NATIONAL UNIVERSITY OF SINGAPORE

Experiment-Based Risk Assessment Form										
	Name of Department	PHYSICS CIBA Optical Materials & Devices Lab		_ Location of Lab _ Name of PI		S11-02-09 Asst Prof Andrew Bettiol				
	Name of Laboratory									
	Jame of Researcher/LO Yan Yuanjun; Yang Chengyuan;		Name of Activity/Experiment		Femtosecond laser system					
Vanga Sudheer Kumar, Shuvan Prashant Turaga										
No. Description Details of Class in Astricts Heavening				la		In			2 (2)	
NO	Description/Details of Steps in Activity	Hazards	Possible Accident / III Health & Persons-at-Risk	Existing Risk Control (Mitigation)	Severity	Likelihood (Probability)	Risk Level	Additional Risk Control	Person Responsible	By (Date)
1	Laser operation and alignment	1. Laser light(Class 4)	Laser light shining directly into eyes can cause permanent blindness. (burning of corneas)	All users should wear laser googles of appropriate wavelength, microscope eyepiece permanantly blocked. Use black non-reflective boards for barricading areas where laser beams are aligned. Reep the MIRA cavity closed at all time.	3	1	3			
2		2. Fire hazard	Fire due to high power femtosecond infrared light Skin burn due to laser	Always close the laser shutter when the laser is not in use. Reduce the power to minimum during laser alignment. Cover the light path when laser is in use Forsure not to leave any flammable materials in the laser beam path. Use metal shields to block relected light.	2	2	4			
3		3. Reflected laser light	Reflected laser light can cause permanent blindness.	No jewellery allowed when working with lasers. LASER IN USE' sign lighted when laser work is carried out.	1	1	1			
4		4. Overloading of laser power source	Electrical short circuit	Label stating maximum allowed current allowed for each power supply. Do not open power supply	1	1	1			
	Conducted By	Yan Yuanjun		Approved By						
Yang Chengyuan			Name	Asst Prof Andrew Bettiol						
Vanga Sudheer Kumar			_ Signature							
Church Drochast Turage				Americal data		2/11/2011		Next Devicion data	2/11/2014	

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(Maximum 3 years)