

## **Lakehead University**

I have developed software running under Solaris and Linux to help in the teaching of process control. The software called ColdSym brings up a graphic of a process in a "cold" state, that is, with nothing happening. The graphic includes valves and sensors which student can link using DCS-like block programming. The intent is to teach the structure of feedback loops as well as feedforward, cascade and constraint controls. Then the student can start up the process by turning on flows, steam, etc.

New simulations are created by preparing a process graphic; writing a C/C++ dynamic model which is compiled and linked with the ColdSym and various OpenGL libraries; and preparing a data file describing the process in its cold state.

I will be describing this software to the CSChE meeting in Hamilton in late October, and making the libraries and examples available on the web.

Allan Gilbert, PhD., P.Eng.  
Chair, Department of Chemical Engineering  
Lakehead University