



**CHAITANYA BHARATHI
INSTITUTE OF TECHNOLOGY (A)**

Kokapet(Village), Gandipet, Hyderabad, Telangana-500075. www.cbit.ac.in



ISO Certified
9001:2015

COMMITTED TO
RESEARCH,
INNOVATION AND
EDUCATION

44
years

Brief Report on “NEOZION-2023”

Department of Biotechnology, CBIT

Date: 31.01.2023 to 01.02.2023

Introduction

Sudhee NEOZION-2023 is a two-day national-level technical symposium where every student, mainly life science and biotechnology students across India, can showcase their knowledge and ideas via paper presentations, poster presentations, and live projects and many more. The main aim of this Annual Technical National Symposium is to provide a platform for participants to learn about the latest advances in Biotechnology besides interacting with eminent scientists. The purpose and objective of this event focuses on letting the students explore the real-time Ideas and advancements in the field of Biotechnology. Students with entrepreneurial interests and start up ideas can utilize this platform to present their innovative approach to difficult problems. This is a unique opportunity for participants to enhance their technical skills and broaden their perspectives in this exciting field.

Organizing Committee

Department of Biotechnology

Dr. Ashoutosh Panday, Professor
Dr. Yadavalli Rajasri (I/C. Head) Associate Professor
Dr. G. Vijaya Laxmi, Assistant Professor
Dr. C. Nagendranatha Reddy, Assistant Professor
Dr. K. Dharmalingam, Assistant Professor
Dr. V. Kiran Yellapa, Assistant Professor
Dr. Sanjeeb Kumar Mandal, Assistant Professor

Coordinators:

Mrs. S. Sumithra, Assistant Professor
Dr. B. Sumithra, Assistant Professor

Non-Teaching:

Dr .D. Madhavi latha
D.Mahboob Basha
S.Kavitha
Shaik Amir
B.Sekhar

NEOZION-2023
Volunteers list

S No.	Department	Designation	Name	Year
1	General Management	Chief Coordinators	Bhanu	4/4
			Veniya	4/4
			Sumeet	4/4
			Kavya	4/4
2	Paper Presentation	Organizer	Sudheshana	3/4
		Volunteer	Rahul	2/4
		Volunteer	Sairam	2/4
		Volunteer	Kaushal	2/4
3	Poster Presentation	Organizer	Shynisha	3/4
		Organizer	Alwina	3/4
		Volunteer	Keerthan	2/4
		Volunteer	Kashyap	2/4
		Volunteer	Prashant	2/4
4	Live Projects	Organizer	Sharvani	3/4
		Organizer	Samanth	3/4
		Volunteer	Zuber	2/4
5	Bio-Quiz	Organizer	Aishwarya	3/4
		Organizer	Aakash	3/4
		Volunteer	Manogna	2/4
		Volunteer	Akila	2/4
		Volunteer	Keerthana	2/4
6	Design team	Organizer	Divamshu	3/4
		Organizer	Sirisha	3/4
7	Registration	Organizer	Deekshitha	4/4
		Organizer	Charan	3/4
		Organizer	Chaitra	3/4
		Volunteer	Grace	2/4
		Volunteer	Prashanthi	2/4
8	Publicity	Organizer	Jyothika	3/4
		Organizer	Shreya Sharma	3/4
		Volunteer	Dhruv	2/4

Keynote Session

Topic: Bio electrochemical Systems: A versatile process for value addition and environmental abatement

Resource Person: Dr. Mohanakrishna Gunda, Associate Professor, KLE Technological University, Hubballi, Karnataka.

Profile: Former Marie Curie Fellow

TOP 2% World Scientist – 2021 (Stanford University)

Total Citations (Google Scholar) >4684 (Average- 73+ per publication)

Few Areas of Research Experience:

1. Bio electrochemical Systems (BES)

- Microbial electrosynthesis (MES) for CO₂ capture and conversion to biofuels or value-added products
- Microbial electrolysis cells (MECs) for energy generation from bioremediation
- Microbial Fuel Cells (MFCs) for bioelectricity generation
- Bio electrochemical treatment (BET)/Microbial electro remediation of industrial wastewaters
- Plant based and sediment type MFCs to harness energy from rhizo-deposits

2. Biohydrogen Production

- Dark and Photo fermentations for the treatment of waste organics
- Bio-augmentation strategies to H₂ production

Scope covered:

- *What is Microbial Fuel Cell*
- *Ideas and advancements in the Bio electrochemical treatment techniques*
- *Pros and Cons of Single-chamber, Dual-chamber and Hybrid MFC*

Outcome:

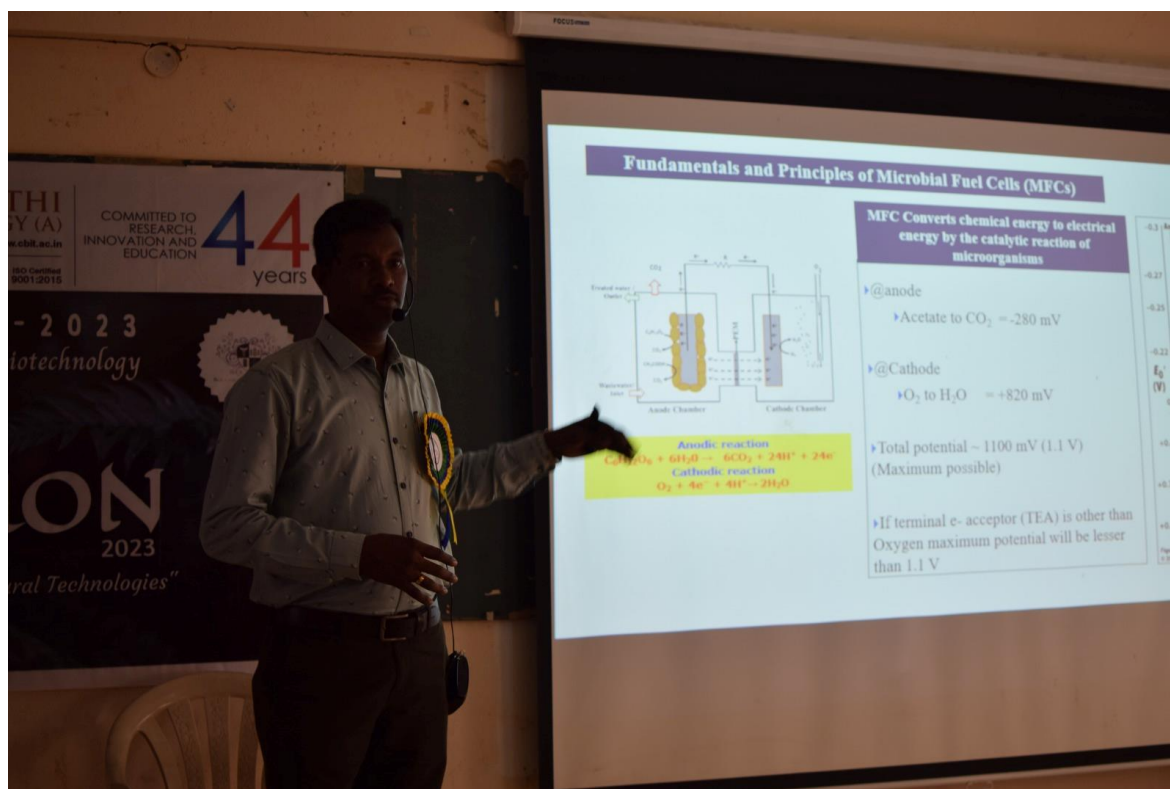
- *Students understood the definition of Microbial Fuel Cell and latest innovation in the field*
- *Students had exposed the real-time Ideas and advancements in Bio-electrochemical treatment techniques that are cost-effective*
- *Students understood different strategies for treatment of waste integrated with high-voltage generation*

Number of students and faculty attended:

Students: 80; Faculties: 11

Photographs:





Event Details

EVENT-1

Paper Presentation

Theme of the activity: Innovation trends in Biotechnology

Scope covered:

Food Biotechnology, Nano Biotechnology, Plant Biotechnology, Algal Biotechnology, Animal Biotechnology, Environmental Biotechnology, Bioprocess Technology, Bioinformatics, Biomedical Engineering, Pharmaceutical Biotechnology

Outcome:

- Students understand the need and apply knowledge of Biotechnology to solve problems in the areas of Medicine, Agriculture, Fermentation technology, Food processing and Environment, and develop entrepreneurial ideas.
- Ability to present their project work through written, oral, and visual presentations.
- Exhibit an ability to work independently and collaboratively.

Number of students and faculty attended:

Students: 70 ; Faculties: 11

Winners list for Paper presentation:

Committee members

1. Dr. Mohanakrishna Gunda, Associate Professor, KLE Technological University, Hubballi, Karnataka.
2. Dr. Ashutosh Panday, Professor, Department of Biotechnology, CBIT
3. Dr. G. Vijaya Laxmi, Assistant Professor, Department of Biotechnology, CBIT

1st prize given for “STIMULI RESPONSIVE HYDROGELS FOR VARIOUS APPLICATIONS” – Research

Presented by

1. Aishwarya CVS
2. Vaishnavi Mokkaapati
3. Abhishek Naik

College: CBIT

Abstract Id: PP-BT-06

2nd prize given for “ANIMAL BIOTECHNOLOGY-APPLICATIONS & THE LINE BETWEEN EXPLOITATION AND ETHICS”- Review

Presented by

1. VARAS RAMA KRISHNA.DUGGU

College: Babu Jag Jeevan Ram Government Degree College, Nampally

Abstract Id: PP-BT-01

Appreciation Certificate given for “UNDERSTANDING CACHEXIA”- Review

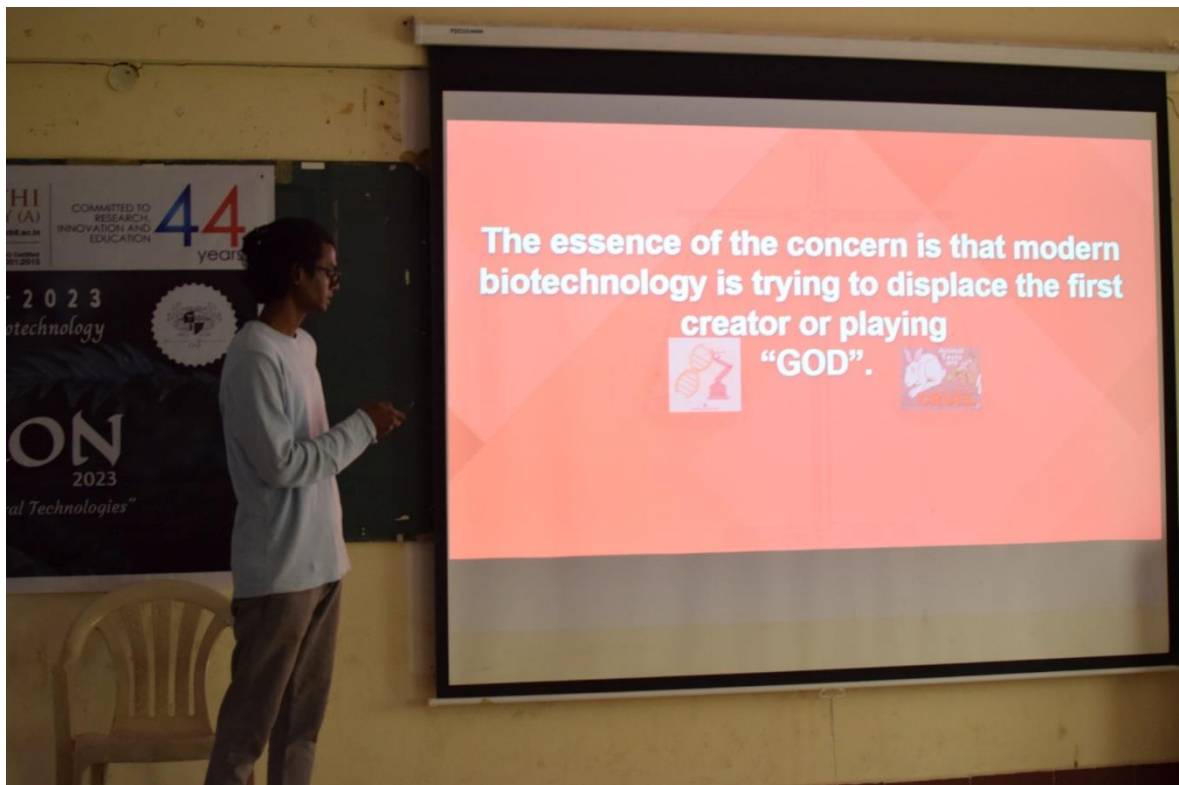
Presented by

1. V Shreya Sharma
2. Souborni Nandy
3. Jyotika Meenakshi Kambhampati

College: CBIT




Abstract Id: PP-BT-04

Photographs:



$$2\text{NH}_4\text{HCO}_3 + \text{CaSO}_4 \rightarrow \text{CaCO}_3 \downarrow + (\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O} + \text{CO}_2$$

Ammonium Bicarbonate	Calcium Sulphate (PoP)	Calcium Carbonate	Ammonium Sulphate
----------------------	------------------------	-------------------	-------------------

PoP waste after treatment with 20% NH_4HCO_3

Supernatant containing $(\text{NH}_4)_2\text{SO}_4$

CaCO_3 Precipitate at the bottom

$(\text{NH}_4)_2\text{SO}_4$ obtained from PoP waste of Ceiling and Idol

CaCO_3 obtained from PoP waste of Ceiling and Idol

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44 years

SUDHEE - Department of Biotechnology

NEON "Nurturing"

STIMULI RESPONSE HYDROGELS FOR V APPLICATION

ID- PP-BT-06

By
 Aishwarya CVS - 160119805001
 Vaishnavi Mokkalapati - 160119805033
 Abhishek Naik - 160119805039
 (Department of Biotechnology)

EVENT-2

Poster Presentation

Theme of the activity: Innovation trends in Biotechnology

Scope covered: Food Biotechnology, Nano Biotechnology, Plant Biotechnology, Algal Biotechnology, Animal Biotechnology, Environmental Biotechnology, Bioprocess Technology, Bioinformatics, Biomedical Engineering, Pharmaceutical Biotechnology

Outcome:

- Students could apply the Biotechnology concepts to solve problems in the Agriculture, Fermentation technology, Food processing and Environment, and develop entrepreneurial ideas.
- Students got the chance to present their project work through pictorial presentations.
- Exhibit an ability to work independently and collaboratively.
- Get an exposure in current scientific literature pertaining to Biotechnology

Number of students and faculty attended:

Students: 12; Faculties: 4

Winners list for Poster presentation:

Committee members

1. DR. M. Anjaneyulu, Assistant professor, Department of Biotechnology, JNTU Hyderabad
2. Dr. C. Obula Reddy, Assistant Professor, Department of Biotechnology, CBIT
3. Dr.K. Dharmalingam, Assistant Professor, Department of Biotechnology, CBIT

1st prize given for **“MOLECULAR DOCKING STUDIES ON ANTI-FUNGAL ACTIVITY OF METABOLITES FROM MARINE ALGAE AGAINST MUCORMYCOSIS” – Research**

Presented by

1. Chunduru Sai Hari Hara Sudheshna
2. Matta Chenna Keshava Charan

College: CBIT

Abstract Id: PO-BT-01

2nd prize given for **“RECENT DEVELOPMENTS IN THE TECHNOLOGY OF BIODEGRADABLE FOOD PACKAGING”- Review**

Presented by

1. Konda Tanvi
2. Chitti Shirisha
3. Gundeti Rajesh

College: Bhavan's Vivekananda College of Science Humanities and Commerce

Abstract Id: PO-BT-03

Appreciation Certificate given for **“ENVIRONMENTAL AND ECONOMIC FEASIBILITY OF MUNICIPAL SOLID WASTE THROUGH THERMAL TREATMENT”- Review**

Presented by

1. Madikunta Divya Sree
2. Vempati Vaidehi Pravallika

College: CBIT

Abstract Id: PO-BT-02

Photographs:







EVENT-3

Live Projects

Theme of the activity: Application, Innovation, and Product development in Biotechnology

Scope covered: Food Biotechnology, Nano Biotechnology, Plant Biotechnology, Algal Biotechnology, Animal Biotechnology, Environmental Biotechnology, Bioprocess Technology, Bioinformatics, Biomedical Engineering, Pharmaceutical Biotechnology

Outcome:

- Demonstrate proficiency in basic laboratory skills like preparation of solutions and culture media, handling of equipment, portable microscope
- Perform, and analyze results of experiments using basic laboratory techniques in molecular biology

Number of students and faculty attended:

Students: 18; Faculties: 6

Winners list for Live Project:

Committee members

1. Dr. Anjaneyulu, Assistant Professor, Department of Biotechnology, JNTUH
2. Dr. B. Sumithra, Assistant Professor, Department of Biotechnology, CBIT
3. Dr. Sanjeeb Kumar Mandal, Assistant Professor, Department of Biotechnology, CBIT

1st prize given for **“DIRECT ORGANOGENESIS FROM THE LEAF EXPLANT OF BACOPA MONNIERI–A MEDICINAL PLANT”**

Presented by

1. V. Shreya sharma
2. Chaitra Gali
3. Balaji Doolam

College: CBIT

Abstract Id: LP-BT-05

1st prize given for **“DEMONSTRATION OF THE FLEXIBLE NATURE OF CARBOPOL-940 BASED HYDROGEL FILMS”**

Presented by

1. Samhita Cheruku
2. M. Sai Sahithi

College: CBIT

Abstract Id: LP-BT-06

Appreciation Certificate given for **“OPTIMIZATION OF CARBOXYMETHYL CELLULOSE BASED HYDROGEL FOR EFFECTIVE DYE REMOVAL”**

Presented by

1. Chenna Sumeet
2. Shivani Hazari

College: CBIT

Abstract Id: LP-BT-01

Appreciation Certificate given for **“PORTABLE MICROSCOPE FROM E-WASTE”**

Presented by

1. S. Shiva Prasad
2. P.V. Kashyap

College: CBIT

Abstract Id: LP-BT-09

Photographs:





EVENT-4

Bio-Quiz

Theme of the activity: Application and Innovation in Biotechnology

Scope covered: Food Biotechnology, Nano Biotechnology, Plant Biotechnology, Algal Biotechnology, Animal Biotechnology, Environmental Biotechnology, Bioprocess Technology, Bioinformatics, Biomedical Engineering, Pharmaceutical Biotechnology

Outcome:

- *Since questions are based out-of-syllabus and require critical thinking and extensive research, students get into the habit of innovative learning from an early age*
- *Students need to form teams while participating in quizzes, giving them an opportunity to hone their teamwork skills*
- *Gain knowledge, seek opportunities to excel beyond academics and secure their future*

Number of students and faculty attended:

Students: 15; Faculties: 3

Winners list for Bio-Quiz :

Committee members

1. Mrs. S Sumithra, Assistant Professor Department of Biotechnology.

1st prize: Team Six

V Sneha
J Haripriya
Muskan

College: CBIT

Runners: Team Bg

Prathibh
Harish
Yashasvi

College: CBIT

Photographs:



Participants

A total of 48 participants have been actively involved in the events, out of which 22 abstracts for papers, 12 abstracts for posters, and 18 abstracts for live projects have been accepted.

Students from various institutes like Babu Jagjeevan Ram Degree College, Bhavan's Vivekananda College of Science, Humanities, and Commerce, Telangana, have actively participated in paper and poster presentations. Out of the 11 abstracts that were submitted, 22 participants have signed up to present papers. Twelve people have signed up for the poster presentation session, and six posters have been displayed. For the nine live projects that have been received, a total of 18 students have participated. More than four teams have taken part in the Bio-Quiz, and they did so with great enthusiasm.

Participants Feedback

Duggu Varas Rama Krishna: One of the participants from Babu Jagjeevan Ram Degree College provided the following feedback:

I learned so much about the latest advancements and cutting-edge research in the field, and was able to network with experts and like-minded professionals. Interactive sessions provided a unique and engaging learning experience that I will not soon forget. Although it was my first time visiting this college, it felt as if this was my college, as the students here created a friendly environment for me. I appreciate how enlightening this experience was.

Abdul Muqeeth of B-Tech Biotechnology, CBIT provided the following feedback:

I just wanted to take a moment to express my gratitude for the opportunity to attend the recent technical event. As a participant, I was thoroughly impressed by the level of organization and the quality of the presentations and sessions.

I would like to thank the organizers for putting together such a fantastic event, and for providing an environment that fostered learning, growth, and collaboration. I am already looking forward to the next event and the continued growth of the community. Thank you for such a memorable and educational experience.

Sponsors and Partners

None

Conclusion

In conclusion, the technical event was a resounding success, providing valuable insights and opportunities for learning to all participants. Through a combination of expert presentations, interactive sessions, and hands-on demonstrations, attendees had the chance to expand their knowledge and deepen their understanding of cutting-edge research in the field.

Participants learned about a wide range of topics, from the latest advancements in technology to innovative approaches to problem-solving. The diversity of perspectives and backgrounds among the speakers and attendees added to the richness of the experience, fostering an environment of collaboration and cross-disciplinary learning.

It is evident that the participants left the event with a newfound appreciation for the complexity and excitement of research in their field, and with a wealth of new ideas and approaches to explore. We believe that the knowledge and skills acquired at this event will be invaluable in their future endeavors and will continue to drive progress in the field for years to come.

Annexures

Registration Details

S. n o.	Event Name	Registration Fee (Rs.)	No of Online Registrations	Online Registrations Amount (Rs.)	No of Spot Registrations	Spot Registrations Amount (Rs.)	Total Number of Registrations	Total Amount (Rs)
1	Paper presentation (Online)	400 + 200	5+17	2000+3400 =5400	Nil	NA	22	5400
2	Poster presentation (Online)	400+ 200	3 + 10	1200+2000 =3200	Nil	NA	13	3200
3	Live projects (Online)	400+ 200	0+18	0+3600	Nil	NA	18	3600
4	Delegates(Spot)	400+ 200	Nil	NA	0+5	2000	5	2000
5	Bio-quiz(Spot)	50	Nil	NA	7	350	7	350
6	Bio-debate(Spot)	50	Nil	NA	Nil	NA	NA	NA
7.	Non-Technical Events (Spot)	20	Nil	NA	98	1960	98	1960
	Total no of Online Registration = 53			12,200	Total no of spot registration = 110	4,310	163	16,510
		Total (Rs.) = 16,510						
Total Amount Received					Sixteen thousand, four hundred and ten rupees (Rs. 16,510)			

DEPARTMENT OF BIOTECHNOLOGY'S



NEOZION
2023

PAPER PRESENTATION



AT
M-BLOCK

For more information,
contact:

Sudheshna - 9014378300

Rahul - 6281671517

Sairam - 7780384299



31st January
1st February

**SPOT
REGISTRATIONS
ALSO
AVAILABLE!**

SELECTED ABSTRACTS WILL BE AWARDED WITH THEIR
VERY OWN ISBN NUMBERS

DEPARTMENT OF BIOTECHNOLOGY



POSTER PRESENTATION

JAN 31st-
FEB 1st
M-BLOCK



Contact details:
Shynisha - 9542194165
Alwina - 7396387527



DEPARTMENT OF BIOTECHNOLOGY



presents

LIVE PROJECT

**JAN 31st-FEB 1st
M-BLOCK**

CONTACT DETAILS:

SHARVANI - 8341510190

SAMANTH - 9652553226

ZUBER - 9121258800



DEPARTMENT OF BIOTECHNOLOGY



NEOZION

2023



Quiz Time!



**Spot
Registration
Also
Available!**



Register Here

M-BLOCK

30 Jan to 01 Feb

Contact details

Aishwarya- 767108663

Akash-6302073267

Manogna-9502545583

A Pandey

HoD, Biotechnology