

CLA Advanced Technology Laboratories

The Advanced Technology building consists of over 11,000 ft² of optical laser labs, a clean room, a 2,800 ft² high bay lab, and six offices.



Nanofabrication Laboratory

The Nanofabrication Laboratory is a class 1000 clean room with femtosecond laser machining capabilities. The current laser machining setup includes a continuous wave 532nm solid-state Coherent Verdi-V18 laser, a Spectra –Physics Tsunami oscillator, and a Coherent Reg A 9000 regenerative amplifier. The Nanofabrication Lab is also used for other projects that require a clean room environment. Some additional equipment in the lab includes the following: A Harrick PDC-32G plasma cleaner, a Micro Automation Model 1100 dicing saw, a Vision Engineering Lynx Stereo Dynascope inspection microscope, Barnstead Nanopure Infinity ultrapure water system, a Chemat Technology KW-4A spin coater, an ultrasonic cleaner, and a chemical fume hood.

Mossbauer Spectroscopy System

Utilizes a nuclear spectroscopy method that is extremely sensitive to small changes in the chemical environment. Capable of detecting changes of a few parts in 10¹¹.

Optics Labs

The CLA also houses several large optics labs for advanced laser research.

