

Free Two-day Workshop



# Bruker and (MC)<sup>2</sup> Nanomechanical Testing Workshop



November 8-9, 2023  
University of Michigan

## Discover the Latest Advances in Nanomechanical Testing

Join us November 8-9 for a free two-day workshop that Bruker and (MC)<sup>2</sup> will be co-hosting at the North Campus Research Complex (NCRC) at the University of Michigan focusing on advances in nanomechanical testing of materials, including nanoindentation, atomic force microscopy, and in-situ testing combined with SEM and TEM.

Mornings will feature presentations in the NCRC Bldg 10 South Atrium and afternoons will offer live demos at (MC)<sup>2</sup> using Bruker's [Hysitron TI 950 TriboIndenter](#), [Hysitron PI 89 SEM PicoIndenter](#), and [Dimension Icon](#) AFM. Lunch will be provided.

Space is limited, [register today!](#)



**Register now to secure your spot!**

Scan the QR code or [click here](#) to register.

### Local Contact from University of Michigan

**Haiping Sun, Ph.D.**

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### Workshop Organizers

**Michael Berg**

Nanoindentation Sales Manager  
Bruker Nano Surfaces and Metrology  
[Michael.Berg@bruker.com](mailto:Michael.Berg@bruker.com)

**Rick Kitadai, Ph.D.**

AFM, NanoIR & Nanoindentation Midwest Sales Manager  
Bruker Nano Surfaces and Metrology  
[Hikari.Kitadai@bruker.com](mailto:Hikari.Kitadai@bruker.com)

### Workshop Location

**University of Michigan**

NCRC Building 10 South Atrium  
2800 Plymouth Rd.  
Ann Arbor, MI 48109  
[View on Google Maps](#)

*View preliminary agenda  
on pages 2 and 3*

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## Wednesday, November 8

8:30AM	Registration
8:45AM	Opening — Rick Kitadai (Bruker), Bobby Kerns (MC <sup>2</sup> Manager)
9:00AM	Keynote Presentation <b>Nanomechanical Characterization of Hierarchical Metallic Microstructures</b> — Prof. Amit Misra
9:30AM	Bruker Presentation <b>Recent Developments in Nanomechanical Testing</b> — Michael Berg
10:00AM	Bruker Presentation <b>Advanced AFM Techniques and Recent Developments</b> — John Thornton
10:30AM	Coffee Break
10:45AM	User Presentation <b><i>In situ</i> and <i>ex situ</i> indentation to explore mechanical behavior at microscale under tension and compression</b> — Eunji Song
11:00AM	Bruker Presentation <b>Tribology Product Overview and Applications</b> — Robert Wang
11:30AM	Lunch (provided)
1:00PM to 4:00PM	Lab — Hysitron TI 950 TribolIndenter
1:00PM to 4:00PM	Lab — Atomic Force Microscopy (PF-QNM)
1:00PM to 4:00PM	Lab — Hysitron PI 89 SEM PicoIndenter



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## Thursday, November 9

<b>9:00AM</b>	Invited Presentation <b>Application of AFM on Ferroelectric Nitride Materials and Devices</b> — Ding Wang
<b>9:30AM</b>	Bruker Presentation <b>Applications of In-Situ Nanomechanics</b> — Eric Hintsala
<b>10:00AM</b>	Bruker Presentation <b>High Throughput Nanomechanical Testing</b> — Jasmine Johnson
<b>10:30AM</b>	<b>Coffee Break</b>
<b>10:45AM</b>	User Presentation <b>Mechanical properties of molecularly-linked nanoparticle monolayers</b> — Zhongyong Wang
<b>11:00AM</b>	Bruker Presentation <b>IR Beyond the Diffraction Limit: Introduction and Applications of Photothermal AFM-IR</b> — Jinhee Kim
<b>11:30AM</b>	<b>Lunch</b> (provided)
<b>1:00PM to 4:00PM</b>	<b>Lab</b> — Hysitron TI 950 TriboIndenter
<b>1:00PM to 4:00PM</b>	<b>Lab</b> — Atomic Force Microscopy (PFM, KPFM)
<b>1:00PM to 4:00PM</b>	<b>Lab</b> — Hysitron PI 89 SEM PicoIndenter