

Materials Characterization Facility

Scanning Probe Microscopy lab rules

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- All the tools on the working benches and inside the drawers and toolbox are necessary for sample preparation and instrument operation; they cannot be removed from the laboratory.
- The working benches can be used only for sample preparation in dry conditions; no solvents are allowed in the laboratory, excepted minor quantities of water and ethanol for sample rinsing.
- The instruments are sensitive to vibrations: avoid any unnecessary noise.
- WATER LEAK: if you notice water on the floor leave the laboratory immediately and alert the Lab manager.
- OXYGEN SENSOR: in case of beeping sensor, leave the Lab immediately and alert the Lab manager.
- In case of out-of-hours access, a second person must be in the building within reach and the lab door must be kept open.
- When using the instruments please fill in the instrument logbook with as many useful information as possible; at least the following should be written: user, date, sample, session goal, consumables used, instrument condition (either 'ok', or, in case of issue, describe it).
- Report immediately any critical instrument malfunction to the lab manager via email.
- Save your data files only to your personal folder: D:\spmdata\Yourname\
Do not install new programs without permission or save data to C:.
- Make the copy of your data BEFORE LEAVING the work session, i.e. spend the last 5 min of your session for this task: you shouldn't come again to copy them at later time, disturbing another user during his/her session.
- The only allowed means to make a copy of your files is transferring them to the shared public folder: <\\iit.local\public\Nanobiotech\MCF>.
Do not connect any USB DEVICE to the PC of the instrument.
- For candidate users who still have to receive the training on the AFM instrument: please be aware that the standard training consists of 2 sessions of 2 h each.
During the first session, the trainer shows how the instrument works, while operating all actions by himself, and the trainee has to write down notes and ask questions on unclear items; the session is carried out only on test samples with defined geometry (calibration grating).
During the second session, the trainee repeats all the actions required to run the instrument (the trainer only stops him/her when corrections are necessary); the trainee can use his/her own samples of interest.