ERIK A. PETROVSKIS, Ph.D, P.E.

CAREER OVERVIEW

Dr. Petrovskis has over 30 years of experience in environmental engineering, which encompasses environmental management, consulting, research, teaching, and technological innovation. He is a proven project director for sustainability, environmental compliance, due diligence and remediation. His organizational leadership is well established. Dr. Petrovskis is a frequently invited speaker on corporate environmental management.

SUSTAINABILITY

- ➤ Developed corporate environmental sustainability program, including benchmarking, Meijer Environmental Commitment, and the Meijer Sustainability Plan
- ➤ Leads Sustainability Council, integrating activities across Meijer business units and facilitating goal setting and strategy development
- Responsible for sustainability metrics tracking, goal setting, and sustainability reporting
- ➤ Leads carbon reduction, food waste reduction, circular economy, and Great Lakes stewardship programs

ENVIRONMENTAL COMPLIANCE

- Responsible for environmental compliance for over 260 retail stores, six distribution centers, five food manufacturing facilities, and two central pharmacies
- ➤ Developed multimedia environmental compliance management system conformant to ISO 19600, including procedure development, training, permitting, metrics tracking, and auditing
- > Implemented robust management programs for fuel systems, construction and post-construction stormwater management, hazardous waste, and ammonia refrigeration systems

DUE DILIGENCE AND REMEDIATION

- ➤ Led over 160 Phase I and Phase II environmental assessments for acquisition or divestiture of residential, commercial, and industrial properties
- ➤ Directed or managed site investigation and remediation at over 100 diverse facilities, including gasoline stations, pipelines, industrial laundries, and metal fabrication sites in the Great Lakes states, Ontario, and Quebec
- ➤ Co-Principal Investigator of federal and state grants to develop assessment and remediation technologies for chlorinated solvent sites

ORGANIZATIONAL LEADERSHIP

- ➤ Leads corporate environmental management team supporting retail, supply chain, manufacturing, and merchandising activities
- ➤ Founded startup offices for two different environmental consulting firms, recruiting and integrating diverse staff of engineers and other professionals, with headcounts of 12 to 15
- Met or exceeded financial metrics, budget strategies, and accounting targets
- ➤ Directed organizations through technology leadership, practice innovation, personal entrepreneurship, and teamwork

EDUCATION

Ph.D., Environmental Engineering, University of Michigan, Ann Arbor, Michigan, 1995 M.S.E., Environmental Engineering, University of Michigan, Ann Arbor, Michigan, 1992 M.S., Environmental Health Science, University of Michigan, Ann Arbor, Michigan, 1991 B.S. (Honors), Biochemistry, University of Wisconsin, Madison, Wisconsin, 1983

ACADEMIC EXPERIENCE

University of Michigan, Ann Arbor, Michigan, School for Environment and Sustainability Adjunct Associate Professor, 2023- present

Master's Capstone Project Advisor/Sponsor

2023-present Meijer Scope 3 Supplier Engagement and Emission Reduction Goal

2022-2023 Meijer Scope 3 Carbon Accounting Framework

2019-2020 Meijer Store of Tomorrow

2017-2018 Meijer Renewable Energy Strategy

2015-2016 Meijer Sustainability Plan and 2014 Environmental Footprint Report

University of Michigan, Ann Arbor, Michigan, Department of Civil and Environmental Engineering, Lecturer, 2011-2014

CEE360/CEE465 Environmental Process Engineering (four semesters)

CEE265 Sustainable Engineering Principles (one semester)

PROFESSIONAL EXPERIENCE

Meijer, Inc., Grand Rapids, Michigan, Director of Environmental Compliance and Sustainability, 2014-present

Geosyntec Consultants, Ann Arbor, Michigan, Principal/Office Manager, 2004-2014

GeoTrans, Inc., Ann Arbor, Michigan, Principal/Operations Manager, 2000-2004

Tetra Tech Inc., Project Engineer, Ann Arbor, Michigan, 1994-1999

The Upjohn Co., Environmental Affairs Unit, Intern, Kalamazoo, Michigan, 1990

The Upjohn Co., Molecular Biology Research, Staff Scientist, Kalamazoo, Michigan, 1983-1989

REGISTRATIONS AND CERTIFICATIONS

Professional Engineer, Michigan, No. 046877

AFFILIATIONS

National Association of Environmental Management Retail Industry Leaders Association Erb Institute Michigan Business Sustainability Roundtable West Michigan Sustainable Business Forum

AWARDS AND RECOGNITIONS

Southwest Michigan Sustainable Business Forum "Business of the Year" 2023 Meijer President's Award, 2023

Grand Rapids Business Journal 2022 Newsmaker of the Year – Sustainability

West Michigan Sustainable Business Forum "Business of the Year" nominee 2022

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SERDP Project of the Year, Co-Principal Investigator, 2004

Distinguished Achievement Commendation, UM College of Engineering, 1995

NIH Predoctoral Fellowship in Cellular Biotechnology, 1991-1994

Parsons Foundation Fellowship in Environmental Engineering, 1991-1992 Tau

Beta Pi honor society (engineering), 1991

UM School of Public Health Scholarship, 1989-1991

Gamma Sigma Delta honor society (agriculture and life sciences), 1983

UW Graduate with distinction, 1983

M.S. Peterson Memorial Scholarship of Biochemistry, 1982-1983

UW Dean's Lists 1980-1983; Sophomore honors, 1980

PROFESSIONAL SERVICE

University of Michigan, Center for Sustainable Systems, External Advisory Board/Vice Chair, 2017–present.

Latvian Center Garezers and Divreizdivi Seminar, Sustainability Lecturer, 2021-2022

University of Michigan, REFRESCH, Advisory Board member, 2014-2017

National Research Council (NRC), Committee for Integrating Sustainability into USEPA Decision Making, 2013-2014.

Interstate Technology and Regulatory Council (ITRC), Environmental Molecular Diagnostics Team member and fact sheet co-author, 2009-2014

Sustainable Remediation Forum (SURF), Framework Team member and white paper co-author, 2006-2011

Huron River Watershed Council, Board Member 2000-2011; Executive Committee 2012-2014 University of Michigan, Jack Lendvay Ph.D. dissertation committee, "Temporal and Spatial Trends in Biogeochemistry at the Groundwater-Surface Water Interface", 1999.

INTERNATIONAL RESEARCH EXPERIENCE

Environment Canada. Landfarming of Missile Fuel-Contaminated Soil at a Former Soviet Military Base. 1996.

National Academy of Sciences. Young Investigator Program with Latvia and Lithuania: Agricultural Impacts on Water Quality. 1994-1995.

PUBLICATIONS

Tirpak R.A., Winston R.J., Simpson I.M., Dorsey J.D., Grimm A.G., Pieschek R.L., Petrovskis E.A., Carpenter D.D. 2021. Hydrologic impacts of retrofitted low impact development in a commercial parking lot. *J. Hydrology*. 592:125773.

Britton, C. and Petrovskis, E.A. 2020. Meijer and Carbon Management, In *Green Chemistry in Government and Industry*, Walter de Gruyter GmbH, Berlin.

National Research Council (co-author). 2014. Sustainability Concepts in Decision-Making – Tools and Approaches for the USEPA, Washington, D.C., National Academies Press.

Petrovskis E., Amber W., Walker C. 2012. Microbial Monitoring During Bioaugmentation with *Dehalococcoides*. In Stroo HF, Leeson A, Ward CH, eds, In *Bioaugmentation for Groundwater Remediation*. SERDP and ESTCP Remediation Technology Monograph Series, Springer Science+Business Media, New York, NY, USA. Chapter 6.

- Holland, K., R. Lewis, K. Tipton, S. Karnis, C. Dona, E. Petrovskis, L. Bull, D. Taege, and C. Hook, 2011. Framework for Integrating Sustainability into Remediation Projects. *Remediation*. Summer: 7-38.
- Ritalahti, K. M.; J. K. Hatt; V. Lugmayr, K. Henn, E. A. Petrovskis, D. M. Ogles, G. A. Davis, C. M. Yeager, C. A. Lebrón, F. E. Löffler, 2010. Comparing on-site to off-site collection for *Dehalococcoides* biomarker gene quantification to predict *in situ* chlorinated ethene detoxification potential. *Environ, Sci. Technol.* 44:5127-5133.
- Ritalahti, K. M.; J. K. Hatt; E. Petrovskis, F. E. Löffler, 2009. Groundwater sampling for nucleic acid biomarker analysis. In *Handbook of Hydrocarbon and Lipid Microbiology*, Timmis, K. N., Ed. Springer: Berlin, pp. 3407-3418.
- Abriola, L.M., Drummond, C.D., Hahn, E.J., Hayes, K.F., Kibbey, T.C.G., Lemke, L.D., Pennell, K.D., Petrovskis, E.A., Ramsburg, C.A., Rathfelder, K.M., "A Pilot-Scale Demonstration of Surfactant-Enhanced PCE Solubilization at the Bachman Road Site: (1) Site Characterization and Test Design," *Environ. Sci. Technol.* 39:1778-1790. 2005.
- Ramsburg, C.A., Pennell, K.D., Abriola, L.M., Daniels, G., Drummond, C.D., Gamache, M. Hsu, H-L., Petrovskis, E.A., Rathfelder, K.M., Ryder, J., Yavaraski, T., "A Pilot-Scale Demonstration of Surfactant-Enhanced PCE Solubilization at the Bachman Road Site: (2) System Operation and Evaluation," Environ. *Sci. Technol.* 39:1791-1801. 2005.
- Ramsburg, C.A. Abriola, L.M., Pennell, K.D., Löffler, F.E., Gamache, M., Amos, B.K., Petrovskis, E.A., "Stimulated Microbial Reductive Dechlorination following Surfactant Treatment at the Bachman Road Site," *Environ. Sci. Technol.* 38:5902-5914. 2004.
- Lendvay, J.M., M. J. Barcelona, G. Daniels, M. Dollhopf, B. Z. Fathepure, M. Gebhard, R. Heine, R. Hickey, R. Krajmalnik-Brown, F. E. Löffler, C. L. Major, Jr., E. Petrovskis, J. Shi, J. M. Tiedje and P. Adriaens, "Bioreactive Barriers: A Comparison of Bioaugmentation and Biostimulation for Chlorinated Solvent Remediation," *Environ. Sci. Technol.* 37:1422-1431. 2003.
- Petrovskis, E., D. Zarina, S. Valtere, J. Millers, and H. Whittaker, "Landfarming of Xylidine-Impacted Soil at a Former Soviet Military Base," Bioremediation 4(2) 149-150. 1997
- Baker, J., D. Bosch, P. Bukaveckas, S. Deets, K. Hatfield, A. Kazakevicius, K. Lohman, A. Mitchell, E. Petrovskis, I. Runge, and A. Zale, "Agricultural Impacts on Water Quality in Latvia and Lithuania: A Report of the U.S. Young Investigator Program," Proceedings of the Latvian Academy of Sciences, Section B, no.3/4, p. 128-136. 1995
- Petrovskis, E.A., T.M. Vogel, P. Adriaens, K.H. Nealson, and D.A. Saffarini, "Transformation of Tetrachloromethane by *Shewanella putrefaciens* MR-1," Bioremediation 3(4): 61-67. 1995
- Petrovskis, E.A., T.M. Vogel and P. Adriaens, "Effects of Electron Acceptors and Donors on Transformation of Tetrachloromethane by *Shewanella Putrefaciens* MR-1," *FEMS Microbiol Lett.* 121:357-364. 1994
- Meyer, A.L., E.A. Petrovskis, W.P.H. Duffus, D.R. Thomsen and L.E. Post. 1991. Cloning and sequence of an infectious bovine rhinotreicheitis virus (BHV-1) gene homologous to glycoprotein H of herpes simplex virus. *Biochem. Biophys. Acta* 1090:267-269.

- Post, L.E, D.R. Thomsen, E.A. Petrovskis, A.L. Meyer, P.J. Berlinski and R.C. Wardley. 1990. Genetic engineering of the pseudorabies virus genome to construct live vaccines. *J. Reprod. Fert.* 41:97-104.
- Nunberg, J.H., et al., 1989. Identification of the thymidine kinase gene of feline herpesvirus-1: Use of degenerate oligonucleotides in the polymerase chain reaction to isolate herpes virus gene homologues. *J. Virology* 63:3240-3249.
- Petrovskis, E.A., et al., 1988. Pseudorabies virus gp50: an effective subunit vaccine and interference with virus replication in cell lines. In Lasky, L. (ed): "Technological Advances in Vaccine Development," New York: Alan R. Liss, Inc., pp. 147-156.
- Petrovskis, E.A., A.L. Meyer and L.E. Post. 1988. Reduced yield of infectious pseudorabies virus and herpes simplex virus from cell lines producing viral glycoprotein gp50. *J. Virology* 62:2196-2199.
- Marchioli, C.C., R.J. Yancey, E.A. Petrovskis, J.G. Timmins, and L.E. Post. 1987. Evaluation of pseudorabies virus glycoprotein gp50 as a vaccine for Aujeszky's disease in mice and swine: Expression by vaccinia virus and Chinese hamster ovary cells. *J. Virology* 61:3977-3982.
- Petrovskis, E.A. and L.E. Post. 1987. A small open reading frame in pseudorabies virus and implications for evolutionary relationships between herpesviruses. *Virology* 159:193-195.
- Petrovskis, E.A., J.G. Timmins, and L.E. Post. 1986. Use of λgt11 to isolate genes for two pseudorabies virus glycoproteins with homology to herpes simplex virus and varicella zoster virus glycoproteins. *J. Virology* 60:185-193.
- Petrovskis, E.A., J.G. Timmins, T.M. Gierman and L.E. Post. 1986. Deletions in vaccine strains of pseudorabies Virus and their effect on synthesis of glycoprotein gp63. *J. Virology* 60:1166-1169.
- Petrovskis, E.A., J.G. Timmins, M.A. Armentrout, C.C. Marchioli, R.J. Yancey, and L.E. Post. 1986. DNA sequence of the gene for pseudorabies virus gp50, a glycoprotein with no N-linked glycosylation. *J. Virology* 59:216-223.
- Timmins, J.G., E.A. Petrovskis, C.C. Marchioli, and L.E. Post. 1985. A method for efficient gene isolation from phage λgt11 libraries: Use of antisera to denatured, acetone-precipitated proteins. *Gene* 39:89-93.

PATENTS

- Method for constructing thymidine kinase mutants of herpes viruses. L.E. Post, E.A. Petrovskis, J.H. Nunberg and T. Compton. U.S. Patent No. 5,324,664
- Pseudorabies virus proteins. E.A. Petrovskis, L.E. Post and J.G. Timmins. U.S. Patent No. 5,352,575

RECENT INVITED PRESENTATIONS

Enriching Lives in the Communities We Serve, Keynote–Air and Waste Management Association Annual Air Conference, November 2022.

Fleet Electrification, Michigan Sustainability Conference, October 2022

Sustainability at Meijer, Council for the Great Lakes Region, October 2022

Supply Chain Sustainability, Grand Valley State University, October 2022

Green Stormwater Management, West Michigan Sustainable Business Forum, September 2022

Refrigerant Management at Meijer, Retail Industry Leaders Association, September 2022

Pollution Solutions of the Great Lakes, Macatawa Area Coordinating Council, April 2022

Meijer Environmental Sustainability, Wayne State University, February 2022

Meijer Materiality Assessment, University of Michigan Erb Institute, November 2021

Tackling Carbon Emissions at Meijer, Michigan Sustainability Conference, June 2021

Environmental Sustainability at Meijer, Michigan Hispanic Chamber of Commerce, April 2021

Organics Recycling at Meijer, Great Lakes Circular Materials Roundtable, October 2020

Green Infrastructure at Meijer, Tip of the Mitt Watershed Council, June 2020

Environmental Sustainability at Meijer, Aquinas College, April 2020

Facilitating Environmental Sustainability, Grand Valley State University, October 2019

Commercial GI Retrofits, Great Lakes Stormwater Collaborative, July 2019

Commercial GI Retrofits: Construction, Performance, and Maintenance, Ohio Stormwater Conference, May 2019

Electric Vehicle Charging Strategy, Michigan Council on Future Mobility, May 2019

Sustainability at Meijer, West Michigan Sustainable Business Forum, March 2019

Energy Efficiency and Sustainability, USGBC Michigan Energy Summit, April 2018

Meijer Environmental Management, Calvin College, April 2018

Environmental Metrics, Aquinas College, April 2018

Facilitating Environmental Sustainability, Keynote–Michigan Sustainability Conference, September 2017

Food Waste Management at Meijer, Indiana Recycling Coalition Annual Conference, June 2017 Infiltration Technologies for Mitigating Stormwater Runoff of Commercial Retail Properties, Great Lakes and St. Lawrence Green Infrastructure Conference, May 2017