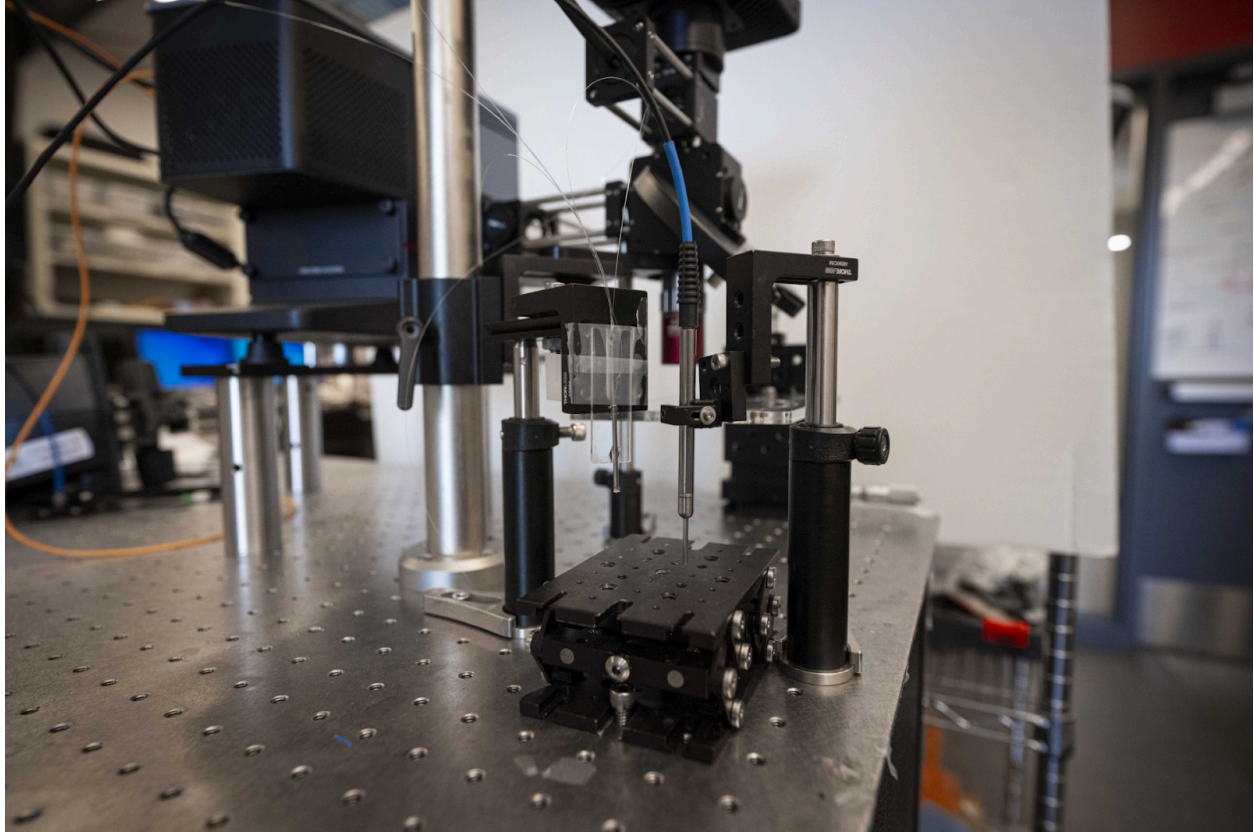
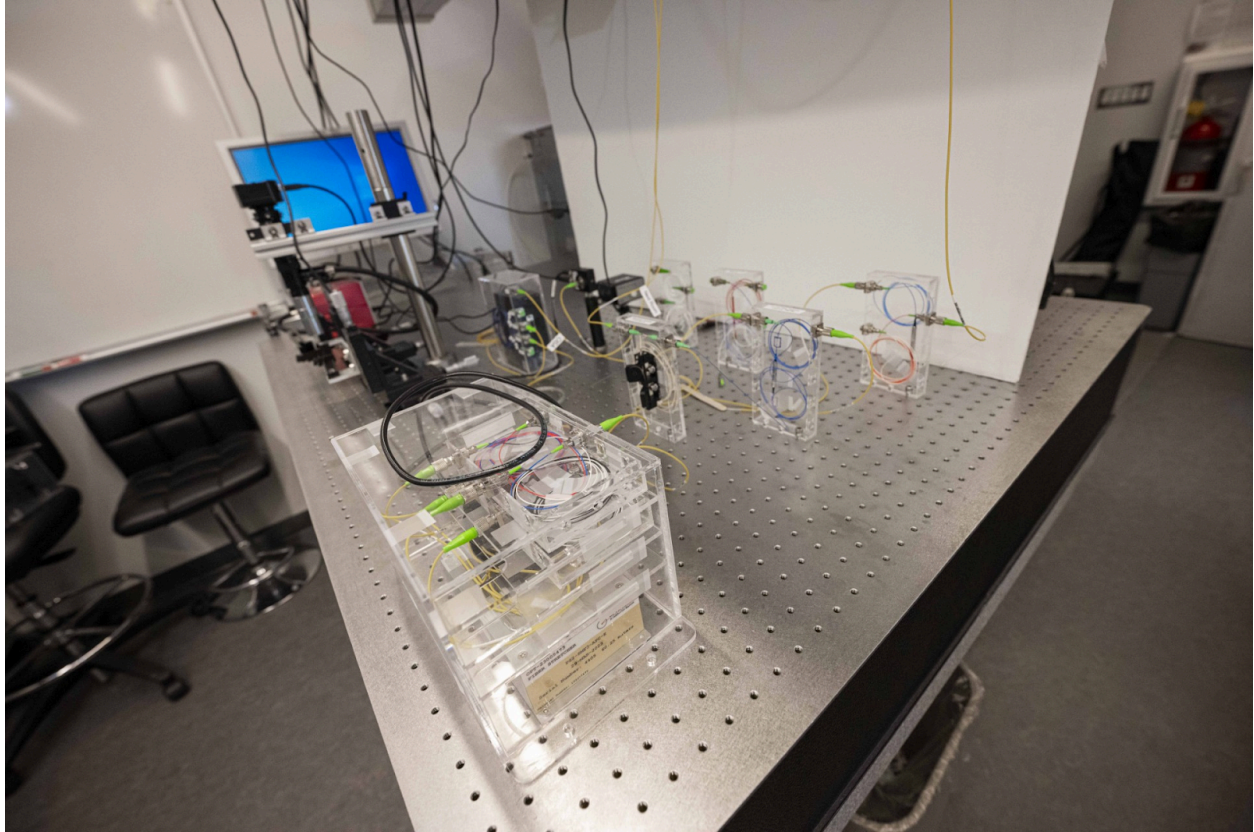


Custom dryer for banana slice drying with continuous computer vision and fiber sensor data display, for real-time drying process monitoring

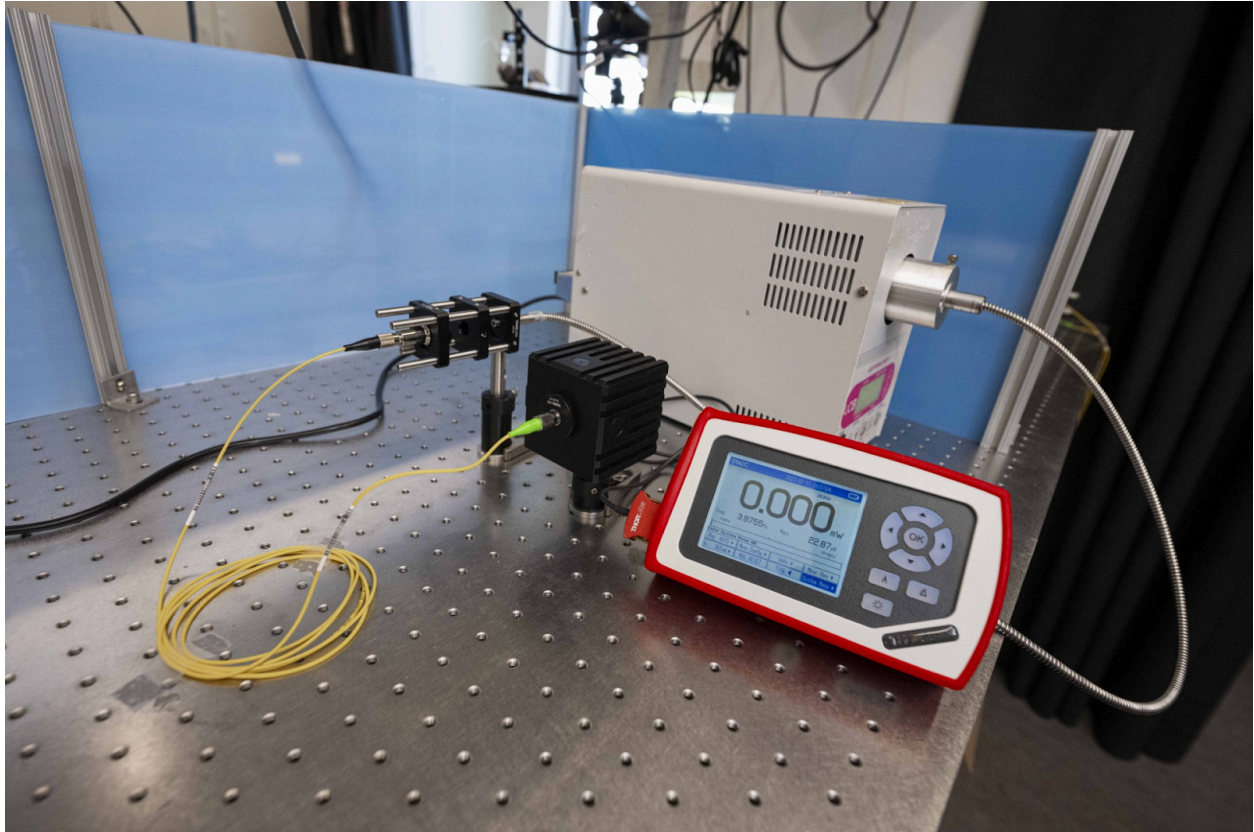


Various custom and commercial fiber optical spectroscopic probes and microscopes for Raman and Near Infrared (NIR) spectroscopy



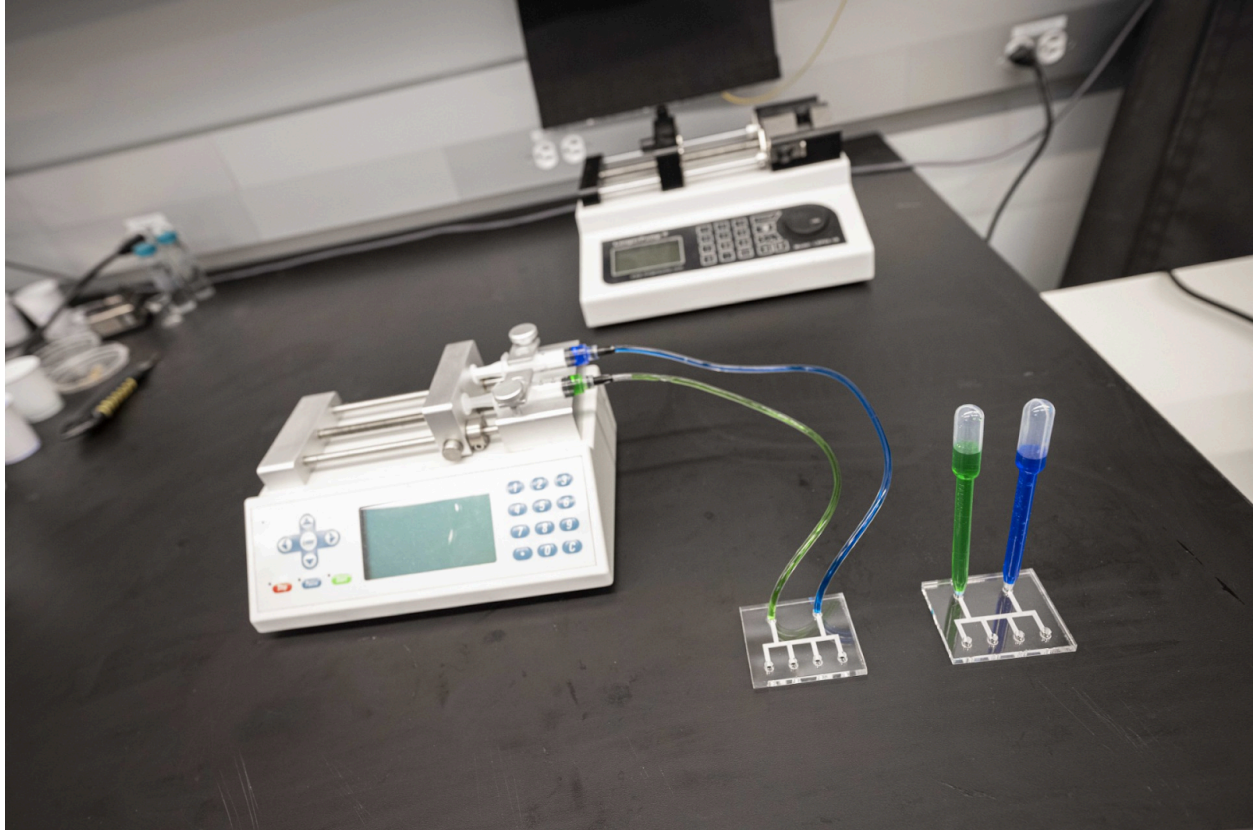


Fiber optical sensor readout system facilitating 1) sensor multiplexing, 2) optical phase modulation and demodulation, and 3) wireless fiber sensor readout

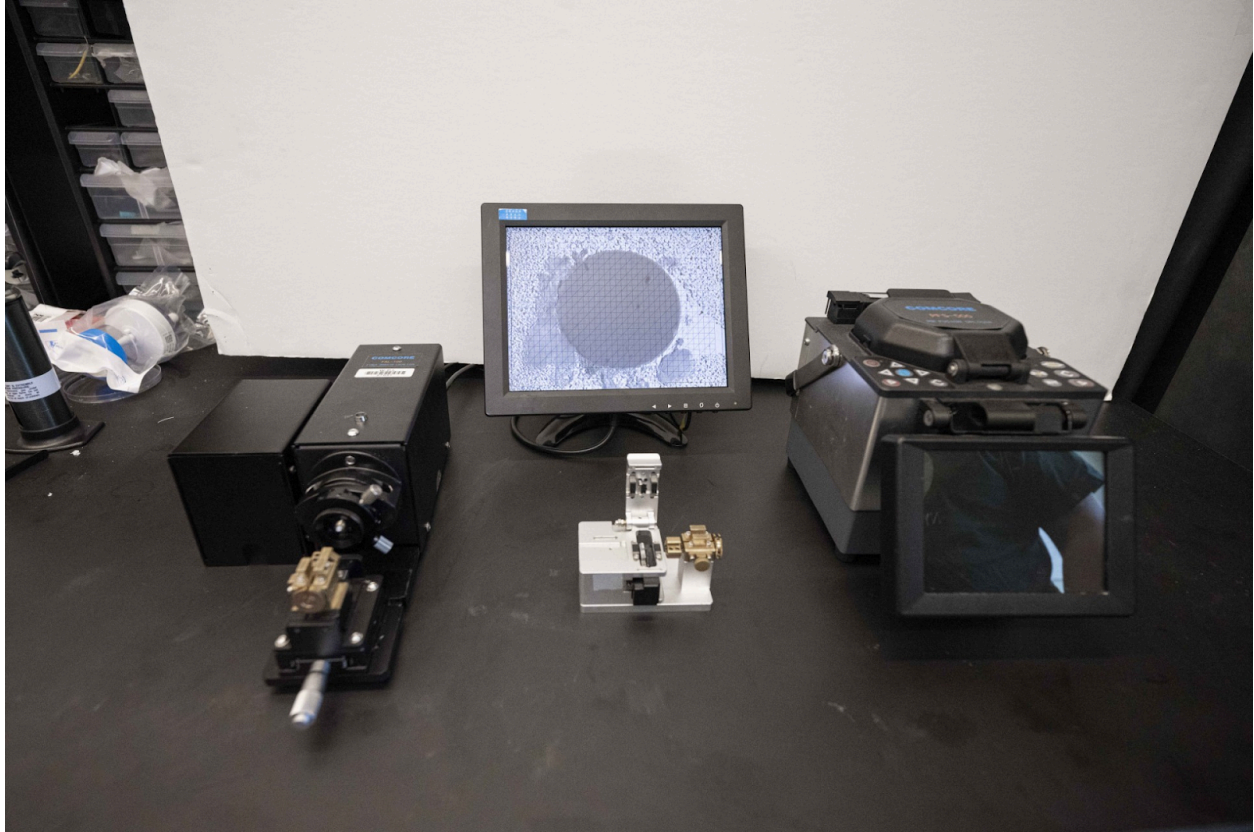


UV light source and light coupling system into an optical fiber, for fiber tip customization, fiber sensor fabrication, and optical beam control



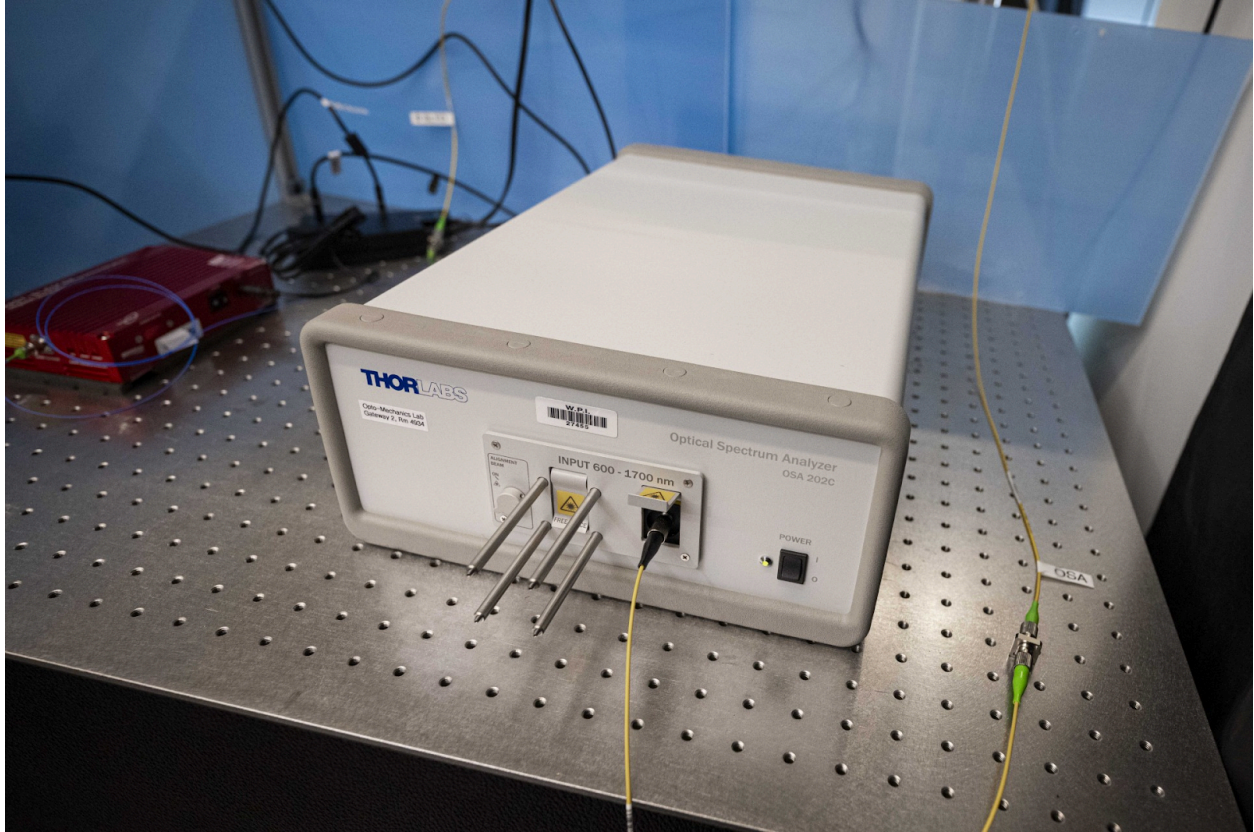


Custom acrylic-tape and acrylic-acrylic microfluidic chips for portable food safety detection



Polarization-maintaining (PM) optical fiber cleaver and splicer to recollect single-mode fibers and PM fibers



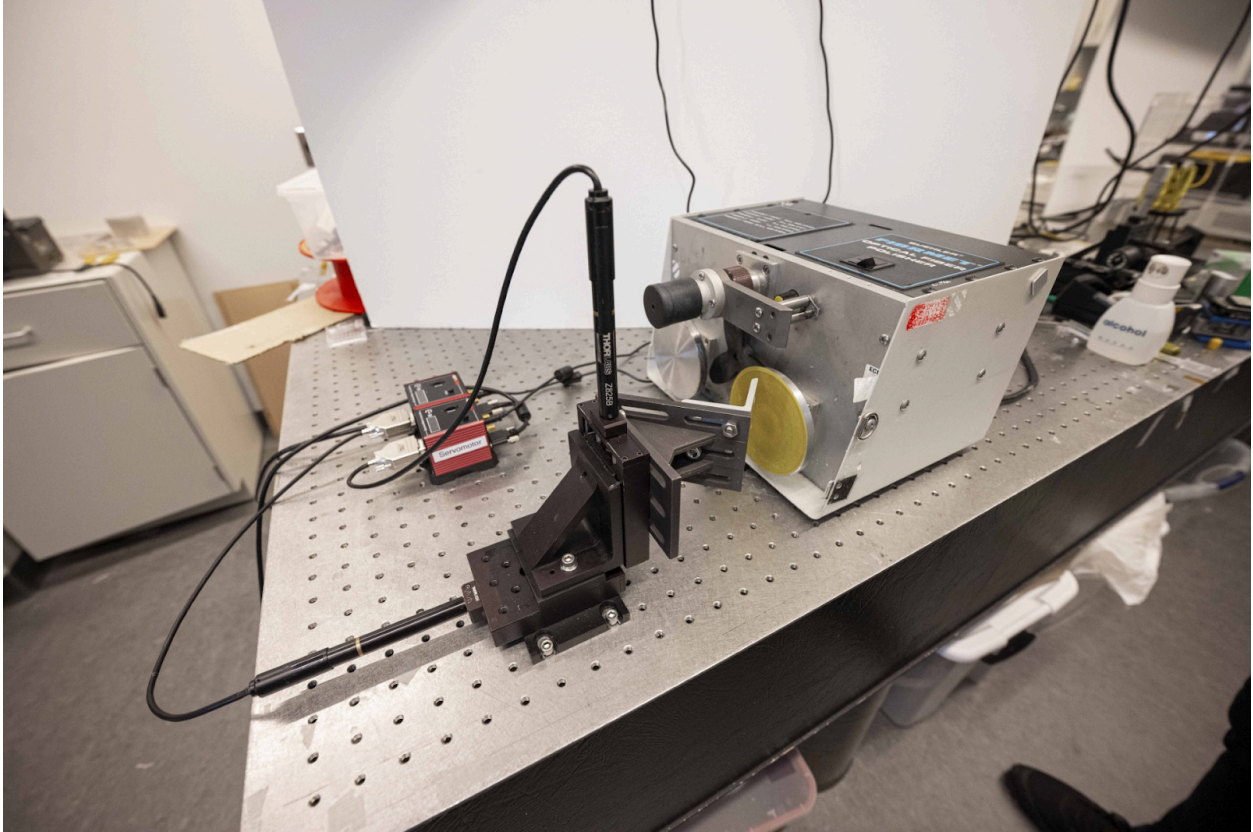


Optical spectrometer with a wavelength range of 600-1700 nm for both fiber-coupled and free-space spectroscopy



RF sputtering machine for thin (<10 nm resolution) film deposition and fiber sensor functionalization





Custom fiber tip polishing system for fiber tip shaping and sensor development



Millipore deionized water system for chemical and biological sample preparation



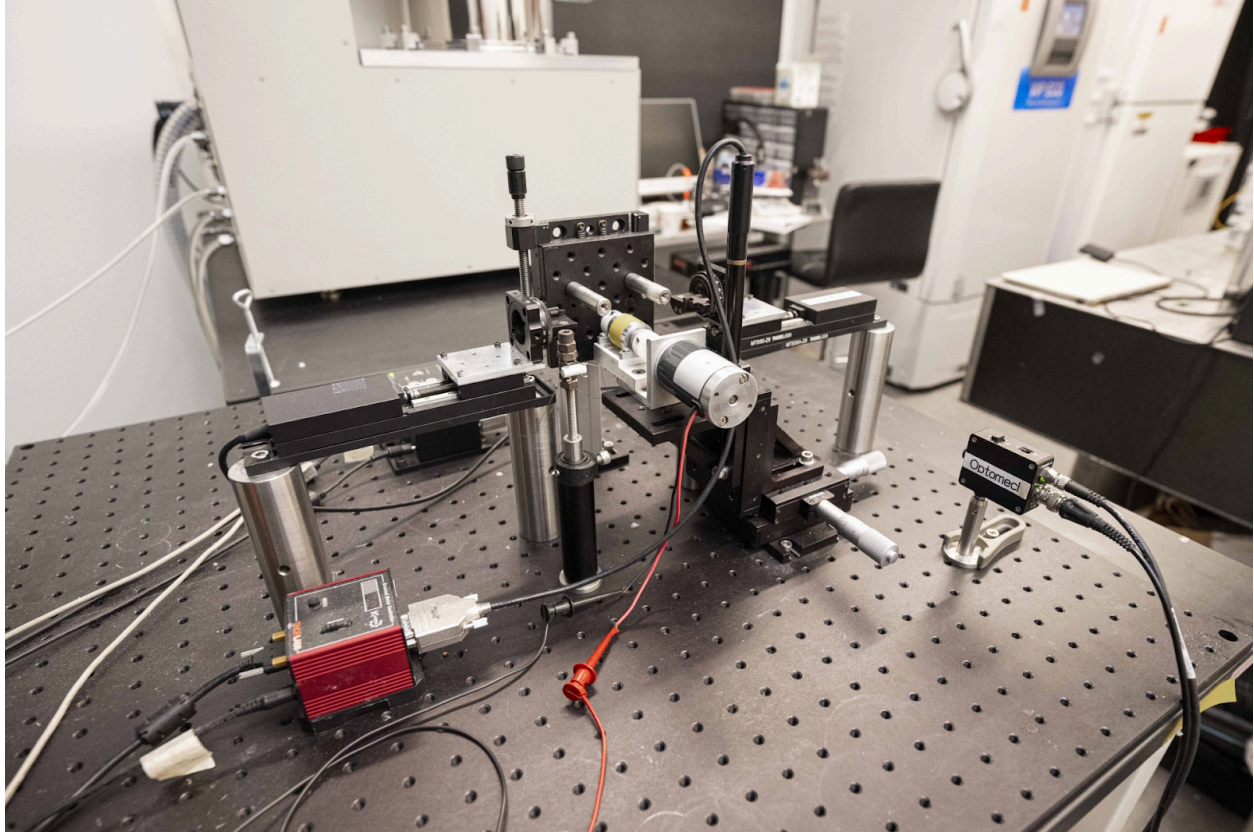


Cell incubator with environment (temperature, humidity, and gas) control.



-80 oC freezer for biological sample storage



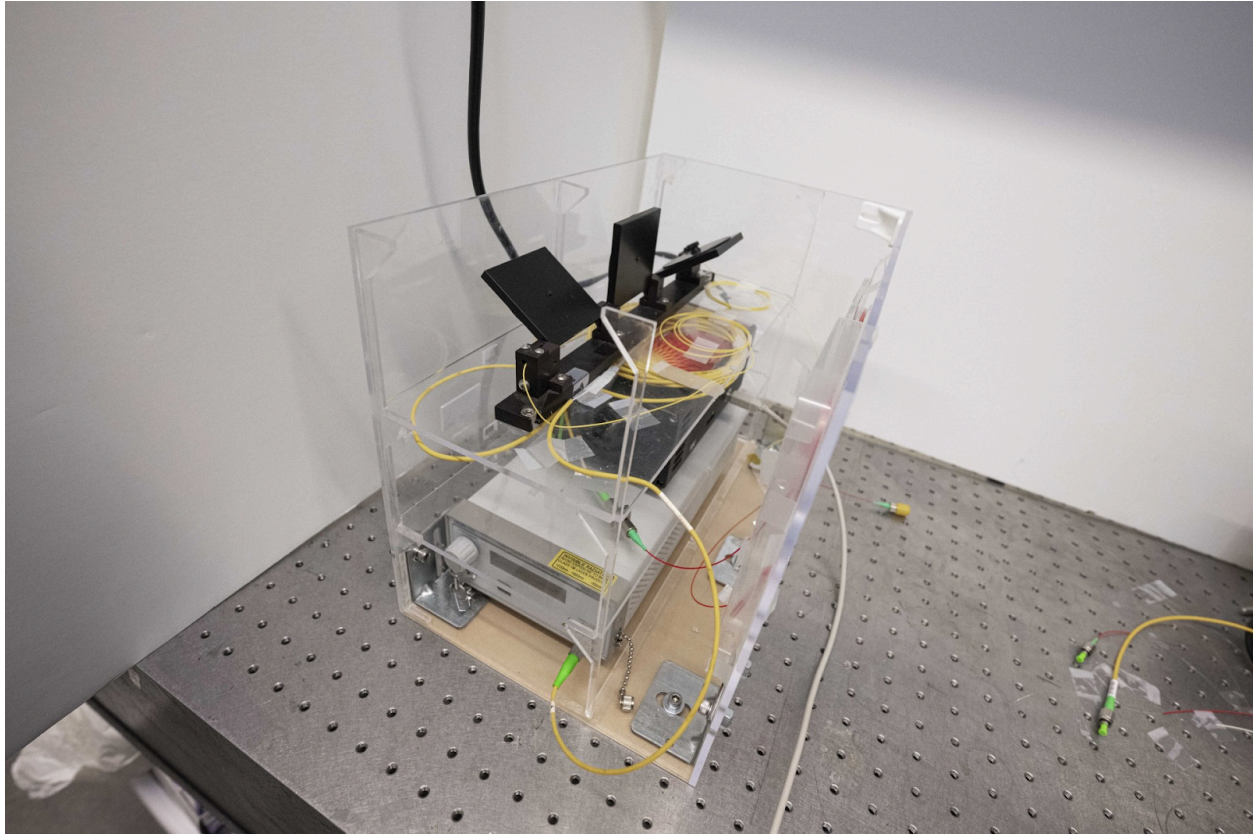


Custom fiber customization system, which facilitates sidewall fiber polishing and heat-and-draw fiber taper, for fiber sensor development.



Custom gas chamber for humidity and gas sensor calibration and demonstration.



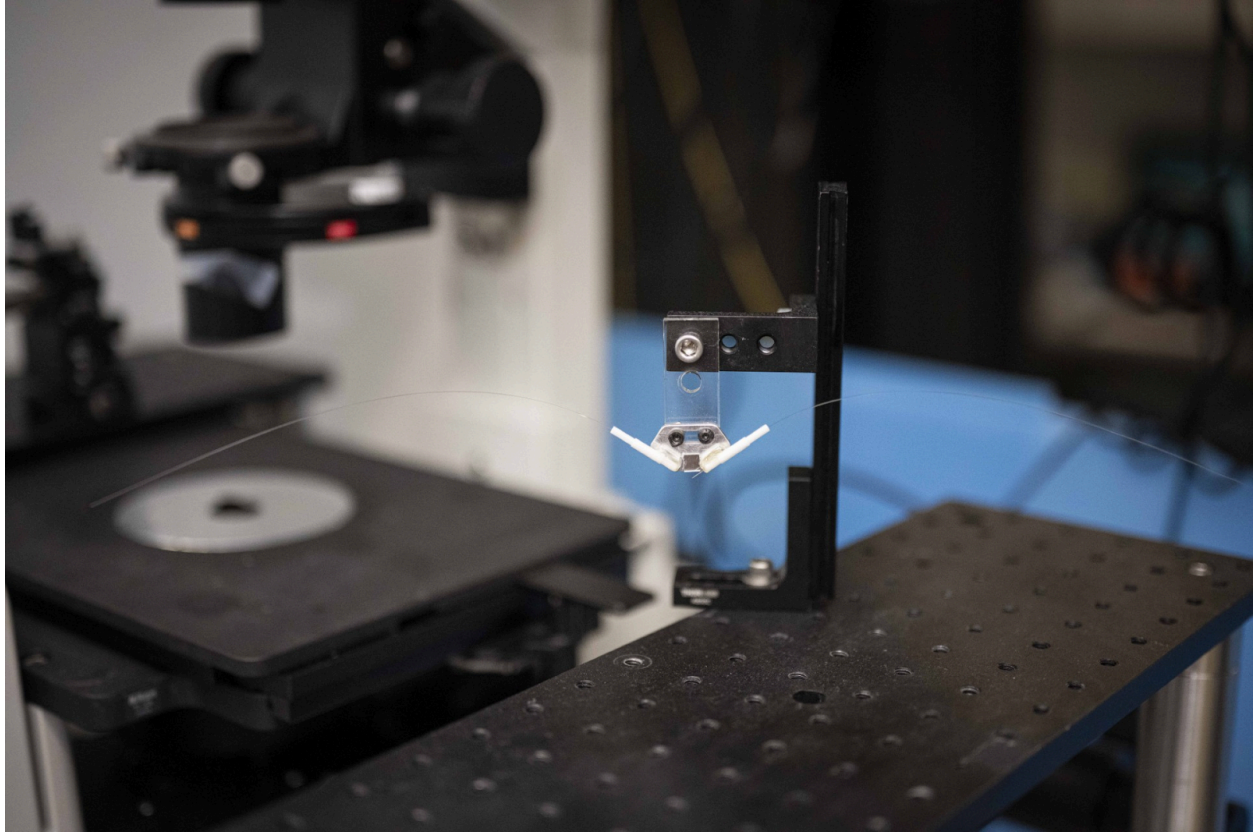


Portable fiber sensor readout system



Microbiology equipment: biosafety cabinets, table-top autoclave, and bacteria shaking incubator





Module, miniature all-fiber optical trapping system for micro/nanoparticles trapping in water and gas