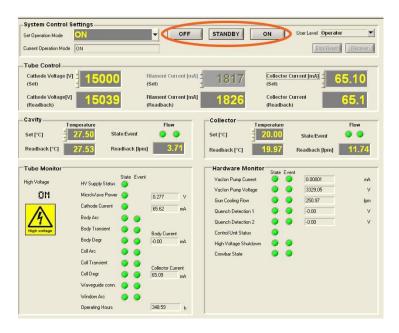
## Operating the Gyrotron

- 1. Before turning on the gyrotron make sure that the probe is cold.
- 2. If the sample is spinning and it is in auto mode, put it to manual.
- 3. Turn on the gyrotron using the ON button.
- 4. The filament current will increase from 0 to the set value (110 mA). It might be stuck for some time at the RF calibration stage, be patient, and it will go to the set value in few minutes. You can go and get some coffee in the meantime, and I promise it will be at the set value when you come back.
- 5. Wait till the temperature equilibrates. During this time the spinning frequency will change due to heating effect.
- 6. Adjust the spinning frequency using the drive pressure and put it back to AUTO mode again.
- When you are done, put the spinning to MANUAL, and the gyrotron to STANDBY mode (not OFF).

## Instruction for general users

Please use only the **ON** and **STANDBY** modes for the gyrotron as the gyrotron has been calibrated to work best for standard bi-nitroxide radicals. In case you have accidentally turned OFF the gyrotron, please wait for some time (5 mins) and then turn it ON again. It will take some time for the filament to warm up. Please be patient. Thank you.



## Instruction for trained users

You can change the collector current but make sure that you do not go above 130 mA. Please keep an eye on the temperature of your sample when you do so. You can also do an error reset in case there is some error, but please inform and write it in the log book by the gyrotron.

