

Process Technology Limited Low Pressure Chemical Vapor Deposition (LPCVD) System



The PTL LPCVD system features 3 zone tubes that can be used for low and elevated temperature wafer processing. The system currently has 2 operations tubes. Tube 2 is used for undoped Polysilicon and low temperature oxides. Tube 3 is used to for **Silicon Nitride deposition only**. After passing the NCF safety exam, users can request training on this machine by sending an email to ncftech@uic.edu. Those not trained can request an NCF work service order by contacting the lab manager.

Location: wafer loading/unloading in the cleanroom (deposition bay), system operation in NCF service corridor

Training: 3 sessions (2 trainings and a checkout session)

Technical Specifications:

- # of Temp Zones: 3 temperature zones per tube
- Temp Range: 400°C to 1300°C
- Wafer sizes: 2", 3", and 4"
- Gases: N_2 , O_2 , SiH_4 , SiH_2Cl_2 , N_2O , NH_3 , NF_3 , H_2 , Ar
- Available Recipes: low stress nitride, low temperature oxide, doped/undoped Polysilicon
- Boats: 2, 3, and 4-inch quartz boats available