

Training Policy for PIII

Policy:

Training on PIII is restricted for controlled usage of the system. Users can go through the operator for getting their processes done.

Specifications:

- **Substrate:** Si, Ge
- **Substrate size:** upto 4" .
- **Types of implants:** Phosphorus and Boron
- **Implant Pressure range :** 1e-1 mbar to 1e-3 mbar
- **Gases presently connected to system:** PH₃/He, B₂H₆/He
- **Mass Flow Controller (MFC) Limit/Range :** PH₃: 20 sccm, B₂H₆: 20 sccm

Training & Authorization Policy:

1. Send a training request using the link given below:
http://www.cen.iitb.ac.in/equipment_usage/index.php
2. Once approved, go through the system specifications/documents to know the system capabilities
3. There will be three sessions for observing users handling the system
4. Student should attend 5 complete runs with an AU/SO and operator
5. Every AU would be trained for independent operation of the process parameter control aspects and safety checks
6. ***Process gas handling will always be done only by the operator***
7. To complete authorization, the student must clear
 - (a) a short quiz on the system theory + safety + contamination issues
 - (b) 1 independent run in presence of SO and operator

Violation Policy:

1. **SOP violation leading to system down-time:** AU must initiate, drive and complete system repair within prescribed time. Additionally, AU must perform 1 complete run before SO before resuming independent runs.
2. **SOP violation regards system/safety checks:** Loss of authorization depending on degree of violation.