

Rev. 22/02/2024	<h2 style="color: red; margin: 0;">Materials Characterization Facility</h2> <h3 style="color: red; margin: 0;">X-ray Diffraction Lab rules</h3>	
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Before reading these rules, read the [general ones](#)

- It is your responsibility to check the operating conditions of the X-ray generator and diffractometer before starting your session.
- Read all signs posted on the instrument and logbook, as they may include instructions and/or notices about changes in the instrument.
- Report any malfunction immediately.
- Take all of your samples with you at the end of your session. Specimens left in the XRD Lab may be discarded at any time.
- **Do not connect** any USB DEVICE to the PC of the diffractometer. Copy the data files to your personal folder (inside the "Z FOLDER - XRD Lab" [\\iitfsvwqe005\nanobiotech\XRD Lab](#)) of the PANalytical PC.
- Internet connection through the PANalytical PC is **strictly limited to e-mail checking** (it is forbidden to download and open the attachment files).
- Remember to sign out from the "database" computer (the one used for the phase identification) at the end of your session.
- In the use of the PANalytical Empyrean diffractometer, follow these rules:
 - before starting your XRD session, check the Tension and Current values: **40 kV** and **10 mA**
 - the minimum starting angle allowed **$2\theta = 5^\circ$**
 - the maximum value allowed for the "Time per step (s)" **500 s**
 - whenever any **error message** appears, stop your session and contact the XRD Lab staff
 - fill always the logbooks with a legible writing.

Booking policy (PANalytical Empyrean)

Maximum number of allowed normal sessions* per week:	4
Maximum number of allowed normal sessions per day:	3
Maximum number of allowed overnight sessions** per week:	1

It is possible to book the sessions for the following week only, starting from **Friday afternoon at 14:00**

*Normal session: 1h

Overnight session: 15h (the overnight session (from 17:00 to 09:00) is available only for automatic measurements using the batch file. **Access to the XRD Lab is allowed only until 17:30.

Cancellation Policy

- If you want to cancel your session on the very same day:
 - **First**, cancel your session in the booking system (only if not already started) and then send an e-mail to XRDUUsers@iit.it;
- You can cancel your session until the day before the reservation without sending any e-mail.

In case you finish your session earlier and more than 15 minutes are still available, send an e-mail to the other users.

If users are more than 15 minutes late for a booking, they must contact the laboratory manager, or the booking will be canceled. Repeated lateness for bookings may result in the user losing access privileges to the laboratory.