

## CURRICULUM VITAE

### **Stephen J. Randtke, Professor**

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University of Kansas  
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### **Education**

B.S. Civil Engineering, Loyola Marymount University, 1972  
M.S. Civil/Environmental Engineering, Stanford University, 1973  
Ph.D. Civil/Environmental Engineering, Stanford University, 1977

### **Professional Experience**

1989-present Professor, University of Kansas  
2014-present Courtesy Professor, Environmental Studies Program, University of Kansas  
2005-2006 Professor in Residence, Black & Veatch, Kansas City  
1992-2006 Co-Director, Environmental Engineering and Science Graduate Program,  
The University of Kansas  
1992-2006 Co-Director, Environmental Engineering and Science Research Laboratory,  
The University of Kansas  
1983-1989 Associate Professor, University of Kansas  
1977-1983 Assistant Professor, University of Illinois  
1974-1977 Graduate Research Assistant, Stanford University  
1974 Assistant Engineer, Los Angeles Dept. of Water and Power  
1973 Student Engineer, Los Angeles Dept. of Water and Power

### **Professional Registration & Certification**

Engineer-in-Training: California (1973)  
Professional Engineer: Illinois (No. 062.041474; 1983 & 2008-2013)  
Kansas (No. 9667; 1983-present)  
Diplomate Environmental Engineer (Certificate No. 94-30002; 1994-present)

### **Professional Societies**

American Academy of Environmental Engineers  
American Association for the Advancement of Science  
American Council on Science and Health  
American Water Works Association (Life Member)  
Association of Environmental Engineering and Science Professors  
North American Lake Management Society  
Water Environment Federation  
International Water Association (formerly International Association on Water Quality)

## Professional Activities

### American Water Works Association

Student Activities Committee, 1981-1990

Chairman, 1987-1990

Vice-Chairman, 1984-1987

Executive Committee, 1981-1990

Standard Methods Committee, 1983-present

Coordinator, Part 5000, Organic Constituents, 1984-1990

Joint Task Group on Total Organic Carbon, 2006-present

Academic Achievement Awards Committee, 1984-1990

Chairman, 1987-1990

Research Committee on Coagulation, 1984-1992

Research Committee on Softening, 1984-1988

Publications Award Committee, 1985-1989

Chairman, 1988-1989

Research Committee on Organic Contaminants, 1986-1998

Chairman, Larson Grant Steering Committee, 1988-1989

LARS Scholarships Selection Committee, 1988-1990

Emerging Technologies Committee, 1988-1992

Research Division Board of Trustees, 1991-1998

Third Trustee, 1991-1992

Second Trustee, 1992-1993

First Trustee, 1993-1994

Vice-Chair, 1994-1995

Chair, 1995-1998

Research Symposia Program Committee, 1991-1998

A.P. Black Research Award Nominating Committee, 1991-1998

Best Poster Award Committee, 1991-1998

Best Paper Award Nominating Committee, 1991-1992

Liaison, Students Activities Committee, 1992-1998

Liaison, Particulate Contaminants Research Committee, 1992-1995

Liaison, Water Resources Research Committee, 1992-1998

Planning Committee, Enhanced Coagulation Research Workshop, 1994

Nominating Committee, 1995-1998

Appointing Committee, 1995-1998

Planning Committee, Workshop on Bench- and Pilot-Scale Evaluations of GAC and Membranes, 1995-1996

Project Advisory Committee, Enhanced Coagulation and Softening Project, Technical Advisory Work Group on Disinfectants and Disinfection Byproducts, 1994-1996

Reviewer for the book *Water Treatment Plant Design, 3rd ed.*, 1998

Steering Committee to revise the book *Water Quality & Treatment, 5th ed.*, 1994-1999

Peer Review Workshop, Managing Lead and Copper Rule Corrosion Control Practices to Avoid Unintended Consequences, 2004-2005

Membrane Systems Subcommittee, 2006-present

Water Treatment Facilities Design & Construction Committee, 2007-present

## Professional Activities (cont'd)

### American Water Works Association (cont'd)

Committee to revise the book *Water Treatment Plant Design, 5th ed.*, 2008-2012

Technical Co-Editor, *Water Treatment Plant Design, 5th ed.*, 2009-2012

Expert Workshop, Impact of Changing Lead and Copper Rule Sample Pool and Sample Protocol Requirements and Cost Assessment of OCCT and Treatment Consequences, sponsored by AWWA and the Water Industry Technical Action Fund, Indianapolis, IN, June 19, 2013.

### American Water Works Association Research Foundation

Technical Proposal Review Committee, 1986

Research Advisory Council, 1986-1988

### Association of Environmental Engineering and Science Professors

Annual Symposium Subcommittee, 1982-1983

Awards Committee, 1986-1991

Chair, 1988-1991

Board of Directors, 1992-1996

Liaison, Awards Committee, 1992-1994

Liaison, Bylaws Committee, 1993-1996

Chair, Arrangements Committee, 1993-1994

Liaison, Education Conference Planning Committee, 1994-1995

Liaison, Long-Range Planning Committee, 1994-1995

Liaison, Emeritus Membership Committee, 1994-1995

Liaison, Latin American Initiatives Committee, 1994-1995

Liaison, Legislative Affairs Committee, 1994-1995

Vice-President, 1993-1994

President, 1994-1995

Past-President, 1995-1996

Organizer, AEESP Lecture at the AWWA Conference, 1993-2006

Nominating Committee, 1995-1999

Chair, 1995-1996

Organizer, AEESP Lecture at the WEF Conference, 1996-1997

Lead Author, AEESP Administrative Handbook, 1996-2001

Liaison, American Water Works Association, 1997-2006

Strategic Planning Committee, 2001-2003

Lecturers Committee, 2004-2007

### City of Lawrence, KS

Recycling Advisory Board, 1991-1992; Secretary, 1991-1992

### Illinois Section, American Water Works Association

Student Activities Committee, 1978-1983

Chair, 1979-1983

Technical Arrangements Committee, 1982-1983

## Professional Activities (cont'd)

### International Water Association (cont'd)

Specialist Group on Reservoir Protection, Management, and Water Treatment, 1995-2005  
Specialist Group on Environmental Engineering Education, 1995-present  
Specialist Group on Eutrophication, 2000-2010  
Specialist Group on Off-Flavors in the Aquatic Environment, 2000-present  
Specialist Group on Watershed and Reservoir Management, 2000-2005  
Specialist Group on Design, Operation and Maintenance of Drinking Water Treatment Plants, 2005-present  
Specialist Group on Membrane Technology, 2005-present  
Specialist Group on Water Reuse, 2009-present

### Johnson County Wastewater

Member, Technical Support Group, Site-Specific Ammonia Limits Study for the Mill Creek Regional Wastewater Treatment Plant, 1998-2001

### Kansas Section, American Water Works Association

Chairman, Research Committee, 1984-1996  
Community Relations Committee, 1985-1988  
Publications Committee, 1988-1991, 1996-1997  
Student Activities Committee, 1989-1990  
Conference Program Planning Committee, 2006, 2011-2013; Chair, 2011-2012  
Fuller Award Committee, 2008-present; Chair, 2010-2012  
Trustee, KsAWWA Board of Trustees, 2008-present; Chair-Elect, 2011-2012; Chair, 2012-2013; Past Chair, 2013-present  
Nominating Committee, 2011-present; Chair 2013-present  
Bylaws Committee, 2012-present  
Audit Committee, 2013-present

### State of Illinois

Scorer, Professional Engineers' Examination, 1978-1983

### State of Kansas

Kansas Fluoridation Advisory Council, Kansas Bureau of Oral Health, Kansas Department of Health and Environment, 2013-present

### United States Environmental Protection Agency

Technologies Working Group (for the Disinfectants / Disinfection By-Products Rule proposed by the U.S. EPA), 1992-1993  
Drinking Water Committee, USEPA Science Advisory Board (SAB), 2009-present  
Hydraulic Fracturing Study Plan Review Panel, Science Advisory Board, 2010-2011  
Drinking Water Committee Augmented for the Review of the Effectiveness of Partial Lead Service Line Replacements, Science Advisory Board, 2011  
Hydraulic Fracturing Research Advisory Panel, Science Advisory Board, 2013-present

## **Professional Activities (cont'd)**

### University of Illinois

Program Coordinator, Annual Public Water Supply Engineers' Conference, 1979-1983  
Chair, 1983  
Advisor, Engineering Council, 1977-1982

### Water Environment Federation

Water Reuse Committee, 1977-1983  
Standard Methods Committee, 1977-present  
Joint Task Group on Organic Nitrogen, 1977-1985; 1992-1996  
Chairman, Joint Task Group on Organic Nitrogen, 1979-1985  
Joint Task Group on Ammonia Nitrogen, 1992-1996  
Student Activities Committee, 1988-1990

## **Consulting Activities**

Nalco Chemical Company, 1978  
Robert L. Douglas, Attorney at Law, 1979  
Peter Polansky, Attorney at Law, 1981  
J. Michael Greer, Attorney at Law, 1986  
Mid-Kansas Engineering Consultants, 1987  
Black & Veatch, 1988-present  
Jordan, Jones, & Goulding, 1989-1991; 1994-2001  
E & E Specialties, Inc., 1990  
Kaw Sand Company & Landplan Engineering, 1991  
Research & Evaluation Associates & U.S. EPA, 1991  
Johnson County Water District No. 1, 1992, 1995  
East Bay Municipal Utility District, Oakland, CA, 1995-2000  
CH2M-Hill, 1996-2000  
Regan & McGannon, Attorneys at Law, 1996-1998  
Master's Dredging, 1997, 2000  
Archer Engineers, 1999, 2004-2006  
Con Agra, 1999  
CDG Technology, Inc., 1999-2000  
Vinson & Elkins, Attorneys at Law, 1999-2000  
Bartlett & West Engineers, 2002  
Kansas Department of Health and Environment, 2003-2008  
Adams & Reese, LLP, Attorneys at Law, 2005-2013  
Horsley Witten Group (on behalf of U.S. EPA), 2007  
City of Pittsburg, Kansas, 2009  
Water Advice Network, 2009-present  
Drinking Water Committee, U.S. EPA Science Advisory Board, 2009-present  
Castalia, 2010

## **Professional Activities (cont'd)**

### **Service as a Reviewer**

Journal of the Water Pollution Control Federation, 1980-1987  
John Wiley & Sons, Inc., 1981, 1994  
Water Research, 1981-present  
American Chemical Society, Advances in Chemistry Series, 1981, 1987  
Environmental Science & Technology, 1982-1989, 2004-present  
Journal of the American Water Works Association, 1983-present  
National Science Foundation, 1986-1987, 1992-1996  
U.S. Environmental Protection Agency, 1986, 1995  
Environmental Technology Letters, 1987  
Lewis Publishers, 1994  
Journal of Environmental Engineering, ASCE, 1997-present  
Water Environment Research, 2001  
Environmental Engineering Science, 2002  
Kansas Water Resources Research Institute, 2002  
Cooperative Research Centre for Water Quality and Treatment, Australia, 2003  
McGraw-Hill Higher Education, 2004  
Journal of Water Supply Research and Technology – Aqua, 2004

### **Primary Research Interests**

Control of naturally occurring and synthetic chemical contaminants in public water supplies through source control, conventional treatment, and advanced treatment technologies.

Sources and transformations of organic chemical contaminants in water supplies, including disinfection byproducts, pesticides and their metabolites, taste- and odor-causing compounds, and algal toxins.

Formation and control of disinfection byproducts during drinking water treatment.

Physical / chemical water treatment processes, including coagulation, lime softening, activated carbon adsorption, disinfection, oxidation, and various membrane processes, especially with respect to their use in removing trace contaminants from drinking water

Precipitative processes for drinking water treatment, especially lime softening and its ability to remove trace contaminants, and enhanced coagulation and softening for removal of disinfection byproduct precursors

Water treatment plant design

Lake and reservoir management as it pertains to water supply and water quality.

Water recycling and reuse for potable and non-potable purposes.

## **Professional Activities (cont'd)**

### **Courses Taught**

Introduction to Environmental Engineering  
Concepts of Environmental Chemistry  
Environmental Chemical Analysis  
Environmental Analytical and Process Laboratory  
Chemical Principles of Environmental Engineering Processes  
Water Treatment Plant Design  
Physical/Chemical Water Quality Control Processes  
Treatment of Industrial Water and Wastewater  
Wastewater Treatment Plant Design  
Environmental Engineering & Science in Developing Countries  
Water Reuse

### **Departmental Service**

Scholarship Committee, 1983-1985, 2008-2010  
Engineering Exposition and Open House Committee, 1983-1986  
Program Committee, Environmental Engineering Conference, 1984-present  
Chair, 1992-1994, 1996-2005, 2006-present  
Graduate Recruitment Committee, 1985-1986  
Library Committee, 1985-2005  
Public Relations Committee, 1986-1991  
Faculty Secretary, 1987-1988  
Editor, Civil Engineering Newsletter, 1987-1991  
Curriculum Committee, 1991-1995; 2000-2005, 2008-present  
Chair, 2004-2005  
Faculty Search Committee, 1991-1992  
Off-Campus Programs Committee, 1992-1994  
Co-Director, Environmental Engineering & Science Graduate Program, 1992-2006  
Co-Director, Environmental Engineering & Science Research Laboratory, 1992-2006  
Graduate Admissions, Envir. Engrg. & Science Graduate Program, 1992-2001  
Faculty Search Committee, Chair, 1998-1999  
Liaison to the School of Engineering Curriculum Committee, 2001-2003  
Faculty Search Committee, 2004-2005  
Promotion and Tenure Policy Committee, 2007-2012

### **School of Engineering Service**

Co-Advisor, Engineering Council, 1984-1986  
Library Committee, 1985-1989  
Coordinating Committee, KU Center for Research, Inc., 1987-1995  
Curriculum Committee, 2001-2003, 2013-present  
Chemistry Liaison Committee, 2001-2003  
Promotion and Tenure Committee, 2006-2008

## Professional Activities (cont'd)

### University Service

Water Resources Committee, 1987-1988  
Campus Coordinator, National Network for Environmental Management Studies, U.S. Environmental Protection Agency, 1989-1993  
Kansas EPA/EPSCOR Faculty Advisory Committee, 1992-1993  
Kansas EPA/EPSCOR Proposal Review Committee, 1997  
Kansas EPA/EPSCOR Technical Advisory Committee, 1997-1999  
Search Committee (Aquatic Ecologist), Kansas Biological Survey and the Department of Ecology and Evolutionary Biological, 2000-2001  
Center for Global and International Studies, Core Faculty Member, 2009-present  
Search Committee, Geology Dept., assistant professor in geophysics, 2013-present  
Water Research Working Group on Surface Water Quantity & Quality, Lead, 2013-present  
Water Research Working Group on Water Reuse & Recovery, 2013-present

### Honors and Awards

Alpha Sigma Nu, National Jesuit Honor Society  
Tau Beta Pi, National Engineering Honor Society  
Chi Epsilon, National Civil Engineering Honor Society  
U.S. Environmental Protection Agency Traineeship, 1972-1973  
California State Graduate Fellowship, 1973-1974  
AWWA Publications Award, 1983 (awarded by the American Water Works Association for the most notable contribution to the science or practice of water utility development published in the Journal during the previous year)  
Miller Professional Development Award for Distinguished Service to the Engineering Profession, 1985 (awarded by the School of Engineering at the University of Kansas)  
Miller Professional Development Award for Distinguished Engineering Research, 1988 (awarded by the School of Engineering at the University of Kansas)  
Certificate of Appreciation, American Water Works Association, for supervising the doctoral dissertation of Craig D. Adams, recipient of the First-Place 1992 Academic Achievement Award  
Listed in Citation Directory's *Who's Who Environmental Registry*, 1992  
Listed in Marquis' *Who's Who in American Education*, 4th ed., 1994-95  
AWWA Research Division Best Paper Award, 1994 (awarded by the American Water Works Association for the best research paper published in the Journal during the past year; the paper was co-authored by Craig D. Adams)  
Listed in *International Who's Who of Professionals*, 3rd. ed., 1996  
Listed in *American Men and Women of Science: A Biographical Directory of Today's Leaders in Physical, Biological and Related Sciences*, 20th ed., 1998; 21st ed., 2002; R. R. Bowker, ed., Gale Publishing, Farmington Hills, MI



**Professional Activities** (cont'd)

**Honors and Awards** (cont'd)

- Nominated (by the senior class of engineering students at the University of Kansas) for the Henry E. Gould Award for Distinguished Service to Undergraduate Engineering Education, 1997
- Excellence in Teaching Award, 1999 (awarded by the KU Center for Teaching Excellence based on selection by graduate students in the Civil & Environmental Engineering Department)
- Distinguished Service Award, 1999 (awarded by the Association of Environmental Engineering and Science Professors for outstanding effort in writing and updating AEESP's Administrative Handbook)
- Certificate of Appreciation, American Water Works Association, for supervising the doctoral dissertation of Holly L. Shorney, recipient of the First-Place 1999 Academic Achievement Award
- Miller Professional Development Award for Distinguished Service to the Engineering Profession, 2001 (awarded by the School of Engineering at the University of Kansas, for service beyond that recognized by the 1985 award)
- Listed in *Who's Who Among America's Teachers*, 2003-04, 2004-05, and 2005-06 eds.
- Listed in Marquis' *Who's Who in Science and Engineering*, 8th ed. (2005-2006), 9th ed. (2006-2007), 10th ed. (2008-2009)
- George Warren Fuller Award, American Water Works Association, Kansas Section, 2007-2008
- Listed in Marquis' *Who's Who in America*, 67th ed.(2013), 68th ed. (2014)

## Research Grants Funded

"Removal of Organics from Water and Wastewater by Chemical Coagulation and Precipitation," Illinois Water Resources Center; \$11,610; July 1, 1977 to June 30, 1978.

"Chemical Pretreatment for Activated Carbon Adsorption of Organics in Water and Wastewater," Illinois Water Resources Center; \$12,380; July 1, 1978 to June 30, 1979.

"Formation and Control of Total Organic Chlorine in Water Supplies," National Science Foundation (ENG-7908187); \$32,000; April 15, 1979 to September 30, 1981.

"A Fundamental Study of Organic Chlorine Formation During Wastewater Chlorination," Illinois Water Resources Center; \$13,000; July 1, 1979 to June 30, 1980.

"Removal of Soluble Organic Contaminants by Lime–Soda Softening," Advanced Environmental Control Technology Research Center, University of Illinois (funded through the U.S. Environmental Protection Agency, Cooperative Agreement CR 806819); \$92,500; February 1, 1980 to November 14, 1982.

"Precipitation of Aluminum and Silica in the Lime Softening Process," U. of Kansas, General Research Fund; \$4,490; August 1, 1984-June 30, 1985.

"A Critical Assessment of the Influence of Management Practices on Water Quality, Water Treatment, and Sport Fishing in Multipurpose Reservoirs in Kansas," Kansas Water Resources Research Institute; \$17,214; August 1, 1984 to September 30, 1985; with F. deNoyelles, Jr.

"Geological and Geochemical Factors Influencing Water Quality in a Buried Valley in Northeastern Kansas," Kansas Water Resources Research Institute; \$16,925; June 1, 1985 to May 31, 1986; with J. Denne and L. Hathaway.

"Trihalomethane Precursors in Kansas Lakes: Sources and Control," Kansas Water Resources Research Institute; \$15,000; June 1, 1985 to May 31, 1986; with F. deNoyelles, Jr., and C. E. Burkhead.

"Evaluation of the Trihalomethane Formation Potential of Kansas Groundwaters," U. of Kansas, General Research Fund; \$6,430; July 1, 1985 to June 30, 1986.

"Geological and Geochemical Factors Influencing Water Quality in a Buried Valley in Northeastern Kansas: Year 2," Kansas Water Resources Research Institute; \$16,651; April 1, 1986 to March 31, 1987; with J. Denne and L. Hathaway.

"Trihalomethane Precursors in Kansas Lakes: Sources and Control (Year 2)," Kansas Water Resources Research Institute; \$17,687; April 1, 1986 to March 31, 1987; with F. deNoyelles, Jr.

"Characteristics and Effects of Aerosol Inputs to a Tree/Grass Ecotone," U. of Kansas, General Research Fund; \$100,000; July 1, 1986 to June 30, 1989; with D. Lane et al.

**Research Grants Funded (cont'd)**

"Assessment of the Feasibility of In-Situ Groundwater Treatment in Northeastern Kansas," U. of Kansas, General Research Fund; \$6,899; July 1, 1986 to June 30, 1987.

"Aerosol Nitrogen Inputs to a Tree/Grass Ecotone," U.S. Environmental Protection Agency; \$373,943; October 1, 1986 to March 31, 1990; with D. Lane et al.

"Development of an Experimental Lake Facility," U. of Kansas, General Research Fund; \$99,950; July 1, 1987 to June 30, 1990; with E. Angino et al.

"Development of a Sampling Method for Large Nitrogen- and Sulfur- Bearing Aerosols," U.S. Environmental Protection Agency; \$75,000; September 1, 1987 to January 31, 1989; with D. Lane.

"Transport and Fate of Atrazine, Alachlor, and Their Degradation Products in Ground Water," U. of Kansas, General Research Fund; \$7,777; July 1, 1989 to June 30, 1990.

"Origin and Chemistry of Natural Surfactants in Streams," Procter and Gamble; \$10,000; June 15, 1989 to June 15, 1990; with E. M. Thurman.

"Quantification of Herbicide Removal by Ozonation and Granular Activated Carbon Adsorption," Lincoln Water System; \$5,000; August 21, 1989 to January 31, 1990; with E. M. Thurman.

"Occurrence and Control of Atrazine Degradation Products in Kansas Drinking Water Supplies," Kansas Water Resources Research Institute; \$41,695; April 1, 1990 to March 31, 1991.

"Distinguishing Atrazine Occurrence in Ground Water: Point-Source Versus Nonpoint-Source Origin," Ciba-Geigy Corp.; \$40,000; May 1, 1990 to April 30, 1991; with E. M. Thurman.

"Occurrence and Control of Atrazine Degradation Products in Drinking Water Supplies," Ciba Geigy Corp.; \$40,000; May 1, 1990 to April 30, 1991; with E. M. Thurman.

"Acid Aerosol Measurement Methods Intercomparison Study," U.S. Environmental Protection Agency; \$14,991; May 11, 1990 to October 12, 1990; with D. Lane.

"Sampling and Analytical Support for the AEROCE Project," U.S. Environmental Protection Agency; \$129,094; June 1, 1990 to April 10, 1993; with D. Lane.

"Origin and Chemistry of Natural Surfactants in Streams. Phase II: Preparatory Isolation and Spectroscopic Characterization," Procter & Gamble; \$12,500; June 1, 1990 to May 31, 1991; with E. M. Thurman.

"Microanalysis of Water Distribution System Deposits," Johnson County Water District No. 1, Johnson County, Kansas; \$500; December, 1990.

**Research Grants Funded (cont'd)**

"Occurrence and Control of Atrazine Degradation Products in Kansas Drinking Water Supplies, Year 2," Kansas Water Resources Research Institute; \$57,277; April 1, 1991 to March 30, 1992.

"Transport, Storage, and Metabolism of Atrazine in Reservoirs," Ciba-Geigy Corp.; \$35,000; April 1, 1992 to March 31, 1993; with E. M. Thurman.

"An Improved Infrastructure for Environmental Research," The University of Kansas Research Development Fund; \$30,000; November 30, 1992 to June 30, 1993.

"Removal of DBP Precursor Material by Optimized Coagulation and Precipitative Softening," American Water Works Association Research Foundation; \$250,000; November 1, 1992 to April 1, 1995; with Virginia Tech and Black & Veatch.

"Field Study of Alachlor-Ethane-Sulfonic Acid: Leaching Potential to Ground Water and Runoff to Surface Water," Monsanto Co.; \$10,000; March 1, 1993 to February 28, 1994.

"Transport, Storage, and Metabolism of Atrazine in Reservoirs, Year 2," Ciba-Geigy Corp.; \$35,000; April 1, 1993 to March 31, 1994; with E. M. Thurman.

"Formation and Control of DBPs in Drinking Water Treatment Plants," Black & Veatch; \$30,000; May 16, 1993 to May 15, 1994.

"An Improved Infrastructure for Environmental Research," The University of Kansas Research Development Fund; \$30,000; July 1, 1993 to June 30, 1994.

"Research on DBP Formation and Herbicide Removal at the Topeka, Kansas Water Treatment Plant," Black & Veatch; \$12,000; July 15, 1993 to February 12, 1994.

"Field Dissipation of Cyanazine: Runoff, Leaching, and Metabolism," DuPont Agricultural Products; \$40,000; September 1, 1993 to August 31, 1994.

"Assessment of the Use of Chlorine Dioxide at the Topeka, KS Water Treatment Plant," City of Topeka; \$18,000; April 30, 1994 to March 31, 1995.

"A Review of the Use of Coagulation in Municipal Wastewater Treatment," Midland Resources; \$5,300; September 1, 1994 to December 31, 1994.

"Atrazine Removal from the Higginsville, MO Water Supply Using Powdered Activated Carbon," Burns & McDonnell Engineering; \$5,900; March 15, 1995 to April 15, 1995.

"Development of an HPLC Method for the Analysis of Sulfonic Acid and Oxanilic Acid Metabolites of Acetochlor, Alachlor, and Metolachlor," Monsanto Co.; \$20,000; July 5, 1995 to September 30, 1995; with E. M. Thurman and D. S. Aga.

**Research Grants Funded (cont'd)**

"The Kansas-One Microfiltration Pilot-Plant Study," \$60,399, including \$9,500 from Western Resources, Inc., \$9,000 from the Electric Power Research Institute, \$7,500 in-kind contribution from Haynes Equipment Co., \$5,000 from Bartlett and West Engineers, Inc., \$5,000 from the University of Kansas Center for Research, Inc., \$3,000 in-kind contribution from the City of Topeka, KS, and \$2,000 in-kind contribution from the Kansas Department of Health & Environment; May 15, 1995 to December 31, 1995; with P. V. Adams.

"Taste and Odor in Kansas Surface Water Supplies: Causes and Cures," Kansas Water Resources Research Institute; \$36,840; March 1, 1997 to February 28, 1998.

"Taste and Odor in Midwestern Surface Water Supplies: Sources and Control," The University of Kansas, General Research Fund; \$8,139; July 1, 1997 to June 30, 1998.

"Sources and Control of Geosmin in Midwestern Water Supply Reservoirs," U.S. Geological Survey (administered through the Kansas Water Resources Research Institute); \$185,292; September 1, 1998 to August 31, 2000, extended to February 28, 2001, with D.W. Graham and F. deNoyelles, Jr.

"A Comparative Water Quality Study of Cheney Reservoir, KS," City of Wichita Water and Sewer Department; \$165,762; May 16, 1999 to November 15, 2000, extended to February 28, 2002; with V.H. Smith (PI), F. deNoyelles, and D.W. Graham.

"Determination of Carboxylic Acids in Raw and Treated Lake Mead Water: Method Development and Application," Black & Veatch (on behalf of the Southern Nevada Water Authority); \$60,000; July, 2000 to November, 2001.

"Requirements for Specialized Research Transportation Equipment: A Unique Airboat to Study Shallow Reservoirs and Rivers of the Great Plains," NSF EPSCoR; \$33,333; 2004; with J. H. Thorp, F. deNoyelles, Jr., and K Gido.

"Evaluation of Lead Service Line Lining and Coating Technologies," U.S. EPA STAR Grant to the Water Research Foundation; \$600,000 (\$550,000 to KU); with E.F. Peltier, C.D. Adams (Utah State University), and J.A. Roberson (American Water Works Association); May 1, 2011 to May 1, 2015.

"Treatment of Algal Toxins in Rivers and River-Influenced Groundwater," Water Research Foundation tailored collaboration grant to Black & Veatch; \$257,484 (including \$100,00 from the Foundation, \$100,000 from participating utilities and the Kansas Water Office, and the balance from in-kind costs for laboratory analysis and professional services); J.J. Neemann (PI), S.J. Randtke (Advisor); October 1, 2013 to April 1, 2016.

## **Presentations**

Randtke, S.J., and P.L. McCarty, "Operational Fractionation of Soluble Secondary-Effluent Organics," presented at the 50th Annual Water Pollution Control Federation Conference, Philadelphia, PA, Oct. 6, 1977.

Randtke, S.J., "The New Water Treatment Technology," presented at the 22nd Annual Public Water Supply Engineers' Conference, University of Illinois, April 22-24, 1980.

Randtke, S.J., C.P. Jepsen, and C.N. Yamaya, "Chemical Pretreatment for Activated-Carbon Adsorption," presented at the Annual Conference of the American Water Works Association, June 17, 1980, Atlanta, GA.

Thiel, C.E., M.Y. Liao, C.N. Yamaya, D.E. Johnson, and S.J. Randtke, "Removal of Soluble Organic Contaminants by Lime-Soda Softening," presented at the 72nd Annual Conference of the American Water Works Association - Illinois Section, March 18-20, 1981 (presented by C.E. Thiel).

Randtke, S.J., C.E. Thiel, M.Y. Liao, D.E. Johnson, and C.N. Yamaya, "Removal of Soluble Organic Contaminants by Lime-Soda Softening," presented at the Annual Conference of the American Water Works Association, June 7-11, 1981, St. Louis, MO.

Randtke, S.J., "Stormwater Pollutant Loadings," presented at the Second International Conference on Urban Storm Drainage, June 15-19, 1981, University of Illinois at Urbana-Champaign.

Fleischacker, S.J., D.E. Johnson, and S.J. Randtke, "Formation and Control of Organic Chlorine in Public Water Supplies," presented at the Annual Conference of the American Water Works Association, May 16-20, 1982, Miami Beach, FL (presented by S.J. Fleischacker).

Randtke, S.J., "The Removal of Organic Contaminants in Water Treatment Plants," Invited lecture, University of Missouri at Rolla, Nov. 24, 1982.

Randtke, S.J., "Treatment Alternatives for Controlling Trihalomethanes," presented at the Thirty-Fourth Annual Sanitary Engineering Conference, The University of Kansas, February 1, 1984.

Liao, M.Y., and S.J. Randtke, "Mechanisms for the Removal of Soluble Organic Contaminants by Lime Softening," presented at the Annual Conference of the American Water Works Association, June 23-27, 1985, Washington, D.C. (presented by M. Liao).

Nixon, R.R., D.D. Lane, and S.J. Randtke, "Extraction of Sulfate from Size-Differentiated Atmospheric Particulates Collected on Dry Media," presented at the Annual Meeting of the American Association for Aerosol Research, Albuquerque, NM, November 1985 (presented by D.D. Lane).

**Presentations (cont'd)**

Nixon, R.R., D.D. Lane, and S.J. Randtke, "A Comparison of Methodologies for the Extraction of Sulfate Ion from Size-Differentiated Particles," presented at the APCA-EPA Symposium on Measurement of Toxic Air Pollutants, Raleigh, NC, April 1986 (presented by D.D. Lane).

Long, B.W., and S.J. Randtke, "VOC Control Strategies for Drinking Water Supply and Groundwater Cleanup," presented at the Thirty-Seventh Annual Environmental Engineering Conference, The University of Kansas, February 4, 1987 (presented by B.W. Long).

Sinclair, J.L., S.J. Randtke, J.E. Denne, and W.C. Ghiorse, "Distribution of Bacteria and Protozoa in Glacial Buried-Valley Sediments in Northeastern Kansas," poster presentation given at the Annual Meeting of the American Society for Microbiology, Atlanta, GA, March 1-6, 1987 (presented by J.L. Sinclair).

Randtke, S.J., "The Influence of Coagulation on Organic Contaminant Removal and Activated Carbon Adsorption," invited presentation given at the Research Seminar on Coagulation, Annual Conference of the American Water Works Association, Kansas City, MO, June 14-18, 1987.

Randtke, S.J., F. deNoyelles, Jr. J.E. Denne, L.R. Hathaway, R.E. Miller, A.S. Melia, and C.E. Burkhead, "Source Control of THM Precursors," presented at the Research Symposium, Annual Conference of the American Water Works Association, Kansas City, MO, June 14-18, 1987.

Rundell, B.D., and S.J. Randtke, "In-Situ Groundwater Treatment for Iron and Manganese Removal: Fundamental, Practical, and Economical Considerations," presented at the Universities Forum, Annual Conference of the American Water Works Association, Kansas City, MO, June 14-18, 1987 (presented by B.R. Rundell).

Randtke, S.J., F. deNoyelles, Jr., C.E. Burkhead, R.E. Miller, J.E. Denne, L.R. Hathaway, and A.S. Melia, "Trihalomethane Precursors in Kansas Water Supplies: Occurrence, Source Control Measures, and Impacts on Drinking Water Treatment," presented at the Thirty-Eighth Annual Environmental Engineering Conference, The University of Kansas, February 3, 1988.

Mauch, S.C., G.A. Marotz, S.J. Randtke, D.D. Lane, R.E. Carter, Jr., M.J. Thomas, and P.G. Torrey, "Aerosol Nitrogen Inputs to a Tree/Grass Ecotone: Project Overview," presented at the EPA/APCA Symposium on the Measurement of Toxic and Related Air Pollutants, Research Triangle Park, NC, May, 1988 (presented by S.C. Mauch).

Lane, D.D., S.J. Randtke, and T.E. Baxter, "Development of a Sampling Procedure for Large Nitrogenous Particles: Preliminary Results," presented at the EPA/APCA Symposium on the Measurement of Toxic and Related Air Pollutants, Research Triangle Park, NC, May, 1988 (presented by D.D. Lane)

Lane, D.D., G.A. Marotz, S.J. Randtke, R.E. Carter, Jr., S.C. Mauch, M.J. Thomas, and P.G. Torrey, "An Overview of Dry Deposition Characterization in a Tree/Grass Ecotone," presented (by G.A. Marotz) at the Annual Meeting of the Air Pollution Control Assn., Dallas, TX, June, 1988.

**Presentations** (cont'd)

Rocha, C.A., C.S. McCool, S.J. Randtke, L.G. Schoeling, and M. Sophocleous, "The Use of Gelled Polymer Technology for Containment of Contaminated Groundwater," presented at the Conference on Hydrocarbons and Organic Chemicals in Ground Water, Houston, TX, Nov. 9-11, 1988 (presented by C.A. Rocha).

Randtke, S.J., G.G. Guinn, C.D. Adams, T.E. Baxter, and D.D. Lane, "Chemical Artifact Formation on Oiled and Greased Impaction Surfaces," presented at the EPA/APCA International Symposium on Measurement of Toxic and Related Air Pollutants, Raleigh, NC, May 2-5, 1989.

Randtke, S.J., P.G. Torrey, and D.D. Lane, "Precision of Collocated Glass-Impactor Denuder-Tube Filter-Pack (IDF) Samplers Used to Detect Chemical Gradients," presented at the EPA/APCA International Symposium on Measurement of Toxic and Related Air Pollutants, Raleigh, NC, May 2-5, 1989.

Randtke, S.J., D.D. Lane, and P.G. Torrey, "Determining Concentration Gradients of Gaseous and Particulate Species Using Slow-Response Chemical Samplers," presented at the Annual Meeting of the Air and Waste Management Association, Anaheim, CA, June 25-30, 1989.

Lane, D.D., G.A. Marotz, and S.J. Randtke, "Estimates of Dry Depositional Inputs to a Forest Canopy in Eastern Kansas," presented at the Annual Meeting of the Air and Waste Management Association, Anaheim, CA, June 25-30, 1989 (presented by G.A. Marotz).

Baxter, T.E., D.D. Lane, and S.J. Randtke, "Particle Loss and Collection Characteristics of an Impactor/Denuder/Filter-Pack System Used for Acidic Aerosol and Gas Measurement," presented at the Eighth Annual Meeting of the American Association for Aerosol Research, Reno, Nevada, October 10-13, 1989 (presented by T.E. Baxter).

Baxter, T.E., S.J. Randtke, and D.D. Lane, "Comparison of Two Impaction Plate Surfaces Used in an Impactor/Denuder Sampling Apparatus: Particle Bounce and Entrapment Properties," presented at the Eighth Annual Meeting of the American Association for Aerosol Research, Reno, Nevada, October 10-13, 1989 (presented by T.E. Baxter).

Adams, C.D., S.J. Randtke, E.M. Thurman, and R.A. Hulsey, "Atrazine and Its Degradation Products in Soil and Ground Water, and the Effectiveness of Water Treatment Processes for Their Removal," presented at the 40th Annual Environmental Engineering Conference, The University of Kansas, February, 1990 (presented by C.D. Adams).

Randtke, S.J., and D.D. Lane, "Annular Denuder Systems: Precision and Applicability to Stratospheric Aerosol Sampling," International Workshop on Stratospheric Aerosols: Measurement, Properties, and Effects, NASA Ames Research Center, March 27-30, 1990.

Randtke, S.J., "Control of Atrazine and Its Degradation Products in Drinking Water," Ciba-Geigy Corporation, Greensboro, NC, April 10, 1990.



**Presentations (cont'd)**

Adams, C.D., S.J. Randtke, and E.M. Thurman, "Atrazine and Its Degradation Products in Drinking Water," presented at the spring meeting of the Kansas Section, American Institute of Hydrology, April 13, 1990, Topeka, KS (presented by C.D. Adams).

Adams, C.D., S. J. Randtke, E.M. Thurman, and R.A. Hulsey, "Occurrence and Treatment of Atrazine Degradation Products in Drinking Water," presented at the Annual Conference, American Water Works Association, Cincinnati, OH, June 17-21, 1990 (presented by C.D. Adams).

Randtke, S.J., "Methods Intercomparison at the ROSE Site," Acid Aerosol Measurement Workshop, U.S. Environmental Protection Agency, Research Triangle Park, NC, April 10-11, 1991.

Randtke, S.J., D.D. Lane, R.K. Stevens, and J. Pinto, "Annular-Denuder- System Measurements at the R.O.S.E. Site," presented at the EPA/AWMA International Symposium on the Measurement of Toxic and Related Air Pollutants, Durham, NC, May 6-9, 1991.

Ellestad, T.G., H.M. Barnes, R.M. Kamens, S.R. McDow, J.E. Sickles, II, J.M. Waldman, S.J. Randtke, D.D. Lane, S.R. Springston, P. Koutrakis, and G. Thurston, "Acid Aerosol Measurement Method Intercomparison: An Outdoor Smog Chamber Study," presented at the EPA/AWMA International Symposium on Measurement of Toxic and Related Air Pollutants, Durham, NC, May 6-9, 1991 (presented by T.G. Ellestad).

Goold, R.R., R.G. Wyss, M.B. Horsley, D.B. Elder, L.L. Harms, W.F. Noel, and S.J. Randtke, "Enhancing Distribution System Water Quality at Water District No. 1," presented at the Annual Conference of the American Water Works Association, Philadelphia, PA, June 23-27, 1991 (presented by L.L. Harms).

Randtke, S.J., "Atrazine and Drinking Water," presented at the 9th Annual Water and the Future of Kansas Conference, Manhattan, Kansas, March 4-5, 1992.

Randtke, S.J., "Atrazine in Drinking Water: An Overview," presented at the Annual Conference of the Kansas Section, American Water Works Association, Overland Park, KS, March 25-27, 1992.

Ellestad, T.G., L.L. Hodson, S.J. Randtke, D.D. Lane, G.D. Thurston, J.M. Waldman, and P. Koutrakis, "Acid Aerosol Measurement Methods: Studies of Extraction and Analytical Effects," presented at the EPA/AWMA International Symposium on Measurement of Toxic and Related Air Pollutants, Durham, NC, May 6, 1992. (presented by T.G. Ellestad)

Shamet, K.A., E.M. Thurman, and S.J. Randtke, "Chemistry of Aquatic Humic Surfactants: Characterization and Possible Role in Enhanced Degradation of Herbicides," presented at the 6th Meeting of the International Humic Substances Society, Monopoli, Italy, September 22-25, 1992. (presented by E.M. Thurman)

**Presentations (cont'd)**

Randtke, S.J., "Atrazine and Its Degradation Products in Drinking Water," Virginia Polytechnic Institute and State University, Blacksburg, VA, February 26, 1993.

Lane, D.D., R.E. Carter, Jr., S.J. Randtke, and R.K. Stevens, "Particle and Gas Transmission Characteristics of a VAPS System and Two Different Inlets," presented at the EPA/AWMA International Symposium on Measurement of Toxic and Related Air Pollutants, Durham, NC, May, 1993. (presented by D.D. Lane)

Randtke, S.J., "Coagulation of Natural Organic Matter: An Overview of the Science and U.S. Practice," presented at the Natural Organic Matter Workshop sponsored by the American Water Works Association Research Foundation and Lyonnaise des Eaux Dumez, Chamonix, France, September 19-22, 1993.

Randtke, S.J., "Occurrence and Control of Atrazine and Its Degradation Products in Public Drinking Water Supplies," presented at the Symposium on Agricultural Nonpoint Sources of Contaminants: A Focus on Herbicides, Lawrence, KS, September 28-29, 1993.

Long, B.W., G.S. Logsdon, and S.J. Randtke, "Plant Facility Design and Operational Enhancements to Meet Future Drinking Water Standards," presented at the 44th Annual Environmental Engineering Conference, The University of Kansas, Lawrence, KS, February 2, 1994. (presented by B.W. Long)

Pancake, R.E., and S.J. Randtke, "Controlling DBPs and Herbicides at the Topeka, KS Water Treatment Plant," presented at the 11th Annual Conference on Water and the Future of Kansas, Kansas State University, Manhattan, KS, March 3, 1994. (presented by R.E. Pancake)

Randtke, S.J., R.C. Hoehn, W.R. Knocke, A.M. Dietrich, B.W. Long, and N. Wang, "A Comprehensive Assessment of DBP Precursor Removal by Enhanced Coagulation and Softening," presented at the Annual Conference of the American Water Works Association, New York City, NY, June 19-23, 1994.

Shorney, H.L., and S.J. Randtke, "Enhanced Lime Softening for Removal of Disinfection By-Product Precursors," presented at the Annual Conference of the American Water Works Association, New York City, NY, June 19-23, 1994. (presented by H.L. Shorney)

Randtke, S.J., A.A. Witt, P.V. Adams, R.E. Pancake, and C.D. Adams, "Occurrence and Control of Atrazine and Its Degradation Products in Drinking Water Supplies," presented at the Annual Conference of the American Water Works Association, New York City, NY, June 19-23, 1994.

Smith, L.A., A.M. Dietrich, P.D. Mann, P.H. Hargette, W.R. Knocke, R.C. Hoehn, and S.J. Randtke, "Effects of Enhanced Coagulation on Halogenated Disinfection Byproduct Formation Potentials," presented at the Annual Conference of the American Water Works Association, New York City, NY, June 19-23, 1994. (presented by L.A. Smith)

**Presentations (cont'd)**

Participant in the production of the instructional video: *Disinfection By-Product Precursor Control*, American Water Works Association, released in February, 1994.

S.J. Randtke, "Removal of DBP Precursors by Optimized Coagulation and Softening," presented at a Technology Transfer Conference, Reg-Neg: Coping with the Byproducts, sponsored by the AWWA Research Foundation, St. Louis, MO, August 16-18, 1994.

Shorney, H.L., and S.J. Randtke, "Improved Methods for Haloacetic Acid Analysis," presented at the Water Quality Technology Conference, sponsored by the American Water Works Association, San Francisco, CA, November 6-10, 1994. (presented by H.L. Shorney)

Hoehn, R.C., P.H. Hargette, W.R. Knocke, A.M. Dietrich, S.J. Randtke, B.W. Long, "The Influence of Raw Water Quality on the Formation of Disinfection By-Products During Drinking Water Treatment," presented at the Water Quality Technology Conference, sponsored by the American Water Works Association, San Francisco, CA, November 6-10, 1994. (presented by R.C. Hoehn)

Randtke, S.J., "Sampling and Analysis of Total and Dissolved Organic Carbon," presented at the Enhanced Coagulation Research Workshop, sponsored by the American Water Works Association, Charleston, SC, December 4-6, 1994.

Shorney, H.L., and S.J. Randtke, "DBP Precursor Removal by Enhanced Softening," presented at the Enhanced Coagulation Research Workshop, sponsored by the American Water Works Association, Charleston, SC, December 4-6, 1994. (presented by H.L. Shorney)

Randtke, S.J., H.L. Shorney, S. Sinha, R.E. Pancake, S.L. Sullivan, and B.W. Long, "Enhanced Coagulation and Softening for Compliance with the Proposed Stage-1 D/DBP Rule," presented at the 45th Annual Environmental Engineering Conference, The University of Kansas, February 1, 1995.

Randtke, S.J., "Removal of DBP Precursors Through Enhanced Coagulation," presented at the Annual Conference of the Kansas and Missouri Sections of the American Water Works Association, Kansas City, MO, April 5-7, 1995.

Shorney, H.L., and S.J. Randtke, "Disinfection By-Product Precursor Removal by Enhanced Lime Softening," presented at the Annual Conference of the Minnesota Section of the American Water Works Association, Minneapolis, MN, September 28, 1995. (presented by H.L. Shorney)

Randtke, S.J., "Occurrence and Control of Atrazine in Midwestern Surface Water Supplies," presented at the 46th Annual Environmental Engineering Conference, The University of Kansas, February 7, 1996.

**Presentations (cont'd)**

Clair, D.H., S.J. Randtke, P.V. Adams, and S. Shreve, "The Kansas-One Microfiltration Pilot-Plant Study: Membrane Treatment of Kansas River Water," presented at the 46th Annual Environmental Engineering Conference, The University of Kansas, February 7, 1996. (presented by D.H. Clair)

Shorney, H.L., S.J. Randtke, P.H. Hargette, P.D. Mann, R.C. Hoehn, W.R. Knocke, A.M. Dietrich, and B.W. Long, "The Influence of Raw Water Quality on Enhanced Coagulation and Softening for the Removal of NOM and DBP Formation Potential," presented at the Annual Conference of the American Water Works Association, Toronto, Ontario, June 23-27, 1996. (presented by H.L. Shorney)

Clair, D.H., S.J. Randtke, P.V. Adams, and S. Shreve, "Microfiltration of a High-Turbidity Surface Water with Post-Treatment by Nanofiltration and Reverse Osmosis," presented at the Annual Conference of the American Water Works Association, Toronto, Ontario, June 23-27, 1996. (presented by D.H. Clair)

Randtke, S.J., "Occurrence and Control of Atrazine in Midwestern Surface Water Supplies," presented at the Second National Drinking Water Treatment Technology Transfer Workshop, U.S. Environmental Protection Agency, Kansas City, MO, August 12-14, 1996.

Clair, D.H., S.J. Randtke, P.V. Adams, and S. Shreve, "Microfiltration of a High-Turbidity Surface Water with Post-Treatment by Nanofiltration and Reverse Osmosis," presented at the Membrane Technology Conference, American Water Works Association, New Orleans, LA, February 23-26, 1997.

Randtke, S.J., "Removal of DBP Precursors by Coagulation and Softening," presented at the symposium "Disinfection By-Products: History, State-of-the-Art, and Research Needs," co-sponsored by the U.S. Environmental Protection Agency, the University of Houston, the American Academy of Environmental Engineers, and the Texas Section of the American Water Works Association, Houston, TX, March 20-21, 1997.

Randtke, S.J., S.L. Shelton, C.J. Weber, S. Pan, D.B. Elder, and L.L. Harms, "Incorporating Chlorine Dioxide into Lime Softening Plants," presented at the 49th Annual Environmental Engineering Conference, The University of Kansas, February 3, 1999.

deNoyelles, F., Jr., S.H. Wang, J.O. Meyer, D.G. Huggins, J.T. Lennon, W.S. Kolln, and S.J. Randtke, "Water Quality Issues in Reservoirs: Some Considerations from a Study of a Large Reservoir in Kansas," presented at the 49th Annual Environmental Engineering Conference, The University of Kansas, February 3, 1999. (presented by F. deNoyelles, Jr.)

Randtke, S.J., "Water Treatment Plant Design and Operation to Meet the Enhanced Coagulation and Softening Requirements of the Stage-1 D/DBP Rule," presented as part of the Professional Development Series, sponsored by the Department of Civil and Environmental Engineering, University of Kansas, in Kansas City, MO, March 8, 1999.

**Presentations (cont'd)**

Randtke, S.J., "Fifty Years of Progress and Challenges for the Next Century," presented at the 50th Annual Environmental Engineering Conference, The University of Kansas, February 2, 2000.

Randtke, S.J., F. deNoyelles, Jr., D.W. Graham, and S. Pan, "Sources and Control of Geosmin and MIB in Midwestern Water Supply Reservoirs," 17th Annual Water and the Future of Kansas Conference, Manhattan, KS, March 1, 2000.

Randtke, S. J., "Control of Taste and Odor in Public Water Supplies," presented as part of the Professional Development Series, sponsored by the Department of Civil and Environmental Engineering, The University of Kansas, in Kansas City, MO, April 10, 2000.

Randtke, S.J., F. deNoyelles, Jr., D.W. Graham, and S. Pan, "Sources and Control of Geosmin and MIB in Midwestern Surface Water Supplies," 18th Annual Water and the Future of Kansas Conference, Manhattan, KS, March 13, 2001.

Pan, S., and S.J. Randtke, "Alternative Methods for Monitoring Geosmin and MIB," Water Quality Technology Conference, American Water Works Association, Nashville, TN, November 11-14, 2001.

Randtke, S.J., "An Improved Ion Chromatographic Method for Carboxylic Acids in Drinking Water," Water Quality Technology Conference, American Water Works Association, Nashville, TN, November 11-14, 2001.

Pan, S., S.J. Randtke, F. deNoyelles, Jr., and D.W. Graham, "Occurrence, Biodegradation, and Control of Geosmin and MIB in Midwestern Water Supplies," Proceedings of the Annual Conference of the American Water Works Association, New Orleans, LA, June 16-20, 2002. (presented by S. Pan)

Randtke, S. J., S. Pan, F. deNoyelles, Jr., D. W. Graham, V. H. Smith, and H. L. Holm, "Occurrence, Biodegradation, and Control of Geosmin in Midwestern Surface Water Supplies," 53rd Annual Environmental Engineering Conference, The University of Kansas, Lawrence, KS, February 5, 2003.

Randtke, S. J., "Water Quality Impacts on Enhanced Coagulation and Softening," Workshop on Evaluating Water Quality Impacts on Coagulation Efficiency, Annual Conference of the American Water Works Association, Anaheim, CA, June 15-19, 2003.

Randtke, S. J., F. deNoyelles, Jr., V. H. Smith, and S. Pan, "Managing Taste and Odor Problems at Cheney Reservoir and Clinton Lake," Annual Conference of the Kansas Section, American Water Works Association, Topeka, KS, September 17-19, 2003.

Randtke, S. J., "Membrane Filtration," Invited for Presentation at the Advanced School for Class III and IV Operators, Kansas Section, American Water Works Association, February 8, 2006.

**Presentations (cont'd)**

Randtke, S. J., J. Dyksen, and D. Khiari, "Unintended Consequences of Treatment Changes to Reduce Disinfection Byproducts," Invited for presentation at a Joint Annual Conference of the Missouri Water Environment Association and the Missouri Section of the American Water Works Association, Osage Beach, MO, March 28, 2006.

Freeman, S.D., and S.J. Randtke, "Overview of RO & NF System Design," Invited for presentation at the Preconference Workshop on RO & NF Design -- Computer Modeling, American Water Works Assn., San Antonio, TX, June 11, 2006 (presented by S.J. Randtke).

Tadanier, C.J., P.A. Petrey, S.J. Randtke, and H.L. Shorney-Darby, "The Arsenic Threat to Aquifer Storage and Recovery," Presented at the Annual Conference of the American Water Works Association, San Antonio, TX, June 11-15, 2006 (presented by C.J. Tadanier).

Randtke, S.J., "Membrane Filtration: Principles, Applications, and Procedures," Invited for presentation at the 87th Annual KDHE Water & Wastewater Operators School, Lawrence, KS, August 2, 2006.

Randtke, S.J., "Unintended Consequences of Treatment Changes and How to Avoid Them," Invited for presentation at the Annual Conference of the Kansas Section, American Water Works Association, Wichita, KS, September 13-15, 2006.

Randtke, S.J., "Maintaining Disinfectant Residuals: Principles, Challenges, & Solutions," Invited for presentation at the Northeast Kansas Operators Distribution System Workshop, Kansas Section, American Water Works Association, November 16, 2006.

Freeman, S.D., and S.J. Randtke, "Overview of RO & NF System Design," Invited for presentation at the Preconference Workshop on Computer Modeling in RO & NF Design, American Water Works Assn., Tampa, FL, March 18, 2007 (presented by S.D. Freeman).

Randtke, S.J., "Computer Models for Evaluating Scaling Potential and Antiscalant Use in RO and NF Systems," Invited for presentation at a Preconference Workshop on Computer Modeling in RO & NO Design, Membrane Technology Conference, American Water Works Association, Tampa, FL, March 18, 2007.

Owen, C.A., K.R. Herd, S.D. Freeman, S.J. Randtke, and B.W. Long, "Tampa Bay Water's 25-MGD Seawater Desalination Facility," Presented (by C.A. Owen) at the Membrane Technology Conference, American Water Works Association, Tampa, FL, March 18-21, 2007.

Randtke, S.J., S.D. Freeman, and B.W. Long, "Membrane Systems for Water Treatment: Process Design Fundamentals," Presented as part of the Professional Development Series sponsored by the Department of Civil, Environmental, and Architectural Engineering, The University of Kansas, in Kansas City, MO, April 16, 2007.

**Presentations (cont'd)**

Neemann, J., J. Edwards-Brandt, H. Shorney-Darby, M. Waer, and S. Randtke, "Enhanced Precursor Removal," Presented (by J. Neemann) at the 58th Annual Environmental Engineering Conference, The University of Kansas, Lawrence, KS, February 6, 2008.

Randtke, S.J., "Maintaining Disinfectant Residuals: Principles, Challenges, & Solutions," Invited for presentation at the Advanced School for Class III and IV Operators, Kansas Section of the American Water Works Association, February 14, 2008.

Randtke, S. J., "Managing Taste and Odor Problems at Water Treatment Plants," Invited for presentation at the Taste & Odor Workshop, Kansas Biological Survey, Lawrence, Kansas, July 31, 2008.

Randtke, S.J., "Maintaining Disinfectant Residuals: Principles, Challenges, & Solutions," Invited for presentation at the 89th Annual Water and Wastewater Operators School, The University of Kansas, Lawrence, Kansas. August 5-8, 2008.

Randtke, S. J., "Managing Taste and Odor Problems," Invited for presentation at the Advanced Water Operator Workshop, Kansas Section of the American Water Works Association, Lawrence, Kansas, February 12, 2009.

Randtke, S. J., "Alternative Disinfectants for Drinking Water," guest lecture in CE 576: Municipal Water Supply and Wastewater Treatment, University of Kansas, March 25, 2009.

Randtke, S. J., "Chlorine Chemistry Revisited: Implications for Design & Operation," Presented as part of the Professional Development Series sponsored by the Department of Civil, Environmental, and Architectural Engineering, University of Kansas, in Kansas City, MO, April 20, 2009.

Randtke, S. J., "Chlorine Chemistry Revisited," Joint Conference, Kansas Section AWWA and Kansas Water Environment Association, Topeka, Kansas, September 1-3, 2009.

Randtke, S.J., "A Deeper Look at Lime Softening Chemistry," Joint Conference, Kansas Section AWWA and Kansas Water Environment Association, Topeka, Kansas, Aug. 31 – Sept. 2, 2010.

Randtke, S.J., "Drinking Water Treatment Principles," Engineers Without Borders, Kansas City Chapter, October 18, 2010.

Graham, J.L., K.A. Loftin, C.D. Adams, and S.J. Randtke, "Cyanobacterial Blooms: Tastes, Odors, and Toxins," Invited for presentation at the 61st Annual Environmental Engineering Conference, University of Kansas, Lawrence, KS, April 14, 2011. (presented by J.L. Graham)

Graham, J.L., K.A. Loftin, C.D. Adams, and S.J. Randtke, "Cyanobacterial Blooms: Toxins, Tastes, and Odors," Presented at the Great Plains Bioassessment Symposium sponsored by the Great Plains Limnological Society, Lawrence, Kansas, August 10-11, 2011. (presented by J.L. Graham)

**Presentations (cont'd)**

Graham, J.L., K.A. Loftin, C.D. Adams, and S.J. Randtke, "Cyanobacterial Blooms: Toxins, Tastes, and Odors," Presented at the Water and the Future of Kansas Conference, Topeka, Kansas, September 30, 2011. (presented by J.L. Graham)

Randtke, S.J., "Hydraulic Fracturing of Natural Gas Reservoirs: Potential Impacts on Drinking Water Quality and Availability," Joint Conference, Kansas Section AWWA and Kansas Water Environment Association, Topeka, Kansas, August 31, 2011.

Randtke, S.J., "A Deeper Look at Lime Softening Chemistry," Kansas Section AWWA, Northeast Operator Training Committee, Advanced Operator School, Olathe, Kansas, February 8, 2012.

Randtke, S.J., "Hydraulic Fracturing of Natural Gas Reservoirs: Potential Impacts on Drinking Water Quality and Availability," Kansas Section AWWA, Northeast Operator Training Committee, Advanced Operator School, Olathe, Kansas, February 8, 2012.

Graham, J.L., K.A. Loftin, C.D. Adams, and S.J. Randtke, "Cyanobacterial Blooms: Toxins, Tastes, and Odors," Presented at the KU Environmental Security conference (Environmental Security: Academic and Military Perspectives), Lawrence, Kansas, April 23-24, 2012. (presented by J.L. Graham)

Randtke, S.J., C.D. Adams, and J.J. Neemann, "Controlling Algal Metabolites in Drinking Water," Kansas River Algae Workshop, Kansas Water Office, Topeka, Kansas, May 15, 2012.

Neemann, J.J., S.J. Randtke, and C.D. Adams, "Oxidation of Algal Metabolites and Tools for Operators," Kansas River Algae Workshop, Kansas Water Office, Topeka, Kansas, May 15, 2012. (presented by J.J. Neemann)

Randtke, S.J., J.J. Neemann, and C.D. Adams, "Removing Algal Toxins From Drinking Water," 93rd Annual Water & Wastewater Operators School sponsored by the Kansas Department of Health and Environment and the University of Kansas, Lawrence, Kansas, August 2, 2012.

Neemann, J.J., S.J. Randtke, and C.D. Adams, "Removing Algal Toxins From Drinking Water," 4th Annual Joint Conference of the Kansas Water Environment Association and the Kansas Section of the American Water Works Association, Topeka, Kansas, August 28-30, 2012. (presented by J.J. Neemann)

Breault, Z.A., R.F. Lane, E.F. Peltier, C.D. Adams, and S.J. Randtke, "Evaluation of Lead Service Line Linings and Coatings," 62nd Annual Environmental Engineering Conference, University of Kansas, Lawrence, Kansas, April 18, 2012. (poster presentation by Z.A. Breault)

Breault, Z.A., E.F. Peltier, C.D. Adams, and S.J. Randtke, "Evaluation of Lead Service Line Linings and Coatings," Annual Conference of the American Water Works Association, Dallas, Texas, June 10-14, 2012. (poster presentation by Z.A. Breault)



**Presentations (cont'd)**

Breault, Z.A., R.F. Lane, E.F. Peltier, C.D. Adams, and S.J. Randtke, "Evaluation of Lead Service Line Linings and Coatings," 4th Annual Joint Conference of the Kansas Water Environment Association and the Kansas Section of the American Water Works Association, Topeka, Kansas, August 28-30, 2012. (poster presentation by Z.A. Breault)

Randtke, S.J., C.D. Adams, E.F. Peltier, R.F. Lane, Z.A. Breault, R.E. Carter, Jr., J.A. Roberson, and J.D. Cuppett, "Evaluation of Lead Service Line Lining and Coating Technologies," U.S. EPA Research Forum and STAR-Grant Progress Review Meeting, Arlington, Virginia, April 10-11, 2013.

Lane, R., C. Adams, S. Randtke, E. Peltier, and R. Carter, Jr., "Leaching of BPA and Related Compounds from Epoxy Coatings into Drinking Water," poster presentation (by R.F. Lane) at the 63rd Annual Environmental Engineering Conference, University of Kansas, Lawrence, Kansas, April 17, 2013. (received first place in the poster competition sponsored by the Kansas Section of the American Water Works Association)

Randtke, S.J., E.F. Peltier, R.F. Lane, R.E. Carter, Jr., Z.A. Breault, C.D. Adams, and J.A. Roberson, "Lead Service Line Lining and Coating Technologies," Annual Conference of the American Water Works Association, Denver, Colorado, June 9-13, 2013.

Lane, R.F., C.D. Adams, R.E. Carter, Jr., S.J. Randtke, E.F. Peltier, and J.A. Roberson, "Leaching of BPA And Related Compounds From Epoxy Coatings," presented (by R.F. Lane) at the Annual Conference of the American Water Works Association, Denver, Colorado, June 9-13, 2013.

Lane, R.F., C.D. Adams, S.J. Randtke, E.F. Peltier, and R.E. Carter, Jr., "Leaching of BPA and Related Compounds from Epoxy Coatings into Drinking Water," presented (by R.F. Lane) at the Fresh Ideas Poster Session, Annual Conference & Exposition, American Water Works Association, Denver, Colo., June 9-13, 2013. (received third place in the poster competition)

Breault, Z.A., E.F. Peltier, S.J. Randtke, R.E. Carter, Jr., R.F. Lane, and C.D. Adams, "An Evaluation of Lead Service Line Linings and Coatings and Their Effect on the Inorganic Chemistry of Drinking Water," presented (by Z.A. Breault) at the Annual Conference of the American Water Works Association, Denver, Colorado, June 9-13, 2013.

Randtke, S.J., R.F. Lane, Z.A. Breault, C.D. Adams, E.F. Peltier, R.E. Carter, Jr., and J.A. Roberson, "Water Service Line Lining And Coating Technologies," 5th Annual Joint Conference of the Kansas Water Environment Association and the Kansas Section of the American Water Works Association, Wichita, Kansas, August 27-29, 2013.

Lane, R.F., C.D. Adams, S.J. Randtke, R.E. Carter, Jr., E.F. Peltier, Z.A. Breault, and J.A. Roberson. Leaching and Degradation of Bisphenols, BADGE and BFDGE from Epoxy Coatings in Water Pipes. Presented (by C.D. Adams) at the Water Quality Technology Conference, American Water Works Association, Long Beach, California, November 3-7, 2013.

## Publications

1. Jacobs, J.K., D.J. Ringel, J.M. Toy, and S.J. Randtke, "Second Project Report on the Los Angeles Water Recycling Project, Playa del Rey: Development of a Program to Inject Reclaimed Water into a Domestic Aquifer," SED Report No. 76-14, City of Los Angeles, Department of Water and Power, May, 1976.
2. Randtke, S.J., "Occurrence and Removal Characteristics of Soluble Organic Nitrogen in Municipal Secondary Effluent," Ph.D. Dissertation, Stanford University, 1977.
3. Randtke, S.J., and P.L. McCarty, "Variations in Nitrogen and Organics in Wastewaters," *J. Environmental Engineering Division, ASCE*, 103 (EE4), 539, August, 1977.
4. Randtke, S.J., G.F. Parkin, J.V. Keller, J.O. Leckie, and P.L. McCarty, "Soluble Organic Nitrogen: Characteristics and Removal," Report 600/2-78-030, Environmental Protection Technology Series, Office of Research and Development, U.S. Environmental Protection Agency, March, 1978.
5. Randtke, S.J., "Discussion of 'Improved Performance of Activated Carbon by Pre-Ozonation,'" *Jour. Water Pollution Control Federation*, 50 (11), 2802, November, 1978.
6. Randtke, S.J., and P.L. McCarty, "Removal of Soluble Secondary-Effluent Organics," *J. Environmental Engineering Division, ASCE*, 105 (EE4), 727, August, 1979.
7. Randtke, S.J., "Unsafe Use of Acid Leads to Sewer Tragedy," *Deeds & Data (WPCF Highlights)* 16 (10), 11, October, 1979. (Reprinted in *Concrete Pipe News*, 31 (6), 118, December, 1979).
8. Randtke, S.J., "The New Water Treatment Technology," Proceedings of the 22nd Annual Public Water Supply Engineers' Conference, The University of Illinois, April 22-24, 1980.
9. Randtke, S.J., Technical Editor, "Engineering for Water Supply in a New and Developing Regulatory Climate," Proceedings of the 22nd Annual Public Water Supply Engineers' Conference, The University of Illinois, April 22-24, 1980.
10. Randtke, S.J., C.P. Jepsen, and C.N. Yamaya, "Chemical Pretreatment for Activated Carbon Adsorption," Proceedings of the Annual Conference of the American Water Works Association, Atlanta, GA, June 15-19, 1980.
11. Rittmann, B.E., and S.J. Randtke, "Discussion of 'The Role of Adsorption in Biologically Extended Activated Carbon Columns,'" *Jour. Water Pollution Control Federation*, 52 (11), 2816, November, 1980.
12. Randtke, S.J., Technical Editor, "New Directions for Water Supply Design and Operation," Proceedings of the 23rd Annual Public Water Supply Engineers' Conference, The University of Illinois, April 21-23, 1981.

**Publications** (cont'd)

13. Randtke, S.J., C.E. Thiel, M.Y. Liao, D.E. Johnson, and C.N. Yamaya, "Removal of Soluble Organic Contaminants by Lime-Soda Softening," Proceedings of the Annual Conference of the American Water Works Association, June 7-11, 1981, St. Louis, MO.
14. Randtke, S.J., "Stormwater Pollutant Loadings," Proceedings of the Second International Conference on Urban Storm Drainage, The University of Illinois at Urbana-Champaign, June 15-19, 1981.
15. Randtke, S.J., and C.P. Jepsen, "Chemical Pretreatment for Activated-Carbon Adsorption," *Jour. American Water Works Association*, 73 (8), 411-419, August, 1981.
16. Randtke, S.J., and C.P. Jepsen, "The Effects of Salts on Activated-Carbon Adsorption," *Jour. American Water Works Association*, 74 (2), 84-93, February, 1982.
17. Randtke, S.J., C.E. Thiel, M.Y. Liao, and C.N. Yamaya, "Removing Soluble Organic Contaminants by Lime-Soda Softening," *Jour. American Water Works Association*, 74 (4), 192-202, April, 1982. (awarded the 1983 AWWA Publications Award)
18. Randtke, S.J., Technical Editor, "Unconventional Water Treatment," Proceedings of the 24th Annual Public Water Supply Engineers' Conference, The University of Illinois, April 27-29, 1982.
19. Fleischacker, S.J., D.E. Johnson, and S.J. Randtke, "Formation and Control of Organic Chlorine in Public Water Supplies," Proceedings of the Annual Conference of the American Water Works Association, May 16-20, 1982, Miami Beach, FL.
20. Randtke, S.J., "New Technology for Drinking Water Treatment," *Water Engineering and Management*, 129 (8), 38-44, July, 1982.
21. Fleischacker, S.J., and S.J. Randtke, "Formation of Organic Chlorine in Public Water Supplies," *Jour. American Water Works Association*, 75 (3), 132-138, March, 1983.
22. Randtke, S.J., "Discussion of 'Determination of Total Kjeldahl Nitrogen and Total Phosphorus in Surface Waters and Wastewaters,'" *Jour. Water Pollution Control Federation*, 55 (4), 427-428, April, 1983.
23. Randtke, S.J., Technical Editor, "Engineering for Water Supply in Today's Economy," Proceedings of the 25th Annual Public Water Supply Engineers' Conference, The University of Illinois, April, 1983.
24. Johnson, D.E., and S.J. Randtke, "Removal of Non-Volatile Organic Chlorine and Its Precursors by Coagulation and Softening," *Jour. American Water Works Association*, 74 (5), 249-253, May, 1983.

**Publications** (cont'd)

25. Randtke, S.J., and V.L. Snoeyink, "Evaluation of GAC Adsorptive Capacity," *Jour. American Water Works Association*, 75 (8), 406-413, August, 1983.
26. Water Pollution Control Federation (WPCF), *Water Reuse: Manual of Practice SM-3*, Technical Practice Committee, Task Force on Water Reuse, WPCF, Washington, D.C., 1983. (contributing author, reviewer, and committee member)
27. Randtke, S.J., "Treatment Alternatives for Controlling Trihalomethanes," Proceedings of the Thirty-Fourth Annual Sanitary Engineering Conference, The University of Kansas, February 1, 1984, 27 pp.
28. Randtke, S.J., and R.A. Larson, "Comment on 'Investigation of Folin- Ciocalteau (sic) Phenol Reagent for the Determination of Polyphenolic Substances in Natural Water,'" *Water Research*, 18 (12), 1597-1601, December, 1984.
29. Liao, M.Y., and S.J. Randtke, "Mechanisms for the Removal of Soluble Organic Contaminants by Lime Softening," Proceedings of the Annual Conference of the American Water Works Association, June 23-27, 1985, Washington, D.C.
30. Liao, M.Y., and S.J. Randtke, "Removing Fulvic Acid by Lime Softening," *Jour. American Water Works Association*, 77 (8), 78-88, August, 1985.
31. Randtke, S.J., F. deNoyelles, Jr., D.P. Young, P.E. Heck, and R.R. Tedlock, "A Critical Assessment of the Influence of Management Practices on Water Quality, Water Treatment, and Sport Fishing in Multipurpose Reservoirs in Kansas," Project Completion Report, Kansas Water Resources Research Institute, The University of Kansas, Contribution No. 252, September, 1985, 171 pp.
32. Nixon, R.R., D.D. Lane, and S.J. Randtke, "Extraction of Sulfate from Size-Differentiated Atmospheric Particulates Collected on Dry Media," Transactions of the Annual Meeting of the American Association for Aerosol Research, Albuquerque, NM, November, 1985.
33. Liao, M.Y., and S.J. Randtke, "Predicting the Removal of Soluble Organic Contaminants by Lime Softening," *Water Research*, 20 (1), 27-35, January, 1986.
34. Nixon, R.R., D.D. Lane, and S.J. Randtke, "Comparison of Methodologies for the Extraction of Sulfate Ion from Size-Differentiated Particles," *Transactions of the APCA-EPA Symposium on Measurement of Toxic and Related Air Pollutants*, Raleigh, NC, April, 1986.
35. Denne, J.E., S.J. Randtke, and L.R. Hathaway, "Geological and Geochemical Factors Influencing Water Quality in a Buried Valley in Northeastern Kansas: Report of Year 1 Results," Project Completion Report, Kansas Water Resources Research Institute, The University of Kansas, Contribution No. 253, June, 1986, 53 pp.

**Publications** (cont'd)

36. Randtke, S.J., F. deNoyelles, Jr., and C.E. Burkhead, "Trihalomethane Precursors in Kansas Lakes: Sources and Control (Report of Year One Results)," Project Completion Report, Kansas Water Resources Research Institute, The University of Kansas, Contribution No. 255, January, 1987, 114 pp.
37. Long, B.W., and S.J. Randtke, "VOC Control Strategies for Drinking Water Supply and Groundwater Cleanup," Proceedings of the Thirty- Seventh Annual Environmental Engineering Conference, The University of Kansas, February 4, 1987, pp. 203-229.
38. Randtke, S.J., and D.D. Lane, "Discussion of 'Modified Approach to Evaluate Column Test Data'," *Journal of Environmental Engineering, ASCE*, 113 (2), 447, April, 1987.
39. Randtke, S.J., "The Influence of Coagulation on Organic Contaminant Removal and Activated Carbon Adsorption," Proceedings of the Research Seminar on Coagulation, Annual Conference of the American Water Works Association, Kansas City, MO, June 14-18, 1987.
40. Randtke, S.J., F. deNoyelles, Jr., J.E. Denne, L.R. Hathaway, R.E. Miller, A.S. Melia, and C.E. Burkhead, "Source Control of THM Precursors," Proceedings of the Annual Conference of the American Water Works Association, Kansas City, MO, June 14-18, 1987, pp. 1545-1575.
41. Rundell, B.D., and S.J. Randtke, "In-Situ Groundwater Treatment for Iron and Manganese Removal: Fundamental, Practical, and Economical Considerations," Proceedings of the Universities Forum, Annual Conference of the American Water Works Association, Kansas City, MO, June 14-18, 1987, pp. 513-541.
42. Lane, D.D., S.P. Hamburg, G.A. Marotz, C.E. Martin, and S.J. Randtke, "Aerosol Nitrogen Inputs to a Tree/Grass Ecotone," First Year Progress Report to the U.S. Environmental Protection Agency on Project #R812280-01-0, October, 1987.
43. Baxter, T.E., D.D. Lane, and S.J. Randtke, "Initial Performance Testing of a Glass Jet Impactor Designed for Use in Dry Acid Deposition Sampling," Proceedings of the Annual Meeting of the American Association for Aerosol Research, Seattle, WA, 1987.
44. Denne, J.E., S.J. Randtke, L.R. Hathaway, and A.S. Melia, "Geological and Geochemical Factors Influencing Water Quality in a Buried Valley in Northeastern Kansas," Project Completion Report, Kansas Water Resources Research Institute, The University of Kansas, Contribution No. 265, December, 1987, 204 pp.
45. Randtke, S.J., F. deNoyelles, Jr., and C.E. Burkhead, "Trihalomethane Precursors in Kansas Lakes: Sources and Control," Project Completion Report, Kansas Water Resources Research Institute, The University of Kansas, Contribution No. 266, December, 1987, 188 pp.

**Publications** (cont'd)

46. Randtke, S.J., F. deNoyelles, Jr., C.E. Burkhead, R.E. Miller, J.E. Denne, L.R. Hathaway, and A.S. Melia, "Trihalomethane Precursors in Kansas Water Supplies: Occurrence, Source Control Measures, and Impacts on Drinking Water Treatment," Proceedings of the Thirty-Eighth Annual Environmental Engineering Conference, The University of Kansas, February 3, 1988, pp. 47-89.
47. Mauch, S.C., G.A. Marotz, S.J. Randtke, D.D. Lane, R.E. Carter, Jr., M.J. Thomas, and P.G. Torrey, "Aerosol Nitrogen Inputs to a Tree/Grass Ecotone: Project Overview," Proceedings of the EPA/APCA Symposium on the Measurement of Toxic and Related Air Pollutants, Research Triangle Park, NC, May, 1988, pp. 200-215.
48. Lane, D.D., S.J. Randtke, and T.E. Baxter, "Development of a Sampling Procedure for Large Nitrogenous Particles: Preliminary Results," Proceedings, EPA/APCA Symposium on Measurement of Toxic and Related Air Pollutants, Research Triangle Park, NC, May, 1988, pp. 699-715.
49. Lane, D.D., G.A. Marotz, S.J. Randtke, R.E. Carter, Jr., S.C. Mauch, M.J. Thomas, and P.G. Torrey, "An Overview of Dry Deposition Characterization in a Tree/Grass Ecotone," Proceedings of the Annual Meeting of the Air Pollution Control Association, Dallas, TX, June, 1988.
50. Randtke, S.J., "Organic Contaminant Removal by Coagulation and Related Process Combinations," *Jour. Amer. Water Works Assn.*, 80 (5), 40-56, May, 1988.
51. Rocha, C.A., C.S. McCool, S.J. Randtke, L.G. Schoeling, and M. Sophocleous, "The Use of Gelled Polymer Technology for Containment of Contaminated Groundwater," Conference Proceedings, Petroleum Hydrocarbons and Organic Chemicals in Ground Water, Houston, TX, Nov. 9-11, 1988.
52. Randtke, S.J., G.G. Guinn, C.D. Adams, T.E. Baxter, and D.D. Lane, "Chemical Artifact Formation on Oiled and Greased Impaction Surfaces," Proceedings of the EPA/APCA International Symposium on Measurement of Toxic and Related Air Pollutants, Raleigh, NC, May 2-5, 1989.
53. Randtke, S.J., P.G. Torrey, and D.D. Lane, "Precision of Collocated Glass-Impactor Denuder-Tube Filter-Pack (IDF) Samplers Used to Detect Chemical Gradients," Proceedings of the EPA/APCA International Symposium on Measurement of Toxic and Related Air Pollutants, Raleigh, NC, May 2-5, 1989.
54. Randtke, S.J., D.D. Lane, and T.E. Baxter, "Development of a Sampling Procedure for Large Nitrogen- and Sulfur-Bearing Aerosols," Final Report on Cooperative Agreement CR-814613-01-0, U.S. Environmental Protection Agency, Environmental Monitoring System Laboratory, Research Triangle Park, NC, June, 1989.

**Publications** (cont'd)

55. Randtke, S.J., D.D. Lane, and P.G. Torrey, "Determining Concentration Gradients of Gaseous and Particulate Species Using Slow-Response Chemical Samplers," Proceedings of the Annual Meeting of the Air and Waste Management Association, Anaheim, CA, June 25-30, 1989.
56. Lane, D.D., G.A. Marotz, and S.J. Randtke, "Estimates of Dry Depositional Fluxes to a Forest Canopy in Eastern Kansas," Proceedings of the Annual Meeting of the Air and Waste Management Association, Anaheim, CA, June 25-30, 1989.
57. AWWA Coagulation Committee, "Coagulation as an Integrated Water Treatment Process," *Jour. Amer. Water Works Assn.*, 81 (10), 72-78, October, 1989.
58. Adams, C.D., S.J. Randtke, E.M. Thurman, and R.A. Hulsey, "Atrazine and Its Degradation Products in Soil and Ground Water, and the Effectiveness of Water Treatment Processes for Their Removal," Proceedings of the 40th Annual Environmental Engineering Conference, The University of Kansas, February, 1990.
59. Miller, R.E., S.J. Randtke, L.R. Hathaway, and J.E. Denne, "Organic Carbon and Trihalomethane Formation Potential in Kansas Ground Waters," *Jour. Amer. Water Works Assn.*, 82 (3), 49-62, March, 1990.
60. Sinclair, J.L., S.J. Randtke, J.E. Denne, L.R. Hathaway, and W.C. Ghiorse, "Survey of Microbial Populations in Buried-Valley Aquifer Sediments in Northeastern Kansas," *Ground Water*, 28 (3), 369-377, May-June, 1990.
61. Adams, C.D., S.J. Randtke, E.M. Thurman, and R.A. Hulsey, "Occurrence and Treatment of Atrazine Degradation Products in Drinking Water," Proceedings of the Annual Conference of the American Water Works Association, Cincinnati, OH, June 17-21, 1990.
62. Miller, R.E., S.J. Randtke, L.R. Hathaway, and J.E. Denne, "A Survey of Organic Carbon and Trihalomethane Formation Potential in Kansas Ground Waters," Kansas Geological Survey, Chemical Quality Series 12, 1991.
63. Adams, C.D., and Randtke, S.J., "Occurrence and Control of Atrazine Degradation Products in Kansas Drinking Water Supplies, Report of Year 1 Results (Ozonation of Atrazine: A Kinetic Model and Byproduct Formation in Natural Waters)," Project Completion Report, Kansas Water Resources Research Institute, The University of Kansas, Contribution No. 290, May, 1991, 242 pp.
64. Randtke, S.J., D.D. Lane, R.K. Stevens, and J.P. Pinto, "Annular-Denuder-System Measurements at the R.O.S.E. Site," Proceedings, EPA/AWMA International Symposium on Measurement of Toxic and Related Air Pollutants, Durham, NC, May 6-9, 1991.

**Publications** (cont'd)

65. Ellestad, T.G., H.M. Barnes, R.M. Kamens, S.R. McDow, J.E. Sickles, II, J.M. Waldman, S.J. Randtke, D.D. Lane, S.R. Springston, P. Koutrakis, and G. Thurston, "Acid Aerosol Measurement Method Intercomparison: An Outdoor Smog Chamber Study," Proceedings of the EPA/AWMA International Symposium on Measurement of Toxic and Related Air Pollutants, Durham, NC, May 6-9, 1991.
66. Randtke, S.J., "Impacts of Row Crop Pollutants on Drinking Water Supplies and Treatment Systems," Proc. Conf. on the Status of Row Crop Pollution Control Practices, Kansas State University, Manhattan, KS, June 20, 1991.
67. Goold, R.R., R.G. Wyss, M.B. Horsley, D.B. Elder, L.L. Harms, W.F. Noel, S.J. Randtke, "Enhancing Distribution System Water Quality at Water District No. 1," Proceedings of the Annual Conference of the American Water Works Assn., Philadelphia, PA, June 23-27, 1991.
68. Randtke, S.J., and Lane, D.D., "Annular Denuder Systems: Precision and Applicability to Stratospheric Sampling," Proceedings of the International Workshop on Stratospheric Aerosols: Measurement, Properties, and Effects, NASA Conference Publication 3114, Ames Research Center, 1991.
69. Randtke, S.J., "Atrazine and Drinking Water," Proceedings, 9th Annual Water and the Future of Kansas Conference, Manhattan, KS, March 4-5, 1992.
70. Witt, A.A., and S.J. Randtke, "Occurrence and Control of Atrazine Degradation Products in Kansas Drinking Water Supplies, Report of Year 2 Results, Part A: Full-Scale Plant Sampling and Bench-Scale Studies," Project Completion Report, Kansas Water Resources Research Institute, The University of Kansas, Contribution No. 297-A, May, 1992, 125 pp.
71. Adams, P.V., and S.J. Randtke, "Occurrence and Control of Atrazine Degradation Products in Kansas Drinking Water Supplies, Report of Year 2 Results, Part B: Atrazine Removal from Drinking Water by Point-of-Use Activated Carbon Filters," Project Completion Report, Kansas Water Resources Research Institute, The University of Kansas, Contribution No. 297-B, May, 1992, 155 pp.
72. Shamet, K.A., E.M. Thurman, and S.J. Randtke, "Chemistry of Aquatic Humic Surfactants: Characterization and Possible Role in Degradation of Herbicides," Proceedings, 6th International Meeting of the International Humic Substances Society, Monopoli, Italy, September 22-25, 1992.
73. Adams, C.D., and S.J. Randtke, "Removal of Atrazine from Drinking Water by Ozonation," *Jour. American Water Works Assn.*, 84 (9), 91-102, September, 1992. (awarded the 1994 AWWA Research Division Best Paper Award)



**Publications** (cont'd)

74. Adams, C.D., and S.J. Randtke, "Ozonation Byproducts of Atrazine in Synthetic and Natural Waters," *Environmental Science & Technology*, 26 (11), 2218-2227, October, 1992.
75. Ellestad, T.G., L.L. Hodson, S.J. Randtke, D.D. Lane, G.D. Thurston, J.M. Waldman, and P. Koutrakis, "Acid Aerosol Measurement Methods: Studies of Extraction and Analytical Effects," Proceedings of the EPA/AWMA International Symposium on the Measurement of Toxic and Related Air Pollutants, Durham, NC, May 3-8, 1992.
76. Lane, D.D., S.J. Randtke, R.E. Carter, Jr., and R.K. Stevens, "Particle and Gas Transmission Characteristics of a VAPS System and Three Different Inlets," Proceedings of the EPA/AWMA International Symposium on the Measurement of Toxic and Related Air Pollutants, Durham, NC, May, 1993.
77. Hulsey, R.A., S.J. Randtke, C.D. Adams, B.W. Long, "Atrazine Removal Using Ozone and GAC: A Pilot Plant Study," *Ozone Science & Engineering*, 15 (3), 227-244 (1993).
78. Randtke, S.J., "Coagulation of Natural Organic Matter: An Overview of the Science and U.S. Practice," in *Natural Organic Matter: Origin, Characterization, and Removal*, Proceedings of the Workshop on Natural Organic Matter sponsored by the American Water Works Association Research Foundation and Lyonnaise des Eaux Dumez, Chamonix, France, September 19-22, 1993.
79. Long, B.W., G.S. Logsdon, and S.J. Randtke, "Plant Facility Design and Operational Enhancements to Meet Future Drinking Water Standards," Proceedings of the 44th Annual Environmental Engineering Conference, The University of Kansas, Lawrence, KS, February 2, 1994.
80. Randtke, S.J., R.C. Hoehn, W.R. Knocke, A.M. Dietrich, B.W. Long, and N. Wang, "A Comprehensive Assessment of DBP Precursor Removal by Enhanced Coagulation and Softening," Proceedings of the Annual Conference of the American Water Works Association, New York City, NY, June 19-23, 1994.
81. Shorney, H.L., and S.J. Randtke, "Enhanced Lime Softening for Removal of Disinfection By-Product Precursors," Proceedings of the Annual Conference of the American Water Works Association, New York City, NY, June 19-23, 1994.
82. Randtke, S.J., A.A. Witt, P.V. Adams, R.E. Pancake, and C.D. Adams, "Occurrence and Control of Atrazine and Its Degradation Products in Drinking Water Supplies," Proceedings of the Annual Conference of the American Water Works Association, New York City, NY, June 19-23, 1994.

**Publications** (cont'd)

83. Smith, L.A., A.M. Dietrich, P.D. Mann, P.H. Hargette, W.R. Knocke, R.C. Hoehn, and S.J. Randtke, "Effects of Enhanced Coagulation on Halogenated Disinfection Byproduct Formation Potentials," Proceedings of the Annual Conference of the American Water Works Association, New York City, NY, June 19-23, 1994.
84. Shorney, H.L., and S.J. Randtke, "Improved Methods for Haloacetic Acid Analysis," Proceedings of the Water Quality Technology Conference, sponsored by the American Water Works Association, San Francisco, CA, November 6-10, 1994.
85. Hoehn, R.C., P.H. Hargette, W.R. Knocke, A.M. Dietrich, S.J. Randtke, B.W. Long, "The Influence of Raw Water Quality on the Formation of Disinfection By-Products During Drinking Water Treatment," Proceedings of the Water Quality Technology Conference, sponsored by the American Water Works Association, San Francisco, CA, November 6-10, 1994.
86. Jacangelo, J.G., J. DeMarco, D.M. Owen, and S.J. Randtke, "Selected Processes for Removing NOM: An Overview," *Jour. American Water Works Assn.*, 87 (1), 64-77 (1995).
87. Randtke, S.J., H.L. Shorney, S. Sinha, R.E. Pancake, S.L. Sullivan, and B.W. Long, "Enhanced Coagulation and Softening for Compliance with the Proposed Stage-1 D/DBP Rule," Proceedings of the 45th Annual Environmental Engineering Conference, The University of Kansas, February 1, 1995.
88. Randtke, S.J., "Occurrence and Control of Atrazine in Midwestern Surface Water Supplies," Proceedings of the 46th Annual Environmental Engineering Conference, The University of Kansas, February 7, 1996.
89. Clair, D.H., S.J. Randtke, P.V. Adams, and S. Shreve, "The Kansas-One Microfiltration Pilot-Plant Study: Membrane Treatment of Kansas River Water," Proceedings of the 46th Annual Environmental Engineering Conference, The University of Kansas, February 7, 1996.
90. Shorney, H.L., S.J. Randtke, P.H. Hargette, P.D. Mann, R.C. Hoehn, W.R. Knocke, A.M. Dietrich, and B.W. Long, "The Influence of Raw Water Quality on Enhanced Coagulation and Softening for the Removal of NOM and DBP Formation Potential," Proceedings of the Annual Conference of the American Water Works Association, Toronto, Ontario, June 23-27, 1996.
91. Clair, D.H., S.J. Randtke, P.V. Adams, and S. Shreve, "Microfiltration of a High-Turbidity Surface Water with Post-Treatment by Nanofiltration and Reverse Osmosis," Proceedings of the Annual Conference of the American Water Works Association, Toronto, Ontario, June 23-27, 1996.

**Publications** (cont'd)

92. Randtke, S.J., "Occurrence and Control of Atrazine in Midwestern Surface Water Supplies," Proceedings of the Second National Drinking Water Treatment Technology Transfer Workshop, U.S. Environmental Protection Agency, Kansas City, MO, August 12-14, 1996. (reprinted from publication 87)
93. Clair, D.H., S.J. Randtke, P.V. Adams, and S. Shreve, "Microfiltration of a High-Turbidity Surface Water with Post-Treatment by Nanofiltration and Reverse Osmosis," Proceedings of the Membrane Technology Conference, American Water Works Association, New Orleans, LA, February 23-26, 1997.
94. Randtke, S.J., "DBP Precursor Removal by Coagulation and Precipitative Softening," Proceedings of the Disinfection By-Products Symposium: History, State of the Art, and Research Needs, co-sponsored by the U.S. Environmental Protection Agency, the University of Houston, the American Academy of Environmental Engineers, and the Texas Section of the American Water Works Association, Houston, TX, March 20-21, 1997.
95. Clair, D.H., S.J. Randtke, and P.V. Adams, "Microfiltration of a Highly Turbid Surface Water with Post-Treatment by Nanofiltration and Reverse Osmosis," Final Project Report to the Electric Power Research Institute, Community Environmental Center, St. Louis, MO, January, 1998, 344 pp.
96. Randtke, S.J., S.L. Shelton, C.J. Weber, S. Pan, D.B. Elder, and L.L. Harms, "Incorporating Chlorine Dioxide into Lime Softening Plants," Proceedings of the 49th Annual Environmental Engineering Conference, The University of Kansas, Lawrence, KS, February 3, 1999.
97. deNoyelles, F., S.H. Wang, J.O. Meyer, D.G. Huggins, J.T. Lennon, W.S. Kolln, and S.J. Randtke, "Water Quality Issues in Reservoirs: Some Considerations From a Study of a Large Reservoir in Kansas," Proceedings of the 49th Annual Environmental Engineering Conference, The University of Kansas, Lawrence, KS, February 3, 1999, pp. 83-119.
98. Randtke, S.J., "DBP Precursor Removal by Coagulation and Precipitative Softening," In: *Formation and Control of Disinfection By-Products in Drinking Water*, P.C. Singer, ed., American Water Works Association, Denver, CO, 1999.
99. Shorney, H.L., S.J. Randtke, P.H. Hargette, W.R. Knocke, A.M. Dietrich, R.C. Hoehn, and B.W. Long, "Removal of DBP Precursors by Enhanced Coagulation and Lime Softening," AWWA Research Foundation and the American Water Works Association, Denver, CO, 1999. (300 pp.)
100. Randtke, S.J., "Fifty Years of Progress and Challenges for the Next Century," Proceedings, 50th Annual Environmental Engineering Conf., University of Kansas, February 2, 2000.

**Publications** (cont'd)

101. Randtke, S.J., F. deNoyelles, Jr., D.W. Graham, and S. Pan, "Sources and Control of Geosmin and MIB in Midwestern Surface Water Supplies (Abstract)," Proceedings of the 18th Annual Water and the Future of Kansas Conference, Manhattan, KS, March 13, 2001.
102. Pan, S., and S.J. Randtke, "Alternative Methods for Monitoring Geosmin and MIB," Proceedings of the Water Quality Technology Conference, American Water Works Association, Nashville, TN, November 11-14, 2001.
103. Randtke, S.J., "An Improved Ion Chromatographic Method for Carboxylic Acids in Drinking Water," Proceedings of the Water Quality Technology Conference, American Water Works Association, Nashville, TN, November 11-14, 2001.
104. Pan, S., S.J. Randtke, F. deNoyelles, Jr., and D.W. Graham, "Occurrence, Biodegradation, and Control of Geosmin and MIB in Midwestern Water Supplies," Proceedings of the 121st Annual Conference of the American Water Works Association, New Orleans, LA, June 16-20, 2002.
105. Smith, V.H., J. Sieber-Denlinger, F. deNoyelles, Jr., S. Campbell, S. Pan, S.J. Randtke, G.T. Blain, and V.A. Strasser, "Managing Taste and Odor Problems in a Eutrophic Drinking Water Reservoir," *Lake and Reservoir Management*, 18, 4, 318-322 (2002).
106. Randtke, S.J., S. Pan, F. deNoyelles, Jr., D.W. Graham, V.H. Smith, and H.L. Holm, "Occurrence, Biodegradation, and Control of Geosmin in Midwestern Surface Water Supplies," Proceedings of the 53rd Annual Environmental Engineering Conference, The University of Kansas, Lawrence, KS, February 5, 2003.
107. deNoyelles, F., M. Jakubauskas, and S.J. Randtke, "Reservoir Management and Renovation: Addressing Problems in Multipurpose Reservoir Systems," A white paper prepared for the Kansas Water Office by the Kansas Biological Survey, 2003 (21 pp.)
108. Randtke, S.J., A.A. Witt, P.V. Adams, R.E. Pancake, and C.D. Adams, "Occurrence and Control of Atrazine in Midwestern Surface Water Supplies," In: *Advances in Water and Wastewater Treatment*, R.Y. Surampalli and K.D. Tyagi, eds., Environmental and Water Resources Institute, American Society of Civil Engineers, Reston, VA, pp. 356-394, 2004.
109. Owen, C.A., K.R. Herd, S.D. Freeman, S.J. Randtke, and B.W. Long, "Tampa Bay Water's 25-MGD Seawater Desalination Facility," Proceedings of the Membrane Technology Conference, American Water Works Association, Tampa, FL, March 18-21, 2007.
110. Kansas Department of Health and Environment, "Policies, General Considerations, and Design Requirements for Public Water Supply Systems in Kansas," December, 2008. (Revised by S. J. Randtke, D. H. Clair, D. F. Waldo, and R. E. Cox, with minor contributions from others at KDHE.)

**Publications** (cont'd)

111. Randtke, S.J., "Chemistry of Aqueous Chlorine," Chapter 2 in *White's Handbook of Chlorination and Alternative Disinfectants, 5th ed.*, Black & Veatch Corporation, John Wiley & Sons, Inc., New York, NY, 2010.
112. Randtke, S.J., "Determination of Chlorine Residuals in Water and Wastewater Treatment," Chapter 3 in *White's Handbook of Chlorination and Alternative Disinfectants, 5th ed.*, Black & Veatch Corporation, John Wiley & Sons, Inc., New York, NY, 2010.
113. Randtke, S. J., "Precipitation, Coprecipitation, and Precipitative Softening," Ch. 13 in *Water Quality & Treatment: A Handbook of Community Water Supplies, 6th ed.*, American Water Works Association, J. K. Edzwald, ed., McGraw-Hill, Inc., New York, 2011.
114. Dzombak, D.A. (Chair), G. Alexeeff, T. Ballestero\*, M. Benjamin\*, M. Boufadel, E. Boyer, D. Burnett\*, T.L. Davis\*, S. Dunn-Norman, J.P. Giesy, J. Griffiths, P. Gschwend\*, C.M. Harris, N.K. Kim, C.M. Lee\*, D. Patten, S. Randtke\*, D. Reible\*, C. Schreppel, G. Thyne, J. VanBriesen\*, R. Vidic (U.S. EPA Science Advisory Board Hydraulic Fracturing Review Panel), "SAB Review of EPA's Draft Hydraulic Fracturing Study Plan," Report EPA-SAB-11-012, U.S. Environmental Protection Agency, Washington, D.C., August 4, 2011. (\* Lead authors)
115. Griffiths, J.K. (Chair), G. Alexeeff, M. Benjamin\*, J. Ducoste, S. Korrick\*, M. Kosnett, B. Lanphear, D.F. Lawler\*, F. Loge, S. Randtke\*, A.L. Roberts, S. Rothenberg, R. Sakaji\*, J. Skadsen, V. Weaver, R. Wright, and M. Yates (U.S. EPA Science Advisory Board Drinking Water Committee Augmented for the Review of the Effectiveness of Partial Lead Service Line Replacements), "SAB Evaluation of the Effectiveness of Partial Lead Service Line Replacements," Report EPA-SAB-11-015, U.S. Environmental Protection Agency, Washington, D.C., September 28, 2011. (\* Lead authors)
116. Elder, D.B., M.B. Horsley, and S.J. Randtke, "Precipitative Softening," Ch. 13 in *Water Treatment Plant Design, 5th ed.*, American Water Works Association and American Society of Civil Engineers, McGraw-Hill, Inc., New York, 2012.
117. AWWA (American Water Works Association) and ASCE (American Society of Civil Engineers), *Water Treatment Plant Design, 5th ed.*, S.J. Randtke and M.B. Horsley, eds., McGraw-Hill, Inc., NY, 2012 (1376 pp.).
118. Yelton, J.P., D.G. Huggins, and S.J. Randtke, "Plant Community Effects on Atrazine in Grassed Mesocosms," Kansas Biological Survey Report No. 175, University of Kansas, Lawrence, Kansas, February, 2013.
119. Lane, R.F., C.D. Adams, S.J. Randtke, E.F. Peltier, R.E. Carter, Jr., Z.A. Breault, and J.A. Roberson, "Leaching of BPA and Related Compounds from Epoxy Coatings." Proceedings, Annual Conference & Exposition, American Water Works Association, Denver, Colo., June 9-13, 2013.

**Publications** (cont'd)

120. Breault, Z.A., E.F. Peltier, S.J. Randtke, C.D. Adams, Lane, R.F., R.E. Carter, Jr., J.A. Roberson, "The Effects of Lead Service Line Lining and Coating Technologies on Inorganic Drinking Water Quality." Proceedings, Annual Conference & Exposition, American Water Works Association, Denver, Colo., June 9-13, 2013.
121. Randtke, S.J., C.D. Adams, E.F. Peltier, Lane, R.F., Breault, Z.A., R.E. Carter, Jr., J.A. Roberson., "Lead Service Line Lining and Coating Technologies." Proceedings, Annual Conference & Exposition, American Water Works Association, Denver, Colo., June 9-13, 2013.
122. Lane, R.F., Adams, C.D., S.J. Randtke, R.E. Carter, Jr., E.F. Peltier, Z.A. Breault, and J.A. Roberson, "Leaching and Degradation of Bisphenols, BADGE and BFDGE from Epoxy Coatings in Water Pipes," Proceedings, Water Quality Technology Conference, American Water Works Association, Long Beach, California, November 3-7, 2013.

**Unpublished Reports and Manuscripts** (excluding research project progress reports)

1. Randtke, S.J., E.M. Thurman, and C.D. Adams, "Quantification of Herbicide Removal by Ozonation and Granular Activated Carbon Adsorption," Final Project Report to Lincoln Water System, The University of Kansas Center for Research, Inc., January, 1990, 23 pp.
2. Thurman, E.M., K.A. Shamet, and S.J. Randtke, "Origin and Chemistry of Surfactants in Streams," Research Report prepared for Procter & Gamble, May, 1990.
3. Randtke, S.J., "Control of Disinfection By-Product Formation and Herbicides at the Topeka, KS Water Treatment Plant," Final Project Report to Black & Veatch, The University of Kansas Center for Research, Inc., February, 1994, 72 pp.
4. Randtke, S.J., "Sampling and Analysis of Total and Dissolved Organic Carbon," distributed at the Enhanced Coagulation Research Workshop, sponsored by the American Water Works Association, Charleston, SC, December 4-6, 1994, 12 pp.
5. Randtke, S.J., "Atrazine Removal from the Higginsville, MO Water Supply Using Powdered Activated Carbon," Final Project Report to Burns & McDonnell Engineering Company, Inc., University of Kansas Center for Research, Inc., May 5, 1995, 27 pp.
6. Schlater, N.L., and S.J. Randtke, "A Review of the Use of Coagulation in Municipal Wastewater Treatment," Final Project Report to Midland Resources, Inc., The University of Kansas Center for Research, Inc., May 10, 1995, 279 pp.
7. Randtke, S.J., "Evaluation of the Corrosion of Center-Pivot Irrigation Systems Used for Wastewater Reclamation," Prepared for Mr. Patrick J. Regan, Attorney-at-Law, Wichita, KS, December 14, 1996, 21 pp.
8. Randtke, S.J., "Jar-Test Evaluation of Adsorption of Geosmin and MIB on PAC," Prepared for Cal-Pacific Carbon, LLC, Arcata, CA, March 4, 1998.
9. Randtke, S.J., "Taste and Odor in Kansas Surface Water Supplies: Causes and Cures," project report submitted to the Kansas Water Resources Research Institute, Kansas State University, Manhattan, KS, June 12, 1998.
10. Randtke, S.J., "Jar-Test Evaluation of Adsorption of Geosmin and MIB on Aqua Nuchar PAC," prepared for G.S. Robins and Company, Kansas City, KS, October 14, 1999.
11. Pan, S., and S.J. Randtke, "Water Treatment Plant Studies for Lawrence, KS," prepared for the City of Lawrence, KS, June 2, 1999 (150 pp.)
12. Randtke, S.J., D.W. Graham, and F. deNoyelles, Jr., "Sources and Control of Geosmin in Midwestern Water Supply Reservoirs" project report submitted to the Kansas Water Resources Research Institute, Kansas State University, Manhattan, KS, June 12, 1999.

**Unpublished Reports and Manuscripts (Cont'd)**

13. Randtke, S.J., "Analysis of Extracts of IMS Filter-Cap Specimens," prepared for the F. B. Leopold Company, Inc., Zelienople, PA, September 14, 1999.
14. Randtke, S.J., "Expert Report: Assessment of the Impacts of a 1994 Fuel-Oil Spill on the Osawatomie, KS Public Water Supply," prepared for Vinson & Elkins, Washington, DC, January 26, 2000.
15. Randtke, S.J., D.W. Graham, and F. deNoyelles, Jr., "Sources and Control of Geosmin in Midwestern Water Supply Reservoirs," project report submitted to the Kansas Water Resources Research Institute, Kansas State University, Manhattan, KS, May 26, 2000.
16. Randtke, S.J., "Examination and Analysis of an IMS Filter Cap," prepared for the F. B. Leopold Company, Inc., Zelienople, PA, January 10, 2001.
17. Randtke, S.J., D.W. Graham, and F. deNoyelles, Jr., "Sources and Control of Geosmin in Midwestern Water Supply Reservoirs" project report submitted to the Kansas Water Resources Research Institute, Kansas State University, Manhattan, KS, June 10, 2001.
18. Smith, V.H., F. deNoyelles, D.W. Graham, and S.J. Randtke, "A Comparative Water Quality Study of Cheney Reservoir, KS," Final Report to the City of Wichita Water and Sewer Department, July 3, 2001.
19. Randtke, S.J., "Examination and Analysis of an IMS Filter Cap," prepared for the F. B. Leopold Company, Inc., Zelienople, PA, August 17, 2001.
20. Randtke, S. J., "A Review of Disinfection By-Product Control Practices at the Topeka Water Treatment Plant," prepared for Black & Veatch, Kansas City, MO, September 28, 2002 (95 pp.).



## **Patents**

Beck, S., S.D. Campbell, F. deNoyelles, S. L. Egbert, F.D. Fox, D. Penny, and S.J. Randtke, "System, Method, and Computer Program Product for Weather and Terrestrial Vegetation-Based Water Renovation and Management Forecasting," United States Patent and Trademark Office, Patent No. 7,031,927, April 18, 2006.