Curriculum Vitae

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

Present Position: Interim Director

Graduate School of Public Health College of Health & Human Services

San Diego State University San Diego, California 92182

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Education:

1977 Ph.D., Microbiology, University of California, Davis

1968 M.S., Biology, University of Houston

Santee, California.

1966 B.S., Biology, City College of the City University of New York

Employment Record:

2014- present	Interim Director, Graduate School of Public Health, San Diego State University
1997 - 2014	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,

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 Activities and Achievments:

2007- present	Member, Environmental Advisory Committee, San Diego Unified Port District
2006-present	Member, Environmental Health Advisory Board, Department of Environmental Health, San Diego County
2005-present	Member, Independent Advisory Panel, City of San Diego Water Reuse Study.

2005- present	Reviewer, 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
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 Contrac	<u>ets</u>
2014-2017	Co-Principal Investigator, Assessing Toxicity of Tobacco Product Waste to Humans, State of California Tobacco Related Disease Research Program (TRDRP), \$520,503.
2014-2015	Principal Investigator, The Copper Conundrum: Will Zinc be Next in the Bottom Paint Blues, University UGP Award, \$10,000
2013-2014	Principal Investigator, Climate Change and Vulnerable Populations in San Diego County, Addendum to Blasker 2012 Award from the San Diego Foundation, \$10,000.
2012- 2014	Principal Investigator, Modeling the Impact of Global Climate Change on Vulnerable Populations of San Diego County, Blasker award, San Diego Foundation, \$45,000.

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:

1. Zhang, D., Luo, J., Zarraz, M.P.L., Yogananda, M., Gersberg, R.M., Liu, Y., Ng, W.J. and S.K. Tan. Characterization of bacterial communities in wetland mesocosms receiving ibuprofen-enriched wastewater. *Ecological Engineering*. In Press.

- 2. Zhang, D., Luo, J., Lee, Z.M.P., Gersberg, R., Liu, Y., Tan, S.K., and W.J. Ng. Ibuprofen removal in horizontal subsurface flow constructed wetlands: treatment performance and fungal community dynamics. *Environmental Technology*. In Press.
- 3. Zhang, D., Hua, T., Xiao, F., Chen, C., Gersberg, R.M., Liu, Y., Stuckey, D., Ng, W.J. and S.K. Tan. 2015. Phytotoxicity and bioaccumulation of ZnO nanoparticles in Schoenoplectus tabernaemontani. *Chemosphere* 120:211-9.
- 4. Zhang, D.Q., Jinadasa, K.B., Gersberg, R.M., Liu, Y., Ng, W.J. and Tan S.K. 2014. Application of constructed wetlands for wastewater treatment in developing countries--a review of recent developments (2000-2013). *J. Environ. Manage*. 141: 116-31.
- 5. Stigler-Granados, P., Quintana, P.J.E., Gersberg, R., Zuniga, M.L., and T Novotny. 2014. Comparing health outcomes and point-of-use water quality in two rural indigenous communities of Baja California, Mexico before and after receiving new potable water infrastructure. *J. Water, Sanitation and Hygiene for Develop.* 4: 672-680.
- 6. Zhang, D.Q., Tao, H., Xiao, F., Chen, C., Gersberg, R.M., Liu, Y., Ng, W.J. and S.K. Tan. 2014. Uptake and accumulation of CuO nanoparticles and CdS/ZnS quantum dot nanoparticles by Schoenoplectus tabernaemontani in hydroponic mesocosms *Ecological Engineering* 09; 70:114–123.
- 7. Zhang, D.Q., Gersberg, R.M., Ng, W.J. and S.K. Tan. 2014. Removal of pharmaceuticals and personal care products in aquatic plant-based systems: a review. *Environ Pollut*.: 184:620-39.
- 8. Zhang, D.Q., Hua, T., Gersberg, R.M., Zhu, J., Ng, W.J. and Tan S.K.2013. Carbamazepine and naproxen: fate in wetland mesocosms planted with Scirpus validus. *Chemosphere* 91(1):14-21
- 9. Zhang, D.Q., Gersberg, R.M., Hua, T., Zhu, J.F., Kumar, M., Ng, W.J. and S.K. Tan. 2013. Fate of pharmaceutical compounds in hydroponic mesocosms planted with *Scirpus validus*. *Environ. Pollut.* Jul 8;181C:98-106.
- 10. Ni, W.D., Zhang, D.Q., Gersberg, R. M., Hong, J., Jinadasa, K.B.S.N., Ng, W.J. and S.K. Tan. 2013. Statistical modeling of batch versus continuous feeding strategies for pollutant removal by tropical subsurface flow constructed wetlands. *Wetlands* 33(2): 335-344.
- 11. Zhang, D.Q., Gersberg, R.M., Hua, T., Zhu, J.F., Ng, W.J. and S.K. Tan. 2013. Fate of caffeine in mesocosms wetland planted with Scirpus validus. *Chemosphere* 90 (4): 1568-1572.

- 12. Zhang, D.Q., Hua, T., Gersberg, R.M., Zhu, J.F., Ng, W.J. and S.K. Tan. 2012. Assessment of plant-driven uptake and translocation of the pharmaceutical, clofibric acid by Scirpus validus. *Environ. Science and Pollut.Res.* DOI 10.1007/S 11356-012-1375-1
- 13. Zhang, D.Q., Hua, T., Gersberg, R.M., Zhu, J.F., Ng, W.J. and S.K. Tan. 2012. Fate of diclofenac in wetland mesocosms planted with Scirpus validus. *Ecol. Eng.* 49, 59-64.
- 14. Jinadasa, K.B.S.N., Wijewardena, S.K.I., Zhang, D.Q., Gersberg, R.M., Tan, S.K., Wang, J.Y. and W.J. Ng, 2012. Socio-environmental impact of water pollution on the Mid-canal (*Meda Ela*), Sri Lanka. *J. of Water Resource and Protection* 4 (7): 451-459.
- 15. Zhang, D.Q., Gersberg, R.M., Zhu, J.F., Hua, T., Nguyen, A.T. and S.K. Tan. 2012. Batch versus continuous feeding strategies for pharmaceutical removal by subsurface flow constructed wetlands. *Environ. Pollut.* 167, 124-131.
- 16. Zhang, D.Q., Gersberg, R.M., Hua, T., Zhu, J.F., Jinadasa, K.B.S.N. and S.K. Tan. 2012. Pharmaceutical removal in tropical subsurface flow constructed wetlands at varying hydraulic loading rate. *Chemosphere* 87, 273-277.
- 17. Zhang, D.Q., Tan, S.K., Gersberg, R.M., Zhu, J.F., Hua, T. and A.T. Nguyen. 2012. Effect of feeding strategies on pharmaceutical removal by subsurface flow constructed wetlands. *Journal of Environmental Quality* 41: 1349-1360.
- 18. Weragoda, S.K., Jinadasa, K.B.S.N., Zhang, D., Gersberg, R.M., Tan, S.K., Tanaka, N. and W.J. Ng. 2012. Tropical application of floating treatment wetlands. *Wetlands*_32 (5): 955-961.
- 19. Zhang, D.Q., Tan, S.K., Gersberg, R.M., Zhu, J., Sadreddini, S. and Y. Li. 2012. Nutrient removal in tropical subsurface flow constructed wetlands under batch and continuous flow conditions. *J. Environ. Management* 96(1): 1-6.
- 20. Lüderitz, V, Speiert, T., Langheinrich, U., Völkl, W. and R.M. Gersberg. 2011.Restoration of rivers Upper Main and Rodach the success and measurement. *Ecological Engineering* 37: 2044-2055.
- 21. 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.
- 22. 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.

- 23. 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.
- 24. 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.
- 25. Zhang, D.Q., Gersberg, R.M., and S.K. Tan. 2009. Constructed Wetlands in China. *Ecological Engineering* 35:1367-1378.
- 26. 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.
- 27. 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.
- 28. Watanabe, K., Franz, K. and R.M. Gersberg. 2008.Levels of the organophosphorus pesticide diazinon in the Chollas Creek watershed, San Diego, Ca, since its phase-out in 2004. *Bulletin of the Southern California Academy of Science* 107 (1): 33-40.
- 29. 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.
- 30. 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.
- 31. 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.
- 32. 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.
- 33. 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.
- 34. 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.
- 35. 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.
- 36. 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.
- 37. 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.
- 38. 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.
- 39. 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.
- 40. 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.
- 41. 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.
- 42. 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.
- 43. 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.

- 44. 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.
- 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.
- 46. Riveles, K. and R.M. Gersberg. 1999. Toxicity identification evaluation of runoff from the Tijuana River. *Bull. Environ. Contam. Toxicol*. 63, 625-632.
- 47. 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.
- 48. 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.
- 49. 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.
- 50. 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.
- 51. 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.
- 52. 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.
- 53. 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.
- 54. 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.

- 55. 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.
- 56. 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.
- 57. 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.
- 58. 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.
- 59. 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.
- 60. 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
- 61. Gersberg, R.M. and D.A. Silvaggio. 1992. Fate of coliphage during wastewater treatment by water hyacinth (Eichhornia crassipes). *Ecol. Eng.* 1, 355-363.
- 62. 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.
- 63. 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.
- 64. 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.
- 65. 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.

- 66. Gersberg, R.M., Lyon, S.R., Brenner, R. and B.V. Elkins. 1988. Performance of a clayalum flocculation (CCBA) process for virus removal from municipal wastewater. *Water Res.* 22, 1449-1454.
- 67. 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.
- 68. 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 Conference on Aquifer Restoration, Ground Water Monitoring and Geophysical Methods*. May 23-26, 1988. Las Vegas, Nevada, pp.183-199.
- 69. Gersberg, R.M., Brenner, R., Lyon, S.R. and B.V. Elkins. 1987. Virus removal by a clayalum (CCBA) coagulation process for wastewater reclamation. *Proceedings of Water Reuse Symposium IV*. AWWA Research Foundation. August 3-7, Denver Colorado, pp.1173-1182.
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- 71. 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.
- 72. 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.
- 73. Elkins, B.V., Wilson, G.E., and R.M. Gersberg. 1985. Complete reclamation of wastewater and sludge. *Water Sci. Tech.* 17, 1453-1454.
- 74. 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.
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