

# **Svetoslava Todorova**

## **PhD Candidate**

Department of Civil and Environmental Engineering  
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### **Biographical Information**

- Master in Environmental Engineering, 2004, Syracuse University  
Thesis: Iron Geochemistry and Microbial Diversity of Iron-reducing Microorganisms in a Minerotrophic Wetland
- Bachelor/ Master of Science in Civil Engineering, 1996, University of Architecture, Civil Engineering and Geodesy, Bulgaria  
Thesis: Treatment and Utilization of Solid Waste and Sewage Sludge for the Town of Plovdiv

### **Research Projects**

- Evaluation of Nitrate Addition to Control Methyl Mercury Production in Onondaga Lake, Center for Environmental Systems Engineering, Syracuse University, in collaboration with Upstate Freshwater Institute and local consulting companies, 2005-current
- Onondaga Lake Permanent Habitat Modules and Wetland Connection: Post-construction Monitoring, Center for Environmental Systems Engineering, Syracuse University, in collaboration with Onondaga Environmental Institute, 2004-2005
- Adapting to Climate Change: Scientists, Policymakers and Great Lakes Decision-Making, Center for Environmental Policy and Administration, Syracuse University, 09/2003-12/2003

## Peer-reviewed Publications

Todorova, S., Siegel, D., and A.M. Costello. 2005. Microbial Fe(III) reduction in a minerotrophic wetland – geochemical controls and involvement in organic matter decomposition. *Applied Geochemistry*. 20, 1120-1130.

Todorova, S. and A.M. Costello. 2005. Design of *Shewanella*-specific 16S rRNA primers and application to analysis of *Shewanella* in a minerotrophic wetland. *Environmental Microbiology*. 8(3): 426-432

## Selected Technical Presentations

### • Poster Presentations

Todorova, S., Driscoll, C.T., David Matthews, and Steven Effler. 2006. High nitrate inputs to help remediate mercury contaminated lake. International Conference on Mercury as a Global Pollutant. Madison, WI

Todorova, S. and Costello, A. 2004. Microbial diversity of iron-reducing microorganisms at a minerotrophic wetland. ASM General Meeting, New Orleans, LA

Todorova, S., Siegel, D., and Costello, A. 2002. Microbial dynamic in a shallow peat in calcareous fen. AGU Fall General Meeting, San Francisco, CA

### • Oral Presentations

Todorova, S., Driscoll, C.T., David Matthews, and Steven Effler. 2007. Long-term changes in mercury in biota of a recovering eutrophic and mercury contaminated lake. Ninth Annual Onondaga Lake Scientific Forum, Syracuse, NY

Todorova, S. and David Matthews. 2007. Impacts of nitrate on methylmercury production in Onondaga Lake: preliminary results from the 2006 study. Joint meeting with NYDEC and USEPA Region II, Albany, NY.

Todorova, S., Driscoll, C.T., David Matthews, and Steven Effler. 2006. Impact of nitrate on hypolimnetic processes in Onondaga Lake: 2. Preliminary evidence for reductions in methylmercury production. Eighth Annual Onondaga Lake Scientific Forum, Syracuse, NY

Todorova, S., Todorov, D. and Driscoll, C. T. 2005. Mercury speciation in wetlands surrounding Onondaga Lake. Biennial AEESP Conference, Potsdam, NY