

Annual Report 2023 -24

Sanmati Government College of Science Education and Research Jagraon was established in 1968 with the mission to provide quality science education to the rural youth of Punjab. The Vision and Mission of college clearly articulate college's commitment towards learner centric approach for enhancing their knowledge and hence upliftment of society. The college has made all possible efforts to become more innovative and entrepreneurial and to provide impactful learning experience to students. Our focus on Holistic development of students is reflected through all the activities which were undertaken during the session 2023-24. This year was all the more important as the college underwent for the third cycle of accreditation by NAAC. The peer team visited the college on 30th and 31st January, 24 and awarded 'B' grade to college.

POST GRADUATE DEPARTMENT OF BOTANY

P.G. Department of Botany has a dedicated team of 9 teachers who continuously do hard work for the uplift of the department. Department is producing university toppers and position holders since its inception. Students of PG and UG classes take up research projects to inculcate research aptitude.

On 18 July 2023 College celebrated 55th foundation Day under the able guidance of college director Ms. Kirpal Kaur. Department teachers Mrs. Amandeep Kaur and Mr. Kulwinder Singh made all the arrangements.

On 25 July 2023 College organized a workshop on gender sensitization, Mrs. Amandeep Kaur, Assistant Prof. of Botany presented a PPT presentation on Gender sensitization.

On 11/08/2023 Department Teachers Mr. Kulwinder Singh NSS officer and NSS volunteers undertook a plantation drive.

On 28/08/2023, College organized a seminar on "Ban on paddy straw burning". Mrs. Surbhi Gupta Assistant Professor of Botany discussed in detail about the harmful effects of paddy straw burning and environment degradation.

College celebrated World Ozone day on 18/09/2023 to make students aware about the importance of Ozone layer. All the faculty members of department actively participated.

Our College in collaboration with Municipal committee Jagraon organized a seminar on Solid Waste Management. All the faculty members of department actively participated.

Mr. Jatinder Singh, Assistant professor of Botany, Scholarship Nodal officer on 23/09/2023 shared with student different scholarship schemes available and how to apply for these scholarship schemes.

A competition on the theme "Swachhta hi Sewa" was organized on 30/09/2023. Mr. Jatinder Singh Assistant Professor acted as judge for debate competition.

Mr. Jatinder Singh ,in charge Career Counseling and Guidance cell organized Seminar on Career options for students. DBEE Ludhiana CEO Mr. Deepak Bhalla and Councilor Mr. Anuj gave a lecture on various career options and schemes of NSDC.

Mrs. Amandeep Kaur , Assistant Professor of Botany participated and gave oral presentation entitled "Molecular characterization of Mechanosensitive Channels in Bread wheats" in 16th Chandigarh Science Congress (CHASCON 2023) organized by Panjab University Chandigarh in association with CRIKC from October 12th to 14th, 2023.

Mrs. Amandeep Kaur, Assistant Professor of Botany Participated in the 93rd Annual Session of the academy (NASI) organized at BARC on 3rd to 5th December 2024

Mrs. Amandeep Kaur, Assistant Professor of Botany published research article in springer on "Ascorbate oxidases in bread wheat: gene regulatory network, transcripts profiling, and interaction analyses provide insight into their role in plant development and stress response" in 13 december 2023.

Raveena of M.Sc. BotanyIIRD Semester secured 1st position in college (December 2023) University Examination. Ms. Jagdeep Kaur of M.Sc. Botany 1st Semester(December 2023) secured 4th positions in university examination

Mrs. Amandeep Kaur, Assistant Professor of Botany published research article in Elsevier on "Modulation in gene expression and enzyme activity suggested the roles of monodehydroascorbate reductase in development and stress response in bread wheat" in January 2024.

Mr. Jatinder Singh , incharge Career Counseling and Guidance cell arranged seminar on 10/02/2024 on "Career options after Graduation". Mr. Des Raj branch Head Bright Academy was the Resource person.

Career Counseling and Guidance cell incharge Mr. Jatinder Singh, arranged following industrial tours of students:

- 1.On 20/02/2024 industrial visit to A.P. refinery tappar.
- 2.On 21/02/2024 visit to Directorate of Mushroom cultivation Solan.
- 3.On 21/02/2024 industrial visit to A.P. refinery tappar.
- 4.On 24/02/2024Visit to IOL chemical and Pharmaceuticals Barnala.
- 5.On 27/02/2024 Visit to CIL Panjab University Chandigarh.

Mrs. Amandeep Kaur, Assistant Professor of Botany published research article in Cell Press on "Investigation of two-pore K⁺ (TPK) channels in Triticum aestivum L. suggests their role in stress response" in 13 marches 2024.

Plant excursion tour of Students of M.Sc. Ist and IInd was organized from 27/03/2024 to 31/03/2024 in and around Dalhousie.

Career counseling and guidance cell took initiative and guided two students ,Ms. Jashanpreet Kaur of B.Sc. II (NM) at MAHE Manipal and Ms. Jaspinder Kaur of B.Sc. II (M) at IIT Kharagpur to attend two month Summer Research fellowship-2024 offered by IASC during summer vacation 2024.

Mrs. Amandeep Kaur, Assistant Professor of Botany contributed a chapter “Chapter 8 - Osmotin in stress response and signaling in plants” in book “Defence related Proteins in Plants” in January 2024 published by Academic Press.

Mrs. Amandeep Kaur, Assistant Professor in Botany contributed a chapter “. Chapter 1 - An introduction to the defense-related proteins in plants” in book “Defence related Priteins in Plants” in January 2024 published by Academic Press.

POST GRADUATE DEPARTMENT OF CHEMISTRY

With a dedicated team of academicians, the department proudly takes the credit of producing university toppers and merit holders consistently in undergraduate and Post graduate programs. During the session 2023-24, the students of this department were able to get admission in some of prestigious research-based Science courses in India and abroad.

Pride of Department

1. Ms Jaspal Kaur, student of M.Sc II chemistry (4th sem) got 1st position in Panjab University Examination.

Participation/ Honors/ Trips:

Ms. Jaspal Kaur (M.Sc Chemistry) and Ms. Ameet Rana (Assistant Professor Chemistry) participated in DBT sponsored National Conference held at DAV College, Bathinda on March 02, 2024. 1st prize was bagged by them in Poster presentation on the topic “ Emerging Trends in Science and Technology for Sustainable Development”

Ms. Jaspal Kaur was honoured by Mr. Gurbir Singh Kohli, PCS , Jagraon on 15-08-2024 on independence day.

Freshers party was organised by the Post Graduate department of Chemistry on 20-02-2024.

Farewell party was organised for the Post Graduate department of Chemistry on 20-04-2024.

One day educational trip was organised for the Post Graduate department of Chemistry on 24-02-2024 to IOL Barnala .

One day trip was organised for the Post Graduate department of Chemistry on 26-04-2024 to Naina Devi, Shri Anandpur Sahib And Virasat-e- Khalsa .

Three students got selected at IOL, Barnala .

DEPARTMENT OF PHYSICS

Department of Physics organized an educational trip to Pushpa Gujral Science City, Kapurthala on October 26th 2023 , as part of its experiential learning initiatives. Students of Bsc III NM visited Science City under the leadership of Mrs. Sarbdeep Kaur Sidhu. Students explored various scientific exhibits, including space exploration, robotics, and renewable energy. The planetarium show was a highlight, providing insights into celestial phenomena. The trip provided students with hands-on learning experiences and enhanced their understanding of scientific concepts in a practical setting. It was an enriching and enjoyable experience for all participants.

Students, with guidance of Mrs Akashdeep Kaur and Mrs.Sarbdeep Kaur Sidhu and successfully prepared working models on the Foucault Pendulum and Chandrayaan-3 on January 30th 2024. These models showcased their innovative skills and understanding of physics concepts. The models were highly appreciated by the NAAC team for their creativity, precision, and relevance, reflecting the department's commitment to fostering scientific curiosity and hands-on learning.

The Physics Department celebrated National Science Day 2024 in collaboration with IAPT RC2 on February 28th with great enthusiasm. The day began with an inspiring extension lecture delivered by a physicist Dr. Jagdeep Singh Assistant Professor SLIET Longowal who highlighted the significance of science in everyday life and its future impact. The department also organized an inter-school and inter-college poster-making and presentation competition on the theme 'Indigenous Technologies For Viksit Bharat'.

Zoology Department

During this session the B.Sc Ist year took part in preparation of model/ charts on " Life cycle of Anopheles/ Culex mosquito."

Students of B.Sc II prepared a detailed project on topics like "Gambusia as Biological control"&"Feeding behaviour of Fresh water fishes",

The students were also initiated into observation cum performance based experiments, where they gathered easily available stages of the insects in their surroundings, observed & recorded their developmental stages with the help of pictures/photos& thus were able to study the life cycles of insects, giving them an insight into the development involved therein.

In another study, the students were asked to click photos & identify the common & scientific names of the birds in the college, which helped them to gather knowledge on Aves. As an extension of this project the students also collected the abandoned nests so as to develop a deeper understanding of skills of nesting , types of nests, places of nesting in Birds.

Biochemistry Department

The department observed a surge in admission from single digit to about 21 students seeking admission in this course. The students learned the intricacies of working of Spectrophotometer, Colorimeter, Electronic weighing balance. In order to enhance their knowledge beyond the prescribed curriculum the students prepared assignments on a variety of topics as Nucleotides their structure and function Proteins ,Conversion of amino acids to specializes products- polyamines, glutathione, catecholamine , melanin, serotonin and creatinine.

Language Department

Language Department took the initiative to celebrate Independence Day on 15th August 2023 under the guidance of Mrs. Nidhi Mahajan. Language department made the necessary arrangements to do Sukhmani Sahib path on 20th August 23 on the inauguration of new session in the college. On 20th October, 23 language department organised a workshop on “Resume writing and Interview skills “in which Dr. Sumeet Brar from GCG Ludhiana was the resource person .She enlightened the students about the various techniques of making good resume and polishing interview skills. On 27th November 23 , Sukhmani Sahib path was done in hostel to commemorate Gurburab of Shri Guru Nanak Dev Ji.

Republic Day was celebrated under the supervision of language department on 26th January 2024. On 21st February 2024 language department celebrated International mother Tongue day. Doctor Rajpal Singh from Amritsar was the resource person in the first session and in the second session of this program Kavi Darbar was organised in which 8 students of the college recited their self composed poems.

Yoga day was celebrated on 21st June 2024 under the supervision of Mrs. Nidhi Mahajan. Dr. Karmdeep Kaur of Punjabi attended Punjabi Bhasha conference at Punjabi Bhawan Ludhiana on 27th April 2024.

Mrs. Nidhi Mahajan worked as NAAC coordinator and college undertook the third cycle of accreditation.

NSS Activities

NSS Unit of our College conducted diverse activities under the N.S.S. and associated schemes. Highlights include Yoga and Meditation Camp, tree plantation, Independence Day, and campaigns like Meri Mati Mera Desh and Swachhta Hi Sewa. Workshops on entrepreneurship, innovation, and career guidance empowered students. Environmental and social awareness events, including World Environment Day, Aids Day, and plastic-free city rallies, were impactful. Adventure and digital marketing workshops enriched participants. Republic Day, National Science Day, and Martyr's Day celebrations reinforced patriotism. Together, these initiatives cultivated holistic development and societal contribution.

Cultural activities

- 55th Foundation Day of college was celebrated on 18 July 2023 and seminar was conducted by Prof. Amandeep Kaur on “Life and principles of Acharya Shri Vimal Muni Ji”.

- A total of 53 students participated in various items of Zonal Youth and Heritage festival 2023-24 held at Guru Nanak College, Ferozpur cant on 16th October 2023 to 19th October 2023. A total of 23 students got prizes in several items of Zonal Youth and Heritage festival 2023-24.

- Three students: Dilpreet Singh, Komalpreet Kaur and Amandeep Kaur were participated in Heritage quiz organised under Inter-Zonal Youth and Heritage festival 2023-24 on 06 november 2023.

- Teej festival was celebrated on 29 August 2023 under the supervision of Vice Director Prof. Nidhi Mahajan and organised by cultural committee. Jasnoor kaur was selected as “Queen of Teej”.

- Green Diwali was celebrated on 24 November 2023 under the supervision of Director Kirpal Kaur.

- Lohri was celebrated on 13 January 2024 to preserve the culture and heritage of Punjab.

- Martyr’s Day of Shaheed Bhagat Singh, Sukhdev and Rajguru was observed on 23 March 2024. “Natak” was performed to offer tribute to them.

Sports Activities

The 44th annual sports meet was organized on 23 feb 24 under the able guidance of Director Prof.Ms Kirpal kaur. Chief Guests Hon . Sardar Teja Singh Dhaliwal General Secretary Basketball Association Punjab & Hon. Sardar Parminder Singh S.P(D) inaugurated the athletic meet.

About 450 students participated in the March Past & events like 100mts, 200mts race (G&B) ,long jump (G&B),Short put (G&B), Discuss throw (G&B), Relay race4x200 (B), 3 legged race (G) .

The Rakesh Raman Memorial Running Trophy for Best March Past Contingent was won by B.Sc.II (Med & NonMed).

The award for Best Athlete (G) was won by Jasmeen Kaur M.Sc I Bot & Best Athlete (B) went to Harman Singh B.Sc. II(Non Med).

Conclusion-

This is an account of the remarkable achievements of our college during this academic session , we are really proud of our students and staff members for their sincere efforts. The collective achievements of our staff and students have really ignited a passion for Excellence and to take this temple of learning to greater heights. We all are proud of our shared success stories during the session and eagerly anticipate the greatest strides that we will take in future.

