



Report on Glorious Science Week Celebration - 2024 (22nd to 28th February)

Under DBT Star College Scheme

Departments of Sciences, Centre of Excellence, Government College Sanjauli, organized a week-long celebration of science from February the 22nd to 28th of February, 2024 under DBT Star College Scheme. Students and faculty members of nearby schools and colleges were invited to participate in the various competitions. Around 300 to 350 students were actively participating each day.

The highlights of the event were- invited talks by eminent speakers, science drama competition, model demonstration competition, and workshop on science in everyday life, inter-college quiz competition, and laboratory visits for invited school/college students.

Glorious Science Week Celebration	About Govt. College Sanjauli	About DBT Star College Scheme
<p data-bbox="255 667 526 701">(22nd to 28th February)</p>  <p data-bbox="223 936 558 1041">Organised by Centre of Excellence Govt. College Sanjauli Shimla-06 (NAAC Accredited 'A+' College)</p>  <p data-bbox="311 1227 478 1272">सत्यमेव जयते Department of Biotechnology Ministry of Science & Technology</p>	<p data-bbox="582 649 981 1377">Nestled in the lap of nature and housed in a heritage building, the Centre of Excellence, Govt. College Sanjauli, Shimla, HP, has been providing an academically and intellectually stimulating environment to the students. Situated in the heart of the city, this college has a long tradition of excellence. The institute carries a legacy of teaching and learning. In its initial days, it was an Industrial School for female orphans. It was upgraded during the pre-independence days to B.Ed. /B.T. College for girls, affiliated to Punjab University. Since 1969, this college has been catering to the needs of the students from the length and breadth of Himachal Pradesh. The college was given the honorary status of "Centre of Excellence" in the year 2006 by H.P. Government. Additionally, in 2023, the college achieved an 'A+' grade from NAAC, making it the first government college to receive such accreditation.</p>	<p data-bbox="981 649 1380 1332">DBT STAR COLLEGE SCHEME grant has a multi-sectorial approach that supports colleges and universities offering undergraduate education to improve science teaching across the country. This Scheme was launched in the year 2008 by the Department of Bio-Technology, Ministry of Science and Technology, Government of India. The college received approval for the esteemed DBT STAR COLLEGE SCHEME funding in January, 2023. The scheme focusing on enhancing experimental facilities, organizing guest lectures, industrial visits, training sessions, seminars, workshops, and Faculty development Programmes. These initiatives aimed to enhance the understanding of the latest tools and techniques in the field among both students and teachers.</p>
Under DBT Star College Scheme		

Objectives of Celebrating Science Week	About Speakers
<ul data-bbox="215 1473 582 2094" style="list-style-type: none">• Promoting awareness: Science Week aims to raise awareness about the importance of science and its impact on society. It seeks to highlight the relevance of scientific research and discoveries in various fields.• Showcasing scientific achievements: The celebration provides a platform for showcasing recent scientific achievements, breakthroughs, and advancements. This can include presentations, exhibitions, and demonstrations highlighting cutting-edge research and technologies.• Fostering scientific literacy: This Week aims to improve scientific literacy by providing opportunities for people to engage with scientific concepts, principles, and methodologies in accessible and engaging ways.• Facilitating collaboration and networking: It brings together scientists, researchers, educators, policymakers, and other stakeholders to exchange ideas,	<p data-bbox="614 1473 981 1541">collaborate on projects, and build networks within the scientific community.</p> <ul data-bbox="630 1545 981 1780" style="list-style-type: none">• Addressing societal challenges: The Week may focus on addressing specific societal challenges or issues through science and innovation. This could involve discussions, workshops, and initiatives aimed at finding solutions to pressing global problems, such as climate change, public health crises, or sustainable development. <p data-bbox="614 1787 981 1832">Note: Participants will receive Certificates.</p> <p data-bbox="614 1841 981 1863">Registration</p> <p data-bbox="614 1877 981 2004">There is no registration fee for this programme, though, prior confirmation of participation is necessary through mail address dbtstarcollegeschemegcsanjauli@gmail.com</p> <p data-bbox="614 2027 981 2072">The deadline for confirming participation is February 20th, 2024.</p>
	<ol data-bbox="1013 1473 1380 2094" style="list-style-type: none">1. Dr. P.K. Ahluwalia Professor Department of Physics HP University Shimla (Key Note Speaker)2. Dr. M.S. Chauhan, Professor, Department of Chemistry, HP University3. Dr. Aman Sharma, Professor Department of Computer Science, HP University Shimla4. Dr. Daleep Sharma, Associate Professor, Department of Mathematics5. Dr. Pankaj Vaidya, Head, Yogananda School of AI, Shoolini University6. Dr. Shashi Dhar Coordinator, HP Patent Information (HPPIC) HIMCOSTE7. Dr. Ritvik Chauhan, Information officer EICAP PC hub HIMCOSTE Shimla, HP8. Dr. Vaneet Jishtu, Scientist- E, HFRI, Shimla9. Dr. Pawan Kumar, Scientist F and Head Forest protection division ICFRE10. Dr. Arun Kumar Assistant Professor, Govt. PG College Bilaspur (Hands on Expert)

Day-1 (February 22, 2024)

Pre-lunch session:

The function began with the arrival of our esteemed guests and speakers of the day, Dr. P.K. Ahluwalia, President IAPT; Dr. Vaneet Jishtu, Scientist-E, HFRI Shimla; Dr. Manisha Kohli, Principal, RKMV Shimla; and Dr. Bharti Bhagra, Principal, CoE, Government College, Sanjauli. The anchor, Dr. Deepti Gupta, welcomed all the guests and highlighted how science has been a part of our day-to-day life for centuries. The function began with lamping the lights in front of the mural of Goddess Saraswati, seeking her blessings. Our guests were facilitated with a batch and a token of appreciation.



Dr. Kirti Singha, Coordinator DBT Star College Scheme, was called upon the stage for the formal welcome speech. She, in her speech highlighted the importance of science and talked of how such functions help inspiring people to do well for the society and lay a positive impact on the world. She expresses her sincerest gratitude to Dr. Bharti Bhagra, Principal, Government College, Sanjauli and all the persons involved for their utmost support and guidance.



Dr. Bharti Bhagra, Principal of the College, highlighted how scientists, leaders, and researchers sow the seeds of scientific temper and curiosity in our minds and inspire us to dream of a better future.



The guests and the jury, Dr. Monica Chandel and Dr. Shivani Keprate, were invited to visit the model exhibition stalls, where twenty models made by students of participating schools and colleges were demonstrated.

Dr. P.K. Ahluwalia, the keynote speaker, President IAPT, came upon the stage with his presentation titled, “75 Impactful Years of Science and Technology”. He spoke of the contributions of our scientists- Dr. Homi J Bhabha, C.V. Raman, M. Swaminathan, Dr. A.P.J. Abdul Kalam, and Joseph Kurian to the nation-building process. He spoke of their contributions in the scientific community that made India a self-sufficient ‘Atamanirbhar Bharat.’ He spoke of the scientific developments in India since independence to this date.



Dr. Vaneet Jishta, our second speaker of the day, Scientist-E, HFRI Shimla, gave a presentation on the “Role of our Traditional Cultural Practice and Knowledge of Plant Conservation. He made us aware of how our activities that lead to human-biodiversity conflict are creating a serious impact on our nature and the planet. He gave us a solution by emphasizing the role of our traditional practices to attain sustainable development. He spoke of how practicing these customs can lead to a better living environment, not only for us, but for the future generation as well. He spoke of naturally extracted utilities as an alternative to the chemically generated products. Concluding, he said, “The mystery of human existence lies not in just staying alive, but in finding something to live for.”

Post-lunch session:

Intercollege drama competition was held in the post-lunch session of day-1. We had four participating themes.

The first team to act was GC Sanjauli, their topic was “Plastic Pollution”. They, in a very engaging manner, gave the audience a lesson on how the use of plastics has severely damaged our society, living environments, and the planet as a whole. The moral was to not use plastics, and instead use better and eco-friendly alternatives.

The second team to enact their play was RKMV Shimla, on the topic “Impact of Modern Technologies on our society”. They in a very amusing manner showed us how modern

technologies are time and cost-efficient. The drama ended with the message that modern technology is very efficient if used wisely.



The third team to come was St. Bede's Collge, Shimla, with the topic "Lamarckism, Neo-Lamarckism, and Darwinism." They in a comical and edifying manner made the audience understand these difficult theories of evolution. The last team was GC Bilaspur, and they enacted the play on "Raman Effect". With this the first day of our Glorious Science Week celebration was concluded.

Day-2 (February 23, 2024)

Pre-lunch session:

The event started at 11:00 am with anchor Dr. Shikha Chandel giving a brief summary of yesterday's events. The Chief Guests of the day were eminent speakers, Dr. Ritvik Chauhan, Information Officer EICAP PC hub HIMCOSTE Shimla, HP; and by Dr. Arun Kumar, Assistant Professor, Govt. P.G. College, Bilaspur. Our guests were facilitated with a token of appreciation.



Dr. Ritvik Chauhan, Information Officer EICAP PC hub HIMCOSTE Shimla, HP, in her presentation titled, “Environmental Information, Awareness, Capacity Building and Livelihood programme” explained the objectives of ‘Mission LiFE: Lifestyle for Environment’. She spoke of saying no to plastics, and sustainable food system, modernisation in a healthy way, eco friendly plates, traditional ways to boost immunity, reducing e-wastes. She explained the benefits of traditional food grain crops of Himachal (Bathu, Lal dhan, Fafra, Kodra).

Dr. Arun Kumar, Assistant Professor, GC Bilaspur came upon the stage for his demonstration on 'developing scientific temperament.' He performed various experiments on sinusoidal functions by using pendulum and also explained Damped and Coupled oscillator, Snell's law, Gold leaf electroscope using AI foil. He made understanding some concepts of physics easier.



Post-lunch session:

Dr. Arun Kumar shared his presentation on “Developing Scientific Temperament.” Hands on small experiments was also organized by him for students, in which, all the students participated actively.





A cultural performance by GC Sanjauli, pahari nati, was performed which left the audience marvelled at our cultural heritage.

Day-3 (February 26, 2024)

Pre-lunch session:

The day began with a recollection of the activities of the last two days. The guests of the day were Dr. Aman Sharma, Professor, Department of Computer Science, HPU Shimla; and Dr. Pawan Kumar, Scientist-F and Head Protection Division ICFRE. The guests were facilitated with a token of appreciation.

Dr. Aman Sharma, Professor, Department of Computer Science, HPU Shimla in his presentation titled “Cyber : Bane or Boon” shared his thoughts on IT; software development; boon and bane of internet. He explained about the stages of software development; stenography ,cyber attack , hacking and phishing. He spoke of being aware at all times while online, and to be beware of scams.



Dr. Pawan Kumar, Scientist-F and Head Protection Division ICFRE shared his presentation on the topic “Role of insects -Green technology for insect-pest management in Himalayan forests.” He explained the economic importance of insects ,beneficial insects (bees , lady bugs etc.) and destructive insects (beetles). He spoke of the advantages and disadvantages of biological control of insects. He spoke of how we, ourselves are responsible for the proper management and protection of our forests.



some cultural activities were held. A dance from Simran from RKMV Shimla; a song by students of GC Sanjauli; and a dance performance by GC Sanjauli left all awestruck at the cultural diversity of India.



Post-lunch session:

The invitees from various schools and colleges, also the guests were out for the laboratory visits in the different departments under the Department of Sciences at CoE, GC Sanjauli.





This concludes our third day.

Day-6 (February 27, 2024)

Pre-lunch session:

The day began by a recollection of the events of the previous days. The function started by 11 a.m. with a documentary on DBT Star College. One of guest speakers for the day was Dr. MS Chauhan, Professor, Department of Chemistry, HPU. He expanded our knowledge about the origin and development of thermodynamics.



The second guest for the day was Dr. Pankaj Vaidya, Head, Yoganda School of AI, Shoolini University, Solan. He discussed about the much needed information about Artificial Intelligence where he told us how generative AI can act as a creative partner for music composers, advertisers, teachers, content creators and can be of great use in marketing and personal learning .He also demonstrated the use of Google Gemini and told us about other such applications which not only act as a tool for research (such as Consensus) ,create codes and also help in daily life for modifying videos, images and audios.



Post-lunch session:

Intercollege quiz was conducted with six participating teams from different colleges. The competition was cut-throat and several tie-breaking rounds were held to declare second and third places. First prize was bagged by GDC Arki, St. Bede's was the first runner-up and RG GDC Chaura Maidan bagged the third place.



A cultural activity, kinnauri kayang, was performed by the students of GC Sanjauli. They took the audience with them to the snow-capped Himalayas of Kinnaur. They left all astonished at our cultural diversity.



This concludes our day four of the event.

Day-7 (February 28, 2024)

The concluding day began with the presentation of Dr. Kirti Singha, Convener DBT Star College Scheme, on the theme for science day celebration, “Importance of Indigenous Technologies for VIKSIT BHARAT by 2047”. She highlighted the uses of indigenous technology in Agriculture, Textiles, Architecture and the challenges for it. Prof. Deepti Gupta, Asstt. Prof Botany put some light on the motive of celebrating science day every year on February, 28.



Dr. Anjana Sharma, Assistant Professor, Department of Mathematics, GC Sanjauli, was invited upon the dice to read a brief report of the Glorious Science Week celebration.



Student representatives from participating colleges were invited to give the collective feedback of all students on the science week celebration. They were Bobby Verma (GC Kotshera); Parija Chauhan (B.Sc. First year, GC Sanjauli); Yamini Chauhan (B.Sc. Second year, GC Sanjauli); K Pragati Nargis (B.Sc. Third Year, GC Sanjauli); Vijay Kumar (Vice President, UPSS, GC Sanjauli); and Uday Singh (CSCA President, GC Sanjauli). They spoke of how the event helped developing scientific temperament, and a sense of collective well-being.

The prize distribution ceremony was held for the different competitions held throughout the week. In model making competition, COE GC Sanjauli secured both the first as well as second place, St. Bede’s settled for the third position. In Science Drama competition, COE GC Sanjauli got first position and RKMV got second. In Quiz competition, first place was bagged by GC Arki, second by St. Bede’s, and GC Kotshera came third. Mementos were presented to the jury from nearby colleges for the various competitions-Dr. Jitender(GC Arki), Dr. Neha (GC Kotshera), Dr. Shivani (Solan). Prize of appreciation was also given to Mr. Almon, the

cameraman. Govt. Boys school Lalpani got the first prize and Govt. school Sanjauli got second prize in school level model making completion. Certificates of participation were provided for all the participating teams. Certificates were presented to the faculties of different departments of the organizing college. The concluding day was celebrated as National science Day -2024.





DBT Star College Scheme Team



Dr. Bharti Bhagra, in her concluding remarks, congratulated all involved for the successful completion of the event, and congratulated all the winning teams as well as the participants. She motivated all to show such enthusiasm and zeal again in the future. Dr Kirti Singha, Coordinator DBT Star college scheme presented a formal vote of thanks to one and all involved in making the week long celebration of science a success. The event concluded amidst the sanctity and sacredness of the national anthem.

Details of Resource persons:

1. **Dr. P.K.Ahluwalia** Professor Department of Physics HP University Shimla (Key Note Speaker)
2. **Dr. M.S. Chauhan**, Professor of Chemistry, HPU
3. **Dr. Aman Sharma**, Professor Department of Computer Science, HP University Shimla
4. **Dr. Pawan Kumar**, Scientist F and Head Forest protection division ICFRE
5. **Dr Vaneet Jishtu**, Scientist – E, HFRI, Shimla
6. **Dr. Pankaj Vaidya**, Head at Yogananda School of AI, Shoolini University Solan
7. **Dr. Rivik Chauhan**, HIMCOSTE, Shimla, H.P.
8. **Dr. Arun Kumar** Assistant Professor, Govt. PG College Bilaspur (Hands on Expert)

Report Compiled by Dr Girish Kapoor (Assistant Prof. of Mathematics) and team members

Submitted & Edited by : Dr. Kirti Singha (Coordinator, DBT Star College Scheme)