



## SYMPOSIUM

# Membrane Technologies for Continuous API Manufacturing

New Jersey Institute of Technology (NJIT), Newark, N.J.

June 12, 2019

- 8:45 a.m.** **Welcome**  
*Kamalesh K. Sirkar, Department of Chemical and Materials Engineering, NJIT*  
*Fadi Deek, Provost, NJIT*  
*Atam P. Dhawan, Senior Vice Provost for Research, NJIT*
- 9 a.m.** **Quality Consideration for Continuous API Manufacturing**  
*Tom O'Connor, Office of Testing and Research/Office of Pharmaceutical Quality, FDA, Silver Spring, Md.*
- 9:30 a.m.** **Membrane Technologies for Continuous API Manufacturing**  
*Kamalesh K. Sirkar, NJIT*
- 10 a.m.** **Continuous Generation of Anhydrous tert-Butyl Hydroperoxide and Its Application in Flow Oxidation**  
*Bryan Li, Pfizer, Groton, Conn.*
- 10:20 a.m.** **Coffee Break**
- 10:30 a.m.** **Continuous Single and Multistage Extraction for Flow Chemistry Applications**  
*Andrea Adamo, Zaiput Flow Technologies, Waltham, Mass.*
- 10:50 a.m.** **Perfluoropolymer Membranes for Organic Solvent Nanofiltration and Pervaporation**  
*Ken Pennisi, Compact Membrane Systems, Newport, Del.*
- 11:15 a.m.** **Applications of PTFE Hollow Fiber Membrane Separations Contactors for Degassing and Concentration in Pharmaceutical Applications**  
*Amir Ghobadi, Markel Corporation, Plymouth Meeting, Pa.*
- 11:35 a.m.** **Evonik's Organic Solvent Nanofiltration (OSN) Membranes: Enabling Continuous Processing in Pharmaceutical Applications**  
*Kumar Abhinava, Evonik Corporation, Lafayette, Ind.*
- 12 p.m.** **Lunch**
- 1 p.m.** **Inorganic Membranes: Preparation, Characterization and Application in Conventional and Reactive Separations**  
*Theodore Tsotsis, University of Southern California, Los Angeles, Calif.*
- 1:30 p.m.** **Gore Technologies for Chemical Reaction and Separation**  
*Gary Harp, W.L. Gore & Associates*
- 1:55 p.m.** **Reflections on Membranes for API Production-Open Forum**  
*Kamalesh K. Sirkar, NJIT*