

Curriculum Vitae

DAVID KING STEVENS, Ph.D., P.E.

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Birth Date and Place:

December 17, 1954, Kansas City, Kansas

Family Status:

Married, two children

Education:

B.S. Civil Engineering, 1976 - Tufts University, Medford, MA
Ph.D. Civil and Environmental Engineering, 1983 - University of Wisconsin - Madison
EIT Exam State of Massachusetts. May, 1976.
Summer Institute in Water Pollution Control, 1981 - Manhattan College, Bronx, NY

Professional Registration

Registered Professional Engineer, State of Ohio, 1985 - present

Teaching Experience

2006 -2016 Head, Division of Environmental Engineering, Department of Civil and Environmental Engineering, Utah State University, Logan, UT
2017 Visiting Volunteer, California Water Data Center, Sacramento State University, Sacramento, CA.
2016 Visiting Professor, Department of Civil and Environmental Engineering, University of Massachusetts, Amherst, MA.
2004-2005 Visiting Professor, Department of Civil Engineering, University of Canterbury, Christchurch, NZ.
1998- Professor, Division of Environmental Engineering, Department of Civil and Environmental Engineering, Utah State University, Logan, Utah (Environmental Process Dynamics, Environmental Statistics, Physical/Chemical Processes Transport Phenomena, others)
1995 Visiting Researcher, Department of Civil Engineering. University of New Hampshire, Durham, NH.
1990-1998 Associate Professor, Division of Environmental Engineering, Department of Civil and Environmental Engineering, Utah State University, Logan, Utah (Industrial Pollution Control, Chemical Process Principles for Environmental Systems, Municipal Systems Engineering, others)
1986-90 Assistant Professor, Division of Environmental Engineering, Department of Civil and Environmental Engineering, Utah State University, Logan, Utah
1984-86 Research Associate, Department of Civil and Environmental Engineering, University of Cincinnati, Cincinnati, Ohio
1980-82 Teaching Assistant, Department of Civil and Environmental Engineering, University of Wisconsin - Madison, Madison, Wisconsin.

Courses taught at Utah State University

Course Title	Undergraduate, U/ Graduate,G	# Times Taught
Sophomore Seminar for Civil Engineers	U	4
Sophomore Seminar for Environmental Engineers	U	4
Introduction to Environmental Engineering	U	1
Water Treatment Plant Design	U	1
Environmental Engineering Junior/Senior Design	U	4
Transport Phenomena in Bioenvironmental Systems	U	13
Drinking Water Engineering	U	2
Municipal Engineering	U/G ^a	1
BASINS training	U/G	16
Biochemical Engineering	U/G	3
Surface Water Quality Modeling	G	2
Physical Processes	G	4
Advanced Wastewater Treatment	G	1
Industrial Pollution Control	G	5
Modeling, Statistics, and Experimental Design in Environmental Engineering	G	4
Process Dynamics in Environmental Science and Engineering	G	9
Data Analysis and Experimentation in Environmental Science and Engineering	G	10
Physical/Chemical Processes	G	11
Environmental Engineering Graduate Seminar	G	20
Engineering Economics	U	4
Waterborne Pathogen Control	C ^b	20

a.Listed for both undergraduate and graduate students

b.Correspondence course, 1 time taught = 1 student

Graduate students under my direction

Name	MS	Ph.D.	Name	MS	Ph.D.
Guyoung Kang		x	Jonathan Oldham	x	
Ahmad Badkoubi		x	Jeff Horsburgh	x	
Tong Yin		x	Tao Hua	x	
Bethany Neilson		x	Rajan Phadnis	x	
Ahmed S. Mohammed		x	Lee Bok Nam	x	
Lee Joon Hee		x	Nikhil Mongha	x	
Mark Schmelter		x	Patrick Sullivan	x	
Hussein Ali Batt		x	Randa Stewner	x	
Ali Salha		x	Ana Ovalle	x	
Jianming Zhong		x	Khartik Iyer	x	
Ahmad Badkoubi	x		Amber Spackman	x	
Boyd Welch	x		Guyoung Kang	x	
Eric Baiden	x		Christine Rumsey	x	
Gao Hu	x		Prajith Dev	x	
Rudy Yuwano	x		Morris Demitry	x	
Chiou Ven-Yeh	x		Ruba Mohamed	x	
Ravinder Menon	x		Ahmed Bitar	x	
Claudia H. Gaeddert	x		Maryana Azmi	x	
Hu Gui Jun	x		Tiana Hammer	x	
Zhu Hui Chung	x		Stetson Bassett	x	
Manish Shah	x		Jinsu Choi	x ^a	
Joy Emory	x		Jade Echard	x	
Chen Shih Tien	x		Tara Saley	x	
Bethany Neilson	x				
Sanjay Dhar	x				
Balavenkata Ravi Pitchuka	x				

Research Projects Awarded (Principal or Co-principal Investigator)

- 2019-2024 AWRC Center of Excellence - Curriculum Improvement for Egyptian Water Engineering (Am. Univ. - Cairo (US AID))
- 2019 Assessment of Cyanotoxins in Utah Waters (State of Utah, MLF program)
- 2015 Technical Support for Narrows Dam Project - Modeling and Data Analysis for Scofield Reservoir (Hansen, Allen, and Luce)
- 2015 Biofiltration of Utah Municipal Drinking Water (U.S. Geological Survey - Funded)
- 2015 Assessment of Nanopure Water Treatment Technology for Dental Office Applications (Ray Maiwurm)
- 2014 Bathymetric Survey for Mud Lake (Bear Lake Watch)
- 2014 Assessment of Environmental Impacts of Mineral Extraction Modifications in the Great Salt Lake (Biowest)
- 2012-2014 Development and Technical Support for Distillation Water Treatment Unit for U.S. Military (Thermal Management Technologies)
- 2012-2014 Fate and Behavior of Trace Inorganic Constituents in Water Distribution Systems (Water Research Foundation, State of Utah)
- 2012 -15 Source Water Protection for Potential Phosphorus Mining Impacts in the Uintah Basin (State of UT)
- 2011-12 Northwind
- 2010-12 Utah Non-point Source Assessment Program (State of UT)
- 2010-11 Hydrologic and Ecological Impacts of Changes in Human Water Resource Management in Response to Climate Change and Urbanization. (National Science Foundation)
- 2009-11 Logan, UT Water Quality Monitoring for TMDL Assessment (City of Logan, UT)
- 2009-12 Data Collection and Modeling Support for the Little Bear and Bear Rivers (State of UT)
- 2008 Precipitation/weather monitoring in the Little Bear River (State of UT)
- 2008-11 Oneida Narrows Reservoir Environmental Assessment (Study V - Water Quality Modeling) (Twin Lakes Canal Co. - FERC licensing study)
- 2007-09 Water Quality Modeling to Support Water Quality Trading in the Bear River Basin (Bear River Commission/U.S. EPA)
- 2007 Water Quality Monitoring for the Little Bear River, UT (State of UT)
- 2007-08 Technical Support for Bear River system data acquisition (State of UT)
- 2007-09 Weber Basin DSS Modernization (State of UT)
- 2007-08 Technical Support for Echo Reservoir Modeling for TMDL Assessment (State of UT)
- 2006-10 An Information System for Science Based River Management (IIMS) (U.S. Bureau of Reclamation)
- 2006-09 Tools for Environmental Observatory Design and Implementation - Sensor networks, dynamic Bayesian nutrient flux modeling, and cyber infrastructure advancement (National Science Foundation)
- 2006-08 Continuous Water Quality Monitoring of Mud Lake to Support Evaluation of Effects of Bear River Water Diverted into Bear Lake (State of ID, USU)
- 2006-07 Development of Data Visualization, Management, and Processing Tools for the CUAHSI HIS Observations Data Model (CUAHSI)
- 2005 Upper Bear River TMDL (Cirris Environmental (State of UT))
- 2004 Real Time Streamflow and Water Quality Monitoring Station in the Logan River at the Utah Water Research Laboratory (USU/Watershed Initiative)
- 2005-08 The Bear River Basin in Idaho, Utah, and Wyoming, Including the Upper Bear (16010101), Central Bear (16010102), Bear Lake (16010201), Middle Bear (16010202), Little Bear-Logan (16010203), and Lower Bear-Malad (16010204) Hydrologic Units (Bear River Commission, USEPA Targeted Watersheds Program)
- 2005-08 Dynamic Water Quality Modeling to Support Water Quality Trading in the Bear River Basin (Bear River Commission, USEPA Targeted Watersheds Program)
- 2004-09 Investigation of the changes in water quality in the Little Bear River Watershed in response to the implementation of Best Management Practices (USDA/CREES)
- 2003 Strawberry Reservoir TMDL (PSOMAS (State of UT))
- 2003 Otter Creek and East Fork Sevier TMDL (Cirris Environmental (State of UT))
- 2003 Echo Reservoir TMDL (Cirris Environmental (State of UT))
- 2002-03 Development of an Integrated Watershed Information Management Tool for Long-term Facilities Stewardship at the INEEL (Idaho National Environmental Engineering Laboratory)
- 2002 Water Quality Data Viewer for the Lower San Joaquin R. (U.S. Bureau of Reclamation)
- 2002-03 Newton Reservoir TMDL (Cirris Environmental (State of UT))

- 2001-03 Ogden/Lower Weber Basin Water Quality/Watershed Management Study (U.S. Bureau of Reclamation)
- 2000-02 Technical Support for TMDL Development: Lower Payette R. (State of ID, Dept. of Environmental Quality)
- 2000-08 Nooksack R. Watershed Management Plan (WRIA-1) (Whatcom County, State of WA)
- 1999-00 Technical Support for TMDL Development: East Canyon, Scofield, and Pineview (State of UT, Dept. of Environmental Quality)
- 1999-02 U.S. EPA BASINS Training
- 1997-00 Development of a User Driven Decision Support system for Water Availability and Quality Management, (U.S. Dept. of Energy/Idaho National Environment and Engineering Laboratory)
- 1997-00 Uintah Basin Selenium Mitigation. (U.S. Bureau of Reclamation.)
- 1997-2009 Lower Weber/Ogden Basin Water Quality/Watershed Management Study: Data Analysis. (U.S. Bureau of Reclamation.)
- 1996-99 Fate of Trichloroethylene (TCE) in plant/soil systems: evaluating phytoremediation (U.S. EPA, Region 7/8 HSRC)
- 1993-96 Weber Basin Water Quality/Watershed Management Study: Data Analysis. (U.S. Bureau of Reclamation.)
- 1992-94 Modeling Support for Radionuclide Transport at the Proposed Low-level Radioactive Waste Landfill, Clive, UT (Utah Department of Environmental Health)
- 1992-93 Bioreactor Engineering, Optimization, Design, and Operations for Organopollutant Destruction using White Rot Fungus (National Institutes of Environmental Health Sciences)
- 1991-93 Modeling and Field Verification of Soil Vacuum Extraction/Enhanced Bioremediation of Fuel Contaminated Soils (United States Geological Survey, Section 104)
- 1991-94 Abiotic Destruction of Pentachlorophenol in Soil using Heme and Hydrogen Peroxide -Preliminary Studies (Electric Power Research Institute)
- 1991-92 Performance Evaluation of At-grade Treatment of Contaminated Ground Water for PAH and PCP Removal (U.S. EPA, RSKERL)
- 1990-92 Screening Models for Land Disposal of Exploration and Production Wastes. (American Petroleum Institute)
- 1989 Remedial Action Assessment System (RAAS) for In-situ Hazardous Waste Treatment Technologies -- Biological Processes (Battelle Pacific Northwest Laboratories)
- 1989-91 Environmental Contaminant Property Estimation using QSARs in an Expert System (U.S. Air Force)
- 1989-91 Biological and Physico-Chemical Remediation of a Mercury Contaminated Hazardous Waste (U.S. EPA HWERL, AWBERC)
- 1989-92 Biodegradation of Organopollutants by a White Rot Fungus in Bench Scale Reactors (United States Geological Survey)
- 1989-94 Biotransformation Studies of Organic Substances (Electric Power Research Institute)
- 1989 Application of Vector Processing in Parameter Estimation for Activated Carbon Adsorption Models (National Science Foundation)
- 1988 Interaction of Mass Transfer and Inhibition in Biofilms (continuation) (Utah State University)
- 1987 Interaction of Mass Transfer and Inhibition in Biofilms (Utah State University)
- 1986 Use of EP Toxicity for Evaluation of Heavy Metal Leaching Potential from Municipal Wastewater Sludges (U.S. EPA)
- 1985 Combined Carbon Oxidation/Nitrification in Plastic Media Trickling Filters (U.S. EPA)
- 1984-86 Evaluation of Municipal Sludge Digestion Alternatives (U.S. EPA)

Consulting/Work Experience

- 2009 State of California (TMDL reviewer)
- 2000-present Brown and Caldwell, Denver, CO
- 2000 University of Wisconsin, Engineering Extension
- 1993-94 Eimco Corp., Salt Lake City, UT
- 1992 Rice University
- 1991 Radian Corp., Austin, TX
- 1991-92 Hydrogaia, Millville, UT
- 1990-1992 R.C. Sims and Associates, Logan, UT
- 1990 Ducks Unlimited, Bountiful, UT
- 1989-present Dynamac Corporation, Rockville, MD

1987 Peer Consultants, Washington, D.C.
1982 Soap and Detergent Association, New York, New York
1976-78 Civil Engineer, Drainage and Irrigation Dept., Malacca, W. Malaysia (U.S. Peace Corps)
1973-74 Drafter/Detailer, Black and Veatch, Consulting Engineers, Kansas City, Missouri

Technical Peer Reviewer

National Science Foundation (2009-2012)
ASCE/EWRI Annual Conference, Salt Lake City, 2004
ASCE Environmental Engineering Division Journal (Associate Editor, 1992-1996)
ASCE, Environmental Engineering, Specialty Conference, Cincinnati, OH, 1986
IAWPRC Conference, Brighton, UK, 1988
IAWPRC Conference, Kyoto, Japan, 1990
U.S. EPA, Exposure Assessment Group
Environmental Science and Technology
Water Environment Research
Water Research
J. Environmental Management
J. Environmental Chemistry and Toxicity
Environmental Engineering Science
Journal of the American Water Resources Association
Waste Management
Wyoming Water Resources Center, Proposal Review

Academic and Professional Activities

American Society of Civil Engineers, President, Northern Utah Branch, 1992-1993
Associate Editor, Journal of the Environmental Engineering Division, ASCE, 1992 -1996
Civil and Environmental Engineering Department, Utah State University, Computer and New Faculty Review, Tenure and Promotion, and Student Grievance Committees
Water Pollution Control Federation, O&M for Fixed Film Processes Manual, Committee Member and Technical Reviewer, 1986-88.
Utah Water Research Laboratory, Environmental Quality Laboratory Advisory Committee Member
Utah State Commission for Certification for Water Treatment System Operators, 1987-present
ASCE/EWRI Annual Conference, Salt Lake City, UT. June 27 - July 1, 2004. Technical Co-Chair
Chair, Professional Responsibilities and Procedures Committee, USU Faculty Senate
State of Utah, Drinking Water Board, 2007-2015
Chair, UCOWR Annual Conference, Snowbird, UT June 11-13, 2019.

Professional Societies

American Society of Civil Engineers
Water Environment Federation
International Association for Water Quality
Association of Environmental Engineering Professors
American Society for Engineering Education
American Water Works Association
American Institute of Chemical Engineers
Universities Council on Water Resources (Lead Delegate)

Honors/Awards

Tau Beta Pi (All Engineering Honorary)
Phi Kappa Phi (University Honorary)
Sigma Xi (Research Honorary)
Honors in Engineering, Magna Cum Laude, Tufts University, 1976
Academic Excellence Award, 1980, awarded by the Central States Water Pollution Control Association.
Lewis H. Kessler Sanitary Engineering Award, 1982, for Academic Achievement in Sanitary Engineering, awarded by the Civil and Environmental Engineering Dept., University of Wisconsin - Madison.
USU Awards
Department of Civil and Environmental Engineering

Researcher of the Year (2x)
Advisor of the Year (2x)
College of Engineering
Researcher of the Year

Training Related Activities

Utah State University Soil Bioremediation Workshop, 1989-1993
Statistics in Environment Sciences and Engineering Workshop, Moscow, Russia 1991
U.S. EPA Soil Bioremediation Workshops in Ada OK and Oklahoma City, OK, 1993, 1994
U.S. EPA Biodegradation Workshop, Philadelphia, PA, 1993
U.S. EPA Biodegradation Workshop, Salt Lake City, UT, 1993
U.S. EPA Soil Bioremediation Workshops, San Francisco, CA 1994, 1996
Statistics in Environmental Sciences and Engineering Workshops, Utah Department of Environmental Quality, Salt Lake City, UT, 1996, 1997
Statistics in Environment Sciences and Engineering Workshops, University of Wisconsin, Engineering Extension, Ogden, UT, Cheyenne, WY, 2000
U.S. EPA BASINS Training, Logan, UT. 2000-2004.
U.S. EPA BASINS/HSPF Training, Albuquerque, NM. 2003
Statistics in Environment Sciences and Engineering Workshops, various Universities, Taiwan, ROC, 2003
Statistics in Environment Sciences and Engineering Workshops, various Universities, Taiwan, ROC, 2010
Pollution Prevention Workshop, Kaohsiung University of Science and Technology, Kaohsiung, Taiwan, ROC, 2010
Engineers Without Borders, Tuni Grande, Peru. 2012, 2013, 2015, 2016, 2018, 2019.

Publications ((* indicates authorship))**Thesis**

1. Stevens, David K. 1983. Performance and Modeling of Nitrification in the Biological Fluidized Bed. Ph.D. Dissertation. University of Wisconsin - Madison.

Refereed Journals - Published or Accepted

1. Berthouex, P.M., (*). 1982. Settling Test Analysis. **Journal of the Environmental Engineering Division, ASCE**. **108**(5): 1065-1069.
2. (*), P.M. Berthouex, T.W. Chapman. 1986. The Effect of Tracer Diffusion in Biofilm on Residence Time Distributions. **Water Research**. **20**(3): 369-375.
3. (*), P.M. Berthouex, T.W. Chapman. 1987. Calculation of Effectiveness Factors in Spherical Shells. **Journal of the Environmental Engineering Division, ASCE**. **113**(5). 1149-1155.
4. (*). 1988. The Interaction of Mass Transfer with Inhibition in Biofilms. **Journal of the Environmental Engineering Division, ASCE**. **114**(6):1352-1358.
5. (*), P.M. Berthouex, T.W. Chapman. 1989. Dynamic Model of Biological Nitrification in a Fluidized Bed. **Journal of the Environmental Engineering Division, ASCE**. **115**(5):910-929.
6. (*), W.J. Grenney, Z. Yan, R.C. Thompson. 1989. Dispersion in the Vadose Zone due to Nonequilibrium Adsorption Kinetics. **Hazardous Wastes and Hazardous Materials**. **6**(4):407-421.
7. Grenney, W.J., (*), W.J. Doucette. 1990. Decision Support Model for Hazardous Waste Application Rates at Land Treatment Systems. **Civil Engineering (U.K.)**. 219-228.
8. Reinhart, D.R., F.G. Pohland, (*). 1991. Mathematical Fate Modeling of Hazardous Organic Pollutants During Codisposal with Municipal Refuse. **Hazardous Wastes and Hazardous Materials**. **8**(1):85-97.
9. Hwang, S.H., C.L. Hansen, (*). 1992. Biokinetics of Upflow Anaerobic Sludge Blanket Reactor Treatment Whey Permeate. **Bioresource Technology**. **41**:223-230.
10. Unlu, K., M.W. Kemblowski, J.C. Parker, (*), P.K. Chong, I. Kamil. 1992. A Screening Model for Effects of Land-disposed Wastes on Groundwater Quality. **Journal of Contaminant Hydrology**. **10**(1-2):27-49.
11. Kang, G. and (*). 1994. Degradation of pentachlorophenol in bench scale bioreactors using *Phanerochaete chrysosporium*. **Hazardous Wastes and Hazardous Materials**. **11**(3):397-410.
12. Peng, J., (*), X. Yiang. 1994. A Pioneer Project of Wastewater Reuse in China. **Water Research**. **29**(1):357-363.
13. Joseph, A.T., W.J. Grenney, (*). 1994. Oil Migration Through Unsaturated Soils And Its Effect On The Vadose Zone Interactive Processes (VIP) Model Output. **Water Science and Technology**. **30**(3):39-51.
14. Hardy, T.B., P.C. Anderson, C.M.U. Neale, (*). 1994. Application of multispectral videography for the delineation of riverine depths and mesoscale hydraulic features. Effects of Human--Induced Change on Hydrologic Systems. Proceedings Annual Water Resources Association, Jackson Hole, WY. 445-454.
15. Badkoubi A., (*), R.C. Sims, I. Murarka. 1996. Quantification of Pentachlorophenol Transformation Product Distribution in the Presence of *Phanerochaete chrysosporium* **Archives of Environmental Contamination and Toxicology**. **30**(1):1-8.
16. Ossenbruggen, P.J. (*). 1996. Mechanistic model identification for Nitrification in activated sludge. **Environmetrics**. **7**:579-600.
17. (*), A. Badkoubi, I.P. Murarka. 1996. Pentachlorophenol Mineralization by *Phanerochaete chrysosporium* in Liquid Culture in the Presence of Syringic Acid or Humic Acid. **Hazardous Wastes and Hazardous Materials**. **13**(4):473-484.
18. Zhu, H.C., (*). 1996. COD and BOD₅ Removal Efficiencies in a Pilot Scale Constructed Reed Bed Receiving Cheese-Processing Wastewater. **Chin. J. Environ. Sci.**, **17**(5):30-32.
19. Chen, S., (*), G. Kang. 1999. Pentachlorophenol (PCP) and crystal violet degradation using Heme and Peroxide-I. Proof of concept and screening tests. **Water Research**. **33**(17):3657-3665.
20. Neilson, B.T., (*). 2002. Issues Related to the Success of the TMDL Program Water Resources Update: Universities' Contribution to TMDL Program Development (Peer Reviewed Issue). **The Universities Council on Water Resources**. (122):55-61. March 2002.
21. Kang, G., H.C. Lee, Y.P. Lee, H.S. Han, (*). 2003. Development of an advanced evaporation system with fouling-free technology using a circulating fluidized bed heat exchanger. **Environmental Engineering and Science**. **20**(4):391-327.
22. Said, A., (*), and G. Sehlke, 2004. An Innovative Index for Evaluating Water Quality in Streams, **Environmental Management**, **34**(3): 406 - 414.
23. Sehlke, G., D.F. Hayes, (*) (eds.). 2004. World Water Congress :Critical Transitions in Water and Environmental Resources Management (June 27 –July 1, 2004, Salt Lake City, Utah, USA).
24. Said, A., (*), and G. Sehlke, 2005. Estimating Water Budget in a Regional Aquifer Using HSPF-MODFLOW Integrated Model, **J. Am. Wat. Resources Assoc.**, **41**(1): 1-12.
25. Said, A., (*), G. Sehlke. 2005. Physical and economic sustainability of water: New approach using the case of the Big Lost River, Idaho. **J. Environment, Development, and Sustainability**. **7**(4): 453–464.

26. Said, A., (*), and G. Sehlke, T. Glover, D. L. Sorensen, W. Walker, and T. Hardy, 2005. Exploring an Innovative Watershed Management Approach: From Feasibility to Sustainability. **Energy, Special Issue on Sustainable Development of Energy, Water and Environment Systems**. **31**(13): 2373-2386.
27. Ames, D.P., B.T. Neilson, (*), U. Lall. 2005. Using Bayesian networks to model watershed management decisions: an East Canyon Creek case study. **Hydroinformatics**. **7**:267-282.
28. Chen, S.Y., (*), G. Kang, M.-J. Hsieh. 2006. Treating Soil Pentachlorophenol (PCP) at Optimal Conditions Using Heme and Peroxide. **J. Environ. Engrg. Div., ASCE**. **132**(7):704-708.
29. Yin, Tong, (*). 2007. Regulating Waste Discharge With Fuzzy Effluent Limitations For Toxic Pollutants. **Water Environ. Res.**, **79**(2007).
30. Cheong, D.Y, C.L Hansen, (*). 2007. Production of Bio-Hydrogen by Mesophilic Anaerobic Fermentation in an Acid-Phase Sequencing Batch Reactor. **Biotech. Bioengr.** **96**(3):421-432.
31. Neilson, B.T., (*), S. C. Chapra, C. Bandaragoda. 2009. Data Collection Methodology For Dynamic Temperature Model Testing And Corroboration. **Hydrologic Processes**. - doi:10.1002/hyp.7381.
32. Horsburgh, J.S., A. Spackman Jones, (*), D.G. Tarboton, N.O. Mesner. 2010. A sensor network for high frequency estimation of water quality constituent fluxes using surrogates. **Environ. Model. and Software** **25**:1031-1044. - doi:10.1016/j.envsoft.2009.10.012.
33. Schmadel, N., B.T. Neilson, (*). 2010. Approaches to estimate uncertainty in longitudinal channel water balances. **J. Hydrol.** doi:10.1016/j.jhydrol.2010.09.011.
34. Neilson, B. T., S. C. Chapra, (*), and C. Bandaragoda (2010), Two-zone transient storage modeling using temperature and solute data with multiobjective calibration: 1. Temperature, **Water Resour. Res.**, **46**, W12520, doi:10.1029/2009WR008756.
35. Neilson, B. T., (*), S. C. Chapra, and C. Bandaragoda (2010), Two-zone transient storage modeling using temperature and solute data with multiobjective calibration: 2. Temperature and solute, **Water Resour. Res.**, **46**, W12521, doi:10.1029/2009WR008759.
36. Jones, A.S., (*), J.S. Horsburgh, N.O. Mesner. 2011. Surrogate measures for providing high frequency estimates of total suspended solids and total phosphorus concentrations. **J. Am. Wat. Resour. Assoc.** **47**(2):239-253.
37. Schmelter, M. L., M. B. Hooten, and (*). 2011. Bayesian sediment transport model for unisize bed load. **Water Resour. Res.**, **47**, W11514, doi:10.1029/2011WR010754.
38. Epstein, D.M., B.T. Neilson, K. Goodman, (*), W.A. Wurtsbaugh. 2012. A modeling approach to assessing the effect of multiple lakes in sequence on nutrient transport in Bull Trout Lake, Idaho, USA. **Aquatic Sciences**. (doi: 10.1007/s00027-012-0267-2).
39. Schmelter, M. L., (*). 2013. A Comparison Of Traditional And Bayesian Statistical Models In Fluvial Sediment Transport. **J. Hydraul. Div., ASCE**. **139**(3):336-340.((doi: 10.1061/(ASCE)HY.1943-7900.0000672).
40. Jones, A.S., J.S. Horsburgh, N.O. Mesner, R.J. Ryel, (*). 2012. Impact of sampling frequency on annual load estimation of total phosphorus and total suspended solids. **J. Am. Wat. Resour. Assn.** **48**(6):1258-1275. (doi: 10.1111/j.1752-1688.2012.00684.x)
41. Batt, H.A., (*). 2013. Relevance Vector Machine Models of Suspended Fine Sediment Transport in a Shallow Lake - I -data Collection. **Environ. Engrg. Sci.** 2012WR012866.
42. Batt, H.A., (*). 2014. How To Utilize Relevance Vectors To Collect Required Data For Modeling Water Quality Constituents, And Fine Sediment In Natural Systems? Case Study: Mud Lake, Idaho. **J. Environ. Engrg. Div., ASCE**. Accepted for publication. DOI: 10.1061/(ASCE)EE.1943-7870.0000858
43. N. Chung, N. K. Park, (*), G. Kang. 2014. Verification of Heme Catalytic Cycle with 5-Aminosalicic Acid and Its Application to Soil Remediation of Polycyclic Aromatic Hydrocarbons. **Environ. Eng. Res.** **19**(2):139-143.
44. Wurtsbaugh, W.A., N. A. Heredia, B.G. Laub, C.S. Meredith, H.E. Mohn, S.E. Null, D.A. Pluth, B. Roper, W.C. Saunders, (*), R.H. Walker, and K. Wheeler. 2014. Approaches for studying production: Do river and lake researchers have different perspectives? **Can. J. Aquat. Sci.** **72**: DOI: cjas-2014-0210
45. Schmadel, N., B. Neilson, J. Heavilin, (*), A. Wörman. 2014. The influence of spatially variable stream hydraulics on reach scale solute transport modeling. Published online - 9 Dec. 2014.
46. Schmadel, N., B.T. Neilson, J.E. Heavilin, (*). 2014. The use of temporal moments to better understand the role of spatially variable stream hydraulics in one-dimensional solute predictions. **Wat. Resour. Res.** **50**(12):9287-9299. doi: 10.1002/2014WR015440.
47. Kang, G. K. Park, J. Cho, (*), N. Chung. 2015. Remediation of polycyclic aromatic hydrocarbons in soil using hemoglobin-catalytic mechanism. **J. EED. ASCE** (DOI: 10.1061/(ASCE)EE.1943-7870.0000955).
48. Batt, H.A., (*). 2015. Can Suspended Fine Sediment Transport in Shallow Lakes Be Predicted Using MVRVM With Limited Observations? **J. Environ. Engrg. Div., ASCE**. DOI: 10.1061/(ASCE)EE.1943-7870.0001003.
49. Schmelter, M.L., P.R. Wilcock, M.B. Hooten, (*). 2015. Multifraction Bayesian bed load sediment transport model. **J. Marine Sci. and Engrg.** **3**:1066-1092. oi:10.3390/jmse3031066.
50. Zhong, J., (*), C.L. Hansen. 2015. Optimization of anaerobic hydrogen and methane production from dairy processing waste using a two-stage digestion in induced bed reactors (IBR), **International Journal of Hydrogen Energy**, **40**(45):15470-15476. ISSN 0360-3199, <http://dx.doi.org/10.1016/j.ijhydene.2015.09.085>. (<http://www.sciencedirect.com/science/article/pii/S0360319915024106>)

51. Demitry, M.E., C. Hansen., (*), M. McFarland. 2016. Extending the Applications of the ADM1 to Predict Performance of the Induced Bed Reactor (IBR) Co-Digesting Municipal Sludge with Bakery Waste. *Environment and Pollution*, **5(2)**:41:56. ISSN 1927-0909 (Print) ISSN 1927-0917 (Online). <http://dx.doi.org/10.5539/ep.v5n2p41>.
52. Bassett, S. S., E. C. Nieminski, (*). 2019. Evaluation of a side-by-side, full-scale conversion to biological filtration. *AWWA Water Science*. <https://doi.org/10.1002/aws2.1112>. **1(1)**:pp 1-17.
53. Tarboton, D., C. Richards, M. McKee, A. Torres-Rua, B. Neilson, B. Tullis, D. Rosenberg, (*), J. Horsburgh, J. McLean, M. Johnson and R. R. Dupont. 2019. The Utah Water Research Laboratory: Empowering Water and Environmental Research in Utah and Around the World, *Water Resources Impact, American Water Resources Association*, **21(5)**: 13-15, <https://awra.org/Members/Publications/IMPACT.aspx>.
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3. Neilson, B.T., S. C. Chapra, (*), C. Bandaragoda. Shortwave Radiation Behavior in River Water Columns. In preparation.
4. Horsburgh, J.S., A.S. Jones, (*), D.G. Tarboton, N. Mesner. A Study of High Frequency Water Quality Observations in the Little Bear River Utah, USA. **Wat. Resour. Res.** (submitted).
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