

DEPARTMENT OF PHYSICS
ASSAM UNIVERSITY SILCHAR

List of PhD Awarded:

Sl. No.	NAME	DATE	SUPERVISOR	PHD THESIS TITLE
1.	A.C. BORAH	14/12/2004	Dr. Asoke Kumar Sen.	Electrostatic Effects of Charged Dust Grains in Star Formation Process in Interstellar Dust Clouds.
2.	HIMADRI SEKHAR DAS	23/12/2005	Dr. Asoke Kumar Sen.	Photo Polarimetric study of Comets other astronomical objects (Modified)
3.	AMALENDU CHAKRABORTY	23/12/2005	Dr. R. Bhattacharjee.	Distortion Induced Resonance Raman Study of Copper Tetramethyl Porphyrin and its Cation Radical
4.	GUNAKAR DAS	22/12/2006	Dr. R. Bhattacharjee (Guide) and Dr. R.K. Thapa, Pachhunga University College (Co-Guide)	A Theoretical Study of Photo field Emission incorporating the Spatially Dependant Photon field.
5.	S.R. GURUNG	28/12/2007	Dr. R. Bhattacharjee (Guide) and Dr. R.K. Thapa, Pachhunga University College (Co-Guide)	A Theoretical Study of Photo emission by using Leed type wave functions and spatially dependent vector potential
6.	LALTHAKIMI ZADENG	29/12/2007	Dr. R. Bhattacharjee (Guide) and Dr. R.K. Thapa, Pachhunga University College (Co-Guide)	Photoemission and Band Structures Calculation from Metals and Semiconductors
7.	NIRMAL KUMAR SARKAR	30/12/2008	Dr. R. Bhattacharjee.	Study of Vibrational Spectra of Some Triatomic and Tetra-atomic molecules using Lie Algebraic Method.

8.	JOYDEEP CHOUDHURY	29/12/2008	Dr. R. Bhattacharjee.	Analysis of Vibrational Spectra of Some Tetrahedral and Octahedral Molecules using Lie algebra.
9.	MIHIR RANJAN NATH	10/07/2009	Dr. Asoke Kumar Sen (Guide) and Dr. S. Sen, G.C college (Co-Guide).	Some Solvable Models of Atom field Interaction in quantum optics.
10.	INDIRA DEY	16/07/2009	Dr. Asoke Kumar Sen	Photo-Polarimetric Studies of Star Forming Clouds.
11.	SRINIVASA RAO KARUMURI	22/01/2010	Dr. R. Bhattacharjee	Analysis of Vibrational Spectra of Some Metalloporphyrins using Lie Algebra.
12.	APRATIM NAG	05/04/2010	Dr. R. Bhattacharjee and Dr. G.C. Das	Some Problems in Non linear Wave Propagation in Plasma.
13.	M. SHUBHAKANTA SINGH	20/09/2010	Dr. B. Indrajit Sharma	Simulation of Energetic Electron Beam Interaction with Resist on Semiconductor Substrates Using Monte Carlo Process and its Application to e-Beam Lithography.
14.	SUDIPTA ROY	October, 2010	Dr. Asoke Kumar Sen.	Wavelet based Intelligent methods in image processing.
15.	SUJIT RANJAN DAS	16/11/2011	Prof. Asoke Kumar Sen (Supervisor) & Dr. Himadri Sekhar Das, (Co-Supervisor)	Modeling the optical characteristics of cosmic dust by fractal aggregates
16.	DWAIPAYAN DEB	07/03/2012	Dr. A.K. Sen	The study of Minor Bodies of Solar System by Simulating Data to Match with Spacecraft Observations.
17.	RATAN DAS	29/05/2012	Dr. Siddhartha Sankar Das (Guide) & Prof. R. Bhattacharjee (Co-Guide)	Synthesis of Noble Metal Nano Particles by Chemical Route and their Potential Applications in Electronics.
18.	SUBHA GAURAV ROY	07/04/2012	Prof. R. Bhattacharjee	A Study on the Determination Of Energy Bands Using Lie Algebra

19.	JAMESON MAIBAM	31/07/2012	Dr. B. Indrajit Sharma (Guide) & Prof. R. Bhattacharjee (Co-Guide)	Investigation of Electronic Band Structure of Transition Metal Carbides and Nitrides Using Density Functional Theory
20.	RAGHU NANDAN DAS	31/07/2012	Prof. R. Bhattacharjee, AUS, (Supervisor) & Dr. Nirmal Kumar Sarkar, Karimganj College (Co-supervisor)	Study of vibrational Spectra of Buckminsterfullerene (C ₆₀) and Carbon Nano Tubes using the Lie algebraic method.
21.	DIPANKAR PAUL	26/09/2012	Prof. Asoke K. Sen, AUS, (Supervisor) & Dr. H.S. Das, Co-supervisor	Study of Polarization Properties of Comets and other objects
22.	SUHASH CH. DEY	07/08/2013	Prof. R. Bhattacharjee (Supervisor) & Dr. S.S. Nath (Co-Guide)	Preparation of Semiconductor Quantum Dots and their Potential Applications
23.	CHINMOY BHATTACHARJEE	16/04/2013	Prof. Asoke Kumar Sen (Guide) & Dr. H.S. Das (Co-Guide)	Study of Light Scattering Properties of Cosmic Dust
24.	ABHINASH SUKLABAIDYA	07/08/2013	Dr. Himadri Sekhar Das.	Modeling of Light Scattering Properties of Cometary Dust
25.	RUPAM SEN	07/10/2013	Prof. R. Bhattacharjee.	Vibrational Spectra Analysis of Fullerene C ₈₀ and its Compounds Using U(2) Lie Algebra
26.	ASHIM KALYAN	07/10/2013	Prof. R. Bhattacharjee, Department of Physics, AUS & Dr. Nirmal Kumar Sarkar (Co-Guide)	An Algebraic analysis of Vibrational Spectra of Fullerene C ₇₀ and Some of its Derivatives by Using Lie Algebra
27.	L. SUJATA DEVI	17/11/2014	Dr. B. Indrajit Sharma (Supervisor) & Prof.	Synthesis and Characterization of Cadmium Sulphide and Zinc

			H.N.K. Sharma, Manipur University (Co-Supervisor)	Sulphide Nano Structures Doped with Mn ⁺² (Modified)
28.	ANINDITA BHATTACHARJEE	03/08/2015	Dr. Atri Desham ukhya, (Supervisor) & Prof. S. Panda, IOP, Bhubaneswar, On lien from HRI, Allahabad.	A Study of few aspects of String Inspired Cosmology
29.	N. BEDAMANI SINGH	03/08/2015	Dr. Utpal Sarkar (Supervisor) & Dr. B. Indrajit Sharma (Co- Supervisor).	Studies on Structure and Properties of new selected Metal Clusters using Density Functional Theory.
30.	MODHUCHHANDA CHOUDHURY	7/01/2016	Prof. R. Bhattacharjee (Supervisor) & Dr. S.S. Nath (Co-Guide)	Preparation of metal oxide semiconductor quantum dots and their applications as nano gas sensors.
31.	SURJA KUMAR SINGH	30/08/2016	Prof. R. Bhattacharjee, Department of Physics, AUS	Analysis of Vibrational Spectra of Benzene and its Derivatives using Lie Algebra.
32.	ARINDWAM CHAKRABORTY	26/07/2017	Dr. Himadri Sekhar Das.	Study of Optical Properties of Cosmic Dust by Numerical Simulations and Observations.
33.	PARIZATH DEBROY	26/07/2017	Dr. Himadri Sekhar Das.	A Comprehensive Dust model to describe the Polarization properties of Comet.
34.	SAUMYADEEP ROY	24/11/2017	Prof. Asoke Kumar Sen	The Cometary Activities as studied through imaging polarimetry.
35.	KHOIROM KABITA	04/08/2017	Dr. B. Indrajit Sharma	DFT study of some selected Binary Compound Semiconductors: Electronic Structures and Elastic Properties.
36.	ANUJ KR. DUBEY	29/12/2017	Prof. Asoke Kumar Sen	Study of Gravitational Redshift from Rotating Body
37.	AJAY ROY	10/10/2018	Dr. S.S. Nath (Supervisor) & Dr. B.	Semiconductor Quantum Dots and Study of their Possible Applications

			Indrajit Sharma (Co-Supervisor)	in Non-Linear Optics.
38.	SASWATI ROY	25/09/2018	Prof. Asoke Kumar Sen	Calculation of Gravitational Deflection of Light due to Rotational Spherical Mass in Weak and Strong Field.
39.	LALIT BORUAH	22/05/2018	Dr. S.S. Nath (Supervisor) & Dr. B. Indrajit Sharma (Co-Supervisor).	Investigation of Swift Heavy Ion Irradiation Effects on Semiconductor Quantum Dots and their Optoelectronic Applications.
40.	AJOY BARMAN	13/08/2018	Dr. Himadri Sekhar Das.	Photometric and Polarimetric Studies of some Selected Dark Clouds.
41.	KANIKA BHATTACHARJEE	20/03/2018	Dr. Pradeep Kr. Shukla.	Quantum Theoretical Study of structures, Properties and Interactions of some Biologically Important Molecules
42.	SARANI CHAKRABORTY	19/05/2018	Prof. Asoke Kumar Sen	Study of Deflection of light due to Rotating Mass and other Space Time Geometry.
43.	PARTHA ROY	25/09/2018	Dr. Atri Deshamukhya (Supervisor) & Prof. Sanjay Sharma (Co-Supervisor)	A Study on Structural and Microphysical Properties of Rain Bearing Convective Clouds over Indian Summer Monsoon Region by using a Train Satellite Sensors.
44.	PRITISH HALDER	1/05/2018	Dr. Himadri Sekhar Das.	Study of Physical Properties of Cosmic Dust from Light Scattering.
45.	ARUP DAS	07/08/2018	Dr. Himadri Sekhar Das (Supervisor) & Dr. A Senorita Devi (Co-Supervisor)	Photo Polarimetric Study of some Selected Dark Clouds.
46.	JAYDEEP PAUL	10/10/2018	Dr. Himadri Sekhar Das (Supervisor) & Dr. Apratim Nag (Co-Supervisor).	A Theoretical study of double layers and sheaths in various plasma configurations.
47.	DEBASHISH	25/04/2019	Dr. Bidhan Mohanta	Synthesis of Silver Silicate Core

	(ACHARJEE) ACHARYA			Shell Nano Particles and their Characterization
48.	S. RANIBALA DEVI	29/04/2019	Dr. S.S. Nath (Supervisor) & Dr. B. Indrajit Sharma (Co-Supervisor).	Synthesis and Characterization of Chemical Bath Deposited PVA/TEA Capped CdSe Nanocrystalline thin films coped with Mn ⁺²
49.	UTPAL MISRA	8/05/2020	Dr. Atri Deshamukhya (Supervisor) & Prof. Sanjay Sharma, Kohima Science College(Co-Supervisor)	A study of Regional Variability of South West Monsoon System over Indian Region
50.	ANAL CH. SHARMA	09/08/2019	Dr. Atri Deshamukhya (Supervisor) & Prof. Sanjay Sharma, Kohima Science College(Co-Supervisor)	Study of Mesoscale Convective Systems with respect to Prevailing Environmental Conditions and microphysical characteristics of rainfall.
51.	MAHUA ACHARJEE	13/08/2019	Dr Bidhan Mohanta	A Comperative Study Between the Vibrational Frequencies of some Linear triatomic molecules obtained by Exact diagonalization of the Hamiltonian and Mean field results obtained by using Lie Algebra
52.	AMRITAKSHA KAR	25/04/2020	Prof. Asoke K Sen	To study the light scattering properties of asteroid surface analogue and their interpretation by laboratory measurement
53.	BARNALI BHATTACHARYA	13/8/2020	Dr. Utpal Sarkar	Theoretical investigation of optical and transport properties of nano-structured systems

54.	DAVID PEGU	26/8/2020	Dr. Utpal Sarkar (supervisor) & Dr. S. S.Nath (Co-Supervisor)	Structural, electronic and optical properties of cds and some other small molecules using density functional theory
55.	BEGUM ABIDA CHOUHURY	26/08/2020	Dr. Atri Deshamukhya (Supervisor) & Dr. Mahen Konwar, IITM Pune (Co-supervisor)	A study of recent climate change and extreme weather events over Northeastern states of India
56.	TANAY GHOSH	26/08/2020	Prof. Asoke K Sen	Rotation of the polarization for static and non-static Gravitational Field due to massive body
57.	AKRAM CHANDRAJIT SINGHA	17/09/2020	Dr. A Seniorita Devi	Study on Spectral and Temporal Properties of Some Black Hole Systems
58.	PAMPI MALAKAR	10/11/2020	Dr. Atri Deshamukhya (Supervisor) & Dr. Amit. P. Kesarkar, NARL, Tirupati (Co-Supervisor)	Appraisal of environmental factors affecting structure and intensity of tropical cyclones on North Indian Oceans