Thermal Hydraulics Laboratory

Description

The Thermal Hydraulics (T/H) Laboratory is a multi-use facility designed specifically to support thermal/fluid experimentation. It includes an experimental high bay area with roll-up door access. Two inert glove boxes in the lab can be used for oxygen free preparation of test articles, and operation of small experiments. Multiple DC power supplies are available with power ratings up to 100 kW. A 200 kW inductive heating system is also installed in the lab. It is equipped with both hydrogen and argon gas supply systems. A chemical hood is available as well as a deionized water supply. A portable Allen-Bradley based data acquisition and control system in the lab can be used to measure temperatures, pressures, flows, etc., and used for experiment control.

Existing experimental loops in the T/H Lab include a low pressure multi-purpose water loop, an air/water test facility, a high temperature liquid fluoride salt test loop, and a high pressure thermosyphon water facility, among others.





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