

# Report of Department of Physics (2023-24)



**Mehr Chand Mahajan**  
**DAV College for Women**  
Sector-36/A, Chandigarh

[www.mcmdavcw-chd.edu](http://www.mcmdavcw-chd.edu)  
0172- 2603355, 0172- 2624921

**Name of the Department: Physics**

**1. Names of Programmes/Courses offered (UG, PG, M.Phil, Ph.D, Integrated Masters etc.)**

**i. B.Sc. Non medical**

**ii. B.Sc. Vocational**

**iii. B.Sc. Physics Hons.**

**2. Number of teachers:**

1. Dr. Renu Bala (HOD)
2. Dr. R. Ridhi
3. Dr. Pallavi Gupta (till 31 August 2023)
4. Dr. Swati Khatta
5. Dr. Kulwinder Kaur
6. Ms. Anu Rathi

**4. Details of Publications by the Faculty in the session: (Hard Copies of the Title Page of the Journal/Contents and First page of the Paper to be collected by the HODs)**

<b>Permanent Faculty/ Contractual faculty</b>	<b>Title of Paper</b>	<b>Title of the Journal with ISSN</b>	<b>Month/Year</b>	<b>PEER Reviewed/Refereed</b>	<b>UGC/CARE Enlisted (Yes/No)</b>	<b>URL</b>
<b>Dr. R. Ridhi</b>	Study of sensing mechanism of heterocyclic hazardous vapors with Metal Phthalocyanines	Dyes and Pigments	2023	PEER Reviewed	Yes	<a href="https://doi.org/10.1016/j.dyepig.2023.111328">https://doi.org/10.1016/j.dyepig.2023.111328</a>
<b>Dr. Kulwinder Kaur</b>	Electronic structure, elastic and transport properties of new Palladium-based Half-Heusler Materials for Thermoelectric Applications	Materials Today Communications	2023	PEER Reviewed	Yes	<a href="https://doi.org/10.1016/j.matcomm.2023.106461">https://doi.org/10.1016/j.matcomm.2023.106461</a>

	Comparative research fluorine and colloidal aggregate formation on the surface lithium fluoride thin films during electronic, ionic and thermal treatments	Vacuum	2023	PEER Reviewed	Yes	<a href="https://doi.org/10.1016/j.vacuum.2023.112133">https://doi.org/10.1016/j.vacuum.2023.112133</a>
	Intrinsic and strain dependent ultralow thermal conductivity in novel AuX (X = Cu, Ag) monolayers for outstanding thermoelectric applications	Physical Chemistry Chemical Physics	2023	PEER Reviewed	Yes	10.1039/d3cp01038d
<b>Ms. Anu Rathi</b>	Nuclear Structure and Decay Data for A=222 Isobars	Nuclear Data Sheets	2023	PEER Reviewed	Yes	<a href="https://doi.org/10.1016/j.nds.2023.10002">https://doi.org/10.1016/j.nds.2023.10002</a>

**3. Details of Publication of Books/Chapters in Books by the Faculty in the session (Hard Copies of the Title Page of the Journal/Contents and First page of the Paper/Book/ Book Chapter to be collected by the HODs)**

<b>Permanent Faculty/ Contractual faculty</b>	<b>Title of Book/ Book Chapter</b>	<b>Month/ Year</b>	<b>Name of the Publisher</b>	<b>National/ International</b>	<b>ISBN</b>
<b>Dr Renu Bala</b>	Solar Electric Vehicles: Harnessing Clean Energy for sustainable transportation	2024	Enkay Enterprises	National	978-81-961431-8-3
<b>Dr. Kulwinder Kaur</b>	Thermoelectric Properties of Perovskites Materials	Feb. 2024	Nova Science Publishers	International	

**6. Awards/ Recognitions received by faculty:**

<b>Name and Designation of the Faculty</b>	<b>Name of the Award</b>	<b>Name of the Agency</b>	<b>Month/Year</b>
<b>Dr. Renu Bala</b> <b>Dr. R. Ridhi</b>	Coordinator of Extempore Competition	MCM DAV College	September, 2023
<b>Dr. R. Ridhi</b>	Resource person of Akshay Urja Divas 2023	Renewable Energy Committee and MCM Eco Club, Chandigarh	22nd August and 23rd August, 2023

**7. List of eminent Academicians and Scientists/ visitors to the department:**

**Dr. Shilpi Chaudhary**, Punjab Engineering College (PEC), Chandigarh

**Student Enrichment Programmes organized by the Department**

**8. Seminars/Conferences organized by the department in the session: Kindly include the sponsoring/funding agency:**

<b>Date</b>	<b>Title of the Event</b>	<b>Name of the Funding Agency</b>	<b>No. of Students benefitted</b>
<b>15/09/23</b>	Extempore Speaking competition on the theme of "Traditional Knowledge to Artificial Intelligence"	MCM DAV College for Women	63
<b>28/02/2024</b>	Inter College Science Fest	DST/MCM Vigyan Manch	More than 100
<b>07/03/2024</b>	Educational Visit to Science City, Kurkshetra	DST/MCM Vigyan Manch	46

**8. Skill-based Workshops/ Extension Lectures/Panel Discussions organized by the department in the session:**

<b>Title of the Workshop/ Extension Lectures/Panel Discussions</b>	<b>Date</b>	<b>Objective</b>	<b>No. of Students benefitted</b>
Two days workshop on "Renewable energy and Sustainable development" as a part of Askay Urja Diwas 2023	22/08/2022-23/08/23	To provide hands on training and skill development among students	50
Interactive Session by Dr Shilpi Chaudhary from PEC, Chandigarh	22/05/24	To make students aware about National technology day and future prospective	20

**9. ACTIVITIES CONDUCTED BY DEPARTMENT OF PHYSICS, 2023-24**

1. Celebration of Akshay Urja Diwas 23 on 22 August 2023 to 23 August 2023.
2. Extempore Speaking Competition conducted on 15th September, 2023 by Department of Physics to mark the celebrations of Hindi Diwas Celebrations 2023.
3. Education Trip to Science Exhibition on " Renewable Energy and Electric Vehicles " organized by Crest, Chandigarh Administration in Sector-17, Parade Ground, Chandigarh on 23rd September, 2023.
4. Educational trip to three days Training Workshop on Disaster Risk Management and Technological Innovations organized by DST-CPR, Panjab University Chandigarh from 22<sup>nd</sup> November, 2023 to 24<sup>th</sup> November, 2023.
5. Participation in Science Fest at GGS College, 02 February 2024
6. Inter-College Science Fest 2024, 28th February, 2024
7. Educational trip to Science City, Kurkshetra on 07 March 2024
8. Interactive session by Dr Shilpi Chaudhary to mark the celebrations of National Technology Day on 22 May 2024

## 1. CELEBRATION OF AKSHAY URJA DIWAS, 22 August 2023 to 23 August 2023

Mehr Chand Mahajan DAV College for Women marked Celebrations of Akshay Urja Divas by organizing Two Days workshop and Science Exhibition on ‘Renewable energy for sustainable development’ on 22<sup>nd</sup> August and 23<sup>rd</sup> August, 2023 by Renewable Energy Committee & MCM Eco-Club ‘Parivesh’.

The aim of the workshop was to revitalize scientific innovative skills among the students



while tapping various sources of Renewable Energy. The resource person of the workshop was Dr. R. Ridhi, Assistant Professor (Department of Physics, MCM DAV College and Former Research Associate, DRDO, Delhi). She mentioned that it's imperative in current scenario to train students at their early stage of education to work for the societal problems and utilize their knowledge skills in contributing for their nation. Proliferation in skill oriented education; imparting critical and innovative thinking among students in Higher Education Institutes (HEIs) is one of the key objectives of National Education Policy (NEP 2020). Sensitizing the students with current societal problems from time to time with encourage them to use their knowledge skills in working for the nation. Utilizing the critical thinking, problem solving and innovative ideas of the students in their learning stage will make them self-reliant and



better researchers in future. Therefore, it becomes the role of teachers and faculty of HEIs to maintain suitable balance in this regard. The aim of this workshop is to utilize skills of the students and motivate them to correlate science theory with practical training.

Dr. Neetu (Head, Zoology Department and Convenor of Renewable Energy Committee) and Dr. Pallavi Gupta, the coordinators of the workshop said that MCM DAV College always works for sensitizing students in skill paradigm approach and incentivizing them for taking lab to market. Renewable committee provides training platforms for the students by organizing various skill development and value-added programs from time to time.

The inaugural session was followed by the training session in which around 50 students had participated in the workshop. Around 6 working models were prepared by the students in groups under the supervision of Dr. R. Ridhi and Dr. Pallavi Gupta. Dr. Renu Bala (Head, Department of Physics) also motivated the students and appreciated the faculty to conduct such training sessions in future.



Day 2 of the workshop inculcated Exhibition and demonstration of the various models prepared by the students during the training session. Teachers and students from various



departments of the college had attended the science Exhibition and encouraged the students while appreciating their innovative skills. Teachers with their different expertise shared their experiences with students and guided the students for further innovative research skills.

Dr. Indu Arora (Dean Sciences and HOD, Computer science department), Dr. Sarabjeet Kaur (Assistant Professor, Zoology Department) and Dr. Neetu (Coordinator of the workshop and HOD, Zoology Department) took demonstration session of each working model prepared by the students. Students presented their innovative skills through their working models and explained their inspiration and motivation behind utilizing renewable sources as energy storage devices. Dr. Indu Arora, Dr. Sarabjeet and Dr. Neetu guided students to utilize their innovation on large scale and contribute towards college development under supervision of their teachers and technical staff of the department. They also motivated students to pursue minor research projects during their degree courses to integrate skill enhancement proliferation in their career.



Dr. Nisha Bhargava appreciated the efforts made by the students, the resource person and Renewable Energy Committee for conducting a valuable workshop. She mentioned that the models prepared by the students on various themes like Wind Energy based on Electromagnetic induction, Irrigation system using solar power, Representation of MCM DAV college with solar and wind energy, Hydraulic machine based on Pascal's law and Night street sensors shows an encouraging impact on students for utility of Renewable energy. This will significantly be an integrating factor for the sustainable development of the society.



## 2. EXTEMPOERE COMPETITION, 15th September, 2023

Mehr Chand Mahajan DAV College for Women marked celebrations of Hindi Diwas by organizing Extempore Competition on the theme of 'Traditional Knowledge to Artificial Intelligence' on 15<sup>th</sup> September, 2023 by Department of Physics. The aim of the event was to motivate students to understand the significance of Hindi language in maintaining our traditional heritage with simultaneous propagation in Science and Technology. In addition, to sensitize the students about the current theme of Hindi Diwas 2023: Traditional knowledge to Artificial Intelligence.

The guest and Judge of the event was Dr. Sarita Chauhan (Associate Professor and Head, Department of Hindi, MCM DAV College). Dr. Sarita Chauhan elucidated an imperative requirement of spoken Hindi in current scenario to imbibe traditional knowledge amongst students. She highlighted the contributions made by Swami Vivekanand in revitalizing Hindi language and Indian culture correlating Science and Spirituality. She also mentioned that the

### MCM celebrates Akshay Urja Diwas

THE AMAN SANDESH TIMES

**Chandigarh:** To mark the celebration of Akshay Urja Diwas, the Renewable Energy Committee and Eco Club- Parivesh of Mehr Chand Mahajan DAV College for Women, Chandigarh, organised 2-day workshop and exhibition on 'Renewable Energy for Sustainable Development'.

The resource persons for the 2-day event were Dr. R. Ridhi, Assistant Professor (Department of Physics at the college and Former Research Associate, DRDO, Delhi), and Dr. Pallavi Gupta, Assistant Professor (Department of Physics at the college). Inaugurating the workshop, Principal Dr. Nisha Bhargava mentioned that there is an imperative need to work in the domain of energy storage applications utilising renewable sources of energy. She highlighted the impediments and challenges of utilising dams,



wind turbines, grids on solar panels, and asserted that there is a need for better alternative sustainable source to contribute significantly in achieving UN sustainable development goals (SDGs). The inaugural session was followed by the training session in which around 50 students participated. Dr. R. Ridhi mentioned that it's imperative in current scenario to train students at their early stage of education to work for the alleviation of societal problems and utilise their knowledge and skills in contributing

for their nation's development. The participants prepared working models on various themes like wind energy based on electromagnetic induction, irrigation system using solar power, hydraulic machine based on Pascal's law and night street sensors. On day 2, exhibition and demonstration of the models prepared was held. Witnessing enthusiastic participation, the workshop successfully achieved its objective of motivating the students to correlate science theory with practical training.

### एमसीएम ने अक्षय ऊर्जा दिवस मनाया



**चंडीगढ़, 24 अगस्त - एमसीएम** की ओर से अक्षय ऊर्जा दिवस के उपलक्ष्य में चंडीगढ़ में एमसीएम के अक्षय ऊर्जा दिवस के उद्घाटन में विद्युत् प्रेरित एनर्जी मोडल और इनको कलम-पॉपिबेल ने सहायक प्रोफेसर डॉ. पालवती गुप्ता, कार्यक्षेत्र में सहित मुख्य अतिथि शामिल हुए।



2 दिवसीय कार्यक्रम में कॉलेज के भौतिकी विभाग में सहायक प्रबन्धक डॉ. अर. रिद्धि और टीआरडीओ, दिल्ली में पूर्व अनुसंधान सहयोगी, डॉ. आर. रिद्धि और कॉलेज के भौतिकी विभाग में सहायक प्रोफेसर डॉ. पालवती गुप्ता, कार्यक्षेत्र में सहित मुख्य अतिथि शामिल हुए। कार्यक्रम का उद्घाटन करते हुए प्रार्थना डॉ. निखा भारगवा ने कहा कि ऊर्जा के नवीकरणीय स्रोतों का उपयोग करने के लिए वैश्विक वैश्विक टिकाऊ विकास में काम करने की अनिवार्य आवश्यकता है। उद्घाटन सत्र के बाद प्रशिक्षण सत्र हुआ जिसमें लगभग 50 से अधिक स्टूडेंट्स ने अपनी-अपनी प्रकृतियों पर प्रकाश डाला और जोर देकर कहा कि संयुक्त राष्ट्र के सतत विकास लक्ष्यों (एसडीजी) को प्राप्त करने में महत्वपूर्ण योगदान देने के लिए वैश्विक वैश्विक टिकाऊ विकास में काम करने की अनिवार्य आवश्यकता है। उद्घाटन सत्र के बाद प्रशिक्षण सत्र हुआ जिसमें लगभग 50 से अधिक स्टूडेंट्स ने अपनी-अपनी प्रकृतियों पर प्रकाश डाला और जोर देकर कहा कि संयुक्त राष्ट्र के सतत विकास लक्ष्यों (एसडीजी) को प्राप्त करने में महत्वपूर्ण योगदान देने के लिए वैश्विक वैश्विक टिकाऊ विकास में काम करने की अनिवार्य आवश्यकता है। उद्घाटन सत्र के बाद प्रशिक्षण सत्र हुआ जिसमें लगभग 50 से अधिक स्टूडेंट्स ने अपनी-अपनी प्रकृतियों पर प्रकाश डाला और जोर देकर कहा कि संयुक्त राष्ट्र के सतत विकास लक्ष्यों (एसडीजी) को प्राप्त करने में महत्वपूर्ण योगदान देने के लिए वैश्विक वैश्विक टिकाऊ विकास में काम करने की अनिवार्य आवश्यकता है।

### एमसीएम ने मनाया अक्षय ऊर्जा दिवस

**चंडीगढ़, 24 अगस्त (मान संदेश) :** अक्षय ऊर्जा दिवस के उपलक्ष्य में मेहर चंद महानिधि डीएवी कॉलेज फॉर वूमन, चंडीगढ़ की विद्युत् प्रेरित एनर्जी मोडल और इनको कलम-पॉपिबेल ने सहायक प्रोफेसर डॉ. पालवती गुप्ता, कार्यक्षेत्र में सहित मुख्य अतिथि शामिल हुए। कार्यक्रम का उद्घाटन करते हुए प्रार्थना डॉ. निखा भारगवा ने कहा कि ऊर्जा के



सामाजिक समस्याओं के निवारण के लिए प्रेरित करना और अपने देश के विकास में योगदान देने के लिए अपने ज्ञान और कौशल का उपयोग करना आवश्यक है। प्रतिभागियों ने इनको कलम-पॉपिबेल डिजाइन पर अवगत करवाया, और ऊर्जा का उपयोग कर विद्युत् प्रेरित, पावर का निष्पन्न और वाट स्टूट सिंग जैसे विभिन्न विषयों पर चर्चा की। मुख्य अतिथि डॉ. रिद्धि ने कहा कि ऊर्जा के नवीकरणीय स्रोतों का उपयोग करने में काम करने की अनिवार्य आवश्यकता है। उद्घाटन सत्र के बाद प्रशिक्षण सत्र हुआ जिसमें लगभग 50 विद्यार्थियों ने भाग लिया। डॉ. अर. रिद्धि ने उद्घाटन किया कि अक्षय ऊर्जा के उपयोग में विद्यार्थियों को प्रेरित करने के लिए प्रेरित करने के उद्देश्य को सफलतापूर्वक प्राप्त किया।

### MCM celebrates Akshay Urja Diwas

CHANDIGARH, AUG 24

To mark the celebration of Akshay Urja Diwas, the Renewable Energy Committee and Eco Club- Parivesh of Mehr Chand Mahajan DAV College for Women, Chandigarh, organised 2-day workshop and exhibition on 'Renewable Energy for Sustainable Development'.

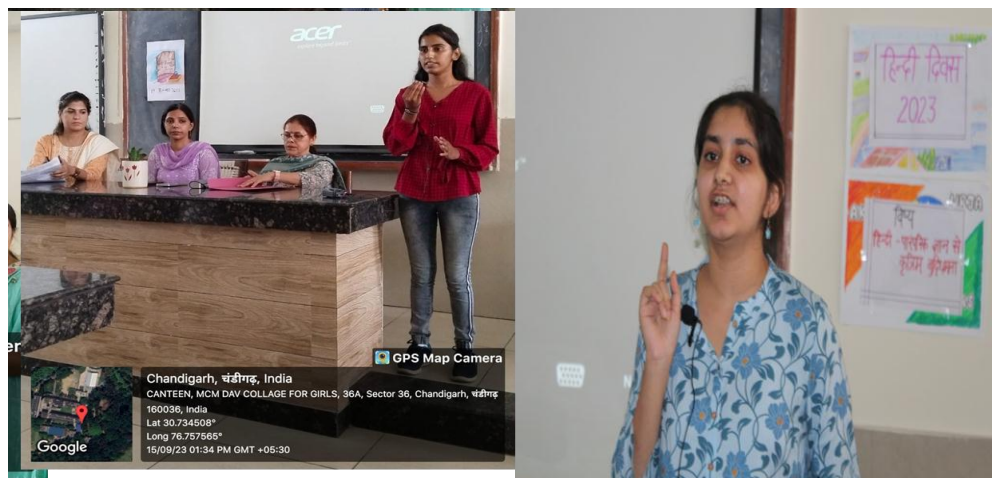
The resource persons for the 2-day event were Dr. R. Ridhi, Assistant Professor (Department of Physics at the college and Former Research Associate, DRDO, Delhi), and Dr. Pallavi Gupta, Assistant Professor (Department of Physics at the college). Inaugurating the workshop, Principal Dr. Nisha Bhargava mentioned that there is an imperative need to work in the domain of energy storage applications utilising renewable sources of energy. She highlighted the impediments and challenges of utilising dams,



wind turbines, grids on solar panels, and asserted that there is a need for better alternative sustainable source to contribute significantly in achieving UN sustainable development goals (SDGs). The inaugural session was followed by the training session in which around 50 students participated. Dr. R. Ridhi mentioned that it's imperative in current scenario to train students at their early stage of education to work for the alleviation of societal problems and utilise their knowledge and skills in contributing for their nation's development. The participants prepared working models on various themes like wind energy based on electromagnetic induction, irrigation system using solar power, hydraulic machine based on Pascal's law and night street sensors. On day 2, exhibition and demonstration of the models prepared was held. Witnessing enthusiastic participation, the workshop successfully achieved its objective of motivating the students to correlate science theory with practical training.

significance given to mother tongue in National Education Policy 2020 as an encouraging platform to proliferate innovative and logical thinking amongst students. She appreciated Department of Physics for conducting such events for the students.





Dr. Renu Bala (Head, Department of Physics) and Dr. R. Ridhi, the coordinators of the event mentioned that this event is one such effort to obviate the barriers of language in understanding Science and Reasoning. Moreover, this event is one of the paradigm approaches to sensitize students about the theme of Traditional Knowledge to Artificial Intelligence. Dr. R. Ridhi mentioned that current emerging proliferation in Artificial Intelligence is rooted from our ancient Indian culture. Therefore, we should also maintain connectivity with our traditional culture and language because that will help us to foster in our future perspectives.

Around 63 students had attended the event and 16 students had participated in the competition. The students shared their views in Hindi language on different topics like Chandrayan, Indian Women Scientists, National Education Policy 2020, Swachhta Abhiyan, Atma Nirbhar Bharat, Artificial Intelligence, Aditya L1, Role of Language in Science Communications, G 20 and many more.

Best three prizes followed by two consolation prizes were given to students to integrate incentives for them to link with such events in future. First prize was bagged by Ankita Arora, BSc. 2<sup>nd</sup> year (Computer Application), Second Prize was given to Saumya Gautam, BSc. 1<sup>st</sup> year (Non-Medical), Third Prize was given to Pragya, BA 2<sup>nd</sup> year. Two consolation prizes were given to Manal Chaudary (BSc. 1<sup>st</sup> Non-Medical) and Aditi Sood (BSc. 2<sup>nd</sup> Computer Application)



Dr. Nisha Bhargava appreciated the efforts made by the students, Department of Physics and Dr. Sarita Chauhan for emphasizing the significance of Hindi Diwas 2023 and sensitizing the students with Traditional Knowledge to Artificial Intelligence. She mentioned that the enthusiastic participation of the students in correlating Hindi language with Science and Reasoning shows an encouraging impact on students to be rooted with their traditional culture.

### **3. EDUCATIONAL TRIP TO SCIENCE EXHIBITION, 23rd September, 2023**

Renewable energy Committee in collaboration with Department of Physics had organized an educational trip for 30 college students of BSc Non-Medical (1<sup>st</sup> and 3<sup>rd</sup> year) and BSc. Computer Applications (2<sup>nd</sup> year) to a Science Exhibition on “Renewable Energy and Electric Vehicles” conducted by Crest Chandigarh Administration in Sector 17, Parade ground on 23<sup>rd</sup> September, 2023).



The aim of the visit was to sensitize students about the applications of electrically charged vehicles, night street sensors, Light emitting diodes (LEDs) and cooking stoves based on kitchen wastes utilizing renewable energy resources. It also aimed to revitalize innovative skills amongst students by training them through exhibition visit of current products. Teacher in charge Dr. R. Ridhi and Mr. Jai Prakash (Senior Lab attendant of the Department) accompanied the students.

Students had a great learning experience while interacting with various displayed products based on electrical charged vehicles, LEDs and Night street lights based on Solar panels energy storage, Gas stove operation based on kitchen organic waste, Electrical charged loading van and many more. Students were very enthusiastic during the complete exhibition visit. Demonstration sessions were also attended by the students to enhance their learning skills and create their own innovative ideas for their future research projects.





Two students of BSc (Non-Medical) 1st year Manal Chaudhary and Saumya Gautam also gave a short talk on "Significance of Aditya L1 mission for analyzing solar harnessing efficiency " and " G20 highlighting Renewable energy resources ". Manal Chaudhary was also the winner of the short games conducted during the exhibition.

The visit was a fruitful learning experience for the student's innovative skills among the students while tapping various sources of Renewable Energy.

Dr. Nisha Bhargava Principal of the College appreciated the efforts of Renewable Energy Committee and Department of Physics for conducting such educational trips which are indispensable for uplifting the student's skill innovative tracks. She also mentioned that its inevitable in current scenario to keep students updated about the current scientific innovations and visit of such science exhibitions is a significant effort in this regard.



#### **4. EDUCATIONAL TRIP to “Training Workshop on Disaster Risk Management and Technological Innovations” 22<sup>nd</sup> November 2023 to 24<sup>th</sup> November, 2023**

Dr. Renu Bala (HOD, Department of Physics) and Dr. Gunjan sud (HOD, Department of Boatny) took 8 selected students for three days training workshop on “Disaster Risk Management and Technological Innovations” organized by DST-CPR, Panjab University, Chandigarh from 22<sup>nd</sup> November to 24<sup>th</sup> November, 2023. The main aim of the training workshop was to make students aware about various natural disasters and preventive measures.

Students attended invited talks by eminent speakers like Dr. Kulbir Bath, Joint Director, Panjab State Council for Science and Technology (PSCST), Govt. of Punjab, Dr. Ashish Kumar Panda, Deputy Secretary, NITI Ayog, New Delhi and others. Students also attended the training session

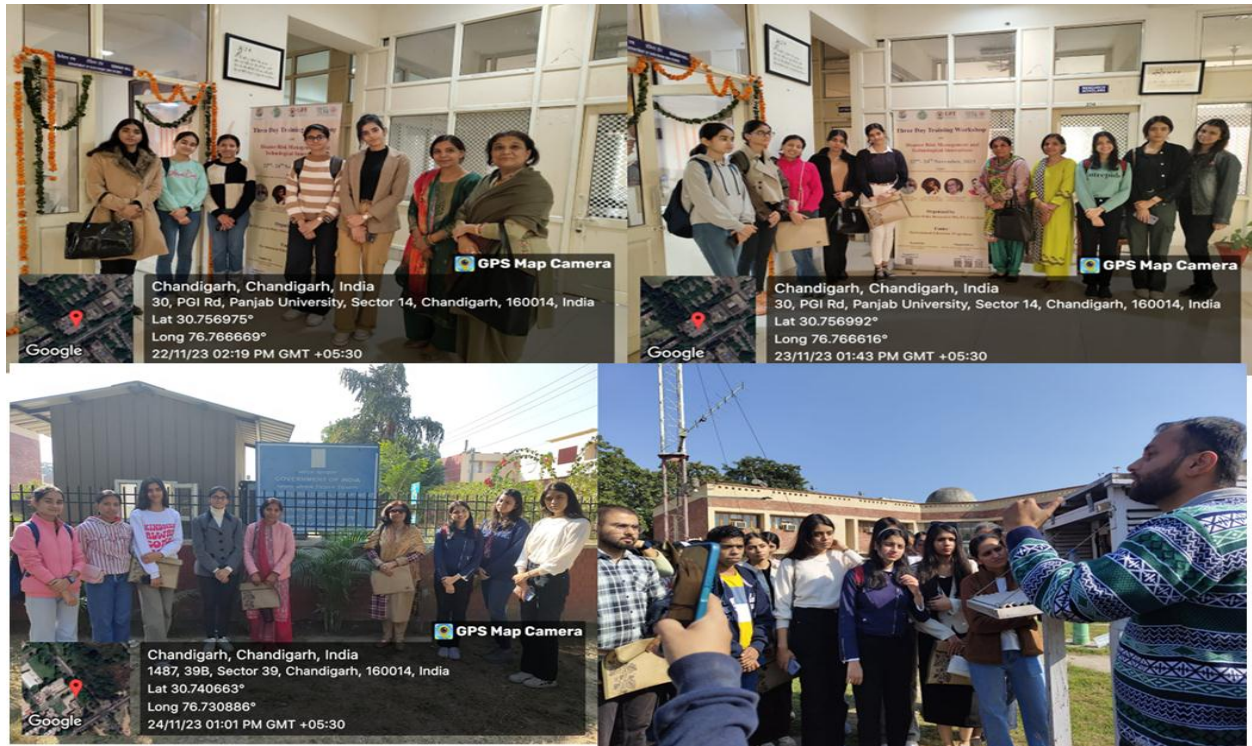


on Hands on training on CPR as First aid to participants and natural and man-made disaster management such as earthquake, fire, floods, avalanche, etc. at DRDO- DGRE, Sector-37, Chandigarh.


Students were also taken for a visit to CSIR- CSIO and IMD Chandigarh to explore existing Technologies in the field of Urban Management and Weather forecasting during the training session. In Indian Metallurgical Department (IMD), they were made to learn about how weather forecasting is done and climate changes are predicted by various methodologies. During the valedictory session a Quiz Competition was organized and Mehakmeet Kaur of BSc 1<sup>st</sup> (Computer Applications) was awarded 1<sup>st</sup> prize.







5. **SCIENCE FEST at GGS College:** Five Students of BSc.3rd year Non-Medical and B.Sc. 2nd year Computer Science participated in Science Fest organized by Guru Gobind Singh College for Women, Sector-26, Chandigarh on 02 Feb 2024. Ms. Ankita Arora bagged 3rd prize in Logo designing.


**Mehar Chand Mahajan**  
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Ref. No.: 4135/2024 Dated: 02/2/24

**Authority Letter**

The following bonafide students of our college are going to participate in the Science Fest 2024 in Guru Gobind Singh College for Women, Sector 26, Chandigarh to be held on 2<sup>nd</sup> February, 2024:

1. Poster Presentation			
Jashanpreet	911	BSc. NM-III	Day Scholar
Sneha Dhanekar	1006	B.Sc. II Voc	Hosteller(Block C)
Chitavi Rani	695	B.Sc. III Med	Day Scholar
Hridhi Sharma	7356	B.Sc. MPT-I	Day Scholar

2. Logo Designing			
Ankita Arora	1005	B.Sc. II Voc	Day Scholar

3. Science Meming			
Jasleen Kaur	1001	B.Sc. II Voc	Day Scholar

4. Slogan Writing			
Kanupriya	1044	B.Sc. II Voc	Day Scholar

5. Power Point Presentation			
Ashmeet Kaur	680	BSc. III Med.	Day Scholar
Prachi Thakar	1285	BSc. II Med	Day Scholar

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## 6. INTER-COLLEGE SCIENCE FEST, 28th February, 2024

MCM Vigyan Manch and Institutions Innovation (IIC 6.0) organized Inter-College Science Fiesta 2024 to mark the celebrations of National Science Day 2024 on 28th February, 2024. As a part of the program, Department of Physics organized Innovative Science Model Competition. The objective of this competition was to incentivize students to understand practical implications of scientific skills while utilizing their scientific concepts and knowledge in practical demonstrations.

Around 31 participants from different colleges registered for this competition and 6 models were demonstrated during the event. Students from different colleges demonstrated their working models on various sustainable scientific skills imperative to obviate various impediments of society. Students also demonstrated the positive aspect of Artificial Intelligence (AI) while presenting innovative model on Spy robot with its societal applications. The various other models demonstrated inculcated Ecoblade as sustainable and cost effective source, Wind turbine, Smart city-Sustainable city; Application of Hydraulic lift and Pascal's law in Chadrayan Mission and Remote Operated Spy Robot.





First prize was bagged by Team of Akanksha Dhiman, Gagandeep Kaur and Deepali from Guru Gobind Singh College, Sector-26, Chandigarh, Second prize was bestowed on Team of Harmandeep Kaur and Yogita, from MCM DAV College and 3rd prize winners were Team of Shreya Rajsi and Navjot Kaur from PGCG, Sector-11, Chandigarh.

Dr. Nisha Bhargava, Principal of the College appreciated the efforts of Department of Physics and mentioned that such events are indispensable to incentivize students to make learning innovative and interesting. She also mentioned that it's imperative for the students to understand positive and negative aspects of AI. Organization of such paradigm events are revitalizing in imbuing students viable approach in Science and Technology.

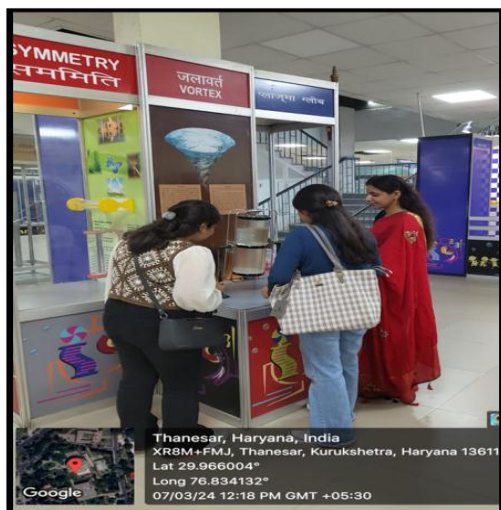
Dr. Indu Arora, Dean Sciences and Dr. Shefali Dhiman, Vice President IIC 6.0 appreciated the efforts of coordinators and students to make an enthusiastic approach to train students for scientific skills in an innovative way.

## 7. EDUCATIONAL TRIP TO SCIENCE CITY, 07 March 2024

The Department of Physics under the aegis of MCM Vigyan Manch, organized an educational trip to Science City, Kurukshetra on 07 March 2024, sponsored by the Department of Science and Technology & Renewable energy, Chandigarh Administration.



46 B.Sc students along with faculty Dr Renu Bala (HOD) and Mrs Anu Rathi, lab assistants Mr Rohan Malra, Mr Jai Parkash visited Kurkshetra Panorama and Science Centre, Kurkshetra, Haryana. The students learned the basics of Science through various interesting ways. Students watched three Shows-(i) 3D movie related to the aquatic animal kingdom, (ii) SDL Show related to the experimental demonstrations such as Bernoulli's Principle, low temperature behavior of liquid Nitrogen, creating artificial cloud etc. and (iii) TaraMandal Show related to various Stars, constellations. Thereafter students performed many experiments themselves on Vortex, Symmetry, Plasma Globe, Transfer of momentum, Changing color due to polarization of light, Floating ball in air due to Bernoulli's principle, Planetary motion, Virtual Reality, Rising bubbles observed since the pressure directly varies with the length of liquid column expand and grows in size etc. Students also explored various other museums nearby. Overall it was very fruitful educational trip that give exposure to the students and motivated them.





## 8. INTERACTIVE SESSION TO CELEBRATE NATIONAL TECHNOLOGY DAY, 22 May 2024

An interactive session was organized by Department of Physics on 22nd May, 2024 under the aegis of Institutes Innovation Council 6.0 for the faculty as well as students to mark the celebrations of National Technology Day 2024. The objective of this interactive session was to make students aware about technology day and train the final year students for their future aspects and other career related opportunities inculcating research and academic approaches.

