

# 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).

## ■ Reservation Rules and Usage Fee

- There are the apparatuses that require reservations and apparatuses that do not require reservations.
- **Apparatuses requiring reservations**
  - Model 691 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 make a reservation in one-hour increments in advance through the reservation system.  
e.g. 10:00-12:00 :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 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 used without reservation by licensed users of the equipment. 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



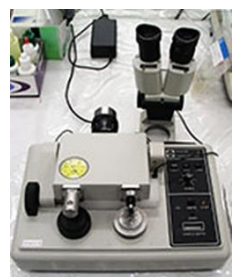
#### ■ Model 691 PIPS

- Acc. voltage: 0.1 to 6 kV
- Milling angle:  $\pm 10^\circ$
- Types of Gas: Argon
- Liquid Nitrogen (LN2) Cold Stag



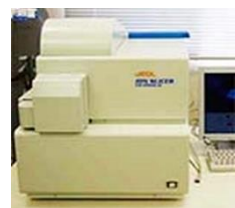
#### ■ Multiprep System

- 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  $\mu\text{m}$
- Grinding can be stopped at set thickness automatically.



#### ■ Ion Slicer EM-9100IS

- Acc. voltage: 1 to 8 kV
- Milling angle:  $\pm 6^\circ$  (0.1° step)
- Types of Gas: Argon

### No reservation required



- C Coater JEC -560
- Pt Coater JFC-1600
- Au Coater JFC-1500
- Os Coater HPC-1SW
- Evaporation deposition equipment SVC-700  
(Need your own target materials for evaporation source.)
- Others (hot plates etc.)