



# National Workshop on Physics Education

## Challenges and Prospects

November 26-27, 2015

Organized By

National Centre for Physics (NCP), Islamabad, Pakistan

The National Centre for Physics (NCP), Islamabad is organizing a two day National Workshop on Physics Education at B.Sc., M.Sc. /BS levels on November 26 and 27, 2015, at its campus located on Shahdara Valley Road, Islamabad. The main objectives of the workshop are to identify the academic and structural problems that confront teachers at graduate and post-graduate colleges and at institutions where the 4 year BS program has recently been introduced. A goal of the workshop is to introduce and obtain feedback of working teachers on a Physics Education Program that is being initiated at the NCP with the purpose of helping teachers to improve their conceptualization and problem solving skills.

### Introduction

One of the goals of the National Centre for Physics (NCP) is to work for the advancement of Physics in Pakistan. In this context it has been realized that the quality of physics education has not been able to keep pace with the expectations of society. Memorization, rote learning and lack of conceptualization have become some standard features of our educational training. There are a number of factors that are contributing to this unsatisfactory state of affairs and these include shortage of adequately trained manpower and lack of material resources. Added to this is the isolation of physics teachers in remote towns and cities who do not find academic resources or peers to interact with. To address such academic problems the NCP is planning to initiate a Physics Education Program for in-service teachers which would concentrate on applying knowledge to solve problems, develop concepts and to introduce teachers to internet resources to enrich their teaching. This workshop will aim to introduce this program to the participants and obtain their feedback on the course structure, methodology and logistics of the proposed program. Part of the Workshop will consist of presentations from teachers on the ground realities of physics teaching as well as presentations on new initiatives in teaching laboratory experiments.

### Participation

Teachers teaching at Masters/BS level will be preferred. Those teaching at B.Sc. Level may also apply. There is no registration fee for participation. Local hospitality and partial travel support will be provided to the selected participants.

### How to Apply

Application form is available at <http://www.ncp.edu.pk:8080/nwpe/>. Application forms should be submitted not later than 12 November 2015. List of applicants shortlisted/accepted by the technical committee will be placed on NCP website. The short listed applicants will also be informed by email once the selection procedure is completed.

For further queries, please contact

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### Topics to be discussed

- Status of physics education at M.Sc. and BS levels in Pakistan.
- Problems being faced in quality teaching and laboratory training.
- Introduction to Program on Physics Education at NCP and sample lectures.
- Presentations on laboratory initiatives to develop local experiments for teaching.
- Open discussion to formalize recommendations.

**Application Deadline**

**November 12<sup>th</sup>, 2015**