

**Jonathan W. Peterson**

Dean of Natural and Applied Sciences Division  
Professor of Geology & Environmental Science

Ruth and John Reed Faculty  
Achievement Award

2021

Hope College

**MEMBERSHIPS**

Geological Society of America  
American Society of Civil Engineers

**COURSES TAUGHT:**

First Year Seminar-Water (IDS 100)  
First Year Seminar-Petroleum, People and the Hydrocarbon Age (IDS 100)  
First Year Seminar-

Peterson\*, Jonas M., Tarp\*, Cleveland E., Wade, Randall D., Brokus, Sarah A., Pikaart, M.J., Krueger, Brent P., and Best, Aaron A. (2021). A global reconnaissance of particulates and metals/metalloids in untreated drinking water sources. *Environmental Monitoring and Assessment*, 193:307, <https://doi.org/10.1007/s10661-021-09086-y>.

Nathan Tintle, Kristin Van De Griend, Rachel Ulrich, Randall D. Wade, Tena M. Baar\*, Emma Boven\*, Carolyn E. A. Cooper\*, Olivia Couch\*, Lauren Eekhoff\*, Benjamin Fry\*, Grace K. Goszkowicz\*, Maya A. Hecksel\*, Adam Heynen\*, Jade A. Laughlin\*, Sydney M. Les\*, Taylor R. Lombard\*, B. Daniel Munson\*, Jonas M. Peterson\*, Eric Schumann\*, Daniel J. Settecerri\*, Jacob E. Spry\*, Matthew J. Summerfield\*, Meghana Sunder\*, Daniel R. Wade\*, Caden G. Zonnefeld\*, Sarah A. Brokus, Francesco S. Moen, Adam D. Slater, **Jonathan W. Peterson**, Michael J. Pikaart, Brent P. Krueger and Aaron A. Best. (2021) Diarrhea prevalence in a randomized, controlled prospective trial of point-of-use water filters in homes and schools in the Dominican Republic. *Tropical Medicine and Health*, v. 49:1 <https://doi.org/10.1186/s41182-020-00291-y>

Peterson, J.W., Stock\*, M.L., Brophy\*, E.E., and Mattson\*, B.D. (2019) Using laboratory settling experiments to characterize the suspended load or moveable matrix portion of an urban aquifer: potential relationships to land use. *Journal of Environmental Engineering*, V. 145, Issue 7, DOI: 10.1061/(ASCE)EE.1943-7870.0001547

Peterson, J. W., Petrasky\*, L.J., Seymour, M.D., Bergmans\*, R.S.,(2016) Laboratory investigation of antibiotic interactions with Fe<sub>2</sub>O<sub>3</sub> nanoparticles in water. *Journal of Environmental Engineering*, V.142, Issue 5, May 2016.

Peterson, J.W., Gu, B., Seymour, M.D., (2015), Surface interactions and degradation of a fluoroquinolone antibiotic in the dark in aqueous TiO<sub>2</sub> suspensions. *Science of the Total Environment*, 532, 398-403.

3 H W H U V R Q - : 2 ¶ 0 H D U D 2014\$ Effects of Acidic Fe<sup>3+</sup>, Fe<sub>3</sub>O<sub>4</sub>, and Fe<sub>2</sub>O<sub>3</sub> on

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- Bodenbender, B.E., Hansen, E.C., Peaslee, G.F., and Peterson, J.W., (2000), The environmental science minor: a disciplinary approach to interdisciplinary studies with a grounding in undergraduate research: *Council on Undergraduate Research (CUR) Quarterly*, v .21, n. 2, p. 72-76.
- Peterson, J.W. DeBoer\*, M.J. and Lake\*, K.L., (2



- Pharmaceuticals in Groundwater: PETRASKY\*, Laura J., SEYMOUR, Michael D., and PETERSON, Jonathan W., *Annual Meeting of the Geological Society of America, in Denver, CO, October 31-November 3, 2010.*
- Textural, Mineralogical, and Infiltration Capacity Analysis of Athletic Field Soils: A Metadisciplinary Study for Turf Management: GARCIA\*, Katherine G., PETERSON, Leah Marie, and PETERSON, Jonathan W., *Annual Meeting of the Geological Society of America, in Denver, CO, October 31-November 3, 2010.*
- The Role of "Fines" in the Transport of Pharmaceuticals and Personal-Care Products (PPCPs) through Sediments and Soils: WILCOX, Jeffrey D., KERR\*, Katharine A., GARCIA\*, Katherine G., SEYMOUR, Michael D., and PETERSON, Jonathan W., *Annual Meeting of the Geological Society of America, in Denver, CO, October 31-November 3, 2010*
- Breakdown of Penicillin Antibiotic in Water by Nano-scale Oxides: Implications for Removal of Pharmaceuticals from Aqueous Systems :Laura L. Petrasky\*, Michael D. Seymour, and Jonathan W. Peterson, *Annual Meeting of the American Institute of Chemical Engineers (AIChE), Salt Lake City, UT, November 5-8, 2010.*
- Pharmaceuticals and Personal Care Product (PPCP) Adsorption to Managed Turf Soils: Implications for Waste Water Recycling: Katherine G. Garcia\*, Leah Marie Peterson, Katharine A. Kerr\*, Jeffrey D. Wilcox, Michael D. Seymour and Jonathan W. Peterson, *Annual Meeting of the American Institute of Chemical Engineers (AIChE), Salt Lake City, UT, November 5-8, 2010.*
- Burkhart\*, R S., Shaw\*, D.C., Schuiling\*, A.B., and Peterson, J.W., (2009) *Ampicillin adsorption to nanometer-size Al<sub>2</sub>O<sub>3</sub> in water: macroscopic experiments and mechanistic investigations*: Annual Meeting of the Geological Society of America, Portland, OR, October 17-21, 2009.
- Peterson, J.W., Andresen\*, D.E., Seymour, M.D., Wang, W. and o0 g0 G{Pet}-4(e)9(r)-3(son, )9(J.W)-3(.,)11( A)5(ndr 79

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- Peterson, J.W. (2004), The Savvy Traveler: Learning Language & Customs of Interdisciplinary Research: Invited presentation in a CUR/GSA Special Session-Integrative Interdisciplinary Undergraduate Research in the Earth Sciences, *Annual Meeting of the Geological Society of America*, Denver, Colorado, November 7-10, 2004.
- Peterson, J.W.; Bassman\*, J., Cencer\*, J.L., and Johnson\*, E., (2004), Analysis of Insect Occurrence in Groundwater in a Coastal Lake Michigan Aquifer: Poster presentation at *Geological Society of America Annual Meeting*, Denver, Colorado, November 7-10, 2004.
- Halloran\*, D.J. and Peterson, J.W., (2004) Analysis of Onychiuridae Occurrence in Groundwater Beneath the Hope College Campus, *Michigan Academy of Science, Arts and Letters, Annual Meeting*, March 5, 2004.
- Peterson, J.W., Weiss\*, W.J., Knapman\*, M.Y., and Ingersoll\*, E.N., (2003), Research Offspring in Your Own Backyard: The Campus Ground Water Project, Invited presentation in a CUR/GSA Special Session, *Geological Society of America Annual Meeting*, Seattle, Washington, November 2-5, 2003
- Peterson, J.W., (2002), Phase relations in undergraduate research: seeking equilibrium in a 3-component system. (Abstract & Presentation), *Geological Society of America Annual Meeting*, October 27-30, 2002, Denver, Colorado.
- Peterson, J.W. and Northup\*, A. (2001), Particle-size heterogeneity and subsurface stratification in air sparging: laboratory experiments-field implications (abstract & presentation): *Geological Society of America Annual Meet Ame.00000912 0 61t 2 792r000912 0 6e2 reW\*BT/BT/F5 11.04 Tf,9(f)-/impl*

Peterson, J.W., Peaslee, G.F., and Hansen, E.C., (1998), The research seminar: an integrated capstone to an environmental science curriculum (abstract): *Geological Society of America Annual Meeting*



