

DEMONSTRATION OF HYSITRON IN-SITU NANO INDENTATION IN A SEM

Date: 13th November, 2016 **Venue:** IIT Kanpur

Hysitron's SEM series PicoIndenter instruments are depth-sensing nanomechanical test instruments that can be interfaced with scanning electron microscopes (SEM). With these systems, it is possible to perform quantitative nanomechanical testing while simultaneously imaging with the SEM. Coupling these two techniques allows the researcher to position the probe with extreme accuracy and image the deformation process throughout the test. These stage-mounted systems are designed for exceptional performance in the electron microscope, with vacuum compatible versions of Hysitron's capacitive sensor technology and electrically conductive probes to prevent sample charging to maintain the highest resolution imaging during testing.

Hysitron's PI 85L SEM PicoIndenter Features

- Quantitative measurement of nanomechanical properties including hardness, stiffness, and elastic modulus
- *performech*® Advanced Control Module with 78kHz feedback rate and data acquisition up to 38kHz to capture transient events, such as fracture initiation
- Low profile design ideal for SEMs, Raman and optical microscopes, beamlines, and more
- Hysitron's unique transducer technology featuring electrostatic actuation and capacitive displacement sensing
- Load or displacement controlled testing modes for nanoindentation, compression, tension, or bending tests
- Patented Q-Control mode actively dampens transducer oscillations for superior stability
- Interchangeable probes available in a variety of geometries to meet the demands of different test types

PI 85L SEM PicoIndenter also has the following optional attachments:

[SEM Heating](#)

[Electrical Characterization Module](#)

[Push-to-Pull Device](#)

[nanoDynamic Mode](#)

Registration: We plan to demonstrate the Hysitron PI 85 SEM Picoindenter on 13th November 2016 in the Electron Microscopy Lab in the ACMS department of IIT Kanpur. The demonstrations will include the following experiments: Nanoindentation Experiments, Compression experiments, etc. We request you to register for the demonstrations by sending your Name, Email, Organization and Email to Mr. Sanjay Vaidya <sanjay@hysitronindia.com>. About 6-8 people can be accommodated in one demo and the demo will run for about 1-2 hours.

For any additional information, please contact: Mr. Sanjay Vaidya on (0)95279 25789

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