pcl12.hep.anl.gov: Mon Oct 17 18:21:40 CDT 2011 Ed May
Notes for Evaporator DAQ

Refer to Naive Sketch:

Followup on Friday phone call.
Followup with Marcel and Jun on Monday.

Initial set of questions:

What/Which Voltage Supply? Specs? I/F
What is range of Voltages and curretns?
What is steps in Voltsage, set precission?
Is read back of Power supply V and I (if available) sufficient?
What is desired precission of independant measure of V and I?
Can this be achieve with standard multimeters.
Need a plan for mounting inside UHV chamber.
Need information on RGA, thermocouple, and IR camera.
What components required for minimal 1st system and measurements?
What components to add to base 1st system?
Can useful tests (beyond DAQ) be done with
        1. Simple wire or low value resistor in air.
        2. Berle 1" tubes.

DAQ to acquire data to study IV and Power characteristics
of metal evaporator. Guess at operating characteristics
2-3ohms at 8amps. Implies V=24Volts run 200watts.
Study I(time) [and Power=V*I] at various V set points.
What is Voltage set point range?
How arcurate must V-set be?
How acurate must V and I measurements be?
What range of times (time steps)?
Data display:
        IV curves
        I and P v time as chart recorder.
What is the anticipated shape of IV and time dependence?

Ed May