

SOP for Laminar Air Flow (LAF) bench equipped with Spincoater and Hotplate



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System Details

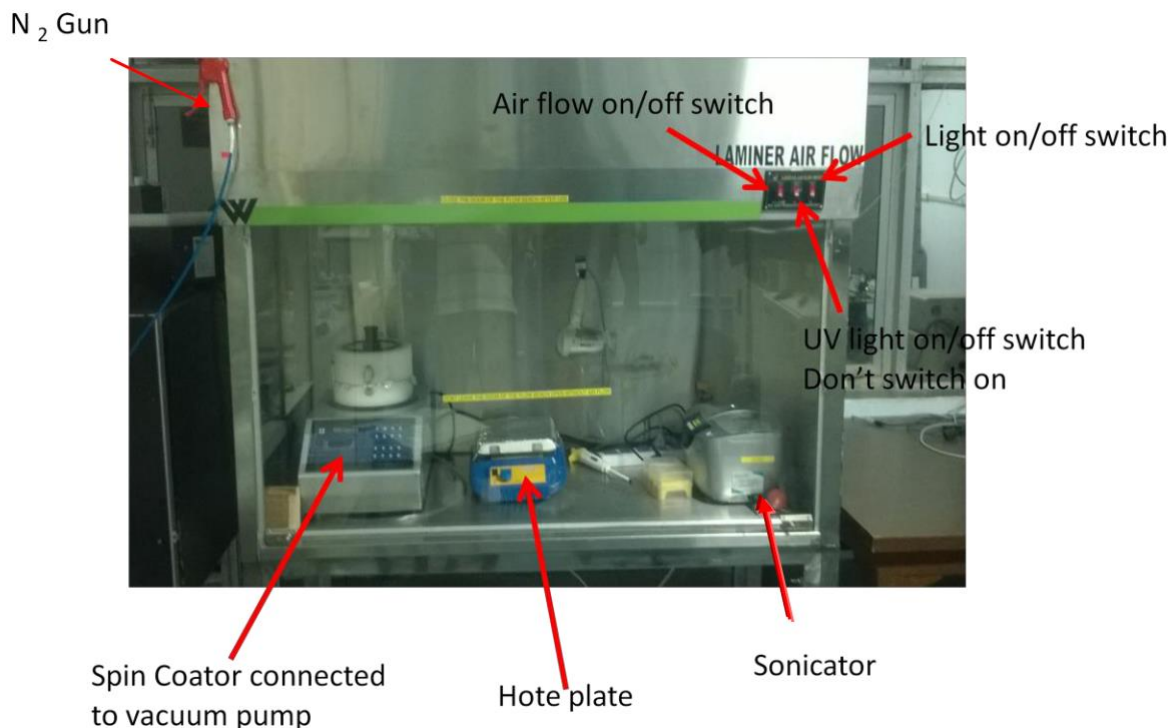


Fig. 1 Laminar Air Flow bench

After entering the organic device lab first wear the lab coat, clean lab shoes, Hair net and gloves. Spin coator is used for deposition of thin films and hot plate for thermal annealing.

How to use LAF bench:

1. Switch on air flow (Using left red switch) and switch on tube light switch (using red switch).
2. Slide the front door upwards to one third of its position and hold it there using a latch knob at the Corner.
3. Power cables for the instruments (Spincoator and hotplate) are connected to the extension board, which is kept inside the LAF bench.
4. Switch on system according to your requirement.
5. Fill in offline (register kept in adjacent table) and online logbook after using the system.

Spincoater

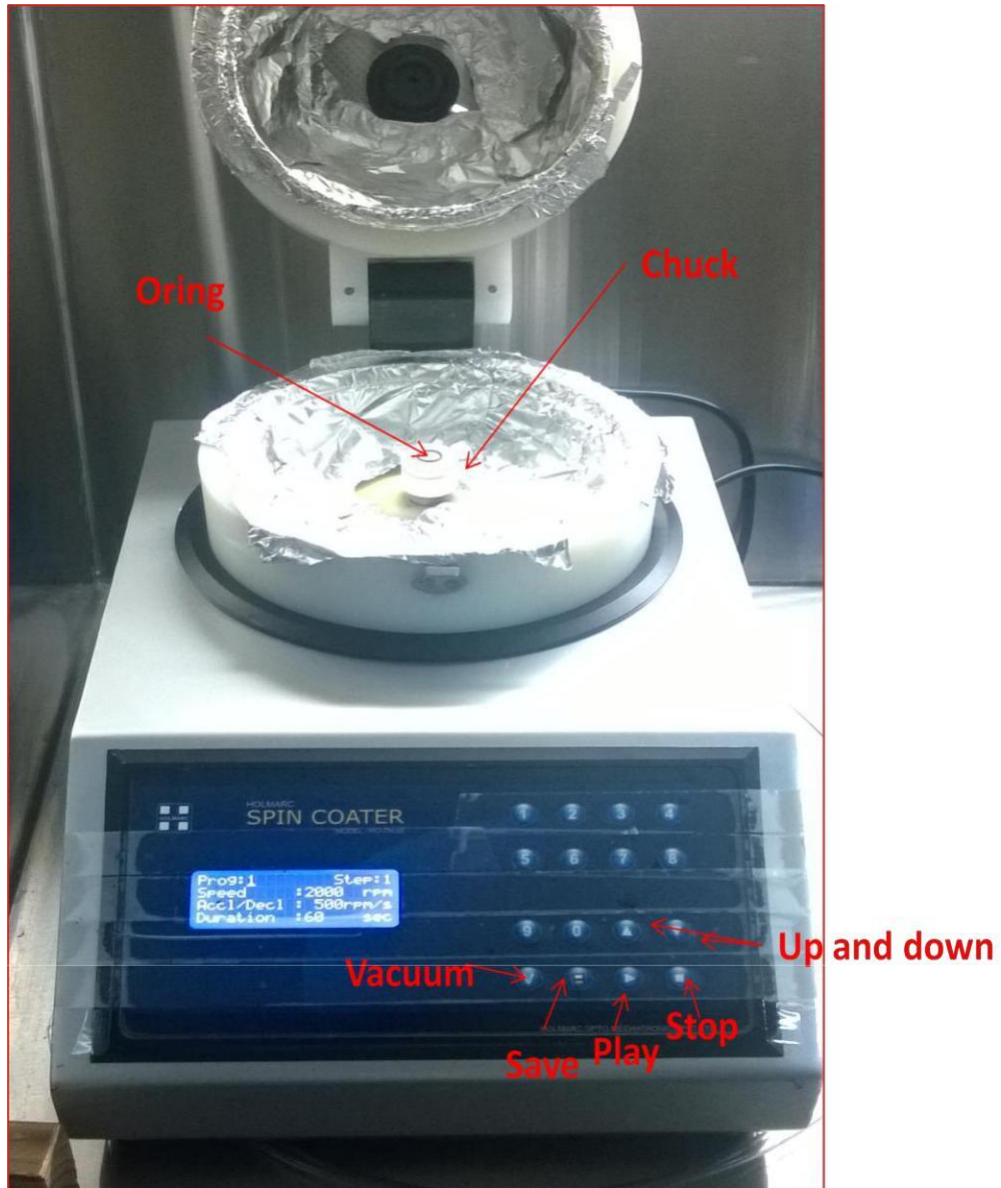


Fig. 3, Spincoater

How to use spin coater: -

1. Switch on the spin coater from the electrical board
2. Light will glow on spincoater display like (Program, step, speed, ramp, hold time).

3. Using different button, we can change parameters. Set the required parameter (spin speed, hold time, ramp and step) and save the program and try a demo run.
4. Open the lid and keep the substrate over the chuck and start vacuum (V button).
5. **Close the lid** and press play button to start the process. If you want to abort the process then press stop button.
6. Once the process is finished please clean the chuck using IPA and switch off system from electrical extension board.

Note:

- Toxic or lead based solutions are not allowed to be spincoated in LAF
- Only use IPA for LAF cleaning.
- Do not run the process with the lid open
- Use goggles while spinning
- **Apply vacuum before putting the solution**
- After completing the process please clean the LAF and close the front door
- Don't keep your head inside the LAF during process.

Hotplate



Fig. 2, Hotplate

How to use hot plate: -

1. Switch on the hotplate from electrical board.
2. The display screen in the instrument shows the current temperature (40-500°C) of the plate. Rotate the knob in clock wise or anti-clock wise direction to increase or decrease the temperature, respectively. Press the knob, once the desired temperature is selected and the temperature of the hotplate changes to the final one gradually.
3. After completing the annealing process set the hot plate to 40°C by rotating the knob and pressing it. **Switch off the power supply only after the hot plate has reached 40°C and not before that.**