SMVEC
SCHOOL OF ARTS AND SCIENCE
(Approved by Government of Puducherry, Affiliated to Pondicherry University)
Madagadipet, Puducherry - 605107

PG DEPARTMENT OF PHYSICS

DEPARTMENTAL ACTIVITY REPORT

DR. A.P.J. ABDUL KALAM BIRTHDAY CELEBRATION

The students and faculty of Physics department gathered on October 19.10.24 and 24.10.24 to celebrate the birth anniversary of Dr. A.P.J. Abdul Kalam, the former President of India and an inspiring visionary. The event aimed to honour his legacy by organizing various competitions and a tree plantation drive, reflecting his commitment to education, innovation, and environmental sustainability.

Competitions and Activities

The celebration began with a heartfelt tribute to Dr. Kalam, highlighting his contributions to science, technology, and the youth of the nation. To commemorate his ideals, several competitions were held, including:

- **Essay Writing Competition** – Students expressed their thoughts on Dr. Kalam's vision for India and the importance of scientific advancement.

- **Speech Competition** – Participants eloquently spoke about Dr. Kalam's life, achievements, and his message to the younger generation.

- **Quiz Competition** – A knowledge-based competition tested students on facts related to Dr. Kalam, space research, and scientific innovations.

Tree Plantation Drive

Following the competitions, a tree plantation drive was organized within the college campus. Faculty members and students actively participated in planting saplings, reinforcing Dr. Kalam's vision of a greener and more sustainable future. The initiative aimed to instil a sense of environmental responsibility among students and contribute to a healthier ecosystem.

Conclusion

The event was a grand success, filled with enthusiasm and deep respect for Dr. A.P.J. Abdul Kalam. It not only provided a platform for students to showcase their talents but also encouraged them to follow his ideals of perseverance, knowledge, and dedication to the nation. The tree plantation drive served as a meaningful gesture towards environmental conservation, making the celebration even more impactful. The college extends gratitude to the organizing committee, faculty members, and students for their active participation in making this event a memorable one.

NATIONAL SCIENCE DAY CELEBRATION 2025

Introduction

National Science Day is celebrated annually on February 28th to commemorate the discovery of the Raman Effect by Sir C.V. Raman. This occasion serves as a platform to promote scientific awareness and innovation among students, researchers, and the general public. This year, our department organized a special event focusing on the critical role of climate science in shaping the future, with a guest lecture on **"Climate Data Analysis and Communication for Youth Empowerment."**

Event Highlights

The event commenced with an inaugural session, featuring esteemed dignitaries, faculty members, and students. The opening speech emphasized the significance of National Science Day and the necessity of engaging youth in climate science. Following the welcome address, the keynote lecture was delivered by **Mr.Kalamegam M.Tech Environmental Engineer Department of science technology and environment , Government of Puducherry,** and **Mr.T.Balaji M.Tech Senior Associate Puducherry climate change cell** a renowned expert in climate studies and environmental communication.

Guest Lecture: Climate Data Analysis and Communication for Youth Empowerment

The guest lecture was the focal point of the celebration, shedding light on the vital role of climate data in understanding environmental changes and formulating sustainable solutions. The session covered:

- **Understanding Climate Data:** The speaker elaborated on various sources of climate data, including satellite observations, meteorological stations, and oceanographic research. The importance of accurate data collection and its role in climate modeling was emphasized.
- **Data Analysis Techniques:** The audience was introduced to essential techniques for processing and interpreting climate data, including statistical analysis, machine learning applications, and trend forecasting.
- **Effective Communication Strategies:** The speaker stressed the necessity of translating complex climate data into accessible and actionable information for policymakers, businesses, and the general public. Various communication tools such as visualizations, infographics, and social media campaigns were discussed.
- **Youth Engagement and Empowerment:** Recognizing the power of young minds in addressing climate challenges, the session encouraged students to actively participate in climate-related research, advocacy, and policy-making. Opportunities for youth involvement in citizen science projects and international climate initiatives were highlighted.

Interactive Session and Demonstrations

Post-lecture, an interactive Q&A session allowed participants to engage with the speaker, seeking insights on real-world climate issues and potential career paths in climate science. Live demonstrations of climate data analysis tools and software provided a hands-on experience, further enhancing the learning process.

Conclusion

The National Science Day celebration concluded with a vote of thanks, acknowledging the contributions of the speaker, organizing committee, and participants. The event successfully fostered scientific curiosity and reinforced the crucial role of climate literacy in empowering youth to address environmental challenges.

Impact and Takeaways

- Greater awareness among students regarding climate data analysis and its real-world applications.
- Motivation for young minds to pursue research and careers in climate science and environmental communication.
- Strengthened collaboration between academic institutions and climate experts for future engagements.

Through this event, we reaffirmed our commitment to scientific exploration and the empowerment of youth as proactive contributors to climate resilience and sustainability.

TWO DAYS INTERNATIONAL CONFERENCE ON NANOSCIENCE AND COMPUTATIONAL MODELLING (ICNCM 2025)

Introduction

The **School of Arts and Science, SMVEC**, in collaboration with the **Department of Physics and the Department of Chemistry**, successfully organized the **Two Days International Conference on Nanoscience and Computational Modelling (ICNCM 2025)** on **March 12 & 13, 2025** in **Hybrid Mode**. The conference provided an excellent platform for researchers, academicians, and industry professionals to exchange knowledge, present their latest research, and discuss innovative developments in the fields of nanoscience and computational modelling.

Conference Highlights

The conference was inaugurated by esteemed dignitaries and featured keynote addresses by distinguished speakers from renowned institutions. The event included insightful technical sessions, paper presentations, and discussions on cutting-edge researc

- A total of **[80]** research papers were presented, and interactive sessions encouraged discussions among participants. Poster presentations allowed researchers to showcase their work, fostering collaboration and networking opportunities

Guest Speakers and Resource Persons

Prominent speakers included:

- **Dr. N. Vijayan** – Senior Principal Scientist, CSIR-NPL, New Delhi.

- **Dr. R. Sathiskumar** – Principal Research Scientist, Indian Institute of Science, Bangalore.

- **Dr. Cathrin Lims Selvakumar** – Post-Doctoral Researcher, Department of Physics, National Sun Yat-Sen University, Taiwan.

- **Dr. S. Santhoshkumar** – Post-Doctoral Researcher, Department of Chemistry, National Sun Yat-Sen University, Taiwan.

- **Ramesh L. Gardas** – Professor, Department of Chemistry, IIT-Madras

- **Dr. R. Venkatesan** – Professor, Department of Chemistry, Pondicherry University.

- **Dr. S. Periandy** – Associate Professor, Department of Physics, KMGIPSR, Puducherry.

Their sessions provided valuable insights into the latest advancements and challenges in nanoscience and computational modelling.

Participation and Engagement

The conference attracted **[450]** participants, including UG & PG students, research scholars, faculty members, and industry professionals. The interactive discussions and Q&A sessions allowed attendees to gain in-depth knowledge and explore future research collaborations.

Conclusion and Takeaways

The **ICNCM 2025** conference was a resounding success, fostering a vibrant exchange of ideas and research findings. Key takeaways included:

- Strengthening collaborations between academic institutions and industry professionals.
- Enhancing awareness and knowledge of computational modelling in nanoscience.
- Encouraging young researchers to explore innovative solutions in nanotechnology.

The event concluded with a **vote of thanks**, expressing gratitude to the organizing committee, participants, and speakers for their invaluable contributions. The success of ICNCM 2025 has paved the way for future scientific engagements and collaborative research initiatives.