

UMF Equipment – Scanning Probe Microscope

Asylum MFP-3D Infinity

Scanning Probe Microscope (SPM) scans the sample surface using a very sharp probe (cantilever) with the scanner moves back and forth to extract information from the sample surface at unprecedented resolution. With the help of special coating tip, the SPM can detect the magnetic field and electric field on the sample surface as well as the piezo response of a ferroelectric film. The capabilities of SPM have been extended to cover wide range of modes, such as nano-mechanical, nano-electrical and nanoscale chemical mapping. The Asylum MFP-3D Infinity system equipped with advanced Piezoresponse Force Microscopy (PFM) and Electrochemical Strain Microscopy (ESM) modes and has control electronics located close to the AFM for fast and low noise measurement.

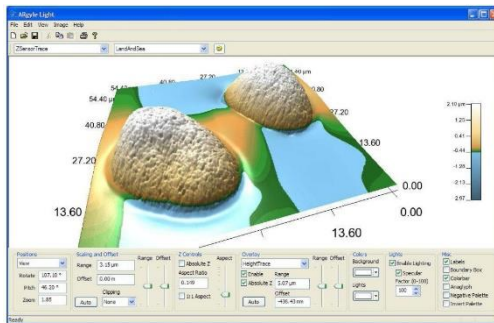
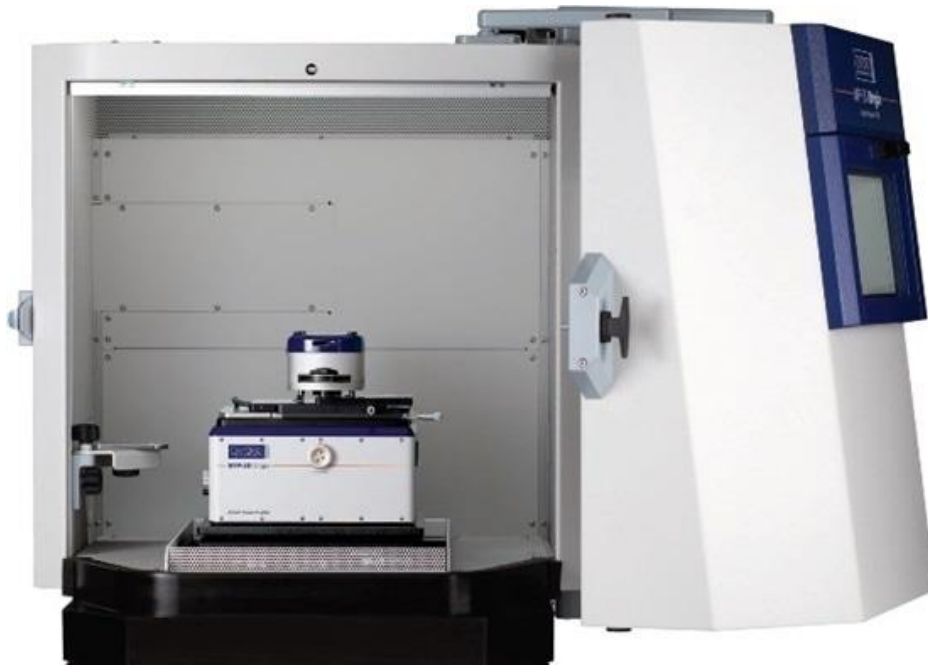
Features:

- Closed-loop XY scanner with 90 μm scan range
- Sample size up to 80 mm diameter and up to 10 mm thick
- Acoustic isolation hood and active vibration isolation
- Modules: PiezoResponse Force Microscopy (PFM), Electrochemical Strain Microscopy (ESM), Scanning Tunneling Microscopy (STM), Closed Fluid Cell (CH-CELL), Variable Field Module Option (VFM3), Conductive AFM (C-AFM), PolyHeater, Humidity Sensored Cell (PEEK), SThM Scanning Thermal Microscopy

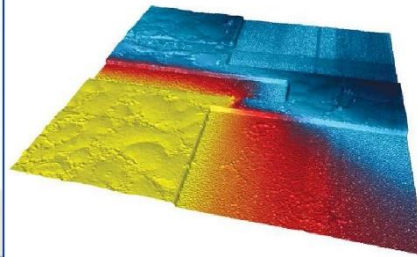
Please refer to supplier information page for further details of the system:

<https://afm.oxinst.com/products/mfp-3d-afm-systems/mfp-3d-infinity-afm>

For inquiry, please contact Dr. Hardy Lui (Tel: 2766 7791; Email: hardy.lui@polyu.edu.hk).



Argyle Lite windows application



Surface potential overlay on topography