

# Komaba Analysis Core

## [Open Core Facility for Materials Characterization]

Komaba Analysis Core, Institute of Industrial Science

User Facilities for all scientists in private company, research institute, and University.

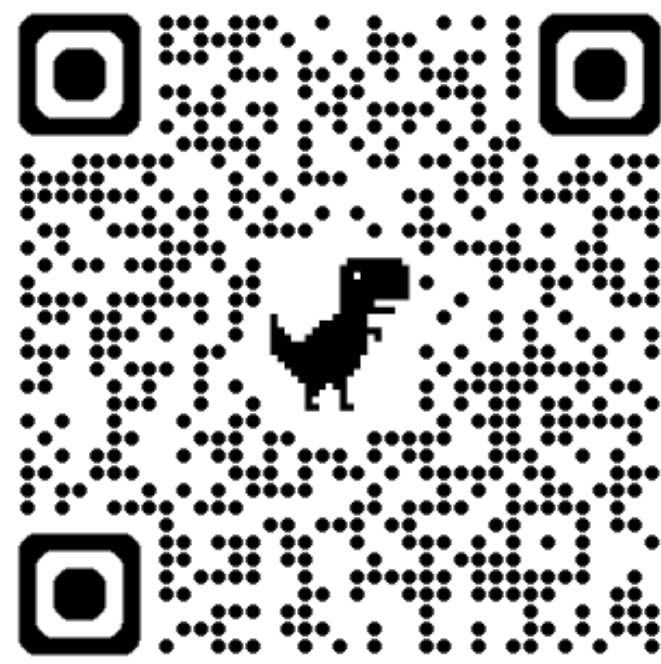
Komaba Analysis Core

<https://sites.google.com/g.ecc.u-tokyo.ac.jp/iis-materials-core>

### What is “Komaba Analysis Core (駒場分析コア)”?

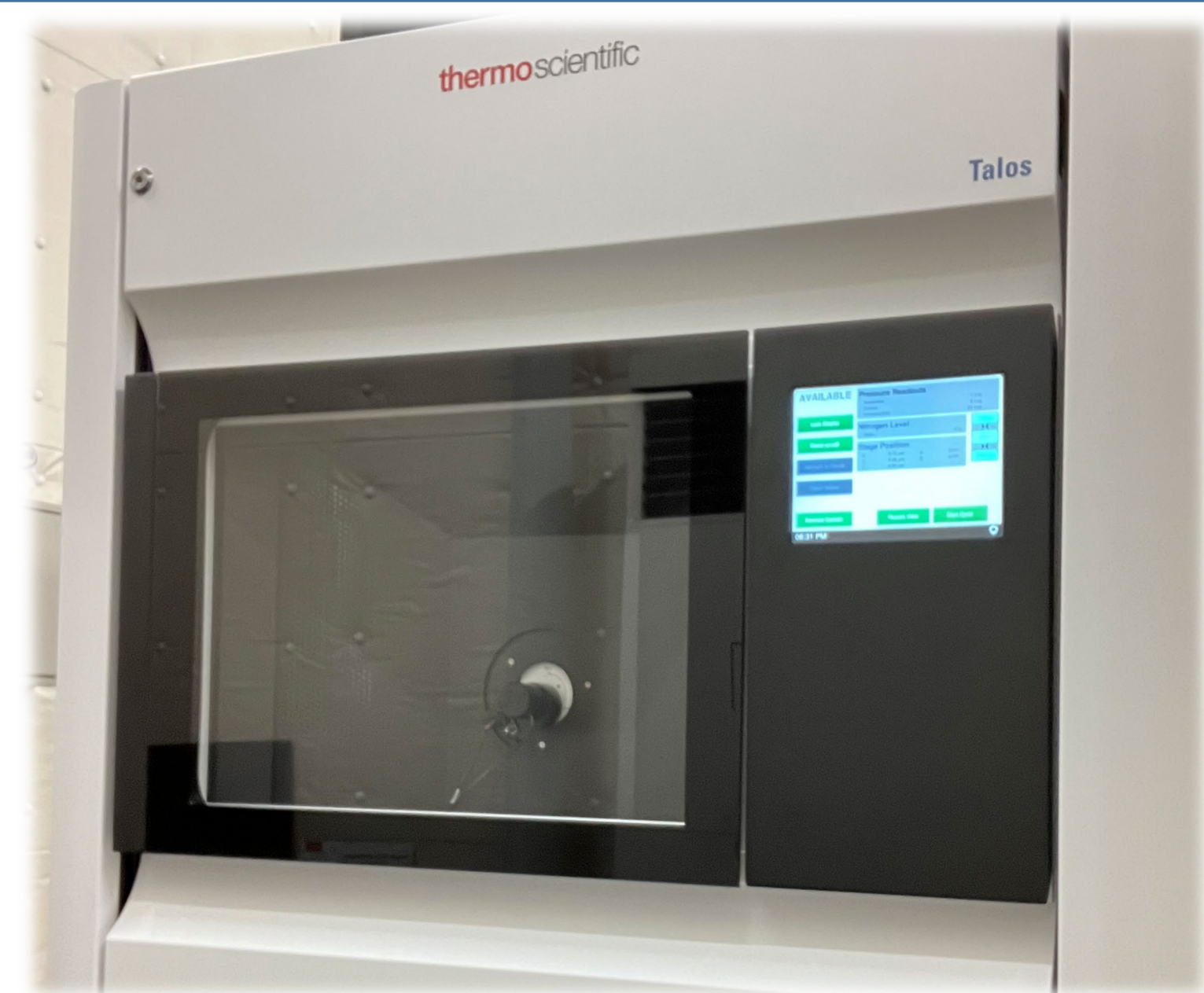
The Komaba Analysis Core has been established in FY2021. New instruments, focused ion beam microscopy (FIB-SEM), confocal microscope, cell sorter, and mass spectrometer, have been installed under a supports from the University of Tokyo Venture Ecosystem (uTIE). The aim of us is accelerations of venture business and scientific research!!

We would contribute to the development of academic researches and the creation of innovation in venture businesses by supporting research organizations inside and outside the university and private companies (especially venture businesses) through the open facilities.



### TEM

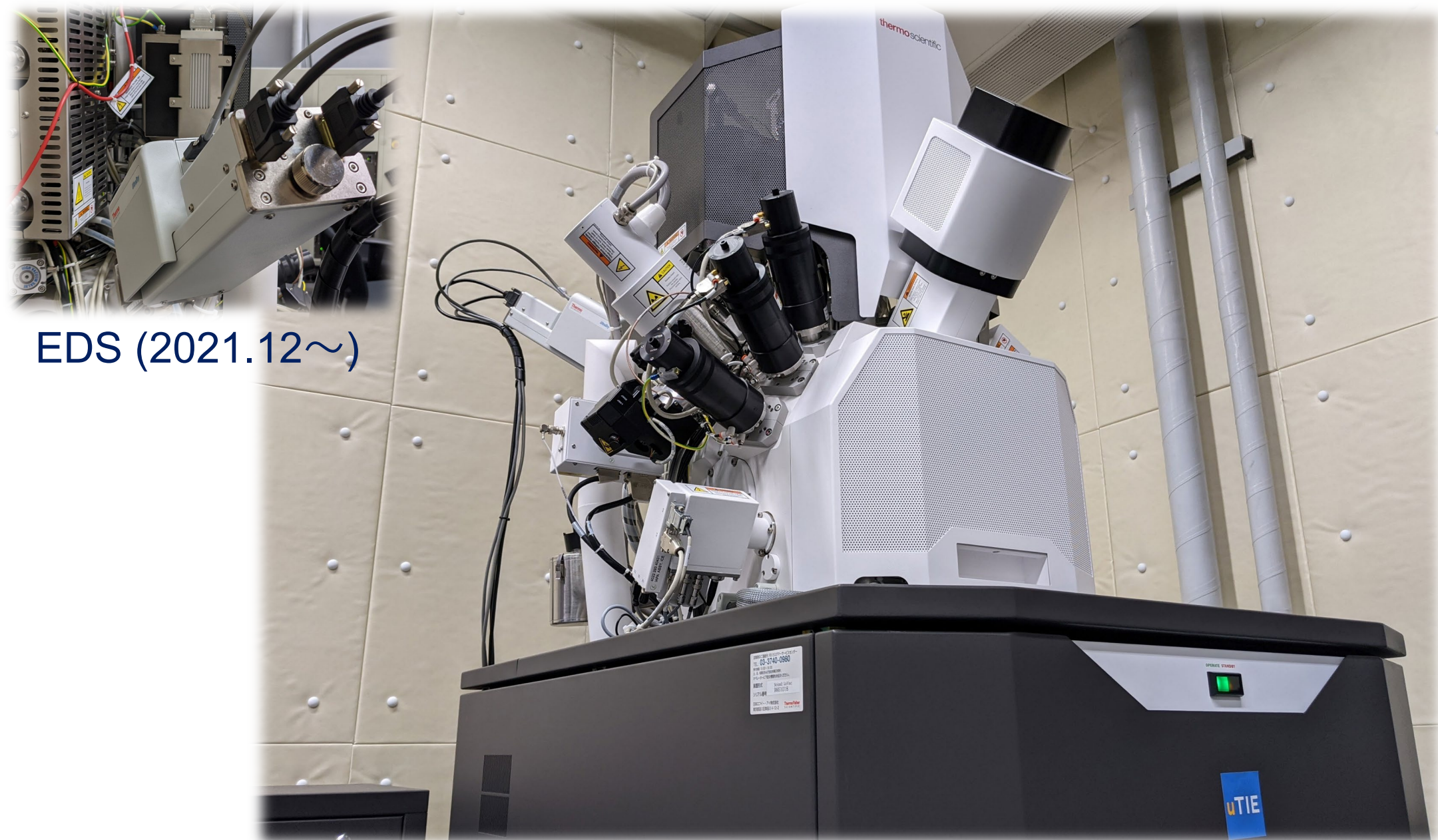
Thermo Fisher Scientific Talos F200S G2



Material structure observation (bright field, dark field), Diffraction pattern, High-resolution STEM/TEM imaging, Compositional analysis, 4D-STEM, DPC-STEM, STEM-EELS mapping

### FIB-SEM

Thermo Fisher Scientific Scios2

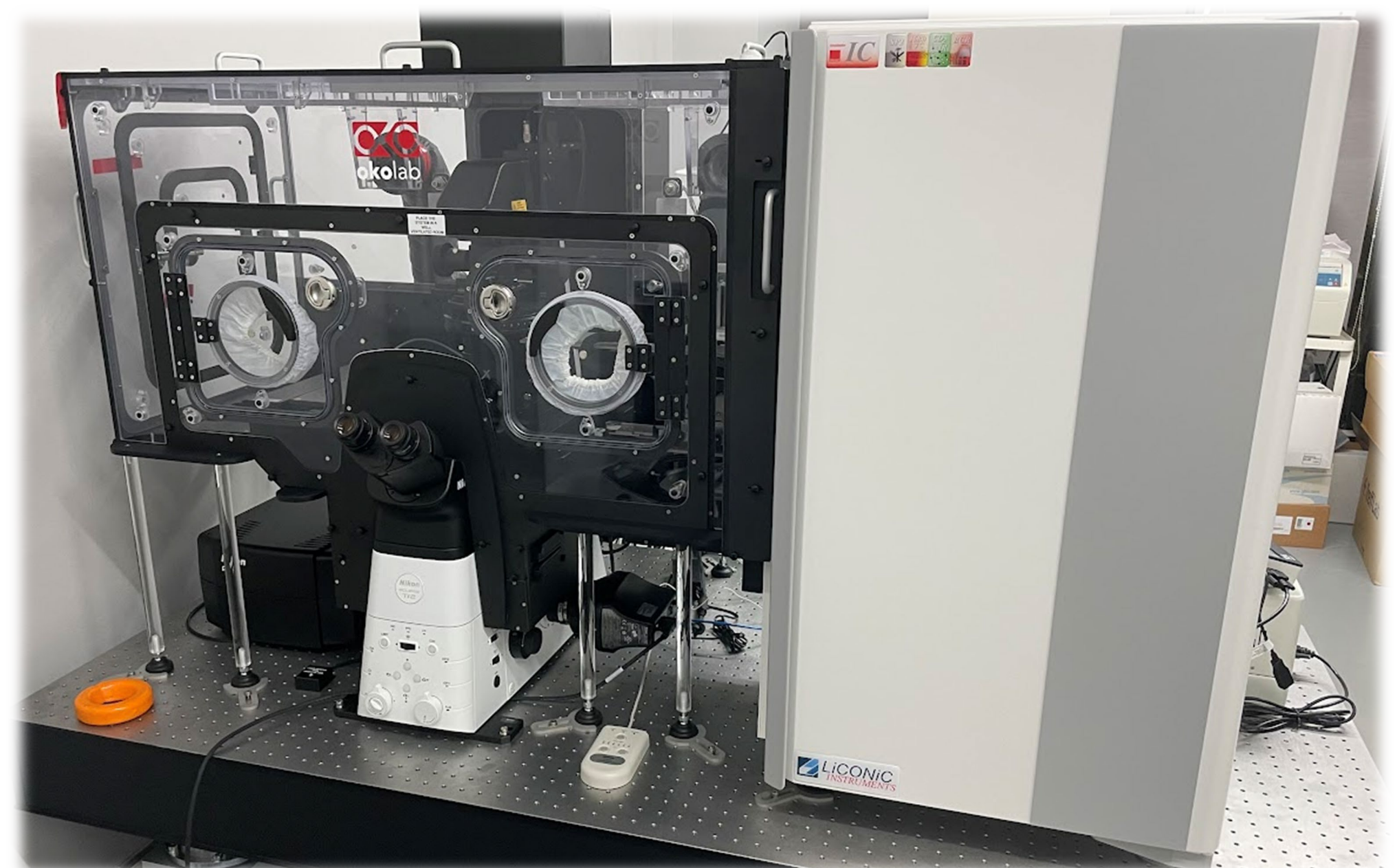


EDS (2021.12~)

TEM sample preparation and microfabrication by FIB  
Observation by FE-SEM; elemental composition determination by EDS  
Dark-field and bright-field image observation by STEM mode  
3D multi-modal observation by FIB+SEM

### Confocal microscope

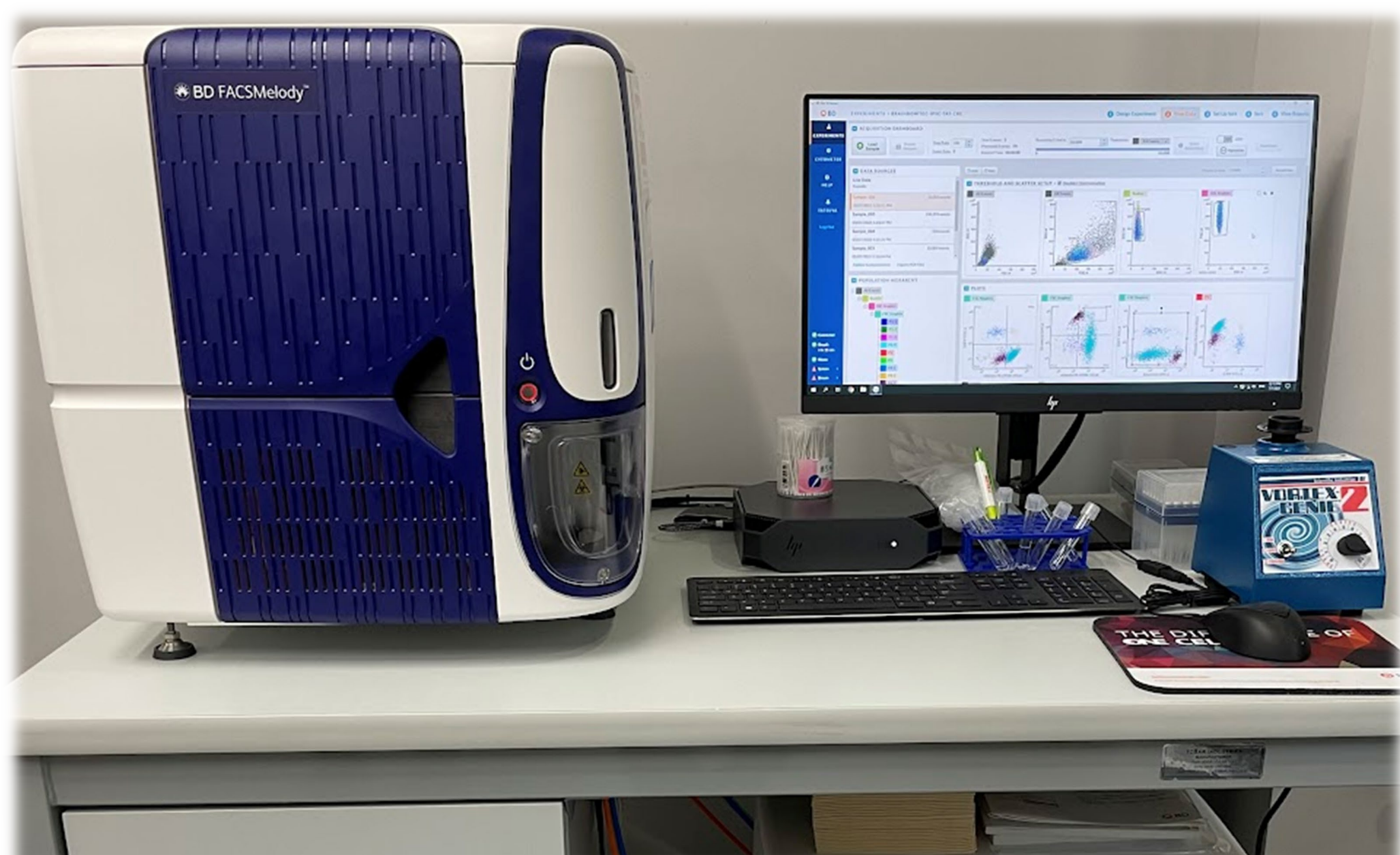
Nikon Biopipeline LIVE



Confocal microscopy  
Live Imaging  
High Content Cell Analysis

### Cell sorter

BD FACS Melody



Cell Preparation and Analysis  
Plate Sorting  
Simple and easy operation

### Mass spectrometer

JEOL SpiralTOF-plus



Molecular weight measurement (molecular weight distribution of included and macromolecules, host-guest complexes)  
Elemental composition estimation by HR-MS  
Peptide sequencing by MS/MS measurements

