Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon

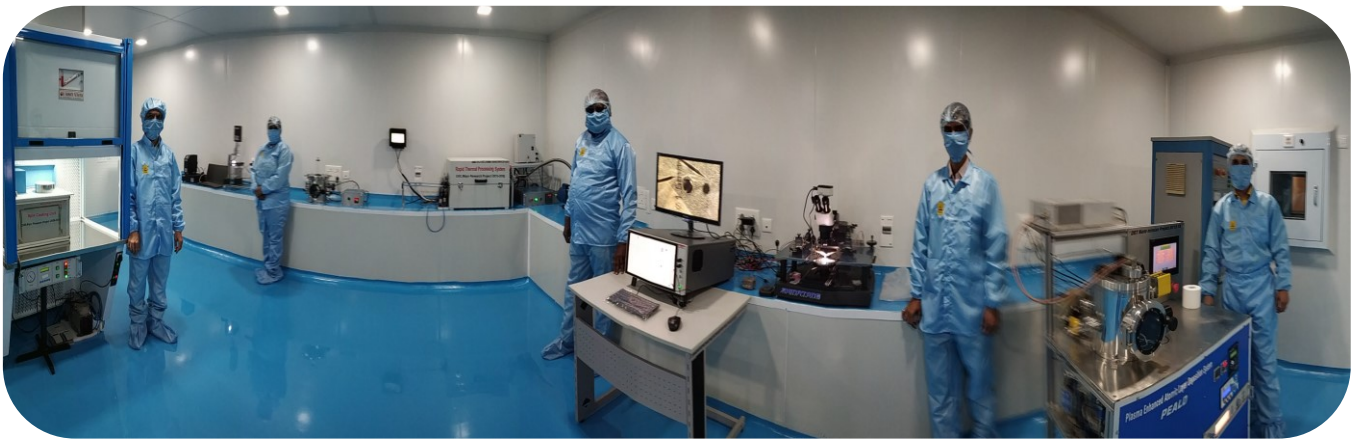
॥ अंतरी पेटवू ज्ञानज्योत ॥

'A' Grade
NAAC Re-accredited
(4th Cycle)

CLASS 10,000 CLEAN ROOM

for

SEMICONDUCTOR WAFER FABRICATION



"**Class 10,000 clean laboratory for Semiconductor Wafer Fabrication"** having facilities for **semiconductor wafer/devices/chips** fabrication and characterization like **RTP, E-Beam evaporator, Spin coating, Super critical drying setup** etc and **SCS (IV-CV) setup, FTIR, Contact angle measurement, etc.** procured through various goernment funded projects including the most economic and versatile **Plasma Enhanced Atomic Layer Deposition (PEALD) system** which is main tool for nano layer uniform deposition on the wafer is developed by us, through Nanomission DST funded project.

This cleanroom provides ultra-clean environment to protect testing and fabrication processes from contaminants. This cleanroom feature high-efficiency filters that trap and remove microscopic airborne particles as air changes (60-120 per hour) through the air handling unit by utilizing HEPA filters systems to maintain air cleanliness levels of a maximum of 10,000 particles (≥0.5µm) per cubic foot. Establishing this unique **class 10,000 clean room laboratory with novel Gate stacks, MOS, MIM and other semiconductor nano devices fabrication and characterization facilities** as step forward towards **"India Semiconductor Mission (ISM)"** of Government of India. This facility is being used by faculty, researchers and master students of the university. Further, it will be made available for the users from **Academia** (other university) and **Industry Personnel** on afordable **access price** and also we are providing the hands on training. Also, we have plans to come up with the **start ups** for **"PEALD system fabrication"** and **"novel uniform nano PEALD coatings"** towards various societal applications in coordination with the university's KCIIL centre. Enquiries are welcomed.

For more details about lab visit and access to facilities contact:

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P.T.O.

Research Facilities available in Class 10,000 Clean Room Materials and Devices Laboratory for Nanoelectronics (MDLN)

The most economic and versatile indigenously developed **Plasma Enhanced Atomic Layer Deposition (PEALD) system, E-Beam evaporator, Plasma Treatment Unit (PTU), Rapid Thermal Processing (RTP), Spin coating, Super critical drying setup,** etc and **SCS (IV-CV) setup, FTIR, Contact angle measurement, etc.** including