



Career Options after

Environmental Chemistry

the study of chemical processes in ecosystems

www.utsc.utoronto.ca/physsci

Co-op, Specialist

What is Environmental Chemistry?

Environmental Chemistry is a Physical Science. It is the study of chemical processes occurring in the environment which are impacted by anthropogenic activities. It seeks to understand the impacts through the application of chemical and physical parameters of elements and molecules to systems large and small. These impacts may be felt on a local scale, through the presence of urban air pollutants or toxic substances arising from a chemical waste site, or on a global scale, through depletion of

Skills of Environmental Chemistry Grads

- Application of modern analytical instrumentation including spectroscopy, (NMR, Mass, Light), Microscopy
- Design and application of experiments
- Analysis of contaminants and pollutants
- Investigate aspects of chemicals and processes as they occur in the environment
- Techniques in Geographic Information Systems (GIS) and Remote Sensing (RS) to solve scientific problems
- Qualitative and quantitative approaches for environmental impact assessments & audits
- Practical methods of resource exploration and assessment
- Communication skills – writing of technical report and project proposals
- Presentation skills – visualization of data and communication of research findings/topics

What makes Environmental Chemistry at UTSC unique? Graduates of Specialist programs are eligible to receive their Environmental Professional in Training (EPT) designation, which is a developmental certification for emerging environmental professionals:

www.eco.ca/accreditation.

Entry-Level Jobs for Bachelor Grads

Common employment destinations include:

- Water Treatment Specialist in Water Treatment and Waste Disposal
- Environmental Assessment Analyst
- Environmental Auditor
- Development Scientist for the Federal Government
- Research Associate in Universities
- Environmental Health & Safety Coordinator in Chemical Product Distributors
- Quality Assurance in Manufacturing (Food, Paper, Chemical, Plastics)
- Analytical Specialist in Engineering Consulting

The Career Directory: www.canadastop100.com/tcd

Graduate & Professional Studies

Popular further education opportunities include:

- Environmental Chemistry – Master
- Environmental Science – Bachelor or Master
- Engineering – Bachelor or Master
- Biotechnology – Master
- Regulatory Affairs – Post-Graduate Certificate
- Quality Assurance – Post-Graduate Diploma
- Occupational Health & Safety – Certificate

Use LinkedIn!

UTSC Environmental Chemistry graduates are working in Government Research, Education, and Operations.

Attend our LinkedIn workshop to learn about the *Find Alumni* tool!

Environmental Chemistry Grads from UTSC have gone on to:

- Alpha Laboratories (Laboratory Clerk)
- MediSystem Pharmacy (Relationship Manager)
- Ministry of the Environment (PPCP Analyst)



Examples of Fields that 'Fit' the Skills of Environmental Chemistry Grads

- Manufacturing (Chemical, Pharmaceutical)
- Research and Development
- Consulting
- Biotechnology
- Health and Safety
- Education
- Renewable Energy
- Government (Municipal, Regional, Provincial, Federal)
- Sales and Marketing
- Healthcare
- Waste Management

Your 4-Year Career Exploration Action Plan

1 Do Your Research

The databases below provide you with details about job prospects, nature of work, educational requirements, working conditions, pay and related career paths:

Career Cruising: Log into cln.utoronto.ca, click on Resources, and click on Career Cruising to be logged in automatically

O*Net: online.onetcenter.org (U.S. site)

Attend our workshop **Discover Your Skills and Career Options**, meet with a Career Counsellor, and use our resources to get to know your skills, values, personality and interests:

www.utsc.utoronto.ca/aacc/get-know-yourself

Use the advice on our tip sheets for gathering info: www.utsc.utoronto.ca/aacc/tipsheets

- Information Interviews
- Working On-Campus
- Internships
- Volunteering

3 Build Your Network

Explore **Professional Associations** and get involved: volunteer for their events and conferences, and get to know people in your industry of interest. These are your future mentors, supervisors and colleagues!

Environmental & Physical Sciences Student Association - www.myepsa.ca

Association of the Chemical Profession of Ontario - www.acpo.on.ca

The Chemical Institute of Canada - www.cheminst.ca

Canadian Society of Clinical Chemists - www.csccl.ca

Canadian Education Association - www.cca-ace.ca

Chemistry Industry Association of Canada - www.canadianchemistry.ca

Society of Environmental Toxicology & Chemistry - www.setac.org

Canadian Water and Wastewater Association - www.cwwa.ca

Biotech Canada - www.biotech.ca

Workplace Safety & Prevention Services - www.wsps.ca

2 Explore Career Options & Get Experience

Gain exposure to your options in the world of work and make connections while you're a student via campus events and programs listed on cln.utoronto.ca and ccr.utoronto.ca:

- [Extern Job Shadowing](#)
- [In the Field](#)
- [Explore It!](#) (course-based)
- [Partners in Leadership](#) (4th year students)
- [iLead, uLead, weLead](#) (Dep't of Student Life)
- Employer Information Sessions
- Career & Volunteer Fairs
- [Departmental Student Association](#) Events

Apply for [Work Study](#) jobs on CLN in the Fall and Spring! You might also find work via www.scsu.ca/jobs.

Find networking opportunities, internship programs and entry-level jobs via websites like www.talentegg.ca and www.charityvillage.ca.

As an upper year student (14+ credits), attend UTSC's [Get Hired Conference](#) and participate in [Jobs for Grads](#).

As a graduate, explore internships and other trainee programs like www.careeredge.ca

Please note: This document is a starting point for your further research into career options in this field of study. For more information on this program and course requirements, please visit the departmental website at the top of the first page.