

Chemistry and Biochemistry Virtual Open House

Campus and Facilities Tour



UMBC

Fall 2022

Our Campus



Our Campus



Albin O. Kuhn Library & Gallery

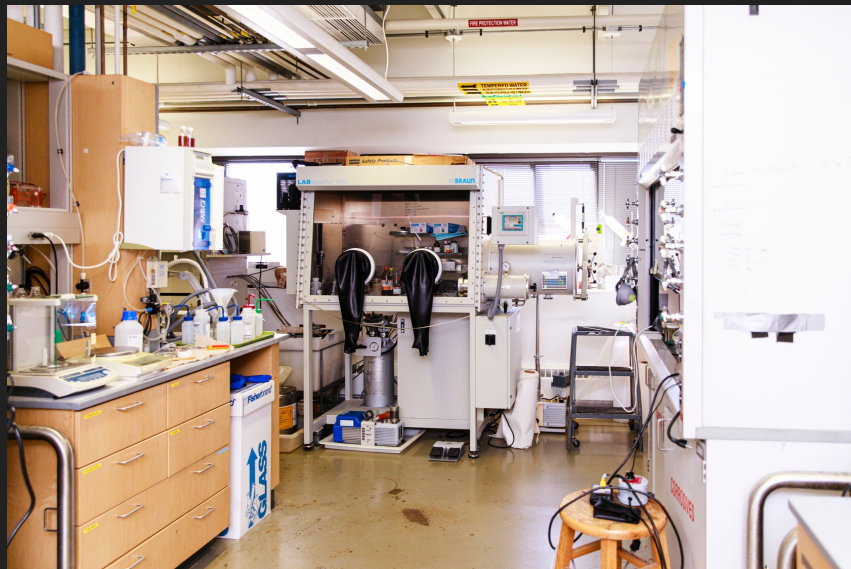


Interdisciplinary Life Science Building

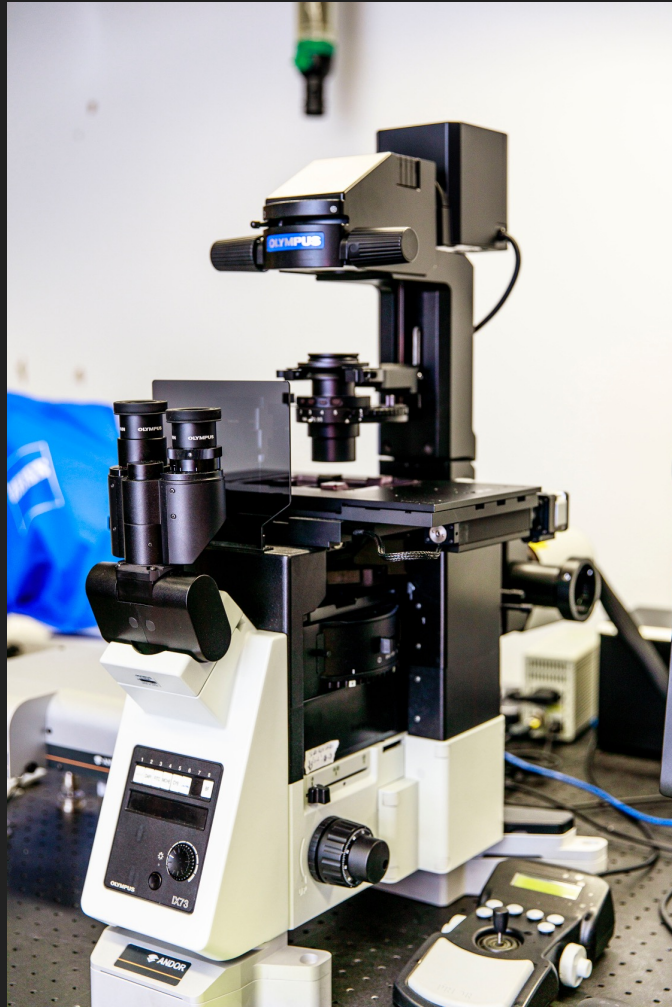
Department of Chemistry and Biochemistry



Extensive Research Infrastructure and Facilities



Confocal Microscopes



Olympus Inverted Microscope



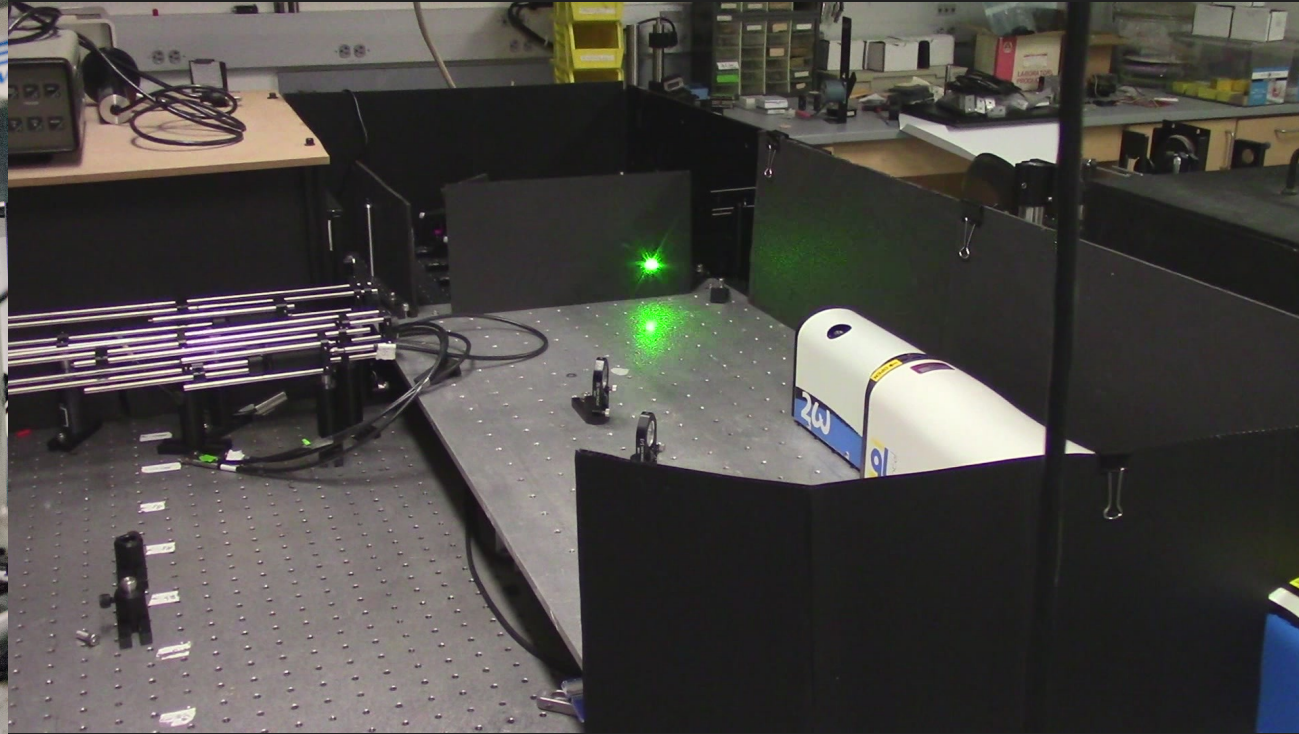
Cold Room



Laser Facility



Nanosecond laser flash
photolysis
for transient absorption

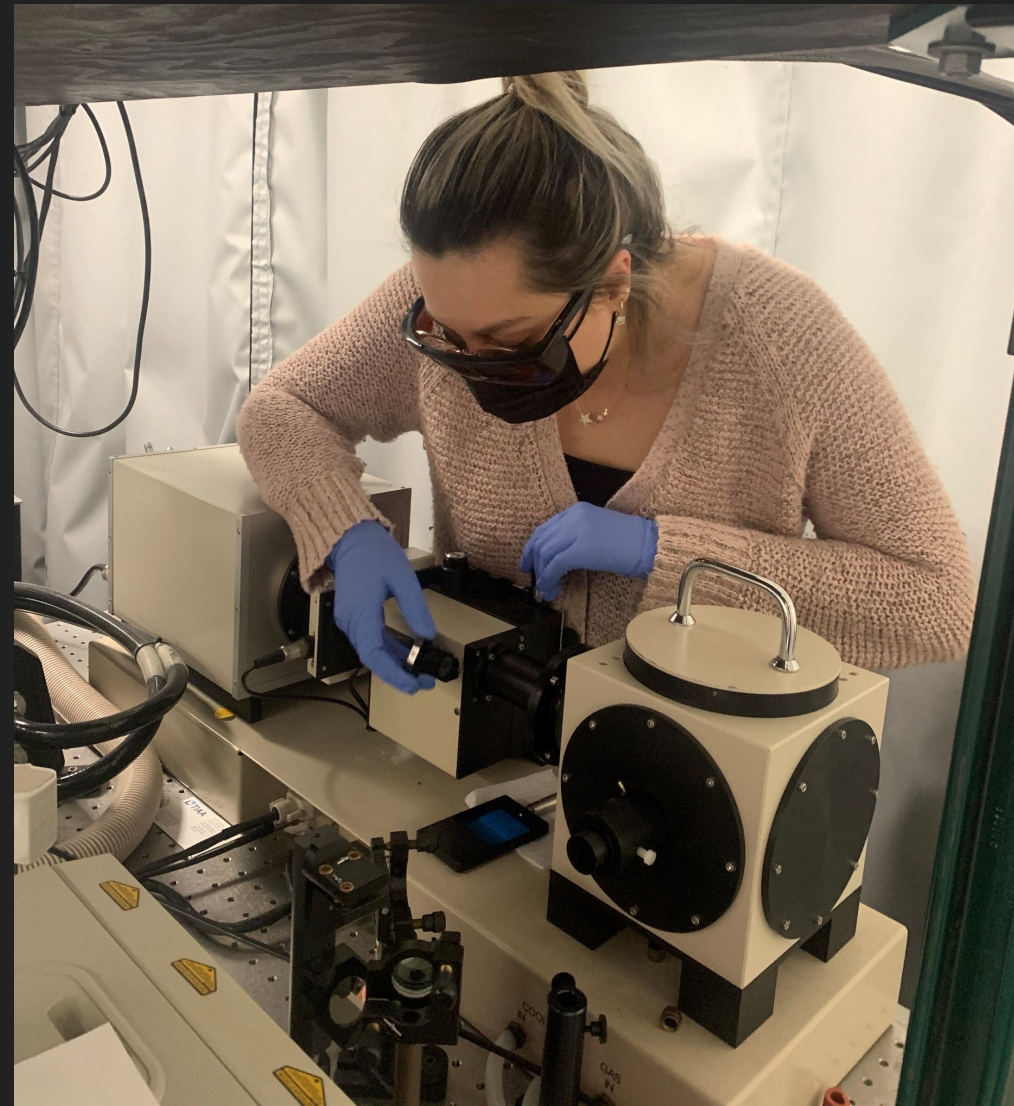


Raman spectroscopy for stand-off chemical
detection

Laser Facility

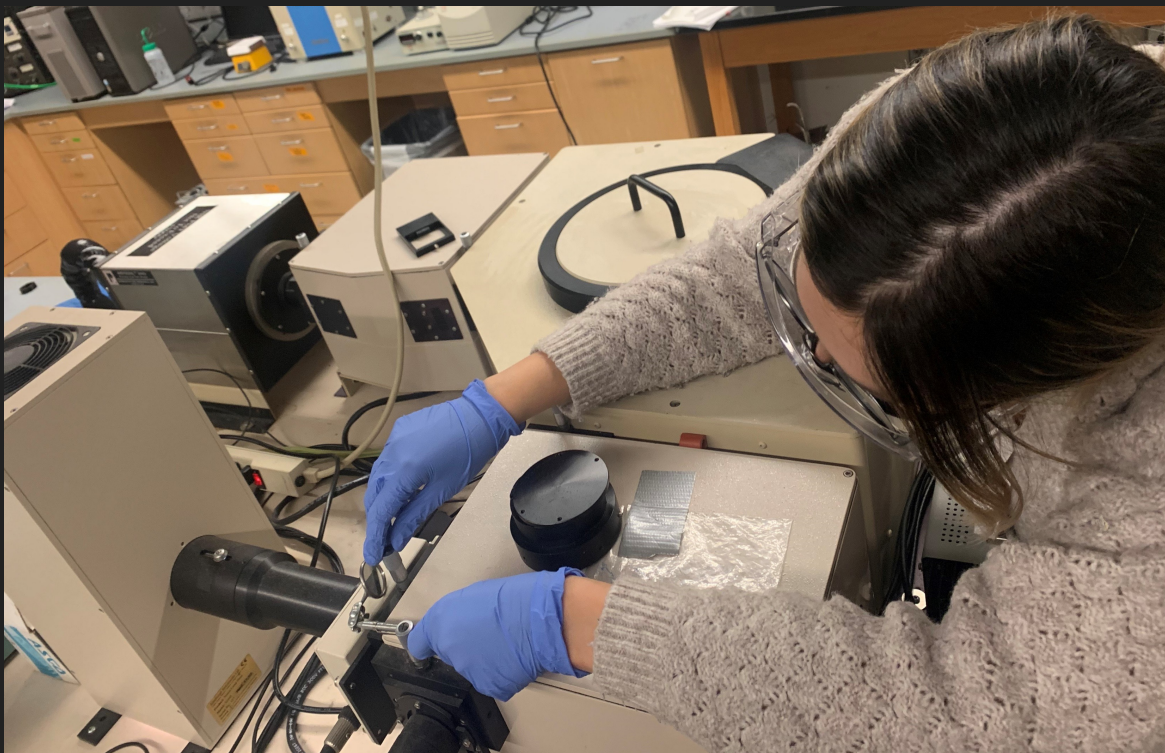


Femtosecond Laser for Time-Resolved
Fluorescence and Pump-Probe
Spectroscopy

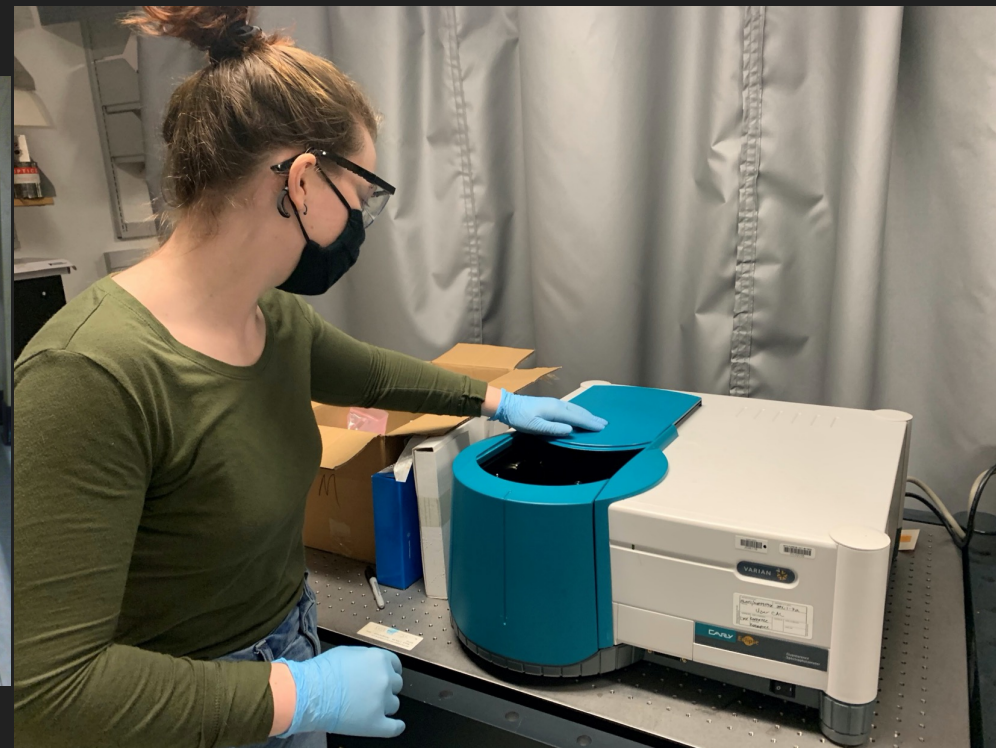


Fluorescence Lifetimes via Time-
Correlated Single Photon Counting

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

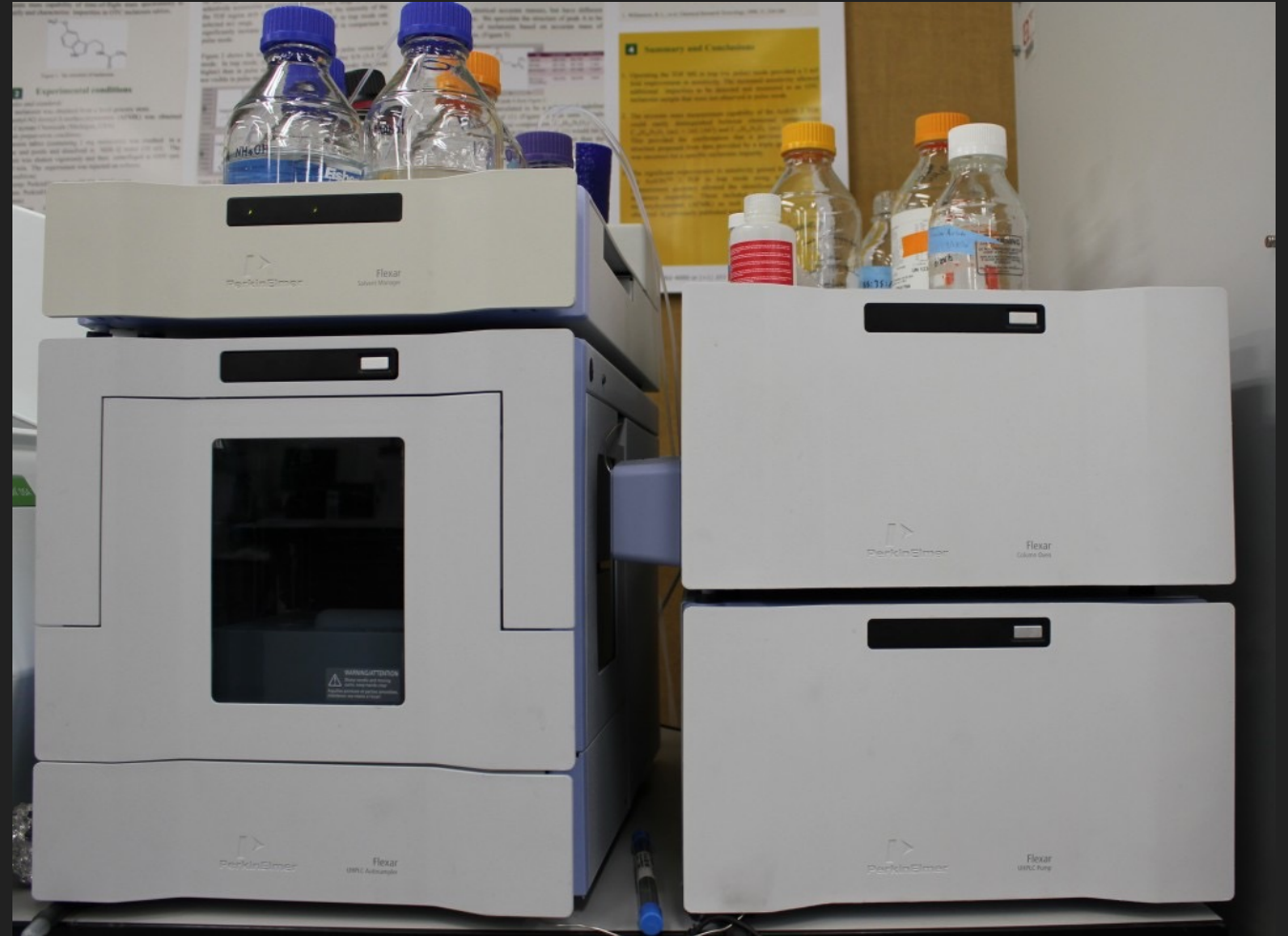


Perkin Elmer Clarus 600 MS with GC

HPLC Instruments



Dionex UltiMate 3000 HPLC



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

Keith R. Porter Imaging Facility



Transmission Electron Microscope



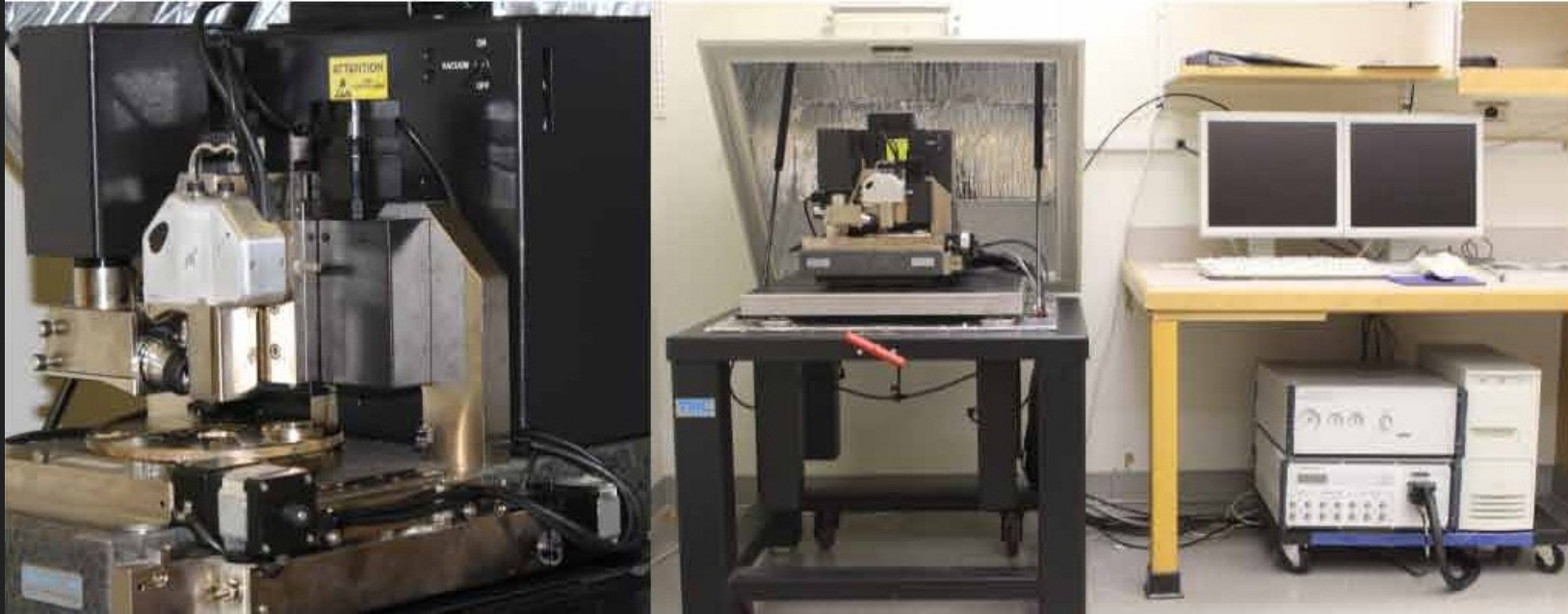
Leica SP5 Confocal Microscope

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)
- University of Maryland, College Park
- Johns Hopkins University

Questions?

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

We are looking forward to seeing you at UMBC!

