

**ACTIVITY REPORT**  
**DEPARTMENT OF PHYSICS**  
**2015-16**

➤ **Invited Talk on Solar Panel and uses of solar energy**

Invited Lecture on Solar Panel by Mr. Anto Chirayath, Electronic Technician on 17<sup>th</sup> September 2015 from 12.30 pm-1.30 pm in the Jubilee Hall. He explained the importance of use of solar panels to generate electricity from solar energy. He demonstrated the working of solar panels and its installation procedure with connection diagram. He admits his willingness to help in the installation of solar panel in houses of students and motivate each student to use solar energy. He explained the construction of solar pump with his own video on making the solar motor. The class was motivating and he cleared all the doubts of the students with great enthusiasm. The students have hands on experience in connecting the solar panel to a lamp.



## ➤ **Poster Presentation on the Life & quotes of Dr. A P J Abdul Kalam**

October 15 being the birth anniversary of Dr. A P J Abdul Kalam, A journey through the life and quotes of Dr. APJ Abdul Kalam is organized in the open stage from 9.00 AM to 3.15 PM. APJ Abdul Kalam, the ‘missile man’ who came to be known as ‘People’s President’ died on 27 July 2015 after he collapsed during a lecture at the IIM in Shillong.

A lifelong scientist, Kalam’s prominent role in India’s 1998 nuclear weapons tests established him as a national hero. Among his many accolades, including honorary doctorates from 40 universities, he was granted the Padma Bhushan (1981), the Padma Vibhushan (1990), and the Bharat Ratna (1997) — India’s highest civilian awards — for his contributions in modernizing government defence technology. Known as the People’s President, Kalam was so popular that MTV nominated him for a Youth Icon of the Year award in 2003 and 2006. A bachelor, the former President was a veena player and was deeply interested in Carnatic music. He was vegetarian all his life. Some of the posters are:

### *Dr. Avul Pakir Jainulabdeen Abdul Kalam ( Dr. APJ Abdul Kalam)*

**Born** :15th October 1931

**Place of Birth** : Rameswaram, Tamilnadu

#### **Education:**

- Graduated in Science from St. Joseph's College, Trichy in 1954
- Specialized in Aeronautical Engineering from Madras Institute of Technology (MIT) in 1957.





*Dr. APJ Abdul Kalam*

*People's President*

11<sup>th</sup> President of India  
25 July 2002-25 July 2007



ഉറക്കത്തിൽ കിടന്നുനോക്കി സ്വപ്നം,  
നമ്മുടെ ഉറക്കം നഷ്ടപ്പെടുത്തുന്നതാണ്  
ഘമാദമ സ്വപ്നമെന്നു നമ്മെ പഠിപ്പിച്ച  
അല്ലെങ്കിൽ കലാപം സ്വപ്നങ്ങൾ  
ബാക്കി വെച്ച് നമ്മെ പിരിഞ്ഞിരിക്കുന്നു.

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An aeronautics engineer from Madras Institute of Technology, Kalam was considered the brain of missile programme in India got and as Chief Scientific Adviser to Vajpayee was also instrumental in the Pokhran nuclear test in 1998.

As President, Kalam utilised any opportunity that came to him to address students, especially school children, to dream big so that they became achievers in life. The exhibition is arranged to motivate young minds through his life and quotes.

➤ **Talk on Ill-effects of Fireworks & Upkeep of Clean Environment**

Talk on Ill-effects of Fireworks & Upkeep of Clean Environment by Prof. K R Janardhanan, Retd. HOD of chemistry, N.S.S College, Nenmara on 11<sup>th</sup> March 2016 from 9.30 am-11.00 am in the Jubilee Hall.



Our planet is no longer the green planet we had inherited from our forefathers. Environmentalists and scientists have affirmed in no uncertain terms that a host of factors like uninhibited industrialization, unchecked urbanization, fossil fuel emissions etc. have done tremendous damage to the ecology and environment and humankind has to brace for the impact of greenhouse gas emissions and climate change. It is as a part of this

effort that world leaders came together at COP21 in Paris recently and underscored preservation of environment as collective responsibility. In this context, the Supreme Court's order Civil Writ Petition No:728/2015 dated 16-10-2015 expresses serious concerns over environmental health hazards and the toxic fallout that fireworks pose.

We know that the smoke from fireworks consists mainly of particulate matter that can enter lungs and severely affect people with asthma or multiple chemical sensitivity. Fireworks shows also spray out a toxic concoction of carcinogenic and hormone disrupting substances that seep into soil and water. Still worse are the chemicals in fireworks that persist in environment and do not break down. On festive occasions, the levels of particulate matter in the air increases beyond the permissible levels. At a time when issues of climate change and global warming have captured international attention, we need to all it takes to educate students about the severity of toxicity of fireworks so as to discourage their usage. Let us join hands to save our planet.

### ➤ **Quiz on Nobel Prize Winners-2016**

The aim of this program is the enhancement of student-faculty interactive partnerships to strengthen education. The unique nature of the quiz is the nature of the participating teams which consists of one faculty, one PG student and 2 UG students. The expected outcome of this programme is to develop a research culture in the college that will occur through the close interaction of the faculty with the students by sharing their time, expertise and intelligence.

The Quiz on Nobel Prize Winners is held on 19<sup>th</sup> February 2016 which is sponsored by Sopanam, Dr. C V Krishnan & Mrs. Nalini P Krishnan Charitable Trust, Thrissur.

**First Prize - Rs: 20,000/-**

**Second Prize - Rs: 12,000/-**

**Third Prize - Rs: 8,000/-**

The Nobel Prize Winners selected for the quiz are

- Albert Einstein
- Amartya Sen
- Watson & Crick
- Nelson Mandela

It is announced in July and the preliminary round is conducted on 15<sup>th</sup> December 2015. The quiz master is Dr. Jijo P Ulahannan, Assistant Professor in Physics, Maharaja's College, Ernakulam. 10 Teachers, 25 PG students and 231 UG students of various discipline participated in the preliminary written test and 6 groups are selected for the final round.

*The selected groups for the final round are*

1	Manita Gabriel (Faculty-B.Voc) Surya K S (M.A. Economics) Jojiya K J (B.Sc Maths) Aleena Mathew (B.Sc Chemistry)	2	Shelja Jose (Faculty-Computer) Jyothi (M.Com) Soverin (B.Sc Maths) Ajisha P A (B.Sc Chemistry)
3	Neetha C Menon (Faculty-Computer) Ann Joseph (M.Com) Greeshma Xavier (B.Sc Maths) Aiswarya Murali (B.Sc Maths)	4	Abhini P K (Faculty-English) Theresa Ouseph (Psychology) Sony Sunny (BA History) Anjaly Warriar (B.Sc Microbiology)
5	Meghna Davy (Faculty-English) Sreeja Santhoshkumar (M.Sc Maths) Smaya (B.Sc Maths) Vismitha K S (B.A History)	6	Anu Aravind (Faculty-Chemistry) Femi Moni (M.Com) Aparna Eswar (B.Sc Maths) Aparna A R (B.Sc Chemistry)



*The Winners of final round are:*



I Prize – Ms. Shelja Jose (Faculty-Computer), Ms. Jyothi (M.Com), Ms. Soverin (B.Sc Maths), Ms. Ajisha P A (B.Sc Chemistry)



II Prize- Ms. Meghna Davy (Faculty-English), Ms. Sreeja Santhoshkumar (M.Sc Maths)  
Ms. Smaya (B.Sc Maths), Ms. Vismitha K S (B.A History)



III Prize - Ms. Manita Gabriel (Faculty-B.Voc), Ms. Surya K S (M.A. Economics)  
Ms. Jojiya K J (B.Sc Maths), Ms. Aleena Mathew (B.Sc Chemistry)