

## **National Competition for Innovations in Computational Physics (NCICP) – 2020**

The annual IAPT competition **NCICP 2020** will be held during the Annual IAPT Convention, to be organized at Vaishnav Vidyapith, Indore (MP) in November 2020. The detailed updates on the IAPT Convention-2020 will be made in due course of time.

Last date for submitting entry to NCICP is 31st August 2020.

### **About the Competition**

This competition is open to teachers at School level, as well as the UG and PG levels. The participant can be even an M.Phil. / Ph.D. awarded / pursuing student or a scientist from regional / national laboratory or a science communicator in recognized institutions, etc. He / She need not be an IAPT member. Nowadays Computers play a big role in the teaching learning process and they are used for carrying out virtual experiments, simulations, analysis of experimental results, acquisition of data, and so on. Computers also find applications in numerical computations, data analysis, solving complex numerical problems in Physics, iterative calculations and so on. A physics teacher can use graphical presentations (like evolution of a cyclone with time and other such phenomena) for enhancing the understanding of the subject as well as improving imagination skills of the students. Thus IAPT provides a platform to the physics teachers to show their innovative skills in computational physics and for development of experiments by conducting such competitions at the national level. INNOVATION is the main theme here.

The following kinds of experiments are included in this competition.

1. Computational Mathematical modeling based on softwares
2. Sensors /Actuators interfaced with Microprocessors /PC
3. ANDROID/AUDRINO/PID/PIC based experiments /applications.

The work to be presented should be an original one developed by the participant himself / herself. It can even be a demonstration. A few selected entries will be invited for demonstration at the annual IAPT Convention, and the participants will be paid travelling expenses for coming to convention venue INDORE (MP) as per IAPT rules. In case of joint authors only one participant will be eligible to receive TA from IAPT. The selected participants will have to come with the setup of experiment for final evaluation to be made during the Convention-2020, and also the demonstration.

The best three presentations will be given cash awards of Rs. 5000/- , Rs. 3000/- & Rs. 2000/- respectively and a certificate. DECISION OF THE JUDGES WILL BE FINAL.

The detailed entry should be sent only by email as an attachment to, Prof. P. D. Lele, Coordinator NCICP at the mail id, [pdlele@hotmail.com](mailto:pdlele@hotmail.com)

## **How to submit the entry**

- There should be only two pdf files to be attached to the email.
- The First file must be named as 'bio-data'. It should contain 1. Title of presentation, 2. Name(s) of the participant(s), 3. Institutional affiliation of each participant, 4. Address for correspondence, 5. Mobile Number (s) 6. All the authors must sign the following declaration;  
“The proposed work is original, designed and developed by the participant(s) and not published / submitted elsewhere.”
- The second file must be named as 'Experiment'. It should contain detailed write up of their work (along with the computer program if any), i.e. detailed theory with diagrams, procedure, observations, calculations, graphs, results and references. There is no limit on the number of pages. The participant should write his/her name, name of the institution etc at the end of this file. Please mention the innovation you have incorporated and its importance in teaching physics as a tool.
- Please use Times Roman font size 12, spacing 1.5 and margins should be appropriate.

For any query you can contact the competition coordinator.

The abstracts of selected experiments will be published in IAPT monthly Bulletin (ISSN 2277-8950) after the Annual Convention.

**Last date for entries to reach is 31st August 2020. Your cooperation to abide by the last date will be highly appreciated.**

**Dr. P.D. Lele Coordinator, NCICP (AHMEDABAD)**

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