

**SOS in Electronics & Photonics,
Pt. Ravishankar Shukla, Raipur**

M.Tech III Sem. Project Details 2019(2018-2020)

S.N.	Student name	Roll No	Institute name	Guide name	Project details
1. ✓	Brijmohan Chaurasia	1810196001	NIT Raipur	Dr.B.Acharya	Design of multijunction solar cell to achieve greater efficiency
2. ✓	Tushar Shah	1810196002	Space Application Center ISRO Ahmedabad	SmtPritiKajiwala -SF	Implementation of Optical Based Ser-Des Using FPGA and Establishment of End to End Communication.
3. ✓	Sweta Minj	1810196003	RRCAT Indore	Dr.RavindraJangir (Scientific Officer F)	Magnetoelectric properties of lead free composite materials BaTiO ₃ /NiFe ₂ O ₄ and CoFe ₂ O ₄
4. ✓	Samved Naik	1810196004	Space Application Center ISRO Ahmedabad	Mr. Sachin Kumar Daksh-SF	Development of pointing acquisition and tracking control using KALMAN filter for LEO to ground optical terminal
5. ✓	Mohit Sinha	1810196006	RRCAT Indore	Dr.M.H.Modi (Scientific Officer H)	Polarization Analysis of Soft-x-ray Synchrotron Radiation

SoS in Electronics & Photonics,
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M Tech IV Sem. Project Details 2020 (2018-2020)

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1.	Brijmohan Chaurasia	1810196001	NIT Raipur	Dr.B.Acharya	Design of multijunction solar cell to achieve greater efficiency
2.	Tushar Shah	1810196002	Space Application Center ISRO Ahmedabad	Smt Priti Kajiwala -SF	Implementation of Optical fiber link for digital data communication
3.	Sweta Minj	1810196003	RRCAT Indore	Dr.Ravindra Jangir (Scientific Officer F)	Magnetoelectric properties of lead free composite materials BaTiO ₃
4.	Samved Naik	1810196004	Space Application Center ISRO Ahmedabad	Mr. Sachin Kumar Daksh-SF	Development of pointing acquisition and tracking control using KALMAN filter for LEO to ground optical terminal
5.	Mohit Sinha	1810196006	RRCAT Indore	Dr.M.H.Modi (Scientific Officer H)	Polarization Measurement of Soft-x-ray Synchrotron Radiation

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M.Tech III Sem. Project Details 2021(2019-2020)

MTech in Optoelectronics and Laser Technology

Done

S.No.	Name of Student	Roll No.	Project Title	Supervisor	Collaborated Organization/Institute
1.	Aparna Tiwari	1910196001	Design and simulation of photonic crystal for bio-chemical sensing application	Dr. Vijay Chatterjee Scientist	CSIR- Central Electronics Engineering Research Institute Pilani
2.	Bhaskar Nirmalkar	1910196002	Simulation of TiO_2/CuO solar cell with SCAPS-1D	Dr. S.K. Masiul CS, Islami Scientist	CSIR- Central Electronics Engineering Research Institute Pilani
3.	Dharam Lal	1910196003	The optimization of tin-based perovskite solar cell	Dr. Sanjay Tiwari Professor	SOS in Electronics and Photonics, Pt. Ravi Shankar Shukla University, Raipur
4.	Shekhar Kumar	1910196004	Parametric study of $\text{AlGaIn}/\text{GaIn}$ UV-LED based on Quantum Confined Stark Effect(QCSRE)	Dr. Sanjay Tiwari Professor	SOS in Electronics and Photonics, Pt. Ravi Shankar Shukla University, Raipur
5.	Temeshwar Dhruw	1910196005	Solar charge controller	Dr. Sanjay Tiwari Professor	SOS in Electronics and Photonics, Pt. Ravi Shankar Shukla University, Raipur
6.	Thaneshwari Sahu	1910196006	Design and Simulation of tri-nitride based blue LED	Dr. Manish Mathew Principal Scientist	CSIR- Central Electronics Engineering Research Institute Pilani

SOS in Electronics & Photonics,
Pt. Ravishankar Shukla University, Raipur
M. Tech. IV Semester

List of project 2021 (2020-2021)

S.No.	Name of Student	Topic	Name of Guide	Organization /Institute
1.	Aparna Tiwari	Introducing gold nanoparticle in the design of Bio-Chemical sensor	Dr. Vijay Chatterjee	CSIR CEERI Pilani (AcSIR)
2.	BhaskarNirmalkar	Simulation of TiO ₂ /Cu ₂ O solarcell with SCAPS-1D software	Dr. S.K. MasiulIslam	CSIR CEERI Pilani (AcSIR)
3.	Dharam Lal	Study and Simulation of tandem solar cell	Dr. Sanjay Tiwari	PRSU Raipur
4.	Shekhar kumar	Compositional parametric Study of AlGa _N /Ga _N Deep UV-LED	Dr. Sanjay Tiwari	PRSU Raipur
5.	Temeshwardhruw	Modelling of Photovoltaic MPPT Lithium-Ion Battery Charge Controller for System Applications	Dr. Sanjay Tiwari	PRSU Raipur
6.	ThaneshwariSahu	Design and simulation of Nitride based Blue LED	Dr. Manish Mathew	CSIR CEERI Pilani (AcSIR)

**SOS in Electronics & Photonics,
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M. Tech. IV Semester

List of project 2022 (2021-2022)

S.No.	Name of Student	Title	Coordinating institute	supervisor	Year
1.	K Anil Kumar	Design and modelling of nanostructure surfaces for improved light absorption	CSIR-CEERI, Pilani Rjasthan	Dr. Rahul Prajesh Senior Scientist 7568312545 rprajeshceeri@gmail.com	2022 Jan-June
2.	Madhu Allalla	Synthesis and characterization of mix halide perovskite $\text{CsSnI}_{3-x}\text{Cl}_x$	SoS in Electronics & Photonics PRSU, Raipur, C.G.	Dr. Sanjay Tiwari Professor, Course Coordinator 0755-2424660 vco.mpbou@gmail.com	2022 Jan-June
3.	Mohnish Kumar Sahu	Fabrication and characterization of $\text{MASnI}_{3-x}\text{Cl}_x$ mix halide solar cell	SoS in Electronics & Photonics PRSU, Raipur, C.G.	Dr. Sanjay Tiwari Professor, Course Coordinator 0755-2424660 vco.mpbou@gmail.com	2022 Jan-June
4.	Shivam Sharma	Electromagnetic Field domain analysis of Single Index fiber using COMSOL	SoS in Electronics & Photonics PRSU, Raipur, C.G.	Dr. Sanjay Tiwari Professor, Course Coordinator 0755-2424660 vco.mpbou@gmail.com	2022 Jan-June
5.	Yogesh Kumar	Development and characterization of CsSnI_3 Perovskite thin film for Solar Cell application	SoS in Electronics & Photonics PRSU, Raipur, C.G.	Dr. Sanjay Tiwari Professor, Course Coordinator 0755-2424660 vco.mpbou@gmail.com	2022 Jan-June

SOS in Electronics & Photonics,
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M. Tech. III Semester
(Major Project-I)

List of project 2022 (2022-2023)

S.No.	Name of Student	Title	Coordinating institute	supervisor	Year
1.	Ashish Patel	Study of mono crystalline & poly crystalline cells Under different environmental condition	MEC Power ,Vadodara ,Gujarat	Viral Bhai Raulji EPC Head 9828911575 vadodara@mecpower.in	2022 July-dec
2.	Dibyanchal Sahu	Design a monolithic integrated Structure of GaN based Micro LED & its driver HEMT	NIT Raipur Chhattisgarh	Dr. Guru prasad Mishra Assosiate professor NIT Raipur, C.G.	2022 July-dec
3.	Harsh Singh	Simulation Of Nano Crystalline Quantum Dot Solar Cell Using Scaps-1D	SoS in Electronics & Photonics PRSU, Raipur, C.G.	Dr. Kavita Thakur Head & Professor, Sos in Electronics & Photonics PRSU Raipur	2022 July-dec
4.	Lokesh Kumar sahu	Synthesis and characterization of SnO ₂ nano rod for application of highly sensitive UV photodetector	IIT Bombay, Maharastra	Prof Shobha Shukla Metallurgical Eng. And material science IIT , BOMBAY 9820337607	2022 July-dec
5.	Nilesh Jaiswal	Design & Performance Optimization Of Eco-Friendly Cs ₂ AgBiBr ₆ Double Perovskite Solar Cell	IIT-Patna , Bihar	Dr. Saurabh K. Pandey Assintant Professor IIT-Patna,Bihar	2022 July-dec
6.	Om Prakash Chandrakar	To study about Comparision of MASnX ₃ & CsSnX ₃ perovskite Solar cell	SoS in Electronics & Photonics PRSU, Raipur, C.G.	Dr. Kavita Thakur Head & Professor, Sos in Electronics & Photonics PRSU Raipur	2022 July-dec
7.	Tithi Karmakar	Development of 0D-2D composite material and device for optical Application	DIAT , Pune, Maharastra	Dr. Tejashree Bhawe Associate at Applied Physics DIET,Pune 9657728583	2022 July-dec
8.	Vaishali Soni	Laser assisted photo acoustics wave generation for under water communication application	DIAT , Pune, Maharastra	Dr. Devnath Dhire Associate at Applied Physics DIET,Pune 8975449188	2022 July-dec



School Of Studies in Electronics and Photonics

Pt. Ravishankar Shukla University, Raipur
Chhattisgarh-492010
(UGC & AICTE Approved Innovative Program)



Dated: 01/06/2024

M.Tech in *Optoelectronics and Laser Technology*

VIth Semester

(January- June, 2024)

Subject : Major Project Phase -II

Sub. Code : OE-41

List of dissertation with details

S.No	Student name	Roll No.	Enrollment No.	Seminar Topic	Name of Research Institute/ Lab	Name of Supervisor with Details
1.	Dristy Singh	2210196002	AC/32375	“ Design and Characterization of Hybrid Photodetector based on Polypyrrole and Silicon. ”	Department of Physics, Indian Institute Technology (IIT), Bhilai	Dr. Sessa Vempati (Assistant Professor) Department of Physics, IIT Bhilai
2.	Sandeep Kumar Sahu	2210196003	AC/22785	“Improvement in the system developed for abrasion testing of solar glass coatings & durability testing of coatings.”	Department of Electrical Engineering, Indian Institute Technology (IIT), Bombay	Dr. Anil Kottantharayil (Professor) Department of Electrical Engineering, IIT Bombay

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01/06/2024
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RAIPUR (C.G.) 492 010

SOS in Electronics and Photonics
Pt. Ravishankar Shukla University, Raipur
M.Sc. IV Semester 2024
List of Projects (In-house)

S.NO.	ROLL NO.	STUDENT NAME	PROJECT TITLE	SUPERVISOR/CO-SUPERVISOR
1.	2210184001 2210184014	Abdul Razzaque Satish Kumar Singh	IOT Based Weather Monitoring System	Dr. Kavita Thakur Ms. Neha Dewangan Ms. Ayushi Soni
2.	2210184002 2210184005	Aditya Kashyap Kunal Jangde	IOT Based Transformer Health Monitoring System	Dr. Kavita Thakur Ms. Neha Dewangan Ms. Ayushi Soni
3.	2210184003 2210184007	Akhil Kumar Nag Manas Kumar Markandey	Fabrication & Comparative Characterization of Dye Sensitized Solar Cell Using Different Natural Dyes	Dr. Kavita Thakur Ms. Shailbala Moure Ms. Ayushi Soni
4.	2210184004 2210184017	Chinmayee Biswas Vinas Bansre	Blind Turn Traffic Indicator	Dr. Kavita Thakur Ms. Shailbala Moure Ms. Ayushi Soni
5.	2210184006 2210184016	Lakshya Kumar Vikash	Ev Bms Charge Monitor and Fire Protection	Dr. Kavita Thakur Ms. Shalinee verma
6.	2210184008 2210184012	Mani Ram Nikita Mehar	Electricity By Dry Waste	Dr. Kavita Thakur Ms. Neha Dewangan Ms. Shalinee verma
7.	2210184009 2210184011	Manuraj Gajendra Nidhi Sinha	Smart Aqua Phonic System	Dr. Kavita Thakur Ms. Neha Dewangan Ms. Shalinee verma
8.	2210184010 2210184015	Navita Sahu Shrikant Satpathi	Smart Hand Gloves for Communication	Dr. Kavita Thakur Ms. Shalinee Verma Ms. Ayushi Soni
9.	2210184013 2210184018	Nikita Patel Yogita Sahu	RFID Based Indian Army Safety Project	Dr. Kavita Thakur Ms. Neha Dewangan

10/11/2024
17/15/2024

Head

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RAIPUR (C.G.) 492 010

School Of Studies in Electronics and Photonics

Pt. Ravishankar Shukla University, Raipur

Chhattisgarh-492010

M.Tech in *Optoelectronics and Laser Technology*

IIIrd Semester

(July - December, 2024)

List of dissertation with details

S.No	Student Name	Seminar Topic	Name of Research Institute/ Lab	Name of Supervisor with Details	Name of Co-Supervisor with Details	Year / Session
1.	Madhusudan Chouhan 2310196001	Efficient perovskite Solar cells via improved carrier management by tuning the chemical bath deposition of tin dioxide (SnO ₂)	Photonics Research Lab(PRL) S.o.S in Electronics and Photonics Pt. Ravishankar Shukla University, Raipur	Dr. Kavita Thakur Professor S.o.S in Electronics and Photonics Pt. Ravishankar Shukla University, Raipur	Mohnish Kumar Sahu Guest faculty S.o.S in Electronics and Photonics Pt. Ravishankar Shukla University, Raipur	July - December 2024
2.	Md. Sadique 2310196002	Design and Simulation of efficient Lead free Innocuous tin based perovskite solar cells through thickness optimization using SCAPS 1D	Photonics Research Lab(PRL) S.o.S in Electronics and Photonics Pt. Ravishankar Shukla University, Raipur	Dr. Kavita Thakur Professor S.o.S in Electronics and Photonics Pt. Ravishankar Shukla University, Raipur	K. Anil Kumar Guest faculty S.o.S in Electronics and Photonics Pt. Ravishankar Shukla University, Raipur	July - December 2024

28/12/2024
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