Usage Guidelines of Sample Preparation Room

Venue: Room 103, Physical Analysis Laboratories, Sengen Site

■Usage Time and Available Users

- This room is available from 9:00~16:30 on weekdays (*).
- Only license holders can use licensed apparatuses.
- The license needs to be renewed every year.
- When entering or exiting the room, please borrow or return the card key from the staff room (Room 101, Physical Analysis Laboratories) (*).

*: For night users of NIMS members, available from 9:00~20:30 on weekdays with their ID card after completing the necessary procedures.

■Reservation Rules and Usage Fee

> There are the apparatuses that require reservations and apparatuses that do not require reservations.

> Apparatuses requiring reservations

- ·Model 69 | PIPS
- ·Ion Slicer EM-9100IS
- ·Dimple Grinder
- ·ISOMET Low Speed Saw
- ·Multiprep System
- Usage fee will be charged for "technical support" for hands-on training and "Common use" after getting a license.
- To use the apparatuses, you need to <u>make a reservation in one-hour increments</u> in advance through the reservation system.
 - e.g. 10:30-12:00 :NG /10:00-12:00 :OK
- The reserved time slots in the reservation system will be directly reflected in the usage fee. You can separate the time slots, not to include break time.
- No limit to the number of reservation slot per day.
- Cancellations or changes can be made up to the day before the reservation day.
- If you cancel or change your reservation at short notice, please contact the office (tem@nims.gp.jp) and the staff in charge.

> The apparatuses that do not require reservations

- The other apparatuses such as coaters may be <u>used without reservation by</u> <u>licensed users of the equipment</u>. However, please note that the timing of use may overlap with other users.
- Usage fee will charge for "technical assistance" for hands-on training, but there is no charge for "common use" after getting a license.

List of TEM Sample Preparation Apparatus

Reservations required



■ ISOMET Low Speed Saw

- ·Low Speed / light load
- ·4-inch diamond blade
- ·Blade speed: 0 to 300 rpm



■ Model 691 PIPS

- ·Acc. voltage: 0.1 to 6 kV
- ·Milling angle: ±10°
- ·Types of Gas: Argon
- ·Liquid Nitrogen (LN2) Cold Stag



■ Multiprep System

- ·Angular adjustments: 0 to 10 degrees
- ·Platen rotation speed: 5 to 350 rpm
- ·Sample load: 0 to 600 g
- ·Digital dial indicator



■ Dimple Grinder

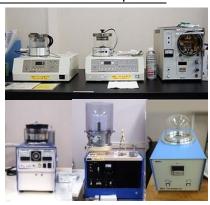
- ·Grinding wheel diameter: 15 mm
- ·Grinding wheel load: 0 to 40 g
- ·Grinding wheel speed: 0 to 600 rpm
- ·Initial specimen thickness: less than 200 µm
- ·Grinding can be stopped at set thickness automatically.



■ Ion Slicer EM-9100IS

- ·Acc. voltage: I to 8 kV
- ·Milling angle: $\pm 6^{\circ}(0.1^{\circ}step)$
- ·Types of Gas: Argon

No reservation required



- ·C Coater JEC-560
- ·Pt Coater JFC-1600
- ·Au Coater JFC-1500
- ·Os Coater HPC-ISW
- Evaporation deposition equipment SVC-700 (Need to bring your evaporation source.)
- ·Hydrophilization treatment equipment DII-29020HD
- ·Others (hot plate etc.)