

## Report: Workshop on Nanotechnology, Polymers & Organic Compounds

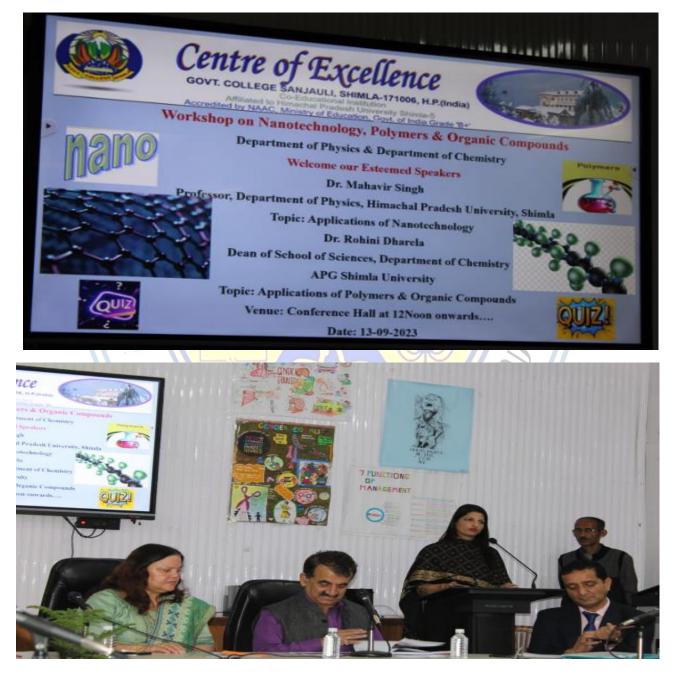


The Department of Physics, Centre of Excellence, GC Sanjauli, Shimla, is perpetually committed to elevating the academic experience for our students. With this aim, Undergraduate Physics students Society along with faculty members were privileged to host Dr. Mahavir Singh, an eminent physicist and a beacon in the world of nanotechnology, for a workshop on 13th September 2023. The workshop began with the pious lamp lighting ceremony by the Principal of the college, Prof. Bharti Bhagra along with the eminent speakers followed by felicitation of the distinguished guests and the speakers. Dr. Kirti Singha welcomed the chief guest Principal COE, Govt. Degree College Sanjauli, Prof. Bharti Bhagra and the eminent speakers Prof. Mahvir Singh, Department of Physics, Himachal Pradesh University and Dr. Rohini Dharela, Dean, School of Sciences, APG Shimla University along with the guests and students. Vice president Undergraduate Physics Students Society, Miss Neha Sharma(B.Sc. IIIrd year) welcomed the Chief guest by pinning the rosette and Secretary Undergraduate Physics Students Society Shubham (B.Sc. IInd year) honoured the speaker by pinning the rosette. Dr. Brijesh Singh HOD department of Physics formally welcomed the speakers and introduced them to the gathering. The enlightening session of the workshop began with Dr. Mahavir Singh. His reputation in the global scientific community is unparalleled. His discourse on the "Applications of Nanotechnology" was both profound and enlightening. He delved deep into contemporary issues in the field, such as toxicity, electromagnetic radiation, and the crucial role of nanotechnology in areas like health, data storage, and ultrahigh-frequency communication. The segment discussing the physics behind nano magnetic materials in electric vehicles was particularly illuminating, emphasizing the convergence of theoretical physics and real-world applications. He went to the level of the students to elaborate the journey of nano particles from being particle to the magnetic nanoparticle later development of the technology which is nanotechnology. He gave a valuable insights into the cutting edge development in the field and what incredible potential the nanotechnology offers for the young research scholars that is going to shape our world. Dr. Mahavir also gave a consent to associate our UG research scholars to get associated with the material science Lab at department of Physics, Himachal Pradesh University. The students actively participated in the interactive session and asked many questions about their interests in the field of nanotechnology. Along with this we had an enthusiastic lecture from young and dynamic Scientist Dr. Rohini, Dean school of sciences, APG Shimla University who elaborated the basics of polymers, applications of Polymers and organic compounds. Her lecture was quite brief and lucid which began with the classification of Polymers and its wide applications. She explained organic compounds its fundamentals and applications especially in Horticulture and Agriculture sector. The students cleared their queries regarding the less use if natural drugs than the synthetic drugs for curing a disease and were engaged in fruitful discussion. It was a insightful discourse and everybody expanded their knowledge and information.

A highlight of the event was the quiz competition, a strategic tool to gauge the absorption and comprehension of the lecture content by the students. This interactive segment fostered an atmosphere of collaborative learning, intellectual curiosity, and analytical thinking. Both the talks were followed by a Quiz competition. The winners were given appreciation certificates for their active participation. The first session quiz was won by the team comprising Uday, Pranay, Chavi, Sachin and Ankit The second session winning team comprised the students, Ayushi, Adarsh, Harsh, Vanshika and Arun kumar.

The event culminated in a memorable closing session, where the achievers of the quiz competition were felicitated. The certificates were awarded by none other than our esteemed Principal, Prof. Bharti Bhagra. The presence of luminaries Professor Mahavir Singh, Professor Rohini Dharela, Professor Anuj, and Dr. Kirti Singha elevated the significance of the ceremony, making it an indelible memory for the winners.

The feedback from the students was overwhelmingly positive, with many expressing a renewed interest in the domain of nanotechnology and its myriad applications. Faculty members, too, found the lecture to be a stimulating blend of theory and its real-world implications.

















Report Compiled & Submitted by: Dr. Kirti Singha