

**Shiksha**

**Sanskar**

**Swavalamban**

# **Shiksha Sopan**

**An Initiative of IIT Community for social upliftment**

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**Newsletter July 2013**



June 2013 brought one of the most disastrous calamity of the world, Uttarakhand cloud bursting and flood. Shiksha Sopan expresses solidarity with the fighting Uttarakhand people and all the pilgrim visitors who got trapped in the tragedy. Sopan is doing some fund collection for the relief work going on there.

We had the Phase-II of PPY(Sr) Summar camp, a visit to Regional Science City Lucknow, and special classes for Sopan children by Dr H C Verma implementing video clips based teaching programme.

## **Uttarakhand Tragedy**

Uttarakhand witnessed one of the worst calamity on June 16<sup>th</sup> and the scale of devastation started showing up soon. Army, Govt Machinery and NGOs, all did their level best to fight out the situation. Large resources are needed to help the people trapped there and the local population who have lost everything.

Shiksha Sopan took the first initiative to collect funds from IIT Kanpur community for Uttarakhand Relief. Many helping hands came up and we sent cheques worth Rs 1,69,000 on June 27<sup>th</sup> to the organization Uttarakhand Daivi Aapda Peedit Sahayata Samiti actively involved in helping the people who need it most. We are receiving more requests from our community to take their donation and send them to the right hands. We hope to send another lot of Rs 1 lac or more in the 1<sup>st</sup> week of July.

Shiksha Sopan thanks all the donors who have expressed their faith in Sopan.

## **Summer Camp Phase II**

The summer camp for the 13 children of Pratibha Poshan Yojana (PPY) Senior was organized in two phases. The first phase was done during 5<sup>th</sup> to 20<sup>th</sup> May at Anveshika and it was already reported in the June 2013 Newsletter. The 2<sup>nd</sup> phase was conducted at IIT Kanpur, House No. 307 from 2<sup>nd</sup> to 20<sup>th</sup> June. They have all gone to Std 10 this year.



In this phase of the Camp there were many well thoughts programmes to give the children exposure to technology and also our cultural and traditional knowledge base. Lots of interaction with dignitaries from various fields were arranged.

## Regular Studies

Taking the thread from Phase I, main focus was again on Mathematics. Dr H C Verma, Mr Vikas Kushwaha and Ms Namrata Shulka were the resource Persons for Mathematics. Vikas is 2<sup>nd</sup> year B Tech student at NIT Hamirpur and Namrata is M Sc Maths student from IIT Gauhati. Both of them are Sopan workers and had come for vacation. Dr Verma and Vikas taught them Differential calculus which they enjoyed most and did lot of practice from the exercises given in the books. Namrata taught them geometry.



English classes were given by Ms Sarjana Singh, Media Management student from Symboisis Institute Pune and doing internship with Shiksha Sopan. She has devised her own way to teach English in most interactive manner and children learnt a lot from her with great interest and fun.

Science Classes were given in two slots. In one of them 30 minute Video lectures were screened and discussed. These video are made for rural children with Hindi as the native language. This was in continuation of Phase I summer camp where science was taught through these videos.

Shiksha Sopan is also developing teaching modules with the help of short video clips. This project is named as Academic Development of All Rural Societies in Hindi-belt (ADARSH). In the second slot of Science classes in the Summer Camp, Dr Verma gave 6 classes on basic electricity and magnetism using ADARSH videos. In each lecture 3 or 4 video clips of about 1 minute duration were used showing the actual experiment on the topic being delivered. This mode was quite successful as the students learnt the topics with great interest and developed feel of the subject.

## Special classes

### (a) Vedic Ganit

A module of Vedic Mathematics of 15 hours was given to the children by Dr Devi Prasad Verma, Ex Head and Professor of Mathematics at Patna University. He taught them a number of methods by which complex arithmetic calculations can be done quickly. Children were very happy to do such calculations. On 19<sup>th</sup> June there was a demonstration by the children on what they learnt. All Sopan volunteers were invited as spectators. Dr Verma requested persons from



the audience to give arithmetic sums of specific nature and asked children to solve. Most of the time they directly wrote the answer as if no calculations are being done. For example they could write the value of  $1/19$  in 18 decimal places (which recur) without a single division step. All audience was surprised in this show.

### (b) Spoken Sanskrit

Sanskrit is a beautiful language and there is a huge amount of useful literature available in it. We gave 8-day classes to the camp children on spoken Sanskrit. The resource person Ms Preeti was meticulous in communicating in Sanskrit. Without going into the nitty gritty of Sanskrit Grammar she was able to make Sanskrit speaking simple and enjoyable. She used to come with several familiar objects and with the help of these teach words and sentences. Children started talking among themselves in Sanskrit by the end of the course.

### (c) Art and Craft

8-day classes were given on Art and Craft. IIT Kanpur student Ms Shilpi and Ms Seema Verma from Shiksha Sopan were the resource persons. Under their guidance children made beautiful drawings and decoration items.

### Trip to Regional Science City Lucknow

Shiksha Sopan organized a visit to Regional science City Lucknow on 6<sup>th</sup> June for all the children from class 8 onwards and the volunteers. A total of 66 persons including 13 from the Summer Camp, 30 from Dr V N Kulkarni Merit Scholarship recipients and children from different Centers went for the trip. The Director of Science City, Dr Umesh Kumar, was very enthusiastic to receive our group. For quite sometime he himself explained the exhibits to the children.

Children were excited to see so many interactive science exhibits on Physics, Biology, Astronomy and other areas. The peculiar images in mirrors with different curvatures were most enjoying. With proper arrangement of one mirror and a parallel semi transparent glass, an exhibit was put up to give appearance of an infinitely deep well. By moving fingers in air, a piano could be played with proper notes. All these things were very exciting and children were keen to know how it was all happening.

Science City people arranged a show on effects of liquid nitrogen. Seeing Nitrogen in liquid form itself was very exciting. The performer presented in a very interesting manner effect of putting different things in it. A potato put in liquid nitrogen for about 10 seconds became so hard that they could use it as a hammer to fix a nail in wood. Several such things were staged on this liquid.

All participants were taken to 2 film shows, one 3-D picture and the other SCIMAX. For 3-D picture, proper polarizer glasses were given which gave the real 3-D effect. SCIMAX movie was projected on a hemispherical dome and had to be seen looking in different directions including upwards, as the characters moved around. Both the films were adventure based and the children enjoyed them thoroughly.



## Science Show for IITK Summer Undergraduate Research Grant of Excellence (SURGE)

UG Students from different universities and institutions come to IITK during summers to do research under guidance of IITK faculty. Apart from their individual research programmes, these students are given some collective exposure to various aspects of research and education. In this sequence, Shiksha Sopan President Dr H C Verma gave them a Demo-cum-talk on "Small Experiments: Great Learning". He used the experiments developed by Sopan Science Cell and



initiated a discussion on the science behind each such experiment. The students of this SURGE programme and others from IITK community who were present there were amazed to see how much Science can be learnt from such simple experiments. Mr Amit Bajpai, Mr Anurag Pandey, Mr Ranjit, and Mr Deepak Mishra assisted in the show.

### Utsahi Physics Teachers Meet

Shiksha Sopan has close relations with the group of Utsahi Physics Teachers. Sopan conducts the 6-day workshop NWUPT each year for these teachers. Senior resource persons (SRP) of this group had their Annual Meeting at Manford College Lucknow from 7<sup>th</sup> to 9<sup>th</sup> June. Shiksha Sopan President Dr H C Verma and Secretary Mr Amit K Bajpai are themselves SRPs and attended the meeting. They presented new experiments developed by Sopan Science Cell before the teachers. Dr H C Verma who coordinates the group presented the report of NWUPT-2013 (described in June Newsletter) to the SRPs. All of them appreciated the role of Shiksha Sopan Science Cell in conducting such a workshop.

### Other Informations

**Web site** : For more details please visit [www.shiksha-sopan.org](http://www.shiksha-sopan.org)

**How to donate:** *Shiksha Sopan*

(a) You can pay through credit/debit card by going to [www.godparents.in](http://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" payable 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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