

## **Thomas Jabusch, PhD**

Environmental Scientist  
San Francisco Estuary Institute  
7770 Pardee Lane  
Oakland, CA 94621

(510) 746-7340  
thomasj@sfei.org

### **Summary**

Dr. Jabusch is an Environmental Scientist at the San Francisco Estuary Institute, where he contributes as a project scientist and manager to the Contaminant Monitoring & Research, Watershed Science, and Regional Monitoring programs. He was a Sea Grant Fellow at the Great Lakes Commission, where he gained experience in water resources policy and strategic planning. Previous experience also includes postgraduate and graduate research related to pesticide fate, PCB bioaccumulation, and trace metal uptake and toxicity.

### **Education**

- Ph.D. 2002    Water Resources Science Program  
University of Minnesota, Twin Cities, MN
- M.S. 1995    Faculty of Biology (Major Subject: Limnology)  
University of Freiburg, Freiburg i. Br., Germany
- B.S. 1991    Biology, University of Freiburg, Freiburg i. Br., Germany

### **Professional Positions**

*Environmental Scientist*, San Francisco Estuary Institute, Oakland CA, 2005-present.

Project scientist and manager in Contaminant Monitoring & Research, Watershed Studies, and Regional Monitoring programs. Current projects include a monitoring strategy for the San Joaquin River basin, technical support to CALFED and IEP for the development of a comprehensive long-term monitoring plan for the Sacramento-San Joaquin Delta, developing a water quality indicator system for the San Joaquin River, and evaluating dredging data for monitoring contaminants in San Francisco Bay.

*Postdoctoral Researcher*, Department of Environmental Toxicology, University of California, Davis, CA, 2004-05.

Studies of herbicide environmental fate and dissipation kinetics in rice field conditions.

*Sea Grant Fellow/Research Associate*, Great Lakes Commission, Ann Arbor, MI, 2002-03.

Project specialist in Regional Coordination, Transportation and Sustainable Development, and Data and Information Management programs. Drafted Corps of Engineers' John Glenn Great Lakes Program Strategic Plan. Developed a flowchart-based annotated bibliography to support a regional guideline for testing and evaluation of Great Lakes dredged material for upland uses. Prepared Great Lakes daily news digest for Great Lakes Information Network.

*Research Assistant*, Environmental Health Sciences, School of Public Health, University of Minnesota, Twin Cities, MN, 1997-2002.

Experimental research evaluating mechanistic assumptions in current foodweb bioaccumulation models about the uptake of PCBs and other organochlorine contaminants by phytoplankton.

*Communication Assistant*, Water Resources Center, University of Minnesota, Twin Cities, MN, 1998-2000.

Web development, brochure design, technical writing.

*Research Assistant*, Department of Biology, University of Minnesota, Duluth, MN, 1996-97.

Method development to study the viability of *Salmonella* under environmental conditions.

*Visitation/Research Assistant*, Swiss Federal Institute of Environmental Science and Technology (EAWAG), Dübendorf, Switzerland, 1994-95.

Research on speciation and bioavailability of trace metals to freshwater phytoplankton.

*Research Assistant*, Institute of Limnology, University of Konstanz, Konstanz, Germany, 1993.

Dept. of Biological Sciences, Brock University, St. Catharines, Ontario, Canada, 1992.

Institute of Zoology, University of Freiburg, Freiburg, Germany, 1991.

### **Scientific Publications**

Jabusch, T.W., and R.S. Tjeerdema. 2006. Microbial degradation of penoxsulam in flooded rice field soils. *Journal of Agricultural and Food Chemistry* 54(16): 5962-5967.

Jabusch, T.W., and R.S. Tjeerdema. 2006. Photodegradation of penoxsulam. *Journal of Agricultural and Food Chemistry* 54(16): 5958-5961.

Jabusch, T.W., and R.S. Tjeerdema. 2005. Partitioning of penoxsulam, a new sulfonamide herbicide. *Journal of Agricultural and Food Chemistry* 53(18): 7179-83.

Jabusch, T.W., and D.L. Swackhamer. 2005. Partitioning of polychlorinated biphenyls in octanol/water, triolein/water, and membrane/water systems. *Chemosphere* 60(9): 1270-1278.

Jabusch, T.W., and D.L. Swackhamer. 2004. Subcellular accumulation of polychlorinated biphenyls in the alga *Chlamydomonas reinhardtii*. *Environ. Toxicol. Chem.* 23(12): 2823-2830.

Knauer, K., Jabusch, T., and L. Sigg. 1999. Manganese uptake and Mn(II) oxidation by the alga *Scenedesmus subspicatus*. *Aquat. Sci.* 61: 44-58.

### **Technical Reports**

U.S. Army Corps of Engineers. 2005. John Glenn Great Lakes Basin Program Strategic Plan (Draft). Great Lakes Commission, Ann Arbor, MI.

Great Lakes Commission and Great Lakes Dredging Team. 2004. Upland Beneficial Use of Dredged Material Testing and Evaluation Annotated Bibliography. Great Lakes Commission, Ann Arbor, MI.

Great Lakes Commission and Great Lakes Dredging Team. 2004. Testing and Evaluating Dredged Material for Upland Beneficial Uses: A Regional Framework for the Great Lakes. Great Lakes Commission, Ann Arbor, MI.

### **Other Publications**

Lower Minnesota River Watershed Website. A networking spot for the diverse group of people concerned with water quality in the Lower Minnesota River Watershed. [wrc.coafes.umn.edu/lowermn](http://wrc.coafes.umn.edu/lowermn). Water Resources Center, St. Paul, MN.

The Great Mississippi. 1999. A brochure describing the benefits of the Mississippi. Water Resources Center, St. Paul, MN.

LIMNology: New initiative aimed at graduate education. Main article in Minnegram March 1999. Water Resources Center, St. Paul, MN.

Freelance journalistic contributions in Laborjournal, 1995-96. ([www.biotech-europe.de](http://www.biotech-europe.de))

### **Meeting Abstracts**

Pawley, A.L., C. Swanson, R. Hoenicke, T. Jabusch, M. Delaney, P. Vorster, and A. Gunther. 2006. Developing Water Quality and Management Response Indicators for the San Joaquin Basin on Multiple Scales. CALFED Science Conference, Sacramento, CA, USA.

Jabusch, T.W., and R.S. Tjeerdema. 2005. Dissipation of penoxsulam, a new sulfonamide herbicide, in simulated rice field conditions. Presented at the SETAC North America 26th Annual Meeting, Baltimore, MD, USA.

Jabusch, T., and D.L. Swackhamer. 2001. The Role of Lipid Membranes in the Bioaccumulation of PCBs in Phytoplankton. Presented at the SETAC North America 22nd Annual Meeting, Baltimore, MD, USA.

Jabusch, T., and D.L. Swackhamer. 2001. Bioaccumulation of PCBs in Phytoplankton: Mechanistic Investigations on the Cellular Level. Presented at the 2001 Aquatic Sciences Meeting of the American Society of Limnology and Oceanography, Albuquerque, NM, USA.

Jabusch, T., and D.L. Swackhamer. 2000. Predicting Bioaccumulation of Organic Chemicals in Phytoplankton: Measurement and Evaluation of Octanol/Water and Lipid/Water Partitioning Coefficients. Poster presented at the Gordon Research Conference on Environmental Science—Water, Holderness School, Plymouth, NH, USA.

### **Financial Support**

Building a Public-Private Partnership for Water Quality Monitoring in the San Joaquin River Basin, U.S. EPA Region IX, \$230,000, 2006-08.

The Environmental Fate of Pesticides Important to Rice Culture (with R.S. Tjeerdema), UC Rice Research Board, \$48,598, 2005.

### **Other Experience**

#### *Financial acquisition*

Proposal preparation for California DFG grant award no. P0685607, Comprehensive Monitoring, Research and Assessment Program Phase III, Technical Support, Research (\$104,828), 2005.

Proposal draft for NSF grant award no. 9975410, The Biological and Chemical Processes Controlling the Bioaccumulation of Organic Chemicals by Phytoplankton (\$200,000), 1999.

Mini-proposal to obtain an internal grant allocation at the Swiss Federal Institute of Technology (EAWAG) for studies of trace metal uptake and speciation in freshwater phytoplankton (sFr 3,000).

Solicitation of sailboat and equipment donations, Sailing Club at the University of Minnesota (\$ 6,000), 2000-2001. Fundraising coordination (\$3,000), 1998.

#### *Service*

*Peer Reviewer* for Environmental Science & Technology, Environmental Pollution

*Planning Committee Member*, Environmental Challenges of the 21<sup>st</sup> Century: Great Lakes Experiences and Global Applications, Great Lakes Commission and International Lakes Environment Committee Special Joint Symposium, ILEC/IAGLR Large Lakes Conference, Chicago, IL, 2003.

*Reviewer*, SOLEC Success Story awards selection committee, *State of the Lakes Ecosystem Conference*, Cleveland, OH, 2002.

#### *Teaching*

*Guest Lecturer*, Environmental Chemistry course, Environmental Health Sciences, School of Public Health, University of Minnesota (Minneapolis, MN), 1999-2001.

*Course Participant*, Teaching in Higher Education, Preparing Future Faculty Program, Graduate School, University of Minnesota, 2001

#### *Team Building*

Vice-Commodore, University of Michigan Sailing Club, 2002-03.

Commodore, Sailing Club at the University of Minnesota, 2000.

Vice-Commodore, Sailing Club at the University of Minnesota, 1998.

#### *PC Skills*

MS Office (Excel, Word, PowerPoint, Access), SigmaPlot, SPSS, JMP, ArcView, Acrobat (PageMaker, Professional, GoLive CS), FrontPage, CorelDraw, Photoshop, HTML.

**Awards and Fellowships**

Great Lakes Commission – Sea Grant Fellowship, 2002.  
ACS Environmental Chemistry Award for Graduate Students, 2001.  
European Community Research Fellowship (ACTIVE program), 1995.

**Professional Memberships**

American Chemical Society  
Society of Environmental Toxicology and Chemistry