Services

Many cultures are available on 1-3 wk notice.

Fees per 15 ml culture (\$CAD)*:

Price	Affiliation
\$90	Canadian non-profit users
\$110	International non-profit users
\$180	All Commercial Users

^{*}S&H is additional; other volumes available.



We can also provide:

- Preparation of media and concentrates
- Training in methods of culture and isolation of algae and cyanobacteria
- Confidential safe-deposit/cryostorage
- Consultation services (including enumeration, isolation and identification; time- and expertise-permitting)



The CPCC may accept deposits of strains for the general collection. Of special interest are those species related to environmental or biotechnological research, particularly if they have been used for publications and have been isolated from Canadian sites.



For more information, contact:

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Canadian Phycological Culture Centre

at the University of Waterloo

CPCC (formerly UTCC)

uwaterloo.ca/canadianphycological-culture-centre/

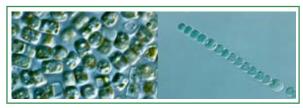
The Centre

The Centre was originally established by Judy Acreman in 1987 as the University of Toronto Culture Collection of Algae & Cyanobacteria (UTCC). It was later renamed as the Canadian Phycological Culture Centre (CPCC). Its mandate is to serve as a source for research quality cultures of freshwater microalgae and cyanobacteria and related services. The focus of the collection is on species that are important for research in environmental studies and biotechnology.

Since 2008, the Centre has been housed in the Department of Biology at the University of Waterloo, which provides much needed administrative and non-financial assistance. Partial salary support is supplied by the Faculty of Science; in addition, the CPCC relies heavily upon user fees for revenue. The Advisory Committee consists of faculty members from several universities in Canada and the USA, including Co-Directors Dr. Kirsten Müller (UWaterloo – Biology) and Dr. Monica Emelko (UWaterloo – Civil & Environmental Engineering).



The CPCC maintains approximately 400 isolates of primarily freshwater microalgae and cyanobacteria, along with a few isolates of marine microalgae, macroalgae, and aquatic vascular macrophytes. Most of the major algal groups are represented; about 50% of the strains are native to Canada and approximately 80% are unique to the CPCC.



Many strains were isolated from areas of environmental concern or are useful in environmental research, such as:

- High lipid species that are potential sources for biofuel (Ankistrodesmus falcatus, Chlamydomonas reinhardtii, Chlorella spp., Tetradesmus obliquus)
- Eco-toxicity test strains of algae and aquatic vascular macrophytes (Raphidocelis subcapitata – also known as Pseudokirchneriella subcapitata and Selenastrum capricornutum, Lemna gibba, Lemna minor)
- Feed organisms for daphnids and other copepods, fish, shellfish, etc. (Chlorella spp., Nitzschia palea, Raphidocelis subcapitata, Rhodomonas spp.)
- Toxic cyanobacteria (Microcystis aeruginosa, Anabaena spp., Trichormus variabilis, Planktothrix rubescens)

- Algae from extreme environments: high salt (Chlorococcum sp.), low pH (Dunaliella acidophila, Euglena spp.), low temperature (Phormidium lumbricale)
- Cyanobacteria from industrially polluted sites (*Aphanocapsa* spp., *Lyngbya* spp.)
- Algae and cyanobacteria causing odour and taste in freshwaters (*Anabaena* spp., *Synura* spp., *Uroglena* spp.)
- Isolates from acid-stressed lakes and bogs (Chlamydomonas acidophila, Euglena gracilis, Mougeotia spp., Tabellaria flocculosa)
- Algae resistant to or tolerant of heavy metals (Coccomyxa sp., Euglena mutabilis, Klebsormidium spp., Stichococcus sp.)



Currently, all CPCC cultures are maintained by routine serial transfer into defined media. A few of the isolates have also been cryopreserved in order to retain valuable genetic traits and to reduce contamination risks.



