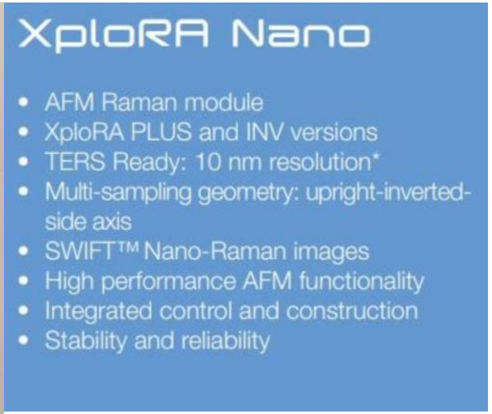
# Research with ion beams - Tandetron Laboratory

## Portable SEM and Raman spectroscopy with AFM

New important instrument SEM (Scanning Electron Microscope) - immediate control of the prepared microdevices and microstructures for sensors and flexible electronics is crucial for optimizing ion beam parameter settings. Additionally EDS is available for elemental mapping being complementary to ion beam elemental mapping with microbeam.

Raman spectroscopy has been installed with AFM integrated in one device, great and powerful tool for detailed surface morphology analysis and structural analysis by Raman spectroscopy at one spot upscaling of our capabilities to get detailed knowledge about defect engineering in 2D materials and related materials created by ion beams.



XploRA Nano

- AFM Raman module
- XploRA PLUS and INV versions
- TERS Ready: 10 nm resolution*
- Multi-sampling geometry: upright-inverted-side axis
- SWIFT™ Nano-Raman images
- High performance AFM functionality
- Integrated control and construction
- Stability and reliability