

Report: Department of Chemistry (2021-2022)

Due to covid 19 pandemic, in this session all regular classes continued in online mode. Ms. Antara Sharma continued as head of the department. This year our department welcomed the fresh batch of 28 students in the first semester. A very short interaction on virtual mode between the faculty and the parents was held to make them well acquainted with the rules and regulations of the college. As per Government order college has resumed offline classes from 15th November 2022.

Due to covid pandemic there was a delay in university end semester examination for even semesters. It was held in the month of July 2021. The mode of examination was assignment based. Similarly odd semester examination was held in the month of February of 2022. The overall university result this year was fair. Out of 28 students in 1st semester 4 students scored more than 8.0 SGPA February 2022, 29 out of 32 and 10 out of 14 students scored more than 8.0 SGPA in the 3rd semester and 5th semester examination respectively held in February 2022. Again 24 out of 32 students in 2nd semester have scored more than 9.0 SGPA and 11 out of 14 students scored more than 8.0 SGPA in the 4th semester examination held in February 2022. Student's performance was good in the 6th semester (Hons.) Examination 2021 as well, Aayush Raj Chettri topped the college by scoring 9.03 CGPA (overall).

On the 26th of November 2021, the students of the third semester(2021) - Department of Chemistry - organized a short program to commemorate Constitution Day. Also known as National Law Day, it is celebrated yearly on 26th November to observe the adoption of the Constitution of India.

“The Constitution of India lays down the framework defining fundamental political principles, establishes the structure, procedures, powers, and duties of government rights, directive principles and the duties of citizens.”

The event began with the welcoming of the guests by the host, Sai Prasanna Thapa. This was followed by a brief history of the making of the Constitution of India by Sakshi Chhetry. The Chief Guest for the event was the revered Vice Principal 'Academic', Father Binay Xavier.

There were three presentations arranged for the celebration. Each of stimulus and significance. These are as follows:

1. Fundamental Rights

Fundamental Rights are the basic rights of an Indian citizen in the Indian Constitution. It was included in the First Draft Constitution (Feb 1948), Second Draft Constitution (17th October 1948) and final Third Draft Constitution (26th November 1949), prepared by the Drafting Committee.

There are six Fundamental Rights:

1. Right to Equality – Equality before the law implying prohibition of discrimination.
2. Right to Freedom – Freedom of speech, expression, and freedom, to form unions and associations. Freedom to travel and live in any part of the country.
3. Right against Exploitation – Prohibits forced labour. Abolition of employment of children below 14 years old.
4. Right to Freedom of Religion – Freely adopt, practice and spread the religion of choice.
5. Cultural and Education Rights – All are free to get the education of their choice. Primary right of each child. Free to follow the culture of their choice and setup own education institutions.
6. Right to Constitutional Remedies – Any citizen has the power to go to the court in case of denial of any of these Fundamental Rights.

Presented by Aditya Gurung and his team (Garima, Simran, Abhikrit, Abhinash, Pravash, Anavighya, Sourav and Bishal).

2. Article 15

Article 15 appears in the Constitution of India under Part 3 which deals with the Fundamental Rights of the citizens of India. Further, Articles 14 to 18 fully deal with the various issues related to “Right to Equality”. There are six clauses of Article 15:

1. State shall not discriminate citizens on religion, race, caste, sex and place of birth (RRCSP).
2. State and private persons shall not discriminate on RRCSP.
3. For the welfare of women and children.
4. For the welfare of Socially and Educationally Backward Classes (SEBC), SC and ST’s.
5. For the educational empowerment of SEBC, SC and ST’s.
6. Educational empowerment of Economically Weak Sections.

Article 15 has always hurdled its way out to reach to the one really in need. The condition of the downtrodden has highly improved since its origin in 1949. It provides a base to each and everything that legislature needs to formulate provisions to promote harmony in the society.

Presented by Sewak Gurung and his team (Mrinalika, Aayushma, Pushpanjali, Shreya, Prem Sagar, Rinzee and Supriya).

3. Women’s Rights

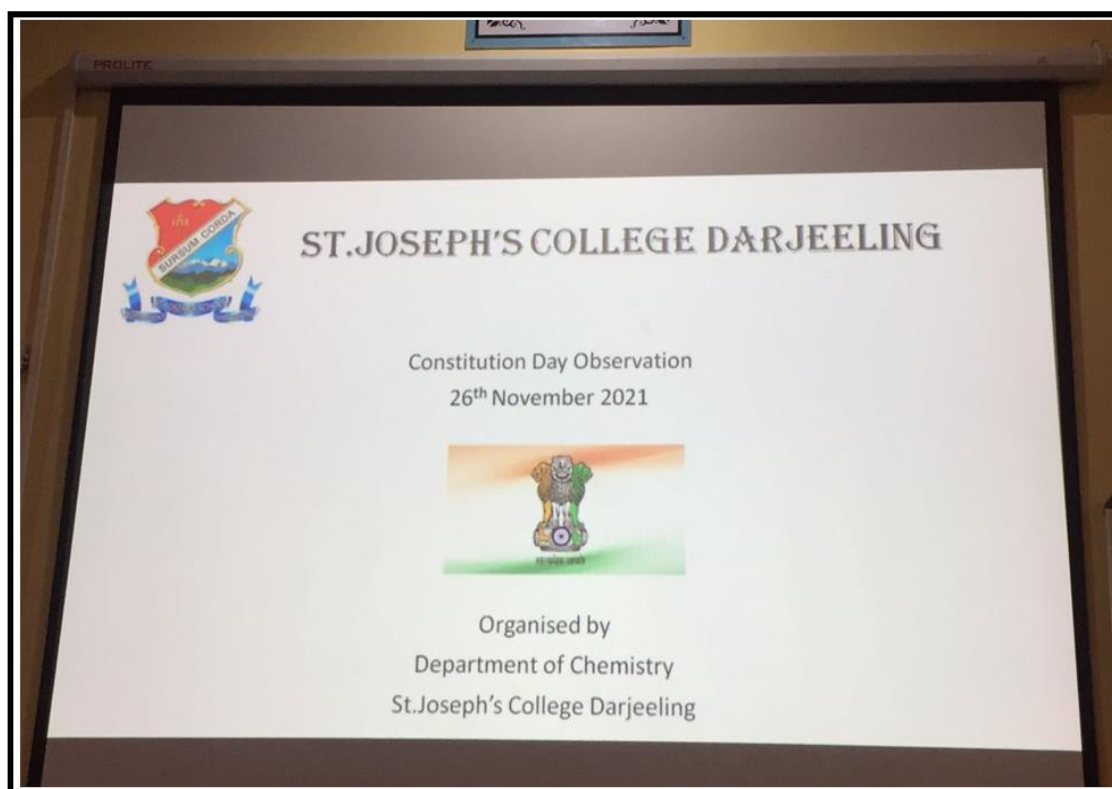
Problems of gender inequality, harassment and infanticide are predominant, especially in the Indian society where a major section of the populace is still ignorant and more importantly, easily influenced (religious or otherwise).

Presented by Hridhiraj Chhetri and his team (Saloni, Richa, Bibek, Tshumi, Kriti, Malika, Kusum).

The event ended with a thought-provoking speech by the Chief Guest, followed by a Vote of Thanks by Preeti Mahato.

Fig: Some Glimpses of Observation of Constitution Day on 26th November, 2021.





The department has organized a parent teacher meeting on 20th April 2022. The intention of the meeting was to develop a healthy and strong relationship between the parents and the teachers for the holistic development of the student. The parents of most of the students attended the meeting. Meeting started with the introductory speech by Ms. Antara Sharma, HOD department of chemistry, followed by the interaction of all teachers with the parents. The lockdown of two years had brought a disparity between the physical growth and mental growth of the student which was felt by both the parents and

teachers. The parents showed concern about the situation. The parents were highlighted about the life of a student in St. Joseph's College. They were also given details regarding rules and regulations of the college and importantly the rule regarding the attendance was stressed upon. It was empathized that if parents and teachers work together, no doubt performance of the student will improve. Contact numbers and email id of all department faculties were provided to parents for better communication.

After this general discussion a one-on-one meeting was arranged for individual parent with their ward. The parents inquired about the academic performance of their ward. A detail report regarding this was shared by the teachers to the parents.

The parent teacher meeting came to an end with the conclusion that the progress and development of the students depend on the joint efforts of parents and teachers.

Fig: Some Glimpses of Parents and Teachers Meeting at the department of Chemistry



Dr. Dhiraj Brahman has successfully completed NCC training program for Associate NCC Officer at OTA Kamtee, Nagpur from 16 July 2021 to 21 October 2021.

Dr. Kiran Pradhan has resigned from the department of chemistry, St. Joseph's college on 24th February 2022 as he joined University of North Bengal as an Associate Professor. Dr. Suman Chettri (a part time teacher) has also resigned from the department and subsequently Mr Pranesh Rai joined the department as a part time teacher.

Research publications and seminars attended by teachers:

1. Ms. Antara Sharma

Publication:

a) Physicochemical and computational investigations of some food chemicals prevalent in aqueous 1-butyl-1-methyl-pyrrolidinium chloride solutions with the manifestation of solvation consequences: *Journal of Molecular liquids*, 2022, 353; 118800. doi: <https://doi.org/10.1016/j.molliq.2022.118800>.

2. Dr. Rajani Dewan

Dr. Rajani Dewan has participated in one day workshop on “Instrumentation & Techniques for Chemical Analysis” organized by department of Chemistry, Sikkim University on 23rd June 2022.

3. Dr Dhiraj Brahman

a) [Diaquo{bis(p-hydroxybenzoato-κ1O1)}(1-methylimidazoleκ1N1)}copper(II)]: Synthesis, crystal structure, catalytic activity and DFT study. *Journal of Molecular structure*, 2022, 1247,131323. doi: <http://dx.doi.org/10.1016/j.molstruc.2021.131323>.

4. Mr. Sailesh Chettri

a) [Diaquo{bis(p-hydroxybenzoato-κ1O1)}(1-methylimidazoleκ1N1)}copper(II)]: Synthesis, crystal structure, catalytic activity and DFT study. *Journal of Molecular structure*, 2022, 1247,131323. doi: <http://dx.doi.org/10.1016/j.molstruc.2021.131323>.