

ULVAC Ellipsometer Demonstration

Date: 21 November 2019 (Thursday)

Time: 1:30 PM – 4:00 PM

Room: BNC 1201

Birck Nanotechnology Center

New Progress on the Channeled Spectroscopic Ellipsometry and its Applications

Presented by: Gai Chin

Portable

Compact and Light-weight



UNECS-Portable

【Specifications】

Wavelength Range	530~750nm or 380~760nm
Spot Size	φ1mm or φ0.3mm
Angle of Incidence	70°
Film Thickness Repeatability	1σ= 0.1nm
Film Thickness Measurement Range	1nm~2μm
Measurement Time	Sampling: 20ms~3000ms Analyzing time: 300ms
Sample Stage	Fixed Stage (<φ150mm, detachable)
Control PC	Laptop PC including analysis software

High-speed

Snapshot method measurement of spectroscopic ellipsometry using high-order retarders makes high-speed measurement which is impossible by conventional methods. Sampling time per point is 10ms only.

Compact

The sizes of emitter and receiver of sensor unit are very small. No consumable parts for sensors as there is not any mechanical and electric parts.

User Friendly

Users can easily measurement and analysis. Also, editing or adding a material table file can also be done easily by the user.

Multi-layer

It is possible to measure multilayer film thickness up to 6 layers.

Full Visible Spectrum

Wavelength range can be selected from the standard type (530nm-750nm) and full visible spectrum type (380nm-760nm).

Features

- ULVAC's innovative compact high-speed spectroscopic ellipsometer UNECS series products have the best cost-performance in the world.
- The excellent measurement reliability with an extremely high throughput will ensure our customers the best productivity for their semiconductor, FPD, PV devices manufacturing lines and R&D purposes.