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Professional Registration

Professional Engineer, Commonwealth of Massachusetts, Civil Engineering, 1995-present
Board Certified Environ. Engineer, Specialization: Water Supply/Wastewater Engineering, 2012-present

Education

Humboldt State Univ., Arcata, CA	Environmental Engineering	B.S. 1988
University of California, Davis, CA	Civil Engineering,	M.S. 1990
University of California, Davis, CA	Civil and Environmental Engineering	Ph.D. 1993

Work Experience

2011-present	Professor	Civil & Environmental Engrg., Univ. South Florida
2009-2011	Assoc. Professor	Civil & Environmental Engrg., Univ. South Florida
2009-2010	Professor	Civil & Environmental Engrg., Univ. Massachusetts, Amherst
2000-2009	Assoc. Professor	Civil & Environmental Engrg., Univ. Massachusetts, Amherst
2007-2008	Fulbright Fellow	Civil & Environmental Engrg. Technion Israel Institute of Technol.
1994-2000	Asst. Professor	Civil & Environmental Engrg., Univ. Massachusetts, Amherst

Research Interests: Biological treatment processes including wastewater treatment, nutrient removal, membrane bioreactors, bioremediation, anaerobic digestion, bioretention and algal biofuel systems.

Courses Taught: *At UMass Amherst:* Systems Analysis & Economics for Civil Engineers, Water & Wastewater Systems, Air Quality, Environmental Biological Processes. *At USF:* Environmental Engineering Systems, Biological Principles in Environmental Engineering, Capstone Water Resources/Environmental Engineering Design, Graduate Research Methods, Mentoring Undergraduate Researchers.

Administration: Graduate Program Coordinator, USF, 2010-present; Chief Undergraduate Advisor, UMass, 2004-2007; Honors Program Coordinator, UMass, 1995-2009.

Student Advisees (*current students, +co-advised):

PhD: Veronica Aponte-Morales*, Kathryn Bailey, Suzanne Boxman*+, Beatriz Cárdenas-González, Matthew Cutter, Trina Halfhide*, Maureen Kinyua*, Emma Lopez*+, Erika Lopez-Luna, Thomas Lynn*+, Nathan Manser*+, Kyung-Nan Min, Karl Payne*+, Laura Rodriguez-Gonzales*, Ashish Sahu.
MS: Adib Amini, Amber Boles, Benjamin Charcow, Tracy Cook, Ayesha Dolasa, Michael Falk, Joseph Fermanian, Jaime Harrison, Greg Hinds*, Nicole Jannis, Yener Keskiner, Leslie Knapp, Alex Kruglick+, Ehoud Leshem, Alex Lin+, Michelle Masi, Brian McCarthy, Michael McGrath, Mercedita Monserrate, Paul Reyes, Laurel Rowse, Ann Sager*, Mauricio Sanchez, Ryan Seigel, Leslee Shumway, Brian Therriault, John Trimmer*, Meghan Wahlstrom, Xin Yuan, Wen Zhao.

Additional students and scholars: 8 high school student interns, 49 undergraduate researchers, 7 middle and high school teachers, 14 international visiting scholars, 2 post-doctoral researchers.

Awards, Honors, and Scholarships

AEESP Distinguished Service: 2011 Lectures Committee Chair, 2011 Conf. Co-chair, 2014 Secretary
2007/2008 Fulbright Fellow, Technion University, Haifa Israel
ASCE ExCEEEd (Excellence in Civil Engineering Education) Fellow, 2005
UMass CEE Advisory Committee Service Award, 2004
College of Engineering Advising Award, 1999
Switzer Environmental Fellowship, 1991
Research Mentorship, University of California, Davis, 1990
Graduate Opportunity Fellowship, University of California, Davis, 1988, 1989
Roscoe-Schenler Engineering Scholarship Award, Humboldt State University, 1987
Engineering Student of the Year, Humboldt State University, 1986

Selected Publications

Journal Articles, Book Chapters, Textbook

1. Manser, N., Wald, I., Ergas, S.J., Izurieta, R., Mihelcic, J. (2015) Assessing the Fate of *Ascaris suum* Ova during Mesophilic Anaerobic Digestion, *Environmental Science & Technology*, accepted.
2. Lynn, T.J., Yeh, D., Ergas, S.J. (2015) Performance and Longevity of Denitrifying Wood Chip Biofilters for Stormwater Treatment - a Microcosm Study, *Environ. Engrg. Science*, in press.
3. Halfhide, T., Dalrymple, O.K., Wilkie, A.C., Trimmer, J., Gillie, B., Udom, I., Zhang, Q., Ergas, S.J. (2014) Growth of an Indigenous Algal Consortium on Anaerobically Digested Municipal Sludge Centrate: Photobioreactor Performance and Modeling, *Bioenergy Res.*, 10.1007/s12155-014-9513-x.
4. Halfhide, T., Åkerström, A.M., Lekang, O-I, Gislerød, H.R.R., Ergas, S.J. (2014) Production of algal biomass, chlorophyll, starch and lipids using aquaculture wastewater under axenic and non-axenic conditions, *Algal Research*, 6(B):152-159.
5. Krayzelova, L., Lynn, T.J., Banihani, Q., Bartacek, J., Jenicek, P., Ergas, S.J. (2014) A Tire-Sulfur Hybrid Adsorption Denitrification (T-SHAD) Process for Decentralized Wastewater Treatment, *Water Research*, 61:191-199.
6. Pettit, S.L., Rodriguez-Gonzalez, L., Michaels, J.T., Norma A. Alcantar, N.A., Ergas, S.J., Kuhn, J.N. (2014) Parameters influencing the photocatalytic degradation of geosmin and 2-methylisoborneol utilizing immobilized TiO₂, *Catalysis Letters*, 144(8): 1460-1465.
7. Kinyua, M.N., Cunningham, J., Ergas, S.J. (2014) Effect of Solids Retention Time on the Bioavailability of Organic Carbon in Anaerobically Digested Swine Waste, *Biores. Technol.*, 162(2014):14-20.
8. Lynn, T.J., Wanjugi, P., Harwood, V.J., Ergas, S.J. (2013) Dynamic Performance of Biosand Filters, *J. American Water Works Assoc.* 105(10): 587-595.
9. Udom, I., Zaribaf, B.H.; Halfhide, T.; Gillie, B.; Dalrymple, O.; Zhang, Q.; Ergas, S.J. (2013) Harvesting Microalgae Grown on Wastewater, *Bioresource Technology*, 139: 101-106.
10. Dalrymple, O.K., Halfhide, T., Udom, I., Gilles, B., Wolan, J., Zhang, Q., Ergas, S.J. (2013) Wastewater use in algae production for generation of renewable resources: A review and preliminary results, *J. Aquatic Biosystems*, 9(2): 1-11.
11. Ergas, S.J., Aponte-Morales, V. (2013) Biological Nitrogen Removal, in *Comprehensive Water Quality and Purification: Vol. 3 Remediation of Polluted Waters*, S. Sengupta Editor, Elsevier, Amsterdam, the Netherlands.
12. Ergas, S.J. and van der Stein, P. (2013) Preface to special issue: Algal biofuels: advances in culturing, harvesting and energy product extraction, *Reviews in Environ. Sci. Bio-Technology*, 12(2): 115-117.
13. Baek, K., McKeever, K., Rieber, K., Sheppard, D., Park, C., Ergas, S.J., Nüsslein, K. (2012) Molecular approach to evaluate of biostimulation of 1,2-dibromoethane in contaminated groundwater, *Bioresource Technology*, 123:207-213..
14. Bailey, K.L., Tilton, F., Jansik, D.P., Ergas, S.J., Marshall, M.J., Miracle, A.L., Wellman, D.M. (2012) Growth Inhibition and Stimulation of *Shewanella oneidensis* MR-1 by Surfactants and Calcium 1 Polysulfide, *J. Ecotoxicology Environmental Safety*, 80: 195-202.
15. McKeever, R., Sheppard, D., Nüsslein, K., Baek, K-H, Rieberb, K., Ergas, S.J., Forbes, R., Hilyard, M., Park, C. (2012) Biodegradation of Ethylene Dibromide (1,2-Dibromoethane [EDB]) in Microcosms Simulating *In Situ* and Biostimulated Conditions, *J. Hazardous Materials*, 209:92-98.
16. Yuan, X., Wang, M., Park, C., Sahu, A.K., Ergas, S.J. (2012) Microalgae Growth Using High Strength Wastewater Followed by Anaerobic Co-digestion, *Water Environ. Research*, 84(5):396-404.
17. Coggon, M., Becerra, C.A., Nusslein, K., Miller, K., Yuretich, R., Ergas, S.J. (2012) Bioavailability of jarosite to iron reducing bacteria from an acid mine drainage site, *Geoch. Cosmo. Acta*, 78: 65-76.

18. Boles, A., Conneely, T., McKeever, R., Nixon, P., Nüsslein, K., Ergas, S.J. (2012) Performance of a Pilot-Scale Packed Bed Reactor for Perchlorate Reduction Using a Sulfur Oxidizing Bacterial Consortium, *Biotechnology & Bioengineering*, 109(3): 637-646.
19. Kumar, A., Lens, P., Ergas, S.J., Van Langenhove, H. (2011) Bioreactors for Waste Gas Treatment: Principles, Process Engineering, Performance and Development Requirements, in *Encyclopedia of Environmental Management*, S.E. Jorgenson (ed.), Taylor & Francis, New York.
20. Yuan, X., Kumar, A., Sahu, A.K., Ergas, S.J. (2011) Impact of Ammonia Concentration on *Spirulina platensis* Growth in an Airlift Photobioreactor, *Bioresource Technology*, 102(3): 3234-3239.
21. Ergas, S.J., Sengupta, S., Siegel, R., Yao, Y., Pandit, A., Yuan, X. (2010) Denitrifying bioretention systems for control of non-point nitrogen sources, *J. Envir.Eng-ASCE*, 136(10):1105-1112.
22. Kumar, A., Chilongo, T., Dewulf, J., Ergas, S.J., van Langenhove, H. (2010) Gaseous dimethyl sulphide removal in a membrane biofilm reactor: Effect of methanol on reactor performance, *Bioresource Technology*, 101 (23): 8955-8959.
23. Kumar, A., Yuan, X., Sahu, A.K., Zhang, Q., Ergas, S.J., Malcata, F. X., Van Langenhove, H. (2010) Strategies for CO₂ sequestration using microalgae and cyanobacteria: Recent developments and future directions, *Trends in Biotechnology*, 28(7): 371-380.
24. Kumar, A., Yuan, X., Sahu, A.K., Ergas, S.J., Van Langenhove, H. (2010) Hollow fiber membrane photo-bioreactor for CO₂ sequestration from combustion gas coupled with wastewater treatment: A process engineering approach, *J. Chemical Technology and Biotechnology*, 85(3): 387-394.
25. Kumar, A., Yuan, X., Ergas, S., Dewulf, J., Van Langenhove, H. (2010) Model of a polyethylene microporous hollow-fiber membrane biofilm reactor inoculated with *Pseudomonas putida* strain To1 1A for gaseous toluene removal, *Bioresource Technology*, 101 (7): 2180-2184.
26. Kumar, A., Ergas, S.J., Yuan, X., Fitch, M., Min, K-N., Van Langenhove, H. (2010) Modeling of a hollow fiber membrane biofilm reactor for nitric oxide removal: Model development and experimental validation, *J. Chemical Technology and Biotechnology*, 85(3): 423-428.
27. Sahu, A.K., Conneely, T., Nüsslein, K., Ergas, S.J. (2009) Hydrogenotrophic denitrification and perchlorate reduction in ion exchange brines using membrane biofilm reactors, *Biotechnology & Bioengineering*, 104(3): 483-491.
28. Sahu, A.K., Sengupta, S., Ergas, S.J. (2009) Onsite hydrogenotrophic wastewater denitrification using a hollow fiber membrane biofilm reactor, *Water Environment Research*, 81(7): 680-686.
29. Sahu, A.K., Conneely, T., Nüsslein, K., Ergas, S.J. (2009) Biological perchlorate reduction in packed bed reactors using elemental sulfur, *Environmental Science & Technology*, 43(12):4466-4471.
30. Becerra, C.A., López-Luna, E.L., Ergas, S.J., Nüsslein, K. (2009) Microcosm-based study of the attenuation of an acid mine drainage-impacted site through biological sulfate and iron reduction, *Geomicrobiology J.*, 26(1):9-20.
31. Min, K-N, Ergas, S.J., Mermelstein, A. (2008) Impact of dissolved oxygen concentration on membrane filtering resistance and soluble organic compound characteristics in MBRs, *Water Science & Technology*, 57(2):161-165.
32. Sengupta, S., Ergas, S.J., Lopez-Luna, E. (2007) Investigation of solid-phase buffers for sulfur-oxidizing autotrophic denitrification, *Water Environment Research*, 79(13): 2519-2526.
33. Min, K., Ergas, S.J. (2006) Volatilization and biodegradation of VOCs in membrane bioreactors, *J. Water, Air and Soil Pollution*, 6:83-96.
34. Sengupta, S., Ergas, S.J., Lopez-Luna, E., Wood, J., Sahu, A.K., Palaniswamy, K. (2006) Autotrophic biological denitrification for complete removal of nitrogen from septic system wastewater, *J. Water, Air, Soil Pollution*, 6(1-2):111-126.
35. Ergas, S.J., Therriault, B.M., Reckhow, D.A. (2006) Evaluation of water reuse technologies for the textile industry, *J. Environmental Engineering, ASCE*, 132(3):315-323.

36. Leshem, E.N., Pines, D.S., Ergas, S.J., Reckhow, D.A. (2006) Electrochemical oxidation and ozonation for textile wastewater reuse, *J. Environmental Engineering, ASCE*, 132(3):324-330.
37. Ergas, S.J., Harrison, J., Bloom, J., Forloney, K., Ahlfeld, D.P., Nüsslein, K., Yuretich, R.F. (2005) Chap. 7. Natural Attenuation of Acid Mine Drainage by Acidophilic and Acidotolerant Fe(III)- and Sulfate-Reducing Bacteria, in *Remediation of Hazardous Waste in the Subsurface: Bridging Flask and Field Studies*, C. Clark II and A. Lindner (eds.), pp. 105-107, American Chemical Society Symposium Series No. 940, American Chemical Society, Washington DC.
38. Pines, D.S., Min, K-N, Reckhow, D.A., Ergas, S.J. (2004) Investigation of an ozone membrane contactor, *Ozone Science & Engineering*, 27:209-217.
39. Ergas, S.J., Rheinheimer, D.E. (2004) Drinking water denitrification using a membrane bioreactor, *Water Research*, 38(14-15): 3225-3232.
40. Morgan-Sagastume, J.M., Noyola, A., Revah, S., Ergas, S.J. (2002) Changes in physical structure of a compost biofilter treating H₂S, *J. Air & Waste Management Assoc.*, 53(8):1011-1021.
41. Min, K-N, Ergas, S.J., Harrison, J.M. (2002) Hollow fiber membrane bioreactor for nitric oxide removal, *Environmental Engineering Science*, 19(6):575-583.
42. Ergas, S.J. (2001) Chapter 6: Membrane bioreactors, In: *Bioreactors for Waste gas Treatment* (C. Kennes and M.C. Veiga, eds.), pp. 163-178, Kluwer, Dordrecht, The Netherlands.
43. Ergas, S.J., Reuss, A. (2001) Hydrogenotrophic denitrification of drinking water using a hollow fiber membrane bioreactor, *J. Water Supply: Research and Technology-Aqua*, 50(3):161-171.
44. Dolasa, A.R., Ergas, S.J. (2000) Membrane bioreactor for cometabolism of trichloroethene air emissions, *J. Environmental Engineering, ASCE*, (126)10: 969-973.
45. Ergas, S.J., Hinlein, E., Tehrany, J.P., Reyes P.O., Ostendorf, D.W. (2000) Near surface soil vapor clusters for monitoring emissions of volatile organic compounds from soils, *J. Air & Waste Management Assoc.*, 50(1):174-180.
46. Ergas, S.J., Kinney, K.A. (2000) Biological Control Systems, In: *Air Pollution Engineering Manual* (W.T. Davis ed.), pp. 55-65, Air & Waste Management Assoc. -John Wiley and Sons, New York.
47. Ergas, S.J., Shumway, L., Fitch, M.W., Neemann, J. (1999) Membrane process for biological treatment of contaminated gas streams, *Biotechnology and Bioengineering*, 63(4):431-441.
48. Cárdenas-González, B., Ergas, S.J., Switzenbaum, M.S. (1999) Characterization of compost biofiltration media, *J. Air & Waste Management Assoc.*, 49(7):174-185.
49. Cárdenas-González, B., Ergas, S.J., Switzenbaum, M.S., Phillibert N. (1999) Evaluation of full-scale biofilter media performance, *Environmental Progress*, 18(3):205-211.
50. Eweis, J.B., Ergas, S.J., Chang, D.P.Y and Schroeder, E.D. (1998) *Bioremediation Principles*, McGraw-Hill, Boston, 296 pgs.
51. Ergas, S.J., McGrath, M.S. (1997) Membrane bioreactor for control of volatile organic compound emissions, *J. Environmental Engineering, ASCE*, 123(6):593-598.
52. Ergas, S.J., Veir, J., Kinney, K. (1996) Control of dichloromethane emissions using biofiltration, *J. Environmental Science and Health*, A31:1741-1754.
53. Ergas, S.J., Schroeder, E.D., Chang, D.P.Y., Morton, R. (1995) Control of volatile organic compound emissions using a compost biofilter, *Water Environment Research*, 67:816-821.
54. Ergas, S.J., Kinney, K., Fuller, M.E., Scow, K.M. (1994) Characterization of a compost biofiltration system degrading dichloromethane, *Biotechnology & Bioengineering*, 44:1048-1054.

Grant Activity
As Principal Investigator

Date	Title	Funding source	Co-PIs	Amount
12/13-11/14	Process Control Parameter Studies on Wastewater Treatment Systems	Hillsborough Co. Utilities	-	\$32,584
6/14-6/15	Alternative Energy Sources for Florida Aquaculture Systems	FL Aquaculture Research Council	Q. Zhang	\$71,848
8/14-7/14	Bioenergy Production from MSW by Solid-State Anaerobic Digestion	Hinkley Cntr. Solid and Haz Waste Mgmt	D. Yeh	\$59,621
8/13-8/15	Reducing Nitrogen Loads to Tampa Bay Using Bioretention Systems	Nat. Fish & Wildlife Fund	M. Trotz, J. Mihelcic	\$103,000
1/11-9/11	Enhancing Drinking Water Treatment Using BioSand Filters	College of Eng. Interdisciplinary Scholar. prog.	V. Harwood, J. Mihelcic	\$15,000
9/10-8/13	A Novel Physical-Chemical-Biological Treatment Process for Swine Wastes	US-Israel Binational Ag Res & Develop. Fund	J. Cunningham, O. Lahav & M. Green	\$300,000
2/10-6/11	Sustainable Microalgal Biofuel Production	Florida Energy Systems Consortium	Q. Zhang, J.R. Mihelcic, J.T. Wolan	\$50,000
9/08-8/12	A Sustainable Process to Capture and Store CO ₂ to Increase Production of Renewable Bioenergy	Norwegian Research Council	C. Park	\$286,000
6/08-5/11	A Novel Method for Biological Perchlorate Reduction Using Elemental Sulfur as an Electron Donor	NSF	K. Nüsslein	\$310,000
9/07-8/12	Expanding the Engineering Pipeline by Recruiting, Mentoring and Graduating Transfer Students	NSF	K. Rubin, N. Anderson, J. Rinderle	\$598,181
5/07-9/08	Support for 2008 IWA North American Membrane Research Conf.	UMass Research Leadership Awd.	-	\$5,000
3/06-2/07	Perchlorate Reduction in Groundwater Using Elemental Sulfur	MA WRRC	-	\$5,000
3/06-2/07	A Novel Onsite Nitrogen Removal System from Wastewater Using Elemental Sulfur	MA Technology Transfer Center	-	\$5,000
1/04-1/08	Anaerobic Membrane Bioreactors for Treatment and Reclamation of Domestic Wastewater	NSF-CONACyt Collaborative Research Prog.	M. Switzenbaum, A. Noylola, & J. Morgan	\$106,000
9/03-8/04	MBR Technology for Water Reuse in the Chemical Industry: Phase II Evaluation of Thermophilic MBR Systems	National Environmental Technol. Inst.	J. Holden	\$45,000
9/02-8/03	Membrane Bioreactor Technology for Water Reuse in the Chemical Industry	National Environmental Technol. Inst.	-	\$50,000
7/04	Hydrogenotrophic denitrification in a hollow fiber membrane bioreactor	Compact Membrane Systems	-	\$50,000
1/00-12/02	Autotrophic Denitrification of Drinking Water Using Microporous MBR	NSF	-	\$80,000

9/01-8/02	Zero Discharge in the Textile Industry: Phase II Scale-up and Implementation of Ozonation and Electrochemical Methods	National Environmental Technol. Inst.	D. Reckhow, D. Pines	\$52,000
1/01	Membrane bioreactors for treatment of chemical industry wastewaters	AquaTech Research Institute	-	\$30,000
1/02	Denitrification of aquaculture wastewater	Fins Technol.	-	\$7,000
9/96-8/00	Membrane Bioreactor for Control of Volatile Organic Compound Air Emissions	NSF	-	\$165,705
7/99-6/00	Evaluation of Technologies for Achievement of Zero Discharge in the Textile Industry	National Environmental Technol. Inst.	D. Reckhow	\$50,000
2/95-8/97	South Butvar Biofilter: Evaluation of System Performance	Monsanto Chemical Co.	-	\$32,000
1/95-12/95	A Membrane Biofiltration System for the Control of Air Emissions of Volatile Organic Compounds	NSF	-	\$17,697
9/98-12/98	Environmental Education for Middle and High School Science Teachers	UMass Corporation for National Service	-	\$500
4/94-3/95	Control of High Concentration Volatile Organic Compound Emissions Using Biofiltration	UMass Faculty Research Grant	-	\$5,000

Grants As Co-Principal Investigator or Faculty Participant*

Date	Title	Funding source	Collaborators	Amount
2/14-1/16	Sustainable Prod. of Marine Fish and Sea Vegetables in a Marine Aquaponics System	Florida Sea Grant	K. Main (PI), M. Trotz	\$179,989
11/13-10-17	Center for Reinventing Aging Infrastructure for Nutrient Management (RAINMgmt)	EPA	J. Mihelcic (PI), M. Trotz, D. Yeh, J. Cunningham, Q. Zhang, T. Boyer, A. Davis, D. Anderson	\$2,500,000
6/13-5/14	Selectivity Studies for Agents for Preserving Bait and Fresh Caught Fish	Marine Metal Prod.	N. Alcantar (PI)	\$10,000
1/13-12/15	REU Site: Tampa Environmental Interdisciplinary Research	NSF	M. Trotz (PI)	\$392,816
1/13-12/15	*REU Site: Globalization and Community Health: Combining Social Science and Engineering	NSF	N. Romero-Daza (PI), D. Himmelgreen, J. Mihelcic	\$418,611
1/13-12/17	*PIRE: Context Sensitive Implementation of Synergistic Water-Energy Systems	NSF	J. Mihelcic (PI), M. Trotz, E.C. Wells, C. McKayle	\$3,900,000
7/12-6/13	Removal of Off-Flavor Compounds in Aquaculture Food Products	Florida Aquaculture Research Council	N. Alcantar (PI), Y. Goswami, J. Kuhn	\$114,714
1/12-12/15	BioWET—Advanced Biological Waste-to-Energy Technologies	European Commission	D. Yeh, J. Bartacek (PI), P. Lens	\$330,000

8/10-7/14	Graduate Scholarships to Achieve Sustainable Infrastructure at the Water-Energy-Global Nexus	NSF	J. Mihelcic (PI), A. Stuart, Q. Zhang, Y. Zhang	\$600,000
8/11-7/14	Development and Testing of a Fundamentals of Environmental Engineering Concept Inventory	NSF	J. Cunningham, S. Sengupta (PI), R. Goael	\$200,000
12/10-11/12	Performance of pilot and commercial wastewater systems associated with inland production of high value marine fish	NOAA	K. Main (PI), M. Trotz, C. Weirich, G. Sharell	\$400,000
9/09-8/11	Natural Attenuation of Ethylene Dibromide [EDB] at MMR	Air Force Center Engr. & Environ.	C. Park (PI), K. Nusslien	\$183,111
9/06-1/09	Use of Sulfur Oxidizing Denitrifying Bioretention Systems for Control of Non-point Sources of Nitrogen	Coop. Inst. Coastal & Est. Environ. Technol.	S. Sengupta (PI)	\$189,098
9/03-2/06	Autotrophic Biological Denitrification for Complete Removal of Nitrogen from Septic System Wastewater	Coop. Inst. Coastal & Est. Environ. Technol.	S. Sengupta (PI)	\$212,762
9/02-12/07	Biogeochemistry of Fe(III) and sulfate in extreme acidic environments	NSF Biocomplexity in the Environ. Prog.	R. Yuretich (PI), D. Ahlfeld, A. Feldman, K. Nüsslein, J.R. Lloyd	\$1,625,000
4/02-3/03	Development of a Cost Effective Water Reclamation System for Aquaculture	Massachusetts Dept. Food and Ag.	J. Goldman (PI)	\$23,420
2/00-1/06	Expanding the Computer Science, Engineering and Math Pipeline by Supporting Community College Transfer Students	NSF Computer Sci., Eng. and Math Scholarship (CSEMS) Prog.	D.F, St. Mary & A. Lutenegger (PIs), K. Rubin, C. Poli, D.M. Barrington	3 grants for total of \$895,000
9/95-8/96	Surface Emissions from Jet Fuel Bioventing at Plattsburgh AFB	Air Force Cntr. Environ. Excellence	D. Ostendorf (PI), A. Lutenegger	\$323,250
9/96-8/98	Environmental Engineering Facility for Research on Chemically Enhanced Biodegradation	NSF Academic Infrastructure Prog.	D. Reckhow (PI), J. Edzwald, S. Long, D. Ostendorf, M. Switzenbaum, J. Tobiason	\$157,445

Selected Service Activities

Association of Environmental Engineering and Science Professors 1994-present:

Member, AEESP Board of Directors 2011-2014 (Secretary 2012-2014)

Secretary, AEESP Foundation (2014-present)

Conference Co-organizer: 2011 Biannual AEESP Conf.: Global Sustainability and Environmental Engineering Science: Implications for Research, Education and Practice, Tampa FL, July 10-12.

Lectures Committee 2004-2012 (Chair 2007-2010)

AEESP/A&WMA liaison 1998-2004

Water Environment Federation 1992-present

FWEA: member 2009-present; Faculty Advisor USF student chapter 2011-present, Board Member West Coast Chapter 2011-present.

FWEA student design competition faculty advisor: 2011, 2012 (1st place wastewater, 1st place environmental), 2013 (1st place wastewater, 1st place environmental), 2014 (1st place wastewater)

WEF student design competition faculty advisor: 2012 (1st place environmental, 3rd place wastewater), 2013 (1st place wastewater, 2nd place environmental), 2014 (1st place wastewater)

Member: Research and Innovation Committee (formerly the Academic Committee): 2011-present

Member: Stockholm Junior Water Prize Task Force 2014

Member: Algae Task Group: 2011-present

Member: Research Symposium Committee 2005-2011

Member: Membrane Community of Practice 2009-2013

Program Committees: Membrane Applications 2010, Anaheim, CA, June 6-9, 2010; Nutrient

Recovery & Management 2011, Miami, Florida, Jan. 9-12, 2011; Nutrient Recovery &

Management 2013, Vancouver BC, July 28-31, 2013

Session chair: WEF/EWA/JSWA: Water & Energy 2015: Advances in Water and Energy Research: Knowledge Exchange between Europe and the Americas

Session chair: WEFTEC 09 Orlando; WEFTEC 10 New Orleans; Membrane Applications 2010 Anaheim; Nutrient Recovery & Management 2011, Miami; WEFTEC13 Chicago.

International Water Association 2005-present

Board Member: IWA Membrane Specialist Group 2005-2011

Conference Chair: North American Membrane Research Conf., Amherst MA, August 10-13, 2008.

Air & Waste Management Association 1990-2004:

Associate Editor, *Journal of the Air & Waste Management Association*, 2001-2004

Vice Chair: Higher Education Division 1999-2001

Higher Education Committee: Chair 1997-99; Secretary 1996-97

Member: Solvents, Odors, and Vapors Committee 1996-2004

Session chair: Biological Air Pollution Control for Odors and Air Toxics, Air & Waste

Management Association Annual Meetings: Orlando, FL, June, 2003; Baltimore MD, June, 2002;

Salt Lake City, UT, June, 2000; St Louis, MO, June, 1999; San Diego, CA, June, 1998; Toronto,

Ontario, June, 1997; Nashville, TN, June, 1996.

American Academy of Environmental Engineering, 2012-present

Engineers Without Borders 2007- present; Advisor, UMass Brazil Project 2008-2009

Chi Epsilon: member 1999-present, Faculty Advisor, UMass Student Chapter 1999-2003.

Selected Community Service

Work with Secondary School Science Teachers, Pre-service Teachers and Students: 1995 - present - workshops for secondary teachers through Hampshire Educational Collaborative, UMass STEM Ed Inst., Ag Extension and Science Ed courses. Summer Engineering Institutes for STEM teachers, 2004, 2005, 2006, 2008, 2012. Work with RETs and HS interns on a variety of research projects.

Town of Amherst: Member, Board of Health 2002-2007 (Chair 2004-2005), School Wellness Policy Committee 2005-2006, Post-Landfill Alternatives Committee, 1999-2000. Air Quality Committee, Ft. River School, Amherst MA, 1996-1997.