

Tool ID: 114  
Tool Location: 103

Equipment Information Sheet

# Phosphorus Doping - D2

**Manager: Phil Infante 607-254-4926**  
**Backup: Aaron Windsor 607-254-4831**

Calls to staff phones will be automatically forwarded to their cell phones during accessible hours. At other times leave a message or send them an email.

**SAFETY**

- The furnaces are run at elevated temperatures of 400-1200°C and use flammable, toxic, and corrosive gases.

**USAGE RESTRICTIONS**

- No changing of gas flows or process parameters without staff approval
- Max temperature of 1025 C

**SCHEDULING/SIGN-UP RESTRICTIONS**

*Minimum Tool Time: 90 minutes*

- Reservation blocks greater than 8 hrs must be cleared by a MOS staff person prior to reserving the time

**MATERIALS COMPATIBILITY CATEGORY**

Tool Category 1E: Silicon Based Materials and Select Dielectrics	
Allowed	Not Allowed
Silicon Based Materials only	No Evaporated or Sputtered Films
Si, SiC, SiO <sub>2</sub> substrates	No Metal or Organic Films
All Furnace grown or deposited films	No Glass Substrates
PECVD Films	No III/V Compound Semiconductors
Select ALD dielectrics (SiO <sub>2</sub> , SiN, HfO <sub>2</sub> , HfN)	No High Vapor pressure materials
Spin on Glass and Spin on Dopants	Organic/Biology Molecules prepared-with or without Salt buffers

**High Vapor Pressure Metals and Compounds are materials that have a vapor pressure above 1e-6 Torr at 400 C.**

**Additional Material Restrictions and Exceptions**

- MOS CLEAN required prior to use
- Only use MOS designated holders, wands and tweezers

*Last Updated: 03/20/2019*