Chemistry and Biochemistry Virtual Open House

Campus and Facilities Tour

UMBC

Fall 2024

Our Campus

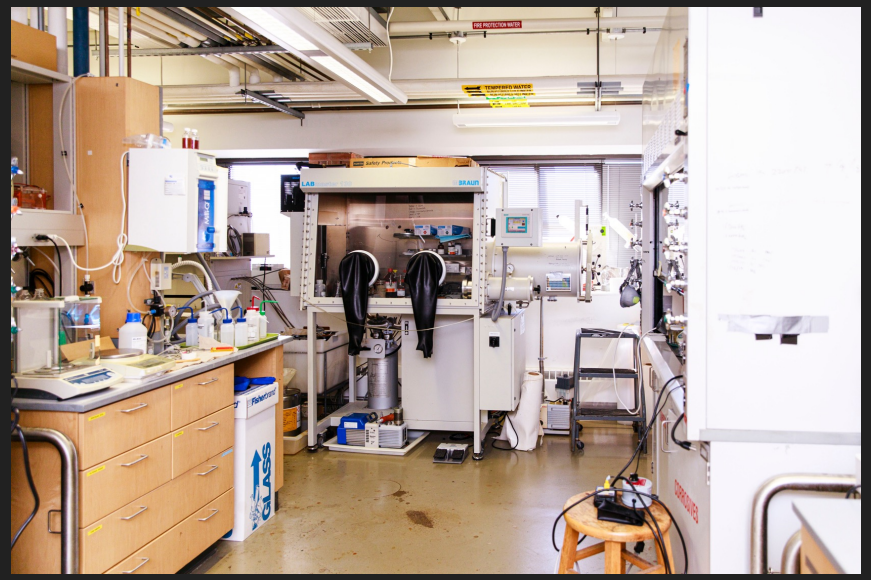
Our Campus

Albin O. Kuhn Library & Gallery

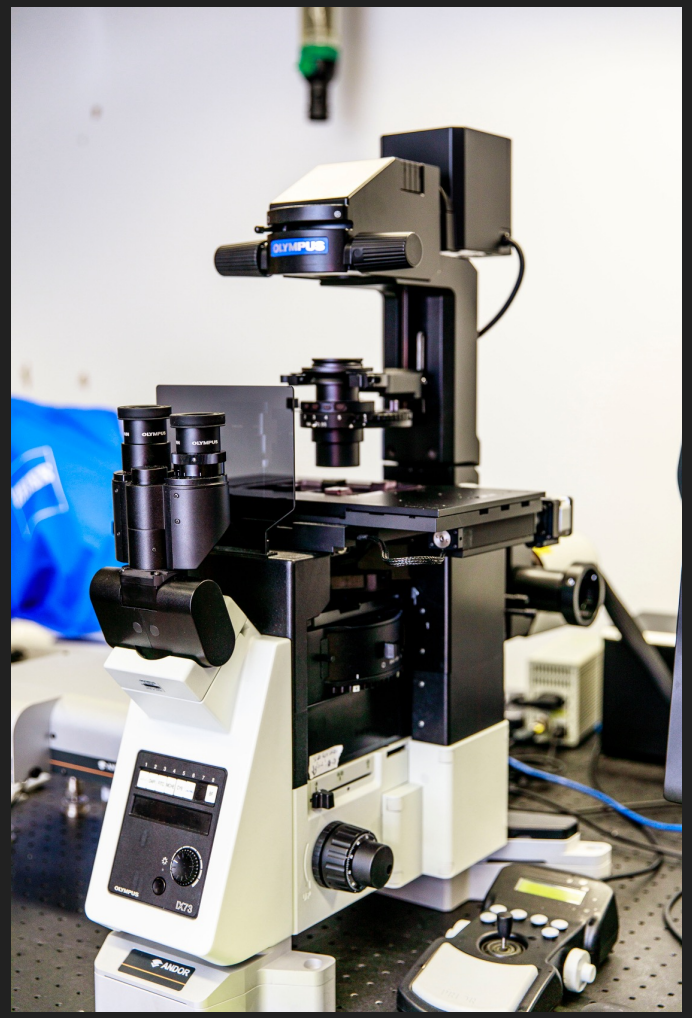
Interdisciplinary Life Science Building

Department of Chemistry and Biochemistry

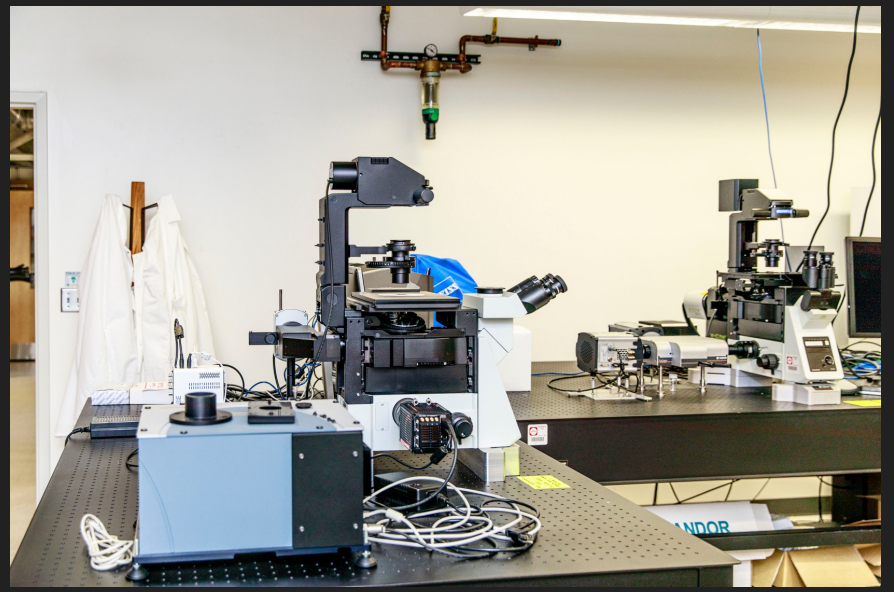
Extensive Research Infrastructure and Facilities



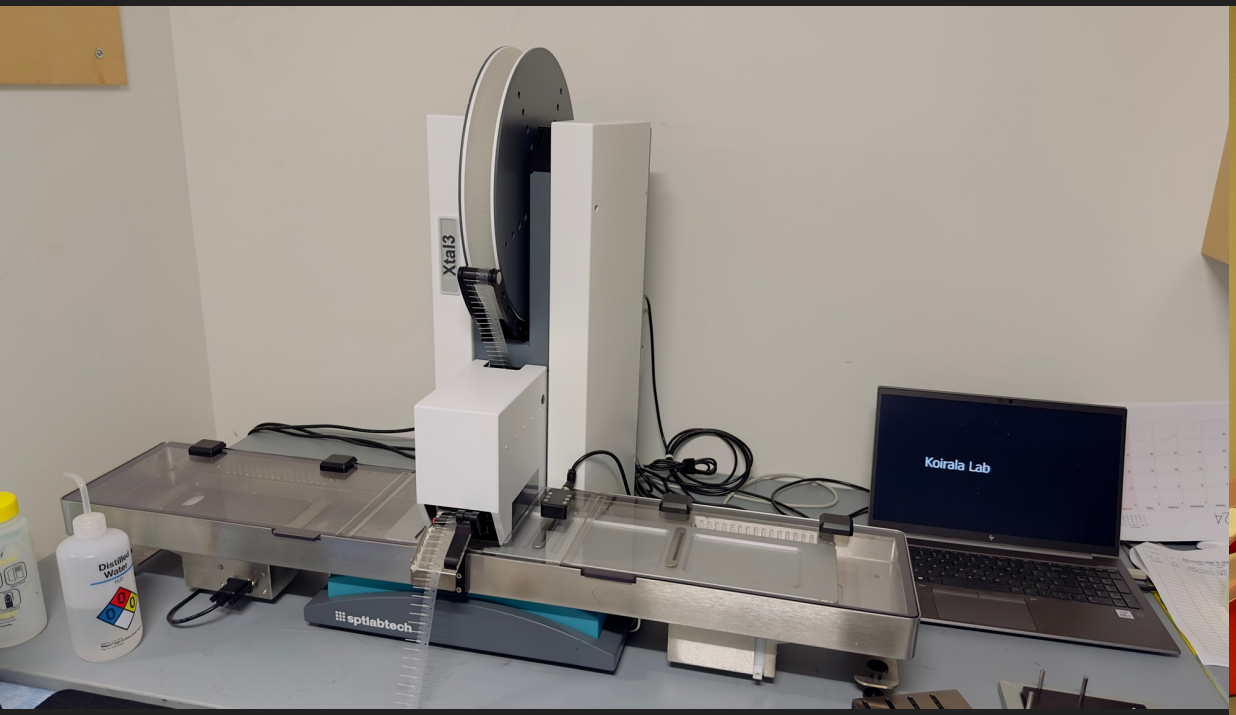
Confocal Microscopes



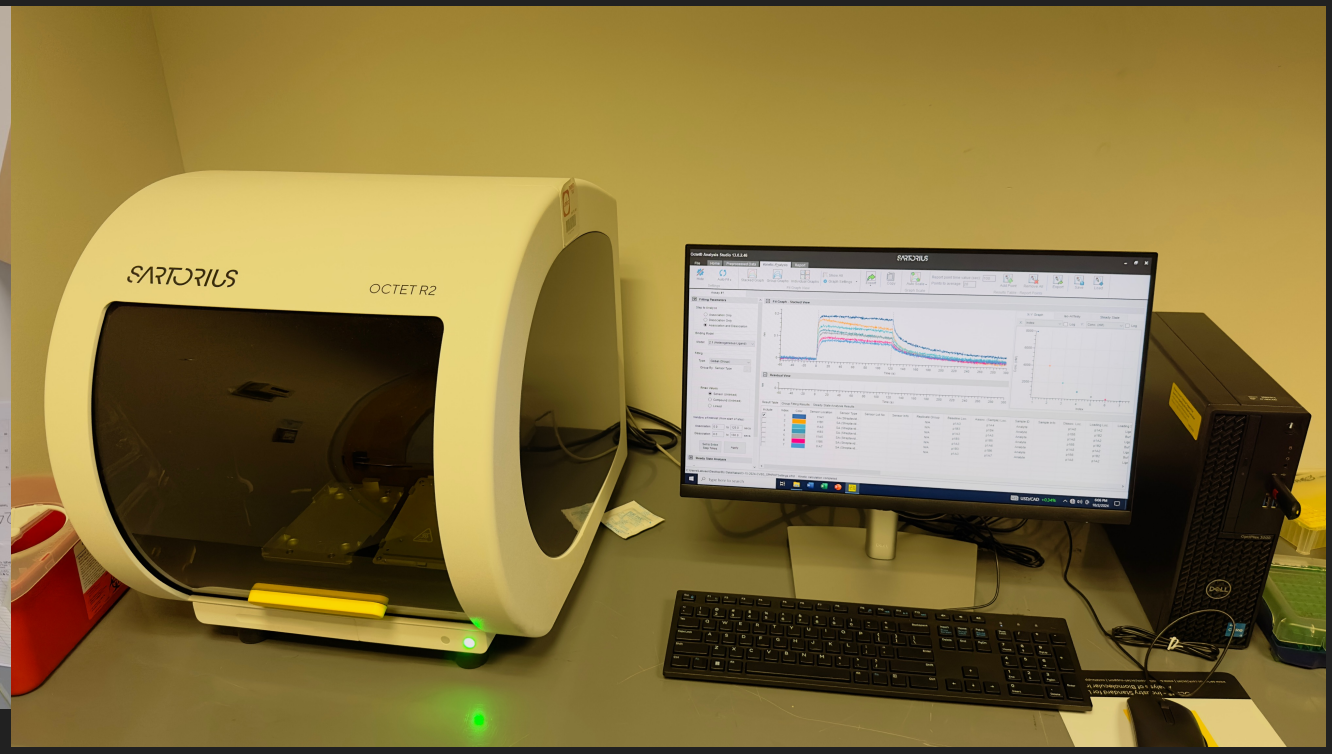
Olympus Inverted Microscope



Biochemistry



Crystallization Robot Mosquito Xtal3



Bio-layer Interferometry for measuring interactions between biomolecules

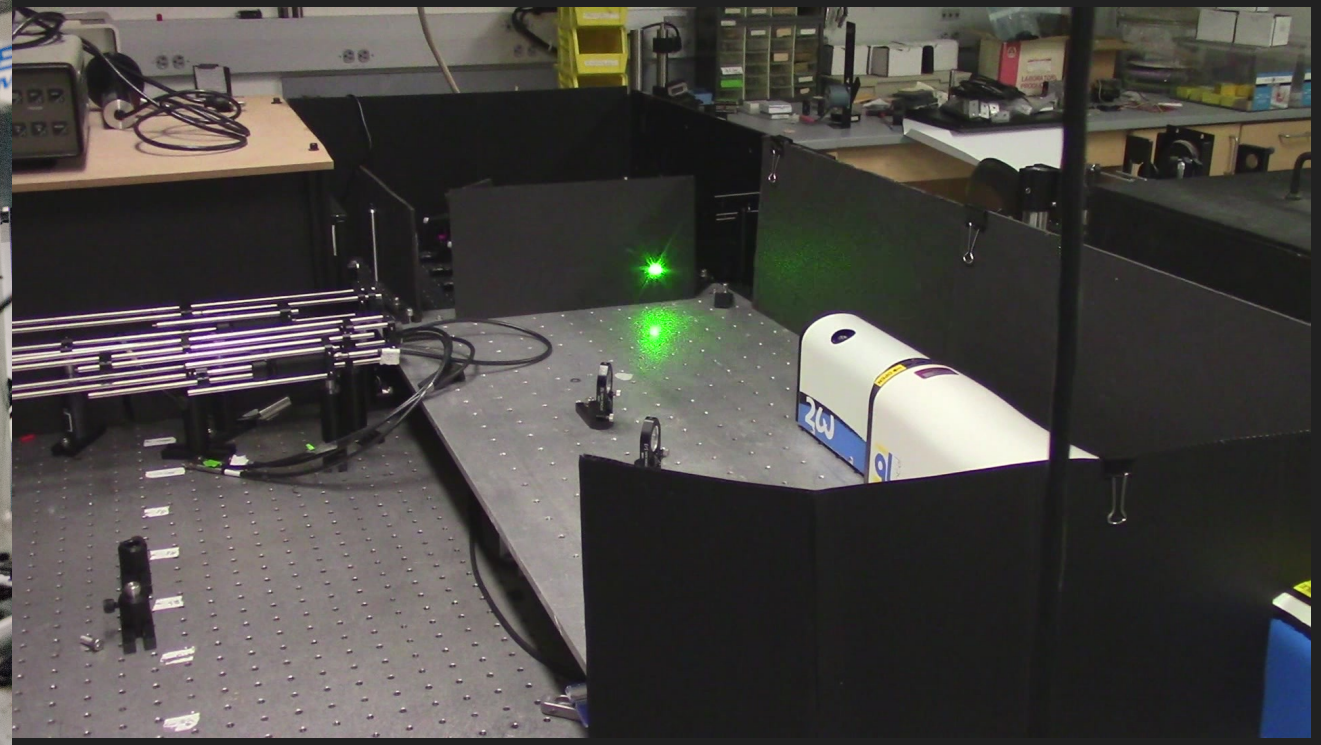
Bio-analytical Equipment

RapifleX MALDI Tissuetyper

3D Printer ProJet MJP 5600

Cold Room

Laser Facility

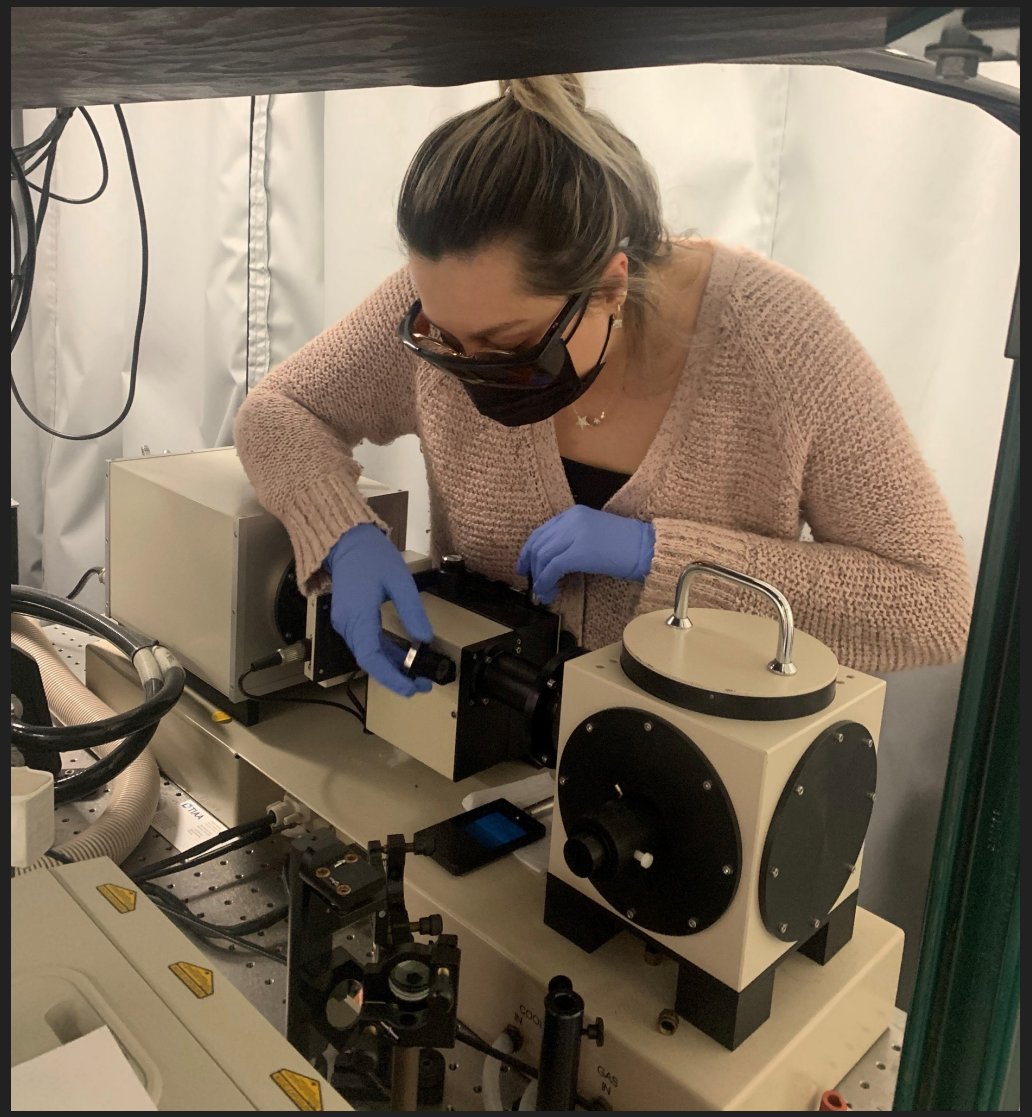


Nanosecond laser flash photolysis
for transient absorption

Raman spectroscopy for stand-off chemical detection

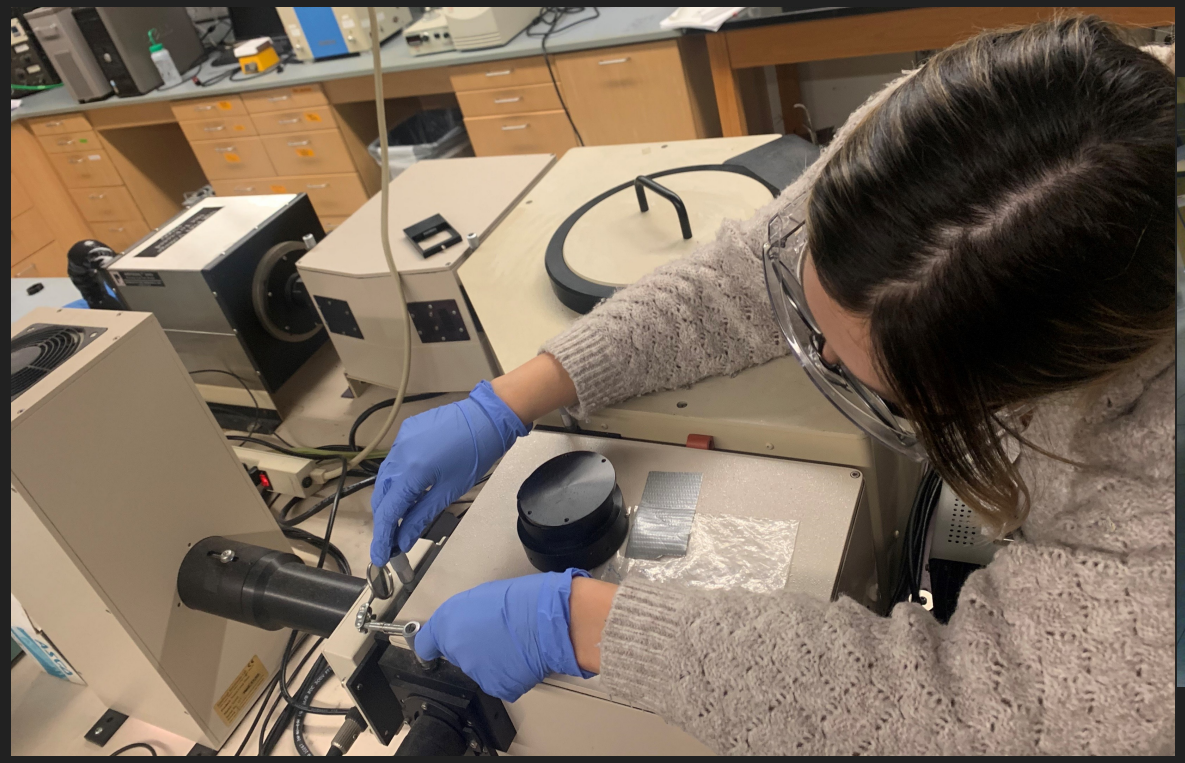
Laser Facility

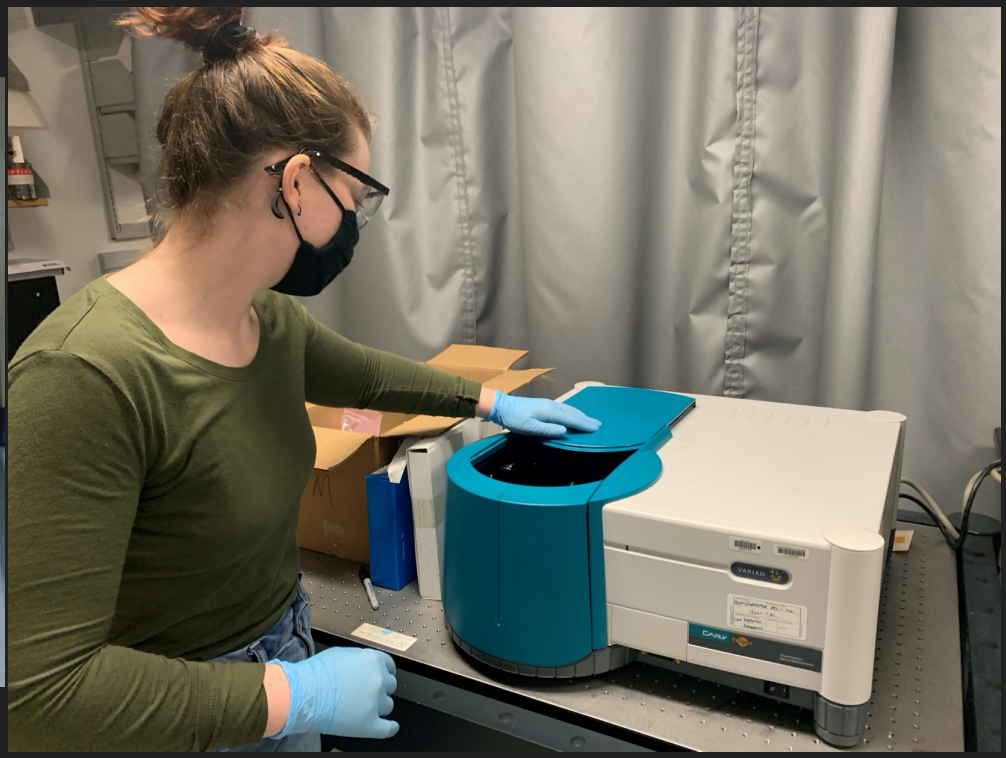
Femtosecond Laser for Time-Resolved Fluorescence and Pump-Probe Spectroscopy



Fluorescence Lifetimes via Time-Correlated Single Photon Counting

Fluorescence Capabilities





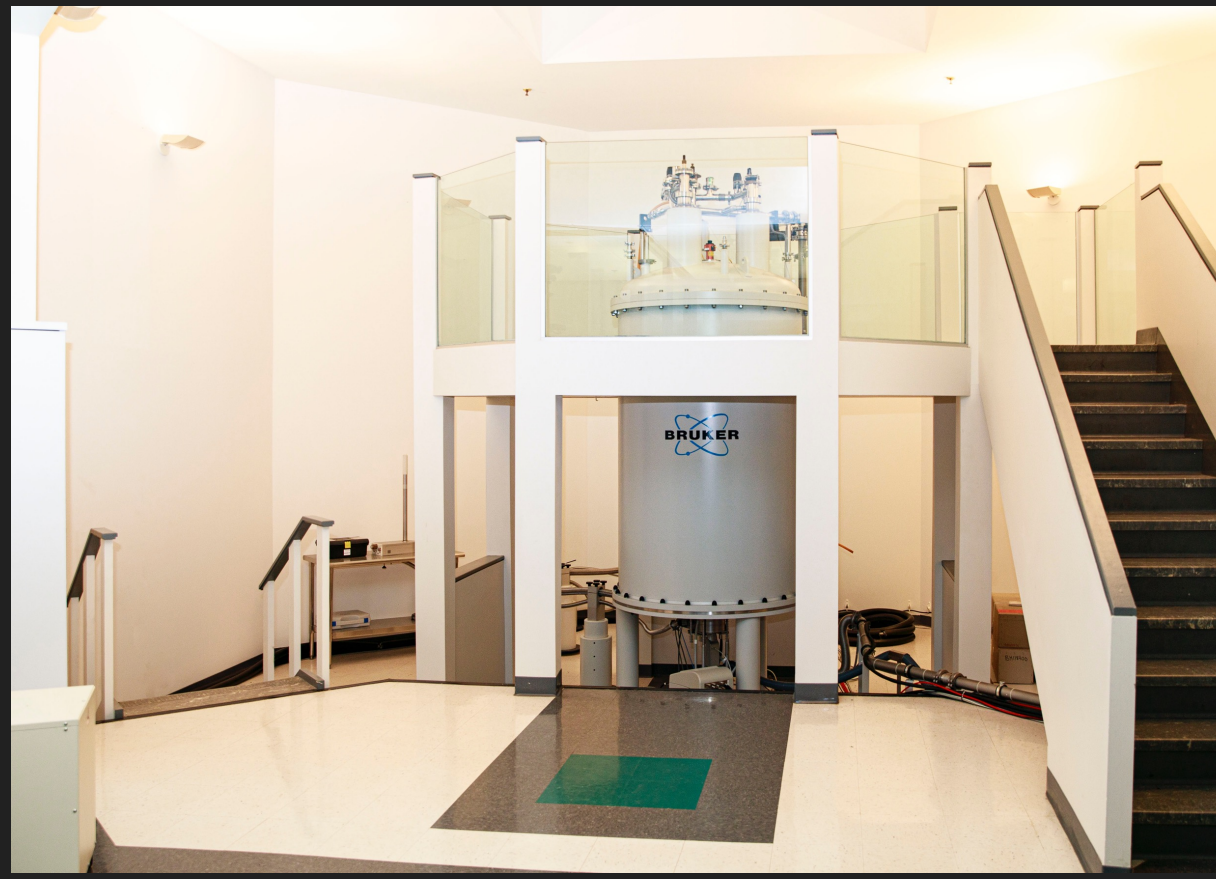
Edinburgh FLS920 for UV/VIS/NIR Fluorescence and Cryogen Spectroscopy

Cary Eclipse UV/Vis Spectrometer

NMR Facilities

400 MHz

500 MHz



800 MHz

Molecular Characterization and Analysis Complex (MCAC)

Mass Spectrometry

Bruker timsTOF Pro MS

Bruker 12T Solar IX FT-ICR MS

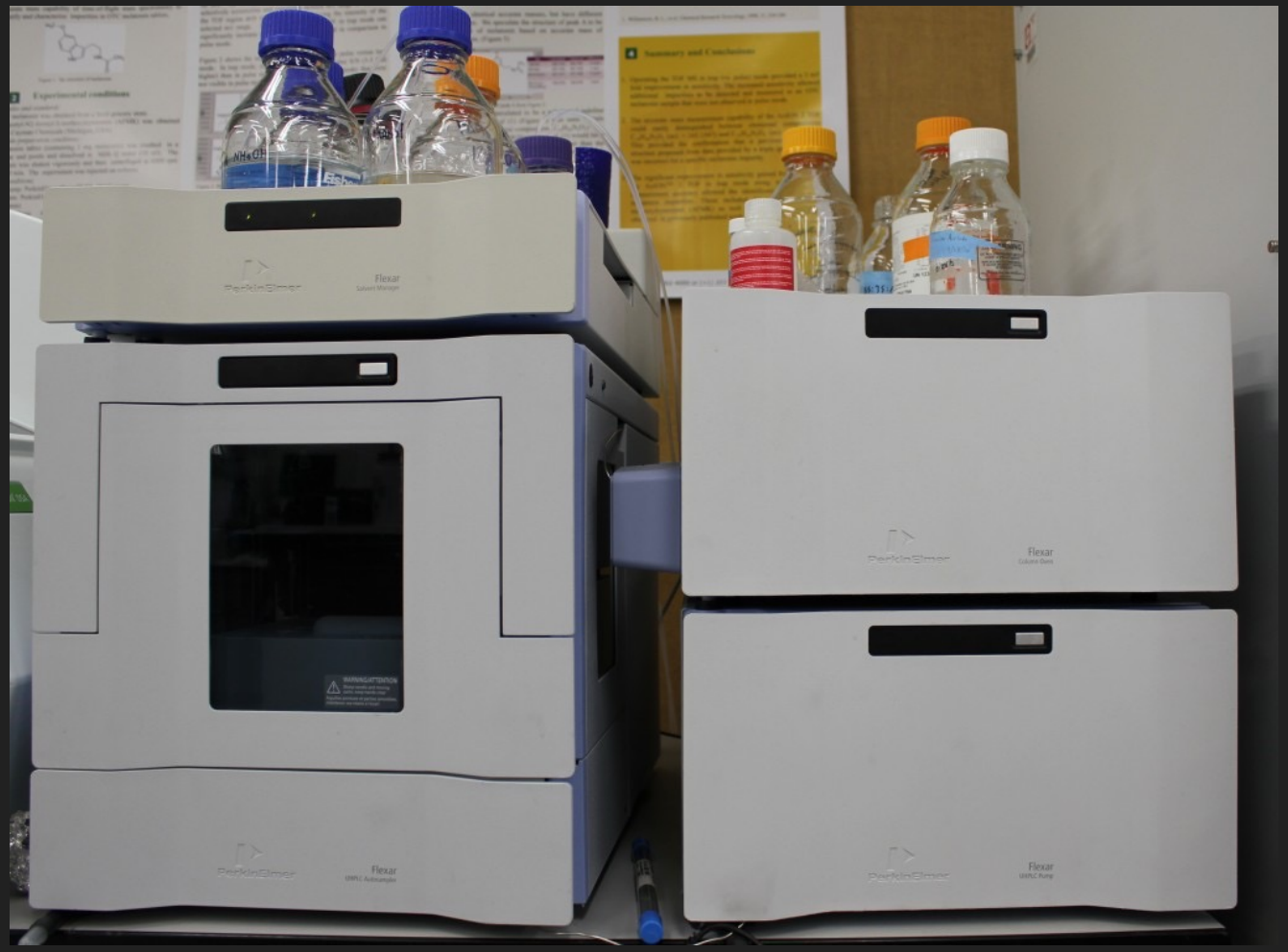
Mass Spectrometry

Perkin-Elmer Axion TOF MS

Perkin Elmer Clarus 600 MS with GC

HPLC Instruments

Dionex UltiMate 3000 HPLC



Perkin Elmer Flexar (HPLC with UV/vis and fluorescence)

Keith R. Porter Imaging Facility

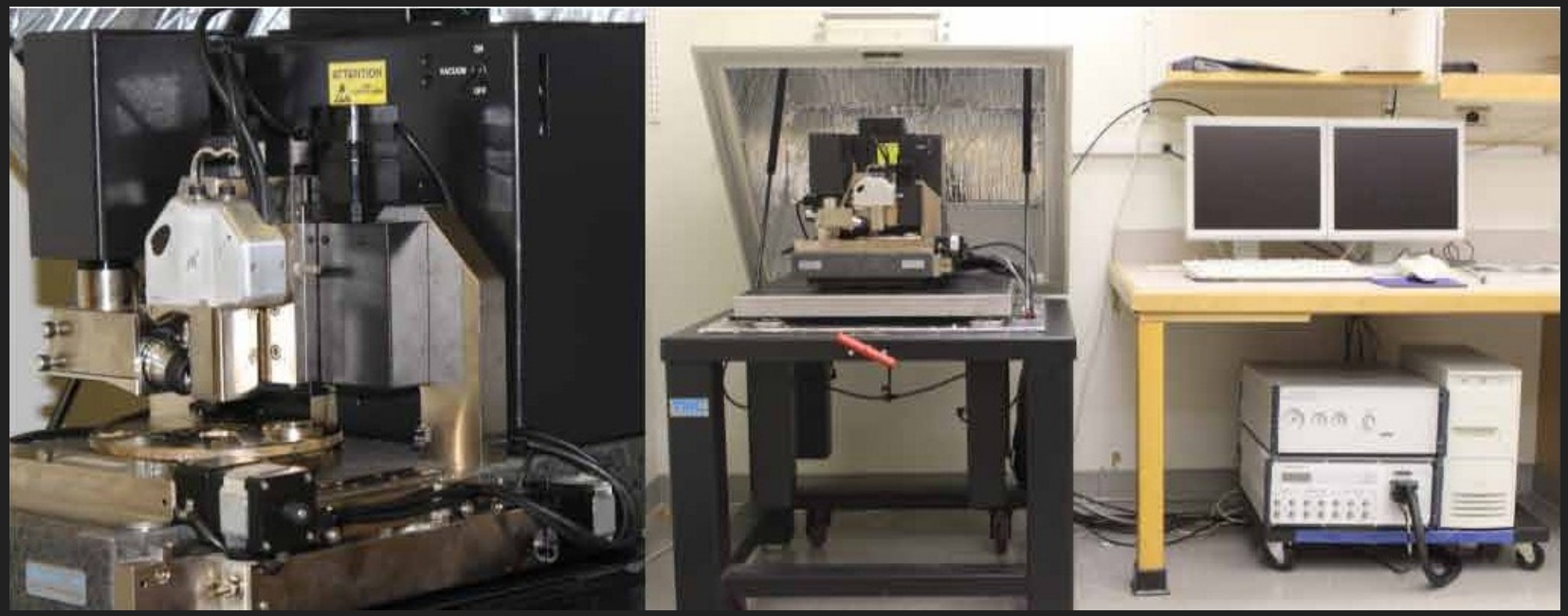
Transmission Electron Microscope

Leica SP5 Confocal Microscope

Keith Porter Imaging Facility

Scanning Electron Microscope

Keith Porter Imaging Facility



Atomic Force Microscope

Facilities Available in Other Institutions

- Computational Facility (UMBC)
- Greenebaum Comprehensive Cancer Center (UMB)
  - Fluorescence Imaging
  - Intracellular and Animal Testing
- NIH (Bethesda, Frederick)
- NIST (extensive facilities for characterization of nanostructures)
- Army Research Labs (Adelphi, Aberdeen)

Questions?

Contact: Dr. Marcin Ptaszek (mptaszek@umbc.edu)

We are looking forward to seeing you at UMBC!