

New England Graduate Student Water Symposium
LIST OF POSTERS

Modeling Hydrodynamic Conditions in the Upper Niagara River, USA to Assess Feasibility of Emerald Shiner (*Notropis atherinoides*) Passage

Isaac Allen, University at Buffalo

Reduction of Membrane Fouling via Surface Modification

Catalina Alvarado, Rensselaer Polytechnic Institute

Emulsion-base recovery of multicomponent synthetic gasoline mixture using surfactants

Parnian Baniahmad, Tufts University

Analysis of Goethite Reactivity with Respect to Surface Area

Grant Bedard, University of Connecticut

Spectroscopic investigation of particle size effects on oxyanion adsorption mechanisms at the goethite-water interface

Grant Bedard, University of Connecticut

Including Measurements Along Vertical Ray Paths in Crosshole Radar Tomography

Cecilia L. Boyden, University of Connecticut and USGS

A porous medium approach to modelling a microchannel heat exchanger

Daniel Brady, Worcester Polytechnic Institute

An Automated Method for Testing Process Parameters

Felice Chan, Cornell University

Flexible Water Treatment BA Electrocoagulation (EC) and Ion Concentration Polarization (ICP) Hybrid System

Siwon Choi, MIT

Nutrient (ammonia) recovery from anaerobic digestate effluent and re-use as a fertilizer

Yashodhara Chowdhury, Clarkson University

An evaluation of the hydrologic budget of the Salar de Atacama in northern Chile – Implications for regional groundwater flow

Lilly Corenthal, University of Massachusetts

Calculating our Estrogen Footprint: Testing a Procedure to Quantify Estrogenic Compounds in Wastewater

Emily Crossette, Lafayette College

Coliforming a Better World

Nicole Del Monaco, Rutgers University

Evaluating Polysulfone Ultrafiltration Membranes for Water Purification

Kerianne M. Dobosz, University of Massachusetts Amherst

New England Graduate Student Water Symposium
LIST OF POSTERS

AguaClara Global Overview

Skyler Erickson, Cornell University

Step Feed Anaerobic Fermentation- A Novel Alternate for Faecal Sludge Processing

Ato Fanyin-Martin, KNUST and Columbia University

Searching for the constraint on the design of inlet diffusers for sedimentation tanks

Casey Garland, Cornell University

Membrane Fabrication from Self-Healing Polyurethanes

Bezawit Getachew, Yale University

Understanding the relative role of droplet straining in controlling emulsion transport within porous media

Somayeh Ghazvinizadeh E., Tufts University

RiverSmart Communities: Deerfield River Watershed Case Study

Nicole Gillett, University of Massachusetts

Ammonia Toxicity on Four Oleaginous Microalgae

James Gutierrez, Yale University

Surface modified activated carbon nanofiber nonwoven as a high surface area sorbent in water treatment

Yi Han, University of Connecticut

Application of DNA Stable Isotope Probing to Identify Trace Organic Contaminant Degrading Microorganisms

Catherine Hoar, Columbia University

Chemical Stratification and Mercury Distribution of Meromictic Glacier Lake

Asante Holder, SUNY ESF

Cometabolism of Beta Blocker Pharmaceuticals during Nitrification and their Inhibition Effects on Nitrifying Bacteria

Amy Hunter, Tufts University

Exploring Beta Blocker Cometabolism by mixed culture biomass communities from Water Resource Recovery Facilities

Amy Hunter, Tufts University

Application of terrestrial laser scanning for wetland microtopography surveys

Kyotaek Hwang, Syracuse University, David G. Chandler, Syracuse University

Climate Change Impacts on the Thermal Stratification of the Wachusett Reservoir

New England Graduate Student Water Symposium
LIST OF POSTERS

Lillian Jeznach, University of Massachusetts, Amherst

Modeling the influence of spatial heterogeneity on bioenhanced dissolution of PCE
Mojdeh Karkhanehchi, Tufts University

Low Impact Development for Cold Regions: Evaluation of SWMM 5.0 Snowmelt Model
Against Seasonal Change
Babak Kasae Roodsari, Syracuse University

Forecasting and assessment of the WARMF model for real time salinity management
within the San Joaquin River
Claire Keller, Smith College

Dynamic Pulse-Driven Flowering Phenology in a Semiarid Shrubland
Natasha Krell, College of the Atlantic

Recirculating Aquaponic Systems
Maya Kutz, Smith College

Optimizing coagulation and disinfection byproduct formation potential minimization
during treatment of high TOC surface water.
Abhisek Manikonda, Clarkson University

Mercury Fate in the Madison County Constructed Wetland
Gerardo Martinez, Syracuse University

Disinfection by-product speciation in swimming pools: Effect of temperature and
sunlight
Christopher Melillo, Manhattan College

Evaluation of Potentially Bioavailable Organic Carbon in Soil Samples after Liming near
the Honnadaga Lake in New York State
Yaskira Mota, Syracuse University

Degradation of Chlorobenzene in Simulated Groundwater Using Palladium-Catalytic
Electro-Fenton Reaction
Roya Nazari, Northeastern University

Synthesis of Modified Polysulphone Membranes using Clay Nanoparticles
Raphael Rodrigues, Harvard University

New England Graduate Student Water Symposium
LIST OF POSTERS

Recovery of Iron Oxide Pigments from Acid Mine Drainage
Michael Ryan, Lafayette University

The influence of freshwater mussels on near-bed flow conditions
Brandon Sansom, University at Buffalo

Groundwater Contribution of Phosphorus from Near-lake Septic Systems to
Eutrophication of a Lake
Frank L. Schellenger, Northeastern University

Evaluation of Fluorescence Spectroscopy to Identify Organic Matter Source in Effluent-
Receiving Fluvial Systems
Sharon Scott, University of Connecticut

The Effect of Dissolved Organic Carbon Fractions on Metal Mobility in In-situ Chemical
Oxidation Applications
Chelsey Serrano, University of New Hampshire

Self-Assembly of Ultra-thin Reduced Graphene Oxide Membranes at the Air-Water
Interface
Gregory Silverberg, Harvard

Using High-Resolution Remote Sensing Data and ArcGIS to Estimate Fluvial-
Geomorphometric Parameters
Noah Slovin, University of Massachusetts Amherst

Supporting Global Citizen Science with a Mixed Media Informatics Framework
Kevin Smith, Tufts University

Water Treatment Residual (WTR)-Coated Mulches for Mitigation of Toxic Metals and
Nutrient in Urban Stormwater
Hanieh Soleimanifar, Montclair State University

Interactions of Ferrate(VI) with Natural Organic Matters (NOMs)
Yali Song, Montclair State University

Incorporating Ecological Principles in Water Management Decision Making: Example
Application to Flood Management in Iowa
Caitlin Spence, University of Massachusetts Amherst

Investigation of DNA Extraction Protocols for Granular Biofilms Containing Microalgae
and Bacteria
Kristie Stauch-White, University of Massachusetts Amherst

Photoelectrochemical Chemical Oxygen Demand for Drinking Water Analysis
Amina K. Stoddart, Dalhousie University

New England Graduate Student Water Symposium
LIST OF POSTERS

Characterization of UV-quinching dissolved organic matter in landfill leachate
Alicja Trzopek, Montclair State University

Assessing the impacts of a biofiltration facility and associated groundwater flow on
surface water quality
Jacquelyn Tupper, Worcester Polytechnic Institute

Improvement on a correction factor to approximate methyl mercury content using
specific ultraviolet absorbance
Lysa Uwizeyimana, Syracuse University

Evaluating the Performance of Biological Phosphorus Removal and the Capacity of
Phosphorus recovery via Different Sludge Retention Times
Yuqi Wang, Northeastern University

Climate Change and Water Quality Impacts and Adaptation Strategies for NYS & NYC
Utilities
Patrick Wittbold, University of Massachusetts, Amherst

Biofilm Formation on Carbon Nanotube/Polycaprolactone Nanocomposite Coated
Surfaces
Zehui Xia, University of Massachusetts, Amherst

Carbon nanomaterials for electrochemical anti-microbial fouling coating: performance
evaluation and mechanism study
Qiaoying Zhang, Harvard University