

Linda S. Lee

Purdue University, Department of Agronomy
915 West State St., West Lafayette, IN 47907-2054
Phone: (765) 494-8612; Fax: (765) 496-2926; E-mail: lslee@purdue.edu

GENERAL INFORMATION

Education

University of Florida 9/77 - 12/83 B.S. (Chemistry)
University of Florida 8/86 - 4/89 M.S. (Environmental Engineering Sciences)
University of Florida 1/90 - 6/93 Ph.D. (Soil Chemistry and Contaminant Hydrology)

Employment

1984 - 1993	University of Florida, Soil Science Department	Chemist/Senior Chemist
1993 - 1997	Purdue University, Department of Agronomy	Assistant Professor
1997 - 2001	Purdue University, Department of Agronomy	Associate Professor
2001 - current	Purdue University, Department of Agronomy	Professor
2005 - current	Discovery Park Center for the Environment	Associate Director
2006 - current	Ecological Science & Engineering IGP	Director
2007 - current	COA pre-Environmental Studies Program	Co-Chair

Membership in Academic, Professional, and Scholarly Societies & Related Activities

American Chemical Society (ACS); American Society of Agronomy (ASA); Soil Science Society of America (SSSA); Society of Environmental Toxicology & Chemistry (SETAC); American Association for the Advancement of Science; The Advancement of Sound Science Coalition (TASSC); Ecological Soil Screening Task Group on Soil Chemistry (Eco-SSLs); Indiana Water Resources Research Center Faculty and External Advisory Committees; Deans and Director; Association of Environmental Engineering and Science Professors (AAESP); PFOA Peer Consultant.

Editorial Boards/National Committees

Associate Editor of Vadose Zone J. (2002-2007) and J. Environ. Qual. (2003-2006); W45 Mechanisms & Mitigation of Agrochemical Impacts on Human and Environmental Health (2000-2005); W82 Pesticides & Other Toxic Organics in Soil and their Potential for Ground and Surface Water Contamination (1994-2004); W1082 Evaluating the Physical and Biological Availability of Pesticides and Pharmaceuticals in Agricultural Contexts (2005-current); Livestock and Poultry Expert (LPE) Pharmaceutical Expert Team (2007-current).

Awards and Honors

Chemist Certification, American Chemical Society (1984); Frederick B. Smith Scholarship, University of Florida (1991); Certificate of Merit, American Chemical Society (1991); University of Florida Sigma Xi Graduate Student Research Award (1992); Award for Excellence in Graduate Studies, Soil & Water Science, University of Florida (1993); Emil Truog Award for Best Doctoral Dissertation, Soil Science Society of America (1994); Gamma Sigma Delta Research Award of Merit (2001); Purdue University Faculty Scholar (2001-2006); SSAJ Citation for Excellence in Manuscript Review (2003); ASA Fellow (2003); SSSA Fellow (2004); Outstanding Editor for J. of Environmental Quality (2004); Gamma Sigma Delta Award of Merit in Research & Teaching (2005).

Research Emphasis

Research emphasis is on developing a mechanistic understanding of the processes that govern environmental fate and remediation of contaminants for use in decision tools and management guidelines for industrial and agricultural settings. Current research projects include the fate of emerging contaminants including pharmaceuticals (trenbolone, estrogens, human and veterinary antibiotics) and perfluorinated telomer compounds in soils, sediments, streams, and biosolids; and plume control of chlorinated solvent contamination.

Refereed papers: 59/3 in review

Book Chapters: 8

Research Abstracts: >125 abstracts published from 1989 - present

Other Publications: 17 proceedings, reports, and commentaries from 1990 to present

Invited Papers/Lectures: > 30 invited papers and lectures since 1991

Extramural funding Summary (as of Nov. 2007)

Received funding totaling over \$6.8 million from federal government agencies (NSF, USEPA, USDA, USDA-BARD), state (Clean Coal Technology Research, Joint Transportation Program Indiana Soybean Research and Education Fund), Purdue internal competitions (PRF, ARP, Lynn, Showalter, Undergraduate Research Funds), and with over \$3.3 million from industry (Electric Power Research Institute, DuPont, CENERGY, NIPSCO, NISOURCE, American Coal Ash Association, Cinergy Corporation, Ish Inc, META Environmental Inc. Tetra Tech EM Inc.).

Graduate Student and Post Doctoral Associate Involvement (as of Dec. 2008)

Served on 21 Ph.D. & 14 M.S. advisory committees; graduated 5 M.S. & 8 Ph.D. graduates as primary advisor; currently serving as primary research supervisor for 4 Ph.D. students, and as a committee member on 10 Ph.D. and 3 M.S. advisory committees from various departments and schools at Purdue including AGRY, CIVIL, EAS, ABE, and FNR. Sponsored and mentored six postdoctoral associates to date.

Undergraduate and High School Student Mentoring

Mentored 3 high school students and 11 undergraduates through various programs (summer MARC/AIM, summer NSF, Minority SRP, SURF, USEPA) and honors courses.

Current Courses Taught

AGRY 544 Environmental Organic Chemistry (taught every spring): A graduate course covering the fundamental processes responsible for the environmental fate of organic contaminants including the transfer of organic chemicals between air, water, organic liquids (such as, gasoline, coal tar, oils), solids (such as, soils, sediments, and subsurface materials), biota (plants, invertebrates, mammals), and an introduction to biotic and abiotic transformations in soils. The thermodynamic basis for the environmental behavior of contaminants is taught as well as methods for estimating this behavior from various physical and chemical properties.

AGRY385 Environmental Soil Chemistry (taught every fall): An introductory course covering environmental soil chemistry concepts in the framework most applicable to metal, nutrient, and organic chemical contamination of soil and water resources through traditional lectures, environmental case studies, laboratory exercises, and computer simulation modules.

Previous Courses Taught

AGRY598F/CE59S/ABE591R Remediation of Contaminated Soils and Groundwater: A team taught graduate course covering current and recently innovative soil and water remediation technologies including a brief review of the key physical, chemical, and biological processes involved, site characterization, and technology implementation.

CE597I/CEE398/BSM Environmental Risk Assessment and Management: An introductory course in environmental risk assessment and management, suitable for undergraduate and graduate students from any major taught in a problem-solving format for learning the techniques from doing risk analysis. Course is taught by a professor at UICU through videoconferencing. Served as a Purdue contact and co-instructor with 2 other Purdue faculty.

AGRY696 Soil Seminar (5 semesters): A seminar-type course in which students gain experience in summarizing scientific information, effectively communicating scientific information to others, responding to post-presentation questions, and in preparing and presenting proposals for thesis work.

Current Research Projects

NSF (CBET, EE, #0606899). <http://www.nsf.gov/awards/> 2006-2009. Systematic Evaluation of the Biotransformation Potential of Commercial Model Fluorotelomers in Soils. Linda S. Lee and Loring Nies. \$350K

EPA STAR. <http://es.epa.gov/ncer/> (#RD833417). 2007-2010. Fate of Hormones in Tile-drained Fields & Impact to Aquatic Organisms Under Different Animal Waste-Land Application Practices. Linda S. Lee, Marisol Sepulveda, Chad Jafvert, Byron Jenkinson, et al. \$750K

JTRP/INDOT/DOT. 7/1/2005 to 6/30/2008. Innovative Remediation Technology Implementation Plan for the Crawfordsville INDOT Row Site. Inez Hua, Suresh C. Rao, and Linda S. Lee.

DuPont, I.E. Denemours and Company. Fate of Fluorinated Compounds in Soil-Water Systems. Linda S. Lee. \$450K

Refereed Papers

- (1) Carmosini, N. and **L.S. Lee**. 2008. Partitioning of Fluorotelomer Alcohols to Different Sources of Dissolved Organic Carbon. *Environ. Sci. Technol.* (In review).
- (2) Goldberg, S., S, Hyun, and L.S.Lee. 2008. Chemical Modeling of As(III,V) and Se(IV,VI) adsorption by soils surrounding ash disposal facilities. *Vadose Zone J.*, (In review).
- (3) Liu, J. and **L.S. Lee**. 2008. Transformation of Fluorotelomer Mono- and Tri- esters in Soils. *Environ. Sci. Technol.* (In review).
- (4) Khan, B., S.A. Sassman, and **L.S. Lee**. 2008. Degradation 17 α - and 17 β -Trenbolone and Trendione in Agricultural Soils. *Environ. Sci. Technol.* (Accepted).
- (5) Hyun, S. and **L.S. Lee**. 2007. Pentachlorophenol sorption by variable-charge soils in methanol-water mixture: pH effect at the low solvent volume fraction. *Chemosphere*. (Web-released, July 2007).

- (6) Liu, J., **L.S. Lee**, L.F. Nies, C.H. Nakatsu and R.F. Turco. 2007. Biotransformation of 8:2 Fluorotelomer Alcohol in Soil and by Soil Bacteria Isolates. *Environ. Sci. Technol.* (Web released, Nov 2007).
- (7) Liu, J. and **L.S. Lee**. 2007. Effect of Perfluorocarbon Chain Length on Solubility and Sorption by Soils of Fluorotelomer Alcohols. *Environ. Sci. Technol.* 41(23); 8024-8030.
- (8) Sassman, S. and L.S. Lee. 2007. Sorption and Degradation in Soil of Veterinary Ionophore Antibiotics: Monensin and Lasalocid. *Environ. Toxicol. Chem.* 26, No. 8, pp. 1614–1621.
- (9) Sassman, S., A.K. Sarmah, and **L.S. Lee**. 2007. Sorption and Degradation of Tylosin A, Tylosin D., and Tylosin A-Aldol in Soils. *Environ. Toxicol. Chem.* 26(8):1629–1635..
- (10) von Kiparski, Guntram R., **L. S. Lee**, and A.R. Gillespie. 2007. Occurrence and Fate of the Phytotoxin Juglone in Alley Soils Under Black Walnut Trees. *J. Environ. Qual.*, 36:709-717.
- (11) Hyun, S, P.E. Burns, I.P. Murarka, and **L.S. Lee**. 2006. Se(IV and VI) sorption by soils surrounding fly ash management facilities. *Vadose Zone J.*, 5:1110-1118.
- (12) Burns, P.E., S. Hyun, **L.S. Lee**, and I.P. Murarka. 2006. Characterizing As(III, V) Adsorption by Soils Surrounding Ash Disposal Facilities. *Chemosphere*, 63(11):1879-1891.
- (13) Hyun, S., C.T. Jafvert, **L.S. Lee**, and P.S.C. Rao. 2006. Laboratory Studies to Characterize the Efficacy of Sand Capping a Tar-Contaminated Sediment. *Chemosphere*, 63(10):1621-1631.
- (14) Liu, J. and **L.S. Lee**. 2005. Solubility and Sorption by Soils of 8:2 Fluorotelomer Alcohol in Water and Cosolvent Systems. *Environ. Sci. Technol.* 39:7535-7540.
- (15) Jafvert, C.T., D. Lane, **L.S. Lee**, and P.S.C. Rao. 2006. Partitioning of Mono- and Poly-cyclic Aromatic Hydrocarbons in a River Sediment Adjacent to a former Manufactured Gas Plant Site. *Chemosphere*, 62(2):315-321.
- (16) Sassman, S.A. and **L.S. Lee**. 2005. Sorption of Three Tetracyclines by Several Soil: Role of pH and Cation Exchange. *Environ. Sci. Technol.* 39: 7452-7459.
- (17) Strock, T.J., S.A. Sassman, and **L.S. Lee**. 2005. Swine Antibiotic Carbadox and Associated N-Oxide Reduced Metabolites. *Environ. Sci. Technol.* 39:3134-3142.
- (18) Hyun, S. and **L.S. Lee**. 2005. Quantifying the Contribution of Different Sorption Mechanisms for 2,4-Dichlorophenoxyacetic Acid Sorption by Variable-Charge Soils. *Environ. Sci. Technol.* 39:2522-2528.
- (19) Zhai, X., I. Hua, P.S.C. Rao, and **L.S. Lee**. 2005. Co-solvent Enhanced Chemical Oxidation of Perchloroethylene by Potassium Permanganate. *J. Contaminant Hydrol.* 82:61-74.
- (20) Pu, X., **L.S. Lee**, R.E. Galinsky, and G.P. Carlson. 2004. Bioavailability of 2,3',4,4',5-pentachlorobiphenyl (PCB118) and 2,2',5,5'-tetrachlorobiphenyl (PCB52) from Soils Using a Rat Model and a Physiological Based Extraction Test. *Toxicol.*, 217: 14-21.
- (21) Hyun, S. and **L.S. Lee**. 2004. Effect of Chemical Acidity and Acid Functional Group on Organic Acid Sorption by Variable-Charge Soils. *Environ. Sci. Technol.* 38:5413 -5419.
- (22) Bischoff, M., **Lee, L.S.**, and R. F. Turco. 2005. Accelerated Degradation of N,N'-Dibutylurea (DBU) Upon Repeated Application, *Biodegradation*, 16(3):265-273.
- (23) **Lee, L.S.**, S.A. Sassman, R. F. Turco, and M. Bischoff. 2004. Degradation of N,N'-Dibutylurea (DBU) in soils treated with only DBU and DBU Fortified Benlate® Fungicides, *J. Environ. Quality*, 33, 1771-1778.

- (24) Zhu, D., S. Hyun, J. J. Pignatello, and **L.S. Lee**. 2004. Evidence for π - π Electron Donor-Acceptor Interactions between π -Donor, Aromatic Compounds and π -Acceptor Sites in Soil Organic Matter through pH Effects on Sorption. *Environ. Sci. Technol.* 38:4361-4368.
- (25) Pu, X., **L.S. Lee**, R.E. Galinsky, and G.P. Carlson. 2003. Evaluation of a rat model versus a physiologically based extraction test for assessing phenanthrene bioavailability from soils. *J. Toxicol. Sci.* 79:10-17.
- (26) Hyun, S. and **L.S. Lee**. 2004. Factors controlling sorption of prosulfuron by variable-charge soils and model Sorbents. *J. Environ. Qual.* 33:1354-1361.
- (27) Sassman, S.A., **L. S. Lee**, M. Bischoff, and R. F. Turco. 2004. Assessing N,N'-Dibutylurea formation in soils after application of n-butylisocyanate and Benlate fungicides, *J. Food Agric. Chem.*, 52:747-754.
- (28) Das, B.S., **L.S. Lee**, P.S.C. Rao, and R. Hultgren. 2003. Sorption and degradation of steroid hormones in soils during transport: column studies and model evaluation, *Environ. Sci. Technol.*, 38:1460-1470.
- (29) Li, H., **L.S. Lee**, D.G. Schulze, and C. A. Guest. 2003. Role of Soil Manganese in the Oxidation of Aromatic Amines. *Environ. Sci. Technol.* , 37:2686-2793.
- (30) Pu, X., **L.S. Lee**, and G.P. Carlson. 2003. Oral bioavailability of pentachlorophenol from soils of varying characteristics using a rat model. *J. Toxicol. Environ. Health*, 66:2001-2013.
- (31) **Lee, L.S.**, T. Strock, A. Sarmah, P.S.C. Rao. 2003. Sorption and dissipation of testosterone, estrogens, and their primary transformation products in soils and sediment, *Environ. Sci. Technol.* 37:4098-4105.
- (32) Hyun, S., **Lee, L.S.**, and P.S.C. Rao. 2003. Significance of Anion Exchange in Pentachlorophenol Sorption by Variable-Charge Soils. *J. Environ. Qual.* 32: 966-976.
- (33) Benner, M., R.H. Mohtar, and **Lee, L.S.** 2002. Factors affecting air sparging remediation systems using field data and numerical simulations. *Journal of Hazardous Materials.* 95(3):305-329.
- (34) Fabrega, J., C.T. Jafvert, H. Li, and **L.S. Lee**. 2001. Modeling competitive cation exchange of aromatic amines in water-saturated soils. *Environ. Sci. Technol.*, 35:2727-2733.
- (35) Seol, Y. and **L.S. Lee**. 2001. Coupled Effects of treated effluent irrigation and wetting/drying cycles on transport of triazines through unsaturated soil columns. *J. Environ. Qual.*, 30:1644-1652.
- (36) Li, H. **L.S. Lee**, C.T. Jafvert, and J. Fabrega. 2001. "Role of pH in Partitioning and Cation Exchange of Aromatic Amines on Soils, *Chemosphere*, 44:627-635.
- (37) Huang, X. and L.S. Lee. 2001. Effect of Dissolved Organic Matter from Animal Waste Effluent on Chlorpyrifos Sorption by Soils. *J. Environ. Qual.*, 30:1258-1265.
- (38) Seol, Y. and **L.S. Lee**. 2000. Effect of Dissolved Organic Matter from Treated Effluents on Sorption of Atrazine and Prometryn by Soils, *Soil Sci. Soc. Amer. J.*, 64:1976-1983.
- (39) Li, H. **L.S. Lee**, C.T. Jafvert, and J.J. Graveel. 2000. Effect of Substitution on Irreversible Binding and Transformation of Aromatic Amines with Soils in Aqueous Systems, *Environ. Sci. Technol.*, 34: 3674-3680.

- (40) Huang, X., **L. S. Lee**, and C. Nakatsu. 2000. Impact of Animal Waste Lagoon Effluents on Chlorpyrifos Degradation in Soils. *Environ. Toxicol. Chem.*, 19:2864-2870.
- (41) Fabrega, J., C.T. Jafvert, H. Li, **L.S. Lee**, 2000. Modeling Abiotic Processes of Aniline in Water-Saturated Soils. *Environ. Sci. Technol*, 34:1687-1693.
- (42) Benner, M., S. Stanford, R. Mohtar, and L.S. Lee. 2000. Field and Numerical Analysis of In-Situ Air Sparging: A Case Study, *J. of Hazardous Waste Management*, 72:217-236.
- (43) Li, H. and **L.S. Lee**. 1999. Sorption and abiotic transformation of aniline and α -naphthylamine by surface soils. *Environ. Sci. Technol*, 33:1864-70.
- (44) Fabrega, J., C.T. Jafvert, H. Li, **L.S. Lee**, 1998. Modeling short-term soil-water phase distribution of aromatic amines. *Environ. Sci. Technol*, 32:2788-2794.
- (45) Biegel, C.M., **L.S. Lee**, J.J. Graveel, J.J. Vorst. 1998. Muskegan's Land Application of Wastewater: A Case Study. *J. Natural Resources and Life Sci. Ed*, 27:137-144.
- (46) Biegel, C.M., **L.S. Lee**, J.J. Graveel, J.J. Vorst. 1998. The Midwest Oil Pipeline Leak: A Case Study. *J. Natural Resources and Life Sci. Ed*, 27:122-128.
- (47) Biegel, C.M., J.J. Graveel, **L.S. Lee**, J.J. Vorst. 1998. Eagle Creek Landfill: A Decision Case Study. *J. Natural Resources and Life Sci. Ed.*, 27:59-69.
- (48) Nyman, M.C., A. Nyman, **L.S. Lee**, L. Nies and E. Blatchley. 1997. Fate of 3,3'-dichlorobenzidine in lake systems. *Environ. Sci. Technol.*, 31:1068-1073.
- (49) Regitano, J.B., M. Bischoff, **L.S. Lee**, M. Reichert, and R.F. Turco. 1997. Retention of imazaquin in soil. *Environ. Toxicol. Chem.*, 16:397-404.
- (50) **Lee, L.S.**, A. K. Nyman, H. Li, M.C. Nyman, and C. Jafvert. 1997. Initial sorption of aromatic amines by surface soils. *Environ. Toxicol. Chem.*, 16:1575-1582.
- (51) **Lee, L.S.** and P.S.C. Rao. 1996. Impact of several water-miscible organic solvents on benzoic acid sorption. *Environ. Sci. Technol*, 30:1533-1539.
- (52) Colin, C.S., P.S.C. Rao, and **L.S. Lee**. 1996. Evaluation of analytical methods for determining polynuclear aromatic hydrocarbons from coal tar contaminated soils. *Chemosphere*, 32:1123-1132.
- (53) **Lee, L.S.**, C.A. Bellin, R. Pinal, and P.S.C. Rao. 1993. Cosolvent effects on sorption of organic acids by soils from mixed-solvents. *Environ. Sci. Technol*, 27:165-171; 28:366.
- (54) **Lee, L.S.**, M. Hagwall, J.J. Delfino, and P.S.C. Rao. 1992. Partitioning of polycyclic aromatic hydrocarbons into water from diesel fuel. *Environ. Sci. Technol*, 26:2104-2109.
- (55) **Lee, L.S.**, P.S.C. Rao, and I. Okuda. 1992. Estimating equilibrium partitioning of polycyclic aromatic hydrocarbons from coal tar into water. *Environ. Sci. Technol*, 26:2110-2115.
- (56) Pinal, R., P.S.C. Rao, **L.S. Lee**, P.V. Cline and S.H. Yalkowsky. 1990. Cosolvency of partially-miscible organic cosolvents on the solubility of hydrophobic organic chemicals. *Environ. Sci. Technol*, 24:639-647.
- (57) Pinal, R.P., **L.S. Lee**, and P.S.C. Rao. 1991. Prediction of the solubility of hydrophobic compounds in nonideal solvent mixtures. *Chemosphere*, 22:939-951.
- (58) **Lee, L.S.**, P.S.C. Rao, and M.L. Brusseau. 1991. Nonequilibrium sorption and transport of neutral and ionized chlorophenols. *Environ. Sci. Technol.*, 25:722-729.

- (59) Rao, P.S.C., **L.S. Lee**, and R. Pinal. 1990. Cosolvency and sorption of hydrophobic organic chemicals. *Environ. Sci. Technol*, 24:647-654.
- (60) **Lee, L.S.**, P.S.C. Rao, P. Nkedi-Kizza, and J.J. Delfino. 1990. Influence of solvent and sorbent characteristics on distribution of pentachlorophenol in octanol water and soil-water systems. *Environ. Sci. Technol*, 24:654-661.
- (61) Woodburn, K.B., **L.S. Lee**, P.S.C. Rao, and J.J. Delfino. 1989. Comparison of sorption energetics for hydrophobic organic chemicals by synthetic and natural sorbents from methanol/water solvent mixtures. *Environ. Sci. Technol*, 23:407-413.
- (62) **Lee, L.S.**, P.S.C. Rao, M.L. Brusseau, and R.A. Ogwada. 1988. Nonequilibrium sorption of organic contaminants during flow through columns of aquifer materials. *Environ. Toxicol. Chem.*, 7:779-793.

Book Chapters

- (1) Carmosini, N. and **L. S. Lee**. 2007. *Sorption and Degradation of Selected Pharmaceuticals in Soil and Manure*, IN: Fate of Pharmaceuticals in the Environment and Water Treatment Systems. CRC Press, pp. 139-166.
- (2) **Lee, L.S.**, N. Carmosini, S.A. Sassman, H.M. Dion, and M. S. Sepulveda. 2007. Agricultural Contributions of Antimicrobials and Hormones on Soil and Water Quality, *Adv. Agron.* Volume 93, Chapter, pp. 1-68.
- (3) **Lee, L.S.**, N.D. Priddy, and D.C.M. Augustijn. 1998. Estimating mass-transfer of polyaromatic hydrocarbons from coal-tar contaminated soil. **IN: *Soil and Aquifer Pollution: Non-Aqueous Phase Liquids - Contamination and Reclamation***, H. Rubin and J. Carberry (eds.) Springer-Verlaag, Berlin, Germany, Chapter 6, p. 91-108.
- (4) Augustijn, D.C.M., **L.S. Lee**, R.E. Jessup, M. D. Annable, and P.S.C. Rao. 1997. Remediation of Soils Contaminated with Hydrophobic Organic Chemicals: Theoretical Basis or the Use of Cosolvents. In: *Subsurface Restoration Handbook*, C.H. Ward, J.A. Cherry, and M.R. Scalf (eds.), Ann Arbor Press, Inc., Chelsea, MI, Chapter 15, p. 227-244.
- (5) Rao, P.S.C., **L.S. Lee**, D.C.M. Augustijn, and A.L. Wood. 1995. Environmental fate and transport of organic contaminants in soils at waste disposal sites. *Environ. Soil Science Conference Proceedings, Canadian Soil Sci. Soc. Annual Meetings, Edmonton, Alberta, Canada (August 10-13, 1992)*, Canadian Society of Soil Sci., Manitoba, Canada, Chap. 3, p. 47-93.
- (6) Rao, P.S.C., C.A. Bellin, and **L.S. Lee**. 1995. Sorption and biodegradation of organic contaminants in soils: Conceptual representation of process coupling. In: *Environmental Impact of Soil Component Interactions*, P.M. Huang, J. Berthelin, J.-M. Bollag, W.B. McGill, and A. L. Page (eds.), CRC Press, Boca Raton, FL, Chapter 25, pp. 259-270.
- (7) Rao, P.S.C., **L.S. Lee**, P. Nkedi-Kizza, and S.H. Yalkowsky. 1989. Sorption and transport of organic pollutants at waste disposal sites. In: *Behavior of Pollutants in Porous Media*, Z. Gerstl, Y. Chen, U. Mingelgrin, and B. Yaron (eds.) Springer-Verlaag, Berlin, Germany, Chapter 8, pp. 176-192.
- (8) Rao, P.S.C. and **L.S. Lee**. 1988. Sorption of organic chemicals by soils from multi-solvent mixtures, In: *Health and Environmental Research on Complex Organic Mixtures*, R.H. Gray,

E.K. Chess, P.J. Mellinger, R.G. Riley, and D.L. Springer (eds.), DOE 62 Symposium Series, Battelle PNL, Richland, WA, pp. 457-471.

Other Publications

- (1) Lee, L.S. 2008. Emerging Environmental Concerns with Manure Management: Antimicrobials, Antibiotic-Resistant Bacteria, and Hormones. *Crops and Soils Magazine* (for the Practicing Professional), In press for March.
- (2) **Lee, L.S.** 2007. Book Review: Environmental Organic Chemistry, *Vadose Zone J.*, 6:263-264.
- (3) EPRI. 2008. Chemical Attenuation Coefficients for Boron Using Soil Samples Collected from Selected Power Plant Sites Laboratory Studies #1014058 (**Lee, L.S.**, S. Hyun, J. Kolbe, I. Murarka) Report No.1012585.
- (4) Joint Transportation Research Program. 2007. Guidance Document for In-situ Soil Flushing Remediation. (**Lee, L.S.**, X. Zhai, and J. Lee), SPR-2335.
- (5) Joint Transportation Research Program. 2007. Lab Testing and Field Implementation of Soil Flushing. (**Lee, L.S.**, X. Zhai, and J. Lee) File No. 4-7-8, SPR-2335.
- (6) EPRI. 2006. Chemical Attenuation Coefficients for Selenium Species Using Soil Samples Collected from Selected Power Plant Sites. (**Lee, L.S.**, P. Burns, I. Murarka) Report No.1012585.
- (7) EPRI. 2004. Chemical Attenuation Coefficients for Arsenic Species Using Soil Samples Collected from Selected Power Plant Sites. (**Lee, L.S.**, P. Burns, I. Murarka) Report No.1005505.
- (8) EPRI. 2002. Manganese Occurrence Near Three Coal Ash Impoundments in Illinois. (Hensel, B., **Lee, L.S.**, P. Burns, I. Murarka) Report No.1005257.
- (9) Ecological Soil Screening Level (Eco-SSL) Guidance Document. March 2003. Co-authored Chapter 3: Soil Properties. (**Lee, L. S.** and C. Menzie).
- (10) **Lee, L.S.**, C.T. Jafvert, H. Li, and J.R. Fábrega-Duque. 2000. Modeling soil-water distribution of aromatic amines in water saturated soil systems. EPA/600/S-99/005 Ecosystems Research Division, National Exposure Laboratory, Athens, GA 30605.
- (11) Electric Power Research Institute. 1999. Estimating aqueous Release Concentrations of Multi-ring Aromatic Hydrocarbons from MGP Soils. EPRI Report, TR-110516 Vol. 2 (**Lee, L.S.** and I. Murarka).
- (12) Graber, E., **L.S. Lee**, Y.Seol, and X. Huang. 1999. An Inquiry into the Phenomenon of Enhanced Transport Pesticides Caused by Effluents. United States Department of Agriculture and Binational Agricultural Research Development (USDA-BARD) Report IS-2384-94, U.S./Israel.
- (13) Electric Power Research Institute. 1998. Estimating release of polyaromatic hydrocarbons from coal tar contaminated soil at manufactured gas plant sites. EPRI Report, TR-110516 (**Lee, L.S.**).

- (14) Electric Power Research Institute. 1996. Estimating aqueous releases of polyaromatic hydrocarbons from coal tar contaminated soils at manufactured gas plant sites. EPRI Report, TR-101060 (Barry J.E., Williamson, D.G., Loehr, R.C., **Lee, L.S.**, Dai, D.P., Augustijn, D.C.M., Rao, P.S.C.).
- (15) Electric Power Research Institute. 1992. Estimating release of polyaromatic hydrocarbons from coal tar: Application of Raoult's law. EPRI Report, TR-101060 (**Lee, L.S.**, P.S.C. Rao, and I. Okuda).
- (16) Rao, P.S.C., **L.S. Lee**, and A.L. Wood. March 1991. Solubility, sorption and transport of hydrophobic organic chemicals in complex mixtures. EPA/600/M-91/009, Robert S. Kerr Environ. Res. Lab., Ada, OK 74820.
- (17) Pinal, R., P.V. Cline, **L.S. Lee**, and P.S.C. Rao. 1990. Solubility and sorption of organic contaminants in complex mixtures: Implications on contaminant release and mobility. Proc. 1st USEPA-EPRI Res. Conf. on "Groundwater Quality and Waste Disposal," Washington, DC.