



ANNUAL DEPARTMENTAL NEWSLETTER

2024-2025

*DEPARTMENT OF PHYSICS
MOTILAL NEHRU COLLEGE
UNIVERSITY OF DELHI*

WHERE THE WORLD STARTS PHYSICS ACCELERATES



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Mr. Surendra Meena

LETTER FROM CONVENER



As another academic session draws to a close in our department and college, I am filled with pride and gratitude as I reflect on the remarkable achievements of our society and department over the past year. It has truly been a year of growth, discovery, and shared passion for physics.

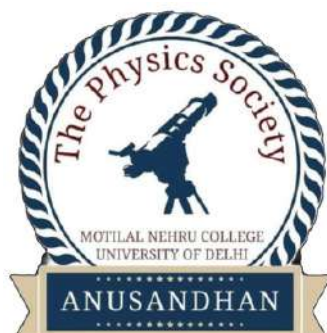
From engaging academic sessions to exciting events, we have seen an inspiring level of participation and enthusiasm from students, faculty, and staff alike. With unwavering support from our faculty and the relentless dedication of our students, the love for physics was reignited in each one of us. This passion has shone through in our classrooms, echoed in our labs, and driven us forward, even in the face of challenges.

A special thank you goes out to the union members whose commitment, leadership, and teamwork played a crucial role in organizing events, fostering a strong sense of community, and ensuring the smooth functioning of society activities throughout the year. Your efforts have been the backbone of many of our successes.

To everyone in the department and society—thank you for your hard work, your energy, and your belief in what we do. Together, we've made this academic year a truly memorable one, and I look forward to all the amazing things we'll achieve in the future.

Dr. Sukirti Gumber
Convener, ANUSANDHAN - The Physics Society,
Motilal Nehru College,
University of Delhi

ANUSANDHAN PHYSICS SOCIETY



Physics is not just a subject, but a way of life. Science starts failing when Physics starts failing. The reality of the Universe seems to be incomplete without the law of physics. Whether the question seems highly tough, a physicist will dedicate himself/herself to solve the mysteries and explain that very question. With the quote - "From atom to universe, we'll find the physics of everything", ANUSANDHAN PHYSICS SOCIETY has been serving Motilal Nehru College, University of Delhi to the best of its abilities. With a dedicated team of Union Leaders, Convenors and Teachers, Team heads, and all the member of the society.

Established back in the year 2006, the PHYSICS SOCIETY had its priorities that led to the foundation of our society. 17 years since its foundation, society has actively participated in various events. The primary goal of our society is to indulge a scientific temperament in people around us. When looking at the world today a lot of people try to take advantage of others and lack of knowledge of the masses, it is important for people to be educated so that we can tackle such fraudster. As such we as a society try our best to include people of all background.

We have been successful in terms of providing exposure to many of the students through visitation and sessions by professional who work in field. We stand as an inclusive society who have members who are part of various society like Abhiyanjana, NESO, NESS etc. We have collaborated with various organization like ISRO, as the department becomes a partner for online learning and AIESEC in IIT Delhi through a series of webinars/seminars for producing young leaders, Physics society of different college(Maitreyi) as we agree to take collaborate in each other events . We once again launched our annual magazine called QUANTA during our departmental fest (INERTIA). We organized a lot of events like meme making, poster competition, debate etc to simulate students in participating in conversations about science and its importance is daily life.

STUDENT UNION BODY 2024-25 (ANUSANDHAN PHYSICS SOCIETY)



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Rakshita Singh**

**Additional President
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Jitanshu Samal**

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**PR Head
Mukul Jaimini**

**Logistic Head
Divyam Pant**

**R&D Head
Harsh Nath Jha**

**R&D Co-Head
Akshat**

VISITATIONS

DEPARTMENTAL VISIT TO CSIR-NPL

On the 1st of October 2024, the department of physics Motilal Nehru College visited CSIR-National Physical Laboratory for its "Open day", a day in which the laboratory opens its doors to subtenants and allows them to explore its facilities and it is done in conjunction with the CIRS foundation day in order to promote interest in scientific research amongst students.

This facility conducts researches and maintains national measurement standards as such playing an important role in the nation development and upkeep, this is also where the IST (Indian Standard time) is maintained. It is located at Dr. Krishnan Marg, New Delhi.

On this day the students were to report at the entrance of the laboratory at 8:45 am, the events started off with a registration, distribution of CSIR-NPL merchandise and food to all the students. A total of 35 students were present for the college including students for all year (1st, 2nd & 3rd) as well as students from both Physics Honors and Physical Sciences. They were accompanied by the following teachers: -

1. Dr. Mahesh Chand
2. Dr. Manohar Singh
3. Dr. Pinki Yadav
4. Mr. Mahesh Kumar
5. Ms. Joyti Chauhan

The student indulged in thought provoking and innovative projects that are at the fore front of many industries and sciences that have never been seen before as each division of the laboratory presented their models, samples and theory. This includes atomic clocks, ferromagnetic fluid, newly developed fibers, thermo-conductor and all lot more innovative stuff with researchers in those field giving presentation and demonstration to the student who have gathered there. The day ended when the students touring the whole facility gathering knowledge as they went along, with the day winding up at around 2:30 pm. As the students disperse exclusive pens for the event were distributed to each student as they left the campus marking the end of the program.



DEPARTMENTAL VISIT TO IUAC

Anusandhan- The Physics Society organized a one-day visit to IUAC to celebrate the National Science Day, 28th February 2025 which organized an open house wherein young students of B.Sc. Physics course interacted with an eminent scientist of the country. The students were also given a tour of the accelerator and the experimental facilities at IUAC to spread awareness about the accelerator based research going on in the country and were inspired to pursue a career in Physics.



This included a keynote lecture by the eminent physicist, Prof. Bedangadas Mohanty, Senior Professor, NISER, Bhubaneswar, titled 'Origin of mass of fundamental particles' followed by an introductory lecture on the accelerator and experimental facilities at IUAC and



DEPARTMENTAL VISIT TO VIGYAN BHAWAN

Anusandhan- The Physics Society organized a one-day visit to Vigyan Bhawan to celebrate the National Science Day, 28th February 2025 as part of the knowledge gathering and to find inspiration for the per suite of science. It was organized for school students and college students alike, for the curios minds of the country to come together to learn about the world they live in from experts. It was a whole day event when not only knowledge was abundant but also food.

The Visit was lead by Mr. Manhor Singh, Mr. Arpit Gaur and Ms. Jyoti Chauhan along with students from the 1st, 2nd & 3rd year of our department.



EVENTS

FRESHERS

At the beginning of the academic session as new students joined our college, settling into a new rhythm and beginning a new chapter in their lives, the department organized a freshers meet to welcome the eager young minds to the department. This included introduction to the teachers and staff, the seniors and a fun way to celebrate them on their achievements of making it to college.

The events called upon the freshers to arrive in their best outfits and it included a lot of games to put them at ease and to act as a barrier breaker. Fostering communication and interaction between them and the seniors but also among themselves. It also featured an introduction session for the 1st years and a chance to show case their talent for the very first time which lead to a display of skill and albites creating a joyful and prosperous atmosphere.



The day ended with the announcements of Mr. Fresher and Miss. Freshers which was based on the best dressed and bet talent displayed among the girls and boys



MR. FRESHERS



MISS. FRESHERS

SPEAKER SESSION

“ORIGIN OF LIFE”

On the 16th of October Anusandhan organize a speaker session on the topic “Origin of Life” presented by Prof. Sanjay Jain who is a big part of the department of Physic and Astrophysics, University of Delhi. The lecture was full of shared ideas and strategies to shape the future, as Prof. Sanjay Jain unravels the mysteries of Life and leads us through a deep dive into the origin of life, theories, discoveries and the science behind how it all began.

As the session was attended by faculty and students of different year not only from Physics honors but also Physical Science students who were curious about the topic. The session was very interactive as students flood the speaker with question as the session ended making it a successful and useful session



CELESTRA



28th February 2025 to celebrate science Day 2025, Anusandhan in collaboration with Jigyasa the scientific guild to celebrate the conception of science and the ideas that support it. It is also an opportunity to promote science and help students to indulge in scientific competitions as we work towards making science assessable and easy to understand.

This events , included different competition which are innovative and engaging such as:

- 1) Ideathon: Where one pitch revolutionary ideas and innovate like never before as participants write down the their ideas in the first round, get shortlisted and then battel it out in the 2nd round as they pitch the ideas to a panel of judges .
- 2) Poster Making: Where students can let their creativity speak through their colors and pencils.
- 3) Meme Making: A platform where to link science and humor and express one fun side through science.
- 4) Science Dumb Charades: A performance for friends to guess as you act out scientific terms testing your acting skills and your friendships in the process while imparting scientific knowledge to participants.



We also launch the collaboration between our department and ISRO on this day making our college a partner in online learning that ISRO provides.



INERTIA

ANNUAL FEST

The annual Fest – INERTIA is a unique and joyous feast that we celebrated at Motila Nehru College. Students from across the University participate in the thrilling events organized under the banner ship of INERTIA. Annually in this event we observe an average of more than 150 students with 20% of them from outside the college.

The fest was held from the 2nd – 3rd of April 2025 in Lt-2. The first day consisted of a session presented by Dr.V.V.V. Satyannayana, a senior Engineer at IUAC on empowering



young minds by transforming science education through innovative Experiments. On the same day we also had our debate competition on the topic, "Space Exploration is a waste of resources" as we had a number of students turning up for this event both from within our college as well as from outside the college.

On the second Day, we had another speaker session by Prof.Y.K. Vijay, president of I.A.P.T.-RC-06 and



Ex-Director of C.P.D.E,U.O.R on innovation in science teaching through demonstration of lattice potentials and Fermi Surfaces and Bohr's Quantization. Our Treasure Hunt, the event with the most turn out, was also conducted on this day. It was engaging and one of the most difficult of its kind all in part to our Social Media Co-Head Parth Khare for putting tremendous efforts into it resulting in students' enjoyment as they solved puzzles with their friends and teammates.

Our Magazine was also launched on the first



day of our fest by our principal, teacher and esteemed guest. Distribution of Certificate to Union Members, Society member winners of various competition also took place through teachers and esteemed guest. With all those events we close our annual fest as we reflect on the dedication and sacrifice of the people involved in making our society a success for the year 2024-2025. Without the support of the students and the faculty the society would have not been able to do what it has done.



QUANTA

ANNUAL DEPARTMENTAL MAGAZINE



The Annual Departmental (Physics) Magazine “QUANTA” highlights the knowledge and passion of the students in different fields of physics and related fields. This is an outlet for students to show off their passion through articles, passages, photos, pomes and other literacy tools which is a great opportunity for them to showcase their creative flare.

The previous editions QUANTA 2022, 2023, 2024 aimed to focus on different aspects like films, devices and many other applicational objects with relation to physics in a language that is understandable to non science oriented people as well. QUANTA 2025 aims to do the same with an addition of more creativity to attract more people

This Year QUANTA 2025 was launched on the 2nd of April during INERTIA in the presence of our esteemed guest Dr.V.V.V. Satyannayana, our respected principal prof. Yogeshwar Sharma, faculty of the department of physics and students at LT-2. It was also also presented to our second esteemed guest Prof.Y.K Vijay on the second day of the fest.



COLLABORATIONS

IIRS (A unit of ISRO):

The department is in collaboration with IIRS (Indian Institute of Remote Sensing) as part of an outreach network, as the college will be a nodal center where online interactions will be conducted as students and faculty can enroll in the program with live interactive classes through e-platforms. A certificate will be granted at the end of the course with the society acting as the logistical linkage.



AIESEC in IIT Delhi

A recruitment collab occurred between AIESEC in IIT Delhi, as the society acted as an official promotional partner in the recruitment cycle of 2025.1 through webinars, Online meetings and interactive session in January. On completion a certificate was awarded to the society.



Scintillation(Maiteryi College Physic Society):

Anusandhan also collaborated with Scintillation(Maiteryi College Physic Society) as we attended each other each others events and exchange Instagram followers resulting in better co-ordination and collaboration between the two society.



A stylized illustration of a Star Trek-style starship, possibly the Enterprise, flying through a vibrant nebula. The nebula features swirling bands of purple, pink, and blue. Several planets of various sizes and colors (red, brown, blue) are visible in the foreground and background. Numerous yellow stars of different sizes are scattered throughout the scene. The starship is depicted in a dynamic, angled position, suggesting movement through space.

BEYOND THE STARS, PHYSICS LIGHTS THE WAY