

Department of Materials Science and Engineering

Rules of Operation for Rigaku SmartLab SE pXRD

Instrument users are required to follow the instructions below to ensure the safe and smooth operation of the diffractometer.

- Each individual user must be registered on the authorized user list after receiving the required training from the designated instrument managers.
- Each research group can have an unlimited number of registered users, provided that they meet the training requirements and comply with the terms of use. **Booking instrument time by a registered user on behalf of an unregistered user is not permitted!**
- Each user is responsible for keeping the instrument in good working condition and leaving it in the correct configuration for the next user. The sample chamber, instrument accessories (e.g., sample holders, knife edge), and sample preparation area should also be kept clean and ready for use.
- If you are the last user of the day according to the online booking system, you are required to set the instrument to standby mode. The procedure is described in the Standard Operating Procedure (SOP), which can be found next to the instrument PC or online on the instrument booking website.
- Each user is responsible for notifying the instrument managers in case of an instrument malfunction or any unusual behavior of the diffractometer and/or its surroundings. If you are unsure whether the instrument is operating normally, stop and contact the instrument managers before proceeding.
- Users must never attempt to bypass or override the instrument door interlock or any other safety system. If the door lock, warning indicators, or any other safety feature does not operate normally, stop using the instrument and contact the instrument managers.
- Samples that may present a safety or contamination risk, or may cause corrosion or other damage to the sample chamber or instrument components (e.g., the knife edge, sample mounting area), should not be measured without prior approval from the instrument managers. If you are unsure whether a sample is suitable for measurement, please ask before placing it in the instrument.
- If water dripping from the A/C unit above the diffractometer is observed, report it immediately to the instrument managers. If water is observed on or close to the instrument, chiller, PC, electrical connections, or cables, do not operate the instrument until the situation has been checked. Please also follow the posted instructions regarding adjustment of the A/C temperature.

Compliance with the Rules of Operation

- Following the Standard Operating Procedures is important for keeping the instrument and its components in good working condition. Repeated improper use or handling can cause damage to the instrument or its accessories and may result in extended instrument downtime. Since this is a shared instrument used regularly by many users, such problems can make the instrument unavailable to all users and delay ongoing research activities.
- Serious violations, such as unsafe or unauthorized operation, bypassing safety procedures, or actions that could cause damage to the instrument or harm to users, may result in immediate suspension of access. Repeated serious violations may lead to long-term or permanent withdrawal of instrument access. In such cases, the user and, when appropriate, their research-group supervisor will be informed of the decision.

Terms of Use

- Booking of the instrument is limited to 2 hours/person/day during the 09:00–17:00 Monday–Friday time slots. Additional measurements are possible before or after this time period and/or during weekends.
- Off-hour and weekend use is permitted only for users who have been authorized for independent operation of the instrument. Additional training may be required before this authorization is granted.
- Instrument reservations are available only to users who have completed the required training. For training, please contact the training personnel: Ioannis Vamvasakis (i.vamvasakis@uoc.gr), or Costas Stoumpos (cstoumpos@uoc.gr).
- Instrument time can be reserved through the online instrument booking system: <https://www.materials.uoc.gr/ereyna/systimata-kratiseon/>. For technical issues with the booking system, please contact the system administrator, Dimitris Stefanakis (stefanad@uoc.gr). Please avoid making reservations more than one week before the planned measurements.
- If you need to cancel your booking, please remove the reservation from the online system at least one day before the scheduled time, whenever possible, to make the instrument available to other users.
- In addition to the online booking, **all users must fill in the instrument logbook** after their measurements are complete.