

Teacher Training Programme Implementation Of Physics Clusters - Issues And Challenges 22.2.2018

Event Date: 22/02/2018

One day UGC sponsored Teacher Training Programme

Implementation of Physics Clusters - Issues and Challenges

Department of Physics 22.2.2018

Objectives of the Programme:

- * To give an insight on various Clusters in Physics
- * To discuss the topics covered in various textbooks.
- * To gather study material and prepare question bank
- * To provide experimental knowledge
- * To encourage the students to opt for Physics Cluster

Report: Principal Dr. C. Krishna inaugurated the programme and congratulated the department for taking an initiative towards conduct of a training programme for teachers on newly introduced cluster system as it was the need of the hour. In his inaugural talk he spoke on the modalities of implementation of clusters, credits allotted to elective papers and importance of project work. He also insisted on the additional focus to be put by the teachers in dealing with the new subjects, updating themselves, browsing the internet and providing study material to the students.

The Chief guest Prof. D.L Sastry garu Retd. Prof of Physics AU Vizag ,in his talk gave an overview of all the three Clusters in Physics. He touched upon various aspects of I Cluster in Physics, i.e., Analog and Digital Electronics. He spoke on Microprocessors and Microcontrollers, their growing importance in the present days, communication systems etc., Talking about the second cluster in Physics ie., Material Science, Prof. Sastry garu elaborated on Methods of synthesis and characterization techniques of nanomaterials, facilities available in laboratories of national importance, improvising smart materials, and the revolution brought about by the application of these materials. Prof. Sastry garu also gave an insight into

the third cluster ie., Renewable energy He said the buzz word of the present day generation is Renewable energy. He emphasized on the need to search for alternate energy sources, the different ways of generation and storage devices.

In the second session, Sri. NLVRK Prasad, lecturer in Physics, GDC Ramachandra Puram expressed his view on the necessity of brainstorming among faculty from various colleges, whenever such changes in syllabi are made. The biggest challenge lies in procuring the needed equipment and conducting practical's said he. He also stressed on the fact that the teachers must share their resources both in electronic and print form to facilitate students both from rural and urban background.

Sri. P. Chantibabu, in the third session discussed various hurdles encountered during the implementation of clusters and how to overcome them. He clarified various aspects related to tidal energy and wind energy and distributed the study material among the faculty present. He explained experiments pertaining to solar cell V-I characteristics

In the last session, Sri. K. V. Ganesh Kumar lecturer in Physics, BGR GDC Tadepalligudem spoke on challenges in preparation of study material, the various books to be referred, the websites to be searched and useful u tube videos to be browsed. He urged the faculty to accept the new changes with a positive note. He showed his blog in which all the study material was uploaded and free to download. He explained experiments pertaining to solar cell series and parallel characteristics.

Faculty and students participated in the Hands on Session and clarified their doubts regarding the practices on measurement of V-I Characteristics of Solar Cell, Tilt angle measurements, intensity variation estimation etc.,

The project works displayed by students were lauded by all the participants of the programme

The programme concluded with a roundtable discussion on the question bank to be prepared, changes in the question paper pattern, types of project works to be allotted, number of students involved and future scope towards research in these fields.

Vice Principal Sri. T. Varaprasad garu, teaching and nonteaching staff of the Department and other colleges, Students of clusters participated in the programme.

