Standard Operating Procedures for

Hot Plate

**Purpose: To bake (heat) the sample**

Specifications

1. Temperature Range:
2. Speed Range: RPM
3. Maximum weight can be put on plate is

Precaution

1. When the device is started, for the first few seconds it is in safe mode

Procedure

1. Connect the power supply and switch on the mains (backside) of the Hot plate
2. Each parameter (Temp., Speed, Time) has its own button, press those to select the respective parameter, use **+** or **–** button to increase or decrease the value
3. After setting all the parameters, press **START/STOP** button to start the device
4. Temperature unit can be changed between , by pressing the button
5. Press the **PLATE/PROBE** button to display the temperature of the plate or the probe (in our lab we don’t have the probe, so keep it **PLATE** always)
6. The temperature shown on the display, is the temperature measured on the thermocouple, it may be different from the actual temperature of the ceramic plate
7. Use a thermometer (higher temperature range) to measure the temperature of the ceramic plate
8. We can use the hot plate to heat solution while stirring, set the speed parameter to value required by pressing the **SPEED** button, put a magnetic stirrer into the beaker
9. If any sample needs to be baked at a particular temperature for certain fixed amount of time, first set the temperature and start the hot plate, it will take some time to reach the temperature, after then set the duration and start baking
10. When the ceramic plate is more than , the **HOT** led glows
11. After completion, switch off the mains and then the power supply

Additional Features

1. Pulse Mode: Press PULSE to activate the pulse mode, where the stirring direction will change between clockwise and anticlockwise for every 30 second
2. In programmable pulse mode operation, the user can change the 30 sec time duration of Pulse mode to any time between 99 second
3. Slip detection mode: Press the SLIP to activate the slip detection mode, when the stirrer slips away from the stirring motion, then the system will reduce the SET RPM by 100 RPM