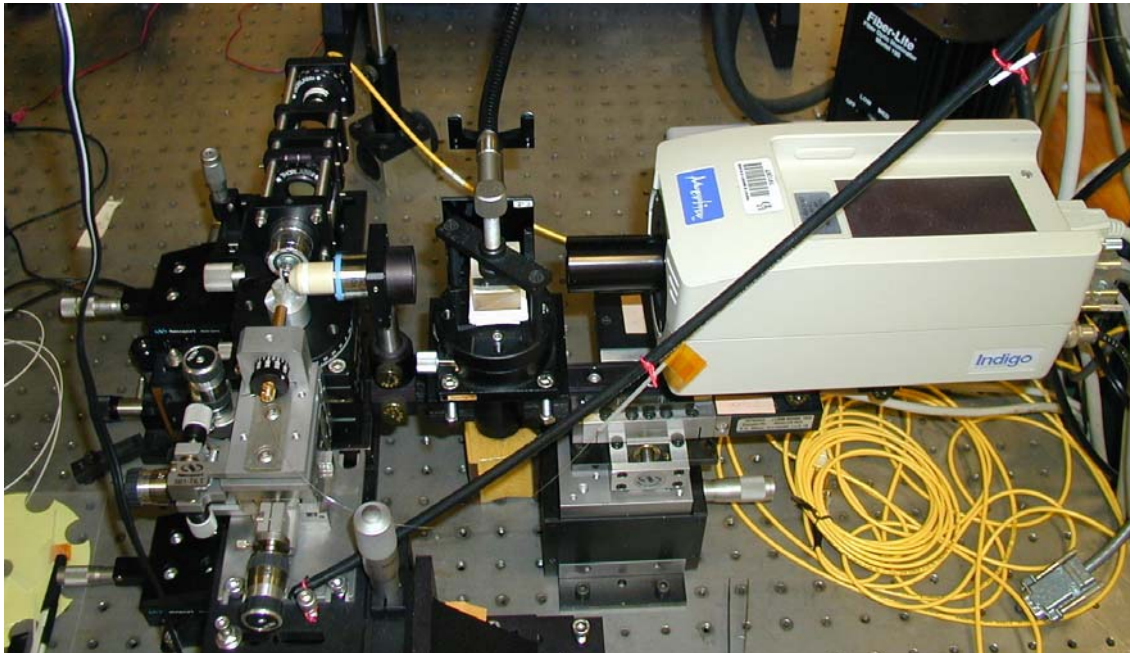


NIR Optics Bench and Tunable IR Laser Source

2D NIR planar devices are characterized using the setup shown below. It consists of an input fiber, focusing optics, a sample mount, an output fiber, and an out of plane IR camera. All of the pieces of equipment are mounted on 3-axis stages allowing for complete control over the alignment of the setup. Devices are typically analyzed using the output fiber to couple light into a power meter for power measurements, and the camera for various loss measurements.



The input signal to the NIR optics workbench is generated using 4 HP 8164A tunable lasers. They collectively cover the range of wavelengths from 1.259-1.641 μm allowing complete characterization of devices across all of the common NIR communication frequencies. The sources are also GPIB compatible and are controlled by computer allowing complete automation of the characterization process.

