

KEERTHANA SOMAN

INTERNATIONAL SCHOOL OF PHOTONICS
COCHIN UNIVERSITY OF SCIENCE AND
TECHNOLOGY, SOUTH KALAMASSERY,
ERNAKULAM
KERALA, INDIA, 682022
+91 9447116785 | keethusoman@gmail.com

EDUCATION

Cochin University of Science and Technology, International School of Photonics, 5 Year Integrated Master of Sciences (Photonics) July 2015 – Current

Cumulative Grade Point Average – 8.9

Courses undertaken – Physical and Geometrical Optics, Optical Instrumentation, Electronics and its Instrumentation, Nuclear Physics, Electromagnetic Theory and Relativity, Atomic and Molecular Spectroscopy, Thermodynamics and Statistical Mechanics, Material Science, Classical Mechanics, Quantum Mechanics (Basics and Advanced), Mathematical Physics, Optoelectronics, Fibre Optics, Laser Physics (Systems and Applications), Advanced Solid State Theory, Biophotonics, Nanophotonics, Laser Systems and Laser Applications, Non Linear Optics, Nanobiotechnology, Optomechanical Engineering.

Lab Experience – Analog and Digital Electronics Lab, Photonics Lab, Optics Lab, Microprocessor Lab, Instrumentation Lab (Lathe, Welding and Filing).

Ursuline Senior Secondary School

July 2012 – May 2015

All India Senior School Certificate Examination (Central Board of Secondary Education)

Secured 93.4%

All India Secondary School Examination (Central Board of Secondary Education)

Cumulative Grade Point Average – 10

RESEARCH EXPERIENCE

Summer Internship at Indian Institute of Science, India

May 2017 – July 2017

Supervisor: Dr V Murugesan

Generation of Light and Optical Properties.

Summer Internship at Indian Institute of Technology, Assam , India

May 2019 – July 2019

Supervisor: Dr Bosanta R Boruah

Confocal Imaging using Holographically Designed Beam.

CONFERENCES

International OSA Network of Students IONS – Kochi

September 2017

Conducted and attended IONS Kochi 2017.

28th Mid Year Meeting By Indian Academy of Science

June 2017

Attended 28th Mid Year meeting of various lectures

Indian Laser Association - Short Course

December 2018

Attended a short course on “Light Matter Interaction at the Nanoscale”

SEMINARS AND PROJECTS

Optical Coherence Tomography

Course seminar on OCT and its applications

Optical Tweezers

Course seminar on Optical Tweezers

Scanning Electron Microscopy

Course seminar on SEM and its applications

Studies on Photonic Band Gap in 2D Photonic Crystal using FDTD Simulation Technique

A Mini-Project on the Simulation of Photonic band gap of 2D Photonic crystals using FDTD simulation technique.

Migration via Quantum Mechanics

A course seminar discussing migration in birds using Quantum Mechanics.

Optogenetics

A course seminar discussing neuromodulation methods in living tissues.

CO – CURRICULAR ACTIVITIES

ISP – SPIE Student Chapter

A Member of SPIE student chapter

July 2015 – Current

ISP – OSA Student Chapter

A Member of OSA student chapter

Was a part of chapter events such as Optics Fair, Annual Photonics Workshop and IONS Kochi.

July 2015 – Current

SKILLS AND INTERESTS

Software: ZEEMAX Opti-Design, JAVA, Opti-FDTD, Microsoft Office Suite

Languages: English, Hindi, Malayalam, Tamil

Interests: Basketball, Reading, Drawing

HONOURS

Qualified Nationwide Education and Scholarship Test conducted in 2017

Received Second prize in Regional Maths Olympiad in 2015

Won Second in University Basketball match in 2017

REFERENCES

Dr. SAJI KJ

Assistant Professor

International School of Photonics

Cochin University of Science and

Technology, South Kalamassery,

Kochi, India – 682022

kjsaji@gmail.com

+91 - 9400217723

Dr. MANU VAISHAKH

Assistant Professor

International School Of Photonics

Cochin University of Science and

Technology, South Kalamassery,

Kochi, India – 682022

manu.vaishakh@cusat.ac.in

+91 – 9496061610

