

CURRICULUM VITA

E. KUDJO DZANTOR, Ph.D.

**Research Associate Professor
Department of Agricultural Sciences
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EDUCATION

Postdoctoral Training: Environmental Toxicology.
University of Wisconsin, Madison, WI: 2/1982-6/1984.

PhD. Soil Microbiology/Biochemistry.
University of Wisconsin, Madison, WI. 12/1980.

M.S. Soil Science.
University of Wisconsin, Madison, WI. 08/1978.

B.S. (Honors); Agriculture.
Major: Soil Science.
Minors: Agricultural Engineering; Statistics.
University of Science and Technology, Kumasi, Ghana. 07/1974.

PROFESSIONAL EXPERIENCE

Tennessee State University **Nashville, TN**
Associate Professor **2014-Present**
Department of Agricultural Sciences

Tennessee State University **Nashville, TN**
Research Associate Professor **2008-2014**
Department of Agricultural Sciences

Tennessee State University **Nashville, TN**
Institute of Agricultural and Environmental Research **2004-2008**
Research Associate Professor, Coordinator
Environmental Protection and Enhancement

University of Maryland **College Park, MD**
Assistant Professor and Extension Specialist, **1996 - 2004**
Soil Biochemistry/Bioremediation

Tennessee Valley Authority, Environmental Research Center **Muscle Shoals, AL**
Research Chemist/Microbiologist, Team Leader, **1991-1996**
Remediation Technology Development

Illinois Natural History Survey **Champaign, IL**
Research Biologist **1985 - 1991**

RESEARCH, SCHOLARLY, AND CREATIVE ACTIVITIES

PUBLICATIONS:

Refereed Journal Publications/Conference Proceedings/Book Chapters

- Cartwright, J., E. K. Dzantor and B. Momen. 2016. Soil microbial community profiles and functional diversity in limestone cedar glades. *Catena (in review)*.
- Fadeyi O., K. Dzantor and E. Adeleke. 2016. Assessment of biomass productivities of *Chlorella vulgaris* and *Scenedesmus obliquus* on defined media and municipal wastewater at varying concentrations of nitrogen. *Journal of Water Resource and Protection (in press)*.
- Dzantor, E.K, Adeleke, E., Kankarla, V., Ogunmayowa, O., Hui, D., 2015, Using Coal Fly Ash Agriculture: Combination of Fly Ash and Poultry Litter as Soil Amendments for Bioenergy Feedstock Production. *Coal Combustion and Gasification Products* 7, 33-39, doi: 10.4177/CCGP-D-15-00002.1.
- Moore, V.C., E.K. Dzantor and D. Hui. 2015. Mycorrhizal enhancement of biomass productivities of big bluestem switchgrass and in neutral to acid substrates. *Journal of Applied Biosciences* 89:8263– 8271.
- Dzantor E. K., V. Kankarla, E. Adeleke and O. Ogunmayowa. 2015. Contending with the global food, energy and environmental insecurities: Biomass production in degraded lands could be one solution. Pp 261-271, *In* R. K. Behl, A. P. Singh, A. B. Lal, G. Haesaert (eds). Proceedings of the International Conference on New Approaches in Food Security and Value Addition: Technological and Genetic Options. February 17-19, 2014 ISBN: 978-93-81191-05-7.
- Dzantor, E.K. 2013. Potentials for beneficial utilization of coal fly ash for biofuel feedstock production on marginal/degraded lands. *In* Renewable Energy—Sources and Applications. R. K. Behl, R.N. Chibbar, S. Jain, V.P. Bahl and N. El Bassam eds. Agrobios (International) Publishers. Jodhpur, India. Pp 346-360.
- Dzantor E. K., H. Pettigrew, E. Adeleke, D. Hui. 2013. Use of fly ash as soil amendment for biofuel feedstock production with concomitant disposal of waste accumulations. Proceedings, 2013 World of Coal Ash (WOCA) Conference, April 22-25, 2013, Lexington, Kentucky. <http://www.flyash.info/>
- Le, X, Hui D. Dzantor EK. 2011. Characterizing rhizodegradation of the insecticide bifenthrin in two soil types. *J. Environ Protec.* 2:940-946.
- Dzantor E.K., M. Vallaban, R. Painter and D. 2011. Biomass productivity potential of selected cellulosic herbaceous perennials in acid impacted soil. SNA Research Conference Proceedings 56: 404-410.
- Le X, Hui, Dzantor E.K. 2011. Elucidating rhizodegradation for use in phytoremediation of synthetic pyrethroids. SNA Research Conference Proceedings 56: 415-420.
- Dzantor, E. K. 2007. Phytoremediation: the state of rhizosphere engineering for accelerated rhizodegradation of xenobiotic contaminants. *J. Chem. Technol. Biotechnol.* 82:228-232.
- Dzantor, E. K., J. E. Woolston, and B. Momen. 2002. PCB dissipation and microbial community analysis in rhizosphere soil under substrate amendment conditions. *Int. J. Phytoremediation* 4: 283-295.

- Dzantor, E. K. and R. G. Beauchamp. 2002. Phytoremediation, Part I: Fundamental basis for the use of plants in remediation of organic and metal contamination. *Environmental Practice* 4(2):77-87.
- Beauchamp, R. G. and E. K. Dzantor. 2002. Phytoremediation, Part II: Management considerations. *Environmental Practice* 4(2): 88-94.
- Nichols, K.A., Wright, S.E., Schmidt, W.F., Cavigelli, M.A., Dzantor, E. K. 2002. Carbon contribution and characteristics of humic acid, fulvic acid, particulate organic matter and glomalin in diverse ecosystems. Pages 365-367 *In: Proceedings of Humic Substances: Nature's Most Versatile Materials International Humic Substances Society. Boston, MA. 2002.*
- Dzantor, E. K. and J. E. Woolston. 2001. Enhancing dissipation of aroclor 1248 (PCB) using substrate amendment in rhizosphere soil. *J. Environ. Sci. Health Part A* 36:1861-1871.
- Chekol, T., L.R. Vough, E.K. Dzantor, and R.L. Chaney. 2001. Plant-soil-contaminant specificity affects the phytoremediation of TNT in soil. Pages 77-83. *In A. Leeson, E. Foote, K. Banks, and V.S. Magar (eds.) Proc. Sixth Int. In situ and On-site Bioremediation Symposium: Phytoremediation, Wetlands, and Sediments. Battelle Press, Columbus, OH. 2001.*
- Dzantor, E.K. and J.E. Woolston. 2000. Dissipation of aroclor 1248 (PCB) and dinitro-*o*-cresol under grass and legume rhizospheres. Pages 107-117 *In R.Y Surampalli (ed) Environmental and Pipeline Engineering. Proceedings of American Society of Chemical Engineers (ASCE) National Conference on Kansas City, MO; June 23-26, 2000.*
- Dzantor, E. K., T. Chekol, and L. R. Vough. 2000. Feasibility of using forage grasses and legumes for phytoremediation of organic pollutants. *J. Environ. Sci. Health Part A* 35:1645-1661.
- Neeru, N., R.C. Anand, K. Lakshminarayana, and K. Dzantor. 1999. Degradation of pesticides by microorganisms: Pages 169-176 *In R.C. Sihag, R.K. Patel, and M. Singh (eds.) Bioremediation an Emerging Technology: Recent Advances in Biosciences for Sustainable Food Security. AAREM, CCHAU, Hisar, India.*
- Felsot, A. S., and E. K. Dzantor. 1997. Potential of biostimulation to enhance dissipation of aged residues in land-farmed waste. Pages 77-91. *In E. L. Kruger, T. A. Anderson and J. R. Coats (eds.) Phytoremediation of Soils and Water Contaminants. ACS Symposium Series 664. American. Chemical Society, Washington, D.C.*
- Felsot, A. S., J. K. Mitchell and E. K. Dzantor. 1995. Remediation of herbicide-contaminated soil by combinations of landfarming and biostimulation. Pages 237-257. *In H. D. Skipper and R. F. Turco (eds.) Bioremediation: Science and Applications. Soil Science Society of America Special Publication Number 43.*
- Felsot, A. S., and E. K. Dzantor. 1995. Effect of alachlor concentration and an organic amendment on soil dehydrogenase activity and pesticide degradation rate. *Environ. Toxicol. Chem.* 14:23-28.
- Dzantor, E. K., A. S. Felsot, and M. J. Beck. 1993. Bioremediating herbicide contaminated soils. *Appl. Biochem. Biotechnol.* 39-40: 621-630.
- Dzantor, E. K., and A. S. Felsot. 1991. Microbial responses to large concentrations of herbicides in soil. *Environ. Toxicol. Chem.* 10:649-655.

- Felsot, A.S. and E.K. Dzantor. 1991. Remediation of herbicide waste in soil: Experiences with landfarming and biostimulation. Pages 532-551 *In* D.L. Weigmann (ed.) *Pesticides in the Next Decade: The Challenges Ahead*. Third National Pesticide Conference. Virginia Polytechnic Inst., Blacksburg, VA.
- Dzantor, E.K. and A.S. Felsot. 1991. Landfarming and biostimulation for decontaminating herbicide wastes in soil. *In* T.D. Ferguson (ed.) *Proceedings of International Workshop on Research in Pesticide Treatment/Disposal/Waste Minimization*. Cincinnati, OH, Feb. 26-27, 1991. EPA/600/9-91/047. pp. 46-57.
- Dzantor, E.K. and A.S. Felsot. 1990. Soil differences in the biodegradation of carbofuran and trimethacarb following pretreatment with these insecticides. *Bull. Environ. Contam. Toxicol.* 43:531-537.
- Felsot, A.S. and E.K. Dzantor. 1990. Enhancing biodegradation for detoxification of herbicide wastes in soil. Pages 250-268 *In* K.D. Racke and J.R. Coates (eds). *Enhanced Biodegradation of Pesticides in the Environment*. ACS Symposium Series 426. American Chemical Society, Washington, D.C.
- Dzantor, E.K. and A.S. Felsot. 1989. Effects of conditioning, cross-conditioning, and microbial growth on development of enhanced biodegradation of methyl carbamate insecticides in soil. *J. Environ. Sci. Health Part B* 24:569-597.
- Harkin, J.M., F.A. Jones, R.N. Fathulla, E.K. Dzantor, and D.G. Kroll. 1986. Fate of aldicarb in Wisconsin groundwater. *In* W.Y. Garner, R.C. Honeycutt, and N. Nigg (eds.) *Evaluation of Pesticides in Groundwater*. Amer. Chem. Soc. Symp. Ser. 315:219-255.

Presentations, Abstracts and Other Professional Papers

Invited Presentations—International

- Dzantor E. K. 2014. Contending with the Global Food, Energy and Environmental Insecurities: Biomass Production in Degraded Lands Could Be One Solution. International Conference On: New Approaches in Food Security and Value Addition: Technological and Genetic Options. Raja Balwant Singh Engineering Technical Campus, Bichpuri [Agra], India ***In collaboration with*** Society For Sustainable Agriculture & Resource Management (SSARM) Hisar, India. February 17-19, 2014.
- Dzantor E.K. 2014. Computer applications in sustainable bioenergy: Enhancing Biofuel Feedstock Production in Problem Lands. International Conference on Computer Application in Manufacturing and Food Technology and Bio-Nano Engineering (Cambte 2014). Universal Institute of Technology ***in collaboration with*** Society For Sustainable Agriculture & Resource Management (SSARM) Hisar, India. February 20-21.
- Dzantor, E.K. Overview of the science and practical applications of contaminated soil bioremediation. Workshop on Bioremediation. Cairo, Egypt; Nov. 22-Dec. 2, 1997.
- Dzantor, E.K., J.S. Angle, and R.L. Chaney. Phytoremediation of metals-contaminated soils. Workshop on Bioremediation. Cairo, Egypt; Nov. 22-Dec. 2, 1997.
- Dzantor, E.K., J.S. Angle, and L.R. Vough. Phytoremediation of organics-contaminated soils. Workshop on Bioremediation. Cairo, Egypt; Nov. 22-Dec. 2, 1997.

Invited Presentations—National

- Dzantor, E. K. 2012. Biofuels—Potentials and Challenges in the Southeast Outreach and Assistance for Women, Hispanic and African-American Farmers, Forest Landowners and Ranchers.
- Dzantor, E.K. 2008. Coupling biomass production to waste remediation. Memphis Bioworks Conference, *Planting Seeds for the Future: The West Tennessee Alternative Crops Conference*. Memphis, TN November 12-13 2008.
- Dzantor, E.K. 2008. Elucidating components and processes involved in rhizodegradation of contaminants University of Nevada Las Vegas Biological Sciences Spring Seminar Series. April 11, 20.
- Dzantor, E.K. 2007 Rhizodegradation: Understanding and exploiting the hidden half of phytoremediation. Southern Region Society of Environmental Toxicology and Chemistry (SETAC) Annual Conference. Nashville, TN May 22-24. 2007
- Dzantor, E.K. J. E. Woolston and B. Momen. 2003. Potential for using rhizosphere manipulation strategies for enhancing PCB dissipation in soil. 13th Annual West Coast Conference on Contaminated Soils, Sediment and Water. March 17-20, 2003, San Diego, CA.
- Dzantor, E.K. 2001. Developing rhizodegradation for phytoremediation of organic contaminants. The Environmental Management and Technology Conference, ENTECH '01. Atlantic City, NJ; June 12-14, 2001.
- Woolston, J.E. and E.K. Dzantor. 2000 Dissipation of aroclor 1248 (PCB) and dinitro-*o*-cresol under grass and legume rhizospheres. American Society of Civil Engineers (ASCE) National Conference. Kansas City, MO; June 23-26, 2000.
- Dzantor, E.K. Effect of pesticide residues on microbially-mediated processes that influence soil quality. American Chemical Society Symposium on Assessing the Ecological Effects of Pesticide Residues. 217th National ACS Meeting. Anaheim, CA; Mar. 21-25, 1999.
- Dzantor, E.K. Bioremediation of contaminated soils: Concepts and Practical Applications. *Proceedings*, 21st Annual Conference of the National Organization for the Advancement of Black Chemists and Chemical Engineers. Atlantic City, NJ; Apr. 4-9, 1994.
- Dzantor, E.K. Degradation and influence of the environment on pesticide behavior. ACS Symposium on Pesticide Management for the Protection of Ground and Surface Water Resources. Chicago, IL; Aug. 22-27, 1993.
- Dzantor, E.K. Concepts and practical aspects of soil bioremediation as a waste cleanup alternative. Pages 27-28, *Proceedings of the Alabama Fertilizer and Pesticide Conference*. Auburn University, Auburn, AL; Jan. 28-29, 1992.
- Dzantor, E.K. and A.S. Felsot. Combination of landfarming and biostimulation as a waste cleanup alternative. Pages 121-126, *Proceedings of the Midwest Plan Service National Symposium on Pesticide and Fertilizer Containment: Design and Management*. Kansas City, MO; Feb. 3-5, 1992.

Invited Presentations—Regional Extension

- Dzantor, E.K. Phytoremediation of organic contaminants. Talbot County Plant Clinic. Easton, MD; May 15, 2001.
- Dzantor, E.K. Phytoremediation: Plant-based remediation of environmental contaminants. National Institutes of Health Saturday Academy Series: Plant Biotechnology. NIH, Bethesda, MD; Dec. 5, 1998.
- Dzantor, E.K. Phytoremediation: Plant-based systems for environmental remediation. Talbot County Plant Clinic. Easton, MD; Aug. 25, 1998.
- Dzantor, E.K. Bioremediation: Principles and practices. Talbot County Plant Clinic. Easton, MD; July 1, 1997.
- Dzantor, E.K. Phytoremediation: What is it and how is it practiced? Carroll County Agricultural Extension Group Meetings. Westminster, MD; May 10, 1997.

Contributed Presentations and Abstracts

- Fadeyi O, Kudjo Dzantor and E. Adeleke. 2015. Assessment of biomass productivities of *Chlorella vulgaris* and *Scenedesmus obliquus* in defined media and municipal wastewater at varying concentration of nitrogen. (*Platform presentation*) 115th General Meeting , American Society for Microbiology (ASM), May 30-June 2, 2015, New Orleans, Louisiana.
- Dzantor E. K, E. Adeleke, V. Kankarla, O. Ogunmayowa, D. Hui and C-L Yu. 2015. Beneficial use of coal fly ash in agriculture: Combination of fly ash and poultry litter as soil amendments for biofuel feedstock production. (*Poster*). 2015 World Coal Ash Conference (WOCA), May 4-7, Nashville, Tennessee.
- Awoyemi, O. M. and Dzantor, E. K. 2014. Bio-accumulation and biochemical responses in African Catfish (*Clarias gariepinus*) to sublethal concentrations of lead and zinc. (*Poster*). Society of Toxicology (SOT) International Conference, San Diego, California, March, 2015.
- Adebambo, T. H., Awoyemi, O. M., Otitoloju, A. A., Dzantor, E. K. 2015. Genotoxic effect of benzene and xylene on *Allium cepa* (Onion). (*Poster*) Society of Toxicology (SOT) International Conference, San Diego, California, March, 2015.
- Ogunmayowa, O. and E. K. Dzantor .2015. Coupling bio/phytoremediation with switchgrass to biofuel feedstock production in mixed-contaminant soils. (*Platform presentation*) Tennessee State University Research Symposium, March 30 , 2015.
- Fadeyi, O, E. Adeleke and Kudjo Dzantor. 2014 Potential for Coupling microalgae biomass production to wastewater treatment and biofuel feedstock production. (*Poster*). The Seventh International Conference on Environmental Science and Technology, Houston Texas, June 9-13, 2014.
- Fadeyi O, and Kudjo Dzantor. 2014. Coupling microalgae biomass production to wastewater treatment and biofuel production. 36th Annual University Symposium, Tennessee State University.
- Le, X, Z. Liu and E. K. Dzantor. 2010. Rhizodegradation of the insecticide bifenthrin in different soils. Tennessee State University 32nd Annual University-Wide Research Symposium.

- Kersey, C. M, X. Le, C. Dumenyo and E. Dzantor. 2009. Characterization of rhizosphere components involved in phytoremediation of a synthetic pyrethroid insecticide (talstar) in soil. 109th General Meeting of the American Society for Microbiology. Abstracts, pg. 345. Philadelphia, PA May 17-21, 2009.
- Kersey, C. M, X. Le and E. Kudjo Dzantor. 2009. Effects of pesticides and naturally-occurring compounds on alfalfa-rhizobium signaling. Tennessee State University 31st Annual University-Wide Research Symposium. March 30-April 3, 2009
- Dzantor, E.K. 2007. Potentials for plant root zone engineering for accelerated destruction of man-made contaminants in soil. Tennessee State University, Institute of Agricultural and Environmental Research (IAgER) seminar series. McMinnville, March 7, 2007.
- Dennis, S., J. Oliver and K. Dzantor. 2006. Degradation of an insecticide used in the quarantine treatment of Japanese Beetle in soils. Presentation at 2006 ASSA-CSSA-SSSA International Annual Meetings Indianapolis, IN. November 12-16.
- Dzantor E. Kudjo, D.E. Long and T.K. Amenyenu. 2006. Evaluation of plant systems for use in protection of water resources from synthetic chemicals. Poster presentation at the Tennessee American Water Resources Symposium, Montgomery Bell, TN. April 19-21.
- Dzantor, E.K., L.T. Yonkos, D.J. Fisher, K.W. Staver, S. Pollack, E. Asfaw, and M.A. Ottinger. 2002. Assessment of the scope and potential environmental impacts of endocrine disrupting chemicals in poultry litter. Society of Environmental Toxicology and Chemistry (SETAC) 23rd Annual Meeting. Salt Lake City, UT. Nov. 16-20, 2002.
- Dzantor, E.K. and R.M. Beauchamp. 2002. Computer simulations of plant mediated removal and/or destruction of environmental contaminants. Society of Environmental Journalists Conference. Baltimore, MD. Oct. 10, 2002.
- Demas, S.Y., A.M. Hall, D.S. Fanning, M.C. Rabenhorst, and E.K. Dzantor. 2002. Acid sulfate soils in dredged materials from tidal Pocomoke Sound in Somerset County, MD, USA. Fifth International Acid Sulfate Soil Conference, Tweed Heads, NSW, Australia. Aug. 25-30, 2002.
- Nichols, K., S. Wright, W. Schmidt, M. Cavigelli, and E.K. Dzantor. 2002. Carbon contributions and characteristics of humic acid, fulvic acid, particulate organic matter, and glomalin in diverse ecosystems. International Humic Substances Society 20th Anniversary Conference. Northeastern University, Boston, MA. July 21-26, 2002.
- Dzantor, E.K. and J. E. Woolston. 2001. Enhancing rhizodegradation for phytoremediating PCB contaminated soil. Poster presentation. Bioscience Research and Technology Review Day. University of Maryland; Nov. 13, 2001.
- Nichols, K.A., S.F. Wright, W.F Schmidt, A.J. Simpson, and E.K. Dzantor. 2001. Using NMR to distinguish unique components of humic substances. American Society of Agronomy Annual Meeting, Charlotte, NC. Oct. 2001.
- Nichols, K.A, S.F. Wright, W.F Schmidt, and E.K. Dzantor. 2001. Glomalin as a constituent of humic substances. Humic Substances Seminar V. Boston, MA. Mar. 2001.
- Woolston, J.E. and E.K. Dzantor. 2000 Enhancing biodegradation of organic contaminants under plant rhizospheres. *Agronomy Abstracts* p. 395. 92nd Annual Meetings of the American Society of Agronomy. Minneapolis, MN; Nov. 5-9, 2000.

- Woolston, J.E., S. Johnsen, S. Sardinelli, and E.K. Dzantor. 2000. Phytoremediation of organic contaminants in soil (poster presentation). Environmental Initiatives Symposium; Office of Technology Liaisons, and Technology Advancement Programs. University of Maryland, College Park, MD; Feb. 28, 2000.
- Chekol, T., E.K. Dzantor, and L.R. Vough. 1999. Phytoremediation of pyrene and PCB contaminated soils. 6th Annual International Petroleum Environmental Conference. Houston, TX; Nov. 16-19, 1999
- Chekol, T., E.K. Dzantor, and L.R. Vough. 1999. Phytoremediation of trinitrotoluene (TNT) contaminated soils. NEBASA Annual Meeting. Guelph, ON, Canada; July 11-14, 1999.
- Chekol, T., E.K. Dzantor, and L.R. Vough. 1998. Phytoremediation of organic contaminants with forage crops. *Agronomy Abstracts*, p. 38. 90th Annual Meetings of the American Society of Agronomy. Baltimore, MD; Oct. 18-22, 1998.
- Dzantor, E.K. and A.S. Felsot. 1994. Biostimulation and bioaugmentation for remediating pesticide-contaminated soil. Extended Abstracts, pp. 671-674, 6th Symposium on Emerging Technologies in Hazardous Waste Management. American Chemical Society, Industrial and Engineering Chemistry Division. Atlanta, GA; Sept. 19-21, 1994.
- Zablotowicz, R.M. and E.K. Dzantor. 1994. Research approaches for accelerated biodegradation of high concentrations of herbicides in soil. 87th Annual Meeting of the Air and Waste Management Association. Cincinnati, OH; June 19-24, 1994.
- Felsot, A.S. and E.K. Dzantor. 1994. Effect of soil dilution and amendment with corn meal on degradation of herbicides in contaminated soil. *Proceedings*, 87th Annual Meeting of the Air and Waste Management Association. Cincinnati, OH; June 19-24, 1994.
- Felsot, A.S., J.K. Mitchell, and E.K. Dzantor. 1993. Remediation of herbicide-contaminated soil by combinations of landfarming and biostimulation. American Society of Agronomy Symposium on Bioremediation: Science and Applications. Cincinnati, OH; Nov. 6-7, 1993.
- Felsot, A.S. and E.K. Dzantor. 1990. Enhancing the biodegradation of high concentrations of acetanilide herbicides (poster presentation). Abstract 07B-24, 7th Int. Congr. Pestic. Chem. Hamburg, Federal Republic of Germany; 1990.
- Felsot, A.S., E.K. Dzantor, R. Liebl, and T. Bicki. 1990. Remediating pesticide waste in soil by landfarming. Abstract 178, p. 44, Soc. Environ. Toxicol. Chem., Platform Session: Biological Processing for Treatment of Xenobiotics, 11th Annual Meeting. Arlington, VA; Nov. 11-15, 1990.
- Dzantor, E.K. and A.S. Felsot. 1989. Stimulation of the degradation of high alachlor concentrations in soil. *Agronomy Abstracts*, p. 34. 81st Annual Meeting, Amer. Soc. Agron. Las Vegas, NV; 1989.
- Felsot, A.S. and E.K. Dzantor. 1989. Pesticide degradation rates at agrichemical spill sites. *Proceedings*, pp. 150-154, Illinois Agricultural Pesticides Conference '89. Coop. Ext. Serv., University of Illinois at Urbana-Champaign; 1989.
- Dzantor, E.K. and A.S. Felsot. 1989. Soil types differ in their ability to be conditioned for the degradation of Broto (trimethacarb). *Proceedings*, Abstract 212, No. Central Branch, Entomol. Soc. Amer. Denver, CO; 1988.

- Dzantor, E.K. and A.S. Felsot. Influence of previous insecticide treatment on biodegradation and bioactivity of carbonfuran and trimethacarb in soil. *Agronomy Abstracts*, p. 29. 78th annual meeting, Amer. Soc. Agron. New Orleans, LA; 1986.
- Dzantor, E.K. and R.F. Harris. Energy efficiency of NH₄⁺-assimilating and N₂ fixing growth of *Azotobacter vinelandii*. *Proceedings*, Abstract C16, Steenbock-Kettering International Symposium on Nitrogen Fixation. Madison, WI; 1978.
- Dzantor, E.K. and R.F. Harris. Microaerophilic nature of *Azotobacter vinelandii* and efficiency of growth and nitrogen fixation. *Abstracts*, p. 206, Amer. Soc. Microbiol. 1977.

Research Reports

- Dzantor, E.K. Tyler, D.D., Hui, D., Tegegne, F., Clardy, A., 2015. Developing and evaluating sustainable production of eastern gamagrass as complementary bioenergy feedstock to switchgrass. TENX-2010-02418. USDA/NIFA
- Dzantor, E.K. 2009. Effects of conventional pesticides and biopesticides on plant-microbe signaling: implications to agricultural production. TENX-0814-EPET4. USDA-CSREES.
- Dzantor, E. K. Ochieng, L. Oliver, J. Mmbaga, M. Dennis, S. Duseja, D. Dumenyo, C. 2009. Evaluation of Biopesticide Treatments to Control Disease and Insect Pests in Container Nursery Stock and Improve Quality of Water Emissions from Nursery Production. TENX-0713-EPET4. USDA-CSREES.
- Dzantor, E.K. 2008 Elucidating Plant Rhizosphere Interactions that Enhance Dissipation of Pesticide Contaminants in Soil.. TENX-0407-EPET4. USDA-CSREES.
- Dzantor, E.K. 2004. Use of animal manure and inorganic by-product mixtures for reclamation of acid impacted soils. Final Technical Report USDA Specific Cooperative Agreement No 58-1270-8-077. 26p.
- Dzantor, E.K. 2001. Use of animal manure and inorganic by-product mixtures for remediating degraded soils. Report on funded project to N-Viro Inc., Columbus, OH. 13p.
- Dzantor, E.K. 2001. Phytoremediation: 'Plant-based systems to decontaminate Egyptian Soils' Joint US-Egypt Science and Technology Program. Project # BIO-001-005-97. 7p.
- Shea, C., D. Ash, V. Van Pelt, K. Bozeman, L. Lovelace, J. Clayton, R. Strickland, and E.K. Dzantor. 2000. Detection of triazines and substituted ureas with a fieldable toxicity test. TVA Publication Y244. 29p.
- Felsot, A.S., J.K. Mitchell, and E.K. Dzantor. 1994. Use of landfarming to remediate soil contaminated by pesticide waste. Final Project Report. Illinois Hazardous Waste Research and Information Center, Champaign, IL. HWRIC RR-070. 53 p.
- Dzantor, E.K., B.L. Potts, and M.J. Beck. 1992. Stimulation of trifluralin degradation in soil. Biotechnical Research Department Report, National Fertilizer and Environmental Research Center, Tennessee Valley Authority, Muscle Shoals, AL. 5 p.

- Felsot, A.S., E.K. Dzantor, L. Case, and R. Liebl. 1990. Assessment of problems associated with landfilling or land application of pesticide waste and feasibility of clean-up by microbiological degradation. Final Project Report, Illinois Hazardous Waste Research and Information Center. Champaign, IL. HWRIC RR-053, 68 p.
- Felsot, A.S., E.K. Dzantor, and R. Liebl. 1988. Assessment of problems associated with landfilling or land application of pesticide waste and feasibility of clean-up by microbiological degradation. Annual Report, Illinois Hazardous Waste Research and Information Center. Champaign, IL. ENR Contract No. HWR88-042, 35 p.
- Dzantor, E.K. and J.M. Harkin. 1985. Bacterial breakdown of aldicarb residues in groundwater. Wisconsin Academy Review 32:40-42.
- Harkin, J.M., F.A. Jones, R. Fathulla, E.K. Dzantor, E.J. O'Neil, D.G. Kroll, and G. Chesters. 1984. Pesticides in groundwater beneath the Central Sand Plain of Wisconsin. Technical Report 84-01. Water Resources Center, University of Wisconsin, Madison. 46 p.

Consulting Project Reports

- Dzantor, E.K. 2001. Phase I assessment of a landscaping site at the Pentagon Remote Delivery Facility (RDF). *Report prepared for* Mr. Darryl Kosisky, Horticulturist for The Pentagon Building, Washington, DC 20301-1155; Final report submitted Oct. 5, 2001. 8p.
- Dzantor, E.K. 1998. Phase I assessment of MARC landscaping site at Brunswick, MD. *Report prepared for* Mr. Robert E. Botts, Holy Ridge Landscape Service. Final report submitted Apr. 1998. 4p.
- Seagren, E. and E.K. Dzantor. 1997. Recommendation for bioremediating petroleum contaminated soils. Report to the University of Maryland Technology Extension Service (TES), for technology transfer to the Chestertown Brick Company. Final Report submitted Nov. 7, 1997. 27p.

SYNERGISTIC ACTIVITIES

Project Director, USDA/NIFA

Member, Editorial Board, Polish Journal of Environmental Science.

Reviewer-Proposals: EPA-2015-STAR, USDA/AFRI (Ad Hoc); USDA CSREES Small Business Innovative Research (SBIR); National Academy of Sciences; Civilian Research and Development Foundation (CRDF); The Civil Engineering Research Foundation (CERF); USDA Research and Scientific Exchange Division, Foreign Agricultural Service (FAS); USDA Small Business Administration—Bioremediation; USEPA; Data Systems for Bioremediation of Subsurface Contamination.

Reviewer-Manuscripts: Polish Journal of Environmental Studies; Journal of Coal Combustion and Gasification Products Journal of Chemical Technology and Biotechnology; Biotechnology Advances; Biotechnology Progress; Plant and Soil; Pesticide Science; Proceedings of the Beltsville Symposium XXII. Applied Biochemistry and Biotechnology.

Professional Memberships

American Society of Agronomy (1982-Present)
 Soil Science Society of America (1982-Present)
 American Society for Microbiology (1987-Present)

TEACHING

Academic Courses

Course/Title	Level	Year	Institution
AGSC 5180—Soil Classification	Graduate	2015	Tennessee State University (TSU), Nashville, TN
AGSC 7060 Soil Technology	Graduate	2014-	TSU
AGSC 2200—Fundamentals of Soil Science	Undergraduate	2013	TSU
AGSC 3230—Soil Morphology and Classification	Undergraduate	2013	TSU
AGSC 3200—Soil and Environmental Chemistry	Undergraduate	2009	TSU
NRSC 798—Graduate Seminar	Graduate	2000	University of Maryland, College Park, MD (UMCP)
NRSC 425—Terrestrial Bioremediation	Upperclassmen and Graduate	1999-2003	UMCP

Guest Teaching

Tennessee State University

Department of Biological Sciences (BIOL 5100) 2005-

UMCP:

NRS, NRSC 452, *Environmental Issues in Plant and Soil Sciences*, April 2000.

ANSC Seminar Series, *Environmental Chemicals and Wildlife*, May 2000.

NRSL, AGRO 798C, *Graduate Seminar, Bioremediation of Contaminated Soils*, November, 1998.

NRSL, AGRO 105, *Soils and Environmental Quality*, November, 1997.

University of Maryland University College (UMUC):

New Technologies in Environmental Management, April 12, 2000.

New Technologies in Environmental Management, April 14, 1999.

New Technologies in Environmental Management, April 12, 1998.

Extension Fact Sheets/Courses

Dzantor, E.K. 2000. Phytoremediation—Plant-based strategies for cleaning up contaminated soils. Heavy metal contaminants. Maryland Cooperative Extension Fact Sheet # 768.

Dzantor, E.K. 2000. Phytoremediation—Plant-based strategies for cleaning up contaminated soils. Organic contaminants. Maryland Cooperative Extension Fact Sheet # 764.

Dzantor, E.K. 1999. Bioremediation of contaminated soils. What it is and how to do it. Maryland Cooperative Extension Fact Sheet #757.

Dzantor, E.K. 1992. Site remediation research moves ahead: Bioremediation of pesticide-contaminated soils may be the answer. *AgChem Retail News* 5:1-2.

Baltimore Ecosystem Restoration Brownfield Training Pilot—‘B’More Green EPA Youth Workforce Development Program (Curriculum Development and Teaching) 2001 and 2002.

‘Bioremediation of Contaminated Soils and Water’ (three-day short course for environmental professional and regulators). University of Maryland, College Park; October 25-27, 2000; May 25-27, 1999; (Workshop Conceptualization, Curriculum Development and Teaching).

Student Supervision:

Doctoral Degrees

Dissertation Director/co-Director (7)—2016, 2015, 2013, 2003.

Dissertation Committees (1)—2016.

Master’s Degrees

Thesis Director/co-Director (7)—2015, 2014, 2011, 2006, 2002, 2001, 1999.

Thesis Committee (6)—2014, 2012, 2000.

Undergraduate Student Mentoring (27) 2012-1997.

Pre-College Mentoring (13)—2002, 2000, 1998.

Post-Doctoral Mentoring:

Visiting United Nations FAO Fellow; Haryana Agricultural University, India; Spring, 1999.

AWARDS/RECOGNITION

National Science Foundation (NSF), Research Opportunities Award (ROA); University Nevada Las Vegas, July/August 2008.

National Institutes of Health (NIH), National Research Service Award (NRSA), Postdoctoral Training in Environmental Toxicology. 1982-1984. University of Wisconsin, Madison.