor networks are providing great opportunities for improving health care. This talk will review new technologies, products, and research in medical sensors and their applications in improving health care efficiency. It will especially focus on the research of portable, non-invasive, smart breath sensors, which are becoming increasingly desirable for monitoring and detecting different diseases. The successful research and development of new medical smart sensors will rely on collaborative efforts from multidisciplinary teams, of which the role of research in industrial engineering will be presented.

## Biography

Susan Lu received the BS degree in mechanical engineering from Hebei University, Hebei, China, the MS degrees in mechanical engineering from Tianjin University, Tianjin, China, and the PhD degree in industrial engineering from Texas Tech University, Lubbock, respectively. She is an Associate Professor with the Department of Systems Science and Industrial Engineering, State University of New York at Binghamton, Binghamton, NY. Her current research interests include solar cell reliability and manufacturing process optimization, pattern recognition for sensor array system. Lu is a member of the IIE and Alpha Pi Mu.

[Slu@binghamton.edu](mailto:Slu@binghamton.edu)