

P-Type Amorphous Oxide Semiconductor Atomic Layer Deposition System

Equipment Overview

This system is used for the deposition of various oxide thin films and for surface plasma treatment.

- ❖ Full name: P-Type Amorphous Oxide Semiconductor Atomic Layer Deposition System
- ❖ Location: L413 Advanced Thin Film Laboratory
- ❖ Equipment Engineer: Dr. Chun-I Lu
- ❖ Emergency Contact for Equipment Engineer: (O) 886-3-5773693 ext. 7510
- ❖ Deputy Engineer: Mr. Tzu-Chieh Hung
- ❖ Emergency Contact for Deputy Engineer: (O) 886-3-5712121 ext. 58521
- ❖ Chemicals Used by the Equipment:
 - (1) Bulk gases: N_2 , O_2 , Ar
 - (2) Special gas: NH_3
 - (3) Bottled chemicals: TMA, TMAHf, Sn precursor
- ❖ Process mode or reaction chamber type: Chemical Vapor Deposition
- ❖ Reaction chamber vacuum range: 5–10 hPa
- ❖ Vacuum pump: Edwards iXH610
- ❖ Exhaust emission species: CHN organic compounds
- ❖ Independent local scrubber for exhaust emissions: Yes, provided by the facility system
- ❖ Reaction chamber temperature range: 150–400°C
- ❖ Cooling system type: Cooling water supplied by the facility system
- ❖ Other special hazards: The precursors are flammable and highly toxic substances
- ❖ Manufacturer or agent: Syn-Yuan-Feng Precision Co., Ltd.
- ❖ Manufacturer's engineer: Cheng-Yi Huang
- ❖ Date updated: 06/18/2026