

DARTMOUTH

Environmental Health & Safety

37 Dewey Field Road, Suite 6216
Hanover, New Hampshire 03755
Tel: 603-646-1762
Fax: 603-646-2622
environmental.health.and.safety@dartmouth.edu
<http://www.dartmouth.edu/~ehs/>

New Laser Registration Form

Section 1: Owner Information

Principal Investigator:

Department:

Hinman Box:

Phone Number:

Date of Submission:

Section 2: Laser Management Information

Building:

Room Number:

Laser Manager:

Emergency Phone Number:

Section 3: Laser Device Information

Manufacturer:

Model:

Serial Number:

Laser Class:

Laser Type:

Laser Medium:

Wavelength/s (nm):

Tunable:

Beam Diameter (nm):

Beam Divergence (mrad):

Beam Divergence Measurement:

Enclosed or Open:

Mode:

Max Power Output:

Average Power Output:

Power Output w/ Optics Used:

Pulse Duration (sec):

Pulse Frequency (Hz):

Avg. Joules/Pulse:

Max Joules/Pulse:

*To register laser devices that have been or will be modified or fabricated at the College, please include a Laser Modification/Fabrication Form.

Requirements

BioRAFT “Laboratory Safety & Hazardous Waste Training” completed by everyone in the lab (<https://dartmouth.bioraft.com/rafttraining/course/61>)

BioRAFT “Laser Equipment Safety Training” completed by laser users (<https://dartmouth.bioraft.com/rafttraining/course/38>)

All laser users have/will complete laser specific training and form (Pg. 2)

All laser users that complete the Laser Specific Training Form will sign fill out the Equipment-Specific Laser Safety Training Log (Pg. 3)

All laser users have reviewed the Laser Safety Manual

(<https://www.dartmouth.edu/ehs/laser/>) - Laser Safety Manual link top left

Technical specs & manuals included with the registration (digital or link)

Standard Operating Procedure attached (Pg. 4)

Laser Manager Signature:

Date:

Notes:

Equipment-Specific Laser Training Form

Section 1: Training Information

Principal Investigator:	
Laser Training Manager:	
Dartmouth Laser ID Number:	
Laser Trainee:	
Date of Training:	

Section 2: Required Training

Topics	Initial
1. Laser Area, Nominal Hazard Zones, Signs and Warning Labels	
2. Laser Safety Equipment and Personal Protective Equipment	
3. Beam and Non-Beam Hazards	
4. Turning on the Laser Device	
5. Turning off the Laser Device	
6. Emergency Stop or Deactivation Procedure	
7. Alignment Protocols	
8. Accident Reporting	
9. Laser SOP	
10. Other Topics Discussed (please specify):	

Please Sign Below and Log Training in the Equipment-Specific Training Log:

Laser Training Manager

Laser Operator

Laser Standard Operating Procedure

The Laser Standard Operating Procedure (SOP) should include information regarding, at a minimum:

1. A brief description of the laser including the make, model, power, and class
2. A description of any optical attachments, with diagrams and power output readings
3. A description of the laser area, nominal hazard zone/s, door/area signs, and warning labels used
4. How the laser will be used in the lab
5. Beam and non-beam hazards
 - a. Plans for exhaust, if applicable
 - b. Any chemicals/dyes used
6. What laser safety and personal protective equipment will be used
7. Instructions on how to use the laser including:
 - a. How to power on and off
 - b. Alignment protocols
8. Emergency procedures, including emergency stops, incident reporting procedures, fire extinguisher locations, and emergency contact numbers
9. A description of the security used for the laser
10. A lab diagram as detailed in the Laser Safety Handbook Section 4.4
11. Service/maintenance procedure for the laser