

CURRICULUM VITAE

CATHERINE A. PETERS

Program in Environmental Engineering and Water Resources
Department of Civil and Environmental Engineering
Princeton University
Princeton, New Jersey 08544

TEL: (609) 258-5645
FAX: (609) 258-2799
cap@princeton.edu
<http://www.princeton.edu/~cap/>

EDUCATION:

PhD Joint degree in Civil Engineering and Engineering & Public Policy, Carnegie Mellon University, Pittsburgh, Pennsylvania, 1992. Thesis advisor: Prof. Richard G. Luthy.
MS Civil Engineering, Carnegie Mellon University, Pittsburgh, Pennsylvania. 1987.
BSE Chemical Engineering, University of Michigan, Ann Arbor, Michigan, 1985.

PROFESSIONAL EXPERIENCE:

Current Chair and Professor, Dept. of Civil and Environmental Engineering, Princeton University.
Full Professor since 2011.
Associated Faculty, Department of Geosciences
Associated Faculty, Andlinger Center for Energy and the Environment
Associated Faculty, Princeton Institute for the Science and Technology of Materials (PRISM)
Associated Faculty, Princeton Environmental Institute
Director, Program in Geological Engineering
Executive Committee, Program in Sustainable Energy

2014-15 *Acting Chair*, Princeton University, Dept. of Civil and Environmental Engineering

2011 Promotion to *Full Professor*

2009 *Visiting Professor*: Earth & Environ. Systems Inst., Penn State Univ. Host: Susan Brantley

2004-08 *Associate Dean*, Academic Affairs, Princeton Univ. School of Engineering & Applied Science

2000-11 *Associate Professor*, Princeton University, Dept. of Civil and Environmental Engineering

1994-00 *Assistant Professor*, Princeton University, Dept. of Civil Engineering & Operations Research

1992-94 *Postdoctoral Research Fellow*, University of Michigan, Environmental and Water Resources Eng., Ann Arbor, MI. Research group: Prof. Walter J. Weber, Jr.

1985-92 Carnegie Mellon University, Pittsburgh, PA.
Research Assistant for Prof. Richard G. Luthy, Dept. of Civil Engineering
Research Assistant for Prof. Mitchell J. Small, Dept. of Engineering and Public Policy.

1986 Brookhaven National Laboratory, Upton, NY. *Research Assistant*.

1982-85 Dow Chemical Co., Midland, MI. Internship: Cooperative Education Program.

1983-85 Univ. of Michigan, Ann Arbor, MI. *Laboratory Assistant*, UofM Research Hospital.
Undergraduate Research Assistant for Prof. H. Scott Fogler, Dept. of Chem. Eng.

PROFESSIONAL MEMBERSHIPS:

Association of Environmental Engineering and Science Professors (*President*, 2002-2003)
American Chemical Society
American Geophysical Union
Alpha Chi Sigma, Professional Chemistry Fraternity
Geochemical Society of America

AWARDS AND HONORS:

Fellow of the Association of Environmental Engineering and Science Professors (AEESP), 2016.
Princeton Commendation List for Outstanding Teaching. 2016.
Outstanding Presentation Award, ACS National Meeting March 2012, for “Intragranular porosity in Hanford sediment”, with Lauren Crandell.
2012 EPA P3 Award for Sustainable Design Project, Power-in-a-Box™. \$90,000.
2011 Outstanding Paper Award, student Juan Nogues, 2011 American Geophysical Union Fall Meeting, an honor given to the top 3% of the nearly 5000 students at AGU.
2011 Poster Award, PhD student Lauren Crandell, AEESP Education and Research Conference.
2009 NSF-AEESP Grand Challenge Paper Award, PhD student Brian Ellis.
AEESP Distinguished Service Award 2003. Presented for service as President of AEESP (2002-2003) and for service on the AEESP Board of Directors (2000-2004).
Educator of the Year 2000. Presented by the New Jersey Section ASCE to an outstanding educator who has contributed substantially to the field of civil engineering.
Graduate Curriculum Development Award, Princeton University, May 2000. Conferred with \$22,320 for development of new graduate course in "Molecular Modeling in Environmental Chemistry".
Princeton University Research Board Award, 1997-98. Conferred with graduate research assistant tuition waiver, in recognition of significant promise in establishment of a research program.
Alfred Rheinstein '11 Junior Faculty Award, Princeton University, 1996. Conferred with \$15,000 in recognition of exceptional promise in teaching and scholarship.
Alcoa Foundation Research Award, 1996. For novel research on synthetic NAPLs.
Princeton University Research Board Award, 1995-96. Conferred with graduate research assistant tuition waiver, in recognition of significant promise in establishment of a research program.
Patricia Harris Scholarship, U.S. Department of Education, 1989-92.
Wharton Foundation Fellowship, 1986-87.
BSE degree granted *Cum Laude*, 1985.
Tau Beta Pi, National Engineering Honor Society, 1984.
Phi Lambda Upsilon, National Chemistry Honor Society, 1984.

PROFESSIONAL APPOINTMENTS:

AEESP Fellows Steering Committee, Since 2017.
Deputy Editor, *Environmental Engineering Science*, Mary Ann Liebert, Inc. Publishers. Since 2014.
Advisory Board, *Greenhouse Gases: Science and Technology*, Wiley Journals. Since 2011.
Member of Stakeholders Group, U.S. DOE National Risk Assessment Partnership (NRAP), since 2016.
Advisory Committee, DOE EFRC Center on “Nanoscale Controls on Geologic CO₂” (NCGC) at Lawrence Berkeley National Laboratory. Since 2014.
External Advisory Board (EAB) of the Bioenvironmental Engineering Undergraduate Program at Rutgers University. Since 2015.
Associate Editor, *Environmental Engineering Science*, Mary Ann Liebert, Inc. Publishers. 2011-2014.
Advancement Committee, Rice University Department of Civil and Environmental Engineering, 2013.
Member, U.S. Environmental Protection Agency (EPA) Science Advisory Board. 2007-2013.
Past President, *Association of Environmental Engineering and Science Professors* (AEESP). 2003-04.
President, *Association of Environmental Engineering and Science Professors* (AEESP). 2002-03.
Vice President, *Association of Environmental Engineering and Science Professors* (AEESP). 2001-02.
Board of Directors, *Assoc. of Environmental Engineering and Science Professors* (AEESP). 2000-2005.
Nominating Committee, AEESP Board of Directors, 2003-08 (*Chair*, 2003-04)
Science Advisory Committee of the Great Plains/Rocky Mountain Hazardous Substance Research Center, of the U.S. EPA. 1996-2002.
National Research Council Committee on Drinking Water Contaminants, 1998-2001.
Groundwater Technical Committee of the AGU Hydrology Section. 1998-2000.

Electronic Communication and Education Committee of the Association of Environmental Engineering and Science Professors (AEESP). 1996 - 2000.

PROFESSIONAL ACTIVITIES AND INVITED PANELS:

Earth and Environmental Sciences Area Expert Assessment Committee at the Lawrence Berkeley National Laboratory, February 2017.

Panelist DOE Basic Energy Sciences (BES) Basic Research Needs (BRN) for the Energy-Water Nexus: New Approaches to Ensure Robust and Secure Energy and Water Systems, January 2017.

Theme Chair for sessions on “Energy Resources for Society” for Goldschmidt Conference 2017 Paris, France.

Onsite reviewer, Oak Ridge National Lab (ORNL) BES Geosciences Program, November 2015.

Editor (with Andres Clarens) of the special issue of *Environmental Engineering Science*, “The science and innovation of emerging subsurface energy technologies”, 2015-2016.

Convener and Presider, Symposium “Subsurface Geochemistry for Energy & the Environment”, 250th ACS National Meeting, GEOC Division, Boston, MA. August 2015

Convener and Presider, Workshop on “Engineering Strategies for a Sustainable Food Supply Chain”, Princeton University, March 2015.

Roundtable on Foundational Research Relevant to SubTER, DOE Germantown May 2015.

Convener, Gordon Research Conference on Flow & Transport in Permeable Media, 6th to 11th July 2014, Bates College, Maryland.

Review Committee Member, Earth Sciences Division (ESD) at Lawrence Berkeley National Laboratory (LBNL). 2013.

Organizing Committee and Session Leader, Gordon Research Conference Flow & Transport in Permeable Media, Les Diablerets, Switzerland. June 2012.

Session convener and chair, “GC42A Carbon Sequestration: Upscaling Issues Related to Predicting Carbon Dioxide Leakage Potential from Geologic Repositories” AGU Fall Meeting, Dec 2011.

Organizer, NSF SEES Workshop Natural and Engineered Carbon Sequestration, Minneapolis, MN, October 2011.

Technical Committee, AEESP Education & Research Conference, Univ of S. FL, July 2011.

Panelist for the 2011 PNNL Science Focus Area (SFA) Review.

Workshop organizer and panel chair, U.S. DOE Workshop on *Common Research Themes for Carbon Storage and Enhanced Geothermal Energy*. June 2010. Rockville, MD.

Session organizer and chair, “Science and Engineering Challenges in Carbon Capture and Storage (CCS)”, at the AEESP 2009 Conference on Grand Challenges in Environmental Engineering and Science. University of Iowa, July 2009.

Steering Committee, 2009 Symposium on Engineering & Liberal Education. June 2009 Union College.

Task Force, Creation of a Society for Environmental Engineering, AEESP and AAEE. 2002-2005.

NETL Merit Review Board (DOE’s National Energy Technology Laboratory), Pittsburgh, PA. 2004-pr.

Advisory Committee, Rutgers University, Center for Self-Sustaining High-Rise Buildings, 2004-pr.

Session Chair for “Understanding Complex Environmental Systems” at the 2002 AEESP/AAEE Conference: Integrating Environmental Teaching, Research and Practice, Toronto, Canada.

Association of Environmental Engineering and Science Professors (AEESP) Conference on Research Frontiers, Penn. State University, August 1999; Member of organizing committee.

Convener and chair (with C. Zheng) of special session on "Environmental Hydrogeology", AGU Fall Meeting, San Francisco, CA, Dec. 1999.

Convener and chair (with L. Ferrand) of special session on "Multicomponent Contaminants in Surface and Subsurface Systems", AGU Fall Meeting, San Francisco, CA, Dec. 1997.

Proposal Review Panelist, National Science Foundation. 3/98, 12/01, 11/01, 11/02 etc.

Proposal Review Panelist, U. S. Environmental Protection Agency. 6/96, 7/96, 3/97. Etc.

PRINCETON UNIVERSITY SERVICE:

Director of the Program in Geological Engineering, 2013 – present.
Task Force on the Administrative Workload on Research, Dean for Research, 2017-18.
Committee on Public Lectures, 2015 – 2017.
CEE Departmental Representative for Undergraduate Academic Affairs. 2011-2015.
Princeton Environmental Institute (PEI) Interdepartmental Committee for the Program in Environmental Studies. July 1998 to 2012.
Executive Committee Member, Keller Center for Innovation in Engineering Education. 2008 to 2017.
Faculty leader for award-winning student project “Power in a Box™”, <http://powerbox.princeton.edu>, 2010-2014.
Executive Committee Member, Program in Sustainable Energy, 2008-2016.
Executive Committee Member, Program Environmental Engineering & Water Resources. 1995 to 2016.
CEE Departmental Committee for ABET Accreditation. Since 1999.
Executive Committee Member, Program in Architecture and Engineering, 2012-2015.
Member, SEAS Curriculum Committee 2008 to 2015.
Member, Program in Urban Studies, 2007 to 2013.
Director, Program in Environmental Engineering and Water Resources, 2009 to 2011.
Acting Director, Energy Grand Challenges Research Initiatives, Princeton University, 2009-2010.
Chair, SEAS Curriculum Committee, 2005 to 2008.
Chair of Search Committee for SEAS Director of Engineering and the Life Sciences, 2005-06.
Co-Chair of Search Committee for SEAS Associate Dean for Graduate Affairs, Summer 2004.
Chair, Executive Committee for the SEAS Workshop on Energy and the Environment, Fall 2003.
Executive Committee Member for the SEAS Workshop on Engineering, Policy and Society. Fall 2003.
President's Task Force on the Status of Women in Natural Sciences and Engineering. 2001-03.
University Committee on the Course of Study. Term: 2002-05.
CEE Departmental Representative for Undergraduate Academic Affairs. 1999-2001
SEAS Strategic Alliance Committee on Environmental Engineering. 1997-1998.
University Committee on Undergraduate Life, Princeton University, 1995-1999.
Princeton Environmental Institute (PEI) Curriculum Committee. 1997 to 1998.
Faculty Representative, Graduate Women in Science and Engineering (GWISE) 1995-1997.

EDUCATIONAL GRANTS AND AWARDS:

Award for \$15K from the Princeton Humanities Council for a Gardner magic grant for Power-in-a-Box™ project and collaboration with Anthropology Professor Carolyn Rouse.
Award for \$17K from the Siebel Energy Challenge fund at Princeton University for summer internships for “Wind-Solar Power for High School in Oshiyie, Ghana”. Summer 2012.
Award for \$90K from the U.S. EPA for “Power in a Box™: Shipping Sustainable Energy to Recovering and Off-the-Grid Communities” for winning the EPA P3 student design competition, 2012.
Award for \$15K from the U.S. EPA for “Wind Energy for Haiti”, for EPICS team to compete in the P3: People, Prosperity and Planet Student Design Competition 2012.
Award for \$100K from the Siebel Energy Grand Challenge fund at Princeton University, “Carbon Capture and Geologic Sequestration: Linking Undergraduate Education with Cutting Edge Research”. 2010-2013.
Award for \$25K from Princeton Institute for International and Regional Studies (PIIRS), with Elie Bou-Zeid and Jane Harrison, “EPICS: Wind Energy and Rainwater Harvesting Solutions for Sustainable Recovery of Haiti”, 2010-2013.
Award for \$120K from the 250th Anniversary Fund for Innovation in Undergraduate Education, Princeton University, “EPICS: Engineering Projects in Community Service 2007-2009.

Award for \$10K from the U.S. EPA for “An Innovative Paradigm: Green Retrofitting Residential Buildings”, an opportunity for my EPICS student team to compete in the P3: People, Prosperity and the Planet Student Design Competition for Sustainability. 2008.

Award for \$10K from the High Meadows Fund, managed by the Princeton Sustainability Committee, for innovations in engineering education related to sustainability, EPICS Greentrotfit Project.

COURSES TAUGHT:

CEE 304	Environmental Engineering and Energy
CEE 303	Introduction to Environmental Engineering
EGR 250/350/450	EPICS: Engineering Projects in Community Service
CEE 367	Environmental Risk Assessment and Management
CIV 406	Statistics for Experimental Design and Data Analysis
CEE 501	Environmental Engineering Fundamentals I
CEE 502	Environmental Engineering Fundamentals II
CEE 505	Statistical Methods for Data Analysis, Modeling and Experimental Design
CEE 571	Environmental Chemistry
CEE 599	Special Topics in EEW: Carbon Capture and Geologic Sequestration
CEE 599	Special Topics in EEW: Modeling of Geochemical Kinetics and Reactive Transport
ENV 201	Environmental Studies

PEER REVIEWED PAPERS

1. Safford, H.; Peters, C.A. (2017) “Citizen science for dissolved-oxygen monitoring: Case studies from Georgia and Rhode Island” *Environmental Engineering Science*. Volume 00, Number 00, 2018. DOI: 10.1089/ees.2017.0218.
2. H. Deng, J.M. Bielicki, M. Oppenheimer, J.P. Fitts, C.A. Peters (2017) “Leakage risks of geologic CO₂ storage and the impacts on the global energy system and climate change mitigation” *Climatic Change*. 144(2):151–163.
3. S. Hajirezaie, X. Wu, C. A. Peters (2017) “Scale formation in porous media and its impact on reservoir performance during water flooding.” *Journal of Natural Gas and Engineering* DOI 10.1016/j.jngse.2017.01.019
4. J.M. Bielicki, H. Deng, J.P. Fitts, C.A. Peters, E.J. Wilson, (2017) “Monetizing Leakage Risk with Secondary Trapping in Intervening Stratigraphic Layers.” 13th International Conference on Greenhouse Gas Technologies (GHGT-13), November 2016, Lausanne, Switzerland. *Energy Procedia*, 114 (2017): 4256-4261.
5. A.F. Clarens and C.A. Peters (2016) “Mitigating climate change at the carbon water nexus: A call to action for the environmental engineering community” *Environmental Engineering Science*. 33(10): 719-724.
6. B.R. Ellis and C. A. Peters (2016) “3D mapping of calcite and a demonstration of its relevance to permeability evolution in reactive fractures”, *Advances in Water Resources*. 95: 246-253.
7. J.M. Bielicki, M.F. Pollak, H. Deng, E.J. Wilson, J.P. Fitts, C.A. Peters (2016) “The Leakage Risk Monetization Model for Geologic CO₂ Storage” *Environmental Science & Technology*. 50(10) May 2016, 4923-4931.
8. Deng, H.; Fitts, J.P.; Peters, C.A. (2016) “Quantifying Fracture Geometry with X-ray Tomography: Technique of Iterative Local Thresholding (TILT) for 3D Image Segmentation”, *Computational Geosciences*. 20:231–244.
9. B. Guo, P. Fu, Y. Hao, C.A. Peters, C.R. Carrigan. (2016) "Thermal drawdown-induced flow channeling in a single fracture in EGS". *Geothermics*. Vol. 61 pages 46-62. doi:10.1016/j.geothermics.2016.01.004.
10. Deng, H.; Fitts, J.P.; Crandall, D.; McIntyre, D.; Peters, C.A. (2015) “Alterations of fractures in carbonate rocks by CO₂-acidified brines” *Environmental Science & Technology*. Vol. 49, Issue 16, pp. 10226-10234.
11. J.M. Bielicki, C.A. Peters, J.P. Fitts, E.J. Wilson. (2015) “An Examination of Geologic Carbon Sequestration Policies in the Context of Leakage Potential” *International Journal of Greenhouse Gas Control*. 37:61-75.
12. D.E. Giammar, F. Wang, B. Guo, J.A. Surface, C.A. Peters, M.S. Conradi, S.E. Hayes (2014) “Impacts of Diffusive Transport on Carbonate Mineral Formation from Magnesium Silicate-CO₂-Water Reactions”, *Environmental Science & Technology*, Volume 48, Issue 24, 16 December 2014, Pages 14344-14351.

13. J.M. Bielicki; M.F. Pollak; J.P. Fitts; C.A. Peters, E.J. Wilson. (2014) “Causes and Financial Consequences of Geologic CO₂ Storage Reservoir Leakage and Interference with other Subsurface Resources”. *International Journal of Greenhouse Gas Control*. Vol. 20: 272-284.
14. H. Deng, J.M. Bielicki, M. Oppenheimer, J.P. Fitts, C.A. Peters (2014) “Policy implications of Monetized Leakage Risk from Geologic CO₂ Storage Reservoirs” International Conference on Greenhouse Gas Technologies (GHGT-12), October 2014, Austin, TX. *Energy Procedia*, 63: 6852-6863.
15. J.P. Fitts and C.A. Peters, “Caprock Fracture Dissolution and CO₂ Leakage”, (2013) In: *Geochemistry of Geologic CO₂ Sequestration* (Eds: DJ DePaolo, DR Cole, A Navrotsky, IC Bourg), *Reviews in Mineralogy & Geochemistry* Vol 77: 459 – 479 (2013).
16. L.E. Beckingham; C.A. Peters; W. Um; K.W. Jones; W.B. Lindquist. (2013) “2D and 3D imaging resolution trade-offs in quantifying pore throats for prediction of permeability” *Advances in Water Resources*. 62: 1-12.
17. J.P. Noguees, J.P. Fitts, M.A. Celia, C.A. Peters. (2013) “Permeability evolution due to dissolution and precipitation of carbonates using reactive transport modeling in pore networks”, *Water Resources Research*, Vol 49(6): 6006-6021, doi:10.1002/wrcr.20486, 2013.
18. Deng, H.; Ellis, B.R.; Peters, C.A.; Fitts, J.P.; Crandall, D.; Bromhal, G.S. (2013) “Modifications of carbonate fracture hydrodynamic properties by CO₂-acidified brine flow”. *Energy and Fuels*. 27(8): 4221 – 4231 DOI: 10.1021/ef302041s.
19. K.W. Jones, J. Wang, Y.-C. Chen, Q. Yuan, W.B. Lindquist, L. Beckingham, C.A. Peters, W. Um, L. Newman, T. Sabo-Attwood, R. Tappero, (2013) “Tomographic Investigations Relevant to the Rhizosphere,” In: *Soil-Water-Root Processes: Advances in Tomography and Imaging*. SSSA Special Publication 61, S.H. Anderson and J.W. Hopmans, editors; Agronomy Journal. 2013.
20. B.R. Ellis, J.P. Fitts, G.S. Bromhal, D.L. McIntyre, R. Tappero, C.A. Peters. (2013) “Dissolution-Driven Permeability Reduction of a Fractured Carbonate Caprock”. *Environmental Engineering Science*, 30(4): 187-193. 2013. DOI: 10.1089/ees.2012.0337
21. J.M. Bielicki, M.F. Pollak, E.J. Wilson, J.P. Fitts, C.A. Peters, (2013) “A Methodology for Monetizing Basin-Scale Leakage Risk and Stakeholder Impacts.” International Conference on Greenhouse Gas Technologies (GHGT-11), November 2012, Kyoto, Japan. *Energy Procedia*, 37: 4665-4672.
22. C.M. Oldenburg, C. Doughty, C.A. Peters, and P.F. Dobson. (2013) “Simulations of upward leakage of CO₂ in long-column flow experiments: The impact of boundary conditions and three-phase relative permeability.” International Conference on Greenhouse Gas Technologies (GHGT-11), November 2012, Kyoto, Japan. *Energy Procedia*, 37: 3486-3494.
23. M.F. Pollak, J.M. Bielicki, J.A. Dammal, E.J. Wilson, J.P. Fitts, C.A. Peters. (2013) “The Leakage Impact Valuation (LIV) Method for Leakage from Geologic CO₂ Storage Reservoirs” International Conference on Greenhouse Gas Technologies (GHGT-11), November 2012, Kyoto, Japan. *Energy Procedia*, 37: 2819-2827.
24. Oldenburg, C.; Doughty, C.; Peters, C.A.; Dobson, P. (2012) “Simulations of long-column flow experiments related to geologic carbon sequestration: Effects of outer wall boundary condition on upward flow and formation of liquid CO₂” *Greenhouse Gases: Science and Technology*, 2(4): 279-303. DOI: 10.1002/ghg.1294.
25. L.E. Crandell, C.A. Peters, W. Um, K.W. Jones, W.B. Lindquist, 2012. “Changes in the pore network structure of Hanford sediment after reaction with caustic tank wastes.” *Journal of Contaminant Hydrology* 131 (2012) 89–99.
26. B.R. Ellis, C.A. Peters, J.P. Fitts, G.S. Bromhal, D.L. McIntyre, R.P. Warzinski, E.J. Rosenbaum. 2011. “Deterioration of a fractured carbonate caprock exposed to CO₂-acidified brine flow” *Greenhouse Gases: Science and Technology*. Vol 1, Issue 3, 248-260.
27. Kim, D., W. B. Lindquist, C. A. Peters, (2011), Upscaling geochemical reaction rates accompanying acidic CO₂-saturated brine flow in sandstone aquifers, *Water Resour. Res.*, 47, W01505, doi:10.1029/2010WR009472.
28. Ellis, B.R.; Bromhal, G.S.; McIntyre, D.L.; Peters, C.A. 2011. “Changes in caprock integrity due to vertical migration of CO₂-enriched brine”, *Energy Procedia*, 4: 5327-5334. 10th Int’l Conf. on Greenhouse Gas Control Technologies, September 2010, Amsterdam, The Netherlands.
29. C. A. Peters, P. F. Dobson, C. M. Oldenburg, J. S.Y. Wang, T. C. Onstott, G. W. Scherer, B. M. Freifeld, T. S. Ramakrishnan, Eric Stabinski, Kenneth Liang, Sandeep Verma. 2011. “LUCI: A Facility at DUSEL for Large-Scale Experimental Study of Geologic Carbon Sequestration”, *Energy Procedia*, 4:5050-5057. 10th Int’l Conf. on Greenhouse Gas Control Technologies, September 2010, Amsterdam, The Netherlands.

30. Ray, S. and C. A. Peters. 2010. "Adaptations in microbiological populations exposed to dinitrophenol and other chemical stressors." *Environmental Toxicology & Chemistry*. Vol. 29, no. 10, pp. 2161-2168.
31. Ellis, B.R., Crandell, L.E., Peters, C.A. 2010. "Limitations for Brine Acidification due to SO₂ Co-injection in Geologic Carbon Sequestration." *International Journal of Greenhouse Gas Control*. 4(3):575-582. DOI 10.1016/j.ijggc.2009.11.006.
32. Crandell, L.E., Ellis, B.R., Peters, C.A. 2010. "Dissolution Potential of SO₂ Co-Injected with CO₂ in Geologic Sequestration." *Environmental Science & Technology*. 44 (1): 349–355. DOI 10.1021/es-2009-02612m.
33. Peters, C. A. 2009. "Accessibilities of reactive minerals in consolidated sedimentary rock: An imaging study of three sandstones." *Chemical Geology*, 265: 198-208. doi:10.1016/j.chemgeo.2008.11.014.
34. Schulman, A. and C. A. Peters. 2008. "GIS analysis of urban schoolyard landcover in three U.S. cities", *Urban Ecosystems* 11: 65-80. DOI 10.1007/s11252-007-0037-4.
35. Ray, S. and C. A. Peters. 2008. "Changes in Microbiological Metabolism under Chemical Stress". *Chemosphere* 71(3):474-483. doi:10.1016/j.chemosphere.2007.10.026.
36. Li, L.; C. A. Peters; M. A. Celia. 2007. "Applicability of Averaged Concentrations in Determining Geochemical Reaction Rates in Heterogeneous Porous Media", *American Journal of Science* 307(10): 1146-1166. DOI 10.2475/10.2007.02.
37. Li, L.; C. A. Peters; M. A. Celia. 2007. "Effects of mineral spatial distribution on reaction rates in porous media", *Water Resources Research*. 43(1): Article no. W01419, doi: 10.1029/2005WR004848.
38. Li, L.; C. A. Peters; M. A. Celia. 2007. "Reply to 'Comment on upscaling geochemical reaction rates using pore-scale network modeling' by Peter C. Lichtner and Qinjun Kang", *Advances in Water Resources*, 30(3): 691-695.
39. Knightes, C. D. and C. A. Peters. 2006. "Multisubstrate Biodegradation Kinetics for Binary and Complex Mixtures of Polycyclic Aromatic Hydrocarbons." *Environmental Toxicology and Chemistry*, 25(7): 1746-1756.
40. Li, L.; C. A. Peters; M. A. Celia. 2006. "Upscaling geochemical reaction rates using pore-scale network modeling" *Advances in Water Resources* 29: 1351-1370.
41. Wammer, K.H. and C. A. Peters. 2006. "A Molecular Modeling Analysis of Polycyclic Aromatic Hydrocarbon Biodegradation by Naphthalene Dioxygenase" *Environmental Toxicology and Chemistry*, 25(4): 912-920.
42. Giammar, D. E.; R. G. Bruant, Jr.; and C. A. Peters. 2005. "Forsterite Dissolution and Magnesite Precipitation at Conditions Relevant for Deep Saline Aquifer Storage and Sequestration of Carbon Dioxide", *Chemical Geology*, 217(3-4):257-276.
43. Wammer, K. H. and C. A. Peters. 2005. "Polycyclic Aromatic Hydrocarbon Biodegradation Rates: A Structure-Based Study", *Environmental Science and Technology*, 39(8):2571-2578.
44. Lee, K., and C. A. Peters. 2004. "UNIFAC Modeling of Cosolvent Phase Partitioning in Nonaqueous Phase Liquids-Water Systems", *Journal of Environmental Engineering*, ASCE. 130(4): 478-483.
45. Li, L.; C. A. Peters; M. A. Celia. 2004. "Upscaling calcite dissolution rates using network model simulations." *Water-Rock Interactions: Proc. Eleventh International Symposium on Water-Rock Interactions, WRI-11*, (Peer Reviewed). R. B. Wanty and R. R. Seal II (Eds.), A. A. Balkema Publishers, London. pp 961-965.
46. Knightes, C. D., C. A. Peters. 2003. "Aqueous Phase Biodegradation Kinetics of Ten PAH Compounds", *Environmental Engineering Science*, 20(3):207-218.
47. Bruant, Robert G. Jr.; Guswa, Andrew J.; Celia, Michael A.; Peters, Catherine A. 2002. "Safe Storage of Carbon Dioxide in Deep Saline Aquifers", Feature article in *Environmental Science & Technology*. 36(11):240A-245A.
48. Knightes, C. D., C. A. Peters. 2000. "Statistical Analysis of Nonlinear Parameter Estimation for Monod Biodegradation Kinetics for Bivariate Data", *Biotechnology & Bioengineering*. 69: 160-170.
49. Peters, C. A., K. H. Wammer, C. D. Knightes. 2000. "Multicomponent NAPL Solidification Thermodynamics", *Transport in Porous Media*, 38(1-2):57-77.
50. Brown, D. B., C. D. Knightes, C. A. Peters. 1999. "Risk Assessment for Polycyclic Aromatic Hydrocarbon NAPLs Using Component Fractions" Policy Analysis section of *Environmental Science & Technology*. 33(24):4357-4363.

51. Peters, C. A., C. D. Knightes, D. G. Brown. 1999. "Long-Term Composition Dynamics of PAH-Containing NAPLs and Implications for Risk Assessment", *Environmental Science & Technology*, 33(24):4499-4507.
52. Guha, S., C. A. Peters, P. R. Jaffe. 1999. "Multisubstrate Biodegradation Kinetics of Naphthalene, Phenanthrene and Pyrene Mixtures", *Biotechnology & Bioengineering*. 65(5):491-499.
53. Peters, C. A., Mukherji, S., Weber, W. J., Jr. 1999. "UNIFAC Modeling of Multicomponent Nonaqueous Phase Liquids Containing Polycyclic Aromatic Hydrocarbons", *Environmental Toxicology and Chemistry*. 18(3):426-429.
54. Guha, S., P. R. Jaffe, C. A. Peters. 1998. "Bioavailability of Mixtures of PAHs Partitioned into the Micellar Phase of a Non-ionic Surfactant", *Environmental Science & Technology*, 32(15): 2317-2324.
55. Guha, S., P. R. Jaffe, C. A. Peters. 1998. "Solubilization of PAH Mixtures by a Nonionic Surfactant", *Environmental Science & Technology*, 32(7):930-935.
56. Peters, C. A., Mukherji, S., Knightes, C. D., Weber, W. J., Jr. 1997. "Phase Stability of Multicomponent NAPLs Containing PAHs", *Environmental Science & Technology*, 31(9): 2540-2546.
57. Mukherji, S., C. A. Peters, W. J. Weber, Jr. 1997. "Mass Transfer of Polynuclear Aromatic Hydrocarbons (PAHs) from Complex DNAPL Mixtures", *Environmental Science & Technology*, 31(2):416-423.
58. Peters, C. A., P. A. Labieniec, and C. D. Knightes. 1996. "Multicomponent NAPL Composition Dynamics and Risk". Proc. ASCE Annual Convention: Non-Aqueous Phase Liquids (NAPLs) in the Subsurface Environment: Assessment and Remediation. (Peer-Reviewed) L. N. Reddi, Ed. Washington, DC, Nov. 1996, pp. 681-692.
59. Mukherji, S., C. A. Peters, W. J. Weber, Jr. 1996. "Rates of Release of PAHs from DNAPL Mixtures". Proc. ASCE Annual Convention: Non-Aqueous Phase Liquids (NAPLs) in the Subsurface Environment: Assessment and Remediation. (Peer-Reviewed) L. N. Reddi, Ed. Washington, DC, Nov. 1996, pp. 575-582.
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65. Huang T., Krupka M., Bagrianski S., Wagner S., Peters C., Adriaenssens S. (2011). ‘Shaping mechanically coupled assemblies of dielectric elastomer elements’. 2011 Materials Research Society Fall Meeting, Boston.
66. C. A. Peters, A. F. Clarens, J. P. Fitts, C. M. Oldenburg, P. F. Dobson, J. S.Y. Wang, Y. Guglielmi, B. R. Ellis, S. Wang. “Safe and effective geologic sequestration of CO₂: Partnerships for multi-scale experimental studies”, Oral presentation at *Global Sustainability and Environmental Engineering: AEESP 2011 Conference*. Univ. of South FL, July 2011, Tampa, FL.
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75. C.M. Oldenburg; C.A. Peters; P.F. Dobson; C. Doughty. 2010. Upward flow of supercritical CO₂ with transition to gaseous conditions: Simulations for design of large-scale CO₂ flow experiments at LUCI. *Abstract H11M-05 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.*
76. B.R. Ellis, J.P. Fitts, G. Brohmal, D. McIntyre, R. Warzinski, E. Rosenbaum, C. A. Peters. 2010. "Computed Tomography Analysis of Alterations in Fractured Caprock Resulting from CO₂-acidified Brine", GSA 2010 Annual Meeting, Denver, Colorado. Oct 31 – Nov 3, 2010. *GSA Abstracts with Programs* Vol. 42, No. 5
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78. Ellis, B.R.; Hui, W.C.E.; Peters, C.A. Fitts, J.P.; Bhatt, V. 2010 "Potential benefits of retrofitting power plants with combined CO₂-SO₂ emission control for co-injection in geologic carbon sequestration", *9th Annual Conference on Carbon Capture & Sequestration*, Pittsburgh, PA May 10-13, 2010.
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91. C. A. Peters, K. Bowman, B. Ellis. 2007. "Imaging Viking Sandstones for Quantification of Reactive Minerals and Surfaces", 2007 AEESP Conference: Interactions at the Interface – Making the Connections Between Environments, Disciplines and Nations, Virginia Tech.
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93. Peters, C. A.; Maier, M. L.; Celia, M. A.; Kim, D.; Lindquist, W. B. 2007. "Network and Mineral Characterization of Viking Sandstones for Reactive Transport Modeling". Computational and Numerical Geosciences, Gaithersburg, MD, May 2007. Organized by Nick Woodward, Office of BES, U.S. DOE.
94. Peters, C. A. and Maier, M. L. 2006, Backscatter Electron Imaging of Viking Sandstones for Mapping Reactive Minerals, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract H54D-07
95. Ray, S. and C. A. Peters. 2006. "Quantifying effects of chemical stress on microbial metabolism", 2006 Northeast Regional ACS meeting (NERM 2006), Binghamton, NY. Oct 5-7, 2006.
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106. Li, L.; Peters, C. A.; Celia, M. A. 2002. "Upscaling of Carbonate Dissolution Rates in Porous Media Using Pore-Scale Network Modeling". American Geophysical Union 2002 Fall Meeting, San Francisco, CA. *Eos Trans. AGU*, 83(47), Fall Meeting Suppl., Abstract H62G-09.
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111. Celia, M. A.; Peters, C. A.; Bachu, S. 2002. "Geologic Storage of CO₂: Leakage Pathways and Environmental Risks". (Invited) American Geophysical Union 2002 Spring Meeting, Washington, D.C., Eos. Trans. AGU, 83(19), Spring Meet. Suppl., Abstract GC32A-03.
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122. Lee, K. Y.; C. A. Peters. "UNIFAC Modeling of Cosolvent Phase Partitioning in NAPL-water Systems" 1999. American Geophysical Union 1999 Fall Meeting. EOS Transactions. #H11.
123. Peters, C. A. "Toward a Risk-Based Model for Multi-Component NAPL Contaminants: When is Remediation Intervention Worthwhile?" (Invited) EPA Innovative Clean-Up Approaches. Nov. 1999, Bloomingdale, IL.
124. Peters, C. A. "Compositional Changes and Solidification in PAH-Containing NAPLs", (Invited) Topical Session: Subsurface Transport and Remediation of NAPL Contaminants in Multicomponent Systems, Geological Society of America Meeting, Denver, CO. GSA Abstracts, Vol. 31, No. 7, October 1999.
125. Peters, C. A. "Student Web Authoring in Environmental Engineering and Chemistry Courses", 1999. AEESP Research Frontiers Preconference Workshop on Computer-Based Learning Tools. Penn. State University. August 1999.
126. Peters, C. A. "Long-Term Composition Dynamics of PAH-Containing NAPLs and Implications for Risk Assessment", 1999. Conference on Hazardous Waste Research, St. Louis, MO. May, 1999.

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135. Guha, S., P. R. Jaffe, C. A. Peters. 1997. "Biodegradation of a PAH Mixture in the Presence of Triton X100". In Situ and On-Site Bioremediation, The Fourth International Symposium. Battelle Press, Columbus, OH. 1997. Volume 2, p. 557.
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137. Mukherji, S., C. A. Peters, W. J. Weber, Jr. 1995. "Mass Transfer of Polynuclear Aromatic Hydrocarbons (PAHs) from Complex Multicomponent Non-Aqueous Phase Liquids (NAPLs)", 18th Midwest Environmental Chemistry Workshop, Michigan State Univ., E. Lansing, MI, Oct 1995.
138. Peters, C. A. 1995. "UNIFAC Phase Equilibrium Modeling to Assess the Bioavailability of Multicomponent NAPLs Containing Polycyclic Aromatic Hydrocarbons". U.S. EPA Symposium on Bioremediation of Hazardous Wastes: Research, Development, and Field Evaluations, EPA/600/R-95/076, p. 124. Aug. 1995, Rye Brook, NY.
139. Peters, C. A. 1995. "UNIFAC Phase Equilibrium Modeling of Multicomponent NAPLs Containing Polycyclic Aromatic Hydrocarbons". Poster presentation at the U.S. EPA Hazardous Substances Research Centers, 1995 Five Centers' Research Conference: From the Flask to the Field: Moving Research Insights into Practical Solutions, July 1995, Gleneden Beach, OR.
140. Mukherji, S., C. A. Peters, W. J. Weber, Jr. 1994. "Phase Equilibria of Complex NAPL Mixtures: Theoretical Treatment and Experimental Evaluation", 17th Midwest Environmental Chemistry Workshop, Michigan State University, E. Lansing, MI, Oct. 1994.
141. Peters, C. A., S. Mukherji, W. J. Weber, Jr. 1994. "Phase Equilibria of Complex NAPL Mixtures: Experimental Evaluation and UNIFAC Modeling", Poster at the Gordon Research Conference, Environmental Sciences: Water, Jun. 1994, New Hampton, NH.
142. Peters, C. A. 1993. "A Methodology for Statistically-Based Clean-Up Standards for Complex Mixture NAPL Wastes". Water Environment Federation Specialty Conference: Developing Cleanup Standards for Contaminated Soil, Sediment, & Groundwater -- How Clean is Clean? Jan. 1993, Washington, D.C.
143. Peters, C. A. and R. G. Luthy. 1991. "Coal Tar Dissolution in Water-Miscible Solvents". Water Pollution Control Federation 64th Annual Conference, October 1991, Toronto, Ontario.
144. Peters, C. A. and R. G. Luthy. 1990. "In Situ Solvent Extraction for Remediation of Coal Tar Sites". Poster presentation at the Gordon Research Conference, Environmental Sciences: Water, Jun. 1990, New Hampton, NH.

INVITED SEMINARS AND PRESENTATIONS – RESEARCH RELATED:

- “Synchrotron Techniques in Support of Sustainable Subsurface Energy Technologies” 2017 NSLS-II and CFN Users’ Meeting: Synchrotron Techniques in Support of DOE’s Subsurface R&D Effort, Brookhaven National Lab, Brookhaven, NY May 2017.
- “Environmental Geochemistry Perspectives on Subsurface Energy Technologies” Engineering Sustainability 2017: Innovation and the Triple Bottom Line. Pittsburgh, PA, April 2017.
- “Permeability evolution in fractured carbonates exposed to reactive flow”, University of Calgary, Department of Geosciences, Alberta Canada. March 2017. (Host: Steve Bryant)
- “Permeability evolution in fractures exposed to reactive flow”, Imperial College London, Department of Earth Science & Engineering, Petroleum Geoscience & Engineering. March 2016. (Host: Branko Bijeljic)
- “Geochemical reactions and permeability evolution in caprock fractures”, University College London, Department of Earth Sciences, March 2016. (Host: Eric Oelkers)
- “Geological Carbon Sequestration: Geochemical Processes and Storage Reliability”, University of Delaware, Civil & Environmental Engineering, November 2015. (Host: Dominic Di Toro)
- “Geochemical reactions and permeability evolution in caprock fractures”, Temple University, Earth & Environmental Science, Sept 2015. (Host: Nicholas Davatzes)
- “Challenges in reactive transport modeling for prediction of geometry evolution in fractured carbonate rocks” 2014 AGU Fall Meeting, San Francisco, CA. Dec 2014.
- “CO₂ Storage Permanence in Geologic Carbon Sequestration” Workshop on Clean Utilization of Coal; 5th International Symposium of the McConnell International Scholars Academy. St. Louis, MO, October 2014.
- “Geochemistry Challenges in Reliable Geologic Carbon Sequestration” Keynote presentation, 100th anniversary Div. of Environmental Chemistry, 248th American Chemical Society National Meeting, San Francisco, CA August 2014.
- “Geochemistry of Caprock Fracture Dissolution and CO₂ Leakage in Geologic Carbon Sequestration” Gordon Research Conference on Environmental Sciences Water. Holderness, NH, June 2014.
- “Challenges for predicting permeability evolution of fractured carbonate-bearing rocks”. Geochemistry Division 247th American Chemical Society National Meeting Dallas, Texas, March 16-20, 2014.
- “Geochemistry of Caprock Fracture Dissolution and CO₂ Leakage in Geologic Carbon Sequestration”, Washington University, Department of Energy, Environmental and Chemical Engineering, February 27, 2014.
- “New Reactive Transport Challenges for Acidified Flows in Fractured Carbonate Rocks” 2013 AGU Fall Meeting, San Francisco, CA Dec 2013.
- “Predicting Permeability Evolution in Reactive Flow Paths in Porous and Fractured Media”, BES Geosciences Workshop on Reaction and Transport within Internal Domains of Porous Media, Dec 2012, San Francisco, CA.
- “Permeability Evolution of Fractured Rock Due to Acid-Driven Reactions: Experiments and Modeling”, NSF workshop on Identification of Fundamental Interfacial and Transport Phenomena for the Sustainable Deployment of Hydraulic Shale Fracturing, May 14-15, 2012, Arlington, VA.
- “CO₂-acidified brines and reactions with caprock minerals”, Workshop on Supercritical Carbon Dioxide and Material Interactions, Brookhaven National Laboratory, March 21-23, 2011.
- “DUSEL CO₂: A facility for experimental study of geologic carbon sequestration”, Sanford Underground Laboratory at Homestake, Lead, SD. April 20, 2010.
- “DUSEL CO₂: A facility for experimental study of geologic carbon sequestration”, 239th ACS National Meeting, March 2010, San Francisco, CA.
- “Geologic Carbon Sequestration: Challenges of Experimental Study”, Chinese Academy of Sciences, Institute for Geosciences (Host: Zhenhao Duan) Beijing, China. Nov. 6, 2009.
- “Geologic Carbon Sequestration: Challenges of Experimental Study”, Center for Energy & Environmental Policy Research (CEEP), Chinese Academy of Sciences Institute of Policy and Management and the CNPC Research Institute of Economics and Technology (Hosts: Prof. Changlu Zhao, Vice President of BIT and Prof. Wei, the center director) Beijing, China. Nov. 6, 2009.
- “Geologic Carbon Sequestration: Challenges of Experimental Study”, Tsinghua BP Clean Energy Research and Education Centre (Li Zheng, Director), Tsinghua University, Beijing, China. Nov. 5, 2009.
- “Geologic Carbon Sequestration: Challenges of Experimental Study”, Forum on Energy, Environment & Economic Policy Research, November 3-4, 2009, Shanghai, China.
- “Reactions in geologic sequestration of CO₂: Fast, slow, and forget about it!”, CEE Seminar Series, Penn State University, April 2009. (Host: Susan Brantley)

- “Reactions in geologic sequestration of CO₂: Fast, slow, and forget about it!”, CEKA 30-Slides Seminar Series, Earth and Environmental Systems Institute, Penn State University, March 2009. (Host: Bruce Logan)
- “Reaction rate upscaling in geologic carbon sequestration”, Dept. of Geosciences, SUNY Stony Brook, February 2009.
- “Carbon Sequestration”, *Deep Carbon Cycle Workshop*, Geophysical Laboratory of the Carnegie Institute, Sponsored by the Alfred P. Sloan Foundation, May 2008.
- “Up-Scaling Mineral Accessibility and Pore Networks for CO₂ Reactive Transport in Sandstones”, U.S. DOE National Energy Technology Laboratory, Morgantown, WV, March 31, 2008.
- “Mineral Reactions in Geological CO₂ Sequestration: Fast, Slow, and Forget About It!”, Department of Civil & Environmental Engineering, McGill University, March 22, 2007. (Host: Subhasis Ghoshal)
- “Environmental Behavior of Complex PAH Mixtures”, Brown University, Division of Engineering, April 19, 2006.
- “Mineral Reactions in Geological CO₂ Sequestration: Fast, Slow, and Forget About It!”, School of Engineering, University of Vermont, January 31, 2006. (Host: Domenico Grasso)
- “Geologic Storage of CO₂ in Deep Saline Aquifers”, Department of Chemical Engineering, Yale University. February 12, 2003. (Host: Meny Elimelech)
- “Geologic Storage of CO₂ in Deep Saline Aquifers”, Department of Environmental Sciences and Engineering, University of North Carolina. January 31, 2003. (Host: Mike Aitken)
- “Geologic Storage of CO₂ in Deep Saline Aquifers”, Department of Civil and Environmental Engineering, Lehigh University. September 27, 2002. (Host: Arup Sengupta)
- “Neural Network Approach for Prioritizing Drinking Water Contaminants: PCCL to CCL”, NDWAC CCL Classification Process Work Group Meeting, U.S. Environmental Protection Agency, Office of Ground Water and Drinking Water, Washington, D.C. Sept. 18, 2002.
- “Classifying Drinking Water Contaminants for Regulatory Consideration: A Neural Network Approach”, ILSI Risk Sciences Institute meeting on *Exploring Approaches to Screening Chemicals for Reproductive/Developmental Toxicity*, Washington, D. C. June 21, 2002.
- “Geologic Storage of CO₂: Leakage Pathways and Environmental Risks”, American Geophysical Union (AGU), 2002 Spring Meeting, Washington, D.C., May 28-31, 2002.
- “A Neural Network Approach for Prioritizing Drinking Water Contaminants: An Explanation of the Recommendations of the NRC Committee on Drinking Water Contaminants”, Contaminant Identification Meeting, American Water Works Association, Washington, D.C. April 25, 2002.
- “CO₂ Storage in Deep Saline Aquifers”, Department of Engineering and Public Policy and Department of Civil & Environmental Engineering, Carnegie Mellon University. April 22, 2002.
- “A Neural Network Approach for Prioritizing Drinking Water Contaminants: An Explanation of the Recommendations of the NRC Committee on Drinking Water Contaminants”, U.S. Environmental Protection Agency, Office of Ground Water and Drinking Water, Washington, D.C. Jan. 24, 2002.
- “Risk Assessment for Subsurface Contamination Involving PAHs”, PSE&G, Newark, New Jersey. July 2000.
- “Risk Assessment for Subsurface Contamination Involving PAHs”, Interagency Risk Assessment Committee (IRAC), New Jersey Department of Environmental Protection, Trenton, NJ. May 2000.
- “Toward a Risk-Based Model for Multi-Component NAPL Contaminants: When is Remediation Intervention Worthwhile?” EPA Innovative Clean-Up Approaches. Nov. 1999, Bloomingdale, IL.
- “Compositional Changes and Solidification in PAH-Containing NAPLs” Subsurface Transport and Remediation of NAPL Contaminants in Multicomponent Systems, Geological Society of America Meeting, Denver, CO., October 1999.
- “Environmental Behavior and Risk Assessment of Complex Mixture NAPLs” The Environmental Science, Engineering and Policy in the 21st Century Seminar Series, University of Michigan. October 22, 1999.
- “Environmental Behavior and Risk Assessment of Complex Mixture NAPLs”, Department of Geography and Environmental Engineering, Johns Hopkins University. April 2, 1999.
- “Environmental Behavior and Risk Assessment of Complex Mixture NAPLs”, School of Environmental Science, Engineering, and Policy, Drexel University. Mar. 19, 1999.
- “Long-Term Chemodynamics of NAPL Environmental Contaminants”, Dept. of Environmental Sciences, Rutgers University. Mar. 27, 1998.
- “Phase Behavior of Multi-Component NAPLs in the Environment”, Hydrological Sciences Seminar Series, University of Colorado, Oct. 31, 1997.
- “Organic Pollutants in the Subsurface Environment: Chemistry, Technology and Risk Assessment”, Univ. of Dalecarlia, Borlange, Sweden. Host: Mr. Roger Bydler. Nov. 1996.

- "The Chemistry of Multicomponent NAPLs Containing PAHs: Dissolution, Bioavailability, and Risk Assessment", Environmental Scholars Colloquium, Spring 1996, University of Connecticut, Storrs, CT, Feb. 2, 1996.
- "Constraints and Uncertainties in Cleanup Strategies", Session leader at the Gordon Research Conference, Environmental Sciences: Water, June 19-24, 1994, New Hampton, NH.
- "The Challenges of Hazardous Waste Site Management: Coal Tar Clean-Up as an Example". Presented at the Third International Summer School for Science and World Affairs, June 24-July 4, 1991, Moscow, USSR.

INVITED PRESENTATIONS – OUTREACH and EDUCATION:

- "Managing the Triad of Teaching, Research and Service Post-Tenure" Panelist, AEESP Workshop, University of Michigan, Ann Arbor, MI, June 2017.
- "Environmental Regulation in the U.S.: From Smog to Acid Rain to Greenhouse Gases", E-ffiliates Retreat, Princeton, NJ February 2017.
- "The Science and Innovation of Fossil Fuels and the Environment", E-ffiliates Retreat, Princeton, NJ January 2016.
- "Portable Power: Opportunities for Student Engagement", IEEE PCJS Education Society Chapter Meeting, Princeton University, April 10, 2013.
- "Library Research Skills in Engineering Education", Invited panelist for *Library Research Skills: Can They Be Taught?* May 2009, Princeton University Libraries.
- "Energy, the Environment, and a Sustainable Future", Keynote Address for the Society of Women Engineers, Princeton University, Nov 2008.
- "Engineering and the Liberal Arts", Symposium on Engineering and Liberal Education, Union College, Schenectady, NJ May 2008.
- "Topics, Technology and the Times We Live In", Colloquium for high school girls interested in engineering, Marymount High School, New York, NY. May 2007.
- "Sustainable Energy in the CEE Curriculum", Frontiers in Environmental Engineering Education, NSF-sponsored workshop, ASU January 2007.
- "Engineering in a Liberal Arts Environment: Observations and Directions", School of Engineering, University of Vermont, January 30, 2006.
- "Putting CO₂ in its Place: Engineering Solutions to a Global Environmental Problem", Presentation to all BSE freshmen, Princeton University, September 2004.
- "Women Engineers in Academia: An American Perspective", 1996, Tomasmässan Convention on Women and Technology, Sponsored by Falu Ingeniörsklubb. Falun, Sweden, Nov. 1996.
- "Women Engineers in Academia: An American Perspective", Univ. of Dalecarlia, Borlange, Sweden. Hosted by the Studenternas Näringslivsenhet, Nov. 1996.
- "Instructional Web Technology in Engineering: Access to Course Materials and Software in and beyond Princeton", Faculty World Wide Web Workshops, Information Services, CIT, Princeton University, January 10-11, 1995.