



Faculty of Engineering and Applied Science Chemical Engineering Seminar Series



The Hazards of “Down the Drain” Chemicals

Dr. Chris Metcalfe/Trent University
Thursday, January 12, 2017, 2:30pm
Dupuis Hall, Room 215



ABSTRACT

We flush a variety of contaminants down the drain as a result of our everyday use of personal care products (e.g. shampoo, fragrances, antibacterial soaps), washing of clothing and excretion of natural hormones and pharmaceuticals. Many of these chemicals are poorly removed from domestic sewage by wastewater treatment plants and therefore, are discharged into the aquatic environment as treated effluent or applied onto agricultural soils as biosolids. Dr. Chris Metcalfe will talk about the environmental hazards of these “down the drain” chemicals, based on studies conducted in his lab at Trent University, as well as studies by Canadian colleagues who are working in this field. He will also discuss how contaminants can be used as “chemical tracers” of wastewater pollution, and how community use of illicit drugs can be estimated using the “sewage epidemiology” approach.