

## Curriculum Vitae

**RICHARD GERSBERG, Ph.D., M.S.**

### **Present Position:**

Professor and Head  
Division of Occupational & Environmental Health  
Graduate School of Public Health  
College of Health & Human Services  
San Diego State University  
San Diego, California 92182  
(619) 594-2905

### **Education:**

1977 Ph.D., Microbiology, University of California, Davis  
1968 M.S., Biology, University of Houston  
1966 B.S., Biology, City College of the City University of New York

### **Employment Record:**

1997 - present Head, Division of Occupational and Environmental Health  
Graduate School of Public Health, San Diego State University  
1993 - present Professor of Environmental Health,  
Graduate School of Public Health  
San Diego State University  
2000-2008 Director, Coastal and Marine Institute, San Diego State University, and the  
new Coastal Waters Laboratory on San Diego Bay  
1990 - 1993 Associate Professor of Environmental Health, Graduate School of Public  
Health, San Diego State University.  
1986 - 1990 Assistant Professor of Environmental Health, Graduate School of Public  
Health, San Diego State University.  
1984 - 1988 Director of Research, San Diego Region Water Reclamation Agency,  
Santee, California.

**Employment Record:** (continued)

- 1980 - 1984            Project Manager, Ecological Research Associates. U.S. EPA Artificial Wetlands Project at Santee, California.
- 1979 - 1980            Environmental Consultant, Ecological Research Associates. Task coordinator for Bioassay Program of the Lake Mead Water Quality Standards Study.
- 1977 - 1979            Assistant Research Microbiologist, Division of Environmental Studies, University of California, Davis. Castle Lake Research Program.
- 1974 - 1977            Research Assistant, Institute of Ecology, University of California, Davis. Castle Lake Limnological Research Group.
- 1976                    Teaching Fellow, Division of Environmental Studies, University of California, Davis. Instructor for one quarter of a Limnology field course.
- 1973                    Research Assistant, Bodega Bay Marine Laboratory, University of California, Davis. Lobster Aquaculture Project.
- 1969 - 1970            U.S. Navy, Lieutenant (j.g.), Naval Security Group, Washington, D.C.
- 1970 - 1972            Instructor, Faculty of the U.S. Naval Academy, Annapolis, MD. Taught one year of General Chemistry and one year of General Biology.
- 1968 - 1969            Research Fellow, Department of Biophysical Sciences, University of Houston. Investigations of biophysical and biochemical characteristics of polymorphic hemoglobins of marine fish.
- 1966 - 1968            Teaching Fellow, Department of Biology, University of Houston. Laboratory instructor for one semester of Histology and General Biology and two semesters of Comparative Anatomy.

**Professional Memberships:**

American Association for the Advancement of Science

Water Pollution Control Federation

American Public Health Association

## IAWPRC Specialist Group on the Use of Macrophytes in Water Pollution Control

### **Professional Activities and Achievements:**

2005- 2008	Member, The CALFED Bay-Delta Authority (CBDA) Science Program, in cooperation with California Sea Grant.
2005-2006	Member, Technical Panel on the SETAC (Society of Environmental Toxicology and Chemistry) third-party scientific and technical review of the Capital Regional District's (Victoria, Canada) Liquid Waste Management Plan (LWMP).
2005	Member, Salton Sea Science Panel for State of California Department of Water Resources
2005	Member, Independent Advisory Panel, City of San Diego Water Reuse Study.
2003	Guest Professor, University of Venice, Italy, Modeling Bacterial Quality of the Venice Lagoon
1994 - 1999	Member, California Sea Grant Committee
1994 - 1995	Member, Ecological Risk Assessment Workshop Steering Committee, California EPA
1995 -present	Guest Professor, Department of Water Management , Univ. of Applied Sciences, Magdeburg, Germany
1990 -1994	Member of State of California, Department of Health Task Force on Wastewater Reclamation Criteria.

### **Grants and Contracts**

2010-1012	Principal Investigator, Award from the Unified Port District of San Diego, San Diego Bay Terrain Modeling. \$96, 528.
2010-2012	Principal Investigator, Ambient Water Quality of San Diego Watersheds, San Diego Coastkeeper/ State Water Resources Control Board, \$60,000.
2009- 2011	Principal Investigator, Award from the San Diego Foundation, Sea-Level Rise in San Diego: Wetland Habitats at Risk and a Sea Level Rise Adaptation Strategy for the San Diego Region. \$59, 539.

2008-2009 Principal Investigator, Blasker Award from the San Diego Foundation, Global Climate Change: Sea-Level Rise, Critical Coastal Habitats, and Coastal Water Quality in the San Diego Region. \$72,797.

2008-2010 Principal Investigator, Networking for Community Health: Risk Assessment for Consuming Fish and Ocean Recreation in Imperial Beach, CA., Imperial Beach Health Center and the TIDES Foundation. \$47,219.

2006-2007 Principal Investigator, Public Health Projects (California Distance Learning Health Network), Immunization Branch of California Department of Health Services. \$2,499,861.

2006-2007 Principal Investigator, Viral Pathogens in the New River and an Evaluation of Human Health Risk Reduction by the Brawley Constructed Wetlands Demonstration Project, Southwest Consortium for Environmental Research and Policy, \$59,500.

2006-2007 Principal Investigator, Statewide Integration of Immunization Registries, California Department of Health Services and First Five Commission, \$900,000

2005-2006 Principal Investigator, Bioterrorism Preparedness Grant to the California Distance Learning Health Network (CDLHN), California Department of Health Services Immunization Branch, \$899,999.

2005-2006 Principal Investigator, Public Health Projects (California Distance Learning Health Network), Immunization Branch of California Department of Health Services. \$2,489,945

2004-2005 Principal Investigator, Bioterrorism Preparedness Grant to the California Distance Learning Health Network (CDLHN), California Department of Health Services, \$700,460.

2004-2005 Principal Investigator, Public Health Projects (California Distance Learning Health Network), Immunization Branch of California Department of Health Services. \$2,306,480

2004-2005 Principal Investigator, Real-Time PCR for Validation of Fecal Coliform and Enterococci as Indicators of Human Health Risk, Southwest Consortium for Environmental Research and Policy, \$62,000.

2003-2004 Principal Investigator, Bioterrorism Preparedness Grant to the California Distance Learning Health Network (CDLHN), California Department of Health Services, \$1,403,618

2003-2004 Principal Investigator, Public Health Projects (California Distance Learning Health Network), Immunization Branch of California Department of Health Services. \$3,469,396

2003-2004 Principal Investigator, Health for the Flu Awareness Campaign, County of San Diego, Health and Human Services Agency, \$100,000

2002-2003 Principal Investigator, Wet and Dry Season Water Quality Monitoring of the Tijuana River, California State Water Resources Control Board, \$48,500

2002-2003 Principal Investigator, Public Health Projects (California Distance Learning Health Network), Immunization Branch of California Department of Health Services. \$5,353,695

2002-2003 Principal Investigator, A human health risk assessment for enteroviruses and Hepatitis A virus (HAV) in runoff from the Tijuana River and in bathing waters of nearby Imperial Beach. US EPA and the Southwest Center for Environmental Policy Research. \$66,000.

2001-2002 Co-Principal Investigator, San Diego County-Baja California Water Quality Prediction and Monitoring Program. California State Water Resources Control Board. \$190,000.

2001-2002 Principal Investigator, Determining Contaminant Levels in Plant and Animal Tissues of the Salton Sea, California. U.S. Geological Survey. \$30,015

2001-2002 Principal Investigator, Public Health Projects (California Distance Learning Health Network), Immunization Branch of California Department of Health Services. \$1,581,813

2001-2002 Principal Investigator, BASINS Modeling of the Loading of Fecal Coliforms and Pathogens from Land-Based Sources into the Bight of the Californias, US EPA and the Southwest Center for Environmental Policy Research. \$69,450.

1999-2000 Principal Investigator, Public Health Projects (California Distance Learning Health Network), Immunization Branch of California Department of Health Services. \$1,100,000.

- 1999-2000 Co Principal Investigator, Transboundary Watershed Research Project, US EPA and the Southwest Center for Environmental Policy Research. \$162,283
- 1997-1998 Principal Investigator, Predictive Modeling of the Interactions between Land Use and Storm Water Quality in the Tijuana River watershed, US EPA and the Southwest Center for Environmental Policy Research
- 1996-1997 Principal Investigator, Monitoring and Modeling of Water Quality in the Tijuana River Watershed, US EPA and the Southwest Center for Environmental Policy Research
- 1995 - 1996 Co-Investigator, Lead Poisoning Case Management Program for San Diego County (State of California)
- 1992 - 1994 Co-Principal Investigator, Study of Water Quality of San Elijo Lagoon (U.S. EPA and California State Water Quality Control Board)
- 1990 - 1991 Co-Principal Investigator, Using Wastewater Wetlands to Protect Tijuana Estuary from Sewage Pollution (National Oceanic and Atmospheric Administration)
- 1989 - 1991 Co-Principal Investigator, Wastewater Wetlands: Pulsed Discharges to Protect Coastal Water Bodies (California Sea Grant Program)
- 1988 - 1991 Principal Investigator, In-Situ Microbial Degradation of Gasoline Using Denitrification (Electric Power Research Institute)

**Published Articles:**

Jinadasa, K.B.S.N., Wijewardena, S.K.I., Zhang, D.Q., Gersberg, R.M., Tan, S.K., Wang, J.Y., Ng, W.J., 2012. Socio-environmental impact of water pollution on the Mid-canal (*Meda Ela*), Sri Lanka. J. of Water Resource and Protection. In Press

Zhang, D.Q., Gersberg, R.M., Zhu, J.F., Hua, T., Nguyen, A.T., Tan, S.K., 2012. Batch versus continuous feeding strategies for pharmaceutical removal by subsurface flow constructed wetlands. Environmental Pollution. In press

Zhang, D.Q., Tan, S.K., Gersberg, R.M., 2012. Centralized versus decentralized stormwater management: case studies of Singapore and Berlin, Germany. Journal of Environmental Management. In press

**Published Articles:** (continued)

Zhang, D.Q., Gersberg, R.M., Hua, T., Zhu, J.F., Jinadasa, K.B.S.N., Tan, S. K., 2012. Pharmaceutical removal in tropical subsurface flow constructed wetlands at varying hydraulic loading rate. Chemosphere 87, 273-277.

Zhang, D.Q., Tan, S.K., Gersberg, R.M., Zhu, J.F., Hua, T., Nguyen, A.T., 2012. Effect of feeding strategies on pharmaceutical removal by subsurface flow constructed wetlands. Journal of Environmental Quality. In press.

Weragoda, S.K., Jinadasa, K.B.S.N., Zhang, D., Gersberg, R.M., Tan, S.K., Tanaka, N. and W.J. Ng. Tropical application of floating treatment wetlands. Wetlands. In Press.

Zhang, D.Q., Tan, S.K., Gersberg, R.M., Zhu, J., Sadreddini, S. and Y. Li. Nutrient removal in tropical subsurface flow constructed wetlands under batch and continuous flow conditions. In Press. J. Environ. Management

Lüderitz, V, Speiert, T., Langheinrich, U., Völkl, W., and R.M. Gersberg. Restoration of rivers Upper Main and Rodach – the success and its measurement. 2011.Ecological Engineering 37: 2044-2055.

Slaughter, T.E., Gersberg, R., Watanabe, K., Rudolph, J., Stransky, C. and T.E. Novotny. 2011. Toxicity of cigarette butts, and their chemical components to marine and freshwater fish. Tobacco Control 20, Suppl.1:23-27.

Zhang, D.Q., Tan, S.K., Gersberg, R.M., Sadreddini, S., Zhu, J. and A.T. Nguyen. 2011. Removal of Pharmaceutical Compounds in Tropical Constructed Wetlands. Ecological Engineering 37: 460-464.

Zhang, D.Q., Tan S.K. and R. M. Gersberg. 2010. Municipal solid waste management in China: status, problems and challenges. J. Environ. Management 91: 1623-1633.

Zhang, D.Q., Tan S.K. and R. M. Gersberg. 2010. A comparison of municipal solid waste management in Berlin and Singapore. Waste Management 30:921-933.

Zhang, D.Q., Gersberg, R.M., and S.K. Tan. 2009. Constructed Wetlands in China. Ecological Engineering 35:1367-1378.

Zhang, D.Q., Gersberg, R.M. and C. Wilhelm. 2009. Decentralized Water Management - Rainwater Harvesting and Greywater Reuse in an Urban Area of Beijing, China. Urban Water Journal 6 (5): 375 – 385.

**Published Articles:** (continued)

Johnson, P.I., Gersberg, R.M, Rigby, M. and S. Roy. 2009. The fate of selenium in the Imperial and Brawley constructed wetlands in Imperial Valley, California. Ecological Engineering 35: 908-913.

Watanabe, K., Franz, K. and R.M. Gersberg. Levels of the organophosphorus pesticide diazinon in the Chollas Creek watershed, San Diego, Ca, since its phase-out in 2004. 2008. Bulletin of the Southern California Academy of Science 107 (1): 33-40.

Gersberg, R.M. Tiedge, J. Gottstein, D., Altmann, S., Watanabe, K. and V. Luederitz. 2008. Effect of the South Bay Ocean Outfall (SBOO) on ocean beach water quality near the USA-Mexico border. International Journal of Environ. Health Res. 18 (2):149-158.

Moreau, M. F., J. Surico-Bennett, M. Vicario-Fisher, R. Gerards, R. M. Gersberg and S. H. Hurlbert, 2007. Selenium, arsenic, DDT and other contaminants in four fish species in the Salton Sea, California, their temporal trends, and their potential impact on human consumers and wildlife. Lake and Reservoir Management 23:536-569.

Moreau, M. F., J. Surico-Bennett, M. Vicario-Fisher, D. Crane, R. Gerards, R. M. Gersberg and S. H. Hurlbert. 2007. Contaminants in tilapia (*Oreochromis mossambicus*) from the Salton Sea, California, in relation to human health, piscivorous birds and fish meal production. Hydrobiologia 576:127-165.

Gersberg, R.M., Rose, M. Robles, R. and A.K. Dhar. 2006. Quantitative detection of Hepatitis A virus and enteroviruses near the United States-Mexico border and correlation with levels of fecal indicator bacteria. Appl. Environ. Microbiol. 72: 7438-7444.

Gersberg, R.M. 2006. Selenium in the Salton Sea, California: A case study of the non-sustainability of intensive irrigated agriculture in the Western U.S. In *Sustainable Approaches in Water Management, Urban Planning, and Effective and Renewable Energy Uses* (R. Jüpner and P. Fox, eds.). Proceedings, Sept 16-17, 2005, Indianapolis, IN. Shaker Verlag, Aachen Germany.

Rose, M., Dhar, A.K., Brooks, H.A., Zecchini, F. and R.M. Gersberg. 2006. Quantitation of Hepatitis A virus and enterovirus levels in the lagoon canals and Lido beach of Venice, Italy, using real-time RT PCR. Water Res. 40: 2249-2462.

Brooks, H.A., Gersberg, R.M. and A.K. Dhar. 2005. Quantification of hepatitis A virus in seawater via real-time RT-PCR. J.Virol. Methods 127 (2) : 109-118.

Luederitz, V., Gerlach, F., Juepner, R., Calleros, J., Pitt, P. and R.M. Gersberg. 2005. Biological assessment of Tecate Creek (U.S.-Mexico) with special regard to self-purification. Bulletin of the Southern California Academy of Sciences. 104: 1-13.

**Published Articles:** (continued)

Coates-Hedberg, K. and R.M. Gersberg. Association of gastrointestinal illnesses and environmental factors in a Kumiai Indian community in Baja California, Mexico. 2004. In *The U.S.-Mexican Border Environment: Tribal Environmental Issues of the Border Region* (M. Wilken-Robertson, ed.). SCERP Monograph Series No. 9. San Diego State University Press pp. 171-195.

Gersberg, R.M. Daft, D. and D. Yorkey. 2004. Temporal pattern of toxicity in runoff from the Tijuana River watershed. Water Res. 38: 559-568.

Langheinrich, U., Tischew, S., Gersberg, R.M., and V. Luederitz. 2004. Ditches and canals in management of fens: opportunity or risk? A case study in the Droemling Natural Park, Germany Wetlands Ecology and Management 12:429-445.

Gersberg, R.M., Pitt, J. Weis, D. and D. Yorkey. 2002. Characterizing In-Stream Metal Loading in the Tijuana River Watershed. Proceedings of the Water Environment Federation Specialty Conference on National TMDL Science and Policy, Phoenix, AZ. November 13-16, 2002.

Luederitz, V., Eckert, E., Lange-Weber, M. Lange, A. and R.M. Gersberg. 2001. Nutrient removal efficiency and resource economics of vertical flow and horizontal flow constructed wetlands. Ecol. Eng. 18/2, 157-172.

Weis, D.A., Gersberg, R.M. and J. Calloway. 2001. Vertical accretion rates and heavy metal chronologies in wetland sediments of the Tijuana Estuary. Estuaries 24 (6), 840-850.

Gersberg, R.M., Pitt, J., King, A., Johnson, H. and R. Wright. 2000. Use of the BASINS Model to estimate the loading of heavy metals from the binational Tijuana River watershed. Watershed 2000 Specialty Conference, Water Environment Federation, 9-12 July, 2000, Vancouver, Canada.

Gersberg, R.M., Brown, C., Zambrano, V., Worthington, K. and D. Weis. 2000. Quality of urban runoff in the Tijuana River watershed. SCERP Monograph Series (no.2) on Water Issues Along the United States and Mexico Border (P. Westerhoff, Ed.) Southwest Center for Environmental Research and Policy, pp. 31-45.

Englert, P., Brown, C, Placchi, C. and R.M. Gersberg. 1999. Geographic information system (GIS) characterization of metal loading in the binational Tijuana River watershed. J. Borderlands Studies. 14:2, 81-91.

Riveles, K. and R.M. Gersberg. 1999. Toxicity identification evaluation of runoff from the Tijuana River. Bull. Environ. Contam. Toxicol. 63, 625-632.

**Published Articles:** (continued)

Brown, C., Placchi, C., and R.M. Gersberg. 1998. Modeling the impacts of surface water hydrology and land use on water quality in the Tijuana River watershed. In Proceedings of the WEF Specialty Conference on Watershed Management, pp. 477-484, May 3-6, 1998. Denver, Co.

Meyer, S.F. and R.M. Gersberg. 1997. Heavy metals and acid-volatile sulfides in sediments of the Tijuana Estuary. Bull. Environ. Contam. Toxicol. 59, 113-119.

Gersberg, R. M., Gaynor, K., Tenczar, D., Bartzen, M., Ginsberg, M., Gresham, L. S. and C. Molgaard. 1997. Quantitative modeling of lead exposure from glazed ceramic pottery in childhood lead poisoning cases. Int. J. Environ. Hlth. 7, 193-202.

Gersberg, R.M., Matkovits, M., Dodge, D., McPherson, T., and J.M. Boland. 1995. Experimental opening of a coastal California lagoon: Effect on bacteriological quality of recreational ocean waters. J. Environ. Hlth. 58, 24-29.

Gersberg, R.M., Korth, K., Bogardt, A.H., Rice, L., Randall, J.D., Bradley, M.D., Dawsey, W.J., and B.B. Hemmingsen. 1995. Chemical and microbiological evaluation of in situ bioremediation of hydrocarbons in anoxic groundwater enriched with nutrients and nitrate. World Journal of Microbiology and Biotechnology 11(5), 549-558.

Gersberg, R.M., Carroquino, M.J., Fischer, D.E., and W.J. Dawsey. 1995. Biomonitoring of toxicity reduction during in-situ bioremediation of monoaromatic hydrocarbons in groundwater. Water Res. 29, 545-550.

Gersberg, R.M., Dodge, D., Parsons, L. and J.B. Zedler. 1994. Microbiological water quality of the Tijuana Estuary. J. Border Health 10(3), 16-27.

de Peyster, A. and R.M. Gersberg. 1994. Use of aquatic species toxicity testing in public health. Chem. Health and Safety 1(3), 38-43.

Zedler, J.B., Busnardo, M., Sinicrope, T., Langis, R., Gersberg, R. and S. Baczkowski. 1994. Pulsed discharge wastewater wetlands: Potential for solving multiple problems by varying hydroperiod. In Global Wetlands, (W.J. Mitsch, Ed.), pp. 363-368. Elsevier Science Publishers, Amsterdam, The Netherlands.

Gersberg, R.M., Dawsey, W.J. and M.D. Bradley. 1993. Nitrate enhancement of in-situ bioremediation of monoaromatic compounds in groundwater. Remediation 3, 233-245.

Sinicrope, T.L., Langis, R., Gersberg, R.M., Busnardo, M.J. and J.B. Zedler. 1992. Metal removal by wetland mesocosms subjected to different hydroperiods. Ecol. Eng. 1, 309-322.

**Published Articles:** (continued)

Carroquino, M., Gersberg, R.M., Dawsey, W.J., and M.D. Bradley. 1992. Toxicity reduction associated with the biodegradation of monoaromatic hydrocarbons in gasoline-contaminated groundwaters. Bull. Environ. Contam. Toxicol. 49, 224-231.

Gersberg, R.M., Dawsey, W.J. and M.D. Bradley. 1991. Biodegradation of monoaromatic hydrocarbons in groundwater under denitrifying conditions. Bull. Environ. Contam. Toxicol. 47, 8-15.

Busnardo, M.J., Gersberg, R.M., Langis, R., Sinicrope, T.L., and J.B. Zedler. 1992. Nitrogen and phosphorus removal by wetland mesocosms subjected to different hydroperiods. Ecol. Eng. 1, 287-307

Gersberg, R.M. and D.A. Silvaggio. 1992. Fate of coliphage during wastewater treatment by water hyacinth (Eichhornia crassipes). Ecol. Eng. 1, 355-363.

Gersberg, R.M., Trindade, F and C. Nordby. 1989. Heavy metals in sediments and fish of the Tijuana Estuary. J. Border Health. 5, 5-15.

Gersberg, R., Gearheart, R.A., and M. Ives. 1989. Pathogen removal in constructed wetlands. In Constructed Wetlands for Wastewater Treatment, Chapter 35, pp.431-445. Lewis Publishers, Inc., Chelsea, Michigan.

Gersberg, R.M., Dawsey, W.J. and H.F. Ridgway. 1989. Biodegradation of dissolved aromatic hydrocarbons in gasoline-contaminated groundwaters using denitrification. In Petroleum Contaminated Soils, Vol. II, Chapter 18, pp.211-217. Lewis Publishers, Inc., Chelsea, Michigan.

Gersberg, R.M., Lyon, S.R., Brenner, R. and B.V. Elkins. 1989. Integrated wastewater treatment by artificial wetlands: A gravel marsh case study. In Constructed Wetlands for Wastewater Treatment, Chapter 10, pp.145-152. Lewis Publishers, Inc., Chelsea, Michigan.

Gersberg, R.M., Lyon, S.R., Brenner, R. and B.V. Elkins. 1988. Performance of a clay-alum flocculation (CCBA) process for virus removal from municipal wastewater. Water Res. 22, 1449-1454.

Sheehan, P.J., Schneiter, R.W., Mohr, T.K.G. and R.M. Gersberg. 1988. Progress in bioreclamation of contaminated groundwater without oxygen addition. HAZMACON 88, April 5 - 8, 1988, Anaheim, California, pp.711-721.

Sheehan, P.J., Schneiter, R.W. and R.M. Gersberg. 1988. Bioreclamation of gasoline-contaminated ground water without oxygen additions. Proceedings of the Second National Outdoor Action

**Published Articles:** (continued)

Conference on Aquifer Restoration, Ground Water Monitoring and Geophysical Methods. May 23-26, 1988. Las Vegas, Nevada, pp.183-199.

Gersberg, R.M., Brenner, R., Lyon, S.R. and B.V. Elkins. 1987. Virus removal by a clay-alum (CCBA) coagulation process for wastewater reclamation. Proceedings of Water Reuse Symposium IV. AWWA Research Foundation. August 3-7, Denver Colorado, pp.1173-1182.

Gersberg, R.M., Lyon, S.R., Brenner, R., and B.V. Elkins. 1987. Fate of viruses in artificial wetlands. Appl. Environ. Microbiol. 83, 731-736.

Gersberg, R.M., Brenner, R., Lyon, S.R. and B.V. Elkins. 1987. Survival of bacteria and viruses in municipal wastewaters applied to artificial wetlands. In Aquatic Plants For Water Treatment and Resource Recovery. (K.R. Reddy and W.H. Smith, Eds.), pp.237-245. Magnolia Publishing, Orlando, Florida.

Gersberg, R.M., Brenner, R., and B.V. Elkins. 1986. Selenium removal using aerobic bacteria. Proceedings of a Symposium on Selenium in the Environment, California Agricultural Technology Institute, California State University, Fresno, June 10-12, 1985, pp. 161-164.

Elkins, B.V., Wilson, G.E., and R.M. Gersberg. 1985. Complete reclamation of wastewater and sludge. Water Sci. Tech. 17, 1453-1454.

Gersberg, R.M., Elkins, B.V., and C.R. Goldman. 1986. Role of aquatic plants in wastewater treatment by artificial wetlands. Water Res. 20, 363-368.

Gersberg, R.M., Lyon, S.R., Elkins, B.V., and C.R. Goldman. 1985. The removal of heavy metals by artificial wetlands. Proceedings of Water Reuse Symposium III. AWWA Research Foundation, San Diego, California, August 26-31, 1984, 639-648.

Gersberg, R.M. and D.W. Allen. 1985. Phosphorus uptake by Klebsiella pneumoniae and Acinetobacter calcoaceticus. Water Sci. Tech. 17, 113-118.

Gersberg, R.M., Elkins, B.V., and C.R. Goldman. 1985. Wastewater treatment by artificial wetlands. Water Sci. Technol. 17, 443-450.

Gersberg, R.M., Elkins, B.V., and C.R. Goldman. 1984. The use of artificial wetlands to remove nitrogen from wastewater. J. Water Pollut. Control Fed. 56, 152-156.

Gersberg, R.M., Elkins, B.V., and C.R. Goldman. 1983. Nitrogen removal in artificial wetlands. Water Res. 17, 1009-1014.

### **Published Articles:** (continued)

Axler, R.P., Gersberg, R.M., and C.R. Goldman. 1982. Inorganic nitrogen assimilation in a subalpine lake. Limnol. Oceanogr. 27, 53-65.

Axler, R.P. and R.M. Gersberg. 1981. Vertical patterns of inorganic carbon and nitrogen uptake in a subalpine lake. Verh. Internat. Verein Limnol. 21, 326-332.

Axler, R.P., Gersberg, R.M., and C.R. Goldman. 1980. Stimulation of nitrate uptake and photosynthesis by molybdenum in Castle Lake, California. Can. J. Fish. Aquat. Sci. 37, 707-712.

Gersberg, R.M., Axler, R.P., and C.R. Goldman. 1980. Isotope studies of nitrogen transformations in Castle Lake, California. Proceedings of the FAO/IAEA Advisory Group on Agrochemical Residue-Biota Interactions in soil and water. International Atomic Energy Agency, Vienna, Austria, 75-85.

Axler, R.P., Gersberg, R.M., and L.J. Paulson. 1978. The primary productivity of Big Soda Lake, Nevada. Great Basin Naturalist 38 (2), 187-192.

Kimmel, B.L., Gersberg, R.M., Paulson, L.J., Axler, R.P., and C.R. Goldman. 1978. Recent changes in the meromictic status of Big Soda Lake, Nevada, Limnol. Oceanogr. 23 (5), 1021-1025.

Gersberg, R.M., Axler, R.P., Krohn, K., and N. Peek. 1977. Nitrate uptake by phytoplankton: Measurements utilizing the radioisotope <sup>13</sup>N. Verh. Internat. Verein Limnol. 20, 392-399.

Gersberg, R.M., Krohn, K., Peek, N., and C.R. Goldman. 1976. Denitrification studies with <sup>13</sup>N-labeled nitrate. Science 192, 1229-1231.

### **Articles Submitted or In Preparation**

Zhang, D.Q., Gersberg, R.M., Nguyen, A.T., Hua, T., Valencia, E., Loh, B.W.T., Tan, P.Y., Tan, S.K., 2010. Pollutant removal by bioretention systems at varying hydraulic loading rates. Submitted to Water, Air & Soil Pollution.

Zhang, D.Q., Hua, T., Gersberg, R.M., Zhu, J.F., Ng, W.J., Tan, S. K., 2012. Uptake of diclofenac by *Scirpus validus* cultivated under hydroponic conditions. Submitted to Science of Total Environment.