John P. DiVincenzo, Ph.D.

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Education

Ph.D.	Environmental Soil Chemistry-1996 University of Delaware, Newark, DE, D.L. Sparks, Advisor <u>Dissertation:</u> Slow Sorption Kinetics of Pentachlorophenol on Soil
M.S.	Environmental Engineering-1993 University of Delaware, Newark, DE, S.K. Dentel, Advisor <u>Thesis:</u> The Effects of an Anionic Surfactant and a Cationic Polyelectrolyte on the Sorption-Desorption of 1,2,4-Trichlorobenzene on Soil.
B.A.	Biological Sciences-1987

University of Delaware, Newark, DE <u>Minor:</u> Philosophy

Research Experience

Faculty Research (8/96 - present).

- Summer 2015 Awarded MTSU FirstStep Research Grant (NSF-funded) Directed 5 freshman and sophomore undergraduate research students along with an upperclassman research assistant. Role of microbial communities in pervious concrete to mitigate nutrient pollution.
- Impact of pesticides on soil microbial communities
 Establishing Microbial Communities in Pervious Concrete
 Hydrocarbon adsorption onto plastics
 Impact of urbanization on water quality
 Adsorption of nutrient contaminants on fly ash amended pervious concrete
 Fate of Pentobarbital in soil-water systems
 Role of pervious concrete in removing urban storm water contaminants
 Occurrence and toxicology of organic contaminants in sediments
 Organic contaminants in local surface water bodies
 Leaching of contaminants from fly ash amended pervious concrete
 Method development for analyzing organic contaminants

Solid phase extraction and GC-MS for analyzing organic constituents in runoff Method development for water quality assessment Nitrogen dioxide levels in ice skating rinks Zinc and copper levels in a vineyard soil Characterization of a vineyard soil Fate of pentachlorophenol in soil Lead leaching from crystal glassware Heavy metals in soil and sediments and road side dust

• Technical Skills: Gas Chromatography-Mass Spectrometry, Ion Chromatography, Liquid Chromatography, Fluorescent Spectrometry, Atomic Absorption Spectrometry, UV-Vis Spectrometry, Solid Phase Extraction, Fluorescent Microscopy

Research Assistant (1/93 - 7/96). Department of Plant and Soil Sciences, University of Delaware, Newark, DE.

- Investigating the aging of ionizable organic contaminants on soil. Sorption mechanisms were explored. Research involved understanding the fate and mobilities of these contaminants in the environment.
- <u>Incidental Experiences:</u> supervision of M.S. student's special problem and supervision of undergraduate lab activities.

Research Assistant (2/92 - 12/92). Department of Civil and Environmental Engineering, University of Delaware, Newark, DE. Investigated the effects of a sludge conditioning polymer and a common detergent surfactant on the soil water partitioning of an organic contaminant. Research involved understanding the impact that polymers and surfactants have on the fate of organic contaminants in landfills.

• <u>Incidental Experiences:</u> repair and upkeep of BET surface area analyzer, development of polymer selection manual, and investigation of sludge characteristics that impact sludge management practices.

Laboratory Research Technician (2/88 - 8/90). Fox Chase Cancer Center, Philadelphia, PA.

 Investigated the molecular genetics and recognition mechanism of the T-cell receptor. <u>Techniques Used:</u> Recombinant DNA Technology, Polymerase Chain Reaction, Sequencing, and RNAse Mapping. Responsibilities: Radiation Safety Officer and Chemical Inventory.

Teaching Experience

Honors Faculty (7/17 – present) Middle Tennessee State University. Assistant Professor of Chemistry (8/96 – 7/01) Middle Tennessee State University. Associate Professor of Chemistry (8/01 – 7/07) Middle Tennessee State University. Professor of Chemistry (8/07 – present). Middle Tennessee State University.

• Courses taught: Topics in Biochemistry (Chemical Toxicology) Environmental Chemistry (graduate/undergraduate) Introduction to Environmental Chemistry (graduate/undergraduate) Environmental Soil Chemistry (graduate/undergraduate) Topics in Applied Chemistry (Doctoral) General Chemistry Undergraduate Research II Chemistry Instruction Internship Consumer Chemistry (The Environment) Physical Science

- Courses developed: Topics in Biochemistry (Chemical Toxicology) Environmental Soil Chemistry (graduate/undergraduate) Environmental Chemistry (graduate/undergraduate) Introduction to Environmental Chemistry (graduate/undergraduate) Consumer Chemistry: The Environment
- Developed Interdepartmental Environmental Science Seminar Series.
- Environmental Science and Technology program development.
- Graduate Assistant (9/90 5/96). University of Delaware.
 - Development of laboratory and lectures to compliment D.L. Sparks's <u>Environmental Soil</u> <u>Chemistry</u> book. Spring 1996 semester.
- Instructed hands on computer workshop.

Administration

Director of Chemistry Internship Program (2010-present) Coordinate approximately 25 undergraduate interns each semester Scheduling, Advising, Safety, Grading Director of Environmental Science and Technology Program (2006-2011) Advising External Review Curriculum Restructuring of Program Student Learning Outcomes and Program Review Reporting Conference Organizer (Spring 2009) CLEAR Water Institute – First Conference "Watersheds and Sustainability"

Advising

- Advisor Biochemistry Majors 2013-present
- Advisor of Environmental Science and Technology students 1997-2011
- Advisor of pre-medicine students 1997-present
- Co-Advisor of Pre-Scripts (pre-medicine group) 1997-2006
- Customs for incoming freshman and transfer students

Dissertations/Theses directed:

Shabnam Arefin, MS December 2012, "Retention of Water Contaminants by Fly Ash Amended

Pervious Concrete Blocks"

- Archana Tirumala, MS August 2012, "Extraction of Fluoranthene and Pyrene from Acetone-Water Mixtures for fly Ash-Amended Pervious Concrete Studies"
- Brian Bachner, MS August 2011, "Nutrient Anion Sorption and Leaching in Fly-Ash Mixed Pervious Concrete"
- Jessie Weatherly, M.S., May 2008, "Leaching and Adsorption of Contaminants associated with Fly Ash Amended Pervious Concrete"
- Perry Wilbon, M.S., June 2007, "Gas Chromatography/Mass Spectrometry Analysis of Polycyclic Aromatic Hydrocarbons in Sediment and Stormwater Runoff samples: Toxicological Impact on Lumbriculus Variegatus"
- Rebecca James, M.S., December 2003, "Quantifying Organic Constituents of Urban Runoff in Murfreesboro, Tennessee: Potential Impact on Spring Water Chemistry"

Meredith Rogers, M.S., May 1999, "Method Development for Analyzing Aqueous Chlorpyrifos Samples"Kelli Douglas, M.S., August 1999, "Synthesis of Chlorpyrifos Degradation Products"

Thesis Committees: Spring Gilson (2014-biology), Chasity Bagsby (2013-chemistry), Zahrah Altawil (chemistry-2013), Elizabeth Reed (2010-biology), Amy Tolley (2010-biology), Tim Worall (2006-biology), Bola Oladipupo (2005-chemistry *doctoral*), Kirk Lokits (2003-chemistry), Kristi Wagner (2002-chemistry), Ekram Abusamhadneh (1997-chemistry)

Undergraduate Research

6 Student Group - Impact of pesticides on soil microbial communities Megan Schulz Tim Chitpanya Taylor Orr Ali Green Araceli Lopez Ashleigh Rosner Emily Best Sequence McCollough Emilee Hernandez Nanda "Maria" Laureano Tostes Coimbra Ilija Zecevic Eric Manovic Thuylinh "Lena" Tran Spring 2016/Fall 2016/Spring 2017/Fall 2017

Megan Schulz – Fall 2015 Establishing Microbial Communities in Pervious Concrete Christena Mossad – Fall 2015 Establishing Microbial Communities in Pervious Concrete First Step Summer Immersion (2015) Sophia Britt - Spring 2015, Establishing Microbial Communities in Pervious Concrete Timothy Chitpanya – Spring 2015, Establishing Microbial Communities in Pervious Concrete Rachel West - Fall 2014, Sorption of Hydrocarbons by Waste Plastics Valerie Yelton - Fall 2014, Development of Environmental Chemistry Lab Manual Ki-In Keith - Spring 2013, Aqueous Hydrolysis of Pentobarbital Ki-In Keith - Fall 2012, Pentobarbital Soil Sorption Studies Amy Pegram – Fall 2012, Characterization of Soils for Pentobarbital Fate Studies Steven Ehrhardt – Spring 2011, Pervious Concrete and Water Quality Robert Green – Spring 2011, Pervious Concrete and Water Quality David O'Brien - Spring 2009, Water Quality Monitoring Joseph Weller – Spring 2009, Water Quality Monitoring Tommy Felts - Spring 2008, Water and Sediment Analyses. Jordan Haskins - Spring 2007, Leaching of Metals from Pervious Concrete Amanda Petty - Spring 2007, Leaching of Metals from Pervious Concrete Adam Burris – Fall 2006, Degradation of Veterinary Antibiotics by UV Light Michael Cain – Spring 2006, Characterization of Sediment Samples Stephen Gibson – Spring 2004, Adsorption of Diesel Components on Soil Jade Thorton – Spring 2003, Solid Phase Extraction Techniques Jennifer Pollock - Spring 2001, Lead Leaching from Glassware Adam Richardson - Spring 1997, Platinum in Roadside Dust Cynthia Allen – Fall 1996, Elemental Analysis of Midwest Soils for Signs of Nuclear Fallout

Other Research Advising

Darcie Wallace 2001 Kristi Wagner 2000 Kathy Parks Spring 1999

Honors & Awards

Personal

- Selected to MTSU Honors Faculty, Summer 2017
- MTSU (NSF-funded) FisrtStep Research Award, Summer 2015
- MTSU Student recognition of professor making a difference, 6 citations, 2000-present
- MTSU NTO (Non-Traditional Student Organization) Recognition as a Professor making a difference, Fall 2014
- MTSU Special Projects Foundation Award, CLEAR Water Institute, \$4000, Spring 2008
- Phi Kappa Phi Honorary Society
- "Outstanding Grant" Award, International Paper, Spring 2002
- Outstanding Young Man of America, 1998
- Northeastern Branch, American Society of Agronomy, Graduate Student Award, 1996

Student

- Alissa Green-REU, Mississippi State University, Summer 2017, \$5,000
- Araceli Lopez Alvarez-undergraduate MTSU-URECA Spring 2017, \$1000. Observing the effect of pesticides on the soil's ecosystem through soil columns
- Alissa Green- undergraduate MTSU-URECA Spring 2017, \$1000. <u>Investigating the effect of pesticides on soil microbe cultures</u>
- Araceli Lopez Alvarez-undergraduate MTSU Experiential Learning (EXL) Award Spring 2017, \$500, Chemistry Internship program.
- Ashleigh Roeser-undergraduate MTSU-URECA Fall 2016, \$1000. <u>Use of fluorescent</u> spectrometry to investigate the effects of pesticides on soil microbe cultures
- Araceli Lopez Alvarez-undergraduate MTSU-URECA Fall 2016, \$1000. <u>Effects of pesticides on soil and water microbial ecosystems</u>
- Megan Schultz-undergraduate MTSU-URECA Fall 2015, \$500. <u>Establishment of microbial</u> <u>communities in pervious concrete to aid in nutrient pollution remediation</u>
- Sophia Britt–undergraduate researcher, TN Department of Health Internship, summer 2015
- Ki-In Keith, MTSU Scholar's Week Presentation, Fate of Pentobarbital, spring 2013
- Amy Pegram, MTSU Scholar's Week Presentation, Fate of Pentobarbital, spring 2013
- Tommy Felts, MTSU STEPMT Research Award, spring 2009.
- Jennifer Pollock, Best Student Paper Presentation, Middle Tennessee Collegiate Division Meeting of the Tennessee Academy of Science, Austin Peay State University, April 2001.
- Jennifer Pollock, Third Place, Sixth Undergraduate Research Symposium, College of Basic and Applied Sciences, Middle Tennessee State University, April 2001.

Professional Development and Service

National

McGraw Hill Flipped Classroom Webinar, November 21, 2014

McGraw Hill General Chemistry Symposium, February 2-5, 2006, Austin TX (Invited)

Soil Science Society of America – Soil Science Education Award Committee (2003-2006)

The Environmental Sampling Field Course, completed 32 hours of classroom and field instruction with The Nielsen Environmental Field School, Inc. Ohio State University, Columbus, OH, April 30 – May 3, 2002

Attended the Laboratory Safety Workshop at the College of Charleston in Charleston South Carolina, August 3-6 1999.

Middle Tennessee State University

College of Basic and Applied Sciences Curriculum Committee (Fall 2015-present, Chair)

Environmental Health and Safety Committee (2015-2016)

College of Basic and Applied Sciences Promotion and Tenure Review Committee, MTSU (2014-

Teaching workshop, Physics Department, led by Stephanie Chasteen, August 19, 2014

Chairman of the chemistry department freshman seminar committee (2014-2016)

Chairman of the chemistry department safety committee (2013-present)

University Discipline Committee (Fall 2012-2014)

College of Basic and Applied Sciences Grade Appeals Committee (Fall 2012-2014, Chair)

Program Director and Committee Chair – Environmental Science and Technology (2006-2011)

Department of Chemistry Chair Search Committee (Fall 2011-Spring 2012)

Chair, Graduate Council Subcommittee – Faculty & Curriculum Review (Fall 2010-Spring 2011)

Graduate Council (Fall 2009-2012)

Graduate Council Subcommittee – Faculty & Curriculum Review (Fall 2009-2012)

Chair, Departmental Tenure and Promotion Review Committee (2008-2009)

Departmental Masters Committee (2007-2013)

Analytical Chemist Search Committee (2006-2007)

Departmental Curriculum Committee (2007-2014)

Departmental Safety Committee (1996-2012) Chairman of search committee for laboratory supervisor/chemical hygienist, MTSU, 2009-2010

Faculty Research and Creative Projects Committee (2005-2008)

Non-Instructional Assignment Committee (2005-2008)

CARS-PDP Committee (2005-2006)

Departmental General Chemistry Lab Revision Committee (2004-2005)

Departmental Emphasis Committee (2004-2005) University Tenure and Promotion Committee (2003-2006)

Faculty Senator, MTSU, 2002-2005

Chair, Chemistry Department Space Committee, 2002-2004

Faculty Senate Election Committee, 2003

Presidential Task Force, 2002-2003

Chairman of search committee for laboratory supervisor/chemical hygienist, MTSU, 2002-2003

President, MTSU Chapter of Sigma Xi, 2002-2003

President-elect, MTSU Chapter of Sigma Xi, 2001-2002.

College of Basic and Applied Sciences Tenure and Promotion Review Committee, MTSU, 2002-2005 (Chair, 2004-2005)

GLOBE 2 training workshop, Middle Tennessee State University, May 2002. Training workshops designed to aid participants in training K-12 teachers in soil science field/lab work.

Chairman of the chemistry department safety. Responsible for safety compliance. Development of a waste handling and disposal program with specific guidelines. Involved in removal of \$65,000 worth of old chemicals. 1997-2003.

Environmental Science and Technology Curriculum Committee, 1997-2011.

Departmental Tenure and Promotion Review Committee (2001-Present; chair 2009)

Chairman of search committee for environmental chemist, 1997-98.

Chairman of Faculty Development Committee, 1998-2000.

Chairman of Student Publications Committee, 1998-99.

Applied Sciences and Technology Partnership, steering committee, 1999-2000.

Agribusiness and Commerce Partnership, 1999-2000.

Chairman of Faculty Welfare Committee, 2000-2001.

Coordinator of the Department of Chemistry Student Evaluations. Organized and implemented a new system. 1999-2000.

Department of Chemistry Research Open House, 1998-2002.

Department of Chemistry Social Committee, 2000-2002.

GLOBE training workshop, Middle Tennessee State University, August 1997. Training workshops designed to aid participants in training K-12 teachers in environmental science field/lab work, for student activities and data collection. GLOBE certified.

Other

Curriculum Committee: Review proposed new classes and changes to existing classes for the Department of Plant and Soil Sciences at the University of Delaware, 1995-1996.

Community Service

Community projects with Discovery Center at Murfree Spring and CHEM 1030 groups (2007)
Discovery Center at Murfree Spring Advisory Board, TN (2000-2006) (Children's Discovery House)
Camp PRISM, 2003
Water quality curriculum development w/ Discovery Center (5th grade classes)
Middle Tennessee Regional Science Olympiad Tournament ('97, '98, '99)
National Chemistry Week-demonstrations to 6th grade classes, TN ('96, '98)
Elementary School science sessions
Tennessee Environmental Council
Ashland Nature Center Volunteer, DE

Professional Affiliations (past and present)

American Association of University Professors American Chemical Society Soil Science Society of America Society of Environmental Toxicology and Chemistry Tennessee Section of American Water Resources Association (AWRA) Tennessee Academy of Sciences Sigma Xi

Publications (Peer-Reviewed)

Weatherly J., A. Tirumala, S. Arefin, J.P. DiVincenzo. Fly ash amended pervious concrete: a laboratory study on the removal potential for organic constituents. <u>International Journal of Environmental Engineering</u>. *In Preparation*.

Otter R.R., B. Bachner, J. Weatherly, S. Gilson, H. Brown, J.P. DiVincenzo (2016) Fly ash amended pervious concrete: a laboratory study on the removal potential for inorganic constituents. International Journal of Environmental Engineering, 8(1):12-29

James, R.R., P. Wilbon, and J.P. DiVincenzo (2010) Pervious and impervious urban stormwater runoff in a rapidly urbanizing region: Occurrence of fluoranthene and pyrene. <u>Bulletin of Environmental Contamination and Toxicology</u>, 85:32-36.

Ogden, A.E., R.R. James, and J.P. DiVincenzo (2006) Ground water tracing results for springs in Rutherford County, Tennessee. Journal of the Tennessee Academy of Science, 81(3-4), 66-72.

James, R.R., A.E. Ogden, and J.P. DiVincenzo (2006) A water quality study in Rutherford county, Tennessee: Student group project. <u>Journal of Natural Resources and Life Science Education</u>, 35, 118-126.

Rogers, M.R., G.J. Clark and J.P. DiVincenzo (2006) Analysis of chlorpyrifos by gas chromatography: methodology concerns. <u>Electronic Journal of Environmental, Agricultural and Food Chemistry</u>, 5(5), 1509-1514.

Parks, K.D., W.L. Anderson, F.C. Bailey, T.V. Johnston and J.P. DiVincenzo (2002) Copper and zinc levels at a Middle Tennessee State University Vineyard Site. <u>Journal of the Tennessee</u> <u>Academy of Science</u>. **77** (3): 64-67.

DiVincenzo, J.P. and D.L. Sparks (2001) Sorption of the neutral and charged forms of pentachlorophenol on soil: Evidence for different mechanisms. <u>Arch. Environ. Contam. Toxicol.</u> **40** (4): 445-450.

DiVincenzo, J.P. and D.L. Sparks (1997). Slow sorption kinetics of pentachlorophenol on soil: Concentration effects. <u>Environ. Sci. Technol.</u> **31** (4): 977-983.

DiVincenzo, J.P. and S.K. Dentel (1996). Sorption-desorption of 1,2,4-trichlorobenzene on soil: Anionic surfactant and cationic polyelectrolyte effects. J. Environ. Qual. **25** (6): 1193-1202.

Nakajima, P.B., J.P. DiVincenzo, S.C. Jameson and R.J. Gascoigne (1992). Chromosome 14 in B10.A(18R) mice is a recombinant and includes *Tcra*-V alleles. <u>Immunogenetics</u>. **35**: 190-198.

Publications (e.g., Conference Proceedings)

James, R.R. and J.P. DiVincenzo. *EPA Method-1664, SPE, and GC-MS for analysis of organics in runoff,* Proceedings of the 1st International Conference on Environmental Science and Technology, Volume 2, New Orleans, January 23-26; Lyon, W., Hong, J., Reddy, R., Eds; American Sciences Press: New Orleans, **2005**; pp 654-659.

Ogden, A.E., R.R. James and J.P. DiVincenzo. *Quantifying organic constituents of urban runoff in Murfreesboro, Tennessee: Potential Impact on Spring Water Chemistry*, Proceedings of the 14th Annual Tennessee Water Resources Symposium, Burns, TN, March 31-April 2, **2004**; pp 2B35-2B39.

Ogden, A.E., R.R. James and J.P. DiVincenzo. *Ground water tracing and water quality results for springs in Rutherford County, Tennessee*. Proceedings of the 13th Annual Tennessee Water Resources Symposium, Burns, TN, April 9-11, **2003**; pp 2C17-2C27.

DiVincenzo, J.P. (2000) Water Quality. <u>Encyclopedia of Environmental Issues.</u> Craig W. Allin, ed. Salem Press. 774-776.

DiVincenzo, J.P. (2000) Soil Contamination. <u>Encyclopedia of Environmental Issues.</u> Craig W. Allin, ed. Salem Press. 684-686.

DiVincenzo, J.P. and S.K. Dentel. *The effects of an anionic surfactant and a cationic polyelectrolyte on the sorption-desorption of 1,2,4-trichlorobenzene on soil. In* <u>Hazardous and Industrial Wastes.</u> Proceedings of the 26th Mid-Atlantic Industrial and Hazardous Waste Conference, Newark, Delaware, August 7-10; Huang, C.P. Ed; Technomica Publishing: Lancaster, **1994**; pp 303-31.

Presentations

Invited Talks

DiVincenzo, J.P. (2011) Urbanizing our world: At what cost to water quality. Middle Tennessee State University, Honors Lecture Series, November 7.

DiVincenzo, J.P. (2010) Water quality issues associated with the use of pervious concrete in urban environments. Western Kentucky University Department of Chemistry Seminar Series, March 19.

DiVincenzo, J.P. (2009) Polycyclic aromatic hydrocarbons in urban environments: A potential role for pervious concrete. University of Memphis Department of Chemistry Seminar Series, September 11.

DiVincenzo, J.P. (2007) Polycyclic aromatic hydrocarbons in urban environments: A potential role for pervious concrete. University of the South Department of Chemistry Seminar Series, Sewanee, April 27.

DiVincenzo, J.P. (1999). Kinetics and mechanisms of pentachlorophenol sorption on soil. Tennessee Technological University, Cookeville Tennessee, Department of Chemistry Seminar Series.

Other Talks

Roeser, A, E Best, A Green, A Lopez Alvarez, S McCollough, T Orr, JP DiVincenzo (2016) Investigating the Effect of Pesticides on Soil Microbe Cultures, 126th meeting, Tennessee Academy of Science, Austin Peay State University, Clarksville, Nov 19. Kayla Cowan, Martha Fonseca, MaKayla King, Robert Miller, Megan Schulz*, Sophia Britt Faculty Advisor: Dr. John P. DiVincenzo (2016) Nutrient Retention in Pervious Concrete, National Conference on Undergraduate Research (NCUR), Ashville, NC, April 7-9.

Kayla Cowan, Martha Fonseca, MaKayla King, Robert Miller, Megan Schulz*, Sophia Britt Faculty Advisor: Dr. John P. DiVincenzo (2016) Nutrient Retention in Pervious Concrete, Tennessee Louis Stokes Alliance for Minority Participation (TLSAMP), Knoxville, TN, February 25.

DiVincenzo, JP, B Bachner, J Weatherly, S Gilson, RR Otter, H Brown (2014) Fly Ash Amended Pervious Concrete: Leaching and Removal of Inorganic Contaminants, Southeast Regional Meeting of American Chemical Society, Nashville, TN, October 16-19.

Bachner, B, J Weatherly, JP DiVincenzo (2011) Leaching and Adsorption of Storm Water Contaminants Associated With Fly Ash-Amended Pervious Concrete, 21st Tennessee Water Resources Symposium, Montgomery Bell State Park, Burns, TN, April 12-14.

Otter, RR, S Gilson, FC Bailey, JP DiVincenzo, H Brown (2010) Pervious Concrete: Mixing Engineering and Science. Society of Environmental Toxicology and Chemistry MidSouth Chapter annual meeting, Memphis, TN, May 20-21.

DiVincenzo, JP, FC Bailey, H Brown, S Gilson, J Mongrain, J Weatherly, R Otter (2009) Pervious concrete: An alternative to impervious surfaces (leaching, removal, and toxicity of various compounds in pervious concrete formulations). Society of Environmental Toxicology and Chemistry North America 30th Annual Meeting, New Orleans, LA, Nov 19-23.

Wilbon, P. and J.P. DiVincenzo (2007) Gas chromatography analysis of polycyclic aromatic hydrocarbons in sediment and stormwater runoff samples collected in Murfreesboro, TN. 17th Annual Tennessee Water Resources Symposium, Burns, TN. April 17-19.

Weatherly, J., H. Brown and J.P. DiVincenzo (2006) Leaching and adsorption of contaminants associated with fly ash amended pervious concrete. Annual meeting, Tennessee Academy of Science, Austin Peay State University, Clarksville, Nov 16-17.

James, R.R., A.E. Ogden and J.P. DiVincenzo (2005) EPA Method-1664, SPE, and GC-MS for analysis of organics in runoff. 1st International Conference on Environmental Science and Technology, New Orleans, January 23-26

Ogden, A.E., R.R. James and J.P. DiVincenzo (2004). Quantifying organic constituents of urban runoff in Murfreesboro, Tennessee: Potential Impact on Spring Water Chemistry. 14th Annual Tennessee Water Resources Symposium, Burns, TN. March 31-April 2.

Ogden, A.E., R.R. James and J.P. DiVincenzo (2003). Ground water tracing and water quality results for springs in Rutherford County, Tennessee. 13th Annual Tennessee Water Resources Symposium, Burns, TN. April 9-11.

Ogden, A.E., J. Bales, J.P. DiVincenzo, R.R. James, C. Kennedy, M. Niese and M. Rebecca (2003). Seasonal changes in spring water quality in Rutherford County, Tennessee. National Speleological Society Convention, Porterville, CA. August 4-8.

Pollock, J.R. and J.P. DiVincenzo (2001). Temperature and pH effects on lead leaching from crystal mugs. Middle Tennessee Collegiate Division Meeting of the Tennessee Academy of Science, Austin Peay State University, April 21.

Wagner, K.K., J.P. DiVincenzo, and N.G. Chong (2000). Organic contaminants in the indoor air of ice arena. 21st annual meeting, Society of Environmental Toxicology and Chemistry, Nashville, TN. Nov. 12-16.

Anderson, W.L., F.C. Bailey, J.P. DiVincenzo, T.V. Johnston (2000). Site assessment for a vineyard: an undergraduate class field project. 92nd annual meeting, Soil Science Society of America, Minneapolis, MN. Nov. 5-9.

Rogers. M.R. and J.P. DiVincenzo (1998). Temperature and pH effects on the aqueous hydrolysis of chlopyrifos. 108th annual meeting, Tennessee Academy of Science, Tennessee Technological University, Cookeville Tennessee.

DiVincenzo, J.P. and D.L. Sparks (1997). Evidence for different soil sorption mechanisms for the neutral and charged forms of pentachlorophenol. 213th ACS National Meeting, American Chemical Society, San Francisco, CA.

DiVincenzo, J.P. and D.L. Sparks (1996). Mechanisms of slow sorption of the neutral and charged forms of pentachlorophenol on soil. 33nd annual meeting, Clay Minerals Society, Gatlinburg, TN.

DiVincenzo, J.P. and D.L. Sparks (1995). Sorption-desorption of pentachlorophenol on soil: residence time and pH effects. 87th annual meeting, Soil Science Society of America, St. Louis, MO. Agronomy Abstracts, p 340.

DiVincenzo, J.P. and D.L. Sparks (1995). Residence time and pH effects of pentachlorophenol sorption on soil. 32nd annual meeting, Clay Minerals Society, Baltimore, MD.

DiVincenzo, J.P. and S.K. Dentel (1994). The effects of an anionic surfactant and a cationic polyelectrolyte on the sorption-desorption of 1,2,4-trichlorobenzene on soil. 26th Mid-Atlantic Industrial and Hazardous Waste Conference, University of Delaware, Newark, DE.

Chitikela, S., J.P. DiVincenzo, A.I. Jamrah, S.K. Dentel and H.E. Allen (1992). Impacts of surfactants on sludge management processes. Division of Environmental Chemistry, American Chemical Society, San Francisco, CA.

Reports

Bailey, FC, JP DiVincenzo, RR Otter (2010). Township of Smyrna water quality report. Project period 2009-2010. Complied by CLEAR Water Institute, Middle Tennessee State University.

Dentel, S.K., H.E. Allen, S. Chitikela, and J.P. DiVincenzo (1994). Effects of surfactants on sludge dewatering and pollutant fate. Project report submitted to Delaware Water Resources Center, College of Agricultural Sciences, University of Delaware, Newark, DE. Project period 1991-1994.

Reviewer of Manuscripts

Journals:

Environmental Science and Technology Environmental Toxicology and Chemistry Journal of the Tennessee Academy of Sciences Archives of Environmental Contamination and Toxicology Soil and Sediment Contamination: an International Journal Journal of Environmental Management

Textbooks:

Review of one chapter for Norton, Gilbert's Chemistry-An atoms focused approach Review of one chapter for McGraw Hill, Silberberg's *Principles of General Chemistry* Chapters 1-4 of *Liberal Arts Chemistry* by Kimberly Waldron. Review of one chapter for McGraw Hill General Chemistry Textbook (Chang).

Grants Funded

Summer 2015 – Awarded MTSU FirstStep Research Grant (NSF-funded)
 Directed 5 freshman and sophomore undergraduate research students along with an upperclassman research assistant. Role of microbial communities in pervious concrete to mitigate nutrient pollution. \$7500 (\$2500 in student stipends; \$1500 assistant stipend, \$3000 PI stipend, and materials budget).

"Adsorption of water contaminants by pervious concrete:" 2010. MTSU Faculty Research Grant (Summer), \$8000

MTSU Special Projects Foundation Award, CLEAR Water Institute, \$4,000, Spring 2008

Water Quality Monitoring, Town of Smyrna, TN, \$10,000, Spring 2008, ongoing.

"Development and Research Into Pervious Surfaces (DRIPS)". Spring 2008. MTSU Clean Energy Initiative Grant, \$13,500.

"Leaching and sorption of contaminants associated with fly ash-amended pervious concrete." 2007. MTSU Faculty Research Grant (Summer), \$6750.

Non-Instructional Assignment. Spring 2005.

- Instructional Evaluation and Development Grant. Phelps, A. White, G., And DiVincenzo, J.P. Summer 2004, \$656. Also funded \$5,500 in summer salary through Graduate Studies.
- "Water Quality Field Camps". 2004. MTSU Public Service Grant, \$1,821.

"Surface Water Quality in Murfreesboro Tennessee". 2002. MTSU Faculty Research Grant (Summer 2003), \$5,534.

- Water Quality Curriculum. DiVincenzo, J.P., Little, B. International Paper, \$3110 1 year (June 2002)
- MTSU Faculty Development Grant. 2002. The Environmental Sampling Field Course, The Nielsen Environmental Field School, Inc. Ohio State University, Columbus, OH, April 30 May 3, 2002. \$1400.
- "Hands-on Chemistry Activities Workshop". DiVincenzo, J.P., White, G.D. 2000. MTSU Public Service Grant, \$787.
- "Adsorption and desorption of benzene on a surfactant-modified soil". 1999. MTSU Faculty Research Grant (Summer 2000), \$4,700.

MTSU Faculty Development Grant. 1999. Laboratory Safety Workshop at the College of Charleston in Charleston South Carolina, August 3-6 1999. \$1,207

"Establishment and development of an experimental vineyard at MTSU". Johnston, T. V., DiVincenzo. J. P., Bailey, F., Anderson, W. 1998. MTSU Faculty Research Grant (Academic Year), \$8,850

Grants Submitted (Not Funded)

Camille and Henry Dreyfus Special Grant Program in the Chemical Sciences – Establishing a Water Chemistry Laboratory Program at Middle Tennessee State university, \$25,000, 2014.

"Fate and Biodegradation of Barbiturates in Agroecosytems" USDA, AFRI, \$492,862, Co-PD, 2013.

"Water quality issues in Middle Tennessee: establishing community involvement and awareness." Monsanto Fund, \$31,439, 2004.

Senior personnel in NSF Chem-STEM URC, 2004.

- "Water quality issues in Middle Tennessee: establishing community involvement and awareness." Special Projects Grant, MTSU Foundation, \$6800 3 year (February 2003).
- "Sorption and desorption of benzene, toluene, and xylene on a surfactant-modified soil." Petroleum Research Fund type G grant, American Chemical Society, \$25,000 – 2 year (February 1999).
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- "Development of methodology for reduction, recovery, and recycling of general chemistry laboratory waste." MTSU Faculty Research Grant (Summer), \$4,188 (September 1997).
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