

2007-2008 Porter Fellowship, Bowdoin College
2000-2004 NSF Career Award.
1999-2000 Teacher of the Year, Nicholas School of the Environment, Duke University.
1995 Graduate Student Paper Award, Environmental Chemistry, American Chemical Society.

A.T. Stone*, A. Torrents, J. Smolen, D. Vasudevan and J. Hadley 1993 Adsorption of organic compounds possessing ligand donor groups at the oxide/water interface Environmental Science and Technology 27, 895-909.

DOCUMENTARY/WORKS OF ART

Featured in Thirteen Ways, a 70 minute documentary directed and produced by Ian Cheney). In this feature, of scientists (and, for good measure, a few scientists) travel to a plot of Maine land they have never seen before. One-by-one, through all four seasons, they walk the land and describe what they see. What unfolds is an unusual meditation upon the human relationship to the natural world and the power of different ways of seeing. The film premiered at the Environmental Film Festival in Washington DC, in March 2019.

FUNDING

- 2016-2019 A. MacKay, D. Vasudevan, C. Johnston, (PIs) Collaborative Research: RUI: Novel Computational Tools to Predict Anion Pesticide and Pharmaceutical Sorption to Soil Oxides, National Science Foundation, \$63,759 to Bowdoin College
- 2014-2017 A. MacKay, J. Gascon, and D. Vasudevan (PIs). Collaborative Research: Cation Interactions with Soil Aluminosilicates: Structure-Sorption Relationships, National Science Foundation, \$106,000 to Bowdoin College
- 2013-2014 D. Vasudevan. Chemical Fate and Health Effects: Exploring Necessary Connections

- 2002-2003 D. Vasudevan, M. Miranda, W. Thomas (PIs). "The missing lead link: Measuring lead in soil from historic mobile source deposition." Center for Environmental Solutions, Duke University, \$10,000.
- 2002-2006 A. MacKay (PI), D. Vasudevan (Co-PI). "Factors influencing veterinary antibiotic sorption in soils". U.S. Department of Agriculture, \$130,336-Vasudevan subcontract.
- 2000-2004 D. Vasudevan (PI). "CAREER: Interfacial processes impacting the chemical fate of organic compounds". National Science Foundation, \$200,000.
- 2000-2005 R. DiGulio (Center Director). Duke Center on Superfund Chemicals Impact on Reproduction and Development, D. Vasudevan and A. Schuler (PIs for Project 5), "Fate and toxicity of Superfund chemicals and their metabolites". National Institute of Environmental Health Sciences, \$420,000 (Project 5 budget)
- 2000-2001 D. Vasudevan (PI). "Influence of phosphorus mobilization and attenuation of anionic herbicides in NC Piedmont soils: implications for water quality". Water Resources Research Institute of NC, \$40,000.
- 1999-2000 D. Vasudevan (PI). "Soil processes affecting groundwater quality in the NC Piedmont: Contamination by organic agrochemicals". Water Resources Research Institute of NC, \$40,000

PRESENTATIONS AND POSTERS (* indicates presenter, undergraduate co-authors underlined)

At Conferences (2000-present)

S. Shaheen*, D.H. Freeman, J. Sullivan, and D. Vasudevan. Sorption of Pyridine Cations to Aluminosilicate Clays: Influence of Solid Phase Composition and Structure. American Chemical Society National Meeting, New Orleans, LA, March 2018

J. Gomez*, and D. Vasudevan. Evaluating trimethylammonium as a potential probe for heterocyclic amine sorption to soils. Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), The National Diversity in STEM Conference. Salt Lake City, Utah, November 2017.

D H. Freeman*, J. Sullivan, S. Shaheen and D. Vasudevan. Building a mechanistic understanding of the sorption of substituted pyridines to aluminosilicate clays. American Chemical Society National Meeting, San Francisco, CA, April 2017

L. Alper, A. Lopez, and D. Vasudevan. Evaluation of Salicylic Acid and Hydratropic Acid as Probe Compounds for Structurally Complex Molecules. American Chemical Society National Meeting, San Francisco, CA, April 2017

D. Vasudevan*. Antibiotic interactions at the solid-water interface: Implications for understanding sorption to soils and in situ sampling of natural water. American Chemical Society National Meeting, Boston, MA, September 2015.

A. Lopez*, R. Goyetche, K. Carter, and D. Vasudevan Evaluation of benzylamine and salicylic acid as probes for pharmaceutical sorption to soils

D. Vasudevan, T. Arey, and M. Newman. Sorption of aromatic amines to soils and soil minerals: Implications for the fate of emerging contaminants.

A. Carrasquillo and D. Vasudevan. Influence of composition and structure on the sorption of veterinary antibiotics at the solid-water interface. Maine Water Conference, Augusta, ME, March 2007. [poster]

A. Carrasquillo and D. Vasudevan. Influence of composition and structure on the sorption of cationic amines to mineral surfaces. American Chemical Society National Meeting,

R.L. Fimmen*, D. Richter, and D. Vasudevan. Determination of dissolved organic nitrogen speciation in soil extractions. Division of Geochemistry, American Chemical Society National Meeting, New Orleans, LA, March 2003.

E. Ralston*, D. Vasudevan, E.M. Cooper, and Griffin. Kinetics of phosphate sorption to hematite. Air & Waste Management Association South Atlantic States Section Meeting, Raleigh, NC, December 2002.

D. Vasudevan* and E.M. Cooper. Sorption of organic anions in iron oxide rich soils: Role of soil P and Al. Division of Geochemistry, American Chemical Society National Meeting, Orlando, FL, April 2002

L. Harrington*, D. Vasudevan and E.M. Cooper. Fluoride sorption and associated aluminum release. Division of Geochemistry, American Chemical Society National Meeting, Orlando, FL, April 2002 [poster]

D. Vasudevan* and E.M. Cooper. Competition between 2,4-D and phosphate in southeastern Ultisols under varying land use. Annual Meeting of Soil Science Society of America, Charlotte, NC, October 2001.

R.L. Fimmen*, M.S. Hofmockel, D.D. Richter, and D. Vasudevan. Characterization of DOC from natural water samples and soil extractions. Annual Meeting of Soil Science Society of America, Charlotte, NC, October 2001. [poster]

L. Harrington*, D. Vasudevan and E.M. Cooper. Fluoride sorption and associated aluminum release in Ultisols. Annual Meeting of Soil Science Society of America, Charlotte, NC, October 2001. [poster]

W. Hwang* and D. Vasudevan. Sorption of the water tracer Rhodamine WT in iron-oxide rich soils. Annual Meeting of Soil Science Society of America, Charlotte, NC, October 2001. [poster]

O.L. Van Exem* and D. Vasudevan. Chemometric evaluation of polar/ionogenic pesticide sorption onto nc piedmont Ultisols. Annual Meeting of Soil Science Society of America, Charlotte, NC, October 2001. [poster]

D. Vasudevan*, E.M. Cooper and O.L. Van Exem. Sorption-Desorption of polar and ionogenic compounds in iron-oxide rich soils. Annual ACS Colloid and Surface Symposium, Pittsburgh, PA, June 2001.

D. Vasudevan* P.J. Dorley, and Zhuang. Organic ligand adsorption at the mineral-water interface: Role of tautomeric equilibrium. Annual Goldschmidt Conference, Hot Springs, VA, May 2001.

D. Vasudevan*, R.L. Fimmen and A.B. Francisco. Influence of compound 3-D structure on adsorption at the mineral-water interface. Annual Goldschmidt Conference, Hot Springs, VA, May 2001.

D. Vasudevan*, E.M. Cooper and O.L. Van Exem. Retention of polar and ionogenic herbicides in iron-oxide rich NC piedmont soils. Annual North Carolina Water Resources Research Conference, Raleigh, NC, March 2001.

R.L. Fimmen*, A.B. Francisco, D.J. Sutton, Z.J. Hea, and D. Vasudevan. Groundwater tracer Rhodamine WT. Superfund Basic Research Program Annual Meeting, Oxidative Processes – Stress to Remediation, Chapel Hill, NC, December 2000 [poster]

D. Vasudevan* and E.M. Cooper. Retention polar/ionogenic herbicides in iron oxide rich piedmont soils. Soil Science Society of America, Minneapolis, MN, November 2000

D. Vasudevan* and E.M. Cooper. Sorption and deso

Soils: The nutrient bank for our food Bowdoin College, Organic Garden Talks, Brunswick, ME, September 2014.

Environmental fate of pharmaceuticals and related chemicals: Role of sorption to soil minerals Wellesley College, Department of Geosciences, Wellesley, MA, April 2014

Nonlinearity of cationic aromatic amine sorption to aluminosilicates and soils: Role of intermolecular cation- interactions Massachusetts Institute of Technology, Environmental Engineering, Cambridge, MA, March 2014

Can we build an o-Gellyfish: Passive sampling of pharmaceutical compounds Harvard School of Public Health, Environmental Exposure and Risk - Water Group Meeting, Boston, MA, 2014.

Sorption of Aromatic Amines to Soils and Soil Minerals: Role of Intermolecular Interactions Bates

Tyler Shonrock Sorption of Anionic Compounds to Soils and Soil Minerals

Academic Year 2017-18

- Jorge Gomez Evaluating phenyltrimethylammonium as a potential probe for heterocyclic amine sorption to soils
- Eric Guiang Predicting the Sorption of Anionic Pharmaceuticals Using Probe Compounds
- Sam Shaheen Predicting pyridine sorption to aluminosilicate clays: Influence of solid phase composition and structure

Summer 2017

- Leah Alper Prediction sorption of anionic compounds to soils: An evaluation of probe compounds
- Jorge Gomez Evaluating phenyltrimethylammonium as a potential probe for heterocyclic amine sorption to soil
- Eric Guiang Predicting the Sorption of Anionic Pharmaceuticals Using Probe Compounds
- Emma Landes Sorption Isotherms of Anionic Pharmaceuticals and Probe Compounds
- Sam Shaheen Predicting pyridine sorption to aluminosilicate clays: Influence of solid phase composition and structure

Academic Year 2016-17

- Leah Alper Prediction sorption of anionic compounds to soils: An evaluation of probe compounds(honors)
- Danielle Freeman Predicting the sorption of substituted pyridines to aluminosilicate clays(honors)

Summer 2016

- Leah Alper Prediction Sorption of Anionic Compounds to Soils: An Evaluation of Probe 53 TD 0 Tc ()T

Gillian Kramer Quantifying and Comparing the Nutrient Input of Herring Gulls (*Larus argentatus*) and Leach's Storm-Petrels (*Oceanodroma leucorhoa*) on the Terrestrial Ecosystem of a Small Island in the Bay of Fundy

John Medina Evaluation of Phenyltrimethylammonium as a Probe for Sorption of Cationic Organic Compounds to Soils and Sediments

James Sullivan Structure based predictions of substituted pyridine cation exchange to soil aluminosilicates

Academic Year 2014-2015

Malik McKnight Monitoring Polar and Ionic Organic Pharmaceutical Chemicals in Aquatic Ecosystems using an Equilibrium Passive Sampler Tc 0 Tw.187-soE.Loi

Phoebe Aron

Quantification of pyritic iron and

2012-2013 Chemical Hygiene Committee
Claire Boothe Luce Scholarship Committee
Environmental Studies Committee
Gender and Women's Studies Committee
Working Group on Public Engagement
Bowdoin Advising Program iSupport of Academic Excellence

2011-2012 Chemical Hygiene Committee
Claire Boothe Luce Scholarship Committee
Environmental Studies Committee
Gender and Women's Studies Committee
McKeen Center faculty fellow

2010-2011 Chemical Hygiene Committee
Claire Boothe Luce Scholarship Committee
Environmental Studies Committee
McKeen Center faculty fellow

2009-2010 Claire Boothe Luce Scholarship Committee
Committee on Appointments, Promotion and Tenure
Environmental Studies Committee
McKeen Center faculty fellow (one semester)

2008-2009 Claire Boothe Luce Committee
Committee on Appointments, Promotion and Tenure
Environmental Studies Committee

2007-2008 on sabbatical leave

2006-2007 Chemical Hygiene (one semester)
Committee on Curriculum and Educational Policy
Environmental Studies Committee
Gender and Women' Studies Committee
New Course Subcommittee

June 2012 "Interactions at the interface betwe TD c .0[9