# Degree College Teachers Training Program *in*

### **Biology / Life science** 25<sup>th</sup> November to 15<sup>th</sup> December, 2017



## Center of Excellence in Science and Mathematics Education

#### **Indian Institute of Science**

at its

*Challakere Campus*, Chitradurga-577536 Under Pandit Madan Mohan Malaviya National Mission on Teachers and Training (PMMMNMTT), MHRD, Govt. of India.



The IISc at Challakere Campus offers a great opportunity for the degree college teachers. This is a three weeks (21 days) residential training program equivalent to UGC refresher courses approved by the MHRD, Govt. of India. The unique features of this training program is learning subject by doing experiments. This will allow the teachers to understand the concepts and the theories behind the phenomena, test hypotheses, and also apply their understanding to do new innovative experiments.

Contact hours of the program will be more than 180 hrs.

- ➢ 80 hrs. Lectures (8.00 am 12.00pm).
- ➤ 100 hrs. Experiments (in the afternoon 1.00 pm- 6.30pm).
- ➢ 5 Experiments per day.
- Lecture will be delivered by I.I.Sc. Faculty members.

Theory lectures will be based on UGC model curriculum, which includes Biochemistry, Biotechnology, Botany, Ecology, Genetics, Immunology, Microbiology, Molecular biology, Physiology, Structural biology and Zoology.

Well defined experiments covering various aspects are developed to be performed individually by teachers themselves. More than 50 experiments dealing with isolation of microorganisms, microscopy, micrometry, bio-fertilizers. bio-control agents, biomolecules, analysis of proteins/ carbohydrates, enzymes assays, biochemical estimations, isolation of DNA/RNA from different sources, Electrophoresis, DNA restriction digestion, ligation. transformation, PCR, PAGE/SDS PAGE, differential blood counts, blood constituents,

urine analysis, disease diagnosis, *Drosophila* genetics, chlorophyll biosynthesis, plant embryology, plant morphology and development, cell/tissue culture technology, bioinformatics tools, protein/nucleotide sequence analysis, databases, computational biology, spectroscopy, and other techniques are carried out.

Applications are invited from Indian citizen who is involved in teaching B.Sc. students in any biological discipline and enthusiastic contract teachers can also apply.

#### Send your application mentioning

1. Name, Address, E-mail & Phone No.

2. Date of Birth

3. Qualification (with affiliating institution)

4. Place of work; Experience and specialization

5. Endorsement by Principal/Head of Institute.

#### Last date to receive application: October 31, 2017

#### Send your application to

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