

(RC-06)

Innovative Enhanced learning of Physics

Date: 12 December 2019

Organized By: Department of Physics, St. Wilfred College for Girls

No of participants: 3 Teachers, 40 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 RC6)

HOD, Physics, Agrawal P G College, Jaipur

Department of Physics at St Wilfred College for Girls organized one day workshop on "Innovative Enhanced Learning of Physics" on 12 December 2019. During the inaugural part of the workshop, the Principal felicitated both the resource persons Prof Y. K Vijay and Dr. Minal Bafna. Then the Head of department, Dr Rashmi Saxena gave a brief introduction of the resource persons. She also explained the significance of such workshops and how such innovative experimental kits would help in understanding the basic concepts of physics. In the beginning, Prof Y K Vijay demonstrated and explained certain experiments of quantum physics through a low cost fabricated simple pendulum and magnet. He then explained certain aspects of light using a laser beam. Then Dr Minal Bafna distributed sets of simple experiments to the students arranged in a group of 3/4 each. She one by one explained the theory and required circuits for each of the experiment. She instructed them the precautions to be taken and how readings and observations have to be noted down. She assisted the students to make proper circuit and 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 of bulbs of different wattage connected in series and parallel combinations and estimation of their temperature (iii) Study of thermal conductivity using soldering iron (iv) Variation of current with resistance of bulb filament. (v) Doppler effect (vi) Coupled Oscillations (vii) Damped Oscillations. Dr. Minal Bafna 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 and clarify their doubts and difficulties. The workshop ended with a photo-session of all participants and a vote of thanks proposed by Dr. Narendra Agrawal, Department of Physics of the host college.

