

(RC-06)
Innovative Experiments in Physics

Date: 19 November 2019

Venu: Dr. Ramnath A Poddar Auditorium

Organized By: Department of Physics, G B Poddar College, Nawalgarh

No of participants: 4 Teachers, 100 students of B.Sc-M.Sc.

Resource person:

Prof. Y K Vijay (President IAPT RC6)

Director,

Centre for innovation in Science Teaching, IIS University, Jaipur

Dr. Minal Bafna (EC member IAPT RC6)

HOD, Physics, Agrawal P G College, Jaipur

Dr. Ankit k Gupta (Life member IAPT)

Assistant Professor, Agrawal P G College, Jaipur

One day workshop on **Innovative Experiments in Physics** was conducted by organized Department of Physics, G B Poddar College, Nawalgarh at Dr. Ramnath A Poddar Auditorium run by the **Anandilal Poddar Trust** on 19 November 2019. The workshop was inaugurated with blessings of Lord Saraswati. Dr. V S Shukla, Academic Director, welcomed and felicitated the resource persons and gave a brief introduction of each. Initially, the resource person Dr Y K Vijay gave a power-point presentation on various low cost experiments explaining the basics of typical phenomenon like Doppler effect, Alpha particle scattering experiments, barrier potential etc. After that five sets of five different low cost innovative experiments were distributed among students in a group. Each group comprised of four students. Dr Minal Bafna and Dr. Ankit Kumar Gupta explained and the students how they had to perform the experiments. The experiments performed were –(i) Study of R-L, R-C, LCR circuits using a.c power supply (ii) Study of resistance, current and voltage of bulbs of different wattage connected in series and parallel combinations and estimation of their temperature (iii) Study of thermal conduction and Newton’s law of cooling using soldering iron (iv) Study of magnetic interactions using annular ring magnets and (v) Variation of current with resistance of bulb filament. Dr. Minal Bafna and Dr. Ankit Kumar Gupta helped and supervised the students in performing the experiments and handling their queries. After it when the students had noted down the observations and plotted the graphs and calculated the results, each group was made to present their findings and analyse the results obtained. The students were quite excited and eager to share and learn. The workshop ended with a photo-session of all participants and a vote of thanks proposed by Dr. Satyendra Singh, Principal of the host college. He appreciated the efforts taken by resource persons of IAPT in making Physics look simpler and attractive.

