

# ASWIN ASOK

International School of Photonics, CUSAT | (+91) 949222168 | aswinasok168@gmail.com

---

Currently a 10<sup>th</sup> semester student of a 5-year integrated MSc in **Photonics**, doing **Master Thesis on Yb Doped Fiber Laser** under guidance of Dr Usha Chakravathy in RRCAT-Indore.

## PROJECTS UNDERTAKEN

### SIXTH SEMESTER MINI PROJECT

*Solar cell tracker(Under the guidance of Dr. Bini P Pathrose)*

- \* Hands on experience using Arduino (microcontroller).

### ELECTRONICS PROJECT

*CNC Machine(Under the guidance of Prof. Tripti S Warriar)*

- \* Proficiency in electronics.
- \* Circuit making and project developing skills.

### SUMMER INTERNSHIP

*Vibration detector using michelson interferometer (Eagle Photonics)*

- \* Implemented and interfaced a Vibration detector using michelson interferometer with an Arduino.
- \* Experience in optical fiber applications.

## EDUCATION

### POST GRADUATE AND GRADUATE LEVEL EDUCATION

Cochin University of Science and Technology (International School of Photonics): Currently Pursuing a 5-year integrated MSc in Photonics

### SCHOOL LEVEL EDUCATION

- \* AISCCE: 2015 (CBSE) Std. XII: Aggregate 85%.
- \* AISSE: 2013 (CBSE) Std. X: 9.4 GPA

## COMPUTER SKILLS

### PROFICIENCY IN

**ZEMAX** (Optics Studio), **Simulink**, **Labview**, **TracePro**, **OSLO**, Origin, Adobe Premier Pro, After Effects, Microsoft Word, PowerPoint, Sony Vegas, Wordpress.

### COMPUTER LANGUAGES

**Python**, **C**, **C++**, **MySQL**, **MATLAB**, **Arduino IDE**, Microprocessor (8085)

## COURSES UNDERTAKEN

### OPTICS & PHOTONICS

- \* Non-Linear Optics, Geometrical Optics, Physical Optics, Optical Instrumentation, Applied Optics, Optoelectronics, Fiber Optics, Laser Physics, Biophotonics, Nanophotonics,, Optical Signal Processing, Laser Systems and Applications, Photonic bandgap and metamaterials, Laser Spectroscopy

### PHYSICS

- \* Mechanics and Wave Phenomena, Electricity and Magnetism, Nuclei, particles and beams, Classical Mechanics, Statistical Mechanics, Thermodynamics, Atomic & Molecular Spectroscopy, Material Science, Advanced Solid State, Electromagnetic Theory & Relativistic Phenomena, Basic & Advanced Quantum Mechanics, Solar Physics

### ELECTRONICS

- \* Basic Electronics, Digital and Analog Electronics, Microprocessors and their Applications, Electronic Instrumentation, Digital Signal Processing

### MATHEMATICS

- \* Computational Techniques, Statistical Methods, Vector Calculus, Matrices and Complex Numbers, Curvilinear Coordinates, Tensors, Vector Space, Differential Equations, Laplace Analysis, Fourier Analysis, Group Theory, Complex Variables, Non-linear Differential Equations.

### ELECTIVES

- \* Python in Department of Computer application.
- \* Robotics in Department of Electronics

### LAB COURSES

- \* Photonics Lab, Advanced Electronics, Basic Optics, Analog & Digital Electronics, Microprocessor

## COCURRICULAR ACTIVITIES

- \* Part of the Organizing committee of the EtchNew (Optics Fest) 2016 and 2017
- \* Secretary of the ISP-SPIE Student Chapter 2017-18.
- \* President of the ISP-SPIE Student Chapter 2018-19
- \* Participant of Sargam(University arts festival) 2016.
- \* Media Co-Convener of Sargam (University arts festival) 2018.
- \* Media committee member of the IONS Kochi 2017.
- \* Photonics Sub committee convener and unit member of SFI
- \* Secretary of Film Club CUSAT.

## SEMINARS TAKEN

- \* E-Bomb 2016 July
- \* Dark matter 2017 February
- \* Photogrammetry 2017 August
- \* Arduino Programming; 2018 August
- \* CNC machine 2019 February

## CONFERENCES AND PROGRAMMES ATTENDED

- \* IONS Kochi 2017
- \* National Photonics Symposium and Annual Workshop 2015
- \* National Photonics Symposium 2017
- \* Workshop on Quantum Optics 2016 (ISP-OSA Chapter)
- \* Laser world of photonics 2018
- \* Selected to attend OPIC2019

## REFERENCES

DR. MANU VAISHAKH  
Assistant Professor  
International School of Photonics  
Cochin University of Science and Technology  
Cochin 682022, Kerala, India  
Email: manu.vaishakh@cusat.ac.in

DR. SHEENU THOMAS  
Professor  
International School of Photonics  
Cochin University of Science and Technology  
Cochin 682022, Kerala, India  
Email: *st@cusat.ac.in*