**James F. Rathman**

Professor

Chemical & Biomolecular Engineering

151 W. Woodruff Ave., CBEC #516

rathman.1@osu.edu

**Education:** Ph.D. Chemical Engineering (University of Oklahoma, 1987), M.S., Chemical Engineering (Univer-sity of Oklahoma, 1985), B.S., Chemistry (Montana State University, 1979)

**Professional Experience**

1991 to present: Professor of Chemical & Biomolecular Engineering, The Ohio State University

2008 to present: Managing Director and Co-founder, Altamira LLC, Columbus, OH

2000 to present: Consultant to numerous companies and regulatory agencies in U.S., Europe and Asia in molecular informatics, chemical toxicity, and statistical design & analysis of experiments.

1987-1991: The Clorox Company, Pleasanton, CA.

1979-1981: Conoco, Inc., Ponca City OK.

**Honors and Awards:** The Ohio State University Alumni Award for Distinguished Teaching (1996), The Ohio State University College of Engineering Charles E. MacQuigg Outstanding Teaching Award (1995, 2001, 2005, 2011), The Ohio State University College of Engineering Lumley Award for Excellence in Research (1997), Lectureship Award, Japan Research Institute of Material Technology (2002)

# Professional Organizations: American Institute of Chemical Engineers (AIChE), American Chemical Society (ACS), American Society for Engineering Education (ASEE)

# Research: Molecular informatics, computational modeling of chemical toxicity, machine learning and statistical data analysis, molecular self-assembly, interfacial phenomena and colloidal systems.

Research funded by U.S. National Science Foundation, Ohio Technology Action Fund, U.S. Office of Naval Research, American Chemical Society Petroleum Research Fund, Anatrace Inc., NJIT Emission Reduction Research Center, USDA, AstraZeneca (Mölndal, Sweden), L’Oreal (Paris, France), Altamira LLC.

Published more than 60 papers in technical journals and books (overall h-index 22), and presented talks at many professional conferences and symposia. Most recent activity:

Yang, C.; Tarkhov, A.; Marusczyk, J.; Bienfait, B.; Gasteiger, J.; Kleinoeder, T.; Magdziarz, T.; Sacher, O.; Schwab, C.; Schwoebel, J.; Terfloth, L.; Arvidson, K.; Richard, A.; Worth, A.; Rathman, J. *Journal of Chemical Information and Modeling*, *55* (3), 2015. “*A new publicly available chemical query language, CSRML, to support chemotype representations for application to data mining and modeling*”

Rathman, J.; Mostrag-Szlichtyng, A.; Bienfait, B.; Marusczyk, J.;, Sacher, O.; Kleinoeder, T.; Tarkhov, A.; Hrsitozov, D.; Schwab, C.; Yang, C. Annual Meeting of the Society of Toxicology, San Diego, CA, March, 2015. “*Assessing skin sensitization potential by combining multiple information types in a quantitative weight-of-evidence approach”*

Rathman, J. QSAR 2014: 16th International Workshop on QSAR in Environmental and Health Sciences, Milan, Italy, June 16-20, 2014 “*A quantitative weight-of-evidence approach for estimating uncertainty and integrating alerts, read-across and QSAR”*

# Professional and University Service: Associate Editor, Journal of the American Oil Chemists Society, regular reviewer for many technical journals, NSF proposal review panels. Chair, Chemical & Biomolecular Engineering (CBE) Curriculum Committee, CBE B.S. Program Accreditation Review Leader (1999, 2005, 2011), CBE Semester Conversion Team Leader (2010-12), CBE Computer Committee, College of Engineering Faculty Misconduct Committee.

# University Governance: Faculty Council Chair 2011-12 and Vice-chair 2010-11, University Senate Steering Committee 2008-10 (Chair 2009-10), Council on Academic Affairs 2012-15 (Chair 2014-15), Senate Fiscal Committee (member, 2015-present), Faculty Leadership Team 2009-12, Rules Committee 2013-14, University Faculty Senator representing College of Engineering 2008-14, Chair of the ad-hoc committee appointed to review proposal to merge the OSU colleges of art and sciences (2010).