

# Graduating Batch 2021

## Doctor of Philosophy

### Biological Sciences

**Richa Mishra**

Thesis Supervisor: **Dr. Himanshu Kumar**

Thesis Title: Role of environment in shaping the innate immunity during virus infection and autoimmune diseases

**Anil Raj Narooka**

Thesis Supervisor: **Dr. Sunando Datta**

Thesis Title: EhRho6 mediated actin degradation in E. histolytica and its implication

**Ranjeet Singh Mahla**

Thesis Supervisor: **Dr. Himanshu Kumar**

Thesis Title: Mycobacterial infection instigates mitophagy mediated metabolic reprogramming of immune cells

**Manish Kumar Dwivedi**

Thesis Supervisor: **Dr. Vimlesh Kumar**

Thesis Title: Genetic Analysis of  $\sigma 2$ -Adaptin in the Regulation of TGF- $\beta$  Signaling in Drosophila

**Sandhya Yadav**

Thesis Supervisor: **Dr. Sanjeev Shukla**

Thesis Title: Mechanistic study of oncogenic splicing switch of PKM gene in head and neck cancer

**Shashank Ranjan Srivastava**

Thesis Supervisor: **Dr. R Mahalakshmi**

Thesis Title: Human Mitochondrial VDAC2 : Stability – Function Interplay

**Tulsi Upadhyay**

Thesis Supervisor: **Dr. Ishu Saraogi**

Thesis Title: Investigations into Structural Aspects of E. coli Co-chaperone GrpE and Small Molecule Inhibitors in Regulating DnaK Function

**Yogesh Tak**

Thesis Supervisor: **Dr. Chandan Sahi**

Thesis Title: Identification of subfunctionalized aggregate-remodeling J-domain proteins in plants



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## Doctor of Philosophy

### Biological Sciences

**Chetana Tamadaddi**

Thesis Supervisor: **Dr. Chandan Sahi**

Thesis Title: Expansion of the evolutionarily conserved network of J-domain proteins in the Arabidopsis thaliana mitochondrial import complex

**Neha Ahuja**

Thesis Supervisor: **Dr. Sanjeev Shukla**

Thesis Title: Hypoxia-induced TGF- $\beta$ -RBFOX2-ESRP1 axis regulates human MENA alternative splicing and promotes EMT in breast cancer

**Preeti**

Thesis Supervisor: **Dr. Vinita Gowda**

Thesis Title: Investigating the role of floral morphology, floral biology, and sympatry in the evolution of the genus Hedychium (Zingiberaceae)

**Shubham Kumar Jaiswal**

Thesis Supervisor: **Dr. Vineet K Sharma**

Thesis Title: Understanding Biological Systems using Artificial Intelligence and Data Science Approaches

**Sariki Santhosh Kumar**

Thesis Supervisor: **Prof. Raghuvir Singh Tomar**

Thesis Title: Identification of Sen1 as a regulator of flocculation, and mitochondrial integrity in Saccharomyces cerevisiae

### Chemistry

**Rawale Dattatraya Gautam**

Thesis Supervisor: **Dr. Vishal Rai**

Thesis Title: Lysine Directed Single-Site Precision Engineering of Native Proteins

**Bapurao Arjun Bhoge**

Thesis Supervisor: **Dr. Ishu Saraogi**

Thesis Title: Guanine Nucleotide Analogs Modified at N<sup>2</sup>-Amine and  $\beta$ -Phosphate: Synthesis and Biological Applications

**Gangarde Yogesh Mahadev**

Thesis Supervisor: **Dr. Ishu Saraogi**

Thesis Title: Synthesis and Evaluation of Functionalized Arylamide Scaffolds for Improved Drug Delivery and Protein Aggregation Inhibition



# Graduating Batch 2021

## Doctor of Philosophy

### Chemistry

**Bahadur SK**

Thesis Supervisor: **Dr. Abhijit Patra**

Thesis Title: Organic Multichromophores: Development of Solid-state and Long-lived Emissive Materials

**Gaurav Saini**

Thesis Supervisor: **Prof. Manmohan Kapur**

Thesis Title: N-Heterocycle Synthesis and Remote Functionalizations via Pd-Catalysis

**Anand Kumar Awasthi**

Thesis Supervisor: **Dr. Aasheesh Srivastava**

Thesis Title: Polydopamine nanomaterials prepared using self-assembling templates: Antifouling coatings, chirality translation and redox behaviour

**Himanshu Aggarwal**

Thesis Supervisor: **Dr. Aasheesh Srivastava**

Thesis Title: Nitrogen containing nonplanar conjugated organic materials: Self-assembly driven tunable emission

**Manish Kumar**

Thesis Supervisor: **Dr. Varadharajan Srinivasan**

Thesis Title: First-Principles Study of Methane Conversion and Water Oxidation by Earth-abundant Transition Metal-Based Catalysts

**Ramprasad Regar**

Thesis Supervisor: **Prof. J Sankar**

Thesis Title: Functionalized Perylene and Terrylene Diimide Derivatives for Panchromatic Absorption: Synthesis, Structure and Properties

**Suprakash Biswas**

Thesis Supervisor: **Dr. Apurba Lal Koner**

Thesis Title: Exploring the Design and Synthesis of 1,8 Naphthalimide-Based Fluoroprobes for Understanding Lysosomal Properties and Nitric Oxide Generation for Plant Root Growth Regulation

**Ajit Kumar Kharwar**

Thesis Supervisor: **Dr. Sanjit Konar**

Thesis Title: Synthesis and Study of Magnetically Anisotropic Metal [Tb(III) and Co(II)] Complexes



# Graduating Batch 2021

## Doctor of Philosophy

### Chemistry

**Arindam Maity**

Thesis Supervisors: **Prof. Alakesh Bisai**  
**Prof. Aasheesh Srivastava**

Thesis Title: Asymmetric Total Synthesis of C-3 Prenylated Hexahydropyrrolo [2,3-b] indole Alkaloids

**Arpan Mondal**

Thesis Supervisor: **Dr. Sanjit Konar**

Thesis Title: Experimental and Theoretical Investigation on Single-Molecule Magnets

**Milon Mohan Sadhu**

Thesis Supervisors: **Prof. Vinod K Singh**  
**Prof. Sangit Kumar**

Thesis Title: Organocatalytic Synthesis of Isoindolinones via Thioacid Addition and Enantioselective Mannich-Type Reactions

**Rayhan Gafur Biswas**

Thesis Supervisors: **Prof. Vinod K Singh**  
**Prof. Sangit Kumar**

Thesis Title: Catalytic Asymmetric Synthesis of Nitrogen and Sulfur Containing Five Membered Heterocycles

**Siba Prasad Bera**

Thesis Supervisor: **Dr. Sanjit Konar**

Thesis Title: Lanthanide Complexes for Slow Magnetic Relaxation, Magnetocaloric Effect and Proton Conduction Applications

### Earth and Environmental Sciences

**Shilpi Samiksha**

Thesis Supervisor: **Prof. Ramya Sunder Raman**

Thesis Title: Ambient Aerosols over Bhopal and Combustion Source Emissions: Thermal-Optical Fractions,  $\delta^{13}\text{C}$  Values, Biological Constituents, and Source Apportionment of PM<sub>2.5</sub> Total Carbon



# Graduating Batch 2021

## Doctor of Philosophy

### Mathematics

**Anshu**

Thesis Supervisor: **Dr. Prahlad Vaidyanathan**

Thesis Title: Homotopical Stable Ranks of  $C^*$ -algebras

**Nupur Patanker**

Thesis Supervisor: **Dr. Sanjay Kumar Singh**

Thesis Title: Some Problems in Algebraic Coding Theory

**Arusha C**

Thesis Supervisor: **Dr. Sanjay Kumar Singh**

Thesis Title: Some Problems on Vector Bundles over Nodal Curves

**Neeraj Kumar Dhanwani**

Thesis Supervisor: **Dr. Kashyap Rajeevsarathy**

Thesis Title: Commutativity of periodic mapping classes and their representations as words in Dehn twists

**Kalachand Shuin**

Thesis Supervisor: **Dr. Saurabh Kumar Shrivastava**

Thesis Title: Weighted and unweighted  $L^p$  estimates for multilinear spherical averages, maximal functions and Bochner–Riesz means

**Haritha C**

Thesis Supervisor: **Dr. Nikita Agarwal**

Thesis Title: Shift Spaces with a Hole: Properties and Applications

### Physics

**Gulloo Lal Prajapati**

Thesis Supervisor: **Dr. Dhanvir Singh Rana**

Thesis Title: Low energy and ultrafast dynamics of correlated oxides investigated by terahertz spectroscopy



# Graduating Batch 2021

## Doctor of Philosophy

### Physics

**Sajilesh K P**

Thesis Supervisor: **Dr. Ravi Prakash Singh**

Thesis Title: Unconventional Superconducting Properties of Ternary Noncentrosymmetric Superconductors

**Bommareddy Poojitha**

Thesis Supervisors: **Dr. Surajit Saha**  
**Prof. Dhanvir Singh Rana**

Thesis Title: Phonons and their Interactions in Complex Oxide Systems

**Surajit Sarkar**

Thesis Supervisor: **Dr. Suhas Gangadharaiah**

Thesis Title: Transport and Spin-Susceptibility Studies in Silicene and Dynamics of Impurity in Topological Insulator

**Shalabh Kumar Anand**

Thesis Supervisor: **Dr. Sunil Pratap Singh**

Thesis Title: A Computer Simulation Study of Active Filaments and Anisotropic Microswimmers

**Abhilash Padhy**

Thesis Supervisor: **Prof. Sukanta Panda**

Thesis Title: Inflation With an Antisymmetric Tensor field

**Ritu**

Thesis Supervisor: **Dr. Auditya Sharma**

Thesis Title: Entanglement and Transport Properties of Certain Topological Ladder Systems

**Soudamini Sahoo**

Thesis Supervisors: **Dr. Snigdha Thakur**  
**Dr. Sunil Pratap Singh**

Thesis Title: Dynamics and aggregation of active colloids in different fluidic environments

**Devendra Singh Bhakuni**

Thesis Supervisor: **Dr. Auditya Sharma**

Thesis Title: Electric-Field Driven Quantum Phenomena: From Bloch Oscillations to Many-body Localization



# Graduating Batch 2021

## Doctor of Philosophy

### Physics

**Nilanjan Roy**

Thesis Supervisor: **Dr. Auditya Sharma**

Thesis Title: Localization phenomena and entanglement in certain one-dimensional quantum systems

**Sandeep Aashish**

Thesis Supervisor: **Prof. Sukanta Panda**

Thesis Title: Covariant Quantum Gravitational Corrections to Scalar and Tensor Field Models

A total of 47 Degrees of Doctor of Philosophy will be awarded. 13 graduands are from Biological Sciences, 16 from Chemistry, 1 from Earth and Environmental Sciences, 6 from Mathematics and 11 from Physics.



# Graduating Batch 2021

## Master of Science

### Chemistry

Jatin Panda

Kannagi Bhooshan

Prakash Chandra Tiwari

Princi Gupta

Saurabh Rai

Shubhojit Banerjee

Tanushree Gupta

Urvashi

### Mathematics

Amandeep Khara

Aniruddha S

Himanshi Khurana

Pankaj Kapari

Prachi Sahjwani

Shashank Pathak

Jathar Shubham Ramkisan

### Physics

Abbas Tinwala

Abhijith A

Anshuman

Kamanpreet Singh Manoor

Komal Gupta

Sagnik Chatterjee

A total of 21 Master of Science Degrees will be awarded to students of Integrated Ph.D. programme. 8 graduands are from Chemistry, 7 from Mathematics and 6 from Physics.





# Graduating Batch 2021

## Dual Degree of Bachelor of Science and Master of Science

### Biological Sciences

Sahil Bhardwaj	Gokul G
Krishna Charan B S	Kallol Mozumdar
Prithiv Raj B	Kumari Heena
Sagar Meena	Lekshmy R
Sruthi S	Madhubani Dey
Borkar Shruti Subhash	Powar Manali Pratap
Adarsh R	Minita Yogen Desai
Aiswarya D	Pallavi Gupta
Alex George Varghese	Pankaj Dhakad
Amit Kumar Sahu	Radha Kulkarni
Anandapadmanabhan U	Rucha Dattatraya Kulkarni
Anish Ganju	Safreena N
Anjitha Gireesh	Sayak Dutta
Ankita Behera	Shinto James
Arohi Khurana	Shrestha Rath
Arunaja K	Siddhant S Shetty
Asha James	Sreepadmanabh M
Salve Buddhabhushan Girish	Titas Sil
Chandrama Dipa	Trisha Arora
Debashish Naik	Viplav Agarwal
Dipin Das	Yadunandan E T
Dipti Ranjan Lenka	Yudhajit Ain



# Graduating Batch 2021

## Dual Degree of Bachelor of Science and Master of Science

### Biological Sciences

Aayushi Vishnoi

Srishti Mishra

Jennifer Johnson

Kaveri A S

### Chemistry

Vijay Mundotiya

Achyuth M C

Aditya Kamal

Ajmal Roshan U P

Amar Raj

Anjali

Ardra K

Ashwin Mathew

Bhavana Ramadas

Debanjan Rana

Disha Bhattacharya

Fabina Bintah K

Harshita Meena

Hrishikesh Pravin Nandankar

Jo Sony Kurian

Maneesha Singh

Md Elious Ali Mondal

Meghna K P

Minnu Rajan

Birudukota Nihal Chaitanya

Prachi Gupta

Prashant Anand

Rajdeep Sarma

Ramesh Adakkattil

Ranjini Laskar

Ravindra Meena

Roushan Prakash Singh

Saswade Sagar Santosh

Shaz Ajmal

Shivam Shrivastava

Shreya Verma

Shrobona Banerjee

Shubham Singh

Sreelakshmi P A

Subhashini M

Udit Kumar Singh

Vinod Kumar Meena

Vyshnav Kannampalli



# Graduating Batch 2021

## Dual Degree of Bachelor of Science and Master of Science

### Chemistry

Yashna Khakre

Neena K A

Vidya

Patil Shubham Subhash

### Earth and Environmental Sciences

Harshita Damor

Manish Mehra

Pratik Prabhakar Sawale

Nidhi Singh

Rohit Bisariya

Niharika Panigrahi

Suman Kumari Verma

Pankaj Kumar

Sanyam Singla

Prativa Mallick

Rangari Ayush Vasant

Puneet Singh Gond

Akarsh Ralhan

Rajnish Kumar

Amit Kumar Singh

Rohan Deewar

Aniket Dhar

Sanjesh Kumar

Arathi R

Soubhik Mondal

Arun Kumar

Sudip Chunary

Chandra Prakash

Vishnu K

Gokul U K

Neeraj Suthar

Gopal Kumar

Mohamed Nadeem I T

Harsh Pushkar

Akash Kayal

Himanshu Meena



# Graduating Batch 2021

## Dual Degree of Bachelor of Science and Master of Science

### Mathematics

Lalatendu Keshari Nayak  
Aditya Laxmikant Thorat  
Amajit Sarma  
Talele Chinmayee Vikas  
Divyasree C R  
Gokul H  
Harsh Shamkant Patil

Keshav Kumar  
Koustav Mondal  
Kunal Kishore  
R Aswin  
Soham Pyne  
Srabana Biswas  
Udit Narayan Mohanty

### Physics

Krat Veer Singh  
Aseer .K T  
Rishabh Dabra  
Vikram Kumar  
Aditi Krishak  
Aravind Raji  
Asha B Modan  
Chandan Prasad Kushwaha  
Dasarath Swaraj  
Kumar Tanay  
Kunal Rai  
M Abhijith Bhuvandas  
M V Sayooj Satheesh  
Mahesh K N B

Deshpande Mandar Vyankatesh  
Mehul Sompura  
Merlyn Baby  
Nandhu Krishna Babu  
Nirnay Roy  
Nitin Kriplani  
Chanda Pallav Sushantkumar  
Prashant Shukla  
Rakshit Sharma  
Rasmita Kumari  
Sarvesh Kumar Upadhyay  
Sayan Kunti  
Sayan Roy  
Shazna Ashraf K K



# Graduating Batch 2021

## Dual Degree of Bachelor of Science and Master of Science

### Physics

Shreyansh Agrawal

Shruti Sharma

Sudipto Bagchi

Sujeet Pani

Swayangdipta Bera

Tanmay Biswas

Ujjwal Jayswal

Vijayendra Soni

Vikas Kumar

Yash Nitin Palan

Kuldeep Singh

A total of 174 Dual Degree of BS-MS will be awarded. 48 graduands are from Biological Sciences, 42 from Chemistry, 31 from Earth and Environmental Sciences, 14 from Mathematics, and 39 from Physics.



# **Graduating Batch 2021**

## **Bachelor of Science**

### **Chemistry**

Adarsh Singh

Saurabh Kumar Bhagat

### **Earth and Environmental Sciences**

Kamsky K J

Pawan Kumar

### **Electrical Engineering and Computer Science**

Rohit Saini

### **Mathematics**

Satyam Gupta

### **Physics**

Mahesh Kumar Meena

Ashma Ara

Neeraj R Nagdeve

A total of 9 BS Degrees will be awarded. 2 graduands are from Chemistry, 2 from Earth and Environmental Sciences, 1 from Electrical Engineering and Computer Science, 1 from Mathematics and 3 from Physics.

