

Materials Characterization Facility Scanning Probe Microscopy lab rules

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- All the tools on the working benches and inside the drawers and toolboxes 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, except minor quantities of water and ethanol. For more complex sample preparation requiring large use ethanol or other solvents, a small hood is available in the next 'support' room.
- 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 by phone if possible, and additionally by mail, with cc to luca.ceseracciu@iit.it and lea.pasquale@iit.it
- OXYGEN SENSOR: in case of beeping sensor, leave the Lab immediately and alert the Lab manager by phone if possible, and additionally by mail, with cc to luca.ceseracciu@iit.it and lea.pasquale@iit.it
- 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 AFM instruments, 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).
- For all instruments, report immediately any critical malfunction to the lab manager via email.
- Do not install new programs without permission. Save your data files only to your personal folder e.g. for the Park AFM: D:\spmdata\Yourname\.
- 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.
- For most instruments, the only allowed means to make a copy of your files is transferring them to the shared public folder: <\\iit.local\public\Nanobiotech\MCF>, for those instruments with PC not connected to the iit domain (ie JPK AFM and AMBIOS profilometer) one can insert an USB memory stick.
- The standard training consists of a single 2 h session for the profilometers, and of 2 sessions of 2 h each for the AFMs. In the latter case, during the first session, the trainer shows how the instrument works, while operating it 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 and the trainer only stops him/her when corrections are necessary; the trainee can use his/her own samples of interest.

I have read and understood the contents of this document:
(signature:)

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