CERC marine bio-optical and phytoplankton photo-physiology Laboratory, Laval University

The lab is equipped for standard biological and optical analysis of phytoplankton samples and sea water. In particular photo-physiology can be studied in real-simulated conditions in our temperature-controlled laboratory which is exempt of ambient humidity to allow electronic equipment to be operated at in situ temperature as low as 0 Celsius.

Instrumentation:

* Temperature and humidity controlled laboratory (8 m x 6 m) equipped with a laminar flow hood (6' wide), special lighting system and various phytoplankton culture equipment (volumes between .5 and 80L).
* Cell counting capability. Beckman Coulter MS4 coulter counter, HIAC Royco gravitometry counter
* Photo-physiological studies. FIRe fluorometer, Water-PAM and Phyto-PAM (Heinz Walz GmbH), photosynthetrons (6 times 28 light levels between 1 and 2500 µmolQuanta).
* Spectrophotometer Perkin Elmer Lambda 850 equipped with an integrating sphere (150 mm diameter)
* Horiba Fluorolog (F22 configuration) double monochromator and temperature-controlled sample compartment (Pelletier effect)
* Longpath spectrophotometer Ultrapath (World precision Instr.) for Chromophoric Dissolved Organic Matter concentration determination.

For additional information, contact

Principal Investigator: Dr. Marcel Babin

Research staff: Dr. Flavienne Bruyant [flavienne.bruyant@takuvik.ulaval.ca](mailto:flavienne.bruyant@takuvik.ulaval.ca)