## Photoelectric chemical etching manual

This manual is for the use of the photoelectric chemical etching program in the Cleanroom.

\*Picture of setup

This program uses the 2400 series Keithley to record current vs the time of the etch.

NB. Do not change anything under the '''AUTOMATION STARTS HERE: PLEASE DO NOT CHANGE WITHOUT APPROVAL''' line (unless you save and make your own file)

1. In the “INPUT VALUES HERE SECTION”, change the voltage, time and specify the file name and path you would like the data to be saved in.
2. Click run and in the console window, you should see the current and time being recorded each second.
3. The program will begin. There should be three columns in the command line which are the live results of wavelength, power (W) and power (dBm).
4. Once finished, the results should be in the path given as a CSV file.

Debugging tips:

Make sure the instruments are plugged in and seen by the computer. The addresses of the instruments should be: Tunable laser: GPIB0::22::INSTR, Power meter: 991112

Right click the command line and click quit – this clears all variables and plots from the line.

If there are any other problems – email: [owen.moynihan@tyndall.ie](mailto:owen.moynihan@tyndall.ie)