

JOHN MICHAEL WIENCEK

Professor & Dean
Department of Chemical and Biomedical Engineering
University of South Florida
Tampa, Florida 33620-5350
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EDUCATION:

- (1/86-7/89) **Case Western Reserve University**
Ph.D. Chemical Engineering, August 1989
Liquid Membrane Separations Employing Nonionic Microemulsions
Dissertation Advisor: Prof. Syed Qutubuddin
- (7/84-12/85) **Case Western Reserve University**
M.S. Chemical Engineering, December 1985
Solubilization Studies and Liquid Membrane Separations Using Nonionic Microemulsions
Thesis Advisor: Prof. Syed Qutubuddin
- (9/79-6/84) **University of Cincinnati**
B.S. Chemical Engineering, June 1984
Graduated from Co-operative education program, Cum Laude

EXPERIENCE:

- (7/07- present) **College of Engineering**
The University of South Florida, Tampa, Florida.
Dean
- (7/07- present) **Department of Chemical Engineering**
The University of South Florida, Tampa, Florida.
Professor
- (6/03 -7/07) **Department of Chemical and Biochemical Engineering**
The University of Iowa, Iowa City, Iowa.
Departmental Executive Officer (Chair)
- (7/00 -7/07) **Department of Chemical and Biochemical Engineering**
The University of Iowa, Iowa City, Iowa.
Professor
- (1/95 – 7/00) **Department of Chemical and Biochemical Engineering**
The University of Iowa, Iowa City, Iowa.
Associate Professor
- (7/94-1/95) **Department of Chemical and Biochemical Engineering**
Rutgers University, Piscataway, NJ.
Associate Professor

EXPERIENCE (cont):

- (7/89-7/94) **Department of Chemical and Biochemical Engineering**
Rutgers University, Piscataway, New Jersey.
Assistant Professor
- (7/84-7/89) **Department of Chemical Engineering**
Case Western Reserve University, Cleveland, Ohio.
Graduate Student (NASA Fellow)
- (3/81-9/84) **Procter and Gamble, Co.**
11530 Reed Hartman Hwy., Blue Ash, Ohio.
Industrial Chemicals Division

AWARDS AND HONORARY SOCIETIES

- Professional:
- Commencement Speaker, University of Iowa College of Engineering (Dec 2006)
 - The University of Iowa College of Engineering Teaching Award (2006)
 - CIC Academic Leadership Program Fellow (2006-7)
 - CIC Departmental Executive Officer Training Program (2003)
 - The University of Iowa Faculty Scholarship Award (1998-2001)
 - The University of Iowa Panhellenic Teaching Award (1997)
 - Rutgers College Parents Association Outstanding Teacher Award (1994)
 - Faculty Academic Service Award (1990, 1993)
 - Includes award of merit based salary increase (above and beyond normal salary increases)
 - DOE Environmental Restoration & Waste Management Jr. Faculty Award (1993-1994) - \$100,000 Award to be used for Research and Teaching
 - Henry Rutgers Research Fellow (1989-1991) - \$20,000 Award used for Research
- Graduate:
- NASA Graduate Student Researcher Fellowship (1987-1989)
 - Alumni Award Recipient (1986, 1987)
 - Certified Engineer in Training, Ohio (1985)
- Undergraduate:
- Outstanding Chemical Engineer Co-op Student (1984)
 - Achievement Professional Practice Award (1984)
 - Phi Kappa Tau Scholastic Award (1984)
 - University of Cincinnati, Engineering Honors Scholarship (1984)
 - Phi Kappa Tau Outstanding Man on Campus (1982)
 - Polonia Foundation of Ohio Engineering Scholarship
 - Tau Beta Pi Engineering Honorary
 - Sophos Scholastic Honorary
 - Alpha Lambda Delta Scholastic Honorary
 - Dean's List (8 times)
 - Interfraternity Council Scholarship Certificate of Merit (8 times)

PEER REVIEWED PUBLICATIONS

53. S. Murugesan, J.M. Wienczek, R. Ren and R.J. Linhardt, “*Benzoate-based room temperature ionic liquids—thermal properties and glycosaminoglycan dissolution*” *Carbohydrate Polymers*, 63 268 (2006)..
52. L. Gakhar and J.M. Wienczek, “*A possible additional role of mineral oil in successful flash cooling*” *J of Applied Crystallography*, 38 945 (2005).
51. W.F. Jones, M.A. Arnold, and J.M. Wienczek, “*Precipitant-controlled growth of lysozyme crystals in sodium thiocyanate*” *Crystal Growth & Design*, 4 1387 (2004).
50. L.T. Nguyen, J.M. Wienczek, and L.E. Kirsch, “*Characterization methods for the physical stability of biopharmaceuticals*,” *PDA Journal of Pharmaceutical Science and Technology*, 57 429 (2003).
49. S.-Y. Hu, J. Li and J.M. Wienczek, “*Feasibility of Surfactant-Free Supported Emulsion Liquid Membrane Extraction*,” *J. of Colloid and Interface Science*, 266 430 (2003).
48. S. Murugesan, N. Karst, T. Islam, J.M. Wienczek and R.J. Linhardt, “*Dialkyl Imidazolium Benzoates – Room Temperature Ionic Liquids Useful in the Peracetylation and Perbenzoylation of Simple and Sulfated Saccharides*,” *Synlett* 9 1283 (2003).
47. P.J. Loll, C. Hitscherich, V. Aseyev, M. Allaman, and J.M. Wienczek, “*Assessing Micellar Interaction and Growth in Detergent Solutions Used to Crystallize Integral Membrane Proteins*,” *Crystal Growth & Design* 2 533 (2002).
46. C.E. Green, J.M. Wienczek, and M.A. Arnold “*Multivariate Calibration Models for Lysozyme from Near-Infrared Transmission Spectra in Scattering Solutions of Monodisperse Microspheres*,” *Analytical Chemistry* 74 3392 (2002).
45. D.J. Schibli, H.N. Hunter, V. Aseyev, T.D. Starner, J.M. Wienczek, P.B. McCray, B.F. Tack, and H.J. Vogel “*The Solution Structure of the Human β -Defensins Lead to a Better Understanding of the Potent Bactericidal Activity of HBD3 against Staphylococcus aureus*,” *The Journal of Biological Chemistry* 277 8279 (2002).
44. J.M. Wienczek, “*Crystallization of Proteins*,” invited Chapter 12 of Handbook of Industrial Crystallization (2nd Edition), edited by Allan S. Myerson, Butterworth-Heinemann Publishers (Newton, MA) p267-285 (2002).
43. C. Hitscherich, V. Aseyev, J.M. Wienczek and P.J. Loll, “*Effects of PEG on Detergent Micelles: Implications for the Crystallization of Integral Membrane Proteins*,” *Acta Crystallographica D* . D57 1020 (2001).
42. J. Li, S.Y. B. Hu and J.M. Wienczek, “*Development of a Supported Emulsion Liquid Membrane System for Propionic Acid Separation in a Microgravity Environment*,” *Biotechnology and Bioprocess Engineering* 6 426 (2001).
41. M.V. Sawai, H.P. Jia, L. Liu, V. Aseyev, J.M. Wienczek, P.B. McCray, T. Ganz, W.R. Kearney, and B.F. Tack, “*The NMR Structure of Human Beta-Defensin-2 Reveals a Novel Alpha-Helical Segment*,” *Biochemistry* 40 3810 (2001)..
40. S.-Y.B. Hu, J.M. Wienczek and M.A. Arnold, “*Application of Near-Infrared Spectra to Temperature-Controlled Protein Crystallization – A Simulation Study*,” *Applied Biochemistry and Biotechnology* 94 179 (2001).
39. W.F. Jones, J.M. Wienczek and P.A. Darcy, “*Improvements in Lysozyme Crystal Quality via Temperature-Controlled Growth at Low Ionic Strength*,” *Journal of Crystal Growth* 232 221 (2001).
38. P.J. Loll, M. Allaman, and J.M. Wienczek, “*Assessing the Role of Detergent-Detergent Interactions in Membrane Protein Crystallization*,” *Journal of Crystal Growth* 232 432 (2001).

PEER REVIEWED PUBLICATIONS (continued)

37. J.T. Olesberg, M.A. Arnold, S.-Y. Hu and J.M. Wiencek, "*Temperature Insensitive Near-Infrared Method for Determination of Protein Concentration during Protein Crystal Growth*," *Analytical Chemistry* 72 4985 (2000).
36. C. Hitscherich, J. Kaplan, M. Allaman, J.M. Wiencek and P.J. Loll, "*Static Light Scattering Studies of OmpF Porin: Implications for Integral Membrane Protein Crystallization*," *Protein Science* 9 1559 (2000).
35. S.-Y.B. Hu, M.A. Arnold and J.M. Wiencek, "*Temperature-Independent Near-Infrared Analysis of Lysozyme Aqueous Solutions*," *Analytical Chemistry* 72 696 (2000).
34. J.M. Wiencek and S.-Y. Hu, "*Emulsion Liquid Membrane Extraction in a Hollow-Fiber Contactor*," *Chemical Engineering & Technology* 23 551 (2000).
33. S.-Y. Hu, A. Lillquist, M.A. Arnold and J.M. Wiencek, "*Partial-Least Square Analysis of Lysozyme Near-Infrared Spectra*," *Applied Biochemistry and Biotechnology* 87 153 (2000).
32. S.-Y. Hu, and J.M. Wiencek, "*Copper - LIX 84 Extraction Equilibrium*," *Separation Science and Technology* 35 469 (2000).
31. J. M. Wiencek, "*New Strategies for Protein Crystal Growth*," *Annual Reviews of Biomedical Engineering*, 1 505 (1999).
30. J. M. Wiencek, "*Application of Microemulsions as Liquid Membranes*," Chapter 28, *Handbook of Microemulsion Science and Technology*, Eds. P. Kumar & K.L. Mittal, Marcel Dekker (NY), p. 797-810 (1999).
29. P.A. Darcy and J.M. Wiencek, "*Identifying Nucleation Temperatures via Differential Scanning Calorimetry*," *Journal of Crystal Growth* 196 243 (1999).
28. P.A. Darcy and J.M. Wiencek, "*Estimating Lysozyme Growth Rates and Solubility from Isothermal Calorimetry*," *Acta Crystallographica* D54 1387 (1998).
27. S.-Y. Hu and J.M. Wiencek, "*Emulsion Liquid Membrane Extraction of Copper Using a Hollow Fiber Contactor*," *AIChE Journal*, 44 570 (1998).
26. M. Vasudevan and J.M. Wiencek, "*Role of the Interface in Protein Extractions Using Nonionic Microemulsions*," *J. of Colloid and Interface Science*, 186 185 (1997).
25. C. Schall and J.M. Wiencek, "*Stability of Nicotinamide Adenine Dinucleotide Immobilized to Sepharose-4B*," *Biotechnology and Bioengineering*, 53 41 (1997).
24. J.M. Wiencek and C. Schall, "*Product Recovery and Purification via Precipitation and Crystallization*," in *Handbook of Downstream Processing*, Chp 8, edited by E. Goldberg, Chapman & Hall, New York (1997).
23. C. Schall, J. Riley, E. Li, E. Arnold, and J.M. Wiencek, "*Application of temperature control strategies to the growth of hen egg-white lysozyme crystals*," *J. of Crystal Growth*, 165 299 (1996).
22. C. Schall, E. Arnold and J.M. Wiencek, "*Enthalpy of Crystallization of Hen Egg White Lysozyme*," *J. of Crystal Growth*, 165 293 (1996).
21. J.M. Wiencek, S.-Y. Hu, and B. Raghuraman, "*Use of Emulsions, Microemulsions and Hollow Fiber Contactors as Liquid Membranes*," in *Chemical Separations with Liquid Membranes* (American Chemical Society Symposium Series Number 642), Chapter 22 (1996).

PEER REVIEWED PUBLICATIONS (continued)

20. M. Vasudevan and J.M. Wienczek, "Mechanism of the Extraction of Proteins into Tween 85 Nonionic Microemulsions," *Industrial & Engineering Chemistry Research*, 35 1085 (1996).
19. N. Tirmizi, B. Raghuraman and J.M. Wienczek, "Demulsification of Oil-Water Dispersions via Hollow Fiber Membranes," *AIChE Journal*, 42 1263 (1996).
18. B. Raghuraman, N. Tirmizi, B.-S. Kim and J.M. Wienczek, "Emulsion Liquid Membranes for Wastewater Treatment: Equilibrium Models for Pb- and Cd- Diethylhexylphosphoric Acid Systems," *Environmental Science & Technology*, 29 979 (1995).
17. M. Vasudevan and J.M. Wienczek, "Protein Extraction into Nonionic Microemulsions: Effect of Surfactant Structure," *Biotechnology and Bioengineering*, 46 99 (1995).
16. K.A. Larson, J.M. Wienczek, "Mercury Removal from Aqueous Streams Utilizing Microemulsion Liquid Membranes," *Environmental Progress*, 13 253 (1994).
15. K.A. Larson, B. Raghuraman and J.M. Wienczek, "Electrical and Chemical Demulsification Techniques for Microemulsion Liquid Membranes," *Journal of Membrane Science*, 91 231 (1994).
14. C. Schall, J.M. Wienczek, M.L. Yarmush, and E. Arnold, "Lysozyme Crystallization Studies at High Pressure," *J. of Crystal Growth*, 135 548 (1994).
13. K.A. Larson, B. Raghuraman and J.M. Wienczek, "A Mass Transfer Model of Mercury Removal from Water via Microemulsion Liquid Membranes," *Industrial & Engineering Chemistry Research*, 33 1612 (1994).
12. B. Raghuraman and J.M. Wienczek, "Equilibrium Partitioning and Emulsion Liquid Membrane Separation of Heavy Metals," *Environmental Science and Technology*, 28 1090 (1994).
11. K.A. Larson, J.M. Wienczek, "Extraction of Mercury from Wastewater Using Microemulsion Liquid Membranes: Kinetics of Extraction," *Emerging Technologies in Hazardous Waste Management IV (ACS Symposium Series)*, 554 124 (1994).
10. S. Qutubuddin, J.M. Wienczek, A. Nabi, J.Y. Boo, "Hemoglobin Extraction Using Cosurfactant-Free Nonionic Microemulsions," *Separation Science and Technology*, 29 923 (1994).
9. K.A. Larson, J.M. Wienczek, "Kinetics of Mercury Extraction using Oleic Acid," *Industrial & Engineering Chemistry Research*, 32 2854 (1993).
8. B. Raghuraman and J.M. Wienczek, "Extraction with Emulsion Liquid Membranes in a Hollow Fiber Contactor," *AIChE J*, 39 1885 (1993).
7. K.A. Larson, J.M. Wienczek, "Liquid Ion Exchange for Mercury Removal from Water over a Wide pH Range," *Industrial & Engineering Chemistry Research*, 31 2714 (1992).
6. J.M. Wienczek and S. Qutubuddin, "Microemulsion Liquid Membranes: I. Application to Acetic Acid Removal From Water," *Separation Science and Technology*, 27 1211 (1992).
5. J.M. Wienczek and S. Qutubuddin, "Microemulsion Liquid Membranes: II. Copper Ion Removal from Buffered and Unbuffered Aqueous Feed," *Separation Science and Technology*, 27 1407 (1992).
4. J.M. Wienczek and S. Qutubuddin, "Solubilization in nonionic microemulsions," *Colloids and Surfaces*, 54 1 (1991).

3. J.M. Wiencek and S. Qutubuddin, "*Solubilization in Nonionic Microemulsions*," in *Surfactants in Solution*, Vol 10 (K.L. Mittal, ed.) p181 - 190 (1989).
2. J.M. Wiencek and S. Qutubuddin, "*Microemulsion versus Macroemulsion*," *Journal of Membrane Science*, 45 311 (1989).
1. J.M. Wiencek and S. Qutubuddin, "*Separation of Organics Using Microemulsions*," *Colloids and Surfaces*, 29 119 (1988).

PUBLICATIONS IN PREPARATION

C.A. Hoppe, L.T. Nguyen, L.E. Kirsch, and J.M. Wiencek, "The role of trace aggregates as seeds in glucagon gelation," to be submitted to Biophysical Journal

L.T. Nguyen, C.A. Hoppe, L.E. Kirsch, and J.M. Wiencek, "Mechanical Spectroscopy of Glucagon Gel Networks," to be submitted to Pharmaceutical Research.

L.T. Nguyen, C.A. Hoppe, L.E. Kirsch, and J.M. Wiencek, "Kinetics of Glucagon Aggregation from Total Intensity Light Scattering," to be submitted to Pharmaceutical Research.

INVITED SEMINARS

J.M. Wiencek (Speaker), "*Stable Emulsion Liquid Membranes for Water Reclamation*" Environmental Research Interdisciplinary Colloquium, University of South Florida, Tampa (September 2007).

J.M. Wiencek (Speaker), "Characterization of pH-induced Aggregation and Gelation of Glucagon," Rensselaer Polytechnic Institute, Chemical and Biological Engineering, Troy, New York (September 2006).

J.M. Wiencek (Speaker), "Bouncing light off biopharmaceuticals," Optical Science and Technology Center, The University of Iowa, Iowa City, Iowa (April 2006).

J.M. Wiencek (Speaker), "Glucagon Fibrillization and the Role of Large Molecular Weight Precursors," Eli Lilly Co., Indianapolis, Indiana (November 2005).

J.M. Wiencek (Speaker), "Light Scattering Studies of Glucagon Association and Aggregation," MannKind Corporation, Danbury, Connecticut (October 2005).

J.M. Wiencek (Speaker), "Engineering At Iowa: Engineering and Something More," Southern Yangtze University, Wuxi, China (October 2005).

J.M. Wiencek (Speaker), "Collaborative Learning as Part of a Program for Enhanced Design Experience (PEDE)," Genencor Danisco, Wuxi, China (October 2005).

J.M. Wiencek (Speaker), "Simplified Approaches to Protein Crystallization," China, Japan USA Joint Chemical Engineering Conference, Beijing, China (October 2005).

J.M. Wiencek (Speaker), "*Protein Crystals for XRD: How to Optimize Crystal Growth to get High Resolution Structures*" Sarnoff Research Corporation, Princeton, NJ, (Jan 8, 2004).

J.M. Wiencek (Speaker), "*Stable Emulsion Liquid Membranes for Water Reclamation*" Engineering Foundation Conference on Water Purification and Reuse, Potsdam, Germany (June 9 - 13, 2003).

J.M. Wiencek (Speaker), "*Harvesting Low Hanging Fruit*" Chemical Engineering Department, University of Nebraska, (April 14, 2003).

J.M. Wiencek (Speaker), "*Crystallization of Integral Membrane Proteins*" Chemical and Materials Engineering Department, University of Kentucky, (January 22, 2003).

J.M. Wiencek (Speaker), "*Crystallization of Integral Membrane Proteins*" Chemical Engineering Department, Iowa State University, (December 3, 2002).

J.M. Wiencek (Speaker), "*Cryopreservation of Protein Crystals: Applications to Structural Biology*," The Whitaker Foundation Annual Conference, LaJolla, (August 10, 2001).

INVITED SEMINARS (cont)

- J.M. Wiencek (Speaker), *"Engineering Approaches to Improved Protein Crystallization,"* Department of Chemical & Environmental Engineering, Illinois Institute of Technology, Chicago, (September 13, 2000).
- J.M. Wiencek (Speaker), *"Integral Membrane Protein Crystallization: A Light Scattering Study,"* Henry E. Bent Distinguished Lecture Series, Department of Chemical & Environmental Engineering, The University of Missouri - Columbia, (April 20, 2000).
- J.M. Wiencek (Speaker), *"In Search of Highly Stable Liquid Membranes for Metal Ion Separations,"* Department of Chemical & Environmental Engineering, The University of Toledo, (October 23, 1998).
- J.M. Wiencek (Speaker), *"Protein Crystallization: Improving Resolution of Xray Structures,"* Department of Medicinal Chemistry and Pharmacy, The University of Iowa, (October 14, 1998).
- J.M. Wiencek (Speaker), *"Protein Crystallization and Other Work,"* The Center for Microgravity and Materials Research, The University of Alabama in Huntsville, (April 23, 1998).
- J.M. Wiencek (Speaker), *"Protein Crystallization: The Effects and Uses of Temperature,"* Biochemistry Department, The University of Iowa, (January 1998).
- J.M. Wiencek (Speaker), *"The Effect of Electrolyte on the Enthalpy of Crystallization of Lysozyme"* Spacebound 97, Montreal, Canada, (May 1997).
- J.M. Wiencek (Speaker), *"Protein Crystallization: Microcalorimetric Investigations & Thermally Controlled Growth"* NASA Protein Crystal Growth Conference, Panama City Beach, Florida, (April 1996).
- P.A. Darcy (Speaker) and J.M. Wiencek, *"Thermal Analysis of Protein Crystallization"* Symposia on Protein Crystallization, American Chemical Society Meeting, New Orleans, LA (March 24, 1996).
- J.M. Wiencek (Speaker), *"Effect of DMSO on Peroxidase-Catalyzed Polymerization of Cresol"* U.S. Army Edgewood Research, Development, and Engineering Center Scientific Conference on Chemical Defense Research, (November 15, 1995).
- J.M. Wiencek (Speaker), *"The Use of Emulsions, Microemulsions and Hollow Fiber Contactors as Liquid Membranes"* Symposia on Chemical Separations with Liquid Membranes, American Chemical Society Meeting, Anaheim, CA (April 1995).
- J.M. Wiencek (Speaker), *"Predictive Thermal Control of Lysozyme Crystallization"* NASA Protein Crystal Growth Conference, Panama City Beach, Florida, (April 24, 1995).
- J.M. Wiencek (Speaker), *"Liquid Membrane Technology: Applications to Metal Removal from Water"* AIChE Local Section Meeting, Iowa Chapter, Iowa City, IA (March 21, 1995).
- J.M. Wiencek (Speaker), *"Production of Protein Crystals Suitable for X-ray Diffraction Analysis: Controlling Growth Rates via Temperature Manipulations"* Fall Colloquia, Chemistry and Chemical Engineering, Polytechnic University, Brooklyn, NY (October 5, 1994).
- J.M. Wiencek (Speaker), *"Membrane-based Extraction of Metal Ions from Contaminated Water"* NIST Workshop on Environmental Separations, Boulder, Co (July 19, 1994).
- J.M. Wiencek (Speaker), *"Liquid Membrane Technology: Applications to Metal Removal From Water"* 34th Annual Spring Symposium, NJ AIChE Section, East Brunswick, NJ (May 20, 1994).
- J.M. Wiencek (Speaker), *"Thermal Optimization of Protein Crystal Growth"* NASA Protein Crystal Growth Conference, Panama City Beach, Florida, (April 21, 1994).

INVITED SEMINARS (cont)

- J.M. Wiencek (Speaker), "*Membrane-based Extraction of Metal Ions*" Brown University, Providence, RI (March 3, 1994).
- J.M. Wiencek (Speaker), "*Membrane-based Extraction of Metal Ions*" Wayne State University, Detroit, MI (March 2, 1994).
- J.M. Wiencek (Speaker), "*Membrane-based Extraction of Metal Ions*" Dept. of Energy Efficient Separation Processes Integrated Program, Dallas, Texas (January 10, 1994).
- J.M. Wiencek (Speaker), "*Efficient Separation from Dilute Solution via Driving Force Manipulation*" University of Iowa, Iowa City, Iowa, (December 9, 1993).
- J.M. Wiencek (Speaker), "*Waste Stream Cleanup by Enzymatically-Catalyzed Reaction in an Organic Solvent*" U.S. Army Edgewood Research, Development, and Engineering Center Scientific Conference on Chemical Defense Research, (November 16, 1993).
- J.M. Wiencek (Speaker), "*Thermal Optimization of Protein Crystal Growth*" NASA Protein Crystal Growth Conference, Panama City Beach, Florida, (April 26, 1993).
- J.M. Wiencek (Speaker), "*Separations for Water Treatment,*" Union Camp Inc., Princeton, NJ (May 27, 1993).
- J.M. Wiencek (Speaker), "*Novel Separation Techniques,*" DuPont Co., Wilmington, DE (April 19, 1993).
- J.M. Wiencek (Speaker), "*Emulsion Liquid Membranes for Heavy Metal Ion Separation,*" AIChE Jersey Section Meeting, Wachtung, NJ (April 13, 1993).
- J.M. Wiencek (Speaker), "*Heavy Metal Ion Recovery from Water via Microemulsion Liquid Membranes,*" AIChE Central Jersey Section Meeting, Princeton, NJ (March 16, 1993).
- J.M. Wiencek (Speaker), "*Separation Techniques Utilizing Microemulsions,*" Exxon Research and Engineering, Annandale, NJ (Oct. 1992).
- J.M. Wiencek (Speaker), "*Surfactant-Enhanced Separation Techniques,*" University of Maine, Department of Chemical Engineering, Orono, Maine, (Oct. 1991).
- J.M. Wiencek (Speaker), "*Liquid Membrane Separation Techniques,*" Corning Incorporated, Corning, NY, (June 1991).
- J.M. Wiencek (Speaker), "*Surfactant-Based Separation Techniques,*" Rutgers University Department of Chemical and Biochemical Engineering, Piscataway, NJ, (Oct. 1990).
- J.M. Wiencek (Speaker), "*Nonionic Microemulsion Liquid Membrane Separations,*" University of Cincinnati, Department of Chemical Engineering, Cincinnati, OH, (Feb. 1989).
- J.M. Wiencek (Speaker), "*Liquid Membrane Separations Using Microemulsions,*" Invited lecture at The Cleveland Engineering Society, Cleveland, Ohio, (June 1987).

PRESENTATIONS

- J. J.M. Wiencek (Speaker), "Characterization of pH-induced Aggregation and Gelation of Glucagon," Rensselaer Polytechnic Institute, Chemical and Biological Engineering, Troy, New York (September 2006).
- J.M. Wiencek (Speaker), "Bouncing light off biopharmaceuticals," Optical Science and Technology Center, The University of Iowa, Iowa City, Iowa (April 2006).
- J.M. Wiencek (Speaker), "Glucagon Fibrillization and the Role of Large Molecular Weight Precursors," Eli Lilly Co., Indianapolis, Indiana (November 2005).
- J.M. Wiencek (Speaker), "Light Scattering Studies of Glucagon Association and Aggregation," MannKind Corporation, Danbury, Connecticut (October 2005).
- J.M. Wiencek (Speaker), "Engineering At Iowa: Engineering and Something More," Southern Yangtze University, Wuxi, China (October 2005).
- J.M. Wiencek (Speaker), "Collaborative Learning as Part of a Program for Enhanced Design Experience (PEDE)," Genencor Danisco, Wuxi, China (October 2005).
- J.M. Wiencek (Speaker), "*Industrial Partners in Chemical Engineering Education*," Penford Products, Cedar Rapids, Iowa (March 2005).
- J.M. Wiencek (Speaker), "*ChemCad Overview*," Professional Seminar, UI CBE, Iowa City, Iowa (February 2005).
- S.Y. B. Hu (Speaker), J. Li, and J.M. Wiencek, "*Drop Coalescence in Hollow Fiber Membrane Modules in a Microgravity Environment*," AIChE Annual Meeting, Indianapolis, IN (Nov. 2002).
- L. Gakhar (Speaker), and J.M. Wiencek, "*Ice Formation in Flash Cooled Protein Crystals*," AIChE Annual Meeting, Indianapolis, IN (Nov. 2002).
- W.F. Jones (Speaker), and J.M. Wiencek, "*Precipitant Induced Growth of Lysozyme Crystals via Constant Supersaturation Control*," AIChE Annual Meeting, Indianapolis, IN (Nov. 2002).
- K. Parekh (Speaker), and J.M. Wiencek, "*High Pressure Cooling of Protein Crystals*," AIChE Annual Meeting, Indianapolis, IN (Nov. 2002).
- J.Li (Speaker), S.Y.B. Hu, and J.M. Wiencek, "*Solvent Toxicity Issues in the Extraction of Propionic Acid from Propionibacteria Fermentation Media*," Biocatalysis, Evolution and Metabolic Engineering Conference, Iowa City, IA (Oct 2002).
- Gakhar, L. Parekh, K. and Wiencek, J.M., "*Maintaining X-ray Diffraction Properties in Protein Crystals After Flash Cooling*," Optical Science & Technology Center Annual Meeting, Iowa City, IA (Sept 2, 2002).
- W.F. Jones (Speaker) and J.M. Wiencek, "*Precipitant based CSC Growth of Lysozyme*", Optical Science & Technology Center Annual Meeting, Iowa City, IA (Sept 2, 2002).
- M.M. Allaman (Speaker) and J.M. Wiencek, "*Light Scattering Investigation of Interactions in Membrane Protein Detergent Systems*", Optical Science & Technology Center Annual Meeting, Iowa City, IA (Sept 2, 2002).
- V. Aseyev (Speaker), C. Hitscherich, J.M. Wiencek, and P.Loll, "*Intermicellar Interactions versus Micellar Growth in Crystallization of Membrane Proteins*," 4th International Symposium on Molecular Mobility and Order in Polymer Systems, St.-Petersburg Russia, June 3-7, 2002.

PRESENTATIONS (continued)

- V. Aseyev (Speaker), C. Hitscherich, J.M. Wiencek, and P.Loll, "The Role of Detergent and PEG in Crystallization of Membrane Proteins," The International Symposia on Polyelectrolytes 2002, Lund Sweden, June 15-19, 2002.
- S.Y. B. Hu (Speaker), J. Li, and J.M. Wiencek, "*The Development of a Supported Emulsion Liquid Membrane System for Propionic Acid Separation in a Microgravity Environment*," AIChE Annual Meeting, Reno, NV (Nov. 2001).
- J.Li (Speaker), S.Y.B. Hu, and J.M. Wiencek, "*Supported Emulsion Liquid Membranes for Propionic Acid Recovery from Fermentation Media*," Center for Biocatalysis and Bioprocessing Annual Meeting, Iowa City, IA (Oct 2001).
- C.F. Hitscherich (Speaker), V.O. Aseyev, J.M. Wiencek and P.J. Loll, "*The Role of Detergent Cloud Point in Crystallization of Membrane Proteins*," AIChE Annual Meeting, Los Angeles, California (Nov. 2000).
- L. Gakhar (Speaker), M.A. Yousef and J.M. Wiencek, "*Maintaining X-ray Diffraction Properties in Protein Crystals After Flash Cooling*," AIChE Annual Meeting, Los Angeles, California (Nov. 2000).
- M.A. Yousef (Speaker), L. Gakhar and J.M. Wiencek, "*Flash Cooling of Protein Crystals under Atmospheric and High Pressure*," AIChE Annual Meeting, Los Angeles, California (Nov. 2000).
- W.F. Jones (Speaker) and J.M. Wiencek, "*Temperature-Controlled Growth of Lysozyme at Low Ionic Strength*," AIChE Annual Meeting, Los Angeles, California (Nov. 2000).
- V.O. Aseyev (Speaker), C.F. Hitscherich, J.M. Wiencek and P.J. Loll, "*Physical Properties of PEG-Detergent Solutions in Evaluating Crystallizability of Integral Membrane Proteins*," AIChE Annual Meeting, Los Angeles, California (Nov. 2000).
- P. J. Loll (Speaker), J. Kaplan, C. Hitscherich, M. Allaman, and J. Wiencek, "*Assessing of the Role of Detergent-Detergent Interactions in Membrane Protein Crystallization*," Eighth International Conference on the Crystallization of Biological Macromolecules, Sandestin, Florida (May 14-19, 2000).
- W.F. Jones and J.M. Wiencek (Speaker), "*Improvements in Lysozyme Crystal Quality Via Temperature-Controlled Growth at Low Ionic Strength*," Eighth International Conference on the Crystallization of Biological Macromolecules, Sandestin, Florida (May 14-19, 2000).
- C.E. Green (Speaker), M.A. Arnold and J.M. Wiencek, "Calibration Models for Lysozyme from Near-Infrared Spectra in Scattering Solutions," Pittsburgh Conference, (March 12, 2000).
- L.T. Nguyen (Speaker), L.E. Kirsch, and J.M. Wiencek, "*Effects of Shear Stress on the Structural and Mechanical Characteristics of Glucagon Gel Systems*," American Association of Pharmaceutical Scientists, New Orleans, LA (Nov. 1999).
- P. Loll (Speaker), C.F. Hitscherich, and J.M. Wiencek, "*Integral Membrane Protein Crystallization Studied with Static Light Scattering*," American Crystallographic Association, Buffalo, NY (May 1999).
- W.F. Jones (Speaker), and J.M. Wiencek, "*Temperature-Controlled Crystallization: The Effect of Precipitant Type on Temperature Sensitivity*," American Crystallographic Association, Buffalo, NY (May 1999).
- S.Y. Hu (Speaker), and J.M. Wiencek, "*Online Near-Infrared Spectroscopic Monitor to Facilitate Temperature-Controlled Protein Crystallization*" American Crystallographic Association, Buffalo, NY (May 1999).
- C.F. Hitscherich (Speaker), and J.M. Wiencek, "*The Use of Light Scattering as a Tool for Studying Integral Membrane Protein Crystallization*," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1998).

PRESENTATIONS (continued)

- W.F. Jones (Speaker), and J.M. Wiencek, "*Role of Electrolyte on Crystallization of Lysozyme*," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1998).
- S.Y. Hu (Speaker), and J.M. Wiencek, "*An Intelligent Temperature Control Algorithm for Protein Crystallization*" AIChE Annual Meeting, Miami Beach, Florida (Nov. 1998).
- J.M. Wiencek (Speaker), and Patricia Darcy, "*Temperature Induced Crystallization of Lysozyme in Solutions of NaCl and NaSCN*," International Conference on Crystallization of Biological Molecules, Granada, Spain, (May 1998).
- J. Foelske (Speaker), and J.M. Wiencek, "*The Role of the Surfactant in Membrane Protein Crystallization*," AIChE Annual Meeting, Los Angeles, California (Nov. 1997).
- P.A. Darcy (Speaker), and J.M. Wiencek, "*Experimental Investigation of the Effect of Electrolyte on Heats of Crystallization in Protein Systems*," AIChE Annual Meeting, Los Angeles, California (Nov. 1997).
- P.A. Darcy (Speaker), and J.M. Wiencek, "*Rapid Phase Diagram Determination via Microcalorimetry*," AIChE Annual Meeting, Los Angeles, California (Nov. 1997).
- S.-Y. Hu (Speaker), J.M. Wiencek, M.A. Arnold, and G. Maxwell, "*Microgravity Enhanced Protein Crystallization: Feedback Control Using Temperature and Spectroscopy*," 7th Annual Iowa Space Grant Consortium Meeting, Des Moines, IA (Oct. 1997)
- J. Bonita (Speaker), E. Arnold and J. Wiencek, "*The Use of Temperature to Control the Rate of Catalase Crystallization*," AIChE Annual Meeting, Chicago, Illinois (Nov. 1996).
- P.A. Darcy (Speaker) and J.M. Wiencek, "*Microcalorimetric Measurement of Growth and Solubility of Lysozyme*," AIChE Annual Meeting, Chicago, Illinois (Nov. 1996).
- S.-Y. Hu (Speaker), and J.M. Wiencek, "*Use of Hollow Fiber Contactors with Emulsion Liquid Membranes*," AIChE Annual Meeting, Chicago, Illinois (Nov. 1996).
- J. Bonita (Speaker), E. Arnold and J. Wiencek, "*Effect of Crystal Growth Rate on Protein Crystal Quality*," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1995).
- P.A. Darcy (Speaker) and J.M. Wiencek, "*Calorimetric Analysis of Lysozyme Crystallization*," 50th Calorimetry Conference, Gaithersburg, MD (July 24-28, 1995)
- C.A. Schall (Speaker) and J.M. Wiencek, "*Stability of Immobilized Dihydro Nicotinamide Adenine Dinucleotide (NADH) to Chemical Regeneration*," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- M. Vasudevan (Speaker) and J.M. Wiencek, "*Protein Separations Using Nonionic Microemulsions: Surfactant Structure Effects*," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- M. Vasudevan (Speaker) and J.M. Wiencek, "*Improving Specificity in Protein Separation Using Nonionic Microemulsions*," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- M. Vasudevan (Speaker) and J.M. Wiencek, "*Application of Equilibrium Microemulsion Extraction to Recover Large Molecular Weight Proteins*," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- J.S. Bonita (Speaker), E.V. Arnold and J.M. Wiencek, "*Temperature Control Strategies for Maximization of Protein Crystal Size*," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).

PRESENTATIONS (continued)

- A. Upadhyay (Speaker) and J.M. Wienczek, "*Protein Extraction Using Affinity Surfactants*," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- M. Uyttingco (Speaker), S. Parida and J.M. Wienczek, "*Enzyme-Catalyzed Polymerization of Phenolics in Monophasic Water-Immiscible Organic Solvents*," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- M. Uyttingco (Speaker), S. Parida and J.M. Wienczek, "*Phenolic Removal from Water Driven by Enzyme Catalysis in Organic Media*," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- M. Uyttingco (Speaker), S. Parida and J.M. Wienczek, "*Phenolic Removal Driven by Enzyme Polymerization in Water-Immiscible Organic Media*," AIChE Annual Meeting, San Francisco, CA (Nov. 1994).
- J.M. Wienczek (Speaker), C.A. Schall, E. Li, and E. Arnold, "*Measurement of Enthalpy of Fusion of Lysozyme Crystals by Calorimetry and Application to Maximization of Crystal Size*," AIChE Annual Meeting, St. Louis, Missouri (Nov. 1993).
- J.M. Wienczek (Speaker), C.A. Schall, E. Li, and E. Arnold, "*Thermal Optimization of Protein Crystal Growth*," Advances in Separation Technology (Engineering Foundation Conference), Amsterdam, Holland (July 1993).
- J.M. Wienczek (Speaker), B. Raghuraman, and N. Tirmizi, "*Clarification of Oil-Water Dispersions via Hydrophobic and Hydrophilic Microfiltration*," Advances in Separation Technology (Engineering Foundation Conference), Amsterdam, Holland (July 1993).
- J.M. Wienczek (Speaker) and B. Raghuraman, "*Heavy Metals Separation from Water via Emulsion Liquid Membrane Techniques*," Advances in Separation Technology (Engineering Foundation Conference), Amsterdam, Holland (July 1993).
- K.A. Larson (Speaker) and J.M. Wienczek, "*Extraction of Mercury from Wastewater Using Microemulsion Liquid Membranes: Modeling the Separation Process*," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1992).
- K.A. Larson (Speaker), B. Raghuraman and J.M. Wienczek, "*Demulsification of Microemulsion Liquid Membrane Systems: A Comparison of High Voltage Electrical Demulsification and Nonelectrical Techniques*," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1992).
- C. Schall (Speaker) and J.M. Wienczek, "*Protein Crystal Growth Under Hydrostatic Pressure*," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1992).
- A. Upadhyay (Speaker), M. Uyttingco, G. Tutt, S. Griff, S. Rego and J.M. Wienczek, "*Removal of Iron from Liquid Electrolyte Solutions via Extraction*," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1992).
- J.M. Wienczek (Speaker) and B. Raghuraman, "*Heavy Metal Ion Recovery from Aqueous Streams Using Emulsion Liquid Membrane Systems*," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1992).
- M. Uyttingco (Speaker) and J.M. Wienczek, "*Environmental Separations Driven by Enzyme Catalysis*," AIChE Annual Meeting, Miami Beach, Florida (Nov. 1992).
- J.M. Wienczek (Speaker) and K.A. Larson, "*Extraction of Mercury from Wastewater Using Microemulsion Liquid Membranes: Kinetics of Extraction*," AIChE National Meeting, New Orleans, La., (April 1992).
- J.M. Wienczek (Speaker) and K.A. Larson, "*Recovery of Mercury from Aqueous Waste Streams Using Microemulsion Liquid Membranes*," AIChE National Meeting, Pittsburgh, Pa., (August 1991).

PRESENTATIONS (continued)

- J.M. Wiencek (Speaker) and S. Qutubuddin, "*Employing Microemulsions as Liquid Membranes*," 7th International Symposium on Surfactants in Solution, Ottawa, Canada (Oct. 1988).
- S. Qutubuddin (Speaker) and J.M. Wiencek, "*Microemulsion Liquid Membrane Separations*," Invited review paper, ACS National Meeting, Los Angeles, California, (Sept. 1988).
- J.M. Wiencek (Speaker) and S. Qutubuddin, "*Separations by Diffusion Employing Microemulsions*," ACS 62nd Colloid and Surface Science Symposium, Penn State, (June 1988).
- J.M. Wiencek (Speaker) and S. Qutubuddin, "*Modeling of Diffusion Based Separations Employing Microemulsions*," AIChE Annual Meeting, New York, (Nov. 1987).
- J.M. Wiencek (Speaker) and S. Qutubuddin, "*Separations by Diffusion Employing Microemulsions*," ACS 61st Colloid and Surface Science Symposium, Ann Arbor, Michigan, (June 1987).
- S. Qutubuddin (Speaker) and J.M. Wiencek, "*Solubilization in Nonionic Microemulsions*," Invited paper at 6th International Symposium on Surfactants in Solution, New Delhi, India, (Aug 1986).
- S. Qutubuddin (Speaker) and J.M. Wiencek, "*Solubilization in Nonionic Microemulsions*," Gordon Conference on Chemistry at Interfaces, Kimball Union Academy, New Hampshire, (July 1986).
- J. Wiencek (Speaker) and S. Qutubuddin, "*Solubilization in Nonionic Microemulsions*," ACS 60th Colloid and Surface Science Symposium, Atlanta, Georgia, (June 1986).
- J.M. Wiencek (Speaker) and S. Qutubuddin, "*Separation of Organics Using Microemulsions*," AIChE National Meeting, New Orleans, Louisiana, (April 1986).

COURSES TAUGHT AT RUTGERS UNIVERSITY (1989-1994)

CORE REQUIRED COURSES (FULL LECTURE, SEMESTER BASIS COURSES):

Undergraduate: 155:423 (3 Semester Credit Hrs) Design of Separation Processes (5 times)
 155:204 (4 Semester Credit Hrs) Chemical Engineering Analysis I (3 times)
 155:415 (4 Semester Credit Hrs) Process Engineering Lab I (4 times)
 155:416 (4 Semester Credit Hrs) Process Engineering Lab II (4 times)

Graduate: 155:423 (3 Semester Credit Hrs) Kinetics, Catalysis and Reactor Design
 (3 times)

ELECTIVE COURSES:

Undergraduate 155:491 (3 Semester Credit Hrs) Special Problems in Chemical Engineering
 (7 times)

Graduate 155:555 (3 Semester Credit Hrs) Bioseparations (2 times)
 155:601,602 (1 Semester Credit Hrs) Graduate Seminar (10 times)
 155:701,702 (1-15 Semester Credit Hrs) Research in Chemical & Biochemical
 Engineering (11 times)

COURSES TAUGHT AT THE UNIVERSITY OF IOWA (1995 - present)

CORE REQUIRED COURSES (FULL LECTURE, SEMESTER BASIS COURSES):

Undergraduate: 052:044 (4 Semester Credit Hrs) Heat and Mass Transfer Operations (2 times)
 052:085 (3 Semester Credit Hrs) Process Dynamics and Control (1 time)
 052:086 (3 Semester Credit Hrs) Process Design (5 times)
 052:090 (0 Semester Credit Hrs) Freshman Chemical Eng. Seminar (1 time)
 052:091 (0 Semester Credit Hrs) Professional Chemical Eng. Seminar (2 times)

100 Level: 052:118 (3 Semester Credit Hrs) Advanced Mathematics (2 times)
 052:144 (3 Semester Credit Hrs) Advanced Transport Phenomena (2 times)
 052:217 (3 Semester Credit Hrs) Graduate Transport Phenomena (1 time)
 052:171..(2 Semester Credit Hrs) Thermodynamics & Transport Lab (1 time)
 052:181 (3 Semester Credit Hrs) Bioseparations (3 times)
 052:186 (3 Semester Credit Hrs) Process Design (7 times)
 052:191 (0 Semester Credit Hrs) Graduate Seminar (6 times)

ELECTIVE COURSES:

Graduate 052:244 (3 Semester Credit Hrs) Topics in Transport Phenomena (1 time)

NEW COURSE DEVELOPMENT

Graduate 052:230 (3 Semester Credit Hrs) Colloid and Interfacial Phenomena (2 times)
 052:191 (1 Semester Credit Hr) Nonlinear Regression Using MATLAB (1 time)
 052:191 (1 Semester Credit Hr) Dynamic and Static Light Scattering (1 time)

SERVICE TO UNIVERSITY

The University of Iowa:

College of Engineering, Virtual International Design Mentor, 2004-present
College of Engineering, Center for Computer Aid Design – Director Search (Committee Chair), Jan 2005 – June 2005
College of Engineering, Engineering Faculty Council (Secretary), June 2002 – June 2003
College of Engineering, Graduate Study and Research Council (Chair), Sept 2002 – June 2003
College of Engineering, Promotion and Tenure Committee, Jan 2001 – June 2003
Provost, Postdoctoral Education Advisory Committee, Sept 2000 – June 2001
VP Research, Physical Sciences & Engineering Committee, July 1999 – June 2001
Strategic Planning Committee, College of Engineering, June 1999 – June 2006
Graduate Director, University of Iowa, Sept 1998 – June 2003
Faculty Advisor, Omega Chi Epsilon Chemical Eng. Honorary Society, Sept 1995 - present
Faculty Advisor, American Institute of Chemical Engineers, Sept 1996 – Aug 1998
Graduate Admissions Committee, University of Iowa, Jan 1995 – Sept 1998
Curriculum Committee, University of Iowa College of Engineering, Sept 1996 – June 1999
Curriculum Committee (Secretary), University of Iowa College of Engineering, 1997-98

Rutgers University:

Faculty Advisor, Rutgers University AIChE Student Chapter, Jan 1992 - Jan 1995
Faculty Advisor, Rutgers University ISPE Student Chapter, Sept 1992 - Dec 1993
Faculty Advisor, Rutgers University Chem Eng Graduate Student Orgn, Jan 1992 - Jan 1995
Faculty Representative, Jersey Section of the AIChE, Jan 1992 - Jan 1995
Associate Director, N.I.H. Biotechnology Training Program, Aug. 1991- Jan. 1993
Industrial Liaison, N.I.H. Biotechnology Training Program, March 1990 - Jan 1995
Executive Committee - N.I.H. Biotechnology Interdisciplinary Program, March 1990 - Jan 1995
Graduate Recruiting Committee, 1989- 1994
Merck Lectures in Chemical Engineering, Spring 1991
Chemical Engineering Seminar Series, Fall 1990
Thesis Topics Brochure, 1990 - 1994
Graduate Oral Qualifier Coordinator, 1989-1990
Graduate Handbook Coordinator, 1989 - 1992
College of Engineering Admissions Recruitment Policy Committee, 1989 - 1992
College of Engineering Committee on Committees, 1991 - present
Advisor to Sophomore Chemical Engineering Students, 1989 – 1991

SERVICE TO PROFESSIONAL COMMUNITY

Executive Committee Member, National Institute of Pharmaceutical Technology and Education (NIPTE),
October 2005 – present
Consultant: Eli Lilly, Indianapolis, Indiana (Jan 2005 – present)
Consultant: MannKind Biopharmaceuticals, Danbury, Connecticut (Dec 2005 – present)
Vice Chair, *Advances in Crystallization*, AIChE Annual Meeting, Nov. 2003
Chair, *Crystallization at Interfaces*, AIChE Annual Meeting, Nov. 2002
Chair, *Crystallization of Pharmaceutical and Biological Molecules*, AIChE Annual Meeting, Nov. 2000
Panel Member, NASA Microgravity Biotechnology Glovebox Proposal Review Committee, 1999
Secretary, AIChE Separations Division, 1998-present
Panel Chair, NASA Science Concept Review of Shuttle Flight Experiments, June 1998
Director, AIChE Separations Division, 1995-1998
Membership Committee Chair, AIChE Separations Division, 1991 - 1996
Panel Reviewer, NASA Science Concept Review of Shuttle Flight Experiments, Oct. 1995
Panel Reviewer, NASA Requirements Definition Review of Shuttle Flight Experiments,
Oct. 1995
Panel Reviewer, NSF Small Business Innovative Research Proposal Evaluation, Sept. 1994
Panel Reviewer, NSF Research Initiation Awards, March 1994
Panel Reviewer, NSF Small Business Innovative Research Proposal Evaluation, Sept. 1993
Consultant: Solvay Animal Health, Inc. (July 1996 - October 1996)
Chair, *Separations for Environmental Restoration*, AIChE National Meeting, Aug. 1993
Chair, *Product Recovery and Purification*, AIChE Annual Meeting, Nov. 1992
Chair, *Membranes for Bioseparations*, AIChE National Meeting, Aug. 1992
Chair, *Separations of Contaminants from Groundwater*, AIChE National Meeting, Aug. 1992
Consultant: CIBA-GEIGY, Summit, New Jersey (Dec 1991 - Dec 1992)
Chair, *Separations for Wastewater Treatment*, AIChE National Meeting, Aug. 1991
Consultant: Corning Inc., Corning, New York (June 1991)
Reviewer of Technical Proposals submitted to NSF, DOE and the N.Y. State Centers
Reviewer of Technical Papers - The Chemical Engineering Journal
Reviewer of Technical Papers - Chemical Engineering Science Journal
Reviewer of Technical Papers - The Journal of Membrane Science
Reviewer of Technical Papers - Energy and Fuels (an ACS Publication)
Reviewer of Technical Papers - Langmuir (an ACS Publication)
Reviewer of Technical Papers - Biotechnology and Bioengineering
Reviewer of Technical Papers - Journal of the American Chemical Society
Reviewer of Technical Papers - Journal of Crystal Growth
Reviewer of Technical Papers - AIChE Journal
Reviewer of Technical Papers – Biophysical Journal

HIGH SCHOOL OUTREACH (Science Research Program with local high schools)

Rebecca Kazinka, Advisors: L. Olson and J.M. Wiencek, *Liquid phase diffusion cell construction*
Stephanie Kim, Advisors: L. Olson and J.M. Wiencek, *Liquid phase diffusion cell construction*
Jeanne Alnot, Advisor(s): S.-Y. Hu and J.M. Wiencek, “*Controlled seeding techniques for nucleating lysozyme.*”
Heather Allaman, Advisors: M. Allaman and J.M. Wiencek, “*Growth of E.Coli for Porin*”
Rachel Erb, Advisors: M. Allaman and J.M. Wiencek, “*Growth of E.Coli for Porin*”

UNDERGRADUATE STUDENT SUPERVISION

Stacey Rego, Advisor(s): J.M. Wiencek, *Mercury Removal from Contaminated Water via Microemulsion Liquid Membranes.*
Jennifer Carey, Advisor(s): C.A. Schall and J.M. Wiencek, *A Feasibility Study of Employing Dielectrophoresis for Protein Precipitation.*

UNDERGRADUATE STUDENT SUPERVISION (cont.)

- Rajeew Gupta, Advisor(s): J.M. Wienczek, *b-Galactosidase Partitioning in Nonionic Microemulsions*.
- Karyn Fulman, Advisor(s): R.A. Ahlert and J.M. Wienczek, *Extraction of Proteinaceous Material from Quahog Shells*.
- Edwin Li, Advisor(s): C.A. Schall and J.M. Wienczek, *Lysozyme Crystallization at High Pressure* (J.J. Slade Scholar Project).
- Shilpa Bhagat, Advisor(s): B. Raghuraman, N. Tirmizi and J.M. Wienczek, *Nickel Removal from Water via Emulsion Liquid Membranes*.
- Nancy Boctor, Advisor(s): A. Upadhyay and J.M. Wienczek, *Synthesis and characterization of Affinity Surfactants* (J.J. Slade Scholar Project).
- Kimberly Tahan, Advisor(s): M. Vasudevan and J.M. Wienczek, *Hemoglobin partitioning in C12E3 upper phase microemulsions* (J.J. Slade Scholar Project).
- Nai-Jen Hsu, Advisor(s): N. Tirmizi and J.M. Wienczek, *Membrane-based demulsification of oil-water mixtures*.
- Gung Chang, Advisor(s): N. Tirmizi, B. Raghuraman and J.M. Wienczek, *Equilibrium partitioning of cadmium in DEHPA systems*.
- Timothy Maher, Advisor(s): M. Uyttingco and J.M. Wienczek, *HRP-Catalyzed Polymerization of Cresol*.
- Ayman Mohammed, Advisor(s): M. Uyttingco and J.M. Wienczek, *HRP-Catalyzed Polymerization of Cresol*.
- Danielle Fina, Advisor(s): P. Darcy, J. Bonita and J.M. Wienczek, *Survey of Protein Crystallization Systems*.
- Teri Petro, Advisor(s): P. Darcy, J. Bonita and J.M. Wienczek, *Thaumatococcus Crystallization*.
- Ryan Cooper, Advisor(s): J.M. Wienczek, *HRP-Catalyzed Polymerization of Cresol*.
- Joanne Yamasaki, Advisor(s): P. Darcy, J. Bonita and J.M. Wienczek, *Purification and Crystallization of Glucose Isomerase*.
- Jeanne Peacock, Advisor(s): P. Darcy and J.M. Wienczek, *Feedback Control of Lysozyme Crystallization*.
- Jennifer Foelske, Advisor(s): P. Darcy and J.M. Wienczek, *Membrane Protein Crystallization*.
- Ben Nothwehr, Advisor(s): S.-Y. Hu and J.M. Wienczek, *NIR Detection of Lysozyme*.
- Robert Salach, Advisor(s): Wayne Jones and J.M. Wienczek, *Temperature Controlled Growth of Lysozyme Crystals from NaSCN Solutions*.
- Jacqueline Lang, Advisor(s): J.M. Wienczek, *Quantification of Dimer Concentration in Lysozyme*.
- Joy Mayfield, Advisor(s): Wayne Jones and J.M. Wienczek, *Electrolyte/PEG Screening of Lysozyme*.
- Allison Green, Advisor(s): Lida Nguyen and J.M. Wienczek, *Glucagon Gellation*.
- Beth Ficek, Advisor(s): Lida Nguyen and J.M. Wienczek, *Insulin Crosslinking*.
- Allison Green, Advisor(s): Lida Nguyen and J.M. Wienczek, *Insulin Crosslinking*.
- Fransceca Pirovano, Advisor(s): Lida Nguyen and J.M. Wienczek, *Insulin Crosslinking*.
- Cassidy Whitmore, Advisor(s): J.M. Wienczek, *Maceration Optimization*
- Trung Bui, Advisor(s): J.M. Wienczek, *Maceration Optimization*
- Virginia Kimmel, Advisor(s): J.M. Wienczek, *Maceration Optimization*
- Ann Kirsch, Advisor(s): J.M. Wienczek, *Ion Exchange Treatment for Haze Quality*
- Kristine Golveo, Advisor(s): J.M. Wienczek, *Ion Exchange Treatment for Haze Quality*
- Erica Scheckel, Advisor(s): J.M. Wienczek, *Ion Exchange Treatment for Haze Quality*
- Kristin Knight, Advisor(s): J.M. Wienczek, *Ion Exchange Treatment for Haze Quality*
- Michael McConney, Advisor(s): J.M. Wienczek, *Ion Exchange Treatment for Haze Quality*
- Andy Campbell, Advisor(s): J.M. Wienczek, *Ion Exchange Treatment for Haze Quality*
- Brett Darrow, Advisor(s): J.M. Wienczek, *Ion Exchange Treatment for Haze Quality*
- Stephen Goldman, Advisor(s): J.M. Wienczek, *Ion Exchange Treatment for Haze Quality*
- Afton Thumser, Advisor(s): J.M. Wienczek, *Feedstock Recycle Feasibility Study*
- Aiman Alam, Advisor(s): J.M. Wienczek, *Feedstock Recycle Feasibility Study*
- Luanna Williams, Advisor(s): J.M. Wienczek, *Feedstock Recycle Feasibility Study*
- Jeff Skrentner, Advisor(s): J.M. Wienczek, *Feedstock Recycle Feasibility Study*
- Tyler Kleene, Advisor(s): J.M. Wienczek, *BOD management study*
- James Aberg, Advisor(s): J.M. Wienczek, *BOD management study*
- Robert Smith, Advisor(s): J.M. Wienczek, *BOD management study*
- Peter Rasmussen, Advisor(s): J.M. Wienczek, *BOD management study*
- Brett Ingold, Advisor(s): J.M. Wienczek, *Donnan Effects in Light Scattering Studies of Insulin*

Jessica Heth, Advisor(s): J.M. Wiencek, *Honors Project: Water Treatment Technology and Public Health*
Mike Johnson, Advisor(s): J.M. Wiencek, *NF Membranes for Waste water treatment*
Kate Cannady, Advisor(s): J.M. Wiencek, *NF Membranes for Waste water treatment*
Karin Rod, Advisor(s): J.M. Wiencek, *NF Membranes for Waste water treatment*
Dawn Leonard, Advisor(s): J.M. Wiencek, *NF Membranes for Waste water treatment*
Jonathan Larsen, Advisor(s): J.M. Wiencek, *NF Membranes for Waste water treatment*

GRADUATE THESIS - PRINCIPAL ADVISOR

Cindy Hoppe, PhD, Expected May 2007, *Ataxin 3 aggregation and fibrillization.*

Maritza Muniz, PhD , Expected May 2009, *Glucagon Gelation in the Production Environment*

Attaguile, Salvatore, M.S., December 1997, *Rational Designs for Crystallizing Integral Membrane Proteins.*

Bonita, Jill (NIH and NASA Fellow), Ph.D., August 1997, *Predictive Temperature Control of Protein Crystallization.*

Darcy, Patricia (NIH and NASA Fellow), Ph.D., August 1998, *Calorimetric Characterization of Lysozyme.*

Gakhar, Lokesh Ph.D., December 2003, *Modeling Flash Cooling of Protein Crystals.*

Hitscherich, Carl, Ph.D., December 2001, *Quantification of Surfactant Effects in Membrane Protein Crystallization..*

Hu, Shih-Yao, Ph.D., June 1997, *Selective Ion Separations Using Hollow Fiber Encapsulated Liquid Membranes.*

Jones, Wayne, Ph.D., May 2004, *Controlling growth kinetics in protein crystallization.*

Kirsch, Ann, MS , Dec 2005, *Genencor Professional MS Program*

Larson, Karen, Ph.D., Jan 1993, *Mercury Removal from Contaminated Water via Microemulsion Liquid Membranes.*

Li, Jin, Ph.D., December 2003, *Rejuvenation of Fermentation Media via Supported Emulsion Liquid Membranes.*

Lokenvitz, Diana, M.S., May 2001, *Optimization of OmpF Porin Extraction and Purification.*

Parekh, Kalpesh, M.S., December 2003, *High Pressure Flash Cooling of Protein Crystals.*

Rodriguez, Jessica, M.S., May 2007, *Novel Membrane Distillation Methods of Desalination of Seawater*

Rose, Rebecca, M.S., December 2001, *Design of a Rapid Screening System for Second Virial Coefficients.*

Saxena, Roli, M.S., May 1995, *Organic Soluble Enzyme Catalysts.*

Schall, Constance (NIH and NASA Fellow), Ph.D., August 1995, *Enzymatic Reaction Utilizing Immobilized Coenzyme, NADH.*

Skrentner, Jeffrey, MS , Dec 2006, *Genencor Professional MS Program*

Upadhyay, Ashish (NIH Fellow), M.S., May 1995, *Measurement of Affinity Surfactant - Protein Binding*

Uytingco, Myrna (NIH and NSF Fellow), Ph.D., Dec 1995, *Polymerization of p-Cresol by Horseradish Peroxidase in 2-Octanol/Dimethyl Sulfoxide Cosolvent System.*

Vasudevan, Madhavan (NIH Fellow), Ph.D., Dec 1994, *Employing Microemulsion Phases for Selective Protein Recovery.*

Whitmore, Cassidy, MS, May 2005, *Genencor Professional MS Program*

Ye, Bo, M.S., December 1997, *The Split Step Method Applied to Advancing Reaction Front Models.*

GRADUATE THESIS - COMMITTEE MEMBER (Chemical Engineering Unless Otherwise Noted)

Alexander, Anthony, M.S., expected Dec 1998, *Kinetic Models of ETBE Production over Liquid Metal Catalysts.*

Arands, Rolf, M.S., Oct 1990, *Development of an In-situ and On-site Remediation Process for Phenol Distillate Lagoons.*

Baker, Brian (Biochemistry), Ph.D., Jan 1998, *Modeling and Measuring Protein-Ligand Binding*

Byrne, Stephen, Ph.D., Jan 1991, *Mechanisms of Interaction Between Aniline, Soil, Soil Solution, and Soil Microbes.*

Carlo, S. (Chemistry), Ph.D., August 1999, *UHV Surface Chemistry of Photopolymerization.*

Chen, T.Y. (Chemistry), Ph.D., August 1999, *Electrochemical Studies of Nafion Composites.*

Datta, Amlan, Ph.D., Dec 1994, *Alkaloid Overproduction and Liquid Extraction in Two-Phase Air Lift Bioreactors using California Poppy Plant Culture.*

Guo, Jianzheng (Mech. Eng.), Ph.D. December 2000, *Parallel Numerical Simulation of Transport Phenomena in Alloy Solidification on Unstructured 3D Meshes.*

Guttikunda, Sarath, Ph.D., Expected May 2001, *Sectoral Analysis of Asian Emissions on Urban and Regional Air Quality.*

Kohen, Elizabeth, M.S., Dec 1998, *Archaeal Liposomes: Formation and Characterization.*

Legiec, Irene, Ph.D., May 1991, *Design and Scale-up of a Heavy Metals Recovery Process from Municipal Solid Waste Incinerator Residues.*

Li, Yanzi, M.S., Aug 1998, *Large-Scale Enzymatic Synthesis of Methyl Glucoside Acrylate and Its Application in Superabsorbant Materials.*

GRADUATE THESIS - COMMITTEE MEMBER (cont)

Novick, Scott, Ph.D., expected May 1999, *Novel Biocatalytic Materials*.
Phadnis, Mahesh, PhD, December 1998, *Regional Models of Aerosol Pollutant Chemistry and Transport in Southeast Asia*.
Phillips, Cory, Ph.D., December 1998, *Development of a Clean Biomass Ethanol-to-ETBE Process*.
Ramasubramanyan, Natarajan, Ph.D., Jan 1994, *Process Optimization of Amylase Production by Recombinant Bacillus Subtilis Using Immobilization Systems*.
Song, Chul Han, Ph.D., expected May 1999, *Box Models of Aerosol Pollutant Chemical Kinetics and Transport*.
Stuart, Ben, M.S., May 1993, *Characterization of Municipal Waste Combustion Air Pollution Control Residues as a Function of Particle Size*.
Tong, Xinglin, Ph.D., May 1999, *Effects of Convection on Grain Structure Development*.
Venkatramanyan, Shankar, Ph.D., Sept 1995, *Combined Pneumatic Fracturing and Bioremediation of BTX-contaminated Soil*.
Yao, Jiann-Rong, Ph.D., Expected December 2001, *Biocatalytic Polymer Beads by Suspension Polymerization*.
Yousef, Mohammed, Ph.D., Dec 1999, *The Effect of Molecular Interactions on the Osmotic Pressure and Diffusion Coefficients of Binary Protein Solutions*.
Zhao, Hong, Ph.D., May 1996, *Fiber Optic Sensor for Detecting Groundwater Contaminants*.
Zook, Lois (Chemistry), Ph.D., June 1997, *Characterization and Processing in Nafion Composite Membranes*.

(not up to date)

POST DOCTORAL RESEARCH ASSOCIATES

Aseyev, Validimir, Biosciences Initiative Postdoctoral Award, *Characterization of Protein-Micelle Complexes via Laser Light Scattering* (October 1999 – present)
Hu, Shih-Yao, *Near Infrared Analysis of Lysozyme and Temperature-controlled Crystallization* (June 1997 – Sept. 1999)
Parida, Sanghamitra, *Enzyme Purification and Catalysis* (July 1993 - May 1995).
Raghuraman, Bhavani, *Heavy Metal Ion Removal from Water via Emulsion Liquid Membranes* (July 1991 - Dec 1994).
Tirmizi, Neena, *Demulsification of Water/Oil Emulsions in Membranes* (July 1992 - Sept 1994).

FULL TIME LABORATORY STAFF

Allaman, Margaret, Research Associate II (April 1999 – December 2003)
Hu, Shih-Yao, Assistant Research Engineer (Sept. 1999 – September 2003).

VISITING SCIENTIST

Prof. Byoung-Sik Kim, Dongguk University, Dept. of Chemical Eng., Seoul, Korea, *Modeling of Equilibrium and Mass Transport in Metal Extraction Systems* (Sept. 1992 - Feb. 1993).

FUNDED RESEARCH GRANTS (Principal Investigator is underlined)

- 5/05-5/07 MannKind Corporation, J.M. Wiencek (Sole PI), Physical Characterization of Technospheres and APIs, (\$123,951)
- 6/06-5/07 Genencor International, J.M. Wiencek (Sole PI), Professional MS Program, (\$44,412).
- 8/06-5/07 Genencor International, J.M. Wiencek (Sole PI), Professional Design Experiences for Undergraduate Chemical Engineers, (\$20,000).
- 2/06-2/12 Eli Lilly, J.M. Wiencek, Assessing Glucagon Gelation Mechanisms in the Production Environment, (\$15,783).
- 6/05-5/06 Genencor International, J.M. Wiencek (Sole PI), *Professional MS Program*, (\$144,329).
- 8/05-5/06 Genencor International, Phil Jordan and J.M. Wiencek, *Professional Design Experiences for Undergraduate Chemical Engineers*, (\$20,000).
- 6/04-5/05 Genencor International, J.M. Wiencek (Sole PI), *Professional MS Program*, (\$110,000).
- 8/04-5/05 Genencor International, Phil Jordan and J.M. Wiencek, *Professional Design Experiences for Undergraduate Chemical Engineers*, (\$17,000).
- 8/03-5/04 Genencor International, Phil Jordan and J.M. Wiencek, *Professional Design Experiences for Undergraduate Chemical Engineers*, (\$34,132).
- 8/02-5/03 Genencor International, Ted Smith and J.M. Wiencek, *Professional Design Experiences for Undergraduate Chemical Engineers*, (\$33,450).
- 11/01-11/04 National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement) subcontracted through U. Penn., J.M. Wiencek and P. Loll, *Intelligent Screens for Integral Membrane Protein Crystallization*, (\$1,010,000).
- 11/01-11/04 National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement), J.M. Wiencek and M. Arnold, *Noninvasive Near-Infrared Monitors for Protein Crystallization and Biomedical Systems*, (\$870,000).
- 11/98 - 11/02 National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement), J.M. Wiencek, *Rejuvenation of Spent Media via Supported Emulsion Liquid Membranes*, (\$706,000).
- 9/98 – 5/00 Monsanto Muscatine Production Facility, J.M. Wiencek (Sole PI), *Professional Design Experiences for Undergraduate Chemical Engineers*, (\$26,000).
- 5/98 - 5/01 The Whitaker Foundation, J.M. Wiencek (Sole PI), *Maintaining X-ray Diffraction Properties in Protein Crystals After Flash Cooling*, (\$200,000).
- 5/97 – 8/01 National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement) subcontracted through U. Penn., J.M. Wiencek and P. Loll, *Quantitative Analysis of Surfactant Interactions During Membrane Protein Crystallization*, (\$670,000).
- 5/97 – 8/01 National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement), J.M. Wiencek and M. Arnold, *Real-time Monitoring of Protein Concentration in Solution to Control Nucleation and Crystal Growth*, (\$498,000).

FUNDED RESEARCH GRANTS (Principal Investigator is underlined) - continued

- 5/97 – 8/01 National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement), J.M. Wiencek (Sole PI), *Thermodynamics of Protein Crystallization and Links to Crystal Quality*, (\$561,000).
- 2/97 - 12/97 Iowa Space Grant Consortium, J.M. Wiencek, M. Arnold, and G. Maxwell, *Microgravity Enhanced Protein Crystallization: Feedback Control Using Temperature and Spectroscopy*, (\$25,000).
- 10/95 - 10/96 NIH (subcontract through Ceptra, Inc., Somerset, NJ) STTR Program (Technology Transfer), J.M. Wiencek (Sole PI), *Protein Crystallizer with Predictive Thermal Control* (\$40,332)
- 8/93 - 7/94 U.S. Army, Picatinny Arsenal (Subcontracted via GeoCenters, Inc.), J.M. Wiencek and H. Pedersen, *NIR to Detect XM46 Composition* (\$92,000).
- 8/93 - 7/94 U.S. Army, Picatinny Arsenal (Subcontracted via GeoCenters, Inc.), J.M. Wiencek and H. Pedersen, *Shock Sensitivity of XM46* (\$90,000).
- 9/93 - 9/95 U.S. Dept. of Energy, J.M. Wiencek (Sole PI), *Environmental Restoration and Waste Management Junior Faculty Award*, (\$100,000).
- 9/93 - 9/97 U.S. Army ERDEC, J.M. Wiencek (Sole PI), Aberdeen Proving Grounds, Md, Sole PI, *Removal of Chlorinated Phenols from Contaminated Water Using Biocatalyzed Polymerization in an Organic Solvent*, (\$810,000).
- 9/93 -9/94 New Jersey Department of Environmental Protection and Energy, J.M. Wiencek (Sole PI), *Development of a Mobile Apparatus for Selective Removal of Heavy Metals from Contaminated Water Streams*, (\$33,000).
- 8/93 - 7/94 U.S. Army, Picatinny Arsenal (Subcontracted via GeoCenters, Inc.), J.M. Wiencek (Sole PI), *A Round Robin Test of XM46 Composition* (\$25,000).
- 7/93 - 7/96 New Jersey Hazardous Substance Management Research Center, J.M. Wiencek and B. Raghuraman, *Emulsions Liquid Membrane Separation of Heavy Metals in Hollow Fiber Contactors*, (\$194,690).
- 5/93 - 5/97 National Aeronautics and Space Administration (Microgravity Biotechnology Research Announcement), J.M. Wiencek and E. Arnold, *Thermal Optimization of Growth and Quality of Protein Crystals*, (\$560,000).
- 4/93 - 4/94 National Science Foundation, J.M. Wiencek (Sole PI), *Research Experiences for Undergraduates Supplement*, (\$10,000)
- 9/92 - 8/94 American Chemical Society Petroleum Research Fund, J.M. Wiencek (Sole PI), *Simultaneous Separation and Polymerization of Aromatics by a Biocatalyzed Membrane-reactor*, (\$21,000).
- 9/92 – 9/94 L&F Products Grant-in-aid, J.M. Wiencek (Sole PI), *Surfactant Engineering and Separation Science*, (\$3,000).
- 7/92 - 7/93 Army Research Office (for Picatinny Arsenal), J.M. Wiencek and B. Raghuraman, *Identification of Gaseous Degradation Products from Liquid Propellant*, (\$37,000).

FUNDED RESEARCH GRANTS (Principal Investigator is underlined) - continued

- 7/92 - 7/93 Army Research Office (for Picatinny Arsenal), J.M. Wienczek and B. Raghuraman, *Development of Flame AA Techniques for Iron Analysis of Liquid Propellant*, (\$35,000).
- 7/92 - 7/94 New Jersey Hazardous Substance Management Research Center, J.M. Wienczek (Sole PI), *Demulsification of Water/Oil/Solid Emulsions Using Hollow Fiber and Tubular Membrane Modules*, (\$100,000).
- 5/92 - 5/93 National Science Foundation, J.M. Wienczek and Prof. M. Yarmush, *Removal of Chlorinated Phenols from Contaminated Water Using Bionzymatically-Catalyzed Polymerization in an Organic Solvent*, (\$35,000)
- 4/92 - 4/93 National Science Foundation, J.M. Wienczek (Sole PI), *Research Experiences for Undergraduates Supplement*, (\$10,000)
- 9/91 - 2/93 National Science Foundation (Equipment Award), J.M. Wienczek, M. Yarmush, H. Pedersen, and H. Buettner), *Engineering Research Equipment: Image Analyzer and Light Scattering Device* (\$18,000).
- 7/91 - 7/93 National Science Foundation (Research Initiation Award), J.M. Wienczek (Sole PI), *Protein Separations Utilizing Temperature-Sensitive Microemulsions* (\$80,000).
- 7/91 - 7/93 Hazardous Substance Management Research Center of New Jersey, J.M. Wienczek (Sole PI), *Heavy Metal Ion Recovery from Aqueous Streams Using Emulsion Liquid Membranes* (\$110,000).
- 5/91 - 1/92 U.S. Army, Picatinny Arsenal (Subcontracted via GeoCenters, Inc.), J.M. Wienczek and Prof. H. Pedersen, *A Preliminary Assessment of HAN Shelf Life* (\$50,000).
- 9/90 - 6/91 Rutgers Research Council, J.M. Wienczek (Sole PI), *Mercury Removal from Water via Emulsion Liquid Membrane Systems - Equipment Request* (\$1680).
- 6/90 - 6/92 Water Resources Council/U.S. Geological Survey, J.M. Wienczek (Sole PI), *Removal of Mercury Ions from Aqueous Streams via Microemulsions* (\$40,000).
- 6/90 - 5/91 Biomedical Research Support Grant, J.M. Wienczek (Sole PI), *Influence of Protein Primary Structure on Crystal Growth* (\$5400).
- 1/90 - 6/90 Rutgers Research Council, J.M. Wienczek (Sole PI), New Faculty Award , *Determining Mass Transfer Kinetics in Emulsion Liquid Membrane Systems* (\$3000).
- 7/89 - 6/91 Henry Rutgers Research Fellow, J.M. Wienczek (Sole PI), Discretionary Funds (\$20,000).

PROFESSIONAL SOCIETIES

American Institute of Chemical Engineers

- Food, Pharmaceutical and Bioengineering Division
- Separations Division

American Chemical Society

- Division of Colloid and Surface Chemistry
- Division of Industrial Chemistry (Separation Science Subdivision)
- Division of Environmental Chemistry

American Crystallographic Association

American Society for Engineering Education

National Institute of Pharmaceutical Technology and Education