

CEP workshops on

# Professional Development & Technology Orientation

(Secondary & Secondary Mathematics teachers – 30 October to 1st November 2011)

Organized by CEP Cell, I. I. T. Bombay

Venue: Sarala Birla Academy, Bangalore 560 083

## INTRODUCTION

Mathematics education over the world is going through a great change. Curriculum planners all over the world are recommending radical reforms in math education at all levels to prepare all students to meet mathematical needs of the society. Concept of teaching, which was assumed to be processes of direct transmission of knowledge, is changing. Teaching is being viewed as a process of facilitating students' learning by creating a learning environment conducive to inquiry. This necessitates the teachers to upgrade and reorient themselves by:

**Strengthening one's knowledge of mathematics.**

- Learning to use effective teaching strategies.
- Becoming familiar with exemplary instruction material and resources.
- Learning effective use of technology in teaching and learning.

## GOALS

**Strengthening conceptual understanding of mathematical concepts:** There will be lectures by subject experts on various mathematical topics taught at secondary and senior secondary level. Some lectures on special mathematical topics, normally not covered in the curriculum, are also planned.

**Technology orientation and training:** The second component will have intensive hands-on training on the use of technology to facilitate the processes of mathematics teaching and learning.

## SCHEDULE AND TOPICS

The daily program will have two sessions. The pre-lunch session will have three one hour lectures devoted to conceptual strengthening of various topics covered in secondary and sr. secondary level. Lectures are planned on the following topics:

- \* Calculus \* 3D Geometry and vectors \* Trigonometry
- \* Combinatorics and probability

Afternoon sessions (two each of 2 hours) will be devoted to intensive hands on training on the following:

- Dynamic Geometry softwares \* Learning from digital pictures
- \* Latex, math type setting \* Use of Calculators in teaching

## WHO WILL BENEFIT

Secondary and senior secondary level teachers from schools / international schools (affiliated with CBSC, ICSE, IGCSE, IB and State Boards).

## COURSE VENUE

Sarala Birla Academy  
Bannerghatta, Jigni Road, Bangalore 560 083

## NUMBER OF SEATS: 30-60

(On first come first served basis)

## COURSE FEE

The programme is only for secondary and sr. secondary teachers from schools affiliated to an education board. Registration fee for each participant is Rs. 6000/= ( Rs. 5000/= for each teacher if more than one teacher from the same school). Registration entitles the participant for registration material, lunch and refreshments between lectures. Transport from a common pickup point in the city to School will be arranged.

**All the registered participants will be given participation certificate by I.I.T.Bombay**

## REGISTRATION

For registration, send details in the format given below along with demand draft for Rs. 6000/= drawn in favor of  
"Registrar, IIT Bombay (CEP A/c)" payable at mumbai

Applications for registration should be sent to either of the following latest by September 30, 2011:

### Convener

**Prof. Inder K. Rana,**  
Department of Mathematics,  
Indian Institute of Technology, Bombay  
Powai, Mumbai - 400 076.  
Email: [ikrana@gmail.com](mailto:ikrana@gmail.com), Phone: 022-25768462, 09819237020

### Local Coordinator:

**Mr. Sasikumar**  
HoD Maths, Sarala Birla Academy  
Bangalore 560083  
Email: [sasikumarmaths@yahoo.co.in](mailto:sasikumarmaths@yahoo.co.in), Phone: + 91 9902980520



## FORMAT FOR REGISTRATRATION

**Sixth CEP Course on  
Professional Development and Technology Orientation  
for  
Secondary & Sr. Secondary Mathematics Teachers  
30th October to 1st November, 2011**

NAME (BLOCK LETTERS): \_\_\_\_\_

GENDER (M / F): \_\_\_\_\_

Name of the school \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

EMAIL : \_\_\_\_\_

MOBILE: \_\_\_\_\_

TELEPHONE : \_\_\_\_\_ (O)

\_\_\_\_\_ (R)

D.D DETAILS (Amount, Bank and No.): \_\_\_\_\_

**"The Demand draft should be drawn in favor of Registrar, IIT Bombay (CEP A/c)"**

Date & signature \_\_\_\_\_