



# An Initiative of IIT Community for social upliftment

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Newsletter August 2013

In the month of July, after summer holidays, various programmes of Shiksha Sopan started with full rigour. New appointment in Sopan Vidyalaya, some innovations in Sopan Science Cell, some special classes for Sopan students and other programmes were done in this month by Shiksha Sopan.

#### One Day Physics Workshop at Anveshika

Shiksha Sopan in collabration with SGM-IAPT Anveshika organized a one day Physics workshop at Indira Nagar on 25th July, 2013 for 50 students of class 11. Mr. Chandra Prakash Gupta, Principal, Saraswati Gyan Mandir and Dr H C Verma, president Shiksha Soapan lighted the lamp and inaugurated the program. The theme of the workshop was Electricity and Magnetism.







Prof. H. C. Verma academic sessions, taught During electricity/magnetism in three different slots, each of one hour duration. Prof. Verma started his lecture by telling that the world is made of two kinds of entities: fields and materials. This was a new way of looking at the nature around and connected well with the topics of electricity and magnetism.

Prof. Verma used seven experimental video clips prepared by Shiksha Sopan, during the three lectures. Each of these clips were of a short duration, typically less than a minute. As discussed in July 2013 newsletter, Shiksha Sopan is developing teaching modules with the help of short video clips and the project is named as Academic Development of All Rural Societies in Hindi-belt (ADARSH). The lectures by Dr Verma were also a display of how to use ADRASH Video clips. Before introducing any phenomena, he played the video and explained what was going on in that experiment. Once the phenomena was fixed in mind, he developed the equations and laws so as to understand the experiments seen. With the help of these videos, students could fully concentrate and grab more and more concepts into the mind in very natural manner which generally students do not understand with blackboard alone.

Between the lectures, there were other sessions to give them a change. Mr. Ranjit Kumar with Mr. Anurag Pandey organized a one hour hands-on activity session with the students. Mr. Ranjit Kumar prepared a special cap using old newspapers. During the paper folding, Ranjit explained about angles and shapes. This activity gave full entertainment and knowledge about geometry. In this activity session, another item was to play with ring magnets. They prepared a model in which a pencil hangs vertically among three magnets arranged in proper manner and specific poles orientation of the ring magnets.

In another one hour session between the second and the third lecture, demonstration of some experiments on electricity and magnetism were done n by Mr Yogesh of Anveshika. He talked about fuses used in electrical circuit and showed how excess current burns the fuse or breaks the circuit through MCB.

The whole workshop was properly directed by Mr Amit Kumar Bajpai.

#### **Special Classes for Sopan Students**

On 17th and 18th July at L-8 IITK, Dr H C Verma gave 2 lectures to class 11 students on "Waves" using ADARSH videos. In each lecture 3 or 4 video clips of less than a duration were used showing the actual experiments on the topic delivered. He talked about wave propagation, longitudinal reflection transverse waves, of waves, equations for travelling waves, formation of



nodes and antinodes etc. For each of these phenomena he had a clip and used it before discussing that topic. This mode was quite successful as the students learnt the topics with great interest and developed feel of the subject. We are developing ADARSH video clips on several other topics to teach the basics of science.

### Innovative experiments by Science Cell

Shiksha Sopan Science Cell has been very active. Mr Ranjit Kumar, coordinator Science Cell, with the team members Mr Deepak Mishra, Mr Atul Kumar and Mr Vimal Kumar, made some innovative experiments/demos in this month. They came up with some new ideas to demonstrate science with the help of some new activities. They made a toy car for demonstrating Rocket principle and also designed a model with the help of pencils and magnets to demonstrate magnetic properties.



This cell gave a 2 hours session to students of evening centre at old SAC. A total of 35 students from class 6 to 12 participated in this program. Science team trained them on the activities based on Pressure. By using Syringe, bottles and balloons, they demonstrated different phenomenon of Pressure.

#### SASK (Shiksha Sopan Anaupcharik Shikshan Kendra)

After summer vacations, SASK started their classes from 1<sup>st</sup> July, 2013. Admission process is still going on. A new appointment, Mr Gaurav, has been made in this session. He is very intelligent and enthusiastic person. Mr Gaurav is pursuing Bachelor of Science and is also doing preparation for IIT JEE. Though he is primarily appointed for teaching mathematics, he is taking initiative in other fields too. Mr Gaurav has designed a Game for students at class 3<sup>rd</sup> to class 5<sup>th</sup> level. By playing this game children enjoy and also understand the importance of environment.

Mr Ashish Batlar, IITK B Tech student had given classes on mathematics and taught the students about LCM, HCF, Fractions and Equations in July.

Ms Seema and Ms Suneeta visited the houses of students and talked to the parents about the importance of education and encouraged them to participate in the process. The two also went to families where children were not sent to any school. Ms Seema and Sunita talked to the parents for sending the children for education.



There had been some new changes introduced in this session. Children decorated their school by making paintings in the classroom walls, by putting new paint on the main gate of the center and so on, before the session formally started. This gives an attachment with the school as children think that they have made it attractive and it is their school. In the morning, school starts with the slogan "ASTO MAA SADGAMAY, TAMSO MAA JYOTIRGAMAY". Then every day children make a promise such as to be a good human, respect environment, be patriotic, be sensitive, keep the cultural heritage alive and so on.

## **HE Cell operations**

Shiksha Sopan Higher Education Cell sanctioned financial help to four of its volunteers going for education beyond class 12 in the month of July. These are (1) Nazir Hussain, Rs 16,000 for doing technical training from JK Center, (2) Rachana Yadav, Rs 10,700 for BA 1<sup>st</sup> year, (3) Deepak Mishra, Rs 15,000 for B Sc final year and (4) Archana Sharma, Rs 11,000 for BSc 2<sup>nd</sup> year. These amounts are given mainly from the donation received from Mr Abhishek Purwar towards HE Cell 2013-14 expenses.

We have some more requests from our Sopan center students and we are in the process of collecting funds for them.

#### **Evening Learning Centers**

The UG students go for vacation during May-July. The evening center at old SAC started on July 6 but the work force was limited due to non availability of UG students. Some Ph D students continued but it was not sufficient as the number of children was quite large. It was heartening to see that students who had passed from this center in the previous year, came forward to help and many of them like Archana, Pawan, Mukesh, Sarika and Poonam regularly came and

gave classes to the children in this month of July. Students who studied at our center passed class 12 in the UP Board exam with good marks. Anjani and Poonam got 78% marks, Pawan was at 75%, Diksha at 70%, Pankaj at 65% and Vedprakash at 60% were some of the high scorers among the 15 students of our center. Among these, Vedprakash has joined Paramedical College Kanpur for Physiotherapy course.



#### Mr Sudhir Mittal visits Shiksha Sopan Center

Mr Sudhir Mittal an alumni of IIT Kanpur 1970 batch, and a leading Industrialist of Ghaziabad, visited Sopan Evening Centre on 31st July. About 60 children from class 6-12 were studying in different groups with different teacher volunteers. Later they all sat in formation and Mr Mittal interacted with them. He told them about the importance of strong determination and hard work and shared many of his own experiences. He emphasized on always keeping the spirit of giving back as mentioned in our title song "Desh hame detaa hai sab kuchh, ham bhee to kuchh denaa seekhen". Later he held a separate meeting with our volunteers and expressed his appreciation of the whole efforts.

#### Other Informations

Web site: For more details please visit www.shiksha-sopan.org

How to donate: Shiksha Sopan

- (a) You can pay through credit/debit card by going to www.godparents.in, clicking "support a child" from the left top panel, selecting Shiksha Sopan from the "caretaking NGO" list at the bottom left of the page and then selecting a child from the list. Click on "Be my Godparent" below the photograph.
- (b) You can write cheques/draft for donations in the name of "Shiksha Sopan" payble at Kanpur and send to the address given below.
- (c) Online transfer can be made in State Bank of India, IITKanpur branch. Account No. **10426002488**, Account name "Shiksha Sopan", IFSC code **SBIN0001161**
- (d). People in US can use the link http://indolink.com/iitk/ to donate through IIT Kanpur foundation using credit cards.

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