光 研 科 学
Photonics is Our Profession

WaveLab Scientific Pte. Ltd.
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Laser Optics Short Course

Date and Time: **27 Apr 2009, 9am—5pm**

Course Organizer: **Wavelab Scientific Pte Ltd & Wavelength Technology S Pte Ltd**

Course Venue: **06-09,Skytech building, Bukit Batok St24, S659480**

Course Price: **SGD200/person. 20% Off for Wavelength and Wavelab customer**

Registration to be done by 13 April, 2009

Price includes lunch and refreshment.

Inquiry: **65-65649624 Ext 102, Email:training@wavelab-sci.com**

Course Introduction

Optics is leading the laser beam by form of splitting, bending, reflecting, combining, expanding, condensing, shaping and focusing. In sophisticated and high end system, engineer would like to achieve achromatic (color correction for more than twpo wavelength), telecentric beam, finest spot size, longer depth of focus and longer life span of the laser optics.

The short course is designed with the help of ZEMAX software and real field experience from the team of engineers and researchers. Attendants will benefit from the course and gain knowledge on following areas:

1. Laser optical system simulation by ZEMAX
2. Spot size of focused beam
3. Depth of focus
4. Beam expansion Vs. spot size
5. Effective focal length Vs. spot size
6. Scan area and beam profile analysis
7. Laser beam divergence, propagation, Gaussian beam, Multi-Mode beam (Donut, etc)
8. Selection of coating for laser optics
9. How to prolong optics life
10. Vision / Laser Optics in one path (Achromatic correction)

All the topics will be simulated by the ZEMAX software for your visualization.

ZEMAX software will be provided to all attendants for simulation of laser system as well as beam delivery system during the course.

Who Should Attend?

Laser engineers, optics engineers, system engineers, photonics related professions, engineering managers.

Timetable

Time	Content
9:00-10:30	**Optical System Simulation by ZEMAX** **Spot size of focused beam** **Depth of focus of lens**
10.30-10:45	**Tea break**
10:45-12.00	**Beam expansion Vs. spot size** **Effective focal length Vs. spot size** **Scan area and beam analysis**
12:00-13:30	**Lunch break**
13:30-14:30	**Laser beam divergence, propagation, Gaussian beam, Multi-Mode beam (Donut, etc)** **Selection of coating for laser optics**
14:30-14:45	**Tea break**
14:45-16:30	**How to prolong optics life** **Vision / Laser Optics in one path (Achromatic correction)**
16:30-17:00	Q & A Session

Reply Slip

If you would like to attend the course, please fill up following details and email back to us at training@wavelab-sci.com or fax to us at 65649627

Name:		Email & Phone:	
Company And Address:		Job Title:	