

NICOLAS GILBERT B.Sc, M.Sc
210 Thomas St, Oshawa On, L1J 1M1, (905) 725-8831
nicolas.gilbert@uoit.ca

SPECIAL SKILLS

- Analytical methods
 - Maintaining microbial cultures for Biolog analysis
 - Phylogenetic analysis using DGGE and Gel Compare Software
 - Cell enumeration using epifluorescent microscopy
 - Biodegradation experiments via radioisotope analysis using a scintillation counter
 - Analysis of organic contaminants in sediments and water using UPLC/HPLC
- Data analysis including multivariate analysis of environmental data (ex: SigmaPlot, Microsoft Excel, Past)
- In depth knowledge of wetland function, hydrology and the various pollutant attenuation mechanisms in these systems
- Fully bilingual in both French and English
- Excellent report writing skills
- Excellent presentation/communication and interpersonal skills
- Excellent organizational, planning and research skills required to complete various projects as required
- Valid driver's licence (G class)

EDUCATION

Master of Science in Applied Biosciences **2009-2011**

University of Ontario Institute of Technology (UOIT), Oshawa ON

- thesis research investigated the capacity of urban wetlands to attenuate organic contaminants
- field studies of wetland physicochemical chemical characteristics
- conducted various organic contaminant biodegradation and toxicological assays
- graduate courses: *Research in Applied Bioscience, Special Topics in Ecosystem Health, Environmental Determinants of Health*

Bachelor of Science (Hons) in Biological Sciences **2005-2009**

University of Ontario Institute of Technology (UOIT), Oshawa ON

- Directed Studies: The use of genetically modified plants in phytoremediation
- Specialized Courses: *Environmental Risk Characterization, Advanced Topics in Environmental Toxicology, Environmental Chemistry, Environmental Research Methods, Advanced Topics in Environmental Toxicology*

PUBLICATIONS

Gilbert, N.J, Fulthorpe R, Kirkwood A.E. (2012). Diversity, Function and Resilience of Microbial Communities from Urban Wetlands. *Canadian Journal of Microbiology*, 58 : 887-897

Arnot J., Armitage J., Gilbert N.J., and Wang. J. (2012). Developing Databases and Methods to Address Uncertainty in Microbial Chemical Biodegradation Estimates for Ecological and Human Health Assessment. Final Report submitted to Health Canada, pp. 36

Gilbert, N.J. (2011). The Role of Urban Wetland Diversity and Function in Contaminant Fate (M.Sc Thesis). Department of Science, University of Ontario Institute of Technology, Ontario, Canada, pp. 113

CONFERENCE PAPERS

The 37th Annual Aquatic Toxicology Workshop 2010, Toronto, ON

Gilbert N.J., Kirkwood A.E. The role of urban wetland community structure and function in contaminant fate. Mariott Downton Eaton Center, Toronto, ON

The 61st Annual Conference of the Canadian Society of Microbiologists 2011, Saint John's NL,

Gilbert N.J., Kirkwood A.E. Diversity, function and resilience of microbial communities from urban wetlands, Memorial University, Saint-John's, NL

RECENT EMPLOYEMENT EXPERIENCE

Science Instructor **2012-Present**
Centennial College, Scarborough ON

- Prepared and taught various microbiology and chemistry lectures and labs
- Marked tests, assignments and reports and interacted with a wide range of students

Research Consultant **2012-Present**
University of Toronto, Scarborough ON

- Preparation biodegradation half life databases for various organic pollutants
- Preparing reports summarizing, methodology, background information and theory

Teaching Assistant **2009-2011**
University of Ontario Institute of Technology, Oshawa ON

- Preparing, demonstrating and supervising biology 1010 U laboratory
- Marking assignments and lab reports

Environmental Field Technician **2009**
University of Ontario Institute of Technology, Oshawa ON

- Lake water sampling and recording of lake water chemistry parameters with YSI probe
- Laboratory analysis of water samples including chlorophyll a and total phosphorus
- Analysis and interpretation of data using Microsoft Excel and Sigma Plot

SERVICE & OUTREACH

Member of the Oshawa Environmental Advisory Committee (OEAC) **2010-Present**

- Assist city council with different environmental related issues
- Served on various sub committees

Student Representative - Applied Bioscience Graduate Student Committee

2009-2011

- Assisted with the organization and running of different graduate student fundraising and social events