

Bruker Introduces Next-Generation Nanomechanical Test System

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Hysitron TI 990 Enables Materials Characterization with New Levels of Nanoindenting Performance

COLUMBUS, Ohio--(BUSINESS WIRE)-- At the annual Materials Science and Technology (MS&T23) conference, **Bruker Corporation** (Nasdaq: BRKR) today announced the release of the **Hysitron TI 990 TriboIndenter®**, which brings superior levels of performance, automation, and productivity to nanomechanical testing. TI 990 is a comprehensive advancement of Bruker's industry-leading TriboIndenter platform with new measurement modes, 2X faster testing throughput, and a larger 200mm x 300mm testing area. These enhancements deliver tangible benefits across a variety of applications and markets, for example, improved accuracy for nanoscale testing of polymer thin films, increased throughput for combinatorial materials science, and multi-measurement analysis of full 300-mm semiconductor wafers. With its combination of performance, usability, and flexibility, **TI 990** is an ideal characterization solution for polymer research, alloy development, and semiconductor devices.

The Hysitron TI 990 TriboIndenter®, bringing superior levels of performance, automation, and productivity to nanomechanical testing (Photo: Business Wire)

"Bruker's latest system includes powerful new tool control, particularly its new mixed-mode

feedback control, which opens research possibilities at both extremes of the time domain," said Prof. Nathan Mara, University of Minnesota Twin Cities. "It's impressive to see how the boundaries for new experiments at small length scales are being expanded."

"Every aspect of **TI 990** was reimagined to optimize the testing process and potential," added Dr. Oden Warren, General Manager of Bruker's nanomechanical testing business. "Our engineers have made everything better, from

increased measurement flexibility to easier system setup and more streamlined operation. I look forward to seeing the breakthroughs our customers are going to make with this new system.”

About the Hysitron TI 990 TriboIndenter

Utilizing multiple patented and proprietary technologies, TI 990 enables quantitative mechanical and tribological characterization at the nanoscale. Every aspect of the measurement and analysis process features updated technology, including the new Performech III controller, advanced feedback control modes, next-generation nanoDMA IV dynamic nanoindentation, and XPM II high-speed mechanical property mapping. Nearly any sample can be mounted using the universal sample chuck and measured with a larger testable area. Top-view sample navigation streamlines system setup in the new TriboScan 12 software, allowing for simplified remote operation of the instrument.

About Bruker Corporation (Nasdaq: BRKR)

Bruker is enabling scientists to make breakthrough discoveries and develop new applications that improve the quality of human life. Bruker's high performance scientific instruments and high value analytical and diagnostic solutions enable scientists to explore life and materials at molecular, cellular, and microscopic levels. In close cooperation with our customers, Bruker is enabling innovation, improved productivity, and customer success in life-science molecular and cell biology research, in applied and pharma applications, in microscopy and nanoanalysis, as well as in industrial research, semiconductor metrology and cleantech applications. Bruker offers differentiated, high-value life science and diagnostics systems and solutions in preclinical imaging, clinical phenomics research, proteomics and multiomics, spatial and single-cell biology, functional structural and condensate biology, as well as in clinical microbiology and molecular diagnostics. For more information, please visit: www.bruker.com.

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