

IIU-IDB ADVANCED ELECTRONICS LABORATORIES PROJECT METROLOGY GRADE SPECTROSCOPIC ELLIPSOMETER (SE)

This fast CCD detector based SE in the UV/VIS/NIR (compatible) range is featuring both fast data acquisition and full spectral resolution for process compatibility assessment and metrology for nano-chip fabrication technology.

APPLICATIONS

- Thin film thickness
- Refractive index
- Extinction coefficient
- Reflection
- Transmission
- Anisotropy
- Depolarization
- Scattering (Mueller matrix)
- Lateral and vertical material nonuniformities
- Crystal modification
- Composition
- Impurities
- Orientation of organic molecules

- Conductivity
- Doping profiles
- Surface and interface roughness
- Optical coatings
- Coatings on glass
- Thin film solar cells
- Crystalline solar cells
- Single films and layer stacks
- Dielectric films
- Thin metallic films
- Semiconductor films
- Organic films
- Bulk materials



Principal Investigator: Prof. Dr. Ahmed Shuja Syed