

CURRICULUM VITAE

SPYROS G. PAVLOSTATHIS, PhD, BCEE

OFFICE ADDRESS

School of Civil and Environmental Engineering
Georgia Institute of Technology
3204 Environmental Science & Technology Building
311 Ferst Drive
Atlanta, Georgia 30332-0512, USA
Phone: (404) 894-9367; Fax: (404) 894-8266
E-mail: spyros.pavlostathis@ce.gatech.edu; Website: <http://www.ce.gatech.edu/~spavlost/>

EDUCATION

Ph.D.: Major, Environmental Engineering; Minor, Biochemical Engineering;
Cornell University, 1985 (Advisor: J. M. Gossett)
M.S.: Environmental Engineering, Cornell University, 1982 (Advisor: J. M. Gossett)
Diploma: Agricultural Engineering, Agricultural University of Athens, Greece, 1974
(Advisor: S. Kyritsis)

PROFESSIONAL APPOINTMENTS

1999-present	Professor	Georgia Institute of Technology, Atlanta, GA
2005-2009	Env. Eng. Program Coordinator	Georgia Institute of Technology, Atlanta, GA
1994-1999	Associate Professor	Georgia Institute of Technology, Atlanta, GA
1991-1994	Assistant Professor	Georgia Institute of Technology, Atlanta, GA
1988-1991	Assistant Professor	Clarkson University, Potsdam, NY
1987-1988	Project Engineer	Golder Associates, Inc., Atlanta, GA
1985-1987	Research Associate	Wadsworth Center, NY State Dept. of Health
1984-1985	Visiting Assistant Professor	Cornell University, Ithaca, NY
1979-1984	Teaching/Research Assistant	Cornell University, Ithaca, NY
1976-1979	Instructor	Agricultural University of Athens, Greece
1974-1976	Non-Commissioned Officer	Greek Air Force

RESEARCH INTERESTS AND EXPERTISE

- Environmental biotechnology and bioprocessing for the bioremediation of contaminated natural systems and the treatment of industrial and municipal wastewater;
- Bioavailability, fate and biotransformation of recalcitrant organic compounds such as dyes, pesticides, antioxidants, disinfectants, and antibiotics;
- Biotransformation of emerging environmental contaminants;
- Bioenergy and biofuels from biomass and waste streams;
- Development of halophilic and thermophilic microbial processes;
- Kinetics and modeling of biotransformation/treatment processes.

HONORS, AWARDS & RECOGNITION

Greek National Scholarship Foundation (1969 – 1973)
French Government Scholarship (Summer 1977)

Fulbright Fellowship – Cornell University (1979 – 1981)
Kassimati Foundation Scholarship – Cornell University (1980 – 1982)
Chi Epsilon (National Civil Engineering Honor Society)
Water Environment Federation – Charter Member, Recruiters Recognition Club (1994)
Water Environment Federation/Georgia Water & Pollution Control Association – Laboratory Analyst Excellence Award (1996)
Georgia Institute of Technology/School of Civil & Environmental Engineering – Best Paper Award (1997)
Dutch National Science Foundation – Wageningen University Sabbatical Fellowship (January – July 2000)
Georgia Institute of Technology/School of Civil & Environmental Engineering – Sustained Research Award for Excellence in Environmental Research and Archival Publications (2001)
Visiting Scholar, School of Environmental and Biomedical Sciences, University of Ulster, Coleraine, Northern Ireland, UK (Summers 2002, 2003, 2004, 2005)
Advisor, Georgia Institute of Technology/CEE Best Ph.D. Thesis Award (Y.H. Lee; 2004)
Advisor, Georgia Institute of Technology/AEES Best MS Thesis Award (W. Epolito; 2004)
American Academy of Environmental Engineers – Elected by Eminence as Board Certified Environmental Engineer (2006)
Advisor, Georgia Institute of Technology/CEE Best Ph.D. Thesis Award (D. Okutman-Tas; 2007)
Advisor, Georgia Institute of Technology/AEES Best Ph.D. Thesis Award (U. Tezel; 2009)
Marie Curie Visiting Research Fellow, Department of Microbiology and Environmental Change Institute, National University of Ireland, Galway, Ireland (May – September 2009)

PROFESSIONAL REGISTRATION & TRAINING

EIT, Engineer-in-Training (New York State; 1987)
BCEE, Board Certified Environmental Engineer (American Academy of Environmental Engineers; 2006)
Accreditation Board for Engineering and Technology (ABET)/EAC Evaluator Certificate (2006)

PROFESSIONAL MEMBERSHIPS & AFFILIATIONS

American Academy of Environmental Engineers (2006 – present)
American Chemical Society (1988 – present)
American Society of Civil Engineers (1983 – present)
American Society for Microbiology (1986 – present)
Association of Environmental Engineering and Science Professors (1988 – present)
Georgia Association of Water Professionals (1991 – present)
International Water Association (1985 – present)
Water Environment Federation (1981 – present)

PROFESSIONAL ACTIVITIES & SERVICE

A. Editorial Boards

Journal of Environmental Engineering (ASCE) Associate Editor (2000 – 2003)
Water Environment Research (WEF)

Associate Editor (2004 – 2009)
Vice Chair, WER Board of Editorial Review (2006 – 2009)
Water Science & Technology (IWA)(Vol. 52, issue 1-2, 2005; Guest Editor)
Biotechnology Letters (2007 – 2009)
Journal of Hazardous Materials (2008 – present)

B. Professional Associations

Association of Environmental Engineering and Science Professors (AEESP)
Member, MS Thesis Review Panel (1994 – 1996)
International Water Association (IWA)
Member, Anaerobic Digestion Specialist Group Management Com. (1994 – present)
Member, Anaerobic Digestion Modeling Task Group (1997 – present)
Member, Biofilm Systems Specialist Group (1994 – present)
Member, Contaminated Sediments Specialist Group (1994 – present)
Water Environment Federation (WEF)
Vice Chair, WER Board of Editorial Review (2006 – 2009)
Advisor, WEF Georgia Tech Student Chapter (2008 – present)
Member, Academic Committee (2007 – present)
Member, Literature Review Committee (1993 – 2004)
Vice-Chair, Literature Review Committee (1999 – 2000)
Chair, Literature Review Committee (2000 – 2003)
Past Chair, Literature Review Committee (2004 – 2006)
Member, Hazardous Wastes Committee (1996 – present)
Member, Toxic Substances Committee (1996 – present)
Founder and Advisor, WPCF Clarkson University Student Chapter (1989 – 1991)
Water Environment Research Foundation (WERF)
Member, Research Council (2002 – 2004)

C. International Educational Activities

Greek Ministry of Education
Member, Environmental Graduate Studies Review Panel (1997 – 2002)
Hellenic Open University
Member, Environmental Graduate Studies Review Panel (1997 – 2001)
Technical University of Crete, Greece; External Program Reviewer, Department of Environmental Engineering (1998)
Middle East Technical University, Ankara, Turkey; Invited Lecturer (April 2001)
The University of Queensland, St. Lucia, Queensland, Australia; External Ph.D. Thesis Examiner (2001)
S.V. University College of Engineering, Tirupati, India; External Ph.D. Thesis Examiner (2001)
Visiting Scholar (lecturing and research), University of Ulster, Coleraine, Northern Ireland, UK (Summers 2002, 2003, 2004, 2005)
Technical University of Crete, Greece; External Program Reviewer, Department of Environmental Engineering (2004)
Democritus University of Thrace, Greece; External Program Reviewer, Department of Environmental Engineering (2005)

Indian Institute of Technology, Delhi, India; External Ph.D. Thesis Examiner (2006)
National University of Singapore, Singapore; External Ph.D. Thesis Examiner (2007)
University of Cape Town, South Africa; External Ph.D. Thesis Examiner (2008)
Hellenic Quality Assurance Agency for Higher Education (A. Di. P.); Chair, External Evaluation
Committee of the Department of Environmental Engineering, Democritus University of
Thrace, Xanthi, Greece (2008)

D. Reviews

Panels

NSF CAREER Proposal Review Panel, Fall 2001
NSF IGERT Proposal Review Panel, Fall 2001
NSF CAREER Proposal Review Panel, Fall 2002
EPA SBIR Monitoring and Measurement Technologies Proposal Review
Panel, Fall 2002
EPA SBIR Wastewater Management Proposal Review Panel, Fall 2003
NSF CAREER Proposal Review Panel, Fall 2003
NSF CAREER Proposal Review Panel, Fall 2005
NSF CAREER Proposal Review Panel, Fall 2006
European Commission-Research Directorate (EU-FP7)(2007)

Proposals

Cooperative Institute for Coastal and Estuarine Environmental Technology;
Dakota Water Resources Institute; Delaware Water Resources Institute; European
Commission-Research Directorate; Georgia Water Resources Institute; Hudson River
Foundation; Illinois Water Resources Institute; Israel Science Foundation; National
Science Foundation; National Sciences & Engineering Research Council, Canada; NATO
Science Program; New York State Center for Hazardous Waste Management; New York
State Water Resources Institute; Petroleum Research Fund; Sea Grant Institute -
University of Wisconsin-Madison; Science Foundation Ireland; State of Louisiana, Board
of Regents; U.S. Environmental Protection Agency; U.S. Department of Agriculture

Manuscripts

*Applied Biochemistry & Biotechnology; Applied Microbiology & Biotechnology;
Biodegradation; Bioresource Technology; Biotechnology Letters; Biotechnology
Progress; Biotechnology & Bioengineering; Canadian Journal of Microbiology;
Chemosphere; Environment International; Environmental Engineering Science;
Environmental Science & Technology; Environmental Technology; Environmental
Toxicology & Chemistry; FEMS Microbiology Ecology; Industrial & Engineering
Chemistry Research; International Journal of Hydrogen Energy; Journal American Oil
Chemists Society; Journal Environmental Engineering; Journal of Agricultural and Food
Chemistry; Journal of Hazardous Materials; Science of the Total Environment; Water Air
& Soil Pollution; Water Environment Research; Water Research*

Books & Book Chapters

ACS Symposium Series; American Society of Agronomy; Harper & Row;
Humana Press; Plenum; Springer-Verlag; Water Environment Federation; IWA Publishing

E. Organization and Chairmanship of Conferences and Conference Sessions

1. Chair, Session 12: Contaminant Interactions in the Subsurface Environment; 20th Northeast Regional Meeting, American Chemical Society, Clarkson University, Potsdam, NY, June 1990.
2. Chair, Student Papers Session; Industrial Pollution Control Conference, Georgia Water & Pollution Control Association, Atlanta, GA, February 1993.
3. Co-Chair, Session 46: Biodegradation of Contaminants in Soil and Sediment Systems; 8th Annual Symposium on Emerging Technologies in Hazardous Waste Management, Birmingham, AL, September 1996.
4. Co-Chair, Session III: Microbial Valorisation and Integrated Management of Wastes in Sustainable Agro-ecosystems, International Symposium on the Olive's Wastes, Kalamata, Greece, November 1997.
5. Chair, Session: Environmental Restoration, IAWQ 19th Biennial International Conference, Vancouver, Canada, June 1998.
6. Member, Scientific Committee: First European Bioremediation Conference, Chania, Greece, July 2001.
7. Chair, Session: Bioremediation of Chlorinated Compounds, First European Bioremediation Conference, Chania, Greece, July 2001.
8. Chair, Session 4A: Process Control, 9th World Congress – Anaerobic Digestion 2001: Anaerobic Conversion for Sustainability, Antwerpen, Belgium, September 2001.
9. Member, Scientific Committee: Second European Bioremediation Conference, Chania, Greece, July 2003.
10. Chair, Session: Bioremediation of Recalcitrant Organic Compounds, Second European Bioremediation Conference, Chania, Greece, July 2003.
11. Co-Chair, Scientific Committee: 10th World Congress – Anaerobic Digestion 2004: Anaerobic Bioconversion for Sustainability, Montreal, Canada, September 2004.
12. Chair, Session 5D: Bioremediation I, 10th World Congress – Anaerobic Digestion 2004: Anaerobic Bioconversion for Sustainability, Montreal, Canada, September 2004.
13. Co-Chair, Session 9B: Pretreatment I, 10th World Congress – Anaerobic Digestion 2004: Anaerobic Bioconversion for Sustainability, Montreal, Canada, September 2004.
14. Member, Scientific Committee: Third European Bioremediation Conference, Chania, Greece, July 2005.
15. Chair, Session: Bioremediation of Chlorinated and Recalcitrant Organic Compounds, Third European Bioremediation Conference, Chania, Greece, July 2005.
16. Member, Panel Discussion: A Look into the Future – Where is Bioremediation Research Heading to? Third European Bioremediation Conference, Chania, Greece, July 2005.
17. Member, Scientific Committee: The First International Workshop on the IWA Anaerobic Digestion Model No. 1 (ADM1), Copenhagen, Denmark, September 2005.
18. Chair, Session: Toxic and Inhibitory Compounds, The First International Workshop on the IWA Anaerobic Digestion Model No. 1 (ADM1), Copenhagen, Denmark, September 2005.
19. Member, International Scientific Advisory Committee: First International Conference on Environmental Exposure and Health 2005, Atlanta, GA, October 2005.

20. Member, International Program Committee: 11th World Congress – Anaerobic Digestion: Bioenergy for our Future, Brisbane, Australia, September 2007.
21. Chair, Session: Inhibition, 11th World Congress – Anaerobic Digestion: Bioenergy for our Future, Brisbane, Australia, September 2007.
22. Member, International Scientific Committee: WasteEng08 – 2nd International Conference on Engineering for Waste Valorization, Patras, Greece, June 2008.
23. Member, Scientific Committee: Protection and Restoration of the Environment IX, Kefalonia, Greece, June 2008.
24. Chair, Session B3: Management and Treatment of Solid, Liquid and Gaseous Wastes, Protection and Restoration of the Environment IX, Kefalonia, Greece, June 2008.
25. Member, Scientific Committee: Fourth European Bioremediation Conference, Chania, Greece, September 2008.
26. Chair, Session IV: Pollution Control Technologies, Second International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 09) – Session IV: Pollution Control Technologies, Mykonos, Greece, June 2009.

F. Consulting

Carollo Engineers; Chemical Products Corporation; Chevron; ConocoPhillips; Denim North America; Eastman Kodak Company; Emerson Performance Solutions; Groundwater Sciences Corporation; Gwinnett County, GA; Hazen and Sawyer; Hydro-Thermal Corp.; Indagro; Intelligent Automation Systems; Jordan, Jones & Goulding; Pinellas County, FL; Washington Manufacturing

UNIVERSITY SERVICE

Clarkson University

Member, Curriculum and Academic Policy Committee (1989 – 1991)
Member, Dept. of Civil and Environmental Engrg. Graduate Committee (1990 – 1991)
Graduate Representative & Recruiter, Environmental Engineering Group (1988 – 1991)
Founder and Academic Advisor, New York Water Pollution Control Association Clarkson Student Chapter (1989 – 1991)

Georgia Institute of Technology

Member, Institute Graduate Committee (1996 – 2000)
Member, Institute Research Promotion & Tenure Committee (1997 – 2000)
Member, School of Biology/Endowed Chairs Search Committee (1997 – 1998)
Member, School of Civil & Environmental Engineering Undergraduate Committee (1991 – 1995)
Member, School of Civil & Environmental Engineering Computer Committee (1991 – 1993)
Member, School of Civil & Environmental Engineering IIIi Committee (1992 – 1994)
Member, School of Civil & Environmental Engineering Laboratory Task Force (1993 – 1994)
Coordinator, Daniel Environmental Engineering Laboratory (1993 – 1995)
Member, School of Civil & Environmental Engineering Undergraduate Advising Ad-Hoc Committee (1994 – 1995)
Member, School of Civil & Environmental Engineering/Environmental Hydraulics &

Water Resources Faculty Search Committee (1994 – 1995)
Member, School of Civil & Environmental Engineering Quarter-to-Semester Ad-Hoc Committee (1995 – 1996)
Chair, School of Civil & Environmental Engineering Assistant-to-Associate Promotion & Tenure Committee (1995 – 1996)
Chair, School of Civil & Environmental Engineering Laboratory Safety Task Force (1995 – 1996)
Coordinator, Environmental Engineering Program Ph.D. Comprehensive Examination (1995 – 1996; 1999 – 2001)
Member, School of Civil & Environmental Engineering Ad-Hoc Committee for Regents Professor Nomination (2000)
Chair, Environmental Engineering Program Strategic Plan Committee (2000 – 2001)
Chair, School of Civil & Environmental Engineering Awards Committee (2001 – 2004)
Member, School of Civil & Environmental Engineering Chair Search Committee (2002 – 2003)
Member, School of Civil & Environmental Engineering, Environmental Engineering Faculty Search Committee (2004)
Member, College of Engineering Reappointment, Promotion & Tenure Committee (2004 – 2006)
Member, School of Civil & Environmental Engineering Statutory Advisory Committee (2004 – 2007)
Coordinator, Environmental Engineering Program, School of Civil & Environmental Engineering (2005 – 2009)
Member, School of Civil & Environmental Engineering, Geotechnical Engineering Faculty Search Committee (2007)
Member, School of Civil & Environmental Engineering, Environmental Engineering Faculty Search Committee (2007)
Member, School of Civil & Environmental Engineering, GT-Singapore Initiative Committee (2006 - 2007)
Member, College of Engineering Reappointment, Promotion & Tenure Committee (2008 – present)
Chair, School of Civil & Environmental Engineering, Environmental Engineering Faculty Evaluation Committee (2008)
Chair & Member, School of Civil & Environmental Engineering, Environmental Engineering Faculty Area Committees (2003 – 2008)
Advisor, Water Environment Federation/Georgia Tech Student Chapter (2008 – present)
Coordinator, Distance Learning/Environmental Engineering Program, School of Civil & Environmental Engineering (2005 – present)

TEACHING

Cornell University

Environmental Quality Engineering	(Undergraduate)
Microbiology of Waste and Wastewater	(Graduate)
Environmental Engineering Processes II (Biological)	(Graduate)
Water Quality Laboratory	(Graduate)
Environmental Engineering Processes I Laboratory (Physico-chemical)	(Graduate)

Clarkson University

Hazardous Waste Management Engineering	(Undergraduate)
Environmental Engineering Microbiology	(Graduate)
Environmental Biological Processes	(Graduate)

Georgia Institute of Technology

Environmental Engineering Principles	(Undergraduate)
Hazardous Substance Engineering	(Undergraduate)
Environmental Engineering Systems	(Undergraduate)
Microbial Principles in Environmental Engineering	(Graduate)
Biological Processes	(Graduate)
Biotransformation of Xenobiotic Compounds	(Graduate)
Environmental Engineering Microbiology Laboratory	(Graduate)
Environmental Science & Engineering Laboratory	(Graduate)
Modeling and Simulation of Biological Treatment Systems	(Graduate)

RESEARCH SUPERVISION

A. Postdoctoral Fellows & Visiting Scholars

1. Dr. G. N. Mathavan; Postdoctoral Research Associate, Clarkson University (1990 – 1991).
2. Dr. Vasily A. Vavilin, Russian Academy of Sciences, Russian Federation; Fulbright Scholar, Georgia Institute of Technology (2001 – 2002).
3. Mrs. Umay G. Ozkan Yucel, Middle East Technical University, Ankara, Turkey; Visiting Scholar, Georgia Institute of Technology (2005 – 2005).
4. Dr. J. Hong, Ochanomizu University, Tokyo, Japan; Visiting Research Associate, Georgia Institute of Technology (2006 – 2007).
5. Dr. Z. Ismail, University of Baghdad, Baghdad, Iraq; Visiting Research Faculty, Georgia Institute of Technology (2006 – 2008).
6. Dr. K. Li, Nankai University, Tianjin, China; Visiting Research Faculty, Georgia Institute of Technology (2007 – 2008).
7. Dr. M. Tandukar, Tohoku University, Sendai City, Japan; Visiting Research Associate, Georgia Institute of Technology (2008 – present).
8. Dr. U. Tezel, Georgia Institute of Technology (2009 – present).
9. Dr. N. Onodera, Tohoku University, Sendai City, Japan; Visiting Research Associate, Georgia Institute of Technology (2009 – present).

B. Ph.D. Students

1. Zhuang, P. "Anaerobic Biotransformation of Chlorinated Alkenes," Clarkson University, 1994.
2. Misra, G. C. "Biotransformation of Monoterpenes and their Chlorination Products," Georgia Institute of Technology, 1998.
3. Prytula, M. T. "Bioavailability and Microbial Dehalogenation of Chlorinated Benzenes Sorbed to Estuarine Sediments," Georgia Institute of Technology, 1998.
4. Booker, R. S. "Microbial Reductive Dechlorination of Hexachloro-1,3-butadiene," Georgia Institute of Technology, 1999.
5. Yeh, D. H. "Influence of Nonionic Surfactants on the Bioavailability and Microbial Reductive Dechlorination of Hexachlorobenzene," Georgia Institute of Technology, 2000.
6. Beydilli, M. I. "Reductive Biotransformation and Decolorization of Reactive Azo Dyes," Georgia

- Institute of Technology, 2001.
7. Lee, Y. H. "Reductive Biotransformation and Decolorization of Reactive Anthraquinone Dyes," Georgia Institute of Technology, 2003.
 8. Matthews, R. D. "Transformation and Decolorization of Reactive Phthalocyanine Dyes," Georgia Institute of Technology, 2003.
 9. Okutman-Tas, D. "Microbial Reductive Transformation of Pentachloronitrobenzene", Georgia Institute of Technology, 2006.
 10. Tugtas, A. E. "Effect of Nitrate Reduction on the Methanogenic Fermentation: Process Interactions and Modeling", Georgia Institute of Technology, 2007.
 11. Tezel, U. "Fate and Effect of Quaternary Ammonium Compounds in Biological Systems", Georgia Institute of Technology, 2009.
 12. Hajaya, M. G. Research area: Effect of Quaternary Ammonium Compounds on the Biological Treatment of High Strength Wastewater: Performance and Optimization.
 13. Misiti, T. Research area: Fate and Effect of Naphthenic Acids on the Biological Wastewater Treatment Processes in Oil Refineries.
 14. Watson, M. K. Research area: Biotransformation of Quaternary Ammonium Compounds and Antibiotic Resistance.
 15. Giles, H. Research area: Fate and Effect of Phytosterols in Biological Treatment Systems of Pulp and Paper Wastewater.

C. MS Students

1. Mitra, S. "The Potential of Microwave Heating for Sludge Dewatering and Drying," Clarkson University, 1991 (with A. G. Collins).
2. Sridhar, K. "The Treatability of Photoprocessing Effluents by the Activated Sludge Process and the Impact of Waste Activated Sludge on Anaerobic Digestion," Clarkson University, 1991.
3. Morrison, D. "Fate and Effect of Photoprocessing Effluents on the Activated Sludge Process," Clarkson University, 1992.
4. Klein, A. "Desorption and Biodegradation of Gasoline Hydrocarbons in Water Saturated Soil Systems," Georgia Institute of Technology, 1993.
5. Jungee, S. "Fate and Effect of Photoprocessing Wastewaters on the Anaerobic Digestion Process", Georgia Institute of Technology, 1993.
6. Gess, P. "Release of Chlorinated Organic Compounds from a Contaminated Estuarine Sediment," Georgia Institute of Technology, 1994.
7. Schreiber, D. "Biological Oxidation of Thiosulfate," Georgia Institute of Technology, 1994.
8. Hung, C-H. "Fate of Thiocyanate in Biological Treatment Processes," Georgia Institute of Technology, 1995.
9. Comstock, K. "Transformation of 2,4,6-Trinitrotoluene (TNT) by the Aquatic Plant *Myriophyllum spicatum*," Georgia Institute of Technology, 1996.
10. Jackson, G. "Biotransformation of 2,4,6-Trinitrotoluene (TNT) by the Cyanobacterium *Anabaena spiroides*," Georgia Institute of Technology, 1996.
11. Maeng, S. K. "Effect of a Silver-Bearing Photoprocessing Wastewater and Silver Complexes on Biological Treatment Processes," Georgia Institute of Technology, 1998.
12. Fontenot, E. "Decolorization of Selected Reactive Blue Dyes under Methanogenic Conditions," Georgia Institute of Technology, 1998.
13. Doikos, P. "Investigation of the Potential for Microbial Reductive Dechlorination of

- Hexachlorobenzene under Iron-Reducing Conditions,” Georgia Institute of Technology, 1998.
14. Shah, A. “Fate and Effect of the Antioxidant Ethoxyquin on a Mixed Methanogenic Culture,” Georgia Institute of Technology, 2003.
 15. Epolito, W. “Characterization of the Textile Anthraquinone Dye Reactive Blue 4,” Georgia Institute of Technology, 2004.
 16. Yang, H-B. “Zero-Valent Iron Decolorization of the Anthraquinone Textile Dye Reactive Blue 4 and Biodegradation Assessment of its Decolorization Products,” Georgia Institute of Technology, 2005.
 17. Yang, J. “Fate and Effect of Alkyl Benzyl Dimethyl Ammonium Chloride in Mixed Aerobic and Nitrifying Cultures,” Georgia Institute of Technology, 2007.
 18. Levesque, S. “Evaluation of Potential Biogas Uses at Municipal Wastewater Treatment Plants,” Georgia Institute of Technology, 2007.
 19. Szeinbaum, N. “Anaerobic Treatment of Select Waste Streams in Paper Manufacturing Operations,” Georgia Institute of Technology, 2009.
 20. Huber, S. “Chromium Reduction in the Biocathode of a Microbial Fuel Cell,” Georgia Institute of Technology, 2009.
 21. Misiti, T. “Groundwater Nitrate Reduction in a Simulated Overland Wetland System,” Georgia Institute of Technology, 2009.

D. Undergraduate Students (Georgia Tech only)

1. Bush, R. “Modeling the Desorption of Subsurface Organic Contaminants,” (CEE; Summer 1993).
2. Lewis, A. “Anaerobic Treatment of Photoprocessing Effluents,” (CEE; Winter & Spring 1994).
3. Eyestone, C. “Design of an Anaerobic Fluidized Bed Bioreactor,” (CEE; Spring 1996).
4. Percy, C. “Biological Decolorization of Reactive Textile Dyes,” (CEE; Fall 1998 - Spring 1999).
5. Ebner, J. “Decolorization and Degradation of Reactive Textile Dyes by Ozonation,” (ChBE; Summer 2002; Spring & Fall 2003; Spring 2004).
6. Tartaglia, A. “Kinetics of Zero-Valent Iron Reductive Transformation of Reactive Anthraquinone Dyes,” (CEE; Summer 2004).
7. Dinh, T. “Effect of Quaternary Ammonium Compounds on an Aerobic Mixed Culture” (CEE; Summer 2004).
8. Otano, G. “Effect of Counter-ions on the Critical Micelle Concentration of Quaternary Ammonium Compounds” (ChBE; Fall 2006).
9. Cartwright, A. “Effect of Counter-ions on the Critical Micelle Concentration of Quaternary Ammonium Compounds” (ChBE; Fall 2007).
10. deRussy, A. “Effect of Counter-ions on the Acute Toxicity of Quaternary Ammonium Compounds” (CEE; Spring 2008).
11. Giles, H. “Acute Toxicity of Quaternary Ammonium Compounds” (CEE; Summer 2008).
12. Smith, M. “Effect of Benzalkonium Chloride on Biological Nitrogen Removal” (CEE; Summer 2009).
13. Zheng, Y. “Metal Reduction in the Biocathode of a Microbial Fuel Cell” (CEE; Fall 2009).

PUBLICATIONS

A. BOOKS AND PARTS OF BOOKS

1. Pavlostathis, S. G. and S. Kyritsis. 1980. *Livestock Wastes: Management, Utilization, and Environmental Impact*. Ministry of Agriculture, Greece, p. 345 (in Greek).
2. Pavlostathis, S. G. and P. Zhuang. 1998. Effect of Sorption on the Microbial Reductive Dechlorination of Soil-Bound Chloroalkenes. In *Emerging Technologies in Hazardous Waste Management VII*, D. W. Tedder and F. G. Pohland (Eds.), Plenum Publishing Corp., New York, NY, pp. 127-144.
3. Yeh, D. H., K. D. Pennell and S. G. Pavlostathis. 1998. Effect of Tween Surfactants on the Microbial Reductive Dechlorination of Hexachlorobenzene. In *Bioremediation and Phytoremediation: Chlorinated and Recalcitrant Compounds*, G. B. Wickramanayake and R. E. Hinchee (Eds.), Battelle Press, Columbus, OH, pp. 115-120.
4. Prytula M. T. and S. G. Pavlostathis. 1999. Bioavailability and Reductive Dechlorination of Hexachlorobenzene Sorbed to an Estuarine Sediment. In *Bioremediation of Nitroaromatic and Haloaromatic Compounds*, B. C. Alleman and A. Leeson (Eds.), Battelle Press, Columbus, OH, pp. 259-264.
5. Pennell, K. D., S. G. Pavlostathis, A. Karagunduz, and D. H. Yeh. 2002. Influence of Nonionic Surfactants on the Bioavailability of Hexachlorobenzene for Microbial Reductive Dechlorination. In *Chemicals in the Environment: Fate, Impacts, and Remediation*, R. L. Lipnick, R. P. Mason, M. L. Phillips, and C. U. Pittman (Eds.), Ch. 27, Symposium Series No. 806, American Chemical Society, Washington, DC, pp. 449-466.
6. Batstone, D. J., J. Keller, R. I. Angelidaki, S. V. Kalyuzhnyi, S. G. Pavlostathis, A. Rozzi, W. T. M. Sanders, H. Siegrist, and V. A. Vavilin. 2002. *Anaerobic Digestion Model No. 1*. IWA Task Group for Mathematical Modelling of Anaerobic Wastewater Processes, Scientific and Technical Report No. 13, IWA Publishing, London, UK.
7. Cervantes, F. J., S. G. Pavlostathis, and A. van Haandel (Eds). 2006. *Advanced Biological Treatment for Industrial Wastewaters: Principles & Applications*, IWA Publishing, London, UK.
8. Cervantes, F. J., and S. G. Pavlostathis. 2006. Strategies for Industrial Water Pollution Control. In *Advanced Biological Treatment for Industrial Wastewaters: Principles & Applications*, F. J. Cervantes, S. G. Pavlostathis, and A. van Haandel (Eds.). Ch. 1, IWA Publishing, London, UK.
9. Pavlostathis, S. G. 2006. Basic Concepts of Biological Processes. In *Advanced Biological Treatment for Industrial Wastewaters: Principles & Applications*, F. J. Cervantes, S. G. Pavlostathis, and A. van Haandel (Eds.). Ch. 2, IWA Publishing, London, UK.
10. Tandukar, M., S. G. Pavlostathis, and F. J. Cervantes. 2009. Autotrophic Denitrification for the Removal of Nitrogenous and Sulphurous Contaminants from Wastewaters. In *Environmental Technologies to Treat Nitrogen Pollution: Principles and Engineering*, F. J. Cervantes (Ed.). Ch. 12, IWA Publishing, London, UK.

B. REFEREED JOURNAL PUBLICATIONS

1. Pavlostathis, S. G. and J. M. Gossett. 1985. Alkaline Treatment of Wheat Straw for Increasing Anaerobic Biodegradability. *Biotechnology & Bioengineering* 27: 334-344.
2. Pavlostathis, S. G. and J. M. Gossett. 1985. Modeling Alkali Consumption and Digestibility Improvement from Alkaline Treatment of Wheat Straw. *Biotechnology & Bioengineering* 27: 345-354.

3. Pavlostathis, S. G. and J. M. Gossett. 1986. A Kinetic Model for Anaerobic Digestion of Biological Sludge. *Biotechnology & Bioengineering* 28: 1519-1530.
4. Pavlostathis, S. G. and J. M. Gossett. 1988. Preliminary Conversion Mechanisms in Anaerobic Digestion of Biological Sludge. *Journal of Environmental Engineering ASCE*, 114:575-592.
5. Pavlostathis, S. G., T. L. Miller and M. J. Wolin. 1988. Fermentation of Insoluble Cellulose by Continuous Cultures of *Ruminococcus albus*. *Applied & Environmental Microbiology* 54:2655-2659.
6. Pavlostathis, S. G., T. L. Miller and M. J. Wolin. 1988. Kinetics of Insoluble Cellulose Fermentation by Continuous Cultures of *Ruminococcus albus*. *Applied & Environmental Microbiology* 54:2660-2663.
7. Pavlostathis, S. G., T. L. Miller and M. J. Wolin. 1990. Cellulose Fermentation by Continuous Cultures of *Ruminococcus albus* and *Methanobrevibacter smithii*. *Applied Microbiology & Biotechnology* 33:109-116.
8. Pavlostathis, S. G. and K. Jaglal. 1991. Desorptive Behavior of Trichloroethylene in Contaminated Soil. *Environmental Science & Technology* 25:274-279.
9. Collins, A. G., S. Mitra and S. G. Pavlostathis. 1991. The Potential of Microwave Heating for Sludge Dewatering. *Research Journal of Water Pollution Control Federation* 63:921-924.
10. Pavlostathis, S. G. and E. Giraldo-Gomez. 1991. Kinetics of Anaerobic Treatment. *Water Science & Technology* 24:35-59.
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D. CONFERENCE AND WORKSHOP PROCEEDINGS

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40. Keller, J., D. Batstone, S. G. Pavlostathis, et al. Workshop 2 – AD Modelling No 1: IWA Anaerobic Digestion Model No 1 (ADM1): Concept and Structure; Application of ADM1 to

- Experimental and Full-Scale Processes; Assumptions and Limitations of ADM1. 9th World Congress – Anaerobic Digestion 2001: Anaerobic Conversion for Sustainability, Antwerpen, Belgium, September 2001.
41. Matthews, R. D., and S. G. Pavlostathis. “Ultrasonic Decolorization of Reactive Phthalocyanine Dyes,” 74th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC 2001) – Session 21: Research Symposium: Physical-Chemical Processes, Atlanta, GA, October 2001 (p. 14).
 42. Lee, Y. H., and S. G. Pavlostathis. “Reuse of Textile Reactive Azo Dyebaths Following Biological Decolorization,” 74th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC 2001) – Session 31: Small and Natural Systems and water Reuse: Water Reclamation and Reuse II, Atlanta, GA, October 2001 (p. 22).
 43. Pavlostathis, S. G., and D. H. Yeh. “Phase Distribution of Hexachlorobenzene in a Suspended-Growth Culture Amended with a Polysorbate Surfactant,” 74th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC 2001) – Session 39: Research Symposium: Biodegradation, Atlanta, GA, October 2001 (p. 23).
 44. Fontenot, E. J., Y. H. Lee, R. D. Matthews, G. Zhu, and S. G. Pavlostathis. “Reductive Decolorization of a Textile Reactive Dyebath under Methanogenic Conditions,” 7th FAO/SREN Workshop: Anaerobic Digestion for Sustainability in Waste (Water) Treatment and Reuse, Moscow, Russian Federation, May 2002.
 45. Vavilin, V. A., S. V. Rytov, S. G. Pavlostathis, J. Jokela, and J. Rintala. “Distributed Model of Solid Waste Anaerobic Digestion: Sensitivity Analysis,” 3rd International Symposium on Anaerobic Digestion of Solid Wastes, Munich, Germany, September 2002.
 46. Lee, Y. H., G. Zhu, and S. G. Pavlostathis. “Reductive Decolorization of Textile Reactive Anthraquinone Dyes under Methanogenic Conditions,” 75th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC 2002) – Session 62: Industrial Issues and Treatment Technologies Symposium: Treatment and Monitoring of Complex Organics, Chicago, IL, October 2002 (p. 14).
 47. Beydilli, M. I., and S. G. Pavlostathis. “Decolorization Kinetics of the Azo Dye Reactive Red 2 under Methanogenic Conditions – Effect of Long-Term Culture Acclimation,” Second European Bioremediation Conference, Chania, Greece, July 2003 (pp. 172-175).
 48. Yeh, D. H., and S. G. Pavlostathis. “Modeling the Microbial Dechlorination of Hexachlorobenzene in the Presence of a Biodegradable Nonionic Polysorbate Surfactant,” ACS 228th National Meeting, Philadelphia, PA, August 2004.
 49. Yeh, D. H., and S. G. Pavlostathis. “Influence of the Physical Alteration of Field-Contaminated Sediments on the Bioavailability of Hexachlorobenzene and Surfactant Use for the Enhancement of Microbial Reductive Dechlorination,” ACS 228th National Meeting, Philadelphia, PA, August 2004.
 50. Pavlostathis, S. G., Y. H. Lee, and R. D. Matthews. “Anaerobic Biodecolorization of Textile Reactive Anthraquinone and Phthalocyanine Dyebaths under Hypersaline Conditions,” 10th World Congress – Anaerobic Digestion 2004: Anaerobic Bioconversion for Sustainability, Montreal, Canada, September 2004.
 51. Yeh, D. H., and S. G. Pavlostathis. “Anaerobic Biodegradability of Tween Surfactants Used as Carbon Source for the Microbial Reductive Dechlorination of Hexachlorobenzene,” 10th World Congress – Anaerobic Digestion 2004: Anaerobic Bioconversion for Sustainability, Montreal, Canada, September 2004.

52. Okutman Tas, D., and S. G. Pavlostathis. “The Influence of Iron Reduction on the Reductive Biotransformation of Pentachloronitrobenzene,” Third European Bioremediation Conference, Chania, Greece, July 2005.
53. Tugtas, A. E., U. Tezel, and S. G. Pavlostathis. “An Extension of the Anaerobic Digestion Model No. 1 to Include the Effect of Nitrate Reduction Processes,” The First International Workshop on the IWA Anaerobic Digestion Model No. 1 (ADM1), Copenhagen, Denmark, September 2005.
54. Kabouris, J. C., U. Tezel, S. G. Pavlostathis, A. C. Todd, R. A. Gillette, and M. Engelmann. “Methane Production from the Anaerobic Digestion of Pinellas County’s Dewatered FOG and Sludge,” 81st Annual Florida Water Resources Conference, Orlando, FL, April 2006.
55. Kabouris, J. C., U. Tezel, S. G. Pavlostathis, M. Engelmann, A. C. Todd, and R. A. Gillette. “Anaerobic Biodegradation of Sludge and FOG,” WEF/AWWA Joint Residuals and Biosolids Management Conference 2007, Denver, CO, April 2007.
56. Tugtas, A. E., and S. G. Pavlostathis. “Inhibitory Effects of Nitrate Reduction on Methanogenesis in the Presence of Different Electron Donors,” 11th World Congress – Anaerobic Digestion: Bioenergy for our Future, Brisbane, Australia, September 2007.
57. Tezel, U., J. A. Pierson, and S. G. Pavlostathis. “Effect of Didecyl Dimethyl Ammonium Chloride on Nitrate Reduction in a Mixed Methanogenic Culture,” 11th World Congress – Anaerobic Digestion: Bioenergy for our Future, Brisbane, Australia, September 2007.
58. Yang, J., U. Tezel, J. A. Pierson, and S. G. Pavlostathis. “Biodegradation and Toxicity of Alkyl Benzyl Dimethyl Ammonium Chloride in a Mixed Aerobic Culture,” 80th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC 2007) – Session 102: Industrial Issues and Treatment Technologies: Pharmaceutical Treatment Challenges, San Diego, CA, October 2007.
59. Kabouris, J. C., U. Tezel, S. G. Pavlostathis, M. Engelmann, J. Dulaney, R. A. Gillette, and A. C. Todd. “The Ultimate Anaerobic Biodegradability of Municipal Sludge and FOG,” 80th Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC 2007) – Session 85: Residuals and Biosolids Management: Getting More Out of Your Digester and Process, San Diego, CA, October 2007.
60. Matthews, R., L. A. Bottomley, and S. G. Pavlostathis. “Palladium-catalyzed Hydrogen Reduction and Decolorization of Reactive Phthalocyanine Dyes,” Protection and Restoration of the Environment IX – Session B3: Management and Treatment of Solid, Liquid and Gaseous Wastes, Kefalonia, Greece, June 2008.
61. Yang, J., K. Li, U. Tezel, J. A. Pierson, and S. G. Pavlostathis. “Effect of Alkyl Benzyl Dimethyl Ammonium Chloride and Temperature on Nitrification,” 81st Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC 2008) – Session 2: Industrial Issues and Treatment Technology/Microconstituents: Industrial Wastewater Biological Nutrient Removal, Chicago, IL, October 2008.
62. Lee, Y. H., and S. G. Pavlostathis. “Anthraquinone Compounds as Redox Mediators for Enhanced Continuous-flow Anaerobic Biotransformation of Reactive Dyes under Hypersaline Conditions,” Second International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE 09) – Session IV: Pollution Control Technologies, Mykonos, Greece, June 2009.
63. Padhye, L., U. Tezel, C-H. Huang, and S. G. Pavlostathis. “Biotransformation of Nitrosamines and Secondary Amines in a Mixed Methanogenic Culture”, to be presented at the 82nd Annual

- Water Environment Federation Technical Exhibition and Conference (WEFTEC 2008) – Research Symposium: Trace Constituents, Orlando, FL, October 2009.
64. Tezel, U., H. Giles, A. deRussy, and S. G. Pavlostathis. “Effect of Counter Ions and Natural Organic Matter on the Toxicity of Benzalkonium Chloride”, to be presented at the 82nd Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC 2008) – Research Symposium: Trace Constituents, Orlando, FL, October 2009.
 65. Tandukar, M., U. Tezel, and S. G. Pavlostathis. “Biological Chromium(VI) Reduction in Microbial Fuel Cell: A Three in one Approach”, to be presented at the 82nd Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC 2008), Orlando, FL, October 2009.

CONFERENCE & SYMPOSIA PRESENTATIONS WITHOUT PROCEEDINGS

1. Pavlostathis, S. G., T. L. Miller and M. J. Wolin. "Fermentation of Cellulose by Automated Continuous Cultures of *Ruminococcus albus*," 87th Annual Meeting of the American Society for Microbiology, Atlanta, GA, March 1987.
2. Jaglal, K. and S. G. Pavlostathis. "Desorption of Trichloroethylene from Contaminated Soil," 62nd Annual Meeting and Exhibition, New York Water Pollution Control Association - University Research Forum, New York, NY, January 1990.
3. Zhuang, P. and S. G. Pavlostathis. "Degradation of Trichloroethylene in Simulated Anaerobic Subsurface Environments," 20th Northeast Regional Meeting, American Chemical Society, Clarkson University, Potsdam, NY, June 1990.
4. Pavlostathis, S. G., A. G. Collins and S. Mitra. "The Potential of Microwave Heating for Sludge Dewatering," 63rd Annual Conference, Water Pollution Control Federation, Washington, D.C., October 1990.
5. Theis, T. L., A. G. Collins, S. G. Pavlostathis, P. Monsour and C. D. Theis. "Field Analysis of Polycyclic Aromatic Hydrocarbons by Ultraviolet Fluorescence Spectrometry," 2nd International Symposium - Field Screening Methods for Hazardous Wastes and Toxic Chemicals, Las Vegas, NV, February 1991.
6. Pavlostathis, S. G. "Prospects of Anaerobic In-Situ Bioremediation of Soil and Ground Water Contaminated with Chlorinated Alkenes," BPEC Workshop: The Role of Biotechnology in Bioremediation Process, Massachusetts Institute of Technology, Cambridge, MA, March 1991 (*Invited speaker*).
7. Zhuang, P. and S. G. Pavlostathis. "The Effect of Inoculum Source, Primary Substrate and Temperature on the Dechlorination of Trichloroethylene under Sulfate-Reducing and Methanogenic Conditions," 64th Annual Conference, Water Pollution Control Federation, Toronto, Ontario, Canada, October 1991.
8. Theis, T. L., A. G. Collins, P. J. Monsour, and S. G. Pavlostathis. "Analysis of Total Polyaromatic Hydrocarbons Using Ultraviolet-Fluorescence Spectrometry," 64th Annual Conference, Water Pollution Control Federation, Toronto, Ontario, Canada, October 1991.
9. Prytula, M. and S. G. Pavlostathis. “Reductive Dechlorination of Chlorinated Benzenes in Estuarine Sediments,” Environmental Engineering Quadrangle Conference, Clemson University, Clemson, SC, February 1993.
10. Pavlostathis, S. G. "Effect of Temperature on Anaerobic Processes: Application to In-Situ Bioremediation," Workshop on: "Organic Matter Transformations in Terrestrial and Marine Environments," Georgia Institute of Technology, School of Earth & Atmospheric Sciences,

- Atlanta, GA, March 1992.
11. Zhuang, P. and S. G. Pavlostathis. "Factors Limiting the Reductive Dechlorination of Chloroalkenes," 66th Annual Conference, Water Environment Federation, Anaheim, CA, October 1993.
 12. Pavlostathis, S. G., "The Potential of Microbial Reductive Dechlorination for Subsurface Bioremediation," Environmental Engineering Quadrangle Conference, Virginia Tech, February 1995.
 13. Misra, G., S. G. Pavlostathis, M. Perdue, and R. Araujo, "Aerobic Biodegradation of Selected Monoterpenes," 95th General Meeting, American Society for Microbiology, Washington, D.C., May 1995.
 14. Comstock, K., S. G. Pavlostathis, M. Jacobson, S-Y. Chiang, and F. M. Saunders. "Aquatic Plant Mediated Transformation of TNT," 1995 Five Centers' Research Conference -- From the Flask to the Field: Moving Research Insights into Practical Solutions; U.S. EPA/Hazardous Substance Research Center, Gleneden Beach, OR, July 1995.
 15. Prytula, M., and S.G. Pavlostathis. "Biotransformation of Chlorinated Benzenes in an Estuarine Sediment," 1995 Five Centers' Research Conference -- From the Flask to the Field: Moving Research Insights into Practical Solutions; U.S. EPA/Hazardous Substance Research Center, Gleneden Beach, OR, July 1995.
 16. Pavlostathis, S. G., and P. Zhuang. "Effect of Sorption on the Microbial Reductive Dechlorination of Soil-Bound Chloroalkenes," 7th Annual Symposium on Emerging Technologies in Hazardous Waste Management, Atlanta, GA, September 1995.
 17. Saunders, F. M., M. Jacobson, and S.G. Pavlostathis. "Phytoremediation of TNT Contaminated Soils and Groundwaters," 7th Annual Symposium on Emerging Technologies in Hazardous Waste Management, Atlanta, GA, September 1995.
 18. Faison, V., S. Sahi, and S. Pavlostathis, "Phytoremediation of Contaminated Sites by *Crotalaria* sp.", Understanding the Gulf of Mexico Ecosystem Workshop, University of Southern Mississippi, Long Beach, MS, September, 1996
 19. Beydilli, I., S. G. Pavlostathis and W. Tincher, "Biological Renovation and Reuse of Spent Reactive Dyebaths," 5th Annual National Textile Center Forum, Myrtle Beach, SC, January 1997.
 20. Booker, R. and S. G. Pavlostathis. "Microbial Reductive Dechlorination of Hexachloro-1,3-butadiene," Environmental Engineering Quadrangle Conference, Clemson University, Clemson, SC, February 1997.
 21. Pavlostathis, S. G. "Reductive Biotransformation Processes," Georgia Water & Pollution Control Association – Laboratory Symposium, Augusta, GA, June 1997 (*Keynote speaker*).
 22. Pavlostathis, S. G. "Biotransformation Potential and Limitations of Anaerobic Processes," International Symposium on the Olive's Wastes, Kalamata, Greece, November 1997 (*Plenary Lecture*).
 23. Yeh, D. H., K. D. Pennell and S. G. Pavlostathis. "Methanogenesis and Reductive Dechlorination of Hexachlorobenzene in the Presence of Nonionic Surfactants," SETAC 18th Annual Meeting, San Francisco, CA, November 1997.
 24. Beydilli, I., E. Fontenot, S. G. Pavlostathis and W. Tincher, "Biological Renovation and Reuse of Spent Reactive Dyebaths," 6th Annual National Textile Center Forum, Panama City, FL, January 1998.
 25. Yeh, D. H. and S. G. Pavlostathis. "Methanogenesis and Reductive Dechlorination of

- Hexachlorobenzene In the Presence of Nonionic Surfactants,” Environmental Engineering Quadrangle Conference, University of North Carolina, Chapel Hill, February 1998.
26. Prytula, M., R. Booker and S. G. Pavlostathis. “Bioavailability of Hexachloro-1,3-butadiene in Contaminated Estuarine Sediments for Microbial Reductive Dechlorination,” Spring National Meeting, American Institute of Chemical Engineers, New Orleans, LA, March 1998 (*Invited speaker*).
 27. Yeh, D. H. and S. G. Pavlostathis. “Simultaneous Biodegradation of Tween Surfactants and Reductive Dechlorination of Hexachlorobenzene,” 98th General Meeting, American Society for Microbiology, Atlanta, GA, May 1998.
 28. Booker, R. and S. G. Pavlostathis. “Characterization of a Mixed Methanogenic Enrichment that Reductively Dechlorinates Hexachloro-1,3-butadiene,” 98th General Meeting, American Society for Microbiology, Atlanta, GA, May 1998.
 29. Pavlostathis, S. G. and S-K. Maeng. “Fate and Effect of Silver Compounds on the Anaerobic Digestion Process” SETAC 19th Annual Meeting, Charlotte, NC, November 1998.
 30. Beydilli, M. I., S. G. Pavlostathis and W. C. Tincher. “Decolorization of Reactive Azo Red 2 Under Various Redox Conditions” SETAC 19th Annual Meeting, Charlotte, NC, November 1998.
 31. Pavlostathis, S. G., W. C. Tincher, I. M. Beydilli and D. Corner. “Biological Renovation and Reuse of Spent Reactive Dye baths” 7th National Textile Center Annual Forum, Myrtle Beach, SC, January 1999.
 32. Booker, R. S., M. T. Prytula, and S. G. Pavlostathis. “Bioavailability and Biotransformation of Hexachloro-1,3-butadiene in Contaminated Sediment-Derived Anaerobic Systems” SETAC 20th Annual Meeting, Philadelphia, PA, November 1999.
 33. Karagunduz, A., C. Martin, D. H. Yeh, S. G. Pavlostathis and K. D. Pennell. “Effects of Tween Surfactants on the Availability of Hexachlorobenzene in a Contaminated Soil” SETAC 20th Annual Meeting, Philadelphia, PA, November 1999.
 34. Pavlostathis, S. G., M. I. Beydilli, Y. H. Lee, R. D. Matthews, and W. C. Tincher. “Biological Decolorization and Reuse of Spent Reactive Dye baths,” CCACTI Textile Mid-Year Research Forum, January 2000.
 35. Beydilli, M. I., D. Corner, S. G. Pavlostathis, and W. Tincher. “Biological Decolorization and Reuse of Reactive Textile Dye baths,” Industrial Pollution Control Conference, Georgia Water & Pollution Control Association, Atlanta, GA, February 2000.
 36. Pavlostathis, S. G., Y. H. Lee, R. D. Matthews, and W. C. Tincher. 2001. Biological Decolorization and Reuse of Spent Reactive Dye baths. CCACTI Textile Mid-Year Research Forum, Atlanta, GA, January 2001.
 37. Pavlostathis, S. G., Y. H. Lee, R. D. Matthews, and W. C. Tincher. 2001. Biological Decolorization and Reuse of Spent Reactive Dye baths. AATCC Southeastern Section Winter Meeting, The University of Georgia, Athens, GA, January 26, 2001 (*Invited speaker*).
 38. Pavlostathis, S. G., Y. H. Lee, R. D. Matthews, and W. C. Tincher. 2001. Biological Decolorization and Reuse of Spent Reactive Dye baths. CCACTI Textile Mid-Year Research Forum, Atlanta, GA, January 2002.
 39. Lee, Y. H., and S. G. Pavlostathis. “Reuse of Textile Reactive Azo Dye baths Following Biological Decolorization,” Industrial Pollution Control Conference, Georgia Water & Pollution Control Association, Atlanta, GA, March 2002.
 40. Matthews, R. D., and S. G. Pavlostathis. “Decolorization of Reactive Phthalocyanine Textile

- Dyes and Dyebaths by Sonication," Industrial Pollution Control Conference, Georgia Water & Pollution Control Association, Atlanta, GA, March 2002.
41. Filaski, K., Y. H. Lee, J. Parker, L. A. Bottomley, and S. G. Pavlostathis. "Decolorization of Reactive Anthraquinone Textile Dyes," 54th Southeast Regional Meeting of the American Chemical Society (SERMACS 2002), Charleston, SC, November 2002.
 42. Matthews, R. D., J. L. Ebner, T. Aiyejorun, L. A. Bottomley, and S. G. Pavlostathis. "Decolorization of Reactive Phthalocyanine Textile Dyes by Sonication and Ozonation," 54th Southeast Regional Meeting of the American Chemical Society (SERMACS 2002), Charleston, SC, November 2002.
 43. Lee, Y. H., L. A. Bottomley, and S. G. Pavlostathis. "Biological Decolorization and Reuse of Textile Reactive Anthraquinone Dyebaths," Industrial Pollution Control Conference & Expo, Georgia Water & Pollution Control Association, Atlanta, GA, March 2003.
 44. Matthews, R. D., L. A. Bottomley, and S. G. Pavlostathis. "Transformation and Decolorization of Reactive Phthalocyanine Textile Dyes by Palladium-Catalyzed H₂ Reduction," Industrial Pollution Control Conference & Expo, Georgia Water & Pollution Control Association, Atlanta, GA, March 2003.
 45. Shah, A., J. A. Pierson, and S. G. Pavlostathis. "Fate and Effect of the Antioxidant Ethoxyquin on an Anaerobic Treatment Process," Industrial Pollution Control Conference & Expo, Georgia Water & Pollution Control Association, Atlanta, GA, March 2003.
 46. Ebner, J. L., R. D. Matthews, S. G. Pavlostathis, and L. A. Bottomley. "Decolorization of Reactive Textile Dyes Using Ozone: Reaction Kinetics and Product Formation," AIChE Southern Conference Convention, Melbourne, FL, March 2003.
 47. Ebner, J. L., R. D. Matthews, L. A. Bottomley, and S. G. Pavlostathis. "Sonication vs. Ozonation for the Decolorization of Reactive Phthalocyanine Textile Dyes: Effectiveness, Product Formation and Toxicity," 55th Southeast Regional Meeting of the American Chemical Society (SERMACS 2003), Atlanta, GA, November 2003.
 48. Epolito, W. J., S. G. Pavlostathis, and L. A. Bottomley. "Zero-Valent Iron Reductive Transformation of the Anthraquinone Dye Reactive Blue 4," 55th Southeast Regional Meeting of the American Chemical Society (SERMACS 2003), Atlanta, GA, November 2003.
 49. Froelich, P. N., S. I. Rubin-Mason, and S. G. Pavlostathis. "Origin of Methylated Germanium Compounds in Anoxic Environments," 55th Southeast Regional Meeting of the American Chemical Society (SERMACS 2003), Atlanta, GA, November 2003.
 50. Epolito, W. J., S. G. Pavlostathis, and L. A. Bottomley. "Zero-Valent Iron Decolorization of Textile Anthraquinone Dyes," Industrial Pollution Control Conference & Expo, Georgia Water & Pollution Control Association, Atlanta, GA, March 2004.
 51. Bottomley, L. A., and S. G. Pavlostathis. "Decolorizing and Detoxifying Textile Plant Effluents with Cavitation," CCACTI Textile Mid-Year Research Forum, Atlanta, GA, January 2005.
 52. Tezel, U., J. A. Pierson, and S. G. Pavlostathis. "Assessing the Impact of Quaternary Ammonium Compounds on Anaerobic Biological Systems," Industrial Pollution Control Conference & Expo, Georgia Water & Pollution Control Association, Atlanta, GA, March 2005.
 53. Yang, H., W. J. Epolito, L. A. Bottomley, and S. G. Pavlostathis. "Zero-Valent Iron Decolorization of the Anthraquinone Textile Dye Reactive Blue 4 and Biodegradation Assessment of its Decolorization Products," Industrial Pollution Control Conference & Expo,

- Georgia Water & Pollution Control Association, Atlanta, GA, March 2005.
54. Okutman Tas, D. and S. G. Pavlostathis. “Microbial Reductive Transformation of Pentachloronitrobenzene (PCNB) - Temperature Effect on Dechlorination,” Quadrangle Conference on Environmental Science and Engineering, Atlanta, GA, USA, April, 2005.
 55. Okutman-Tas, D., and S. G. Pavlostathis. “Microbial Transformation of Pentachloronitrobenzene under Nitrate Reducing Conditions,” 105th General Meeting, American Society for Microbiology, Atlanta, GA, June 2005.
 56. Tugtas, A. E., and S. G. Pavlostathis. “Sulfide Exacerbates the Inhibitory Effect of Nitrate Reduction on Methanogenesis,” 105th General Meeting, American Society for Microbiology, Atlanta, GA, June 2005.
 57. Tezel, U., J. A. Pierson, and S. G. Pavlostathis. “Effect of Polyelectrolytes and Quaternary Ammonium Sanitizers on the Anaerobic Biological Treatment of Poultry Processing Wastewater,” Industrial Conference & Expo, Georgia Association of Water Professionals, Atlanta, GA, March 2006.
 58. Tugtas, A. E., and S. G. Pavlostathis. “Effect of Nitrate Reduction on the Anaerobic Digestion Process,” Industrial Conference & Expo, Georgia Association of Water Professionals, Atlanta, GA, March 2006.
 59. Okutman-Tas, D., and S. G. Pavlostathis. “Microbial Reductive Transformation of Pentachloronitrobenzene: Temperature and pH Effect,” ACS 231th National Meeting, Atlanta, GA, March 2006.
 60. Epolito, W. J., L. A. Bottomley, and S. G. Pavlostathis. “Reaction Kinetics and Mechanism of Zero-valent Iron Reductive Transformation of the Anthraquinone Dye Reactive Blue 4,” ACS 231th National Meeting, Atlanta, GA, March 2006.
 61. Ko, R. D., O. Braide, J. F. Parker, L. A. Bottomley, and S. G. Pavlostathis. “Electrooxidative Decolorization of Reactive Textile Dyes,” ACS 231th National Meeting, Atlanta, GA, March 2006.
 62. Song, C. K., P. Bhaumik, S. Arai, L. A. Bottomley, M. J. Kramarz, J. Bartling, S. G. Pavlostathis, and S. Michielsen. “Photochemical Decolorization of Textile Dyes,” ACS 231th National Meeting, Atlanta, GA, March 2006.
 63. Okutman-Tas, D., and S. G. Pavlostathis. “Microbial Transformation of Pentachloronitrobenzene under Nitrate Reducing Conditions,” Environmental Systems Microbiology Symposium, Atlanta, GA, March 2006 (poster).
 64. Tugtas, A. E., and S. G. Pavlostathis. “Effect of Sulfide on Nitrate Reduction in a Mixed Methanogenic Culture,” Environmental Systems Microbiology Symposium, Atlanta, GA, March 2006 (poster).
 65. Tezel, U., and S. G. Pavlostathis. “Effect of Quaternary Ammonium Compounds on the Methanogenic/Fermentative Activity in a Mixed Methanogenic Culture,” Environmental Systems Microbiology Symposium, Atlanta, GA, March 2006 (poster).
 66. Barker, K., A. G. Davis, A. Bryant, R. Ko, S. Hoy, N. Ives, S. G. Pavlostathis, and L. A. Bottomley. “Electrochemical Decolorization of Textile Dye bath Solutions,” 58th Southeast Regional Meeting of the American Chemical Society (SERMACS 2006), Augusta, GA, November 2006.
 67. Pavlostathis, S. G. “Basics of Anaerobic Digestion,” Annual Conference and Exposition, Georgia Association of Water Professionals, Savannah, GA, July 2007.
 68. Li, K., U. Tezel, J. A. Pierson, and S. G. Pavlostathis. “Effect of Quaternary Ammonium

- Compounds and Temperature on Nitrification,” US Poultry & Egg Association – 2008 Environmental Management Seminar, Atlanta, GA, March 2008.
69. Tezel U., and S. G. Pavlostathis. “Biotransformation of quaternary ammonium compounds,” Carl E. Kindsvater Symposium, Georgia ASCE Environmental and Water Resources Group, Georgia Institute of Technology, Atlanta, GA, March 2008 (poster).
 70. Tezel, U., R. Martinez, M. Tandukar, P. A. Sobecky, and S. G. Pavlostathis. “Biotransformation of Benzalkonium Chloride by a Mixed Heterotrophic Culture under Oxidic and Anoxic Conditions,” 109th General Meeting, American Society for Microbiology, Philadelphia, PA, May 2009 (poster).
 71. Pavlostathis, S. G. “Biogas Generation by Anaerobic Digestion,” Workshop: Sustainable Solutions for Utilities to Address Carbon Footprint and Resource Recovery. 82nd Annual Water Environment Federation Technical Exhibition and Conference (WEFTEC 2008), Orlando, FL, October 2009.

INVITED SEMINAR PRESENTATIONS, SHORT COURSES & LECTURES

1. "Bioremediation: Premises and Limitations," Civil Engineering Department, University of Massachusetts, Amherst, MA, November 1989.
2. "Bioremediation: Premises and Limitations," O'Brien & Gere, Inc., Syracuse, NY, February 1990.
3. "In-situ Bioremediation of Contaminated Soil and Groundwater - Bioengineering Issues," N.Y. State Department of Health, Albany, NY, May 1990.
4. "Anaerobic Biotransformation of Selected Organic Compounds for In-situ Bioremediation of Contaminated Soil and Groundwater - Application to Model City Facility," New York State Department of Environmental Conservation, Albany, NY, June 1990.
5. "Anaerobic Transformation of Chlorinated Alkenes for In-Situ Bioremediation," School of Civil Engineering, Georgia Institute of Technology, Atlanta, GA, April 1991.
6. "Biotransformation of Chlorinated Alkenes Under Anaerobic Conditions," School of Biology, Georgia Institute of Technology, Atlanta, GA, June 1992 (lecture).
7. "Biotransformation and Fate of Chlorinated Organic Contaminants in an Estuarine Sediment System," Department of Civil and Environmental Engineering, Vanderbilt University, Nashville, TN, February 1994.
8. "Subsurface Bioremediation - Contaminant Bioavailability Issues," Environmental Hydraulics and Water Resources/School of Civil & Environmental Engineering, Georgia Institute of Technology, Atlanta, GA, November 1995.
9. "Microbial Reductive Dehalogenation: Potential and Limitations," Savannah River Technology Center, Aiken, SC, November 1995.
10. "Microbial Reductive Dehalogenation: Potential and Limitations for In-Situ Subsurface Bioremediation," Department of Biological & Agricultural Engineering, The University of Georgia, Athens, GA, January 1996.
11. "Reductive Dechlorination of Chlorinated Benzenes Under Methanogenic Conditions," Oak Ridge National Laboratory, Oak Ridge, TN, May 1997.
12. "Bioavailability and Microbial Reductive Dehalogenation of Sediment-Associated Chlorinated Benzenes," U. S. EPA/National Exposure Research Laboratory, Athens, GA, March 1998.
13. "Anaerobic Environmental Biotechnology," Department of Chemical Engineering, University of Patras, Patras, Greece, May 1999 (short course).
14. "Microbial Reductive Dehalogenation: Potential and Limitations for In-Situ Subsurface Bioremediation," Department of Environmental Engineering, Technical University of Crete, Chania, Greece, June 1999.
15. "Historical Development in the Modeling of Activated Sludge Digestion," Department of Environmental Technology, Wageningen University, Wageningen, The Netherlands, February 2000 (lecture).
16. "Biological Processes: Microbial Kinetics and Bioenergetics," School of Environmental Engineering, Stavanger University College, Stavanger, Norway, March 2000 (short course).
17. "Anaerobic Biological Processes," School of Environmental Engineering, Stavanger University College, Stavanger, Norway, March 2000 (short course).
18. "Bioenergetics, Stoichiometry and Kinetics of Biological Processes," Departments of Microbiology and Environmental Technology, Wageningen University, Wageningen, The Netherlands, April 2000 (lecture).
19. "Bioenergetics and Stoichiometry of Microbial Processes," Department of Bioengineering,

- Catholic University of Louvain, Louvain-la-Neuve, Belgium, May 2000 (lecture).
20. “Effect of Nonionic Polysorbate Surfactants on the Bioavailability and Reductive Dechlorination of Hexachlorobenzene Sorbed to Contaminated Sediments,” Department of Bioengineering, Catholic University of Louvain, Louvain-la-Neuve, Belgium, May 2000.
 21. “Contaminant Bioavailability, Microbial Reductive Dehalogenation, and Surfactant Use,” Microbiology Laboratory, Wageningen University, Wageningen, The Netherlands, May 2000.
 22. “Bioenergetics and Stoichiometry of Microbial Processes,” Department of Environmental Engineering, Middle East Technical University, Ankara, Turkey, April 2001 (short course).
 23. “Anaerobic Biotechnology,” Department of Environmental Engineering, Middle East Technical University, Ankara, Turkey, April 2001 (short course).
 24. “Bioavailability and Microbial Reductive Dechlorination of Chlorinated Benzenes in Contaminated Estuarine Sediments,” Department of Environmental Engineering, Middle East Technical University, Ankara, Turkey, April 2001.
 25. “Modeling of Anaerobic Biotransformation of Xenobiotic Compounds: Recent Developments and Future Research Needs”, Departments of Chemical & Biochemical Engineering and Environmental Sciences, Rutgers – The State University of New Jersey, Piscataway, NJ, May 2001.
 26. “Biological Processes: Microbial Kinetics and Bioenergetics,” School of Environmental Engineering, Stavanger University College, Stavanger, Norway, September 2001 (short course).
 27. “Anaerobic Biological Processes,” School of Environmental Engineering, Stavanger University College, Stavanger, Norway, September 2001 (short course).
 28. “Bioavailability and Microbial Reductive Dechlorination of Chlorinated Benzenes in Contaminated Estuarine Sediments,” Department of Environmental Engineering, Norwegian Geotechnical Institute, Oslo, Norway, September 2001.
 29. “Biotransformation of Xenobiotic Compounds,” School of Biological and Environmental Sciences, University of Ulster, Coleraine, Northern Ireland, UK, Summer 2002 (Six lectures).
 30. “Microbial Reduction and Decolorization of Textile Dyes,” Department of Civil Engineering, Auburn University, Auburn, AL, March 2003.
 31. “Microbial Kinetics and Continuous-flow Biological Processes,” School of Biological and Environmental Sciences, University of Ulster, Coleraine, Northern Ireland, UK, June 2003 (lecture).
 32. “Environmental Biotechnology and Bioprocesses – Recent Research Activities,” Earth Tech, Roswell, GA, October 2007.
 33. “Microbial Reductive Transformation of Pentachloronitrobenzene,” Earth Tech, Roswell, GA, December 2007.
 34. “Environmental Biotechnology and Bioprocesses – Recent Research Activities,” Malcolm Pirnie, Atlanta, GA, April 2008.
 35. “Fate and Biotransformation of Quaternary Ammonium Compounds in Biological Treatment Processes,” ConocoPhillips, Bartlesville, OK, May 2008.
 36. “Toxicity: Antioxidants and Antimicrobials in Anaerobic Systems,” Anaerobic Treatment of High-Strength Industrial Wastes, Marquette University, Milwaukee, WI, September 2008 (short course).
 37. “Co-Digestion of Fat, Oil and Grease for Increased Methane Production,” Anaerobic Treatment of High-Strength Industrial Wastes, Marquette University, Milwaukee, WI,

- September 2008 (short course).
38. “Fate and Biotransformation of Quaternary Ammonium Compounds in Biological Treatment Systems,” Department of Microbiology and Environmental Change Institute, National University of Ireland, Galway, Ireland, May 2009.
 39. “Stoichiometry and Energetics of Microbial Processes,” Department of Microbiology, National University of Ireland, Galway, Ireland, July 2009 (lecture).
 40. “Kinetics of Microbial Growth and Substrate Utilization,” Department of Microbiology, National University of Ireland, Galway, Ireland, August 2009 (lecture).
 41. “Continuous Culture Processes,” Department of Microbiology, National University of Ireland, Galway, Ireland, August 2009 (lecture).

GRANTS AND CONTRACTS

1. **Chemical Waste Management, Inc.** “Biotransformation of Organic Contaminants for In-situ Bioremediation at the Model City Facility,” (1988-1991) (Principal Investigator).
2. **East Coast Pollution, Inc.** “Sludge Dewatering by Use of Microwaves,” (1989-1990)(Co-Principal Investigator with A. G. Collins, Clarkson University).
3. **Eastman Kodak Co.** “Fate and Effects of Photoprocessing Effluents in Conventional Biological Wastewater Treatment Systems,” (1989-1991) (Principal Investigator).
4. **New York State Center for Hazardous Waste Management** “Enhancement of Anaerobic Biodegradation of Chloroalkenes for In-situ Bioremediation of Contaminated Soil and Groundwater,” (1988-1992) (Principal Investigator).
5. **Eastman Kodak Co.** “Fate and Effect of Photoprocessing Effluents in Anaerobic Treatment Processes,” (1992) (Principal Investigator).
6. **New York State Energy Research and Development Authority** “Anaerobic Pretreatment of Sewage: Optimization Studies and Assessment of Impacts on Conventional Aeration Processes,” (1991-1994) (Co-Principal Investigator with A. G. Collins and T. L. Theis, Clarkson University).
7. **Georgia Research Alliance** “Development of Bioreactor Systems for Reductive Dechlorination of Environmentally Toxic Halogenated Compounds,” (1993-1994) (Co-Principal Investigator with J. Wiegel, University of Georgia).
8. **Eastman Kodak Co.** “Fate and Effect of Photoeffluent Constituents on Aerobic and Anaerobic Biological Processes,” (1993-1994) (Principal Investigator).
9. **U.S. Environmental Protection Agency/ORD/Hazardous Substance Research Center/South & Southwest** “Investigation on the Fate and Biotransformation of Hexachlorobutadiene and Chlorobenzenes in a Sediment-Water Estuarine System,” (1992-1995) (Principal Investigator).
10. **U.S. Environmental Protection Agency/ORD/National Exposure Research Laboratory** “Biological Fate of Selected Monoterpenes,” (1992-1995) (Principal Investigator with E. M. Perdue/EAS).
11. **U.S. Army/DoD** “Degradation of Biologically Resistant Components of Military Propellants by Microbial Mat Ecosystems,” (1993-1996) [Associated Faculty; Co-PIs: J. Bender, P. Philips, J. Stewart, A. Rodriguez (Clark Atlanta); J. Gould (Georgia Tech)].
12. **Strategic Environmental Research and Development Program (SERDP)/ DoD/DoE/EPA** “In Situ Biochemical Remediation of Trinitrotoluene-Contaminated Soils: Integrated Laboratory and Field Studies,” (1994-1996) (Co-Principal Investigator with F. M. Saunders and C. Tiller).
13. **Eastman Kodak Co.** “Effect of Silver on Aerobic and Anaerobic Biological Processes,” (1995-

- 1996) (Principal Investigator).
14. **U.S. Environmental Protection Agency/ORD/Hazardous Substance Research Center/South & Southwest** “Application of Plant Biotechnology in Bioremediation of Contaminated Sediments,” (1995-1997) (Co-Principal Investigator with S. V. Sahi, Alabama State University).
 15. **U.S. Geological Survey/Georgia Water Resources Institute** “Microbial Reductive Dehalogenation of Chloroorganic Compounds Under Iron-Reducing Conditions,” (1996-1997) (Principal Investigator).
 16. **Electric Power Research Institute/Georgia-Pacific Corporation** “The Use of Ozone and Ozone/Biological Treatment for Reduction of Toxicity of Pulp and Paper Mill Effluents,” (1997-1998) (Co-Principal Investigator with J. Gould).
 17. **Gwinnett County/Department of Public Utilities** “Assessment of Biological Filtration, Disinfection By-Product Formation, and Microbial Regrowth Resulting from Implementation of Ozonation at a Direct Filtration Water Treatment Plant,” (1997-1999) (Co-Principal Investigator with C. Tiller and A. Amirtharajah).
 18. **U.S. Commerce Department/National Textile Center** “Biological Renovation and Reuse of Spent Reactive Dye baths,” (1996-1999) (Principal Investigator with W. C. Tincher/TFE).
 19. **U.S. Environmental Protection Agency/ORD/National Center For Environmental Research** “Influence of Nonionic Surfactants on the Bioavailability of Chlorinated Benzenes for Microbial Reductive Dechlorination,” (1996-1999) (Principal Investigator with K. D. Pennell).
 20. **State of Georgia/Traditional Industries Program/CCA CTI** “Biological Decolorization and Reuse of Spent Reactive Dye baths,” (1999-2001) (Principal Investigator with W. C. Tincher/TFE).
 21. **Industry (Confidential)** “Biomethylation of Metalloids,” (2002-2003) (Co-Principal Investigator with P. Froelich/EAS).
 22. **State of Georgia/Traditional Industries Program/FoodPAC** “Assessing the Impact of Quaternary Ammonium Compounds on Wastewater Inhibition and Wastewater Pre-treatment Capacity,” (2003-2004) (Co-Principal Investigator with J. Pierson/GTRI).
 23. **U.S. Geological Survey/Georgia Water Resources Institute** “Reductive Biotransformation of Polychloronitrobenzenes under Iron-Reducing Conditions,” (2004-2005) (Principal Investigator).
 24. **State of Georgia/Traditional Industries Program/FoodPAC** “Selection of Quaternary Ammonium Sanitizers for Improved DAF Flocculent Performance, Skimmings Quality and Biosolids Management,” (2004-2005) (Principal Investigator with J. Pierson/GTRI).
 25. **State of Georgia/Traditional Industries Program/CCA CTI** “Decolorizing and Detoxifying Textile Plant Effluents with Cavitation,” (2004-2006) (Co-Principal Investigator with L. A. Bottomley/Chemistry).
 26. **National Science Foundation/BES-Environmental Engineering and Technology Program** “Reductive Biotransformation and Decolorization of Reactive Anthraquinone and Phthalocyanine Dyes,” (2001-2006) (Principal Investigator with L. A. Bottomley/Chemistry).
 27. **National Science Foundation/IGERT** “Signals in the Sea,” (2001-2007) (Participating faculty with others in Biology, Chemistry & Biochemistry, and Civil & Environmental Engineering/GIT; Principal Investigator M. Hay/Biology).
 28. **Pinellas County/Carollo Engineers** “Two-phase, Mesophilic and Thermophilic Anaerobic Sludge and FOG Digestion for Maximum Biogas Production” (2005-2007) (Principal Investigator).
 29. **Poultry Protein & Fat Council/U.S. Poultry & Egg Association** “Cold Treatment of Raw Secondary Poultry Nutrient for Improved Dewatering, Storage, and Quality” (2005-2007)

- (Principal Investigator with J. Pierson/GTRI).
30. **National Science Foundation/BES-SGER Environmental Engineering and Technology Program** “Role of Anaerobic Digestion in *N*-Nitrosodimethylamine (NDMA) Formation in Municipal Wastewater Treatment Plants: Source or Sink” (2006-2007) (Principal Investigator with C-H. Huang).
 31. **Gwinnett County/Department of Water Resources** “Conversion Strategies and Evaluation of the Transition From Mesophilic to Thermophilic Anaerobic Digestion of Municipal Sludge” (2007-2009) (Principal Investigator).
 33. **Columbus Water Works** “Measurement of Denitrification Rates for the Columbus Water Works Wetlands Demonstration Project” (2008-2009) (Principal Investigator).
 34. **Kimberly-Clark** “Assessment of Anaerobic Treatment of Select Waste Streams in Paper Manufacturing Operations” (2008-2009) (Principal Investigator).
 35. **Carollo Engineers** “Evaluation of a Modified Configuration of Acid-Phase Digestion of Municipal Sludge” (2008-2009) (Principal Investigator).
 36. **U.S. Poultry & Egg Association** “Assessment of Biological Nitrogen Removal in Poultry Processing Facilities” (2007-2010) (Principal Investigator with J. Pierson/GTRI).
 37. **CanocoPhillips** “Fate and Effect of Naphthenic Acids on the Biological Wastewater Treatment Processes in Oil Refineries” (2008-2010) (Principal Investigator).
 38. **US Department of Agriculture** “Fate of Antibiotics in Poultry Litter Before and After Application to Grasslands” (2009-2012) (Co-Principal Investigator with C-H. Huang (PI), M. L. Cabrera and A. Thompson (Co-PIs; UGA).