

Department of Physics

Netaji Mahavidyalaya

Departmental Activities Report (Period: July 2025 – June 2026)

<https://sites.google.com/view/physics-netajimahavidyalaya/july-2025-june-2026-physics-activity>

Key highlights of the year:

Academic & Scientific Events

- **Seminar on Gravitational Waves** (27-Jan-2026): A specialized presentation titled "*Propagation of Gravitational Waves*" delivered by international guest speaker Dr. Purnendu Karmakar from the University of Tartu, Estonia.
- **Add-On Course Commencement** (09-Dec-2025): Launched a departmental Add-On course focused on "*LaTeX and Technical Presentation*".
- **Departmental Seminar** (10-Sep-2025): "A day in Physics with Python" Featured scientific talk files and research presentations from faculty members Dr. Ajit Kumar Singh, Dr. Chayan Kanchan Karmakar, and Dr. Somenath Jalal.

Publication

- a) **B. Pandit and S. Kar, J. Phys.: Condens. Matter 37 (2025) 075601, DOI 10.1088/1361-648X/ad9722. [arXiv:2406.04053v2]**
- b) **B. Pandit and S. Kar, J. Phys.: Condens. Matter 37 (2025) 305601, DOI 10.1088/1361-648X/ade8a8.**
- **Book Publication** (04-Sep-2025): Department faculty members Dr. Binay Malakar and Dr. Chayan Kanchan Karmakar published a textbook titled "*Astrophysics for Beginners*" via Spellbound Publishers.

S. Datta, C. C. Dey, A. Mallick, J. Mondal, K. Majhi, P. K. Mallick, P.K. Chakrabarti, "A strategic chemical reduction method to stabilize ferromagnetic Co phase in 4-benzoyl pyridine and wideband microwave absorption through magnetic investigation", Matr. Sc. & Eng. B. (2025)

Institutional, Student, & Social Events

- **Higher Education Placements:** Celebrated student admissions into M.Sc courses, including Sukanya Pal (Presidency University), Rima Nandi (University of Burdwan), Supravat Malakar (BBAU Lucknow), and Sudipta Chattopadhyay (NIT Hamirpur via JAM).
- **Alumni and Ex-Student Visits** (Various Dates): Multiple alumni visited the department to share feedback, including notable alumna:
 - c) **Mrs. Chhanda Samata** (Assistant Teacher of Bharati Balika Bidyalaya, Kamalakanta Kalibari, Burdwan) our notable Alumni and also daughter of our Ex-Head of the Physics Department Dr. Sristidhar Samata visited here on 14.03.2026.
 - d) **Mr. Souvik Nandi** (M.Sc at BU) (2021-2024 batch) visited our department on 12.03.2026.
 - e) **Pimpa Roy** (New Delhi Domestic Airport) (2020-2023 batch) visited on 05.03.2026
 - f) **Rima Nandi** (BU, M.Sc Physics) (2022-2025 batch)
 - g) **Disha Dey** (Tata AIG, (2022-2025 batch)
 - h) **Sudipta Chattopadhyay** (NIT Hamirpur) (2022-2025 batch)
 - i) **Supravat Malakar** (Babasaheb Bhimrao Ambedkar University, Lucknow) (2022-2025 batch)
 - j) **Sukanya Pal** (M.Sc Physics Presidency University) (2022-2025 batch)
- **Freshers' Welcome-2025** (29-Jan-2026): Active departmental participation in welcoming the incoming batch of students.
- **Annual Sports Day** (16-Jan-2026): The department actively took part in the broader college-wide sports activities.
- **Student Parliament Achievement** (16-Dec-2025): 5th-Semester student Mr. Souparna Santra participated in the *Viksit Bharat Youth Parliament 2026* in Hooghly District, speaking on the topic "*50 Years of Emergency: Lessons for Indian Democracy*".
- **Teachers' Day Celebration** (23-Sep-2025): Organised by physics students to honor departmental faculty.

Examinations & Academic Logistics

- **Semester-I Internal Examinations:** Commenced on 18-Dec-2025 with full attendance from all 8 enrolled students.
- **Mentor-Mentee Awareness Program:** Conducted student interactions with Sem-3 and Sem-5 batches regarding university exam schedules and grievances.
- **Semester-II Practical Examinations:** Conducted the Physics Practical Exam (under the 3/4 Years Minor framework) on 14-Aug-2025.

Key Milestones & New Items

- **New Equipment Setup:**
 - *To determine Velocity of Ultrasonic Waves through Kerosine*
 - *Frank Hertz Experiment (To show electrons orbit are discrete energy Level)*
 - *Charge to mass ratio (e/m) of electron*
 - *Millikan Oil drop experiment (to show quantisation of Charge)*

New Admission 2025:

B.Sc Physics Major (2025 to 2028/2029 batch : 3/4 Years Major in Physics)

4-Year

1. Sandipta Hansda
2. Sk Irfan Habib
3. Subhadip Dandapat
4. Subhajit Dey
5. Souradip Kaity

3-Year

1. Soumojit Dey



Pass Out Students in August: 2025

B.Sc Physics Honours (2022 to 2025 batch)



1. ANTIKA ROY
2. DISHA DEY
3. KOUSHIK KUNDU
4. RIMA NANDI
5. SAYAK MONDAL

6. SNEHA DAS
7. SOUVIK NANDI
8. SUDIPTA CHATTOPADHYAY
9. SUKANYA PAL
10. SUPRAVAT MALAKAR