

Centre for the Control of Emerging Contaminants (CCEC)

Principal Investigators:

Dr. Wayne Parker, University of Waterloo
Dr. Robert C. Andrews, University of Toronto
Dr. Susan Andrews, University of Toronto
Dr. Ron Hofmann, University of Toronto
Dr. Peter M. Huck, University of Waterloo
Dr. Raymond L. Legge, University of Waterloo
Dr. Edward A. McBean, University of Guelph
Dr. Chris Metcalfe, Trent University
Dr. Sigrid Peldszus, University of Waterloo
Dr. Carol Ptacek, University of Waterloo
Dr. David Rudolph, University of Waterloo
Dr. Mark Servos, University of Waterloo
Dr. Robin Slawson, Wilfrid Laurier University
Dr. Barry G. Warner, University of Waterloo
Dr. Hongde Zhou, University of Guelph

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“Emerging contaminants” (ECs) is a term encompassing thousands of compounds released into our water systems daily—from drug residues, to personal care products, to industrial chemicals, to antimicrobial resistant organisms and even exotic “new” compounds such as nanomaterials. Some of these compounds pass virtually unchanged through wastewater treatments which were not designed to remove them, emerging in wells and municipal drinking water sources.

The Centre for the Control of Emerging Contaminants (CCEC), brings together an interdisciplinary group of many respected water scientists in Canada, as well as industry and government partners. The Centre focuses on control of ECs in water, wastewater, and residuals (i.e. biosolids).



The objectives of the Centre are to:

- Develop and test new technologies to better control ECs
- Improve existing technologies for removal of ECs
- Develop analytical technologies for measuring/monitoring ECs in complex streams
- Contribute, through research, to the development of sound science-based policy to control ECs
- Evaluate the impact of ECs on surface and groundwater systems
- Improve our understanding of the effects of a wide range of ECs in water systems
- Act as a forum that brings together researchers, technology implementers and regulators

The CCEC positions Ontario as an international leader in the control of emerging contaminants by building focused research capacity in the following four interrelated theme areas:

Theme 1: Advanced Drinking Water Treatment for Emerging Contaminants

Theme 2: Risk Assessment of Emerging Contaminants in Aquatic Environments

Theme 3: Characterization and Control of Emerging Contaminant Discharges to Water

Theme 4: Fate and Control of Emerging Contaminants in Current and Next-Generation Wastewater Treatment Systems



University of Toronto Department of Civil Engineering, 35 St. George Street, Toronto, ON, Canada M5S 1A4