MIDHILA KRISHNA

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> **Phone:** +91 8592006617 **PHOTONICS**

> **CUSAT** +91 8989405460

KERALA, INDIA

OBJECTIVE To obtain a challenging and responsible position that provides me opportunities to blend

the functional and technical knowledge gained from my experience and to upgrade by

working with experts and enabling the organization to achieve its targets and growth.

RESEARCH **INTERESTS** • Light matter interaction

• Ultrafast optics

- Laser science
- Nonlinear optics
- Functional materials for Photonics applications

WORK **EXPERIENCE**

NATIONAL INSTITUTE OF TECHNOLOGY, MEGHALAYA

1 JUNE 2017 — 26 JUNE 2017

Summer Intern

 Worked on the project "Simulation and modeling of Single P-N junction c-silicon solar cell." under the supervision of Dr. Vivek Kumar.

• Familiarised SCAPS simulation software

INTERNATIONAL SCHOOL OF **PHOTONICS**

DECEMBER 2017 — MAY 2018

Mini Project

- Worked on the project "Z-Scan technique for the characterisation of metal nanoparticles." under the supervision of Dr. Muhammad Rishad K P.
- Familiarised Z scan technique
- Familiarised UV VIS NIR spectrophotometer
- Familiarised Nd YAG laser

RAJA RAMANNA CENTER FOR ADVANCED TECHNOLOGY

DECEMBER 2019 — OCTOBER 2020

Project Trainee

- Project title " Crystal growth of Lithium Fluoride (LiF) and its optical and detector characteristics"
- Supervisors : Dr. Sujan Kar, Dr. Sunil Verma
- Familiarised Czochralski Growth technique
- Familiarised characterisation tools like X-ray diffraction, UV-VIS-NIR spectrophotometer, TLD reader etc.

EDUCATION

MSc (5 YEAR INTEGRATED) IN **PHOTONICS**

JULY 2015 — MAY 2020

INTERNATIONAL SCHOOL OF PHOTONICS

CGPA of 8.74 out of 10 (CGPA till 8th semester)

ISC CLASS 12 2015

MATHEWS MAR ATHANASIUS RESIDENTIAL SCHOOL

Secured 86% marks in the Indian School Certificate Examination

ICSE CLASS 10 2013

MATHEWS MAR ATHANASIUS RESIDENTIAL SCHOOL

Secured 90.2% marks in the Indian Certificate of Secondary Education Examination

COURSES UNDERTAKEN

- OPTICS: Physical Optics, Geometrical Optics, Optical Instrumentation, Applied Optics, Non Linear Optics.
- PHOTONICS: Optoelectronics, Fiber Optics, Laser Physics, Laser Systems and Applications, Nanophotonics, Biophotonics
- PHYSICS: Mechanics and Wave Phenomena, Electricity and Magnetism, Nuclei, particles and beams, Classical Mechanics, Statistical Mechanics, Thermodynamics, Atomic and Molecular Spectroscopy, Electromagnetic Theory and Relativistic Phenomena, Basic and Advanced Quantum Mechanics, Solid State Physics.
- ELECTRONICS: Basic Electronics, Digital and Analog Electronics, Microprocessors and their Applications, Electronic Instrumentation.
- MATHEMATICS: Computational Techniques, Statistical Methods, Vector Calculus, Matrices and Complex Numbers, Curvilinear Coordinates, Tensors, Vector Space, Differential Equations.

CONFERENCES AND WORKSHOPS ATTENDED

- National Photonics Symposium and Annual Workshop (NPSAW) 2016 at International School of Photonics
- National Photonics Symposium (NPS) 2017 and 2018 at International School of Photonics
- ILA Short course on "Advanced laser spectroscopy and its applications in Atomic, Molecular and Cluster physics" at BARC, Mumbai, 2017
- ILA Short course on "Laser matter interaction at the nanoscale" at RRCAT, Indore, 2018
- IONS Kochi 2017 at International School of Photonics
- Laser world of Photonics India 2018 at BIEC Bangalore

OTHER EXPERIENCE

- Executive member of ISP SPIE student chapter during the academic year 2017-2018
- Active member of SPIE And OSA student chapters since 2015
- Elected student coordinator for the ISP placement cell for the academic year 2018-2019

INTERESTS AND ACTIVITIES

- Actively participated in the optics outreach events Optics to School, Optics fair of International School of Photonics.
- Participated in All Kerala ISC/ICSE inter school athletic meet in the years 2014 and 2015.
- Participated in the cultural fest SARGAM and won prize in the event THIRUVATHIRA, at Cusat in the years 2016, 2017 and 2018.

REFERENCES

Dr. SHEENU THOMAS PROFESSOR ISP, CUSAT 91-0484-2575848 st@cusat.ac.in

Dr. PRIYA ROSE T ASSISTANT PROFESSOR ISP, CUSAT 8281982228 priyarose@cusat.ac.in

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