

## Dr. James N. Jensen

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East Amherst, NY 14051  
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### Education:

Ph.D., University of North Carolina at Chapel Hill, 1988  
Department of Environmental Sciences and Engineering

MSPH, University of North Carolina at Chapel Hill, 1983  
Department of Environmental Sciences and Engineering

BS, California Institute of Technology, 1980  
Engineering and Applied Sciences

### Employment History:

1988 to present: Professor  
(Assistant Professor: 1988-1994; Associate Professor: 1994-2005)  
Department of Civil, Structural and Environmental Engineering  
University at Buffalo, Buffalo, NY

6/2015 to present: Director of Undergraduate Studies, Environmental Engineering  
Department of Civil, Structural and Environmental Engineering  
University at Buffalo, Buffalo, NY

8/2016 to present: Academic Director, Sustainability Academy  
University at Buffalo, Buffalo, NY

1994 to 2015: Director (Acting Director: 1992-93)  
Environmental Science Program, School of Engineering and Applied Science  
University at Buffalo, Buffalo, NY

2009 to 2014: Academic Director, Research Explorations Academy  
University at Buffalo, Buffalo, NY

1/2005 to 7/2010: Director of Undergraduate Studies, Civil Engineering  
Director of Undergraduate Studies, Environmental Engineering  
Department of Civil, Structural and Environmental Engineering  
University at Buffalo, Buffalo, NY

1/2003 to 1/2004: Director, Center for Teaching and Learning Resources  
University at Buffalo, Buffalo, NY

1981 to 1987:           Research Technician and Teaching Assistant  
Department of Environmental Sciences and Engineering  
University of North Carolina at Chapel Hill, Chapel Hill, NC

1979:                    Research Assistant  
Environmental Engineering Science  
California Institute of Technology, Pasadena, CA

#### **Awards and Honors:**

The President Emeritus and Mrs. Martin Meyerson Award for Distinguished Undergraduate Teaching and Mentoring, 2013  
Distinguished Service Award, Science Exploration Day, 2013  
Life Raft Debate Winner, University at Buffalo, 2013  
Milton Plesur Excellence in Teaching Award (given out by the Student Association of the University at Buffalo), 2012  
Erie-Niagara Chapter of the New York State Society of Professional Engineers Engineer Educator of the Year, 2009  
New York Water Environmental Association Kenneth Allen Memorial Award for 2007  
American Academy of Environmental Engineers, Honor Award (Research) for Excellence in Environmental Engineering - for research conducted with Camp, Dresser, and McKee and ALCOA on developing a protocol for deriving cleanup levels for soils and sediments, April 22, 1999  
Consulting Engineers Council of New York, Silver Medal Award - for research conducted with Camp, Dresser, and McKee and ALCOA on developing a protocol for deriving cleanup levels for soils and sediments, February 8, 1999  
Chancellor's Award for Excellence in Teaching, 1995  
American Water Works Association Distribution and Plant Operations Division Best Paper Award (with T.J. Brady, J.E. Van Benschoten, D.P. Lewis, and J. Sferrazza for: Sampling and Enumeration of Zebra Mussel Veligers: Implications for Control. *J. Amer. Water Works Assoc.*, **85**(6), 100-103, 1993).  
Certificate of Merit, American Chemical Society (for presentation with T. Coulibaly), 1991  
University Teaching Fellow, 1991  
American Chemical Society, Graduate Student Award in Environmental Chemistry, 1986  
Thomas J. Watson Fellow, 1980-81  
California Institute of Technology, graduation with honor, 1980  
Caltech Summer Undergraduate Research Fellow, 1979

#### **Student Awards:**

J. Turner, UB Undergraduate Award for Excellence in Research, Scholarship and Creativity, 2016  
Third Place, New York State Pollution Prevention Institute Poster Competition, 2012  
Engineers for a Sustainable World, UB Student Organization Award for Excellence in Academics and Service, 2010, 2011 (faculty advisor)  
J. Strassburg, 3<sup>rd</sup> Place, Poster Competition, UB Environmental Sciences Colloquium, 2001  
B. Madge, 1<sup>st</sup> Place, Master's Division, WEF Student Paper Competition, 1999  
J. Yoon, ACS Graduate Student Award in Environmental Chemistry, 1993  
J.P. Stowell, ACS Graduate Student Award in Environmental Chemistry, 1989  
J.P. Stowell, Grand Prize, ASCE National Hazardous Waste Essay Competition, 1989

## Patents

- U.S. Patent 5,393,781 Method for Controlling Zebra Mussels (co-inventor with J.E. Van Benschoten, A. Vegaga, and C.E. Manissero; assignees: Research Foundation of SUNY, FMC Corp.), February 28, 1995 (expired)
- U.S. Patent 5,550,157 Method for Controlling Dreissenidae Mussels (co-inventor with J.E. Van Benschoten, A. Vegaga, and C.E. Manissero; assignees: Research Foundation of SUNY, FMC Corp.), August 27, 1996 (expired)

## Courses Taught and Other Teaching Activities:

Individual problems, undergraduate research, thesis, and dissertation courses are not listed.

- CIE 340: Environmental Engineering, Spring 2011-2014, Fall 2014-2016
- CIE 341: Environmental Engineering Science, Spring 2015-2016
- CIE 360: Environmental Engineering Laboratory, Fall 2009, 2013-2016
- CIE 361: Civil Engineering Laboratory I, Fall 2007-2010
- CIE 415: Civil Engineering Planning and Management, Spring 1997, 1998
- CIE 440: Principles of Water Quality, Fall, 1991, 1993
- CIE 441/562: Water Quality Engineering, Fall 1998-2002
- CIE 442: Design of Water Quality Systems, Spring, 2001-16 (except 2010), Fall 2016
- CIE 447: Sustainability Practicum, Fall 2011, 2012
- CIE 464: Special Topics in Environmental Engineering (Honors College course), Spring 2002
- CIE 500A: Advanced Physicochemical Treatment Processes, Spring 1989
- CIE 500E: Process Engineering Laboratory, Spring 1994
- CIE 562: Water Quality Labs and Processes, Fall 1989
- CIE 564: Chemical Principles in Environmental Engineering, Fall 1988-90, 1992, 1994, 1996, 2003-2013 (dual-listed with CIE 448 from 2003 to 2013)
- CIE 556: Physicochemical Unit Processes, Spring, 1993, 1998, 1999, 2000, 2005, 2011-2014
- CIE 662: Methods of Pollutant Analysis, Spring 1989-91, 1993, 1995, 1997
- CIE 664: Organic Chemical Principles in Environmental Engineering, Spring 1990, 1992, 1994, 1996
- EAS 140: Engineering Solutions, Fall, 1997-03
- EAS 496: Summer Co-op, Summer 2007-2008
- ENM 104: Science, Technology and the Environment, Fall, 1992-94 (with D.D. Meredith and A.S. Weber in 1992-93)
- ENS 542: Environmental Engineering Systems, Spring 1991-92, 1996
- LAI 588: Energy and Environment in the Great Lakes Basin, Summer 1998
- UE 130: Undergraduate Academies Introductory Seminar, Fall 2009-2013 (taught as UE 140 from 2011-2013)
- UE 141: Science, Technology, and the Environment (Discovery Seminar), Spring, 2007
- UE 147: Research Explorations Seminar, Spring 2010-2014

## Graduate Student Advisement:

Major professor for the following students:

M.S.:

Yang, Xiying. Evaluation of a Non-woven Geotextile Fabric in Slow Sand Filtration. M.S., 2015.

- Xu, Shuying. Experimental Study of Methylene Blue Adsorption on Granular Activated Carbon. M.S. (Env. Sci.), 2014.
- Gondwe, Samson. Effectiveness of Geotextile Fabric in Slow Sand Filtration. M.S., 2012.
- Menon, Rahul B. Ecosystem Modeling of the Conewango Creek Wetlands System. M.S, 2012.
- Darcan, Beril. A Partition Approach to Quantifying Adsorption onto Granular Activated Carbon. M.S., 2012.
- Smith-Cunningham, Sandra L. Aircraft De-icing/Anti-icing Fluid (ADAF)-laden Wastewater: Evaluation and Recommendations for Its Treatment and Regulation. M.S. (Env. Sci.), 2008.
- Seneca, Shannon M. A Particle-based Photochromic Actinometer for Ultraviolet Reactors. M.S. (Env. Sci.), 2007.
- Angiel, Jeffrey. The Effectiveness of a Microbial Product to Biodegrade Fats, Oils and Grease in Food Service Facility Sanitary Sewer Lines and Grease Interceptors. M.S. (Eng. Sci.), 2005.
- Sciandra, Jason. Effect of Disinfection on the Propagation of Antibiotic Resistance in Wastewater. M.S., 2005.
- Mukerji, Rupa. Analysis of Loading and Fate of Estrogens in Wastewater Treatment Systems. M.S., 2002.
- López-Luna, Erika L. UV Disinfection Systems: Flow, Intensity and Disinfection Models. M.S., 2002.
- Taft, Joel A. The Polyvinyl Chloride Life Cycle and the Environment. M.S. (Eng. Sci.), 2001
- Strassburg, Jaime. The Effect of Ultraviolet Radiation on Swimming Pool Water Quality. M.S., 2001
- Kang, Namgoo. Fe(II)-Catalyzed Decomposition of Peracetic Acid at Neutral pH: A Mechanistic Model Approach. M.S., 2000
- Trzyna, Janusz. Kinetic Model for Complexed Cyanide Oxidation by Ozone. M.S. (Eng. Sci.), 2000
- Belen, Miguel A. Kinetic Model for the Ultrasonic Oxidation of Organic Compounds in Aqueous Solution. M.S., 2000
- Madhure, Bhavana. Evaluation of Ozone for Drinking Water Treatment. M.S. (Eng. Sci.), 2000
- Li, Chunxian. Ion Exchange for Water Reuse and Metal Recovery in the Electroplating Industry. M.S. (Eng. Sci.), 1999
- Madge, Bethany A. Disinfection of Wastewater Using 20 kHz Ultrasound. M.S. (Eng. Sci.), 1998
- Merlo, Peter. Oxidation of Hexachlorobutadiene by Ultrasonic Irradiation. M.S., 1998.
- Host-Steen, Erik H. Oxidation of Complexed Cyanides by Ozone, Chlorine, and Ozone/UV. M.S. (Eng. Sci.), 1997
- Chen, Wei-Ling. Effect of Nitrite on Wastewater Breakpoint Curves. M.S. (Eng. Sci.), 1997.
- Nelson, Leslie. Application of Ozone and/or Ozone/UV Oxidation as Secondary Treatment for Pre-treated Coke Waste Effluent. M.S., 1996
- Jacobs, C. Donald. Effect of Particles on PCB Treatment by Photolysis and Photocatalysis. M.S., 1995.
- Yeh, Tzu-Ling. Destruction of Cyanide by Ultrasonic Irradiation. M.S. (Eng. Sci.), 1995.
- Avala, Neelima. Degradation of Chlorendic Acid by Photocatalysis. M.S., 1994.
- Kleyman, Genady. Oxidation of Simazine in Aqueous Solution by Ultrasonic Irradiation. M.S., 1994.
- Kelley (nee Evans), Mark. Combined Use of Potassium and Oxidants for the Control of Zebra Mussels M.Eng., 1994.
- Gassman, Lisa J. Hydrogen Sulfide Generation in Wastewater and Removal by Chemical Oxidants. M.S., 1993.
- Mattulke, Timothy R. Survey Method for Detection of Radon-222 in Potable Water Supplies. M.S. (Eng. Sci.), 1992.
- Jain, Priya. Volatilization and Oxidation of Organic Compounds by Ozone in a Continuous Flow Bubble Contactor. M.S., 1992.
- Puranik, Sanjay. Quantitation of Inorganic Monochloramine in Presence of Organic Chloramines. M.S. (Eng. Sci.), 1992.
- Rao, Arun. Advanced Oxidation Processes for the Degradation of Hexachloronorborene Compounds. M.S., 1992.
- Derrigan, James. The Measurement of Residual Chlorine in Wastewaters. M.S., 1992.

Coulibaly, Tchouonon. Ozone Demand in Aqueous Systems, M.S., 1991.  
Tuan, Yeu-Juin. Destruction of Thiocyanate by Ozone. M.S., 1991.  
Hempel, Christopher E. Measurement of Inorganic Monochloramine by the Modified Bertholet Reaction. M.S., 1991.  
Stowell, Janice P. Chemical Degradation of Chlorendic Acid by Ozonation, M.S., 1989.

M.Eng.:

Port, Jared. Residential On-Site Wastewater Treatment Systems. M.Eng., 2015.  
Barry, William J. Purified Water Treatment System for Application in the Copper Beryllium Industry. M.Eng., 1999  
Vreisen, Steven. Evaluation of Ion Exchange at a Metal Finishing Facility. M.Eng, 1998.  
Scharf, Efrat. Adsorption of Chromium from a Metal Plating Waste Stream onto Granular Activated Carbon. M.Eng., 1996.  
Klekovic, Michelle. An Evaluation of Enhanced Coagulation at the Pilot Scale. M.Eng., 1995.

Ph.D.:

Scannell, Luke. An Analysis of Performance Criteria of Porous Ceramic Water Filter Production Methods. Ph.D., 2016.  
Ibrahim, Mohamad N. Pharmaceuticals in Wastewater: Occurrence, Short-term and Seasonal Variability, Sampling Strategies, Biodegradation Rates and Elimination Efficiencies. Ph.D., 2013 (co-advised with A.S. Weber).  
Kim, Sungpyo. The Effects of Operational Parameters on the Fate of tetracycline Resistant Bacteria in Biological Wastewater Treatment Plants. Ph.D., 2005 (co-advised with A.S. Weber).  
Madge, Bethany A. Evaluation of Wastewater Solids and Their Relevance in Ultraviolet Disinfection. Ph.D., 2002.  
Ghosh, Upal. PCB Desorption and Leaching from Contaminated Sediments Containing NAPL. Ph.D., 1998 (co-advised with A.S. Weber).  
Yoon, Jeyong. Distribution of Chlorine Species in the Presence of Ammonia and Nitrogenous Organics. Ph.D., 1993.  
Stowell, Janice P. Sequential Ozonation/Biodegradation of Chlorophenols. Ph.D., 1993.  
Lai, Ming-Shen. Sequential Chemical/Biological Oxidation of Simazine. Ph.D., 1992. (co-advised with A.S. Weber).

## **Grant Support:**

Title: The Tilted Classroom: Leveraging Faculty Strengths and Content Videos to Enhance Student Learning

Funding Agency: UB Center for Educational Innovation

Dates: 5/17- 5/17

Total Funding Amount: \$3,300

Investigator Status: PI

Title: iSucceed: First-Year College Experience

Funding Agency: SUNY Innovative Instruction Technology Grant (IITG) Program

Dates: 6/17-6/18

Total Funding Amount: \$90,500 (under negotiation)

Investigator Status: Project Director

Title: Wicked, Messy, Clumsy: Comparing Qualitative Methods for Evaluating Student Experiences in PBL Settings  
Funding Agency: UB Center for Educational Innovation  
Dates: 5/15-5/17  
Total Funding Amount: \$5,000  
Investigator Status: Co-Principal Investigator (PI: Korydon Smith)

Title: Women in Science  
Funding Agency: SUNY Office of Diversity and Educational Equity  
Dates: 6/10-6/11  
Total Funding Amount: \$10,000  
Investigator Status: Co-Principal Investigator (with H. Borden and J. Adsit)

Title: Implementing a Long-term Plan to Improve Modeling Capabilities for Toxic Chemicals in Lake Ontario: Refinements to LOTOX2 Atmospheric Deposition Processes and Mercury Submodel  
Funding Agency: U.S. Environmental Protection Agency  
Dates: 9/1/02-8/31/03  
Total funding Amount: \$69,000  
Investigator Status: Principal Investigator (Project Director: J.F. Atkinson, PI: J.V. DePinto)

Title: Methods Development for the Analysis of Natural and Synthetic Estrogens in Wastewater  
Funding Agency: Environment and Society Institute, University at Buffalo  
Dates: 5/1/02-4/30/03  
Funding Amount: \$19,540  
Investigator Status: Project Director

Title: Evaluation of Ultraviolet Radiation Technology for Wastewater Plant Effluent  
Funding Agency: Niagara Mohawk Power Corporation  
Dates: 3/1/99-2/29/02  
Total Funding Amount: \$160,847 (\$42,342 to the University at Buffalo)  
Investigator Status: Project Director

Title: Impact of Environmental Exposure to Pharmaceutically-derived Hormones  
Funding Agency: UB Pilot Program  
Dates: 7/1/00-6/30/01  
Total Funding Amount: \$25,000  
Investigator Status: Co-Project Director (with G.M. Buck, Dept. of Social and Preventive Medicine)

Title: Study of Ultraviolet Disinfection for the Competition Swimming Pool  
Funding Agency: UB Facilities  
Dates: 6/21/00-1/3/01  
Total Funding Amount: \$11,170  
Investigator Status: Project Director

Title: Resins Technology for Remediation of PCB-Contaminated Soils/Sediments  
Funding Agency: NYS Energy Research and Development Authority  
Dates: 6/1/99-5/31/00  
Total Funding Amount: \$27,700  
Investigator Status: Principal Investigator (Project Director: A.S. Weber, PI: J.E. Van Benschoten)

Title: Use of Peracetic Acid for Disinfection of Commercial Shipping Ballast Water  
Funding Agency: U.S. Fish and Wildlife  
Dates: 9/30/98-3/31/00  
Total Funding Amount: \$147,810 (\$75,930 to the University at Buffalo)  
Investigator Status: Project Director (Principal Investigator: J.E. Van Benschoten)

Title: Evaluation of Drinking Water Ozonation in New York State  
Funding Agency: Niagara Mohawk Power Corporation  
Dates: 11/1/97-12/31/99  
Total Funding Amount: \$225,788 (\$47,549 to the University at Buffalo)  
Investigator Status: Project Director

Title: Resource Recovery Technology for the Metal Finishing Industry  
Funding Agency: NYS Energy Research and Development Authority  
Dates: 12/30/97-6/30/99  
Total Funding Amount: \$182,289 (includes \$105,000 subcontract to Diversified Manufacturing, Inc.)  
Investigator Status: Project Director (with L.P. Zicari, Jr.)

Title: Evaluation of the Praxair In-Situ Oxygenator at the Buffalo Sewer Authority  
Funding Agency: Praxair, Inc.  
Dates: 12/1/96-3/31/99  
Total Funding Amount: \$43,194  
Investigator Status: Project Director (Principal Investigator: A.S. Weber)

Title: Water Reuse and Metals Recovery in the Metal Finishing Industry  
Funding Agency: NYS Energy Research and Development Authority  
Dates: 6/28/96-12/31/98  
Total Funding Amount: \$81,658 (include \$15,065 extension on original \$66,593)  
Investigator Status: Project Director (with L.P. Zicari, Jr.)

Title: Groundwater Sulfide Mitigation  
Funding Agency: Buffalo Crushed Stone  
Dates: 3/98-6/98  
Total Funding Amount: \$11,012  
Investigator Status: Principal Investigator (Project Director: A.S. Weber)

Title: Site Specific PCB Desorption/Adsorption Analysis of Massena PCB Impacted Soils  
Funding Agency: Aluminum Company of America (ALCOA)  
Dates: 11/97-6/98  
Total Funding Amount: \$52,602  
Investigator Status: Principal Investigator (Project Director: A.S. Weber)

Title: PCB Mobility Reduction by Biostabilization of PCBs  
Funding Agency: U.S. Department of Energy  
Dates: 10/96-9/97  
Total Funding Amount: \$149,801  
Investigator Status: Principal Investigator (Project Director: A.S. Weber)

Title: Disinfection of Intermittent Flows by Ultrasound  
Funding Agency: Water Environment Research Foundation

Dates: 8/15/97-3/31/98  
Total Funding Amount: \$26,259  
Investigator Status: Project Director

Title: Impacts of Chlorine Dosage Reduction on Final Effluent Quality  
Funding Agency: NYS Department of Environmental Conservation (with the Buffalo Sewer Authority and SUC Buffalo)

Dates: 3/1/96-2/28/97  
Total Funding Amount: \$50,000 (\$19,127 to the University at Buffalo)  
Investigator Status: Project Director

Title: Development of Interactive Environmental Models for the General Public  
Funding Agency: New York Great Lakes Protection Fund

Dates:  
Total Funding Amount: \$6,000  
Investigator Status: Project Director

Title: Evaluation of Waste Treatment  
Funding Agency: L.D. McCauley

Dates: 1/11/95-1/10/96  
Total Funding Amount: \$30,857  
Investigator Status: Project Director

Title: Biological Activated Carbon (BAC) Treatment of Waters Containing PCBs  
Funding Agency: New York State Energy Research and Development Agency

Dates: 2/1/94-5/31/95  
Total Funding Amount: \$132,988  
Investigator Status: Principal Investigator (Project Director: A.S. Weber)

Title: Treatment of Chlorinated Hazardous Wastes by Ultrasonic Irradiation  
Funding Agency: New York State Center for Hazardous Waste Management

Dates: 8/1/94-7/31/95  
Total Funding Amount: \$83,509  
Investigator Status: Project Director

Title: Dechloramination of Drinking Waters for the Beverage Industry  
Funding Agency: Pepsi-Cola Company

Effective Dates: 8/1/92-10/31/93  
Total Funding Amount: \$15,695  
Investigator Status: Project Director

Title: Optimizing the Combined Use of Potassium Ion and Chemical Treatment for Control of the Zebra Mussel

Funding Agency: Niagara Mohawk Power Corporation  
Effective Dates: 7/1/92-12/31/93  
Total Funding Amount: \$106,414 (includes \$20,650 subcontract to Aquatic Sciences, Inc.)  
Investigator Status: Principal Investigator (Project Director: J.E. Van Benschoten)

Title: Development of a Sequential Chemical/Biological Process for the Treatment of Simazine  
Funding Agency: Shimizu Corp.

Effective Dates: 1/1/93-12/31/93



Total Funding Amount: \$54,000  
Investigator Status: Principal Investigator (Project Director: A.S. Weber)

Title: Taste and Odor Study  
Funding Agency: Erie County Water Authority  
Effective Dates: 2/15/92-8/31/93  
Total Funding Amount: \$136,091  
Investigator Status: Principal Investigator (Project Director: J.E. Van Benschoten)

Title: Application of Combined Chemical/Biological Oxidation Processes for the Treatment of Industrial Wastes  
Funding Agency: Shimizu Corporation  
Effective Dates: 12/1/90-11/30/92  
Total Funding Amount: \$90,078  
Investigator Status: Principal Investigator (Project Director: A.S. Weber)

Title: Feasibility Study of FMC Products for Zebra Mussel Control  
Funding Agency: FMC Corporation  
Effective Dates: 6/1/92-8/31/92  
Total Funding Amount: \$9,209  
Investigator Status: Project Director (Principal Investigator: J.E. Van Benschoten)

Title: Optimization of Hydrogen Sulfide Removal  
Funding Agency: City of Niagara Falls (Dept. of Wastewater Facilities)  
Effective Dates: 9/16/91-9/15/92  
Total Funding Amount: \$37,279  
Investigator Status: Project Director (Principal Investigator: M.R. Matsumoto)

Title: Combined Chemical/Biological Oxidation for the Reduction of Hazardous Waste Toxicity  
Funding Agency: New York State Center for Hazardous Waste Management  
Effective Dates: 9/1/90-8/30/92  
Total Funding Amount: \$110,407  
Investigator Status: Project Director (Principal Investigator: A.S. Weber)  
Title: Optimizing the Use of Chemical Oxidants for Control of the Zebra Mussel (*Dreissena polymorpha*)  
Funding Agency: Niagara Mohawk Power Corporation  
Effective Dates: 7/1/91-6/30/92  
Total Funding Amount: \$214,700 (includes \$82,045 subcontract to Aquatic Sciences, Inc.)  
Investigator Status: Co-principal Investigator (Project Director: J.E. Van Benschoten)

Title: Treatability of Soil and Groundwater Contaminated with Ammonium Perfluorooctanoate - Phase I: Literature Review  
Funding Agency: Du Pont  
Effective Dates: 7/15/91-8/23/91  
Total Funding Amount: \$4,942  
Investigator status: Co-principal Investigator (J.N. Jensen, A.S. Weber)

Title: Oxidative Degradation of Hexachloronorborene Compounds  
Funding Agency: Occidental Chemical Corporation  
Effective Dates: 1/1/90-12/31/91  
Total Funding Amount: \$47,913

Investigator Status: Project Director

Title: Development of Methods for the Analysis of Organic Chloramines and Organic Monochloramine  
in Natural and Engineered Systems

Funding Agency: U.S. Environmental Protection Agency

Effective Dates: 8/8/90-12/31/91

Total Funding Amount: \$52,185

Investigator Status: Project Director

Title: Hydraulic Analysis and Coagulant Optimization Study

Funding Agency: City of Niagara Falls (Dept. of Water)

Effective Dates: 4/15/90-4/14/91

Total Funding Amount: \$25,000

Investigator Status: Co-principal Investigator (J.N. Jensen, J.E. Van Benschoten)

Title: Potable Water Treatment Control Methods for (1) Zebra Mussels and (2) Residual Aluminum

Funding Agency: Erie County Water Authority

Effective Dates: 3/1/90-2/28/91

Total Funding Amount: \$58,190

Investigator Status: Co-principal Investigator (J.E. Van Benschoten, J.N. Jensen)

Title: Effect of Oxidant Type and Application Method on the Inactivation of the Zebra Mussel  
(*Dreissena polymorpha*) Veliger Larvae

Funding Agency: Niagara Mohawk Power Corporation

Effective Dates: 7/1/90-6/30/91

Total Funding Amount: \$208,673 (includes \$81,457 subcontract to Aquatic Sciences, Inc.)

Investigator Status: Co-principal Investigator (J.E. Van Benschoten, J.N. Jensen)

Title: Analysis of Alternative Sludge Management Strategies

Funding Agency: Erie County Water Authority

Effective Dates: 6/1/89-12/31/90

Total Funding Amount: \$43,288

Investigator Status: Co-principal Investigator (J.E. Van Benschoten, J.N. Jensen)

Title: Electrocoagulation for Hazardous Waste Management: Fundamental Aspects, Applications and  
Economic Feasibility

Funding Agency: NYS Center for Hazardous Waste Management

Effective Dates: 6/1/89-8/31/90

Total Funding Amount: \$121,699 (includes \$53,040 subcontract to Electro-Pure Systems, Inc.)

Investigator Status: Co-principal Investigator (J.N. Jensen, J.E. Van Benschoten)

Title: Wastewater Chlorination Study

Funding Agency: City of Niagara Falls (Dept. of Wastewater Facilities)

Effective Dates: 3/1/90-10/1/90

Total Funding Amount: \$37,635

Investigator Status: Project Director

Title: Removal of Thiocyanates Present in Coke Plant Weak Ammonia Liquor by Chemical Oxidants

Funding Agency: BethEnergy

Effective Dates: 2/1/89-5/15/89

Total Funding Amount: \$10,701

**Publications:**

Books

J.N. Jensen. **A Problem-Solving Approach to Aquatic Chemistry**. John Wiley and Sons, 2003, 565 pp., ISBN-13: 978-0471413868.

J.N. Jensen. **A User's Guide to Engineering**. Prentice Hall, 2005, 384 pp., ISBN-13: 978-0131480254.

Book chapters (peer reviewed)

J.N. Jensen, M.R. Ryan, J.E. Van Benschoten, and A.S. Weber. Waste Management and Recycling. In: **Encyclopedia for Applied Physics**, Vol. 23, 355-374, 1998.

J.E. Van Benschoten, J.N. Jensen, D.P. Lewis, and T.J. Brady. Chemical Oxidants for Controlling Zebra Mussels: A Synthesis of Laboratory and Field Studies. In: **Zebra Mussels: Biology, Impacts and Controls**, T.F. Nalepa and D.W. Schloesser (eds.). Lewis Publ., Chelsea, MI, pp. 599-619, 1993.

Articles in refereed journals

G. Desai, J. Wilbur, P. Ram, J.N. Jensen, J. Lenker, and K. Smith. Laddering Up: Developing a Framework for Research and Practice in Sanitation for People with Disabilities in Low-income Settings. *Waterlines*, in press, 2017.

J.N. Jensen. Disinfection model based on excess inactivation sites: implications for linear disinfection curves and the Chick-Watson dilution coefficient. *Environ. Sci. Technol.*, **44**(21), 8162-8168, 2010.

S. Kim, J.N. Jensen, D.S. Aga, and A.S. Weber. Tetracycline as a selector for resistant bacteria in activated sludge. *Chemosphere*, **66**(9), 1643-1651, 2007.

S. Kim, D.A. Aga, J.N. Jensen, and A.S. Weber. Effect of Sequencing Batch Reactor Operation on Presence and Concentration of Tetracycline-Resistant Organisms. *Water Environ. Res.*, **79**(11), 2287-2297, 2007.

S. Kim, J.N. Jensen, D.S. Aga, and A.S. Weber. Fate of tetracycline resistant bacteria as a function of activated sludge process organic loading and growth rate. *Water Sci. Technol.*, **55**(1-2), 291-297, 2007.

J.N. Jensen and B.A. Madge. Ultraviolet Disinfection of Fecal Coliform in Municipal Wastewater: Effects of Particle Size. *Water Environ. Res.*, **78**(3), 294-304, 2006.

J.N. Jensen. Environmental Infrastructure after Hurricanes Katrina and Rita: A View from the Field. *Clearwaters*, **36**(3), 12-17, 2006.

S. Kim, P. Eichhorn, J.N. Jensen, A.S. Weber, and D.S. Aga. Removal of Antibiotics in Wastewater: Effect of Hydraulic and Solid Retention Times on the Fate of Tetracycline in the Activated Sludge Process. *Environ. Sci. Technol.*, **39**(15), 5816-5823, 2005.

B.A. Made and J.N. Jensen. Disinfection of Wastewater Using 20 KHz Ultrasound. *Water Environ. Res.*, **74**(2), 159-169, 2002.

- W.-L. Chen and J.N. Jensen. Effect of chlorine demand on the ammonia breakpoint curve: Model development, validation with nitrite, and application to municipal wastewater. *Water Environ. Res.*, **73**(6), 721-731, 2001.
- Vaughan, R.L., Jr., B.E. Reed, and J.N. Jensen. Physicochemical Processes, *Water Environ. Res.* (Literature Review), **73**(5), 2001.
- J.N. Jensen. Approach to Steady State in Completely Mixed Flow Reactors. *ASCE (J. Environ. Eng.)*, **127**(1), 13-18, 2001.
- U. Ghosh, A.S. Weber, J.N. Jensen, and J.R. Smith, Jr. Relationship Between PCB Desorption Equilibrium, Kinetics and Availability During Land Biotreatment. *Environ. Sci. Technol.*, **34**(12), 2542-2548, 2000.
- U. Ghosh, A.S. Weber, J.N. Jensen, and J.R. Smith, Jr. Congener Level PCB Desorption Kinetics of Field-Contaminated Sediments. *J. Soil Contamination*, **8**(5), 593-613, 1999.
- U. Ghosh, A.S. Weber, J.N. Jensen, and J.R. Smith, Jr. Granular Activated Carbon and Biological Activated Carbon Treatment of Dissolved and Sorbed Polychlorinated Biphenyls. *Water Environ. Res.*, **71**(2), 232-240, 1999.
- B.E. Reed, M.R. Matsumoto, J.N. Jensen, R. Viadero, Jr., and W. Lin. Physicochemical Processes. *Water Environ. Res.*, **70**(4), 449-473, 1998.
- U. Ghosh, A.S. Weber, J.N. Jensen, and J.R. Smith. Dissolved PCB Congener Distribution in Generator Column Solutions. *Water Research*, **32**(5), 1373-1382, 1998.
- D.K. Harrington, J.E. Van Benschoten, J.N. Jensen, D.P. Lewis, and E.F. Neuhauser. Combined Use of Heat and Oxidants for Controlling Adult Zebra Mussels. *Water Research*, **31**(11), 2783-2791, 1997.
- B.E. Reed, W. Lin, M.R. Matsumoto, and J.N. Jensen. Physicochemical Processes. *Water Environ. Res.*, **69**(4), 444-461, 1997.
- J. Yoon and J.N. Jensen. Negative Interferences in the Measurement of Total Residual Chlorine by Amperometric Titration. *J. Korean Soc. Environ. Eng.*, **18**(11), 1293-1302, 1996.
- A.M. Dietrich, J.N. Jensen, and W.F. da Costa. Measurement and Monitoring of Pollutants - Chemical Species. *Water Environ. Res.*, **68**(4), 391-406, 1996.
- M.R. Matsumoto, J.N. Jensen, B.E. Reed, and Wei Lin. Physicochemical Processes. *Water Environ. Res.*, **68**(4), 432-452, 1996.
- S.S. Sisodia, A.S. Weber, and J.N. Jensen. Continuous Culture Biodegradation of Simazine's Chemical Oxidation Products. *Water Research*, **30**(9), 2055-2064, 1996.
- J.H. Sebastian, A.S. Weber, and J.N. Jensen. Sequential Chemical/Biological Oxidation of Chlorendic Acid. *Water Research*, **30**(8), 1833-1843, 1996.
- C. Huang, J.E. Van Benschoten, and J.N. Jensen. Adsorption Kinetics of MIB and Geosmin Using Powdered Activated Carbon. *J. Amer. Water Works Assoc.*, **88**(4), 116-128, 1996.
- T.J. Brady, J.E. Van Benschoten, and J.N. Jensen. Technical Note: Chlorination Effectiveness for Zebra and

Quagga Mussels. *J. Amer. Water Works Assoc.*, **88**(1), 107-110, 1996.

J. Yoon and J.N. Jensen. Chlorine Transfer from Inorganic Monochloramine in Chlorinated Wastewaters. *Water Environ. Res.*, **67**(5), 842-847, 1995.

A.M. Dietrich and J.N. Jensen. Measurement of Pollutants - Chemical Species. *Water Environ. Res.*, **67**(4), 391-406, 1995.

M.R. Matsumoto, J.N. Jensen, and B.E. Reed. Physicochemical Processes. *Water Environ. Res.*, **67**(4), 415-440, 1995.

J.E. Van Benschoten, J.N. Jensen, D. Harrington, and D.J. DeGirolamo. Kinetics of Adult Zebra Mussel Mortality Using Chlorine. *J. Amer. Water Works Assoc.*, **87**(5), 101-108, 1995.

M.-S. Lai, J.N. Jensen, and A.S. Weber. Oxidation of Simazine: Ozone, Ultraviolet, and Combined Ozone/Ultraviolet Oxidation. *Water Environ. Res.*, **67**(3), 340-346, 1995.

M.-S. Lai, A.S. Weber, and J.N. Jensen. Oxidation of Simazine: Biological Oxidation of Simazine and Its Chemical Oxidation By-Products. *Water Environ. Res.*, **67**(3), 347-354, 1995.

J.E. Van Benschoten, J.N. Jensen, and M.A. Rahman. Effects of Temperature and pH on Residual Aluminum in Treated Waters. *ASCE (J. Environ. Eng.)*, **120**(3), 543-559, 1994.

J.N. Jensen and A.M. Dietrich. Measurement of Pollutants - Chemical Species. *Water Environ. Res.*, **66**(4), 279-291, 1994.

M.R. Matsumoto, J.N. Jensen, P. McGinley, and B.E. Reed. Physicochemical Processes. *Water Environ. Res.*, **66**(4), 309-324, 1994.

Y.-J. Tuan and J.N. Jensen. Chemical Oxidation of Thiocyanate by Ozone. *Ozone Sci. Eng.*, **15**(4), 343-360, 1993.

B.E. Reed, J.N. Jensen, and M.R. Matsumoto. Acid-Base Characteristics of Powdered-Activated-Carbon Surfaces. *ASCE (J. Environ. Eng.)*, **119**(3), 585-590, 1993.

M.R. Matsumoto, J.N. Jensen, P.M. McGinley, and B.E. Reed. Physicochemical Processes. *Water Environ. Res.*, **65**(4), 309-324, 1993.

J. Derrigan, L.-Y. Lin, and J.N. Jensen. Comparison of Free and Total Chlorine Measurement Methods in Municipal Wastewaters. *Water Environ. Res.*, **65**(3), 205-212, 1993.

T.J. Brady, J.E. Van Benschoten, J.N. Jensen, D.P. Lewis, and J. Sferrazza. Sampling and Enumeration of Zebra Mussel Veligers: Implications for Control. *J. Amer. Water Works Assoc.*, **85**(6), 100-103, 1993.

J.E. Van Benschoten, J.N. Jensen, T.J. Brady, D.P. Lewis, J. Sferrazza, and E.F. Neuhauser. Response of Zebra Mussel Veligers to Chemical Oxidants. *Water Research*, **27**(4), 575-582, 1993.

J. Yoon and J.N. Jensen. Distribution of Aqueous Chlorine with Nitrogenous Compounds: Chlorine Transfer from Organic Chloramines to Ammonia. *Environ. Sci. Technol.*, **27**(2), 403-409, 1993.

J.P. Stowell, J.N. Jensen, and A.S. Weber. Sequential Chemical/Biological Oxidation of 2-Chlorophenol. *Wat.*

*Sci. Tech.*, **26**(9-11), 2085-2087, 1992.

M.R. Matsumoto, P.M. McGinley, B.E. Reed, and J.N. Jensen. Physicochemical Processes. *Water Environ. Res.*, **64**(4), 337-346, 1992.

J.P. Stowell and J.N. Jensen. Dechlorination of Chlorendic Acid with Ozone. *Water Research*, **25**(1), 83-90, 1991.

J.A. Jersey, E. Choshen, J.N. Jensen, J.D. Johnson, and F.E. Scully, Jr. N-Chloramine Derivatization Mechanism with Dansylsulfonic Acid: Yields and Routes of Reaction. *Environ. Sci. Technol.*, **24**(10), 1536-1541, 1990.

J.N. Jensen and J.D. Johnson. Interferences by Monochloramine and Organic Chloramines in Free Available Chlorine Methods. 1. Amperometric Titration. *Environ. Sci. Technol.*, **24**(7), 981-985, 1990.

J.N. Jensen and J.D. Johnson. Interferences by Monochloramine and Organic Chloramines in Free Available Chlorine Methods. 2. DPD. *Environ. Sci. Technol.*, **24**(7), 985-990, 1990.

J.N. Jensen and J.D. Johnson. Quantification of Interferences Under Equilibrium Conditions with Applications to Free Chlorine Analysis in the Presence of Organic Chloramines. *Anal. Chem.*, **61**(9), 991-994, 1989.

J.N. Jensen and J.D. Johnson. Specificity of the DPD and Amperometric Titration Methods for Free Available Chlorine: A Review. *J. Amer. Water Works Assoc.*, **81**(12), 59-64, 1989.

C. LeCloirec, J.D. Johnson and J.N. Jensen. Interference of Organic Nitrogen When Analysing Residual Oxidants: Chlorine Example. *Water Supply*, **6**(1), 39-44, 1988.

J.D. Johnson and J.N. Jensen. THM and TOX Formation: Routes, Rates and Precursors. *J. Amer. Water Works Assoc.*, **78**(4), 156-162, 1986.

J.N. Jensen, J.D. Johnson, J.J. St. Aubin and R.F. Christman. Effect of Monochloramine on Isolated Aquatic Fulvic Acid. *Org. Geochem.*, **8**(1), 71-76, 1985.

#### Discussion/Comment article in referred journals

B.A. Madge and J.N. Jensen. Of: Modeling the Inactivation of Particle-Associated Coliform Bacteria (Discussion). *Water Environ. Res.*, **73**(4), 504-505, 2001.

J.N. Jensen. Response to: Reaction of Suwanee River Fulvic Acid with Chloramine: Characterization of Products via 15N NMR (Comment). *Environ. Sci. Technol.*, **27**(11), 2612-2613, 1993.

#### Conference proceedings (proceedings refereed)

J. Yoon and J.N. Jensen. Modeling the Distribution of Chloramines During Drinking Water Chloramination. In: **Disinfection By-Products in Water Treatment: The Chemistry of Their Formation and Control**, R.A. Minear and G.L. Amy, Eds., Lewis Publ., Inc., Chelsea, MI, pp.351-362, 1996.

J.N. Jensen, C. LeCloirec and J.D. Johnson. Chloramine Interferences in the Measurement of Free Chlorine by the Amperometric Membrane Electrode. In: **Water Chlorination: Chemistry, Environmental Impact and Health Effects**, Vol. 6, R.L. Jolley et al., Eds., Lewis Publ., Inc., Chelsea, MI, pp. 801-808, 1990.

- J.N. Jensen, C. LeCloirec and J.D. Johnson. Measurement of Chlorine Residuals in Chlorinated Cooling Waters: Effect of Organic Nitrogen. In: **Water Chlorination: Chemistry, Environmental Impact and Health Effects**, Vol. 6, R.L. Jolley et al., Eds., Lewis Publ., Inc., Chelsea, MI, pp. 535-544, 1990.
- E. Choshen, J.D. Johnson, F.E. Scully, Jr., J.A. Jersey, J.N. Jensen and J.T. Jewell. Identification of Organic N-Chloramines in Water. In: **Water Chlorination: Chemistry, Environmental Impact and Health Effects**, Vol. 6, R.L. Jolley et al., Eds., Lewis Publ., Inc., Chelsea, MI, pp. 751-761, 1990.
- J.N. Jensen, J.J. St. Aubin, R.F. Christman and J.D. Johnson. Characterization of the Reaction Between Monochloramine and Isolated Aquatic Fulvic Acid. In: **Water Chlorination: Chemistry, Environmental Impact and Health Effects**, Vol. 5, R.L. Jolley, et al., Eds., Lewis Publ., Inc., Chelsea, MI, pp. 939-949, 1985.
- Conference proceedings (non-refereed)
- U. Ghosh, A.S. Weber, and J.N. Jensen. Influence of PCB Desorption Kinetics on Bioremediation and Mobility Risk. **Proceedings of the 29th Mid-Atlantic Industrial and Hazardous Waste Conference** (July, 1997), pp. 404-413, G.D. Boardman (ed.), Technomic Publ. Co., Inc., Lancaster, PA, 1997.
- J.N. Jensen. Applications of Ultrasound for the Destruction of Hazardous Waste. **Proceedings of the 28th Mid-Atlantic Industrial and Hazardous Waste Conference** (July, 1996), pp. 265-274, A.S. Weber (ed.), Technomic Publ. Co., Inc., Lancaster, PA, 1996.
- J.N. Jensen. Chlorine in Water Treatment and the Environmental Consequences. **Technical Papers of the Tenth Annual Environmental Management and Technology Conference West** (Nov., 1994), pp. 46-48, 1994.
- J. Yoon and J.N. Jensen. Chlorine Transfer from Inorganic Monochloramine in Chlorinated Wastewaters. **Proceedings of the 66th Annual Water Environment Federation Conference** (Nov., 1993), pp. 757-586, 1993.
- J. Yoon and J.N. Jensen. Analysis of Organic and Inorganic Monochloramines by HPLC. **Proceedings: 1992 American Water Works Association Water Quality Technology Conference** (Nov., 1992), pp. 475-488, AWWA, Denver, CO, 1993.
- M.-S. Lai, A.S. Weber, and J.N. Jensen. Biological Oxidation of Simazine and Its Chemical Oxidation Products. **Proceedings: 24th Mid-Atlantic Industrial Waste Conference** (July, 1992), pp. 421-430, Technomic Publ. Co., Inc., Lancaster, PA, 1992.
- J.N. Jensen and T. Coulibaly. Ozone Demand of Raw Drinking Waters. **Proceedings: American Water Works Annual Conference** (June, 1991), Volume: Water Research for the New Decade, pp. 301-312, AWWA, Denver, CO, 1991.
- J.E. Van Benschoten, J.N. Jensen, T.J. Brady, D.J. DeGirolamo, D.P. Lewis and J. Sferrazza. Control of Zebra Mussel Larvae by Chemical Oxidants. **Proceedings: American Water Works Annual Conference** (June, 1991), Volume: Resources, Engineering and Operations for the New Decade, pp. 119-135, AWWA, Denver, CO, 1991.
- D.J. DeGirolamo, J.E. Van Benschoten and J.N. Jensen. Inactivation of Adult Zebra Mussels by Chlorine. **Proceedings: American Water Works Annual Conference** (June, 1991), Volume: Water Research for the New Decade, pp. 477-494, AWWA, Denver, CO, 1991.

J.E. Van Benschoten, G.R. Stuart and J.N. Jensen. Recovery and Reuse of Polyaluminum Chloride Sludges. **Proceedings: American Water Works Annual Conference** (June, 1991), Volume: Water Research for the New Decade, pp. 461-476, AWWA, Denver, CO, 1991.

C.E. Hempel and J.N. Jensen. A New Method for the Measurement of Monochloramine with Minimal Interference From Organic Chloramines. **Proceedings: American Water Works Association Water Quality Technology Conference** (Nov. 1990), pp. 1033-1042, AWWA, Denver, CO, 1990.

J.P. Stowell, S.J. Masten and J.N. Jensen. Dechlorination of Chlorendic Acid by Ozone. **Proceedings of the 9th World Ozone Congress** (June, 1989), International Ozone Association, New York, Vol. 1, 1989.

J.N. Jensen and J.D. Johnson. Measurement of Free Chlorine by the DPD Procedure: Interference by Organic Chloramines and Monochloramine. **Proceedings: American Water Works Association Water Quality Technology Conference** (Nov., 1987), AWWA, Denver, CO, 1988.

J.D. Johnson and J.N. Jensen. Comparison of Free and Total Chlorine Residuals. **Proceedings: Condenser Biofouling Control - State-of-the-Art Symposium**, EPRI CS-4339, Electric Power Research Institute, Palo Alto, CA, pp. 4-188 to 4-195, Nov., 1985.

J.D. Johnson and J.N. Jensen. THM and TOX Formation: Routes, Rates and Precursors. **Proceedings: American Water Works Association Seminar in Strategies for the Control of Trihalomethanes**, AWWA, Denver, CO, pp. 1-20, 1983.

#### **Presentations:**

Conference presentations with no conference proceedings; speaker's name in italics:

*M. Falcone* and J.N. Jensen. Ray-Tracing Analysis of Parabolic Solar Troughs for Drinking Water Treatment in Low Resource Settings. Presented at the SUNY Undergraduate Research Conference (SURC), Fredonia, NY, April 22, 2017.

*J.N. Jensen*. Oral Examinations as an Assessment Tool in an Engineering Design Course. Presented at the 2017 Joint Conference, American Society for Engineering Education St. Lawrence Section and the New York Cyber Security Engineering Technology Association, Amherst, NY, April 21-22, 2017.

G. Desai, J. Wilbur, P. Ram. *J.N. Jensen, J. Lenker, and K. Smith*. Sanitation for all: A Framework for Research and Practice to Improve Equity for People with Disabilities. Presented at the 39<sup>th</sup> WEDC International Conference, Kumasi, Ghana, July 11-15, 2016.

*M. Falcone* and J.N. Jensen. Applying Engineering Research to Social Entrepreneurship. Presented at the SUNY Undergraduate Research Conference (SURC), Cobleskill, NY, April 15, 2016.

*K.P. Rozwod* and J.N. Jensen. Ceramic Water Filters for the Developing World. Presented at the SUNY Undergraduate Research Conference (SURC), Brockport, NY, April 10, 2015.

*R.S. Swick* and J.N. Jensen. Effectiveness of Muslin Fabric Filtration for Drinking Water Treatment in Developing Countries. Presented at the SUNY Undergraduate Research Conference (SURC), Brockport, NY, April 10, 2015.

*H. Borden, J.N. Jensen, and D. Vegas Kuroski* (co-presenters). Design a Comprehensive Assessment Plan from the Ground Up. NASPA Region II Conference, Buffalo, NY, June 10-12, 2012.



*D. Vegas Kuroski and J.N. Jensen* (co-presenters). Engaging Students, Faculty & Staff to Create a Collaborative Community, NASPA Region II Conference, Buffalo, NY, June 10-12, 2012.

*J.N. Jensen*. Teaching Sustainability in the Physical Sciences through Cases. Fall Annual Conference, National Center for Case Study Teaching in the Sciences, Amherst NY, September 23-24, 2011.

*S. Baik*, B.E. Nalbur, M. Ibrahim, J.N. Jensen, and D.S. Aga. Effectiveness of sonolysis in degrading polar pharmaceuticals in different water matrices. Presented at the 242<sup>nd</sup> National Meeting of the American Chemical Society, August 28, 2011, Denver, CO. (Abstract in Abstracts of Papers of the American Chemical Society, Vol. 242. Meeting Abstract 331-ENVR, August 28, 2011).

*S. Kim*, J.N. Jensen, D.S. Aga, and A.S. Weber. Fate of tetracycline resistant bacteria as a function of activated sludge process organic loading and growth rate. Presented at the 5<sup>th</sup> International Conference on Wastewater Reclamation and Reuse for Sustainability, Cheju Island, South Korea, November 8-11, 2005.

*J.N. Jensen* and B.A. Acquisto (Madge). UV Disinfection Modeling: Implication of Bacterial Colonization of Wastewater Solids. Presented at WEFTEC 2004 (77<sup>th</sup> Annual Technical exhibition and Conference of the Water Environment Federation), New Orleans, LA, October 4, 2004.

*B.A. Acquisto (Madge)* and J.N. Jensen. Bacterial Colonization of Wastewater Solids and the Relevance in UV Disinfection. Presented at WEFTEC 2004 (77<sup>th</sup> Annual Technical exhibition and Conference of the Water Environment Federation), New Orleans, LA, October 4, 2004.

*U. Ghosh*, J.R. Smith, J.V. Fleckenstein, M. Mitraka, A.S. Weber and J.N. Jensen. Long-Term Passive PCB/PAH Bioremediation Following Active Land Treatment. Presented at the Sixth International Symposium on In Situ and On-Site Bioremediation, San Diego, CA, June 4-7, 2001.

*U. Ghosh*, A.S. Weber, J.N. Jensen, and J.R. Smith. Effect of Changing Organic Matter During Land Biotreatment on PCB Desorption Equilibrium, Kinetics, and Availability. Presented at the Division of Environmental Chemistry, American Chemical Society National Meeting, Washington, DC, August 20-24, 2000.

*U. Ghosh*, A. S. Weber, and J.N. Jensen. Effect of Land-Biotreatment on PCB Desorption and Leaching. Gordon Research Conference, Environmental Sciences: Water, Henniker, NH, June, 1998.

*U. Ghosh*, A.S. Weber, and J.N. Jensen. A Tool for Determining Environmentally Acceptable Endpoints for PCBs in Soils. Presented at the 90th Annual Meeting and Exhibition of The Air Waste Management Association, Toronto, Canada, June, 1997.

*E.H. Host-Steen*, J.N. Jensen, and C.X. Li. Ozonation of Complex Cyanides in Metal Finishing Wastewaters. Presented at the Special Symposium on Emerging Technologies in Hazardous Waste Management IX, Industrial and Engineering Chemistry Division of the American Chemical Society, Pittsburgh, PA, September 15-17, 1997.

*U. Ghosh*, A.S. Weber, J.N. Jensen, and J. Smith. Determining Environmentally Acceptable Endpoints for Contaminated Soils. Presented at the Special Symposium on Emerging Technologies in Hazardous Waste Management IX, Industrial and Engineering Chemistry Division of the American Chemical Society, Pittsburgh, PA, September 15-17, 1997.

*J.N. Jensen* and A.S. Weber. Application of Sequential Chemical and Biological Oxidation for Contaminant

Degradation. Presented at the Special Symposium on Emerging Technologies in Hazardous Waste Management VIII, Industrial and Engineering Chemistry Division of the American Chemical Society, Birmingham, AL, September, 1996.

T.-L. Yeh and *J.N. Jensen*. Oxidation of Cyanide by Ultrasonic Irradiation. Presented at the Second International Conference on Advanced Oxidation Technologies for Water and Air Treatment, London, Ontario, September, 1995.

D.C. Roblee, P.J. Merlo, and *J.N. Jensen*. Sonolysis of Trichloroethene and Hexachlorobutadiene. Presented at the Second International Conference on Advanced Oxidation Technologies for Water and Air Treatment, London, Ontario, September, 1995

G. Kleyman and *J.N. Jensen*. Sonochemical Destruction of the Herbicide Simazine by Ultrasonic Irradiation. Presented at the First International Conference on Advanced Oxidation Technologies for Water and Air Remediation, London, Ontario, June 25-30, 1994.

N. Avala and *J.N. Jensen*. Degradation of Chlorendic Acid by Photocatalysis. Presented at the First International Conference on Advanced Oxidation Technologies for Water and Air Remediation, London, Ontario, June 25-30, 1994.

J. Yoon and *J.N. Jensen*. Chlorine Transfer from Inorganic Monochloramine in Chlorinated Wastewaters. Presented at the 66th Annual Conference of the Water Environment Federation, Anaheim, CA, October, 1993.

J. Yoon and *J.N. Jensen*. Modeling the Distribution of Chloramines During Drinking Water Chloramination. Presented at the Disinfection By-Products in Water Treatment: The Chemistry of Their Formation and Control Symposium, Division of Environmental Chemistry, American Chemical Society National Meeting, August 23-25, 1993.

J.P. Stowell, *J.N. Jensen*, and A.S. Weber. Chlorophenol Ozonation: Byproducts and Kinetics. Presented at the 1993 Summer National AIChE Meeting, Seattle, WA, August 15-19, 1993.

*D.K. Harrington*, J. Van Benschoten, *J.N. Jensen*, T. Brady, D. Lewis, J. Sferrazza, and E. Neuhauser. Combined Use of Heat and Oxidants for Controlling Zebra Mussels. Presented at the Third International Zebra Mussel Conference, Toronto, Feb. 23-26, 1993.

*M.-S. Lai*, S.S. Sisodia, A.S. Weber, and *J.N. Jensen*. Chemical Oxidation of Simazine and Assessment of the Relative Biodegradability of Its Oxidation Products. Presented at the 65th Annual Conference of the Water Environment Federation, New Orleans, LA, September, 1992.

*M.-S. Lai*, A.S. Weber, and *J.N. Jensen*. Biodegradation of Simazine and Its Chemical Oxidation Products. Presented at the 1992 American Institute of Chemical Engineers Summer National Meeting, August, 1992.

*M.-S. Lai*, *J.N. Jensen*, and A.S. Weber. Chemical Oxidation of Simazine with Implications for Sequential Chemical/Biological Treatment Processes. Presented at the 1992 American Institute of Chemical Engineers Summer National Meeting, August, 1992.

*J. Boguslavsky* and *J.N. Jensen*. Destruction of a Commercial Dye with Hydrogen Peroxide/Ultraviolet Radiation. Presented at Water Quality International 1992 (Sixteenth Biennial Conference and Exposition of the International Association on Water Pollution Research and Control), Washington, DC, May 24-30, 1992.

A.V. Rao and *J.N. Jensen*. Treatment of Cyclodiene Pesticides By Advanced Oxidation Processes. Presented at

Chemical Oxidation: Technology for the Nineties (Second International Symposium), Nashville, TN, February 19-21, 1992.

J. Sebastian, *J.N. Jensen*, and A.S. Weber. Sequential Chemical/Biological Oxidation of Chlorendic Acid. Presented at Chemical Oxidation: Technology for the Nineties (Second International Symposium), Nashville, TN, February 19-21, 1992.

*T.J. Brady*, J. Sferrazza, J.E. Van Benschoten, J.N. Jensen, D.P. Lewis, and E.F. Neuhauser. Mechanisms of Zebra Mussel Control by Chemical Oxidants. Presented at the Second International Zebra Mussel Conference, Toronto, ON, February, 1992.

*J.E. Van Benschoten*, J.N. Jensen, D.P. Lewis, T.J. Brady, J. Sferrazza, and E.F. Neuhauser. Combined Use of Chemical Oxidants with Heat or Potassium Chloride for Controlling Zebra Mussels. Presented at the Second International Zebra Mussel Conference, Toronto, ON, February, 1992.

*M. K. Evans*, J.E. Van Benschoten, and J.N. Jensen. Use of Chemical Oxidants in Combination with Potassium for the Control of Zebra Mussels. Presented at the Great Lakes Research Consortium Student/Faculty Conference, Syracuse, NY, January, 1992.

*D.K. Harrington*, J.N. Jensen, and J.E. Van Benschoten. Combined Use of Heat and Oxidants for Controlling Zebra Mussels. Presented at the Great Lakes Research Consortium Student/Faculty Conference, Syracuse, NY, January, 1992.

J.E. Van Benschoten, *J.N. Jensen*, and D. DeGirolamo. Control of Zebra Mussels by Chlorine: Comparison of Laboratory and Field Studies. Presented at the Second International Zebra Mussel Research Conference, Rochester, NY, November 19-22, 1991.

Y.-J. Tuan and *J.N. Jensen*. Oxidation of Thiocyanate and Cyanide by Ozone. Presented at the 1991 ASCE Specialty Conference on Environmental Engineering, Reno, NV, July 8-10, 1991.

*J.N. Jensen* and A.S. Weber. Combined Chemical and Biological Oxidation for the Reduction of Hazardous Waste Toxicity. Waste Reduction Conference, Albany, NY, June 11-12, 1991.

T. Coulibaly and *J.N. Jensen*. Mixed-Order Model for Ozone Demand in Natural Waters. Presented at the 201st National Meeting of the American Chemical Society (Division of Environmental Chemistry), Atlanta, GA, April 14-19, 1991.

*J.N. Jensen* and J.E. Van Benschoten. Relationships Between Taste and Odor Problems and the Zebra Mussel. Presented at Zebra Mussels - Strategies for Control, Niagara Falls, NY, March 14-15, 1991.

*J.E. Van Benschoten* and J.N. Jensen. Summary of Research Activities for Control of Zebra Mussels. Presented at Zebra Mussels - Strategies for Control, Niagara Falls, NY, March 14-15, 1991.

*J.E. Van Benschoten*, J.N. Jensen, T.J. Brady, D.P. Lewis and J. Sferrazza. Chemical Oxidants for the Control of Zebra Mussel Veligers. Presented at the First International Zebra Mussel Research Conference, Columbus, OH, December 5-7, 1990.

J.N. Jensen and *J.D. Johnson*. Quantification of Interferences Under Equilibrium Conditions with Applications to Free Chlorine Analysis in the Presence of Organic Chloramines. Presented at the 194th National Meeting of the American Chemical Society (Division of Environmental Chemistry), New Orleans, LA, Aug. 30-Sept. 4,

1987.

*J.D. Johnson, J.N. Jensen and C. LeCloirec.* Electrochemical Methods for the Measurement of Disinfectant Residuals. Presented at the American Water Works Association, Water Quality Technology Conference, Houston, TX, Dec., 1985.

*J.N. Jensen, J.D. Johnson and C. LeCloirec.* Interferences in the Measurement of Free Available Chlorine by Organic Chloramines. North Carolina Water Pollution Control Association/North Carolina Section of the American Water Works Association, 65th Annual Meeting, Charlotte, NC, Nov., 10-13, 1985.

*J.D. Johnson, J.N. Jensen and C. LeCloirec.* Chloramine Chemistry in Drinking Water. Presented before the National Academy of Sciences, National Research Council, Commission on Life Sciences, Safe Drinking Water Committee, Washington, DC, Oct. 21, 1985.

*J.D. Johnson and J.N. Jensen.* Measurement and Significance of Chloramine Residuals. Presented at the Water Pollution Control Federation, Conference on Analytical Techniques in Water Pollution Control, Cincinnati, OH, May 2-3, 1985.

*J.N. Jensen, Y.-H. Seo, J.J. St. Aubin, R.F. Christman and J.D. Johnson.* The Reaction Between Monochloramine and Isolated Aquatic Fulvic Acid. Presented at the International Chemical Congress of Pacific Basin Societies (PACCHEM), Symposium on New and Modified Disinfection Processes, Honolulu, HI, Dec. 16-21, 1984.

Invited presentations (speaker's name in italics):

*B.A. Madge and J.N. Jensen.* Disinfection of Wastewater Using 20 kHz Ultrasound. Presented at the Greater Buffalo Environmental Conference, April 17, 2000.

*B.A. Madge and J.N. Jensen.* Disinfection of Wastewater Using 20 kHz Ultrasound. Presented at WEFTEC 1999 (73rd Annual Conference & Exposition of the Water Environment Federation), October 11, 1999.

*J.N. Jensen.* Alternative Disinfection Strategies and Benefits for Drinking Water Treatment, Western New York Water Works Conference Workshop, Batavia, NY, May 12, 1999.

*U. Ghosh, A.S. Weber, J.N. Jensen, and J.R. Smith, Jr.* Effect of Land Biotreatment on PCB Leachability and Risk from Field-Contaminated Sediments. Presented at the 19<sup>th</sup> Annual Meeting, SETAC, Charlotte, NC, November 15-19, 1998.

*U. Ghosh, A.S. Weber, J.N. Jensen, and J. Smith,* Understanding Effects of Land-Biotreatment on PCB Desorption and Leaching. Poster Presentation at the Gordon Research Conference on Environmental Sciences: Water, New England College, Henniker, New Hampshire, June 14-19, 1998.

*J.N. Jensen and B.A. Madge.* Ultrasound Technology and CSO Abatement. Presented at the Greater Buffalo Environmental Conference, April 27, 1998.

*J.N. Jensen.* Detection and Characterization of Organic Nitrogen-Containing DBPs. Presented at the EPA DBP Identification Workshop, Feb. 11-13, 1998.

*J.N. Jensen and L.P. Zicari, Jr.* Water Reuse in Metal Finishing. Presented at the Greater Buffalo Environmental Conference, April, 1997.

J.N. Jensen. Zebra Mussel Research Update. Presented at the 1994 Spring New York State Section American Water Works Association Meeting, Buffalo, NY, April 20, 1994.

J.N. Jensen. Interferences in the Measurement of Oxidant Residuals. Presented before the Department of Chemistry, Kent State University, May 3, 1990.

J.N. Jensen. Interferences in the Measurement of Free Available Chlorine. Presented before the Department of Civil Engineering, University of Massachusetts at Amherst, September 30, 1988.

Professional Activities:

Professional service:

Reviewer:

*American Society of Civil Engineers (JEED)*  
*Environmental Science and Technology*  
*Journal of the American Water Works Association*  
*Water Research*  
*Water Environment Research*  
*Ozone Science and Engineering*  
*Analytical Chemistry*  
*Journal of Great Lakes Research*  
*Organic Geochemistry*

International Association on Water Pollution Research and Control  
American Chemical Society Books

Prentice-Hall, Inc.

Wiley and Sons Publ., Inc.

Proposal reviewer:

U.S. Environmental Protection Agency  
International Science and Technology Center  
Great Lakes Research Consortium, Small Grants Program  
Delaware Water Resources Institute  
New York State Center for Hazardous Waste Management

Other professional activities:

Member, National Advisory Board, Engineers for a Sustainable World, 2009-2012  
Site Evaluation Team for Alfred State College's technology programs, 2009  
Member, American Water Works Association, University Student Activity Committee, 1997-2005  
Member, Planning Committee, Greater Buffalo Environmental Conference, 1996-2005  
Member, Environment Canada Panel on the Assessment of the Ecological Risk of Chloramines, 1996-98  
Session Chair, Greater Buffalo Environmental Conference, Buffalo, NY, May, 1996-97.  
Chairman, Standard Methods Joint Task Group on Chlorine, 20th edition, 1996  
Session Chairman, 26th Mid-Atlantic Industrial Waste Conference, July, 1996

Session Chair, First International Conference on Advanced Oxidation Technologies for Water and Air Remediation, June 25-30, 1994  
Session Chairman, 24th Mid-Atlantic Industrial Waste Conference, July, 1992  
Member, American Water Works Association Disinfection Committee, 1990-present  
Lecturer, Great Lakes Research Consortium, 1990, 1993, 1995, 1996  
Instructor, Professional Engineer Review Course, 1990-98  
Panel member, Impact of Zebra Mussel from the Local Government Perspective Conference, Buffalo, NY, January 24, 1991  
Chairman, Standard Methods Joint Task Group on Oxidant Demand/Requirement, 17th edition supplement, 1988-1990  
Member, Organizing Committee for the NYS Center for Hazardous Waste Management/American Society of Civil Engineers (Buffalo Section) Seminar on Hazardous Waste Management, September 12, 1989.  
Instructor, North Carolina Water Pollution Control Association Annual School, Chapel Hill, NC, April, 1986

Consultant to: Pepsi-Cola Company (Valhalla, NY), 1991  
BethEnergy (Lackawanna, NY), 1988-89

#### Community Service:

Science fair judge: numerous occasions  
Lecturer, "Wastewater Chlorination - How It Works", Western Chapter, NYS Water Environment Association Chlorine Training Seminar, July, 1995  
Panel member, Impact of Zebra Mussel from the Local Government Perspective Conference, Buffalo, NY, January 24, 1991  
Lecturer, Western New York Science Exploration Day, 1989-92, 1994, 2000  
Mentor, New York State Summer Institute for Science and Mathematics, 1991-2  
Advisor, Western New York Science Fair participants, 1991-2  
Member, Organizing Committee, Zebra Mussels - Strategies for Control (A Workshop for Water Plant Operators), Niagara Falls, NY, March 14-15, 1991  
Lecturer, "Zebra Mussels - An Invasion in Progress", Western New York Chapter, American Meteorological Society, November 7, 1990.  
Member, Organizing Committee for the NYS Center for Hazardous Waste Management/American Society of Civil Engineers (Buffalo Section) Seminar on Hazardous Waste Management, September 12, 1989.

#### Departmental Service:

Director of Undergraduate Studies, Environmental Engineering, 6/2015-present  
Director of Undergraduate Studies, Civil and Environmental Engineering, 1/2005-7/2010  
Member, Graduate Studies Committee, 1990-2005  
Member, Faculty Search Committees, numerous

#### School Service:

##### SEAS:

Member, Tenure and Promotion Committee, 2013-2016  
Director, Environmental Science Program, 1994-2015 (Acting Director: 1992-1993)  
Member, Graduate Division Academic Programs Committee  
SEAS Faculty Senator, 2002-2005

##### Other units:

Member, two Faculty Search Committees for the Department of Chemistry  
Member, two Faculty Search Committees for the School of Public Health and Health Professions  
Member, College of Arts and Sciences Interdisciplinary Program Self-Study Team, 2003  
Member, Ad Hoc Committee for Environmental Health in the School of Public Health and Health Professions

#### University Service:

Faculty advisor, Engineers for a Sustainable World, 2008-present  
Co-chair (with Elaine Cusker), Academic Integrity Committee, Fall 2015-Spring 2017  
Academic Director, Sustainability Academy, 2016-present

Academic Director, Research Explorations Academy, 2009-2014  
Member, numerous committees for selection of students for national awards and the Chancellor's Award for Student Excellence  
Member, Faculty Senate Committee of Decanal Review, 2013  
Member, Faculty Senate Teaching and Learning Committee, 2002-present  
Chair, Faculty Senate Teaching and Learning Committee, 2005-2008 and 2013-present  
Representative of Comprehensive University faculty on the SUNY Provost's Advisory Group on the SUNY Assessment Initiative, August 2009  
Director, Center for Teaching and Learning Resources, 2003-2004  
Member, Faculty Senate Educational Policies and Practice Committee, 2004-2005  
Member, Vice President for Graduate Studies Committee on Transfer Credits, 1996-98  
Faculty Consultant for the Vice Provost for Faculty Development's Video Consultation Project, 1996-97  
Affiliate, Environment and Society Institute, 1998-present  
Member, Selection Committee for 1992 University Teaching Fellows Program