**Instructions for gyrotron operation (13MAY2016)**

**NOTE:** do not switch the microwaves on or off when sample is spinning in 'Auto' mode

1. make sure all indicators are green
2. when gyrotron is off it should be in 'STANDBY' mode
   - to turn on gyrotron, click the 'ON' button
   - to turn off gyrotron, click the 'STANDBY' button
3. using the approximate guidelines on the left plot above set the
   - 'Cathode Voltage' [range: 14475-15500 V], and
   - 'Collector Current' [range: 80-170 mA]
4. to obtain the desired amount of microwave power. The default values are 15000V and 120mA.
5. the gyrotron power going into the wave guide can be determined from the pyrometer reading as shown in the right plot above.
6. once the gyrotron is on, the microwaves going into the probe can be stopped using the shutter controller by flipping the N.O./N.C. switch.
7. microwaves are going into the probe if the green 'Driver' light is on.