Rev. 16/02/2017	Materials Characterization Facility General rules	

General information

The facility consists of 5 different Labs, each with its manager as the responsible, namely: Mirko Prato for XPS Lab (and Facility Coordinator), Sergio Marras for XRD Lab, Marco Salerno for SPM Lab, Luca Ceseracciu for Mech Lab, Filippo Drago for ICP-OES Lab.

Prior to access any laboratory, users must read these rules and the specific laboratory ones and affix their signature indicating that they agree to abide by them.

Access Eligibility

All IIT staff are eligible to use the MCF@IIT. For PhD students and PostDocs it is assumed that approval from their supervisor is accorded. Users external to IIT may request for service measurements or be allowed to use the facility at the discretion of the MCF@IIT personnel.

Training

All users must be trained by the laboratory responsible prior to any unsupervised use of instruments. For first training session, users must coordinate with the laboratory responsible for the choice of the sample on which the training will be performed. For each instruments, a maximum number of training sessions will be offered (see specific lab rules for the exact number). Once training has been completed and the lab responsible is positive that a user can work responsibly without supervision, system access rights and booking rights will be granted. Note: users that will not acquire the needed basic skills to operate an instrument during the offered training sessions will not gain access and booking rights.

Health and Safety

During the first training session, users will be also informed on the peculiar health and safety risks of the specific laboratory.

In case of any equipment failure or malfunctioning, users shall never try to fix the issues but inform immediately the Lab manager.

The use of any device that would prevent you from hearing an alarm (e.g. headphones) is forbidden.

An emergency numbers list can be found affixed on the Lab doors.

None of the Facility Labs is equipped for safe chemical processing. No chemical work more than rinsing or brushing with DI water or Ethanol and Acetone should be done in the Facility Labs.

If you notice water on the floor leave the laboratory immediately and alert the Lab manager.

In case of alarms beeping (e.g. oxygen sensors), leave the Lab immediately and alert the Lab manager.

Access Rights

Users must log on the PC connected to the instruments and/or on the data acquisition software with their own credentials and log out at the end of the session.

Data Management

Users must copy their data on the shared folder, accessible from the PC controlling the instrument, at the end of the session. The local data will be periodically deleted to save disk space.

Booking policy

MCF@IIT includes both open access instruments and instruments run only by facility staff.
Sessions on the open access instruments can be booked on the online system from 2 pm of the Friday of the preceding week. There are booking limits for each instrument, detailed in the table below. If users require additional sessions, they must contact the laboratory manager, who will grant them if available.

Instrument	Session duration	Max sessions/week	lab opening hours		persons in charge
XRD PANalytical	1 h	4	9.00 – 17.00	(a) max 3 sessions/day (b) in addition to the 4 sessions/week, each user could also book one overnight session/week (corresponding to a 15 hours session from 17.30 to 8.30)	S. Marras (+ F. Drago)
AFM Park	2 h	6	8.00 – 18.00	max 3 sessions / day	M. Salerno
Instron testing machine	1 h	8	9.00 – 17.00		L. Ceseracciu
DMA Q800	4 h	4	9.00 – 17.00		L. Ceseracciu
CSM indentation platform	4 h	4	9.00 – 17.00		L. Ceseracciu

Activities on the other instruments (see list below) should be required by directly contacting the person in charge by email. The lab responsible will take care in booking the requested instrument for the specific requested activity and will run data acquisition accordingly.

instrument	Typical measurement	person in charge
XPS Kratos	Surface chemistry	M. Prato
XRD Rigaku	Crystalline phases	S. Marras
AFM Asylum Research	Nanoelectricity, Nanomechanics in air	M. Salerno
AFM JPK	Nanomechanics in liquid	M. Salerno
Micromaterials Nanotest	Nanoindentation	L. Ceseracciu
Deben uniaxial stage	Cyclic mechanical measurement	L. Ceseracciu
ICP-OES	Elemental characterization	F. Drago

Cancellation Policy

Users can cancel a booking up to 2 hours beforehand. To cancel with a shorter notice, the user must contact the laboratory manager and send an email to the instrument mailing list to inform the other users. If users are more than 15 mins late for a booking, they must contact the laboratory manager, or the booking will be cancelled. Repeated lateness for bookings may result in the user losing access privileges to the laboratory.

Out-of-hours access

Use of instruments out of the core hours is permitted exceptionally upon authorization of the lab responsible, who will grant it on a case-by-case base.

Additional Facility Rules

Users are prohibited from training other users. Only facility personnel are authorized to provide training to new users.
All instruments and laboratories must be left in a clean and tidy state. If you find any system that has been left untidy or misused, please report it straight away to the laboratory manager.
Samples that have been brought to the facility must be taken away at the end of the session.
No software of any kind can be installed on the Lab instrument computers without authorization.
Users violating any of the above facility rules may lose their facility access rights.

Acknowledgements/Authorship Policy

Any papers incorporating data acquired or analyzed in the MCF@IIT must acknowledge the use of the MCF@IIT. Please include a statement in the acknowledgements section, such as "We thank the Materials Characterization Facility at the Fondazione Istituto Italiano di Tecnologia for help with [characterization]". When you publish a paper incorporating data acquired at the MCF@IIT, please send either a reprint of the paper or the complete citation of the paper to Iulia Manolache (iulia.manolache@iit.it) and to the facility coordinator (mirko.prato@iit.it). Occasionally the MCF@IIT staff may become substantially involved in experimental design, data acquisition, or data analysis meriting co-authorship. In general, ordinary training and assistance with instruments does not merit co-authorship. However, in cases where there was a substantial contribution in the project development, both the user and staff should consider whether this merits co-authorship.