

SOP Atomic Force Microscope

Initializing the Machine

Switching On the Device

Turn on the Power Switch from back of the board.

Power on the Microscope.

Switching On the PC

Switch on the PC.

Log In the computer.

Switching Software

Double click the JPK desktop shortcut. This will initiate the software for imaging.

Preparing the AFM head

Mount the Cantilever over the glass block (Carefully).

Fix the glass block in AFM head (properly aligned).

Mount the AFM head over microscope

Do the laser alignment over cantilever by the mirror, lateral and vertical deflection screw holders.

Approach the sample and select the mode for imaging.

* **NOTE :-**

1. Replacing cantilever and mounting glass block should be precised and both hands to be used while placing the holder.
2. The AFM head to be lifted gently as it is heavy.
3. At time of imaging maintain silence.
4. Remember to retrack the catilever while making changes in setting during imaging.
5. Save data respectively and copy it in CD or DVD (USB not allowed).

Turning off the instrument

The AFM hood to beremoved gently.

The acquired images must be saved in proper folders.

Close the JPK dektop software.

Turn off the microscope.

Remove glass block and keep them safe.

Shut down the computer.

Note :- Once the Hood is on it should not be turned off in next 30 Minutes, and do not switch it off if the next experiment is in next 1 hour.

If Switched off then wait for next one hour to switch on next time.