



**CHAITANYA BHARATHI  
INSTITUTE OF TECHNOLOGY**  
An Autonomous Institute | Affiliated to Osmania University  
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Quality Audit 9001 : 2015  
Green Audit 14001 : 2015  
Energy Audit 50001 : 2018

COMMITTED TO  
RESEARCH,  
INNOVATION AND  
EDUCATION

**45**  
years

## **SUDHEE 2024**

### **National Level Students Technical Fest**

### **Innovate Integrate Inspire**

### **Neozion 2024**

#### **Department of Biotechnology Report**

#### **[1]. INTRODUCTION: A brief overview of the event, its purpose, and objectives.**

NEOZION 2024, a two-day National Level Technical Symposium conducted by the Department of Biotechnology as part of the college-wide technical fest Sudhee 2024, aimed to celebrate diverse avenues of biotechnological research. Since 2008, this annual fest has provided a platform for participants to learn about the latest advances in Biotechnology and interact with eminent scientists. The event invited brilliant minds with a passion for biotechnology to unleash their inner bio innovator. The Symposium covered events such as Paper Presentation, Poster Presentation, Live Projects, Bio-ideathon, Bio Quiz, Debate, and Non-Technical events. Papers, posters, and live projects were invited on various topics including Plant and Animal Biotechnology, Stem cell technology, Environmental Biotechnology, Nanobiotechnology, Bioinformatics, Biomedical Engineering, Pharmaceutical sciences, Bio- process Technology, Algal biotechnology, and Chemical engineering.

The objectives for conducting NEOZION 2024 are:

- To disseminate knowledge about the latest advancements and trends in the field of Biotechnology and to celebrate the diverse avenues of biotechnological research to inspire participants to contribute to the field.
- To provide a networking opportunity for participants from various educational backgrounds and institutions to interact with eminent scientists and experts in the field, fostering a collaborative environment.
- To encourage participants to unleash their innovative potential by presenting their research ideas and projects. Also to provide a platform develop their skills in various aspects of biotechnology, such as research, presentation, and critical thinking.
- To promote research culture among students and scholars by inviting papers, posters, and live projects on diverse topics in biotechnology.

**[2]. ORGANIZING COMMITTEE: Information about the team that organized the event, including their roles and responsibilities.**

Event/Activity Name and responsibilities	Faculty Coordinator	Student Coordinators		
		Designation	Name	Contact no.
Paper Presentation (Review submitted abstracts, communicate with selected participants, communicate with judges, etc.)	Dr. Yadavalli Rajasri	Head	Neha Reddy	9347916150
		Organizer	Kirthika	7780602509
		Volunteer	Harshitha Valapa	8328619798
		Volunteer	M Manaswini	8019179411
		Volunteer	Naga Priya	8125455495
Poster Presentation (Review submitted abstracts, communicate with selected participants, communicate with judges, etc.)	Dr. Kiran Yellappa	Head	Shriya P	7337462535
		Organizer	Mahima	8106800180
		Volunteer	Akshaya V	8074644122
		Volunteer	Survi Sameeksha	7013849331
Live Projects (Review submitted abstracts, procure materials required by participants, communicate with selected participants, communicate with judges, etc.)	Dr. B. Sumithra	Head	Chaitra	6281828442
		Head	Rakesh	9121428012
		Organizer	Koushik	6305990057
		Volunteer	Adithya Srilan	8074172612
		Volunteer	Sanjana M	7901268116
Bio-Quiz (Publicity of quiz event, formulating questions, conduction of quiz in fair manner)	Dr. S. Sumithra	Head	Shreya Sharma	8688269128
		Organizer	Keerthan	6304078508
		Volunteer	K Akshaya	9949998856
		Volunteer	Varshini V	7995664448
Bio-Debate (Publicity of debate, formulating debate topics, coordinating between participants, assist judging panel, etc.)	Dr. C. Nagendranatha Reddy	Head	Prathibh	8520094606
		Organizer	Rahul	6281671517
		Volunteer	Nikitha Teku	7331122147
		Volunteer	Yamini Khasholka	9100749842
Bio-Ideathon (Review submitted abstracts, communicate with selected participants, communicate with judges, etc.)	Dr. K. Dharmalingam K	Head	Spoorthi	9160998547
		Organizer	Grace	7207031875
		Volunteer	Sarayu	9395147045
		Volunteer	Sudeeksha Punjala	8897395605
Design Team (Design Main Neozion 24 poster, design posts for all individual events conducted, design content for all social media)	Dr. Kiran Yellappa	Head	Divyamshu	7995000772
		Organizer	Sneha	8019986723
		Volunteer	Ramya	7799374104
		Volunteer	Anjali Survi	6309602727
		Volunteer	Zohaib	9989422360
Editorial (Draft invitation letters, email correspondences to chief guest,	Dr. V. Aruna	Head	Umamah	9515226395
		Organizer	Divya	9182668054
		Volunteer	Fawiza Shaik	9000999677

sponsors etc., draft messages to go onto social media, make written reports for all events)		Volunteer	M. Rishika	9550739445
Registration (Overview registrations, track payments and participant details, maintain financial records etc.)	Dr. Sanjeeb Kumar Mandal Dr. D. Madhavalatha Mr. Basha	Head	Charan	9177491458
		Organizer	Ananya	9949192288
		Volunteer	Nusaybah	7207462718
		Volunteer	Sahithi	6302923081
Publicity (Publicize Neozion 24 and all individual events to all possible eligible participants, college to college publicity, maintain social media, etc.)	All Staff members	Head	Shreenija	9502409392
		Organizer	Pranavi Lokam	8978982099
		Organizer	Shreya Tati	9160507828
		Volunteer	Srikanth Muthyala	9392804602
		Volunteer	Krishn Karthik	9391592261
General Management Team (Overview and coordination of all Neozion 24 activities)	Dr. Ashoutosh Panday Dr. S Sumithra Dr. Bishwambhar Mishra	Chief Coordinators	Jyothika Meenakshi	9703812446
			Sai Shriya Y	8501046677



**[3]. KEYNOTE SESSION: Brief description on the keynote address including the details of speaker, topic and speaker profile.**

Keynote address given by Mr. Finny Thomas, General Manager & Head, Fermentation, Granules India Limited, on the topic “Application of biotechnology in pharmaceutical industries”. He began the address by defining biotechnology and discussed its role during the COVID crisis, highlighting various solutions. Mr. Thomas also explained different domains within biotechnology and their significance. He emphasized the importance of fermentation in biotechnology post-COVID, particularly the prioritization of mammalian cells in bioprocesses. The bioprocess is divided into upstream, mid, and downstream areas for commercialized production. Biopharmaceuticals (upstream) include bioreactor tanks, piping, fittings, nosing, tubing, pumps, filters, valves, O-rings, and sensors. He also discussed about the company Glenmark launching Somatotype GL2 for diabetes and anti-obesity in India and the journey of Granules beginning due to biotechnology's potential. Mr. Thomas discussed the vision for 2050, aiming for zero carbon footprint and converting chemical steps into enzyme steps to produce insulin spray injectable every 15 days. He predicted that within five years, India would become the largest biotech hub. He concluded by addressing audience queries.



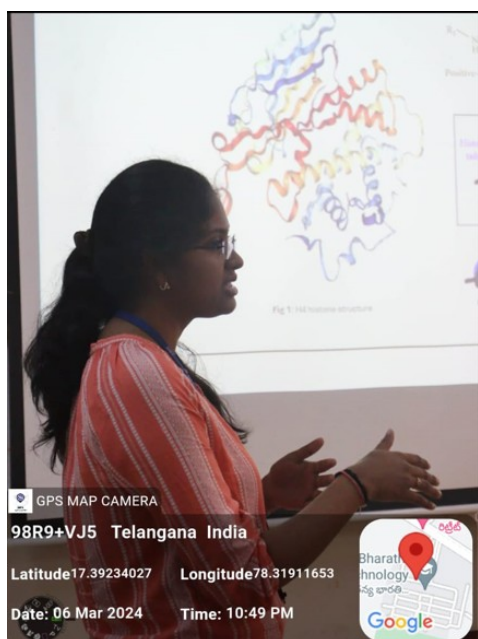
**[4]. EVENT DETAILS: A detailed description of the events, competitions, and activities that took place during the tech-fest including the details of the winners.**

**I. Paper Presentation:** The Paper Presentation segment of NEOZION welcomed research and review papers focusing on bioengineering, biotechnology and related fields. Participants had the opportunity to orally present their academic ideas and research, fostering knowledge exchange and networking opportunities. Both group and solo presentations were accepted, with topics chosen at the discretion of the participant. Paper presentation provided a platform for students to showcase their research and communication skills in the field of biotechnology. An experienced and illustrious judging panel with expertise in diverse fields included:

- External judge – Mr. Gopinath Radhakrishnan, Senior Executive at Biological E. Limited, Hyderabad
- Internal Judges – Professor Ashoutosh Panday, Head of Department of Biotechnology, Dr. Yadavalli Rajasri, Associate Professor, Department of Biotechnology, Dr. Varimadugu Aruna, Associate Professor, Department of Biotechnology.

The event witnessed internal and external participation from colleges including Bhavans Vivekananda college, Siddhartha Degree and PG college, Little flowers and KPR Institute of Engineering. From the abstracts submitted, a total of 25 papers were selected to present their papers, covering diverse topics such as Bio Robo Bird, Comparative studies on isolation, identification and characterisation of Methanogenic Bacteria from cattle dung, etc. The papers were evaluated based on originality, technical merit, clarity, and presentation style. Winners of the paper presentation are as follows:

- Winners – Jyothika Meenakshi Kambhampati, Souborni Nandy, Shreya Sharma (PP-BT-03), CBIT  
Title – Exploring Novel Alternative Splice Variants as Biomarkers for Early Cachexia Detection
- Runners – Divyamshu Surabhi, Chaitra Gali, Samanth Chithankindhi (PP-BT-05), CBIT  
Title – Biomarkers as the key to the early detection of ovarian cancer





**II. Poster Presentation:** Individuals adept at visually representing academic and research information were invited to showcase their creative concepts at NEOZION 24 through their creatively designed posters. Abstract submissions were encouraged for both group and solo presentations, offering enhanced learning experiences and skill development opportunities. The selected posters were displayed in the Department of Biotechnology and were judged by a panel of highly experienced professionals including:

- External Judge – Dr. Ravinder Adlagatta, Assistant Professor, Osmania University
- Internal Judges – Dr. C. Obula Reddy, Assistant Professor, Department of Biotechnology, Dr. Bishwambhar Mishra, Assistant Professor, Department of Biotechnology, Dr. K. Dharmalingam, Assistant Professor, Department of Biotechnology

The event witnessed internal and external participation from colleges including Bhavans Vivekananda college, Siddhartha Degree and PG college, Little flowers and KPR Institute of Engineering. From the abstracts submitted, a total of 8 posters were shortlisted for the participants to present their research work. The event highlighted innovative visual representations of scientific concepts such as Precision Medicine- A Meta-analysis of the Role of Nano Biotechnology in Targeted Drug Delivery, Diving into Plant-Based Meat Alternatives: Crafting Innovative Substitutes with Advanced Food Technology, Hair Today, Tissue Tomorrow: A Sustainable Scaffolding Solution from a Renewable Source, etc. The posters were evaluated based on originality, design, technical merit, and presentation style. Winners of the paper presentation are as follows:

- Winners – Sudheshna Chunduru, Sharvani Pokala (PO-BT-10), CBIT  
Title – Antibiotics Combined with Nanoparticles for Wound Healing
- Runners – Amatul Rahman Khadija, Hansanthi Vuyyuru (PO-BT-04), CBIT  
Title – Microbes and Nano-Conjugate-Assisted removal of Heavy Metal from Water Resources



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**III. Live Projects:** NEOZION's Live Project Event invited passionate creators to exhibit innovative solutions to contemporary challenges. Participants were required to demonstrate their projects, including abstract, product, methodology, and results. Live projects highlighted the novel products created through research and ensured that participants gained real-world experience. The participants had the opportunity to display the products of their research work in real time in the Immunology lab M-109 and Biochemistry lab M-110 of the Department of Biotechnology. Included in the judging panel were experts from diverse fields, including:

- External Judge – Dr. Ravinder Adlagatta, Assistant Professor, Osmania University
- Internal Judges – Dr. B. Sumithra, Assistant Professor, Department of Biotechnology, Dr. V. Kiran Yellappa, Assistant Professor, Department of Biotechnology, Dr. Sanjeeb Kumar Mandal, Assistant Professor, Department of Biotechnology

The event witnessed internal and external participation from colleges including Bhavans Vivekananda college, Siddhartha Degree and PG college, and KPR Institute of Engineering. From the abstracts submitted, a total of 13 participants were shortlisted to present their research work. Exciting live projects with unique products were displayed and the winners took home the prize for their unique work. Winners of the live projects event are as follow:

- 1st prize – Guntheti Sree Vajran, Prathyusha, Lokeshwari, Nikitha (LP-BT-04), Bhavan's Vivekanandha  
Title – Isolation, Identification and Characterisation of Methanogenic Bacteria from Cattle Dung



**IV. Bio-ideathon:** Bio Ideathon provided a platform for participants to present their research vision and vocalize their thoughts and ideas in any area of biotechnology. Abstracts summarizing unique ideas/solutions were accepted as solo or team. Shortlisted participants had the opportunity to be present their research visions, with the best ideas potentially receiving research funds. Participants engaged in stimulating discussions and gained valuable feedback from experts in the field while building collaborations and finding potential mentors/employers. The panel of judges included:

- External Judge – Dr. Ravinder Adlagatta, Assistant Professor, Osmania University
- Internal Judges – Dr. K. Dharmalingam, Assistant Professor, Department of Biotechnology, Dr. Sanjeeb Kumar Mandal, Assistant Professor, Department of Biotechnology

The event witnessed internal and external participation from colleges including Bhavans Vivekananda college, Siddhartha Degree and PG college, and KPR Institute of Engineering. From the abstracts submitted, a total of 6 groups were selected to present their unique solutions for real world problems to the panel of judges . Winners for the bio ideathon are: **(1st prize is shared)**

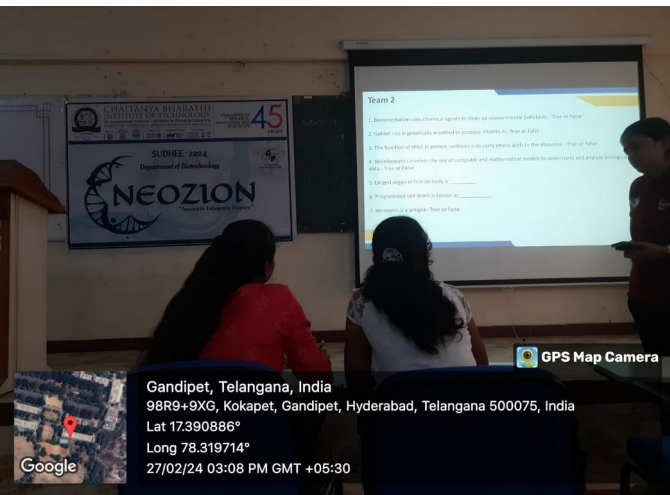
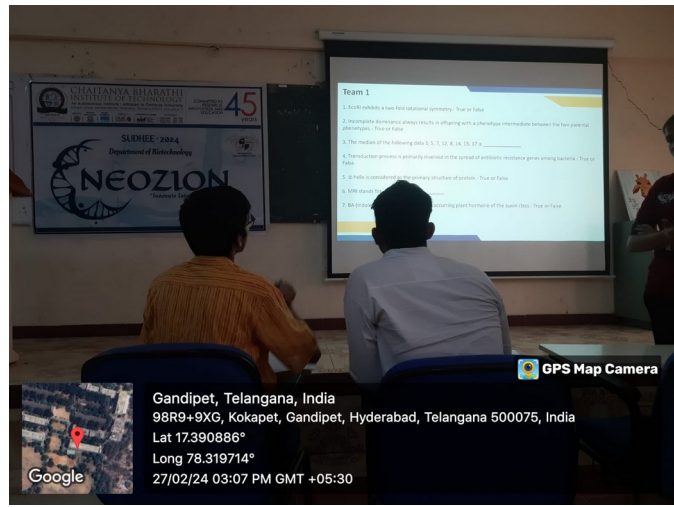
- 1st prize – Akhilesh, Balasivakannan JP, Sathyamoorthi BM (BI-BT-06), KPR IIT
- 1st prize – Balaji Doolam, Charan, Divyamshu (BI-BT-05), CBIT



**V. Bio-Quiz:** The Neozion Bio-Quiz was conducted for quizzes and trivia enthusiasts with a keen interest in biotechnology. The quiz served to evaluate knowledge retention and further fortify learning endeavors of the participants. This event provided a unique opportunity to test and expand one's understanding of biotechnological concepts in an interactive and stimulating environment. The



bio-quiz was judged by, Dr. S. Sumithra, Assistant Professor, Dept. of Biotechnology. A total of six groups battled out their wits in three rounds of intense quiz with the final winning group being T. Gourav, K. Hrithik and Alloju Abhishek, 4<sup>th</sup> year Biotechnology, CBIT.



**VI. Bio-Debate:** Bio Debate provided an exceptional platform to engage in dynamic discussions on thought-provoking topics that explored the vast potential of biotechnology and its implications on society, healthcare, and the environment. Participants, working in teams of 2-3, delved into these subjects, fostering teamwork and communication skills. Through intellectually stimulating debates, participants enhanced their understanding of complex biotech concepts and sharpened their critical thinking abilities. The intense debates were judged by Dr. C. Nagendranatha Reddy, Assistant Professor, Department of Biotechnology. The winners of the bio-debate were decided to be:  
 Winners – Boddu Uday Kiran, Kunal K Heerekar, Srikanth Muthyala, 2<sup>nd</sup> year, CBIT  
 Runners – Shruti Das Mohapatra, Samhitha Reddy Chinthalapudi, Bhoumik, 2<sup>nd</sup> year, CBIT



**VIII. Non-Technical events:** In addition to technical events, Neozion offered a range of non-technical events designed to exhilarate and enlighten students in unconventional ways, fostering community outreach and networking opportunities. The three non technical events conducted were, Quest for Riches which was a treasure hunt and that utilized clever biotechnology related clues to unlock each level for the winners to follow and reach the final prizes. The next non technical event was the Blind Sketch where participants were paired of and were given the task to draw a biotech related picture on their partners back. The pairs that decoded the drawings correctly through tactile sensations were awarded prizes. The final non technical event was the Pursuit of Pixels where the participants were challenged to capture stunning picture relating to biotechnology and life sciences themes given to them

The non-technical events conducted at Neozion '24 served to diversify the symposium's offerings and engage participants in unconventional ways. These events facilitated community outreach, provided networking opportunities, and promoted teamwork and creativity among students. Additionally, they fostered a sense of camaraderie and excitement, enriching the overall experience of the symposium and contributing to its success.

**[5]. PARTICIPANTS DETAILS: A brief description of the number of participants, their backgrounds (within state/Out of state participation).**

Neozion '24 garnered significant interest and participation from a diverse array of colleges. The event attracted a total of 197 registrations, including both internal participants from the organizing college and external participants from various institutions. Colleges such as Bhavans Vivekananda College, Siddhartha Degree and PG College, Little Flowers, and KPR Institute of Engineering, among others, were represented at the symposium.

The paper presentation segment of the symposium featured 25 abstracts, demonstrating a high level of engagement and insightful research contributions from participants. The poster presentation, comprising 8 abstracts, showcased innovative visual representations of complex scientific concepts, highlighting the participants' creativity and understanding of the subject matter. The Live Projects segment, with 13 participants, provided a platform for showcasing the practical applications of theoretical knowledge, further enriching the symposium's content. The Bio-ideathon, a competition challenging 6 talented groups to solve real-world problems using biotechnological solutions, added

a competitive edge to the event and showcased the participants' innovative problem-solving abilities.

Furthermore, the debate competition, with 6 participants, facilitated thought-provoking discussions on relevant topics, enriching the intellectual discourse at the symposium. The Bio-quiz, engaging 6 groups of participants, tested their knowledge on various biological concepts, promoting a competitive yet educational environment. Also the non-technical events witnessed enthusiastic participants from other branches of college as well.

**[6]. FEEDBACK: Feedback from the participants and organizers, including any suggestions for future improvements.**

The feedback from participants and organizers of Neozion '24 reflects a highly positive response to the event. Participants appreciated the variety of technical sessions offered, with the keynote session receiving high ratings for its informative content and engaging delivery. The paper presentation and bio-ideathon were also well-received, with participants praising the quality of presentations and the opportunity to showcase their research. In terms of non-technical sessions, participants rated them highly for their engaging content and the chance to learn in unconventional ways. The networking opportunities provided at the event were also praised, with many participants highlighting the value of connecting with other participants and faculty members.

The organization of the event, including logistics, registration process, and venue facilities, received positive feedback overall. Participants noted the smooth execution of the event and the efficient handling of various aspects such as registration and scheduling. Suggestions for improvement included promoting the Bioengineering & Biotechnology Club of CBIT more effectively and ensuring timely issuance of e-certificates for participants. Overall, the feedback indicates that Neozion '24 was a successful event that provided valuable learning and networking opportunities for all participants.

**[7]. SPONSORS AND PARTNERS: A list of the organizations that supported the event financially or otherwise.**

Neozion '24, received generous support from Suzuki, a leading automotive manufacturer, as one of its sponsors. Suzuki's sponsorship contributed significantly to the success of the event, providing financial support and helping to create a memorable experience for all participants. Their involvement helped to enhance the quality of the event and ensure its smooth execution. Suzuki, as a partners played a crucial role in the symposium's success by providing resources, expertise, and promotional assistance.

Overall, the support of a sponsor was instrumental in making Neozion '24 a successful and impactful event. Their contributions helped to create a platform for knowledge exchange, networking, and collaboration among participants, furthering the goals of the symposium and the field of biotechnology as a whole.

**[8]. CONCLUSIONS: A summary of the event, its highlights, and the outcomes achieved.**

In conclusion, NEOZION 2024 was a resounding success, showcasing the latest advancements and research in the field of biotechnology. The symposium, part of the college-wide technical fest Sudhee 2024, provided a platform for participants to interact with eminent scientists, present their research, and engage in stimulating discussions.

Highlights of the event included a diverse range of competitions and activities such as paper and poster presentations, live projects, a bio-ideathon, a bio-quiz, and a bio-debate. These events not only showcased the participants' knowledge and creativity but also promoted collaboration and innovation in the field of biotechnology. The symposium also featured non-technical events like Quest for Riches, Blind Sketch, and Pursuit of Pixels, which provided a refreshing break from the technical sessions and fostered community outreach and networking opportunities.

Overall, Neozion 2024 achieved its objectives of disseminating knowledge, providing networking opportunities, encouraging innovation, and promoting research culture among students and scholars. The support of sponsors like Suzuki was crucial in making the event a success, and their contributions helped enhance the quality and impact of the symposium. Additionally, the symposium's success can be attributed to the dedication and hard work of the organizing committee, faculty coordinators, and student volunteers who ensured the smooth execution of the event. Moving forward, Neozion aims to continue its tradition of excellence and serve as a catalyst for innovation and collaboration in the field of biotechnology.



**Annexures:**

- a) Event-wise participants' registration details (As per the template shared titled – REgistration form – REgistration Payment – SUDHEE 2024)**
- b) Departmental Techfest posters.**
- c) Any other relevant information/document**