



LASER AND OPTICS LABORATORY

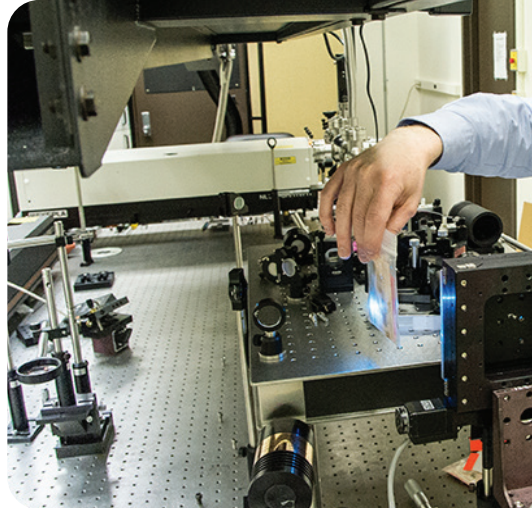
LABORATORY INFORMATION FACT SHEET

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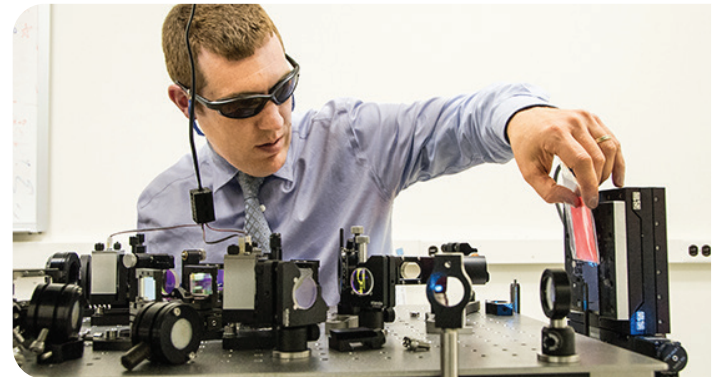
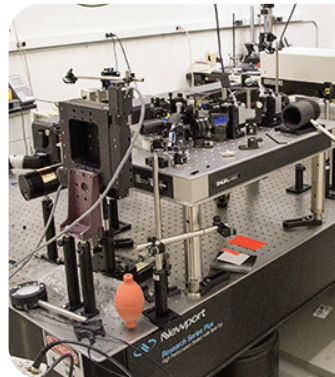
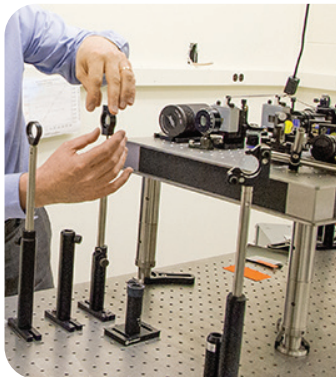


The Laser and Optics Laboratory at DEVCOM's Benét Laboratories is a multi-purpose lab facilitated to perform fundamental laser-materials interactions research all the way to laser testing of production-representative coatings.

TECHNOLOGY/FACILITY DESCRIPTION:

Laser systems have available pulse energies from nanoseconds to milliseconds, and are all Joule-class lasers. Laser setups are highly modular, and we have an extensive array of optics to build custom optical

setups for most typical processing or characterization applications. Motion control capabilities enable processing of large areas, and vacuum chambers with up to 150mm wafer handling are available for processing in special environments. Available wavelengths for pulsed systems include UV, visible, and near IR (1064nm) wavelengths; CW systems are mostly visible.



EQUIPMENT AND EXPERTISE AVAILABLE:

- IPG Yb fiber laser
- Ekspla Nd:YAG laser
- Resonetics excimer laser micromachining workstation
- Coherent argon ion laser
- MegaWatt Nd:YAG laser
- x-y controllable stage
- Laser pulse heating for simulation of thermal environment during weapon firing, pulsed
- Laser melting of semiconductors
- Laser surface structuring of metals
- Laser micromachining