## NJIT LASER USE REGISTRATION (LUR) FORM

Date:			Page of	
Name of Principal Investigator:			Phone #	
Name of Laboratory Contacts:			Phone #	
Names of Laser Users		Laser	Safety Training Completed (Date)	
Department of Principal Investigator:	-			
Laser Research Funding source (circle one) DOE Building and Room Location of Lasor:	E		Otner:	
Make/Model of Laser: Laser Serial Number:				
Laser information				
Laser Classification Marked on Laser (Circle one)	1	2	3 3a 3b 4 none	
CW			Pulsed	
Wavelength(s): (nm)			Wavelength(s)	(nm)
Max Op Power			Pulse Durations (sec)	
Avg. Op. Power:			Pulse frequency	
			(Hz) Max. Op. Energy:	
Beam Diameter at aperture:		_	Avg. Op. Energy:	
Beam Divergence:				
Laser Use (describe briefly):				
Place a check after all items that apply and describe	): :			
Use of cryogen				
Use of Compressed gases				
High Voltage Power Supplies				
High Voltage > 30K Vp				
Dye Laser				
Exposed Beam Paths				
High Noise Levels				
Use of Pumping laser				
Beam Focusing Optics				
Fabricated Laser				
Modified Laser				
Freq. Doubling Crystals				
Tunable Laser				
Invisible Beam Laser Cutting/Welding				

Engineering Controls	1	2a	2	3a	3b	4		
Protective Housing	Х	Х	Х	Х	Х	Х		
Without Protective Housing	LSO shall establish alternate controls							
Interlocks on Protective Housing	?	?	?	Х	Х	Х		
Service Access Panel	?	?	?	?	Х	Х		
Key Control					•	Х		
Protective Viewing Portals			MPE	MPE	MPE	MPE		
Collecting Optics	MPE	MPE	MPE	MPE	MPE	MPE		
Totally Open Beam Path					Х	Х		
Limited Open Beam Path					Х	Х		
Remote Interlock Connector					•	Х		
Beam Stop or Attenuator					•	Х		
Activation Warning System					٠	Х		
Emission Delay						Х		
Protective Windows					MPE	MPE		
Administrative Controls								
Written Laser Safety Procedures					•	Х		
Education and Training			•	•	Х	Х		
Authorized Operating Personnel					Х	Х		
Alignment Procedures					Х	Х		
Control of Spectators					•	Х		
Service Personnel Training	?	?	?	?	Х	Х		
Indoor Laser Controlled Area					Х	Х		
Class 3b Laser Controlled Area					Х			
Class 4 Laser Controlled Area						Х		
Temporary Laser Controlled Area	?	?	?	?				
Warning Labels (on laser housing)	Х	Х	Х	Х	Х	Х		
Warning Sign Posting				•	Х	Х		
Laser sign posted on laboratory				•	Х	Х		
Protective Equipment								
Eye Protection					MPE	Х		
Skin Protection					MPE	MPE		

## LASER SYSTEM REQUIRED CONTROL MEASURES

**X** = Required

• = Recommended

? = Required if contains an embedded Class 3b or 4 lasers

**MPE** = required if the Maximum Permissible Exposure is exceeded

## LASER SAFETY CHECKLIST

Laser Posting, Labeling and Room Control Measures	Yes	No	NA	Deficiency Noted
Entrances properly labeled and posted				
Room security				
Entryway interlock system				
Entryway interlock system functioning				
A door, blocking barrier, curtain, etc. at entry way				
Protective Windows				
Laser status indicator outside room				
Equipment Labels				
Engineering Safety Control Magguros	Vac	No		Deficiency Noted
Protostivo housing in place	res	INO	INA	Deficiency Noted
Interlock on housing				
Beam snutter present				
Key control				
Laser activation warning system (with emission delay) in place				
Remote interlock connector (emergency shutoff) available		-		
Laser secured to table				
Laser optics secured to prevent stray beams				
Enclosed beam path				
Limited open beam path				
Totally open beam path				
Beam barriers in place		_		
Beam stops in place		_		
Beam intensity reduced through filtration		_		
Reflective materials kept out of beam path				
Remote monitoring/viewing devices				
Administrative and Procedural Safety Control Measures	Yes	No	NA	Deficiency Noted
Standard operating procedures are available				
Alignment procedures are available				
Laser operated, maintained and serviced by authorized personnel				
Spectator procedures are available				
Permit holders/workers' laser safety training completed				
(general & specific) including certificate and record of training				
Has homebuilt/modified laser/laser system been classified				
Proper laser eye protection available				
Proper skin protection available				
Permit holders/workers' eye examination completed				
	L.	1		
Non Beam Hazards	res	NO	NA	Deficiency Noted
Compressed gas in use				
Gas cylinders properly restrained				
Laser generated air contaminant (LGAC) production				
Electrical hazards				
Collateral and plasma radiation hazard				
Noise/vibration hazards				
Proper disposal of chemical wastes				