

RESUME

PRIYAMVADA V

Integrated M.Sc Photonics
Centre of Excellence in Lasers and Opto-electronic
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OBJECTIVE:

I am a final year student of Photonics in Centre of Excellence in Lasers and Optoelectronic Sciences (CELOS). My aim is to make a career in Photonics and to make best use of my knowledge for the development of Science and Technology. My immediate objective is to gain experience of doing research work in cutting edge technologies related to Optics and Photonics. I would describe myself as an honest and sincere person with a ready mind for experimenting. My general interests are in Bio photonics, Nano optics, Optical wave guiding, Non linear Optics, Photonic crystals etc. Academically I stand second in my class. I am confident that I am competent enough to work in world-class research laboratories.

ACADEMIC QUALIFICATIONS:

Currently doing 10th Semester project of 5 Year (10 semesters) Integrated M.Sc in Photonics at Indian Institute of Sciences(IISC), Bangalore, India.

<u>Examinations</u>	<u>Percentage</u>
Semester 1	88.4%
Semester 2	87 %
Semester 3	75 %
Semester 4	79%
Semester 5	85 %
Semester 6	84 %
Semester 7	80%
Semester 8	82%

Higher Secondary Examination, Kerala State Education Board, MES Central School, Tirur, **86.5%**

SSLC, Kerala State Education Board, Fathima Matha English Medium Higher Secondary School, tirur, **93%**

COURSES TAKEN :

Photonics

- ☐ Optoelectronics
- ☐ Fiber Optics
- ☐ Laser Physics
- ☐ Lasers and its applications
- ☐ Optical Sensor Technology
- ☐ Nonlinear Optics
- ☐ Nanophotonics
- ☐ Photonic Materials
- ☐ Laser Spectroscopy
- ☐ Industrial Photonics

- ☐ Biophotonics
- ☐ Optical Communication

Optics:

- ☐ Applied Optics
- ☐ Geometrical Optics
- ☐ Nonlinear Optics & Electromagnetic Theory
- ☐ Optical Instrumentation
- ☐ Physical Optics
- ☐ Optical Sensor Technology
- ☐ Optical Communication
- ☐ Digital Signal Processing And Optical Signal Processing

Physics :

- ☐ Classical Mechanics
- ☐ Nuclear Physics
- ☐ Thermodynamics and Statistical Mechanics
- ☐ Structure and Properties of Atoms and Molecules
- ☐ Electromagnetic Theory & Relativistic Phenomena
- ☐ Quantum Mechanics (basic)
- ☐ Quantum Mechanics (advanced)
- ☐ Solid State Physics (basic)
- ☐ Solid State Physics (advanced)
- ☐ Material Science

Electronics:

- ☐ Basic Electronics
- ☐ Digital & Analog Electronics
- ☐ Electricity & Magnetism, Electronic Instrumentation
- ☐ Microprocessors & Their Applications
- ☐ Network Analysis & Communication Engineering

Mathematics :

- ☐ Numerical Solution of Ordinary and Partial Differential Equations
- ☐ Transform Calculus
- ☐ Mathematics (I & II)
- ☐ Chaos and Nonlinear dynamics
- ☐ Group Theory

LABORATORY SKILLS:

Optics lab

- ☐ Basic Optics Lab
- ☐ Fiber Optics Lab
- ☐ Optoelectronics Lab
- ☐ Basic Physics Lab

Electronics Lab

- ☐ Basic Electronics Lab
- ☐ Analog Electronics Lab
- ☐ Digital Electronics Lab
- ☐ Microprocessor Lab

PROJECT DETAILS:

- ☐ **Curriculum Project** : "Using birefringence find the stress points in an object": In this project we found the stress points in an object by using the principle of birefringence Guide: V.P.N.Nampoori, Professor, Director, International School of Photonics (ISP) Cochin University of Science and Technology
- ☐ **Summer Internship**:"Fragmentation of Formic acid and Tetrahydrofuran using Time of Flight Mass Spectrometer."
Guide: Dr. S.V.K.Kumar, Professor, Head of dept. of Nuclear and Atomic Physics, TIFR, Mumbai.

SEMINARS UNDERTAKEN:

- ☐ Organic LED,
- ☐ Black Body Radiation
- ☐ Photodynamic therapy,
- ☐ Bioimaging techniques,
- ☐ Photoelasticity experiments for measuring stress in different objects,
- ☐ Laser applications in medicine etc.

SKILLS:

Object Oriented Programming languages : C, C++
Software's : Origin, Microsoft office, MATLAB, Adobe illustrator
Languages known : English, Malayalam, Hindi, Tamil

TECHNICAL SKILLS:

Operating various Laser Systems (including CO2 Laser, He-Ne, Diode pumped Solid state Laser experiments with fibers ,etc.

CONFERENCE/WORKSHOPS PARTICIPATED:

- ☐ Attended INDO-UK workshop conducted on 2nd-5th September,2008. on Fiber Optics, Photonics and bioinstrumentation.
- ☐ Annual Photonics Workshops (2006,2007 and 2008) held at International School of Photonics, CUSAT, Cochin, India.
- ☐ Plasma 2005, held at International School of Photonics, CUSAT, Cochin, India.

MEMBERSHIP/AFFILIATIONS:

- ☐ Student member-International Society of optical engineering (SPIE) (Member of the ISP-SPIE Student Chapter).
- ☐ Student member of IEEE-LEOS.

ACTIVITIES :

- ☐ Ex Active Vice President of ISP-SPIE Student chapter.
- ☐ Active participation in 'Optics to school programs', SPECTRA, Open house, Seminars and various other educational and social outreach program conducted by ISP – SPIE & OSA student chapters
- ☐ Involvement in designing and carrying out the experiments of Optics Fair 2007, conducted by the ISP – OSA and SPIE Student Chapters.
- ☐ Organizing member of Blood Donation Camp on 2nd Oct 2006 and on Republic day 2007.

REFERENCES :

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I affirm that the above information is true to the best of my knowledge.

Priyamvada V