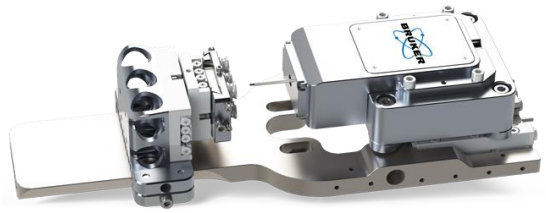
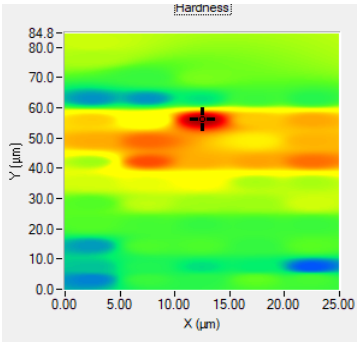
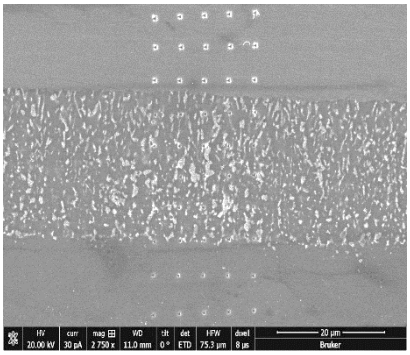
In-Situ Nanomechanical Testing & Property Correlation |Mini Symposium |1st & 2nd June 2021



Bruker's Hysitron PI 89 SEM Picoindenter





Hardness mapping Ni-based superalloy and aluminide bond coating

Probing the mechanical behaviour of materials at the nanoscale is necessary for the development of new nanostructured materials and continued miniaturization of engineering devices, electronic components, thin films, and surface coatings. This symposium will cover state of the art topics related to cutting edge developments in nanoscale mechanical characterization of materials such as metals, alloys, ceramics and organic crystals; used in such applications. The talks will demonstrate *in-situ* nano-mechanical testing techniques to extract site specific properties across temperatures and environments in a high throughput manner, as well as introduce data science approaches for the same. The lecture themes are relevant to both audiences from academia and industry.

01st June, Tues Program Schedule (India Standard Time) – Register/Click Here

Session Chair: Prof Nagamani Jaya Balila, IIT- Bombay

04:00 pm – 04:10 pm	Opening Remarks | Prof Nagamani Jaya Balila, IIT- Bombay
04:10 pm – 05:00 pm	Keynote Talk: Small scale testing: past, current, and future. Prof Vikram Jayaram, Indian Institute of Science Bangalore
05:00 pm – 05:30 pm	Invited Talk: Prof. In-Suk Choi, Seoul National University
05:30 pm – 06:00 pm	Invited Talk: Real time observation of tensile deformation in metallic glasses and metallic glass composites inside a TEM | Prof. Lakshmi Narayan R., IIT Delhi
06:00 pm – 06:30 pm	Bruker Talk
06:30 pm – 06:35 pm	Closing Remarks

02nd June, Wed Program Schedule (India Standard Time) – Register/Click Here

Session Chair: Prof Praveen Kumar, Indian Institute of Science-Bangalore

04:00 pm – 04:10 pm	Welcome Remarks | Prof Praveen Kumar, Indian Institute of Science-Bangalore
04:10 pm – 05:00 pm	Keynote Talk: Insights into deformation and fracture enabled by scale bridging in-situ electron microscopy | Prof. Daniel Kiener | Montanuniversität Leoben
05:00 pm – 05:30 pm	Invited Talk: In Situ Quantitative Tensile Testing of Olivine in a Transmission Electron Microscope | Prof Hosni Idrissi, Université Catholique de Louvain, Belgium.
05:30 pm – 06:00 pm	Invited Talk: Micro-scale fracture studies using in-situ tools | Prof Nagamani Jaya Balila, IIT- Bombay
06:00 pm – 06:20 pm	In-Situ Nanomechanical Testing Demonstration
06:20 pm – 06:30 pm	Closing Remarks & Vote of Thanks: Pratyank Rastogi, Industron Nanotechnology Pvt Ltd

Joint Organizers

For further enquries:

Pratyank Rastogi
Email: Pratyank@industronnano.com
Industron Technical Services Pvt Ltd.