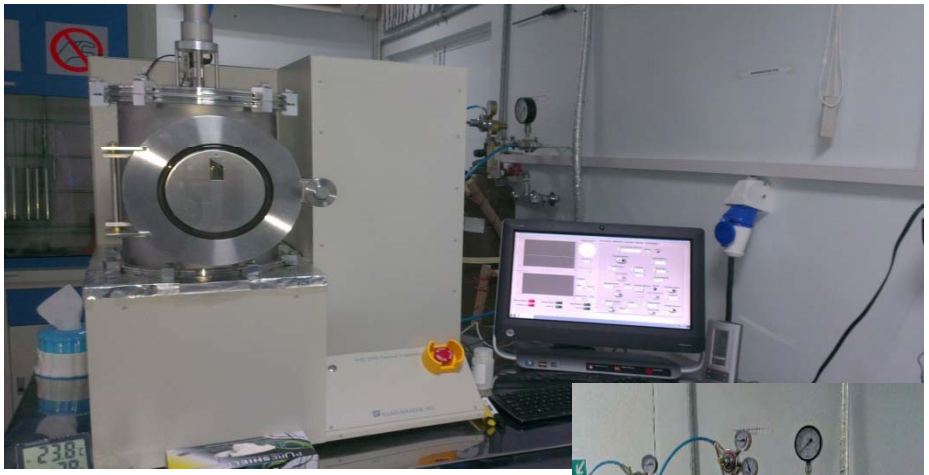
IIU-IDB ADVANCED ELECTRONICS LABORATORIES PROJECT

ATOMISTIC LAYER NANOMASTER DEPOSITION SYSTEM

Nano-Master NTE is a tailor-customized PC controlled table top Ultra-thin (atomistic layer) fabrication based Evaporation System with wide ranges of applications in organic or metal evaporation. It is designed with extreme care to achieve clean, uniform, controllable, and reproducible process on a small footprint. It is a dual source system that can accept standard crucibles for sequential evaporation of organics or metals. The system comes with an option to go with Co-Evaporation and customized/tailored DC/RF Sputtering. It provides a low cost, high quality, advanced capability for demanding applications in R&D and pilot production.



APPLICATIONS

- Interconnect and Packaging
- connecting elemental on-chip devices to each other and to the macro world off-chip,
- Integrating and packaging electronic components including 3D stacked chip integration
- Back End Processes (interconnects in the areas of Cu-low k extendibility, unit processes, reliability, novel global interconnect solutions, and radical new concepts for interconnect and the package/on-chip interconnect sub-system)
- General Thin Film Fabrication/Solar Cell Process Routines/Oxidized Layers/Dielectrics/Superficial Doped Layers

Principal Investigator: Prof. Dr. Ahmed Shuja Syed