## Connecting Learners to Laboratory: VIGYAN SETU workshop, an attempt to rekindle school students' interest in science and experiments.

In order to accelerate science education and to cater to the requirement of those schools in the vicinity that don't have access to the basic facility for executing science experiments, Dolphin (PG) Institute has started the **VIGYAN SETU** project under the aegis of DIBNS best practices. Under the umbrella of the Project VIGYAN SETU initiative, a one-week-long hands-on workshop from 21<sup>st</sup> April to 27<sup>th</sup> April 2022 was organized at Dolphin (PG) institute. The aim of the workshop wis to conduct science-based practical classes for 12<sup>th</sup> class students in the laboratories under the mentorship of faculty members. In the first phase of the activity, 12<sup>th</sup> standard students from 2 schools were selected to carry out practical work in Physics, Chemistry, Zoology, and Botany in the college campus.

The inaugural ceremony commenced with welcoming the Chief Guest Prof (Dr). Anita Rawat, , Uttarakhand Science Education and Research Centre (USERC) Dehradun and Guest of Honour Dr. S.P.S. Rawat, , Former ADG, ICFRE with a sapling. This was followed by lighting of the lamp and Sarswati Vandana.

Dr. Shailja Pant, Principal, DIBNS formally welcomed all the dignitaries on the dais and school students from SVM intermediate college, Manuduwala, and SGRR Intermediate College, Bhauwala. Dr. Aasheesh Raturi, Coordinator of the Programme presented the complete layout of the one-week-long workshop.

Dr. S.P.S. Rawat, an eminent scientist, guided and motivated the young students on how to proceed with science experiments and how experimenting with knowledge can accelerate their interest to explore the natural phenomenon.

Prof (Dr). Anita Rawat in the inaugural session, said that "we are not getting desired results and best innovation due to poor standards of school laboratories and of instruments. The main reason for this problem lies in our education system where we are not motivating students to pursue their interest in science and not giving them a robust environment for STEM-based education at our school levels. Without experimental-based knowledge, the student who passes with good grades does not have a basic understanding of the subject. If we do not make drastic changes in our education and laboratories, we will continue to lag behind in the field of technology and science." She emphasized the need to rise above personal interests and talk about invention and science.

Dr. K.P. Tripathi, Member of VIGYAN SETU and Head Department of Botany offered a vote of thanks to one and all. And finally, the inaugural session was concluded with National Anthem.

A total of 61 students participated out of which11 were from SVM Intermediate College and 50 were from SGRR Intermediate College attended the workshop. All the students were further divided as per their subject combination in four groups of 15 students each. As per the syllabus of Physics, Chemistry Zoology, and Botany, respective resource persons demonstrated practical courses as per their expertise. Before hands-on-experiment the basic introductory theory classes were conducted for each experiment in every session of workshop. Every session was a well round conversational and experimental round. It gave a great opportunity for school students to have a interaction with subject experts and also had direct access to the well equipped laboratories. During the laboratory work each participant performed the practical on his own and thereafter the results were recorded on practical note book, which was provided by the VIGYAN SETU. It has evaluated and rectified by the resource person.

The final day commenced with different laboratory courses and followed by the special guest lecture by Dr. O.P. Nautial, Senior Scientist, USERC, Dehradun. He addressed the participants narrating the E-content development by USERC and how anyone can access them, he also introduced the mentor-mentee programme of USERC Dehradun. The Valedictory Ceremony of the workshop was held on 27<sup>th</sup> April 2022 at 12.30 P.M at the Institute's auditorium to felicitate the students on their successful completion of the workshop. Shri Arvind Gupta, Chairman, Dolphin (PG) Institute was the chief guest of the function and Dr. O.P. Nautiyal graced the function as guest of Honor. Dr. Aasheesh Raturi summarized the six days working of the workshop and said that in the years to come, the activities would be expanded into other branches of sciences and many other features shall be added.

Dr. O.P. Nautial shared his life story and experiences as a science educator. He made students acquainted with all those life skills which help in attaining not just a job but a meaningful career. He told, for chasing your dream and to understand your inner voice explicitly all it takes is close observation. Shri Arvind Gupta gave the Valedictory Address in which he described the utility and relevance of the VIGYAN SETU programme. He emphasized on the multidisciplinary approach of the programme by bringing together multi-discipline of sciences that would not only equip the participants with professional skills but also prepare them to face the challenges of real life problems. He added that such workshops are great means of introducing the school children to the wonderful world of science and developing their approach in pursuing a career in the field of science. Sharing the experience of the workshop, students from both schools, said that this workshop will surely help them in deciding the subjects for future courses and shaping their practical skills. Dr. Shruti Sharma, Coordinator IQAC offered a vote of thanks to one and all without whom this event wouldn't have been possible. And finally, the valedictory session was concluded with National Anthem.





