

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

M.Tech 3rd Semester Project Details 2016 (2016-2017)

M Tech in Optoelectronics and Laser Technology

S.No	Name of Student	Title	Coordinating institute	Supervisor	Year
1.	Dishi Purohit	Phase transformation of [Co/Ti] _{x10} multilayer under swift heavy ion irradiation.	INDUS Synchrotrons Utilization Division, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. Parasmani Rajput, Scientific Officer, A&MPD, BARC / Mumbai. Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	July-December 2016
2.	Udit Kumar Dewangan	Soft X-ray harmonics analysis using multilayer Ti/Ni Multilayer .	SUS, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. M. H. Modi, SUS, Raja Ramanna Centre for Advanced Tsechnology , Indore ,(MP)	July-December 2016
3.	Rahul Kumar Thakur	Synthesis and characterization of transition metal based oxides.	SUS, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. A. K. Sinha, SUS, Raja Ramanna Centre for Advanced Tsechnology , Indore ,(MP)	July-December 2016
4.	Dharmendra Kumar	Structural and optical characterization of Al _x Cr _{2-x} O ₃ (0≤x≤2) and Ga _x Cr _{2-x} O ₃ (0≤x≤1) Synthesized using solid state reaction method.	SUS, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. Ravindra Jangir, Scientific Officer-E, SUS, Raja Ramanna Centre for Advanced Technology ,	July-December 2016

				Indore ,(MP)	
5.	Veena Diyawar	Gas sensing by SnO ₂ thin films prepared by pulsed laser deposition.	CSIR- National Physical Laboratory, New Delhi	Dr. Anjana Dogra ,Senior Scientist,CSIR- National Physical Laboratory, New Delhi	July-December 2016
6.	Umang Singh	Development of XeCl excimer laser subsystems and its parametric study.	Excimer Laser Section, , Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Mr. N.S. Benerji , Excimer Laser Section, , Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	July-December 2016
7.	Manisha Ratre	A study on the microstructure evolution of Fe based metallic glasses using synchrotron radiation.	Synchronization Utilization Section, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. Pooja Gupta ,Assistant Professor HBNI Scientific Officer-E, SUS, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	July-December 2016
8.	Seema Verma	Synthesis and characterization of TiO ₂ doped carbon aero gels.	Laser material section , Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. D. K. Kohli , Scientific Officer-G,LMS, Raja-Ramanna Centre for Advanced Technology , Indore ,(MP)	July-December 2016
9.	Sonal Chandrakar	Studies on structural and optical properties of Nickel oxide thin	Synchronization Utilization Section, Raja	Dr. Shreyashkar Dev singh ,	July-December 2016

		films.	Ramanna Centre for Advanced Technology , Indore ,(MP)	Scientific Officer-F,SUS, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	
10.	Rupa Patel	Measurment of surface from error of an optical surface with polarization phase-shifting Fizeau interferometer.	Optical design and Development Laboratory , Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Shri M P. Kamath, Scientific Officer-G and Head, ODDL, Advanced laser and Optics Division, RRCAT , Indore,(MP)	July-December 2016
11.	Ankita Tiwari	Synthesis and characterization of silver nano structures by soft solution method.	Laser Physics Application Section , Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. Alka A. Angle, Scientific Officer-H, Laser Physics Application Section, RRCAT , Indore,(MP)	July-December 2016
12.	Preetika Mishra	"Optical properties of lithium doped ZnO nanoparticles".	Institute of Physics, Bhubaneshwar, Odissa, India	Dr. Satya Prakash Sahoo, Reader F, Physics Department, Institute of Physics, Bhubneshwar, Odisha.	July-December 2016
13.	Shikha Jha	Numerical study of Inverse Compton scattering through laser produced plasmas.	Laser plasma Section , Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. Ajit Upadhyay, Scientific Officer-f, Laser Plasma Section, RRCAT , Indore,(MP)	July-December 2016
14.	Ritu Verma	Structural and dielectric properties of BaTiO ₃ -	Synchronization Utilization	Dr. Archana sagdeo,	July-December

		BiFeO ₃ solid solution.	Section , Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	scientific officer- E,SUS,INDUS-2, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	2016
15.	Susmita Dutta	Modeling optoelectronics Devices : insight ab-initio approaches.	SOS in Electronics & Photonics, Pt. Ravishankar Shukla, Raipur	Dr. Sanjay Tiwari, Professor & Course Coordinator, SOS in Electronics & Photonics, Pt. Ravishankar Shukla, Raipur	July-December 2016
16.	Jugal Kishor Sonwani	Resistive switching.in TiO ₂	Laser material Processing Division , Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. Pankaj Mishra, Scientific Officer-G,LMS, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	July-December 2016

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M.Tech 4th Semester Project Details 2017 (2016-2017)

M Tech in Optoelectronics and Laser Technology

S.No	Name of Student	Title	Coordinating Institute	Supervisor	Year
1.	Dishi Purohit	Investigation of magnetic domain and local structure of Mgo/co/Mgo trilyer.	INDUS Synchrotrons Utilization Division, Raja Ramanna Centre for Advanced Technology, Indore, (MP)	Dr. Parasmani Rajput, Scientific Officer, A&MPD, BARC, Mumbai. Raja Ramanna Centre for Advanced Technology, Indore, (MP)	July-2017
2.	Udit Kumar Dewangan	Soft X-ray harmonics analysis using multilayer technique.	SUS, Raja Ramanna Centre for Advanced Technology, Indore, (MP)	Dr. M. H. Modi, SUS, Raja Ramanna Centre for Advanced Tsechnology, Indore, (MP)	June-2017
3.	Rahul Kumar Thakur	Synthesis and characterization of transition metal based oxides.	SUS, Raja Ramanna Centre for Advanced Technology, Indore, (MP)	Dr. A. K. Sinha, SUS, Raja Ramanna Centre for Advanced Tsechnology, Indore, (MP)	June 2016-2017
4.	Dharmendra Kumar	Structural and optical characterization of (GAXCr _{1-x}) ₂ O ₃ (0<X<0.45) and (ALxCr _{1-x}) ₂ O ₃ (0<x<1) Synthesized using solid state reaction method.	SUS, Raja Ramanna Centre for Advanced Technology, Indore, (MP)	Dr. Ravindra Jangir, Scientific Officer-E, SUS, Raja Ramanna Centre for Advanced Technology, Indore, (MP)	June 2016-2017
5.	Veena Diyawar	Study of interface properties in LaAlO ₃ /SrTiO ₃ heterostructures prepared by pulsed laser deposition	CSIR- National Physical Laboratory, New Delhi	Dr. Anjana Dogra, Senior Scientist, CSIR- National Physical Laboratory, New Delhi	May-2017

6.	Sarbhjot Kaur	Study of transport characteristics and optoelectronics properties of reduced graphene oxide	CSIR- National Physical Laboratory, New Delhi	Dr.S.P.Khanna, Principal Scientist, CSIR- National Physical Laboratory, New Delhi	May-2017
7.	Manisha Ratre	The influence of early transition metals on the structural and mechanical properties of FeCo(ETM) B ALLOYS; ETM = Nb,Zr,Mo	Synchronization Utilization Section, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. Pooja Gupta ,Assistant Professor HBNI Scientific Officer-E, SUS, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	June 2016-2017
8.	Seema Verma	Synthesis and characterization of Tio2 doped carbon aero gels.	Laser material section , Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. D. K. Kohli, Scientific Officer-G,LMS, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	June 2016-2017
9.	Sonal Chandrakar	Studies on structural and optical properties of Nickel oxide thin films.	Synchronization Utilization Section, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. Shreyashkar Dev singh, Scientific Officer-F,SUS, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	June 2016-2017
10.	Rupa Patel	Measurment of surface from error and surface profiles of optics for lasers and X-Rays.	Optical design and Development Laboratory , Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Shri M P. Kamath, Scientific Officer-G and Head, ODDL, Advanced laser and Optics Division, RRCAT , Indore,(MP)	July-2017
11.	Ankita Tiwari	Growth of silver nanostructured LB films for surface enhanced raman spectroscopy of semiconductor nanostructure.	Laser Physics Application Section , Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. Alka A. Angle, Scientific Officer-H, Laser Physics Application Section, RRCAT	June-2017

				, Indore,(MP)	
12.	Preetika Mishra	"Optical properties of lithium doped ZnO nanoparticles".	Institute of Physics, Bhubaneswar, Odissa, India	Dr. Satya Prakash Sahoo , Reader F, Physics Department, Institute of Physics, Bhubneswar, Odisha.	July-2017
13.	Shikha Jha	Numerical study of "Inverse Compton scattering" through laser produced plasmas	Laser plasma Section , Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. Ajit Upadhyay , Scientific Officer-f, Laser Plasma Section, RRCAT , Indore,(MP)	June 2016-2017
14.	Ritu Verma	Structural and dielectric properties of (x) BiFeO ₃ -(1-x) BaTiO ₃ solid solution.	Synchronization Utilization Section, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	Dr. Archana sagdeo , scientific officer-E,SUS,INDUS-2, Raja Ramanna Centre for Advanced Technology , Indore ,(MP)	July-2017

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M.Tech III Semester Project Details 2017 (2017-2018)

M Tech in Optoelectronics and Laser Technology

S.N.	Student name	Institute name	Guide name	Project details
1.	Abhijeet Yadaw	SOS In Electronics & Photonics, Pt. RSU, Raipur	Mr. Praveen Kumar Verma	Raman-Nath Diferaction.
2.	Dushyant Kumar Sahu	SOS In Electronics & Photonics, Pt. RSU, Raipur	Ms. Pranita Tamboli	Light-Fidility (Li-Fi).
3.	Kamal Solanki	SOS In Physics & Astronomy, Pt. RSU, Raipur	Mr. N.K. Chakradhari	Fiber To the Home.
4.	Manish Sahu	SOS In Electronics & Photonics, Pt. RSU, Raipur	Ms. Pranita Tamboli	Lidar Technology.
5.	Monika Sahu	SOS In Electronics & Photonics, Pt. RSU, Raipur	Dr. Sanjay Tiwari	Synthesis and Characterization of TiO ₂ Nanoparticles.
6.	Nilima Sinha	SOS In Electronics & Photonics, Pt. RSU, Raipur	Dr. Sanjay Tiwari	Optical Material & Properties.
7.	Priyanka Roy	SOS In Electronics & Photonics, Pt. RSU, Raipur	Dr. Sanjay Tiwari	Optical Fiber Fabrication Technique.

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M Tech IV Sem. Project Details 2018 (2017-2018)

M Tech in Optoelectronics and Laser Technology

S.N.	Student name	Institute name	Guide name	Project details
1.	Abhijeet Yadav	RRCAT, Indore (M.P.)	Dr. Mukesh Joshi	Impedance Spectroscopy of Photovoltaic Materials.
2.	Dushyant Kumar Sahu	SOS In Electronics & Photonics, Pt. RSU, Raipur	Dr. Sanjay Tiwari	Design, Fabrication and Characterization of Polymer Solar Cell.
3.	Kamal Solanki	SOS In Electronics & Photonics, Pt. RSU, Raipur	Dr. Sanjay Tiwari	A Simple Synthesis Method to Prepare Molybdenum Solution (Hole Transport Layer) For Organic Solar Cell
4.	Manisha Sahu	SOS In Electronics & Photonics, Pt. RSU, Raipur	Dr. Sanjay Tiwari	Materials, Architecture and Fabrication of Organic Solar Cell
5.	Monika Sahu	SOS In Electronics & Photonics, Pt. RSU, Raipur	Dr. Sanjay Tiwari	Synthesis and Characterization of TiO ₂ Nanoparticles.
6.	Nilima Sinha	RRCAT, Indore (M.P.)	Dr. Salahuddin Khan Scientific Officer	Time Resolved Reflectivity Studies of Semiconductor and Their Nanostructure Using Circularly Polarized Pump and Probe Pulse.
7.	Priyanka Roy	IIT Bombay	Prof. Siddharth Tallur	Design of Photonics Component in III-v Hetrostructures