# Shiksha

## Sanskar

# Swavalamban





# An Initiative of IIT Community for social upliftment

Reg. Office: 391, Nankari, IIT, Kanpur 208016, PAN: AAFTS9743R

# Newsletter May 2022

Dear Readers, Greeting from the Shiksha Sopan family. As the normalcy has returned to a great extents after the night mare of Covid, Shiksha Sopan had expanded its contact programe on new platforms and new sections are being explored to reach more and more sections of Society. In the month of April we focused on Kanpur degree colleges with an active support from the administration of CSJM University. Our centers too widen their fields through participation in collaboration programs conducted by Ambdekar Vichar Samiti. Our outstation program SOORMA also had interesting sessions for teachers of NCR. Here are brief description of our activities of the month.

# **Central programs**

# **Sopan Reaches Degree Colleges of Kanpur**

We read many science books in our school life, we learnt and knew many things related to science, scientific methods and variety of models. But we don't know exactly about the experiments and about the hard work and sacrifice of Scientists and their contribution towards society and of-course correct explanation.

With the help of Dr. Rajesh Kumar Dwivedi, Director, UTI and Shri Vinay Pathak, Vice Chancellor of Chatrapati Sahu Ji Maharaj University (CSJMU), Shiksha Sopan team officially reached in colleges. We had conducted two programmes in two different colleges, on 11<sup>th</sup> April at VSSD College, Navabganj, Kanpur and on 20<sup>th</sup> April in DAV College, Kanpur. At both college, the authorities from the management committee of the college, Principal, HoD Physics and other Key persons were present. They were all enthusiastic about this new initiative of the university in association with Shiksha Sopan. After the college authorities expersssed their views, the stage was handed over to Shiksha Sopan. At the both places, students and teachers number is large, the auditorium was absolutely jam packed. The

programe structure was same at both places.

The programme duration was two hours. A small introduction of Shiksha Sopan done by Mr. Amit K Bajpai, Mr. Vimal gave introduction about IT related programmes of Shiksha Sopan and Mr. Deenachanda Ji introduced our Research exposure lab SUREELA. The opportunities available at Sopan Ashram for the college students and the teachers was repeatedly emphasised. After that the main talk of Verma sir was delivered. The topic of the talk was "आधुनिक भौतकी के इतिहास के कुछ अध्युले पन्ने".



Verma sir talked about Neils Bohr's Atomic Model, JJ Thomson's Plum pudding model, PhD thesis of de Broglie, Si called limitation of Rutherford Model etc. After the talk was over, B.Sc/M.Sc students and the faculty asked questions related to the talk and Verma sir answered them. He also invited them to visit the Sopan Ashram.

## **Preparation Workshop at PGT Level**

Shiksha Sopan teachers training workshop are very impressive and famous. The main focus of the workshop is to boost up our resource persons and prepare a proper content to train PGT Physics in all over India. In order to refresh our key Resource persons and come out with better strategy of teachers training to be undertaken in post covid scenario, We conducted a 3-day camp at Sopan Ashram. 15 resource persons from different states came to Sopan Ashram from 15 to 17<sup>th</sup>

April 2022.

Four Pre Tests were designed to por be the participants for their prior understand or misunderstanding of different chapters in Physics. These were discussed by the team members together with Dr. H. C. Verma to use in future workshops. The demonstrations list was finalized into four broad physics topics. Science Cell team prepared a training Kit on the basis of these demonstrations. We will provide the kit to the



resource persons so that they will perform the experiment in the future workshops. The workshop was very fruitful and created good content.

## SOpan OutReach -MAjlis (SOORMA)

Two Session were conducted in the month of April both were online, details are given below

Date: 16th April, 2022

Resource person: Ms. Pragya Nopany

**Timings:** 4:30pm to 5:30pm **Topic:** Story of Pendulum

**Attendees:** 22

The session was conducted by Pragya Ma'am. She weaved an interesting story on pendulum with the help of beautiful and interactive power point slides. Her story began with a child who watched an oscillating chandelier in a church and took notice of its nearly constant time period. 19 years later this boy, Galileo revisited the pendulum and tried to explain the constancy of time period with a simple mathematical model of isochronism of chords. She further explained how the pendulum was used in the clocks, the initial problems in it and how they were overcome over time. Her way of narration was unique. The audience loved it.

#### **Second Session**

Date: 30th April, 2022

Resource person: Dr. H. C. Verma

Timings: 4:30pm to 5:30pm **Topic:** "भौतिकी के अध्खुले पन्ने"

Attendees: 30

The session was conducted by Dr. H C Verma. His aim was to bring to notice the work of some scientists of which the teachers and students are generally unaware. He explained how these scientists have played a key role in our current understanding of some of the topics we usually come across while teaching physics in our classes. He talked about J J Thomson and his plum pudding model.

Although it is a general belief that in this model the seat of negative charges (electrons) are strewn haphazardly on the base of positive charge, he explained that it is not so. Thomson had very logically arrived that in his model, there can be only two diametrically opposite electrons in the innermost circle, eight in the second circle and so on. He proved that six electrons can never be arranged in a hexagon.

He also talked about the work of Geiger and Marsden in developing Rutherford's atomic model. He explained how we wrongly blame Rutherford and his atomic model for not being able to explain the stability of an atom. Rutherford's model never dealt with the electrons in the atom. He only addressed the mass and size of the nucleus in the atom. The session was very interesting and everyone enjoyed it.

# Sopan Anaupacharik Shikshan Kendra (SASK) New Admission

SASK opened admission of children for the new academic year, that is 2022-23. The process started on 1<sup>st</sup> April, The first day of the new session. SASK volunteers and children began the new session with the worship of Saraswati Maa by wreathing flowers.



#### **Result Distribution**

The results of academic assessment of students in 2021-22 were announced. All the children were told to come with their parents during the report card distribution. The volunteers of SASK counseled every child and their parents during this session on how we all can help children to achieve greater goals. Children were told about their weak points in particular subjects and how to overcome them.



#### **Baal Akhbaar**

Like every month, this month also, Baal Akhbaar was released. In the Festival column, major festivals like Navratri and Ram Navami were mentioned by Deepali of class 8th. Sonam and Ansh of class 8th wrote in the column on great personality, where they talked about Jayanti of Jyotiba Fule and Dr. Bheem Rao Ambedkar. Divyanshi of class 7th wrote about the Earth in the environment column. Many more articles were written by the students in the Baal Akhbaar related to various topics.



## **Farewell Ceremony**

On 12th April, Farewell was done for class 8th. In this Farewell, children of Class 6 and 7 performed some cultural activities like Singing songs and narrating stories. The coordinator of SASK, Ms. Seema Verma, gave the blessings to all students who are leaving the center for further studies in other school and going to nurture their future. Ms. Sunita Maurya and Ms. Ruby were also present there on this occasion. Shraddha of class 7th presented Pen Stand to every student of class 8th as a memento.



# Participation in the IITK programe on Dr. Bheem Rao Ambedkar and Jyotiba Phule Jayanti

In order to propagate the values such as equality respecting diversity etc. Dr. Ambedkar Vichar Samiti of IIT Kanpur conducts massive community programes in March-April to celebrated Jayanti of Dr. Ambedkar and Smt Jyotiba Fule. Samiti organized a drawing competition for students of 1 to 5 from 3 schools, SASK, Opportunity School and Campus School, all three associated to IIT Kanpur in some way. Another competition for the same 3 schools was conducted on General Knowledge. Both there events were conducted in the lecture hall of IIT Kanpur. The results were announced and prizes were given in the main function held at Outreach Auditorium of IITK with the gracious presence of the Deputy Director IITK.

Dr. Bheem Rao Ambedkar (born  $14^{th}$  April 1891) was the person who contributed the most in building up of our Constitution. Another great personality who fought back the ills in society was Jytiba Phule (Born  $11^{th}$  April 1827). Students of SASK performed very well and bringing  $1^{st}$  prizes and  $2^{nd}$  prizes. The winners list is given

below -

Divya( Class-2) -2<sup>nd</sup> Prize Rohit (Class-3) -1st Prize 2<sup>nd</sup> Prize Mansi (Class-3) -2<sup>nd</sup> Prize Krishna (Class-4) -Mohan (Class-4) -2<sup>nd</sup> Prize Shradha kamal (Class-6) - 1st Prize Shradha (Class-6) -2<sup>nd</sup> Prize Ajeet (Class-7) -2<sup>nd</sup> Prize Ankit (Class-7) -1<sup>st</sup> Prize Deepali (Class-8) -1<sup>st</sup> Prize Neelam (Class-8) -2<sup>nd</sup> Prize



# **Barasirohi Evening center (BEC)**

## **World Health Day**

On 7th April, BEC celebrated World Health Day. We know Health is a significant part of our life. Being healthy should always be the priority of everyone because if Health is good, then everything will be good. Volunteers of BEC told the the students the reason of celebration. They informed the children that this celebration was started in 1950 by WHO (World Health Organization). BEC motivated their children to be healthy and to make their environment healthy.

## **Special Visit**

On 11<sup>th</sup> April, in BEC Special visit was done by Rahul Ji (IITK student) along with Prashant ji, PHD student, Material Science Department, IIT Kanpur. They gave some motivational speech to the students. Prashant ji also taught some basic math calculations and science.

Mr. Shivam Sen who is a teacher in a govt. school in Itra Bheetargaon also visited. Mr. Sen discussed about the present education scenario with our team members and how we can improve it.

# **Earth Day**

The only planet where life exists is our Earth and at present, we are not taking proper care of it. We are misusing our natural resources which is leading towards bigger disasters the earth.

To Spread awareness about our earth, we celebrate earth day where we learn how to take care of all the things given by the nature. BEC celebrated this day and told the students how we can contribute in saving our earth by handling the wastage of natural resources.

### Special class

On 28<sup>th</sup> April, Abhishek Jyoti visited the center and took special class on General Knowledge. In the class, he asked some GK questions to the students and also educated them about the current National Education Policy (NEP). He told why this Policy was brought and how we all get benefit from this policy. He also taught some basic grammar.

## **Sopan Ashram Evening center (SAEC)**

#### **New Session and Academic Result**

SAEC was running as usual. Two new volunteers, Ms. Chandni and Mrs. Kalpana Sharma joined the evening center as the new session started. Ms. Kalpana is a housewife and was a teacher in school, she showed some interest in joining the Evening center, and Ms. Chandni, an ex-student of SAEC, also came forward to be a part of Shiksha Sopan by joining SAEC.

In continuation of this, one of our Ex Volunteers, Mr. Abhishek Dass, visited Sopan Ashram, where he took one day class of SAEC students and guided them in preparing for the VN Kulkarni Exam.

### **Sopan Library**

In the month of April, library running as usual. There are many activities done by the coordinator Mrs. Pushpa Tripathi ji which are given below –

- \*Library celebrated the Navratri, in which Pushpa ji gave information to students about the festival.
- ❖Library received some competition books as a donation from one of the IIT K faculty P Sarkar.
- ❖On 14<sup>th</sup> April, Library celebrated the birth anniversary of Dr Bheem Rao Ambedkar. In this, Ms Pushpa told about the life story of Dr. Ambedkar and also told about his contribution in making our Constitution

**Web site**: For more details please visit www.shiksha-sopan.org How to donate: Shiksha Sopan

- (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://www.iitk.ac.in/dora/donation/PayPal/ and Choose Shiksha Sopan Charitable Contribution to donate through IIT Kanpur foundation using credit cards. All donations are 100% tax deductible in the United States. IIT Kanpur Foundation (Tax ID: 94-3370645) is Tax Exempt under 501(c)(3) classification of IRS.
- (e). All donations are Tax free (up to 50%) under section 80/G.

**Email Contacts**: hcverma@iitk.ac.in, samkhan@iitk.ac.in, sopanbajpai@gmail.com **Postal Contact**: Dr. Sameer Khandekar, Dept of Mech. Engg., IIT Kanpur 208016

Dr H C Verma, Dept of Physics, IIT Kanpur, Kanpur 208016

Phone contacts: Mr. Amit 9506611484, Mr. Ranjan 9235905046