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**PROFESSIONAL PREPARATION:** B.S., Chemical Engineering, National Technical University of Athens, Greece, 1974; M.S., Chemical Engineering, University of Illinois, Urbana, 1976; Ph.D., Chemical Engineering, University of Illinois, Urbana, 1978.

**APPOINTMENTS:** Esso-Pappas Refinery in Salonica, Greece, Summer 1972; British Steel Corporation in Consett, England, Summer 1973; Research Assistant, Department of Chemical Engineering, University of Illinois, Urbana, Illinois, 1974-1978; Research Associate, Pittsburgh Energy Technology Center of DOE, Summer 1980; Visiting Associate Professor, Department of Chemical Engineering, University of Houston, Summer 1983; Chevron Visiting Associate Professor, Department of Chemical Engineering, California Institute of Technology, Spring 1986; Research Associate, Hydrocarbon Research Institute, University of Southern California, 1987-2000; Co-Founder and Member of the Executive Committee, Center for Research in Environmental Sciences, Policy and Engineering (ESPE), University of Southern California, 1992-2001; Assistant Professor, Department of Chemical Engineering, University of Southern California, 1978-1983; Associate Professor, Department of Chemical Engineering, University of Southern California, 1983-1988; Professor, Department of Chemical Engineering, University of Southern California, 1988-1992; Robert E. Vivian Professor of Energy Resources, University of Southern California, 1992-present; Visiting Scientist, Laboratoire des Matériaux et Procédés Membranaires, Montpellier, France, Spring 2000; Chair Mork Family Department of Chemical Engineering and Materials Science, 2005-2011.

**RESEARCH/TEACHING INTERESTS:** Professor Tsotsis' research interests are in the areas of reaction engineering, reactor design, membrane and adsorbent preparation/characterization, and the modeling of transport in complex porous media. He is the author/co-author of over two hundred and forty technical publications, and several book chapters. He has authored one book and edited two proceedings volumes. He also holds seven U. S. and one European patents. He has served as the teacher/mentor of countless undergraduates, 25 research MS, 65 PhD, and 14 post-doctoral students, with careers in academia, government and industry.

**HONORS:** Greek Government Undergraduate Scholarship Award (4 times); National Student Award of the Greek Chemical Engineers, 1974; Oak Ridge Associated Universities Fellowship, 1980; Chevron Young Faculty Award, USC, 1981; USC Research Scholar, 1982-1983; Welch Foundation Fellow, 1983; Chevron Visiting Professor, Caltech, Spring 1986; UOP Invitational Lectureship, 1992; Fellow of the AIChE, 2009; OCEC President's Award, 2011; Ed Ma Lectureship, WPI, 2017.

### **SELECT PUBLICATIONS (2000- Present):**

#### **I. PAPERS IN PEER-REVIEWED JOURNALS (out of 232 total; ISI h-Index 48; Google h-Index 67; Google i10-Index 227).**

1. Xu, L., Tsotsis T.T., and Sahimi, M., Nonequilibrium Molecular Dynamics Simulation of Transport and Separation of Gases in Carbon Nanopores. II. Binary and Ternary Mixtures and Comparison with Experimental Results, *J. Chem. Phys.*, 112, 910, 2000.
2. Ghassemzadeh, J., Xu, L., Tsotsis, T.T., and Sahimi, M., "Statistical Mechanics and Molecular Simulation of Adsorption in Microporous Materials: Pillared Clays and Carbon Molecular Sieve Membranes, *J. Phys. Chem. B*, 104, 3892, 2000.

3. Suwanmethanon, V., Goo, E., Johnston, G., Liu, P.K.T., Sahimi, M., and Tsotsis, T.T., "Porous SiC Sintered Substrates for High Temperature Membranes for Gas Separations," *Ind. Eng. Chem. Res.*, 39, 3264, 2000.
4. Sedigh, M.G., Jahangiri, M., Liu, P.K.T., Sahimi, M., and Tsotsis, T.T., "Structural Characterization of Polyetherimide-Based Carbon Molecular Sieve Membranes," *AIChE J*, 46, 2245, 2000.
5. Xu, L., Tsotsis T.T., and Sahimi, M., "Non-equilibrium Molecular Dynamics Simulations of Transport and Separation of Gas Mixtures in Porous Materials," *Phys. Rev. E*, 62, 6942, 2000.
6. Qin, W., Ren, J.Y., Egolfopoulos, F.N., Wu, S., Zhang, H., and Tsotsis, T.T., "Oxygen Composition Modulation Effects on Flame Propagation and NO<sub>x</sub> Formation in Methane-Air Premixed Flames," *Proceedings of the of the Combustion Institute Conference (International)*, 28, 1825, 2000.
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11. Qin, W., Egolfopoulos, F.N. and Tsotsis, T.T., "Fundamental and Environmental Aspects of Landfill Gas Utilization for Power Generation," *Chem. Eng. J.*, 82, 157, 2001.
12. Xu, L., Tsotsis T.T. and Sahimi, M., "Statistical Mechanics and Molecular Simulation of Adsorption of Ternary Gas Mixtures in Nanoporous Materials," *J. Chem. Phys.* 114, 7196, 2001.
13. Ren, J.Y., Egolfopoulos, F.N., and Tsotsis, T.T., "Reactive Membrane Separations for Power Generation Applications. Pollutant Emissions Aspects," *Ind. Eng. Chem. Res.*, 40, 4155, 2001.
14. Ren, J.Y., Egolfopoulos, F.N., and Tsotsis, T.T., "NO<sub>x</sub> Emission Control of Lean CH<sub>4</sub>/Air Combustion with the Addition of a CH<sub>4</sub> Reforming Mixture," *Combustion Science and Technology*, 174, 181, 2002.
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19. Ren, J.Y., Fan, Y., Egolfopoulos, F.N. and Tsotsis, T.T., "Membrane-Based Reactive Separations for Power Generation Applications: Oxygen Lancing," *Chem. Eng. Sci.* 58, 1043, 2003.
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