

# Children's Science Training Camp

October 3- Nov 17, 2007

Culminating in

## Bal Vigyan Mela

November 18, 2007

Jointly by

Department of Physics, IIT Kanpur

And

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In association with

Shiksha Sopan, Opportunity School and Anveshika

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## Introduction

Science has become one of the most important factors in the development of society. It is a well known fact that Science education in our country has not been able to enthuse the young minds towards Science. Further in majority of the schools including government schools and schools in rural areas, there are no laboratory facilities at middle school level. Bare theoretical teaching of science cannot inculcate the qualities needed for one to learn scientific methods and attitudes. The situation is even worse in the schools situated in rural areas and low-fee schools.

Shiksha Sopan is a voluntary organization run by some IIT Kanpur faculty members and students with the help of enthusiastic local youths, working in the villages near the IITK campus. Anveshika is an open Laboratory set up in an Inter college in Kanpur where training is imparted to students and teachers of Uttar Pradesh and Uttaranchal. Opportunity school is a school inside the IITK campus which caters the needs of hundreds of families who help IITK by providing domestic assistance or construction labour and so on.

With the help of these organizations, Vigyan Prasar and Dept of Physics IIT Kanpur is organizing a "Children's Science Training Camp and Bal Vigyan Mela" which for the first time will give hundreds of children of age group 10-15 years a flavour of how interesting and exciting science can be.

## Programme Structure

The programme will have essentially three stages. Coming in reverse chronological order, the final stage is Bal Vigyan Mela to be held on November 18, 2007, on the occasion of Children's day (Sunday is chosen), a tribute to our first Prime Minister Pt Jawahar Lal Nehru. It will be like a real Mela. We expect to put up at least 100-150 stalls manned by 300-400 children of class 6-8. Three to four children will form a group and show their experiment to all visitors who will keep visiting through out the day. Apart from this we will have some fun corners, science based games and so on.

As many of the children will come from schools with ill-equipped facilities for Science education, we will organize a "Children's Training Camp" from October 3, 2007 till November 17, 2007. About 350 to 400 children are expected to participate in the Traing Camp. Initially the camp will be every day 2 hours in the evening for about 15 days and after this, it will gradually become sparse and will be conducted in a tutorial mode. This way the children will be prepared to perform experiments in front of the Mela visitors and explain the science behind.

And to conduct Children's Training Camp, 3 Master trainers have been identified who will design about 150 science experiments at the level of class 6-8 students and will train six more trainers. The training of these trainers will be done during September 15-30, 2007.

## Work Plan

The first stage is to design experiments at Children's level. Our Master trainers are already at work. They will be consulting various sources for such experiments and will also visit some places such as Science academies and

Science centers. They will then train the six trainers for about 15 days and equip them to act as Resource persons in Children's Training Camp.

We will aim at training 300-400 children on about 150 science experiments and activities. The nine trainers (3 Master trainers and six trainers) will be divided in three groups. Each group will train about 100-125 children. The training will be for about 2 to 2.5 hours everyday in the evening for the first 15 – 20 days. Later, based on individual ability and interest we will assign specific experiments to specific groups of children. Intensive training will be given to each group on the selected experiment in the rest of the period.

We will contact as many schools in Kanpur as possible and invite them to send their students of class 6-8 to participate in the Mela and put up the stalls. We will work hard to involve all schools, even the ones who are in the interiors, in rural areas and which are much less known. The schools will have option to either train their students themselves and come with their own equipment or to send their children to our Children's Training Camp. There will be no upper limit on the number of students participating.

Wide publicity will be made using print and electronic media so that large number of visitors can come to Mela and see kids managing the show and explaining the principles of Science.

It will not be in competition mode and no prizes will be given. Indeed we will give gifts to all participating children.

#### Expected Outcome

Children's Science Training Programme and Bal Vigyan Mela will be a major step towards Science popularization among Masses. Our special focus will be on the smaller and rural schools where generally no exposure reaches. These children will be greatly attracted towards science when they will perform experiments and explain science to a number of visitors. The Mela will also change the attitudes of the teachers of these schools when they will see their children doing experiments confidently. We do hope that the atmosphere of science education will be very different in these schools after the Mela.

Tentative Time Table	
Designing of about 150 experiments in Physics, chemistry and Biology by the three Master trainers.	Up to September 14, 2007
Training of six trainers by the Master trainers	September 15 - 30, 2007
Children's Science Training Camp	October 3- November 17, 2007
Bal Vigyan Mela	November 18, 2007