



## DEPARTMENT OF BIOTECHNOLOGY

### ACTIVITIES 2023-2024

#### THOUGHT PROVOKING SESSION ON 'INTERNATIONAL DAY OF GIRL CHILD'

**Date:** October 11, 2023

**Objectives:**

- The sessions was organised with the predominant purpose of *providing students a platform for sharing and clarifying ideas, opinions, and information.*


**Description:** The Department of Biotechnology of St. Bede's College organized a thought provoking session was organized on the 'International day of Girl Child' on October 11, 2023. The theme for the session was 'Invest in Girls' Rights: Our Leadership, Our Well-being'. Students from B.Sc. (Hons.) Biotechnology shared their views on the range of movements and actions to curtail girls' and women's rights and roll back progress on gender equality,

**Outcome:**

- The session instilled values and helped the students to become responsible human beings. It encouraged students to imbibe the qualities of self-acceptance as well as self-worth.






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## **COLLECTION AND DISPOSAL OF FOOD WASTE THROUGH COMPOSTING ON ‘WORLD FOOD DAY’**

**Date: October 16, 2023**

### **Objectives:**

- The activity aimed to expose students to the scientific principles underlying the composting process through the perspective of biogeochemical cycles and – more broadly – to notions of eco-citizenship and sustainable development.
- To promote a sense of responsibility and environmental awareness among the students and educate them about the safe disposal of organic matter.

### **Description**

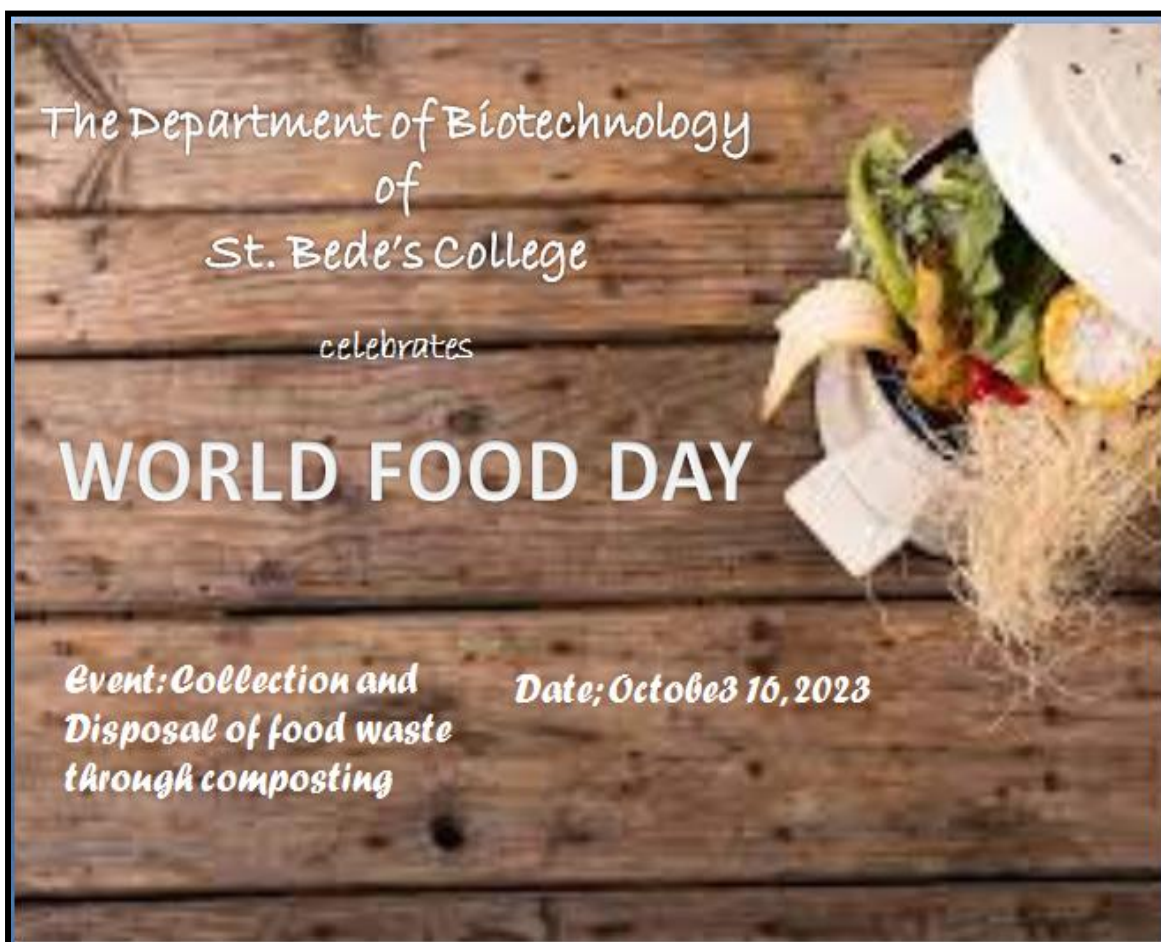
On October 16, 2023, on the occasion of World Food Day’ the students of Department of Biotechnology of St. Bede’s College collected food waste and other organic waste from the college canteen and disposed them off in the composting site of the college. Recycling food and other organic waste into compost provides a range of environmental benefits, including improving soil health, reducing greenhouse gas emissions, recycling nutrients, and mitigating the impact of droughts.



### Outcomes

- The activity promoted organic gardening, solid waste management in homes and reduced dependence on chemical products
- The activity promoted a sense of proper collection and disposal of food waste among students.

### Brochure:







## QUIZ COMPETITION ON WORLD CRISPR DAY

**Date: October 20, 2023**

### Objectives:

- To educate students about the principals and working of CRISPR
- The enable students to define and interpret knowledge of genetic engineering.
- To promote and develop professionalism , team spirit , integrity and communication among different students

### Description:

World CRISPR Day is celebrated every year on 20<sup>th</sup> October to discuss the technological implications and applications of the gene editing tool CRISPR. The Department of Biotechnology of St. Bede's College celebrated World CRISPR Day by organizing a Quiz competition on the theme of genetic engineering and its recent trends. Four teams of students of B.Sc (Hons.) Biotechnology and Microbiology actively participated in the quiz. The quiz was conducted in two rounds and consisted of 20 questions each. The students of B.Sc. (Hons) Biotechnology 3<sup>rd</sup> year won the competition. The aim of the competition was to educate the students on the current knowledge of genetic engineering and gene modification tools such as CRISPR.

### Outcomes:

- The quiz helped the students get a broader understanding of genetic engineering and CRISPR.



- It inculcated the skills of team work, confidence, global awareness as well as sense of accomplishment among students.

### Brochure:





## COMPOST SALE

**Date: November 3, 2023**

### Objectives:

- Compost sale aimed in promoting organic gardening, solid waste management in homes and reduce dependence on chemical products

Description: The department of Biotechnology and Microbiology of St. Bede's College, Shimla organized a sale of compost on November 3, 2023. The compost was prepared in the composting unit of the college using the food waste material collected from the college mess and canteen. The idea was to promote proper waste collection and its disposal. Composting recycles organic matter, such as leaves and food scraps, into a valuable fertilizer that can enrich soil and plants. The compost was sold under the brand name of Bede's Biocom. The Principal of the college, Prof. (Sr.) Molly Abraham inaugurated the sale. The faculty and students of the college bought the product. The college further plans in selling the compost to community outside the college.

### Outcomes:

- The sale helps promoting team work among students for the purpose of selling objectives to increase sales, and maximizing profits.
- The students and faculty were exposed to the scientific principles underlying the composting process through the perspective of biogeochemical cycles and – more broadly – to notions of eco-citizenship and sustainable development.

### Brochure:









## CAREER COUNSELING SESSION AND GUEST LECTURE ON 'BIOTECHNOLOGICAL ADVANCEMENTS AND CAREER OPPORTUNITIES

**Date:** November 23, 2023

### **Objectives:**

- To make students aware about the recent advancements in biotechnology
- To help students make decisions and develop the knowledge and skills they need for future career and life decisions

**Description:** A career counseling session and guest lecture was organized by the department of biotechnology on November 23, 2023. The resource person was Dr. Vikas Mangal, Scientist, CPRI Shimla. Dr. Vikas Mangal enlightened the students on the recent developments in the field of molecular breeding and genetic engineering and their benefits to the society. He furthered conducted a career counseling session and motivated the students to work towards their goal with full potential as well as made them aware about the various career options in the field of biotechnology. He also educated the students about different competitive exams and online courses that can help them build a bright future.



**Outcomes:**


- The students were made aware about the various career options after graduation in biotechnology.
- The students learnt the various concepts of genetic engineering and molecular breeding

**Brochure:**

**Department of Biotechnology**  
is organizing a  
**Guest Lecture and Career Counselling Session**  
on  
**‘Biotechnological Advancements and  
Career Opportunities**

Resource Person: Dr. Vikas Mangal, Scientist, CPRI Shimla  
Venue: Seminar Room  
Date: November 23, 2023  
Time: 11.00 AM onwards



 **GPS Map Camera**

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## **WORKSHOP ON 'HAND'S ON TRAINING IN MOLECULAR BIOLOGY AND BIOINFORMATICS'**

**Date: December 7, 2023**

**Objectives:** The Aim of the workshop was to bridge the gap between theoretical knowledge and practical applications in the state of art laboratory environment.

**Description:** The department of Biotechnology and Microbiology of St. Bede's College in collaboration with Jaypee University of Information Technology conducted a one day workshop on Hands on Training in Molecular Biology and Bioinformatics on December 7, 2023.. Professor Sudhir Sayal and his team from Jaypee University of Information Technology demonstrated several laboratory techniques of molecular biology and bioinformatics such as DNA isolation and sequence analysis to the undergraduate science students of St. Bede's College. Prof. Sudhir Sayal also counseled the students on learning techniques and various competitive exams students can take up in the future.

### **Outcomes:**

- The workshop enhanced both the wet lab and dry lab skills of the students in fields of molecular biology and bioinformatics.
- The workshop also helped the students to navigate their career transitions and challenges.

### **Brochure:**







## **National Science Day**

**Date: February 28, 2024**

### **Objective:**

- Spreading the awareness of Biotechnology in cancer treatment
- Inspiring curiosity and interest in biotechnology
- Recognizing the efforts of biotechnologists in human disease and treatment

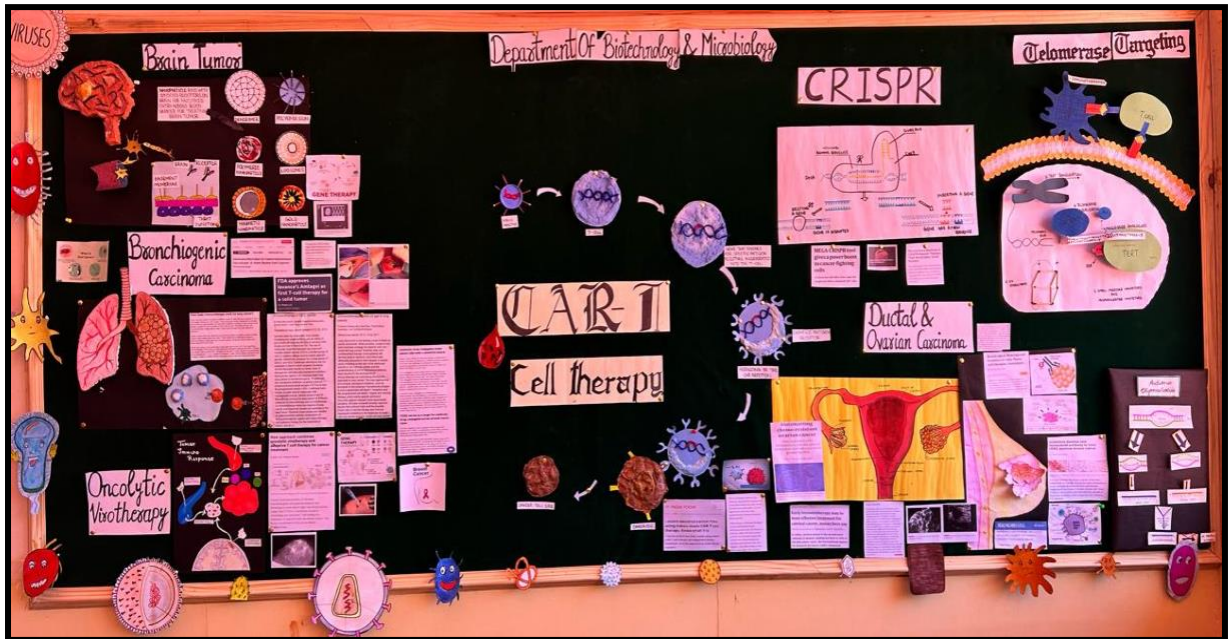
**Description:** National Science Day is celebrated every year on February 28, to mark the discovery of the 'Raman Effect' by Sir C.V. Raman on 28 February 1928. This year the theme for the Day was 'Indigenous Technologies for Viksit Bharat'. The Department of Biotechnology also celebrated National Science Day wherein the students prepared a Bulletin Board illustrating the Plausible Role of Biotechnology in Cancer Therapy. The students of B.Sc. (Hons.) biotechnology also participated in a quiz competition organized by the department of science as well as they displayed scientific models on the applications of biotechnology.

### **Outcomes:**

- The students gained the understanding of the extensive and influential part played by Biotechnology in the studying, diagnosing and treating several human cancers.



- Group activities helped students develop skills that are valued by employers, such as problem-solving, negotiation, conflict resolution, leadership, critical thinking, and time management.







**St. Bede's College**  
(NAAC Re-Accredited 'A+' College)  
under the aegis of IQAC  
celebrates  
**National Science Day**  
on  
**"INDIGENOUS TECHNOLOGIES FOR VIKSIT BHARAT"**

**Date:** 28<sup>th</sup> Feb. 2024  
**Venue:** Seminar Room  
**Time:** 10.00 am to 12.00 pm



**Eminent Speaker**  
Dr. Ramesh Chand Thakur  
Associate Professor  
Department Of Chemistry  
Himachal Pradesh University Shimla-05

**Activities**  
Interactive Session  
Science Exhibition  
Information Bulletin  
Intra college Quiz Competition