## A Report on PHYSICS THROUGH EXPERIMENTS

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Two days' workshop on Learning Physics through Innovative experiments was held in Department of Physics, D A V College Muzaffarnagar on Sept 26 and 27' 2019, under the aegis of Star College Scheme, DBT, New Delhi. The chief resource person was renowned researcher and experimentalist Prof. Y.K. Vijay from Jaipur Rajasthan



The members of college management committee Shri Abhinav Sushil, Sh. Amit Kumar and the Principal (in office) Prof R.M. Tiwari inaugurated the workshop by lighting the lamp with Saraswati Vandana sung by the college students. The faculty members of the department greeted the guests by presenting potted plants. The objective of the workshop was explained by the Head of Department Dr. Garima Jain. Welcoming the guests and resource persons, the principal Prof R.M. Tiwari highlighted the role of imagination in scientific invention citing the example of Newton. Mr. Abhinav Shushil expressed their concern for organising more scientific activities in the college which generates interest of the student in the subject. In the inaugural address, Prof. Y.K. Vijay co-related the nature as the laboratory to perform experiment and the individual human being as a scientist. He emphasized on the pious duty of every citizen to conserve and utilize the natural resources prudently.



The workshop comprises of 5 sessions in two days with the inaugural, Valedictory and 3 technical sessions. In the inaugural session introduction of the workshop and the warm up exercises for the workshop were conducted for the students.



Two technical session were held on the first day i.e.Sept 26, 2019 (in pre-lunch and post lunch sessions). On the second day i.e. Sep27, 2019 the third technical and the valedictory sessions were held.





In each technical session around 55-60 students were given hands on training on around 20 sets of experiments explaining the concepts of Physics a very simple way related to current electricity, magnetism, heat and light. Prominent of the experiments are

- 1. V-I Characteristics of a 100 W bulb with AC source.
- 2. Vector analysis of current and voltage in a LCR circuit fed with AC.
- 3. Diffraction at Transmission Electron microscopic grid and many more.

Prof. Vijay and Sh. Mor Singh ji along with faculty members of Physics department explained the concepts to the students. In the valedictory session, the students were asked for the feedback response. The participants enthusiastically expressed their views contentmentabout learning Physics in simple manner by performing which reflected the enthusiasm and enjoyment of learning the concepts through doing themselves in very simple way.

The students participating in theinaugural, valedictory and technical sessions were given certificate of appreciation by the department. The outstanding performers were encouraged by awarding token gifts. The needto focus and think out of the box was emphasized in the concluding session by the Head Dr. Garima Jain.Prof D.K.Tyagi Physics faculty from the department co-ordinated workshop sessions as anchor. The whole teaching faculty and non-teaching staff of Physics department and college administration including Principal Prof R.M.Tiwari provided whole hearted support to organize the event.

In action video of the workshop can be watched through the link below.

https://photos.app.goo.gl/VYgeg1u74RGQpiJp6

Around 170 students were benefitted with the experiential learning through the workshop.