KANG XIA

Professor in Environmental Soil Organic Chemistry

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EDUCATION:

Ph.D.	1997	University of Wisconsin-Madison (major in Soil Chemistry, minor in Chemistry)
M.S.	1993	Louisiana State University (Soil Chemistry)
B.S.	1989	Beijing Agricultural University (Soil Chemistry)

PROFESSIONAL EXPERIENCE AND APPOINTMENTS:

2016 to present	Professor, Dept. Crop & Soil Environmental Sciences, Virginia Tech
2011 to 2016	Associate Professor, Dept. Crop & Soil Environmental Sciences, Virginia Tech
2006 to 2011	Director for Research Division and Industrial and Agricultural Services Division, Mississippi State Chemical Laboratory
2010 to 2011	Associate Professor, Dept. of Chemistry, Mississippi State University
2006 to 2010	Assistant Professor, Dept. of Chemistry, Mississippi State University
2002 to 2005	Assistant Professor, University of Georgia
1998 to 2001	Assistant Professor, Kansas State University
1997 to 1998	Postdoctoral Researcher, University of Wisconsin-Madison

AWARDS:

1997	Emil Truog Soil Science Award, Soil Science Society of America
1997	Outstanding Ph.D Dissertation Research Award, Wisconsin Chapter of Sigma Xi
2000	KSU President's Faculty Development Award

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

Society of Environmental Toxicology and Chemistry
American Chemical Society
Sigma Xi
Soil Science Society of America
American Society of Agronomy

TEACHING/STUDENT ADVISING:

Course Taught

Monitoring and Analysis of the Environment (undergraduate)	Spring 2015, 2016
Water Quality (undergraduate)	Fall 2012, 2013, Spring 2015,2016
Chromatography and Chemical Separation (graduate)	Fall 2010
Environmental Chemistry (undergraduate)	Spring 2010
General Chemistry (Freshmen)	2006 – 2008
Environmental Soil and Water Chemistry (undergraduate/graduate)	2002 - 2005
Environmental Soil and Water Chemistry Lab (ndergraduate/graduate)	2002 - 2005
Contaminants in Soils (undergraduate/graduate)	2005
Soil and Environmental Chemistry (undergraduate /graduate)	1998 - 2001
Soil and Environmental Chemistry Lab(undergraduate)	1998 - 2001
Soil and Plant Analysis (graduate)	1998 – 2001

Soil Organic Chemistry (graduate) 1998 – 2001

Students Advised

Undergraduate (32) Graduate (12) Postdoctoral Researcher (4)

FUNDED RESEARCH PROJECTS:

1. A. Pruden (PI), Knowlton (co-PI), **K. Xia** (co-PI), M. A. Ponder (co-PI), W. C. Hession (co-PI), L. H. Krometis (co-PI), T. Archibald (co-PI), and A. D. Vallotton (co-PI). Identification and Management of Critical Control Points in the Spread of Antibiotic Resistance from Animal Manure to Raw Produce. USDA-NIFA. $2,250,000. January 2015 – December 2017.
2. **K. Xia (PI)**, R. Maguire (co-PI), K. Knowlton (co-PI), L. A. Krometis (co-PI), and A. Pruden (co-PI). Analytical Capacity Enhancement to Support and Expend Research Activities of USDA-Funded and Other Federally Funded Projects on Environmental Fate and Impact of Emerging Contaminants. Virginia Tech ICTAS Grant Matching Program. $45,000. July 1 2014 – June 30 2015.
3. **K. Xia (PI),** R. Maguire (co-PI), K. Knowlton (co-PI). Fate of Chemicals of Emerging Concern in Agroecosystems Amended with Animal Manure Using Novel Manure Land Management Technologies: Impact of Multi-scale Soil Processes. USDA-NIFA. $485,000. August 1 2013 – July 31 2016.
4. Knowlton, K. (PI), A. Pruden (co-PI), R. Maguire (co-PI), H. Zhang (co-PI), J. A. Ogejo (co-PI), **K. Xia (co-PI)**. Preventing Antibiotic Resistance Spread From Cattle Manure. USDA-NIFA. $499,434. August 1 2013 – July 31 2016.
5. **K. Xia** (**PI**), K. Knowlton (co-PI), R. Maguire (co-PI), and L. A. Kromatis (co-PI). Acquisition of a LC/MS/MS for Studies of Effective Use of Antibiotics to Enhance Animal Nutrition and Minimize Negative Environmental Impact. Virginia Tech Pratt Equipment Fund. $200,000. March 1, 2013 – June 30 2013.
6. K. Knowlton (PI), **K. Xia (co-PI)**, R Maguire (co-PI), and J. F. Currin (co-PI). Antibiotic excretion by livestock and subsequent runoff from cropland: contributors to antibiotic resistance. Virginia Tech CALS Integrated Grants Program. $45,000. March 1, 2013 – June 30, 2014.
7. Brian D. Badgley (PI), W. C. Hession (co-PI), L. A. Kromatis (co-PI), **K. Xia (co-PI)**. Impacts of Urbanization and Extreme Weather Events on Resuspension of Sediment-associated Contaminants in a Stream Ecosystem. Virginia Tech CALS Integrated Grants Program. $38,000. March 1, 2013 – June 30, 2014.
8. A. Pruden (PI), Cully Hession (co-PI), K. Knowlton (co-PI), L. A. Krometis (co-PI), and **K. Xia (co-PI)**. StREAM Lab Examination of Critical Watershed Processes Governing Dissemination of Agricultural Sources of Antibiotic Resistance. Virginia Tech ICTAS Seed Grant. $74,863. July 1 2012 – June 30 2013.
9. William, M. (PI), and **K. Xia (co-PI)**. Peptide/Protein Stabilization and C and N Sequestration in Soil: What Are the Contributions of Mineralogy and Biota in Native and Agro-managed Soils? USDA-NIFA. $496,077. December 1, 2011 – June 30 2015.
10. **Xia, K**. (PI). "Analysis of Seafood from Areas Affected by the Deepwater Horizon Oil Spill

Disaster". Gulf States Marine Fisheries Commission. $418,760. April 1, 2011-September 30, 2015.

11. **Xia, K**. (PI). "Gulf Oil Spill RAPID MRI Proposal: Acquisition of a GC/MS/MS and an ASE for Supporting Monitoring and Biological Research Programs for the Ecosystems Affected by the Oil Spill". NSF. $189,491. August 15 2010 – July 31, 2011.
12. **Xia, K**. (PI), M. A. Williams. "Unraveling at Micro- and Macro-scale the Mineral Surface Reactions of Amino Acids and Small Peptides Using Phage Display Technology Coupled with Synchrotron-Based Spectroscopy". NSF Geobiology and Low Temperature Geochemistry Program. $200,028. July 01 2010 – June 30 2013.
13. **Xia, K**. (PI), K. Armbrust, and M. Crenshaw. "The Occurrence and Fate of Sex Hormones and Their Conjugates in Animal Waste and Soil and Aquatic Environments". *USDA-AFRI, Water and Watersheds Program*. $398,821. Dec 01 2009 – Nov 30 2012.
14. **Xia, K.** (PI) "Chemical Analysis of Bat Tissue for Pesticides in Support of White-Nose Syndrome Investigation". *U.S. Fish & Wildlife Service*. $24,000. May 05 2009 – Dec. 31 2009.
15. **Xia, K**. (PI), and K. Armbrust. "Analytical Services for Environmental, Priority Pollutant, Hazardous Constituent, Water Quality, and Waste Samples". *Mississippi Department of Quality*. $600,000. July 01 2009 – June 30 2014.
16. **Xia, K**. (PI) "Analysis of environmental samples for organic contaminants at trace levels". *U.S. Geological Survey*. $388,873. May 05 2008 – May 05 2013.
17. **Xia, K.** (PI), Paul Brignac, and Kevin Armbrust "Analysis of Organic Contaminants in Fishes and Sediments Impacted by the Restoration Efforts in the Yazoo River Basin, Mississippi". *U.S. Army Corps of Engineers*. $62,400. Sept 25 2007 – Sept 03 2008.
18. **Xia, K.** (PI), K. Armbrust. "EPA/MDAC/BPI equipment grant". Mississippi Bureau of Plant Industry. $41,600. Sept 15 2008 – Sept 30 2008.
19. **Xia, K.** (PI), and Kevin Armbrust. "Occurrence and Fate of Selected Pharmaceuticals and Personal Care Products in Biosolids and Biosolids-Applied Soils in Solano County, California" *Department of Resource Management of Solano County, California.* $25,000. January 1 2006 – November 15 2006.
20. **Xia, K.** (PI), and Kevin Armbrust. "Endocrine Disruption in Coastal Flatfish Proposed Study Plan for Phase II" *Southern California Coastal Water Research Project, California.* $36,000. October 1 2006 – September 30 2007.
21. **Xia, K.** (PI), and M. A. Williams. "Metabolomic Assessment of Microorganisms' Biological Responses to Polychlorinated Biphenyls (PCBs)", *UGA Faculty Research Grant*. $8,500, January 2005 – December 2005.
22. Miguel Cabrera, **K. Xia**(co-PI), and D. Franklin. "Laboratory and field investigations of the processes affecting phosphorus speciation and dynamics in grasslands fertilized with animal manures", *USDA Soil Processes Program*. $308,000, September 15 2003 – August 14 2007.
23. **Xia, K.** (PI) "Effect of Soil Structure on the Fate of Explosive Contaminants", *UGA Faculty Research Grant*. $8,500, January 2002 – December 2003.
24. **Xia, K.** (PI) "Shimadzu LC/MS equipment grant", *Shimadzu Scientific Instruments, Inc.* $55,000,

awarded May 8 2002.

25. **Xia, K.** (PI), and C.W. Rice. Assessing Absorption and Uptake of Ethylene Dibromide (EDB) in Mature Cranberry Fruit and Plants. *U.S. DOD*. $227,694. September 1998 – November 2001.
26. Larive, C.K., W.R. Carper, W.R., A. Bhandari, and **K. Xia** (co-PI). The Role of Natural Organic Material in the Disposition and Binding of Atrazine in Soils. *U.S. EPA-EPSCoR*. $296,825. July 1999 – June 2001.
27. **Xia, K.** (PI), and A. Bhandari. The Occurrence of Endocrine Disruptors (Alkylphenol Polyethoxylates) in Kansas Surface Waters. *Kansas Center for Agricultural Resources and the Environment.* $10,000. July 2000 – June 2001.
28. Starrett, S., S. Thien, **K. Xia** (co-PI), and A. Bhandari. Fate of Pesticides and Their Partitioning Among Water, Soil, and Biomass Elements in a Turfgrass Ecosystem. *U.S. Golf Course Association.* $90,000. February 2001 – January 2004.

REFEREED JOURNAL ARTICLES:

** Indicates corresponding author*

Manuscripts published:

1. Ray, P*, C.Q. Chen, K. F. Knowlton, A. Pruden, and **K. Xia**. 2016. Fate and effect of antibiotics in beef and dairy manure during static and turned composting. J. Environ. Qual. (accepted).
2. Moon, J., L. Ma, **K. Xia**, and M. A. Williams. 2016. Plant-Microbial and mineral contributions to amino acid and protein organic matter accumulation during 4000 years of pedogenesis. *Soil Biology Biochem.* 100:42-50.
3. Gunatilake, S. R., V. K. Munasinghe, R. Ranaweera, T. E. Mlsna, and **K. Xia**. 2016. Recent advancements in analytical methods for the determination of steroidal estrogen residues in environmental and food matrices. *Anal. Methods.* 2016, 8, 5556–5568.
4. Kulesza, S. B., R. O. Maguire*****, **K. Xia***, J. Cushman, K. F. Knowlton, and P. Ray. 2015. Impact of manure injection on pirlimycin transport in surface runoff. *J. Environ. Qual.* 45:511–518.
5. Chao Q., D. Troya, C. Shang, S. Hildreth, R. Helm, and **K. Xia***. 2015. Surface Catalyzed Oxidative Oligomerization of 17β-estradiol by Fe3+-Saturated Montmorillonite. *Environ. Sci. Technol.* 49:956–964.
6. Ray, P., K.F. Knowlton, C. Shang, and **K. Xia**. 2014. Method development and validation: solid phase extraction (SPE)-ultra performance liquid chromatography-tandem mass spectrometry (UPLC-MS/MS) quantification of pirlimycin in bovine feces and urine. *J AOAC International.* 97:1730-1736.
7. Ray, P., K.F. Knowlton, C. Shang, and **K. Xia**. 2014. Development and validation of a UPLC-MS/MS method to monitor cephapirin excretion in dairy cows following intramammary infusion. *PLOS ONE.* 9:1-12.
8. Gunatilake, S. R., J. W Kwon, T. E. Mlsna, and **K. Xia***. 2014. A novel approach to determine estrogenic hormones in swine lagoon wastewater using QuEChERS method combined with solid phase extraction, and LC/MS/MS analysis. *Anal. Methods.* 6:9267 - 9275.
9. Fahrenfeld, N., K. Knowlton, L. A. Krometis, W. C. Hession, **K. Xia**, E. Lipscomb, K. Libuit, B. L. Green, A. Pruden. 2014. Effect of Manure Application on Abundance of Antibiotic Resistance

Genes and their Attenuation Rates in Soil: Field-Scale Mass Balance Approach. *Environ. Sci. Technol.* 48:2643–2650.

10. Li, J., G. Evanylo, **K. Xia**, J. Mao. 2013. Soil Carbon Characterization Ten to Fifteen Years after Organic Residuals Application: Carbon (1s) K-edge Near Edge X-ray Absorption Fine Structure (NEXAFS) Spectroscopy Study. *Soil Science.* 178:453-464.
11. Gunatilake, S. R., S. Steelhammer, J. W. Kwon, J. Rodriguez, **K. Xia**, K. Armbrust, and T. E. Mlsna. 2013. Analysis of Estrogens in Wastewater using solid phase extraction, the QuECHERS cleanup, and liquid chromatography tandem mass spectrometry. *J. AOAC International*. 96: 1440-1447.
12. Keith A. Maruya, D. E. Vidal-Dorsch, S. M. Bay, J. W. Kwon, **K. Xia**, and K. L. Armbrust. 2012. Organic contaminants of emerging concern in sediments and flatfish collected near outfalls discharging treated wastewater effluent to the Southern California Bight. *Environ. Toxicol. Chem*. 31:2683–2688.
13. **Xia, K.***, G. Hagood, C. Childers, J. Atkins, B. Rogers, L. Ware, K. Armbrust, J. Jewell, D. Diaz, N. Gatian, and H. Folmer. 2012. Polycyclic Aromatic Hydrocarbons (PAHs) in Mississippi Seafood from Areas Affected by the Deepwater Horizon Oil Spill. *Environ. Sci. Technol*. 46:5310–5318.
14. Diehl, J., S. E. Johnson, **K. Xia**, A. West, and L. Tomanek. 2012. The distribution of 4-nonylphenol in marine organisms of North American Pacific Coast estuaries. *Chemosphere*. 87:490–497.
15. Kwon, J. W. and **K. Xia***. 2012. Fate of Triclosan and Triclocarban in Soil Columns With and Without Biosolids Surface Application. Environ. Toxicol. Chem. 31:262–269.
16. Kelly, J. G., F. X. Han, Y. Su, Y. J. Xia, V. Philips, Z. Q. Shi, D. L. Monts, S. T. Pichardo, and **K. Xia**. 2012. Rapid Determination of Mercury in Contaminated Soil and Plant Samples Using Portable Mercury Direct Analyzer without Sample Preparation, a Comparative Study. *Water Air Soil Pollut.* 223:2361-2371.
17. Tomanek, L., J.M. Diehl, S.E. Johnson, **K. Xia**, and S.J. Teh. 2010. Nonylphenol in marine organisms in North American estuaries: Trophic chain accumulation and proteomic responses. Comparative Biochemistry and Physiology a-Molecular & Integrative Physiology 157:S47-S48.
18. Liyanapatirana, C., S. Gwaltney, **K. Xia***. 2010. Transformation of triclosan by Fe(III)-saturated montmorillonite. *Environ. Sci. Technol*. 44:668-674.
19. Verma, K. S., **K. Xia***. 2010. Analysis of triclosan and triclocarban in soil and biosolids using molecularly imprinted solid phase extraction (MISPE) coupled with HPLC/UV. *J. AOAC International*. 93:1313-21.
20. Kwon, J. W., **K. Xia***, Kevin L. Armbrust. 2010. Transformation of triclosan and triclocarban in soils and biosolids-applied soils. *J. Environ. Qual*. 39:1139–1144.
21. **K. Xia***, L. Hundal, K. Kumar, K. Armbrust, A. E. Cox, and T. C. Granato. 2010. Occurrence of TCC, TCS, PBDEs, and 4-NP in biosolids and in soil after 33 years of biosolids application. *Environ. Toxico. Chem*. 29:597–605.
22. **K, Xia***, J. Atkins, C. Foster, and K. Armbrust. 2010. Analysis of Cyromazine in Poultry Feed Using the QuEChERS Method Coupled with LC-MS/MS. J. Agricul. Food Chem. 58:5945–5949.
23. Kwon, J. W., K. L. Armbrust, D. Vidal-Dorsch, S. M. Bay, **K. Xia***. 2009. Determination of 17α-ethynylestradiol, carbamazepine, diazepam, simvastatin, and oxybenzone in fish livers. *J. AOAC International*. 92: 359-370.
24. Williams, M. A., **K. Xia**. 2009. Characterization of the water soluble soil organic pool following the rewetting of dry soil in a drought prone tallgrass prairie. *Soil Biology Biochem*.41:21-28.
25. **K. Xia***, M. Luo, C. Lusk, K.L. Armbrust, L. Skinner, and R. Sloan. 2008. Polybrominated diphenyl

ethers (PBDEs) in biota representing different trophic levels of the Hudson River, New York: from 1999 to 2005. *Environ. Sci. Technol*. 42, 4331–4337.

26. Das, K. C., and **K. Xia***. 2008. Transformation of 4-Nonylphenol Isomers During Biosolids Composting. *Chemosphere*. 70:761-768.
27. Butler, D.M., Franklin, D.H., Cabrera, M.L., Tasistro, A.S., **Xia, K**., West, L.T. 2008. Evaluating aeration techniques for decreasing phosphorus export from grasslands receiving manure. J. Environ. Qual. 37:1279 – 1287.
28. Tasistro, A. S., M. L. Cabrera, Y. B. Zhao, D. E. Kissel, **K. Xia**, and D. H. Franklin. 2007. Soluble Phosphorus Released by Poultry Wastes in Acidified Aqueous Extracts. *Comm. Soil Sci. Plant Ana.* 38:1395-1410.
29. **Xia, K**.*, A. Bhandari, K. Das, and G. D. Pillar. 2005. Occurrence and fate of Pharmaceuticals and Personal Care Products (PPCPs) in Biosolids. *J. Environ. Qual.*34:91-105.
30. Fernando, N., and **K. Xia***. 2005. Sorption and Desorption of Ammonium from Swine Lagoon Waste in Soils. *Soil Sci. Soc. Am. J.* 69:1057-1065.
31. Ferrell, J., B. K. Vencill, **K. Xia**, and T. Grey. 2005. Sorption and Desorption of Flumioxazin to Soil, Clay Minerals, and Ion-Exchange Resin. *Pest Manag Sci.* 61:40-46.
32. **Xia, K.***, and C. Y. Jeong. 2004. Photodegradation of endocrine-disrupting chemical 4-nonylphenol in biosolids applied to soil. *J. Environ. Qual.* 33: 1568-1574.
33. Keller, H., **K. Xia***, and A. Bhandari. 2003. Occurrence and transformation of estrogenic nonylphenol polyethoxylates and their metabolites in three northeast Kansas wastewater treatment plants. *Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management.* 7:203-213.
34. **Xia, K**.*, and G. Pierzyski. 2003. Competitive sorption between oxalate and phosphate in soil: an environmental chemistry laboratory using ion chromatography. *J. Chem. Edu.* 80:71-74.
35. Skylberg, U., L. Qian, C. Frech, **K. Xia**, and W. Bleam. 2003. Distribution of mercury, methyl mercury and organic sulphur species in soil, soil solution and stream of a boreal forest catchment. *Biogeochemistry*. 64:53-76.
36. **Xia, K.***, and C. W. Rice. 2001. Association of ethylene dibromide (EDB) with mature cranberry (*Vaccinium macrocarpon*) fruit. *J. Agric. Food Chem.* 49:1246-1252.
37. Skyllberg, U., **K. Xia**, P. R. Bloom, E. A. Nater, and W. F. Bleam. 2000. Binding of mercury (II) to reduced sulfur in soil organic matter along upland-peat soil transects. *J. Environ. Qual*. 29:855-865.
38. Starrett, S.K., A. Bhandari, and **K. Xia.** 1999. Pesticides and herbicides. *Water Environ. Res.* 71:853-860.
39. **Xia, K**.*, W. F. Bleam, U. Skyllberg, P. R. Bloom, and E. A. Nater. 1999. XAS study of the binding of mercury (II) to reduced sulfur in soil organic matter. *Environ. Sci. Techol*. 33:257-261.
40. **Xia, K.***, F. Wessner, W. Bleam, P. R. Bloom, U. L. Skyllberg, and P. A. Helmke. 1998. XANES studies of oxidation states of S in soil and aquatic humic substances. *Soil Sci. Soc. Am. J.* 62:1240-1246.
41. **Xia, K.***, R. W. Taylor, and W. F. Bleam. 1998. The distribution of Cu(II) on boehmite and silica surfaces: correlating EPR signal loss with the effective Bohr magneton number of sorbed ions. *J. Colloid Interface Sci.* 199:77-82.
42. **Xia, K**.*, W, Bleam, and P. A. Helmke. 1997. Studies of the nature of Cu^{2+} and Pb^{2+} binding site in soil humic substances using X-ray absorption spectroscopy. *Geochim. Cosmochim. Acta.*

61:2211-2221.

43. **Xia, K**.*, W, Bleam, and P. A. Helmke. 1997. Studies of the nature of binding sites of first row transition elements bound to aquatic and soil humic substances using X-ray absorption spectroscopy. *Geochim. Cosmochim. Acta*. 61:2222-2235.
44. **Xia, K.***, A. Ali R. W. Taylor, and W. Bleam. 1997. X-ray absorption and electron paramagnetic resonance studies of Cu(II) on Silica: Surface induced precipitation at low surface coverages. *J. Colloid Interface Sci.* 185:252-257.

BOOK CHAPTERS:

1. **Xia, K***. 2009. Analytical Methods for Environmental Samples. In Chemicals of Emerging Environmental Concern: Fate and Transport. Eds: Bhandari, A.; Surampalli, R.; Champagne, P.; Ong, R.D.; Tyagi, R.D.; Zhang, T.C. American Society of Civil Engineers, Reston, VA. pp7-49.
2. Bhandari, A.; **K, Xia**. 2008. Sorption, Sequestration and Binding of Contaminants in Soils. In Natural Processes and Systems for Hazardous Waste Treatment. Eds: Ong, S.; Surampalli, R.; Bhandari, A.; Champagne, P.; Lo, I.; Tyagi, R.D. American Society of Civil Engineers, Reston, VA. pp4-40.
3. Bhandari, A., and **K. Xia**. 2005. Hazardous Organic Chemicals in Biosolids Recycled as Soil Amendments. In The Handbook of Environmental Chemistry Vol. 5. Part F. Environmental Impact Assessment of Recycled Wastes on Surface and Groundwaters. Vol 1. Concepts, Methodology and Chemical Analysis. Aboul-Kassim, T. A.T. and Williamson, K. J. (Eds.), Springer-Verlag, Berlin Heidelberg. pp 217 – 239.
4. Bhandari, A. and **K. Xia**. 2004. Fate and Transport of Nitrogen Compounds in Animal Waste Lagoons. in Animal Waste Containment in Lagoons. Ed: L.N. Reddi. American Society of Civil Engineers, Reston, VA. pp: 11-26.
5. Bloom, P. A., W. F. Bleam, and **K. Xia**. 2001. Applications of x-ray spectroscopy to the study of humic substances. In Humic Substances and Chemical Contaminants. C. E. Clapp et al. (Eds). SSSA Special Publication, Madison, WI. pp 317-350.

PROFESSIONAL MAGAZINE ARTICLES:

1. Karnok, K. J., **K. Xia**, and K. A. Tucker. 2004. Wetting agents: what are they, and how do they work? Golfcourse Management. 72:84-86.

CONFERENCE PROCEEDINGS:

1. **Xia, K.***, and G. D. Pillar. 2003. Anthropogenic organic chemicals in biosolids from selected wastewater treatment plants in Georgia and South Carolina. pg. 806-809. In Kathryn Hatcher (ed.) Proc. 2003 Georgia Water Res. Conf. Athens, GA, April 23-24.
2. Konwick, B. **K. Xia**, and M. Black. 2003. Potential for Toxic Effects of Biosolid Application to Ceriodaphnia dubia. pg. 814-817. In Kathryn Hatcher (ed.) Proc. 2003 Georgia Water Res. Conf. Athens, GA, April 23-24.
3. **Xia, K.***, H. L. Keller, A. Bhandari, and A. J. Wagner. 2001. Occurrence, distribution, and fate of 4-nonylphenol in Kansas domestic wastewater treatment plants. Water Resources Update (currently known as Journal of Contemporary Water Research and Education). 120:41-48.

INVITED PRESENTATIONS:

1. "Emerging contaminants (ECs) in land-applied biosolids". Water Environment Federation/International Water Association Residuals and Biosolids 2015: The Next Generation of Science, Technology, and Management. June 7, 2015.
2. "Antibiotics and antibiotic resistant genes in the environment". Department of Soil & Water, China Agricultural University. June 18, 2014.
3. "Triclocarban, triclosan, polybrominated diphenyl ethers, and 4-nonylphenol in biosolids and in soil receiving 33-year biosolids application". Biosolids Conference, Michigan Water Environment Association. Big Rapids, MI, March 11-12, 2014.
4. "Mineral-associated soil organic carbon speciation during soil ecosystem development: carbon K-edge NEXAFS study". 16th Canadian Light Source Annual Users Meeting. May 2, 2013. Saskatchewan, Canada.
5. "Emerging Contaminants: Occurrence and Remediation". Department of Soil & Water, China Agricultural University. November 29, 2011.
6. "Environmental Occurrence of Polybrominated Diphenyl Ethers (PBDEs)", Department of Forest Resources and Environmental Conservation, Virginia Tech. November 15, 2011.
7. "Triclosan Transformation on Montmorillonite Surface", 2009 International Annual Meeting of The Soil Science Society of America, American Society of Agronomy, and Crop Science Society of America, Pittsburgh, PA. – November 1-5, 2009 (Nov. 3, 2009).
8. "Transformation of Triclosan by Fe(III)-Saturated Montmorillonite". Department of Chemistry, University of Memphis, October 2, 2009.
9. "Pharmaceutical and Personal Care Products In Biosolids and Biosolids-Applied Soils: Occurrence, Accumulation, and Transformation", Joint Annual Meeting of The Geological Society of America, Soil Science Society of America, American Society of Agronomy, Crop Science Society of America, and the Gulf Coast Association of Geological Societies with the Gulf Coast Section of SEPM (GCAGS), Houston, TX. – October 5-9, 2008.
10. "Occurrence and fate of pharmaceuticals and personal care products in Biosolids", Iowa Water Pollution Control Association 15th Annual Biosolids Conference: Ankeny, IA. – March 15, 2006.
11. "Biogeochemical Processes in Soils: Biota Connecting with Their Environment", Soil Science Society of America International Annual Meetings in Seattle, Washington, Oct 31 - Nov 4, 2004.
12. "Pharmaceuticals, Personal Care Products, and Other Organic Chemicals in Biosolids", Sustainable Land Application Conference, Lake Buena Vista, FL., January 5 - 8, 2004.
13. "Fate of Anthropogenic Organic Chemicals in Wastewater Treatment Plants: A Case Study on Endocrine-Disrupting Chemical 4-Nonylphenol". A Joint Egypt /United States Workshop: Integration of Remote Sensing (RS) and Geographic Information Systems (GIS) Technology for Assessing and Managing Surface and Ground Water in Egypt to Identify Water Resources/Environment Related Research Needs/Gaps for Egypt, Cairo, Egypt, December 3-9, 2003.
14. "From freshmen chemistry to senior level soil chemistry". Soil Science Society of American Annual Meeting, St. Paul. MN, November 2002.

ABSTRACTS:

1. Le, H., R. O. Maguire, and **K. Xia**. Effects of Manure Land Application Technologies and Timing on Environmental Fate of Four Antibiotics Commonly Used in Dairy Production. ASA-CSSA-SSSA International Annual Meetings, Phoenix, AZ, November 6-9, 2016.
2. Radolinski, J., J. X. Wu, **K. Xia**, and R. Stewart. Transport and Fate of a Neonicotinoid Pesticide from Corn Seed Coatings. ASA-CSSA-SSSA International Annual Meetings, Phoenix, AZ, November 6-9, 2016.

3. Chen, C. Q., P. Ray, **K. Xia**, K. F. Knowlton, and A. Prudent. Fate and Transformation of Manure-borne Veterinary Antibiotics in Soils. 252nd American Chemical Society National Meeting. Philandelphia, PA, August 21-25, 2016.
4. Chao Q., **K. Xia**. Removal of 17β-estradiol from wastewater using Fe3+-saturated montmorillonite. ASA-CSSA-SSSA International Annual Meetings, Minneapolis, MN, November 15-18, 2015.
5. Sosienski T., S. Kulesza, R. Maguire, and **K. Xia**. Fate of Hormones in a Field Receiving Dairy Manure and Poultry Litter: Effect of Surface-Application and Subsurface Injection. ASA-CSSA-SSSA International Annual Meetings, Minneapolis, MN, November 15-18, 2015.
6. Cushman J., R. Maguire, and **K. Xia**. Fate of thiamethoxam (TMX), a neonicotinoid insecticide, coated on corn seeds – A greenhouse study. ASA-CSSA-SSSA International Annual Meetings, Minneapolis, MN, November 15-18, 2015.
7. **Xia, K.**, S. B. Kulesza, R. O. Maguire, P. Ray, K. F Knowlton, and J. Cushman. Impact of Manure Application Technologies on the Fate of Pirlimycin and Chlortetracycline in Soil. 250th ACS National Meeting. Boston, MA, August. 16-20, 2015.
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