

## **NEWSLETTER**

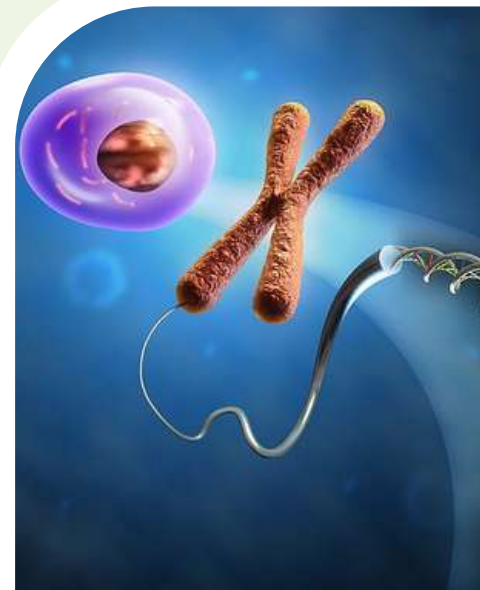
**VOLUME-3 | ISSUE-3 | MARCH-2024**

# **BIOGAZETTE**

**ECHOING MULTIDISCIPLINARY PERSPECTS**

**Inside:**

- Events Conducted
- Research Activities
- Student Activities
- Faculty Activities
- Upcoming Events



**e-copy of the  
newsletter**



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# EDITORIAL TEAM



**DR. M. SIVANANDHAM**  
Secretary, SVEHT  
Visiting Professor  
Biotechnology



**DR. E. NAKKEERAN**  
Professor and Head  
Biotechnology



**DR. K. DIVAKAR**  
Associate Professor  
Biotechnology



**DR. K. GANESH PRASATH**  
Assistant Professor  
Biotechnology



**DR. J. G. ASWIN JENO**  
Assistant Professor  
Biotechnology

# STUDENT EDITORIAL TEAM



**MS. R. JYOTSNA**  
IV Year Student  
Biotechnology



**MS. S. THARANGHINI**  
III Year Student  
Biotechnology



**MS. G. JEEVITHA**  
II Year Student  
Biotechnology

## Vision

To produce higher caliber Biotechnologists to attain new heights in bioinformatics and bioprocess technology as per industrial needs and to provide leaders in the field of Biotechnology.

## Mission

- To progress the department to attain center of excellence in bioinformatics and bioprocess technologies by providing best Undergraduate, Postgraduate, Doctoral programs and R&D activities within a decade.
- To develop special skilled training programs for graduates to meet the personality characters stipulated by the industries within a period of five years.
- To build potential biotechnologists capable of dealing with new challenges and socio-ethical implications.

## B. Tech. Biotechnology

### Program Educational Objectives

**PEO-1.** To produce Biotechnology graduates who will be employable in core Biotech/Pharma industries and domain-based software services.

**PEO-2.** To produce research-oriented Biotechnology graduates who will be employable in academic/Industry sponsored research and also who will be pursuing higher studies.

**PEO-3.** To produce bioentrepreneurs.

### Program Outcomes

**PO-1. Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

**PO-2. Problem Analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO-3. Design / Development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO-4. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**PO-5. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**PO-6. The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**PO-7. Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO-8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO-9. Individual and team work:** Function effectively as an individual and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO-10. Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**PO-11. Project management and finance:** Demonstrate knowledge and understanding of the engineering management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**PO-12. Life-long learning:** Recognize the need for and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

### Program Specific Outcomes (PSOs)

**PSO-1:** To make the students understand and apply the knowledge of computational systems biotechnology to design and develop biologics to meet societal needs.

**PSO-2:** To train the students to meet the requirement of bioprocess industries for developing techno-economical processes.

**PSO-3:** To empower the students with competent skill sets for bridging the gap between academia and the requirements of the healthcare industry.

## M. Tech. Biotechnology

### Program Educational Objectives

**PEO-1:** To prepare the students to excel and succeed in biotechnology research or industry through the latest state-of-art postgraduate education.

**PEO-2:** To train students with good scientific and technical knowledge so as to comprehend, analyze, design and adopt innovative and new technology that provides solutions for developing novel biotechnological products.

**PEO-3:** To create bioentrepreneurs with good communication and leadership skills, respect for authority and the life-long learning needed for a successful professional career.

### Program Outcomes

**PO-1:** Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

**PO-2:** An ability to write and present a substantial technical report/document.

**PO-3:** Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

**PO-4:** Ability to examine the technological problems in various domains of Biotechnology apply modern engineering tools for the prediction and modeling of complex engineering problems with a focus on sustainable development.

**PO-5:** Students should be able to acquire self-management and teamwork skills to collaborate with multidisciplinary teams from academic, industry and research institutes of national or international repute, with a commitment to lifelong learning.

**PO-6:** Potential to apply biotechnological solutions by adhering to the standards of bioethics with social responsibilities.

### Program Specific Outcomes (PSOs)

After the successful completion of M.Tech. Biotechnology program, the students will be able to:

**PSO-1:** Demonstrate the biotechnology concepts and research approach and apply them for healthcare and industrial applications.

**PSO-2:** Possess scientific and technological skills to design and develop novel bioproducts for addressing biological and healthcare challenges.

**PSO-3:** Analyze the socio-economical needs and possess the necessary expertise to become a bioentrepreneur.



## Academic voyage to Western Australia

In accordance with the invitation from the Global Education and Careers Forum (GECF) to participate in an academic voyage to Perth, Western Australia, spanning from March 19<sup>th</sup> to 23<sup>rd</sup>, 2024, and following the subsequent endorsement by the Principal, **Prof. E. Nakkeeran, HOD, Department of Biotechnology** undertook a visit to universities in Perth, Western Australia, with the aim of exploring potential collaborations in academia and research with SVCE. Along with Prof. E. Nakkeeran, GECF team, comprising Mr. Vijay Kumar Nair and Mr. S. Lakshminarayanan, as well as Dr. Y. Swarnalatha, Dean of Higher Studies at Sathyabama Institute of Science and Technology, Chennai, and Dr. D. Brindha, Principal of PSG College of Arts & Science, Coimbatore.

The Commonwealth Scientific and Industrial Research Organisation (CSIRO), an agency of the Australian Government dedicated to scientific research. A comprehensive presentation on the Future Battery Industries, a division of CSIRO, delivered by Prof. Tony Tang, the Professor of Practice at the WA School of Mines: Mineral, Energy and Chemical Engineering within the Science and Engineering department at Curtin University. During the presentation, Prof. Tony elaborated on the process of lithium recovery, as well as the operation of a cathode precursor production pilot plant. Following the presentation, tour was arranged on the Australian Minerals Research Centre and the pilot plant dedicated to the production of lithium precursor.

On the itinerary to Curtin University, an interactive meeting was arranged with esteemed individuals including Prof. Abhijit Mukherjee, who holds the positions of Dean International South Asia, John Curtin Distinguished Professor at the School of Civil and Mechanical Engineering, and Director of the Curtin-India Academy Global Curtin; Dr. Lisa Lim, Dean International at the Faculty of Humanities and Associate Professor at the School of Education; and Mr. Navin Mittal, Principal Secretary of Revenue at the Government of Telangana, along with other professors from Tamil Nadu and Hyderabad. During the meeting, discussions revolved around potential academic and research collaborations such as Student Exchange Programmes, Twinning Programmes, Dual Degree Programmes, Study Tours, and faculty research collaborations facilitated through articulation agreements between universities.

Next to the University of Western Australia, where an interaction was arranged with Prof. Anu Rammohan, Director of International Engagement, Mr. Dave Connell, Associate Director of Global Engagement, and Mr. Broderick Moncrieff, Global Engagement Manager. During this session, Mr. Dave Connell delivered a presentation outlining the various courses offered and the facilities available at the University of Western Australia to all the delegates presents. Discussions ensued regarding potential academic and research collaborations, including opportunities such as the Student Exchange Programme, Study Tours, and faculty research collaborations facilitated through articulation agreements. Later in the session, the GECF presented the Education Excellence Award to Sri Venkateswara College of Engineering and other academic delegation universities. Prof. E. Nakkeeran received the award on behalf of SVCE from Mr. Navin Mittal, Principal Secretary of Revenue at the Government of Telangana, in the presence of Prof. Anu Rammohan, Director of International Engagement, Mr. Dave Connell, Associate Director, Global Engagement, Mr. Broderick Moncrieff, Global Engagement Manager.



### **Education Excellence Award to Sri Venkateswara College of Engineering received by Prof. E. Nakkeeran**

On the itinerary to Edith Cowan University (ECU), Ms. Marija Petrovska, Manager of Global Business Development and Governance at the International Office, graciously led us on a comprehensive campus tour, unveiling the diverse array of facilities available at ECU. The campus tour witnessed the innovative resources and support services offered to students.

Subsequently, an interaction session with Dr. Ahmed Ibrahim, a Senior Lecturer, the School of Science. Dr. Ahmed showcased the cutting-edge facilities within the school, including the Cyberthreat real-time Map prominently displayed at the entrance, and various Cyberthreat real-time maps such as those of Bitdefender and Talos cyber-attack, housed within the laboratory. Further, there was an opportunity to visit the Schneider Electric Instrumentation Control & Automation Laboratory, where Dr. Alex Rassau, an Associate Professor and Discipline Coordinator of Electrical Engineering, briefed us on the state-of-the-art facilities. Dr. Rassau also showcased the Robotics & Automation Laboratory, highlighting the remarkable outcomes achieved.

Following the campus tour, meeting was arranged with Ms. Marija Petrovska, Dr. Ahmed Ibrahim, and Mr. Luke Willcock, Manager of Economic Development & Advocacy at the City of Joondalup. The meeting centered around exploring potential academic and research collaborations, including Student Exchange Programmes, Twinning Programmes, Dual Degree Programmes, Study Tours, faculty research collaborations, and the facilitation of Visiting Professors to Indian Universities through articulation agreements between institutions.

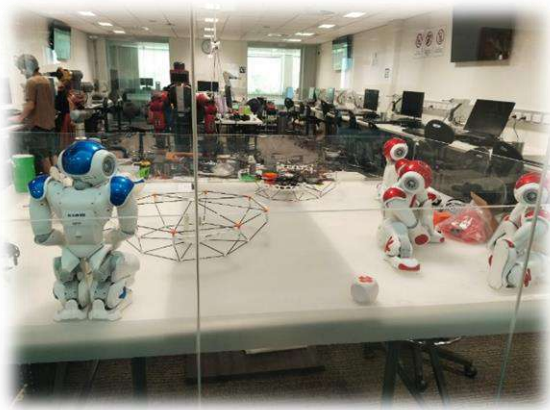
The concluding meeting took place at Hotel Mercure, bringing together the GECF team, consisting of Mr. Vijay Kumar Nair, Mr. S. LakshmiNarayanan, and Mr. Venkatesh, along with members of the academic delegation. The academic delegation comprised distinguished individuals such as Dr. E. Nakkeeran, Professor & Head of Biotechnology; Dr. D. Brindha, Principal of PSG College of Arts & Science, Coimbatore; Dr. Y. Swarnalatha, Dean of Higher Studies at Sathyabama Institute of Science and Technology, Chennai; Dr. C. Kiran, Global Relationships Officer and Associate Professor at the Department of Electronics and Instrumentation Engineering, VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad; Prof. Sriram Venkatesh, Principal of University College of Engineering, Osmania University, Hyderabad; Dr. K. Sudhakar Reddy, Professor & Head of Mechanical Engineering at Mahatma Gandhi Institute of Technology, Hyderabad; Dr. Praveen Jugge, Principal of Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad; and Dr. Satish Paruchuri, Director of Industry Relations at Shri Vishnu College Of Pharmacy, Hyderabad.



## A Few Glimpse of the Visit







## Events Conducted

### Inauguration of SBF

The Department of Biotechnology of Sri Venkateswara College of Engineering recently conducted the inaugural ceremony of the Students' Biotech Forum 2023-2024 on 12<sup>th</sup> March 2024. Prof. M. Sivanandham, Secretary of SVEHT and Visiting Professor in the Department of Biotechnology at SVCE, delivered an inspiring keynote address, setting the stage for an enriching event. **Dr. Siva Ramamoorthy, Ph.D. FLS,FRSB, FRSC** Professor & Dean at the School of BioSciences and Technology, Vellore Institute of Technology, captivated the audience with his inaugural address, shedding light on the advancements in the food biotechnology sector. He emphasized the crucial need for further research in food technology to combat global hunger. During the ceremony, Dr. Siva also introduced the dedicated office bearers of the Students' Biotech Forum to the enthusiastic crowd, fostering a sense of community and collaboration. The event continued with an insightful report highlighting the department's achievements, underscoring our commitment to excellence in biotechnology education and research. To commemorate this special occasion, the event concluded with a group photo featuring the entire team of Students' Biotech Forum 2023-2024, symbolizing our collective dedication to shaping the future of biotechnology.



**Prof. M. Sivanandham, Secretary, SVEHT and Visiting Professor, Department of Biotechnology, SVCE, delivered the keynote address and Dr. Siva Ramamoorthy, Professor & Dean, School of BioSciences and Technology, Vellore Institute of Technology, Vellore delivered the inaugural address.**



## Glimpse of SBF Inauguration



**TECHNOWAYS 24'****An Interdisciplinary Technical Symposium****OMICS 2024**

In collaboration with the third-year Biotechnology students (Batch 2021-2025), the Students' Biotech Forum proudly presented Omics-Technoways'24, a dynamic Technical Fest held on March 15th and 16th. The inaugural day commenced with a heartfelt prayer, fostering a sense of reverence and anticipation for the events to follow. The virtual release of The Omics Annual Report for the academic year 2022-2023 provided a moment of reflection, celebrating past achievements while igniting aspirations for the future. Esteemed faculty members, including the esteemed Head of the Biotechnology Department, Dr E Nakeeran, graced the occasion with their presence, imparting words of wisdom and encouragement to all participants. Moreover, the unveiling of our 'Omics' magazine showcased the diverse creativity and academic endeavours of our talented students. The event unfolded with a brief intermission, allowing participants to recharge and prepare for the exciting lineup of activities ahead. From the strategic BioMonopoly to the intellectually stimulating Find It First and the Engaging Escape Room, the day was filled with events carefully designed to challenge participants' knowledge and problem-solving skills in the field of Biotechnology. This commencement laid the foundation for a truly enriching and memorable technical fest, promising growth, camaraderie, and scholarly eminence for all involved.

**Glimpse of Technoways 24****BIOMONOPOLY****Find It First**



## Escape Room



## Institutional Animal Ethical Committee (IAEC) Meeting

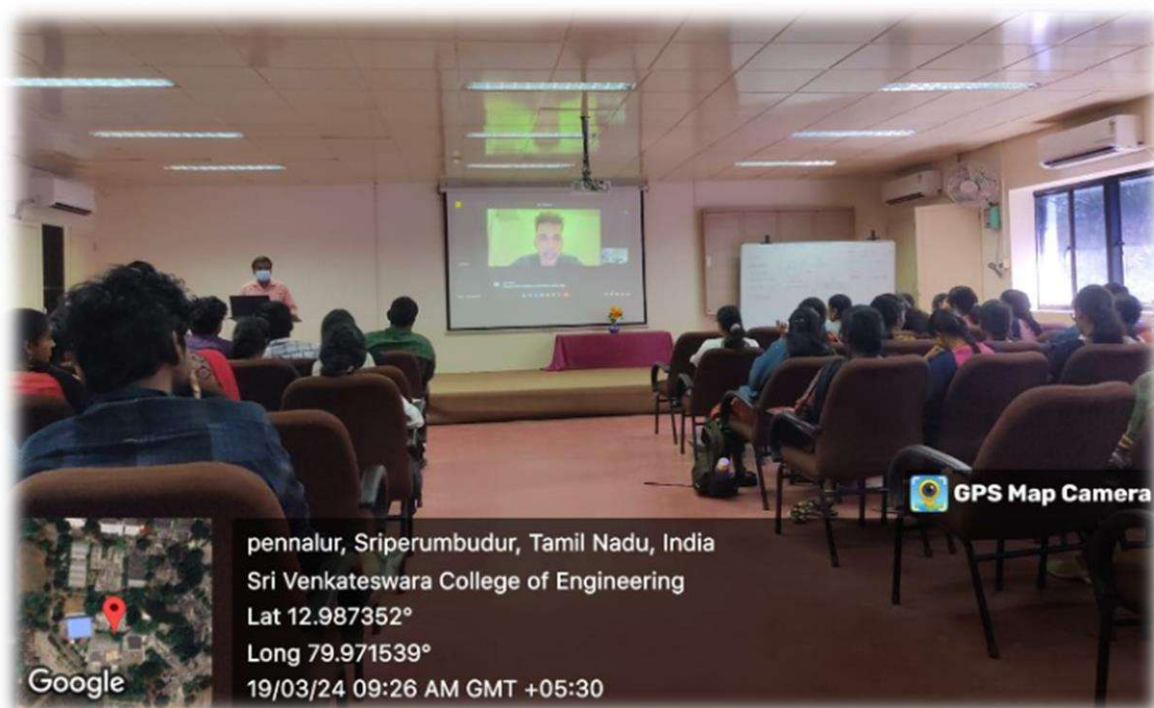
The Department of Biotechnology of Sri Venkateswara College of Engineering conducted its 19<sup>th</sup> Institutional Animal Ethical Committee (IAEC) Meeting for the academic year 2023-2024 (Phase II) on 6<sup>th</sup> March 2024. Project protocols involving small laboratory animals were presented for grant of approval after considering all aspects of the project including the welfare of the animals by the members of the Committee. The committee members also visited the animal house premises during the Institutional Animal Ethical Committee (IAEC) Meeting.

Our animal house facility is now open and ready to support research on the long-term and short-term toxic and therapeutic effects of drugs/compounds in small animals and fish models. CCSEA has registered our facility with Registration No.: 1398/PO/Re/S/10/CCSEA and meets all guidelines for the ethical treatment of animals.



## Guest Lecture

The Department of Biotechnology at Sri Venkateswara College of Engineering recently conducted a Guest Lecture on "Experiences Building a Hard-tech Company" by Mr. Vasu Nadella, CEO, Vital Biosciences, Ontario, Canada, on 19<sup>th</sup> March 2024 (Tuesday) from 9:00 AM to 10:00 AM (IST) in the Biotechnology Conference Hall. The Introduction to the speaker was delivered by our executive member of Student Biotech Forum, Ms. Keerthanaa SG. Mr. Vasu Nadella shared vision and strategic direction of the company. He focused on healthcare, artificial intelligence, and life sciences. The event provided valuable insights to all the students and faculty member. The program ended with vote of thanks by our executive member of Student Biotech Forum Ms. Abineha A.





## Parents-Teachers Meeting

The Department of Biotechnology of Sri Venkateswara College of Engineering hosted the Parent-Teacher Meeting for our students on 23<sup>rd</sup> March 2024. It was a productive and enthusiastic gathering where parents of the students actively engaged in discussions about their wards' academic performance over the current semester. The meeting commenced with a warm welcome from the department followed by an overview of the semester's curriculum and academic expectations. Parents had the opportunity to interact with individual teachers and inquire about their ward's progress, coursework, and any concerns they may have had. The Parents and teachers exchanged valuable insights and suggestions to support the students in their academic journey. The enthusiastic participation of parents demonstrated their commitment to their children's education. The department extends its gratitude to all the parents who attended this Parent-Teacher Meeting, fostering a strong partnership between home and school to ensure the success and well-being of our students.



### Glimpse of PTM





## Interacting Session

We are happy to share the glimpses of an engaging interaction between Prof. M. Sivanandham, Visiting Professor & Secretary-SVEHT, and our First Year B. Tech and M. Tech Biotechnology students on 05<sup>th</sup> March 2024. The session proved to be incredibly fruitful, providing our students with invaluable guidance on navigating their four-year journey at SVCE. Prof. M. Sivanandham shed light on mapping out future prospects within the biotechnology industry and higher education opportunities.



## Higher Studies

Congratulations to our final year B. Tech Biotechnology Student, **Ms. Mathumithaa Rao** for her acceptance



# Northeastern University

Into **MS in Biotechnology**

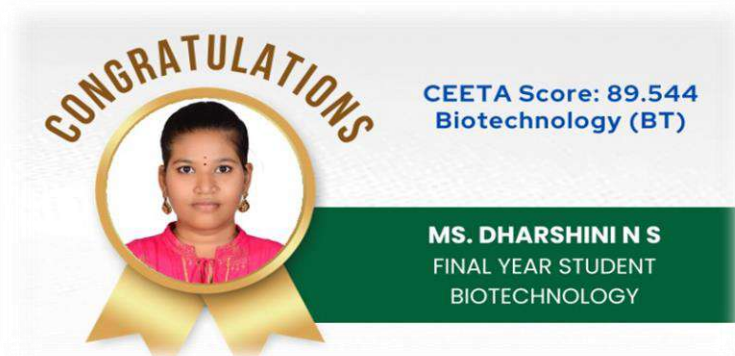


**Ms. Mathumithaa Rao**

Final Year Student  
Biotechnology

## Higher Studies

The following students have cleared Tamil Nadu Common Engineering Entrance Test & Admissions (CEETA-PG 2024) in Biotechnology stream (BT).



## Higher Studies

The following students have cleared Graduated Aptitude Test For Engineers (GATE 2024) conducted by IISc Bangalore.



**CONGRATULATIONS**

**ALL INDIA RANK - 7397**

GATE Score: 173  
Biotechnology (BT)

**MS. ASHWINI P**  
THIRD YEAR STUDENT  
BIOTECHNOLOGY

This banner features a circular portrait of Ms. Ashwini P on the left, with a gold ribbon at the bottom. The word 'CONGRATULATIONS' is written in a large, arched font above the portrait. To the right of the portrait, the text 'ALL INDIA RANK - 7397' is displayed in red, followed by 'GATE Score: 173 Biotechnology (BT)' in blue. Below the portrait, a dark green box contains the student's name 'MS. ASHWINI P' and her details 'THIRD YEAR STUDENT BIOTECHNOLOGY' in white text.



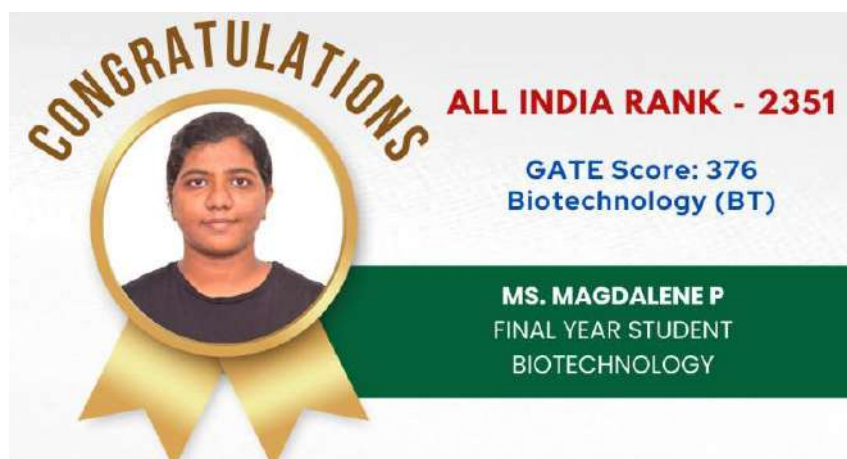
**CONGRATULATIONS**

**ALL INDIA RANK - 45**

GATE Score: 729  
Biotechnology (BT)

**MS. NITHYASREE V**  
FINAL YEAR STUDENT  
BIOTECHNOLOGY

This banner features a circular portrait of Ms. Nithyasree V on the left, with a gold ribbon at the bottom. The word 'CONGRATULATIONS' is written in a large, arched font above the portrait. To the right of the portrait, the text 'ALL INDIA RANK - 45' is displayed in red, followed by 'GATE Score: 729 Biotechnology (BT)' in blue. Below the portrait, a dark green box contains the student's name 'MS. NITHYASREE V' and her details 'FINAL YEAR STUDENT BIOTECHNOLOGY' in white text.



**CONGRATULATIONS**

**ALL INDIA RANK - 2351**

GATE Score: 376  
Biotechnology (BT)

**MS. MAGDALENE P**  
FINAL YEAR STUDENT  
BIOTECHNOLOGY

This banner features a circular portrait of Ms. Magdalene P on the left, with a gold ribbon at the bottom. The word 'CONGRATULATIONS' is written in a large, arched font above the portrait. To the right of the portrait, the text 'ALL INDIA RANK - 2351' is displayed in red, followed by 'GATE Score: 376 Biotechnology (BT)' in blue. Below the portrait, a dark green box contains the student's name 'MS. MAGDALENE P' and her details 'FINAL YEAR STUDENT BIOTECHNOLOGY' in white text.



## Higher Studies

**CONGRATULATIONS**



**ALL INDIA RANK - 861**

GATE Score: 496  
Biotechnology (BT)

**MS. SUBASREE S**  
FINAL YEAR STUDENT  
BIOTECHNOLOGY

**CONGRATULATIONS**



**ALL INDIA RANK - 3179**

GATE Score: 332  
Biotechnology (BT)

**MS. DHARSHINI N S**  
FINAL YEAR STUDENT  
BIOTECHNOLOGY

**CONGRATULATIONS**



**ALL INDIA RANK - 1622**

GATE Score: 426  
Biotechnology (BT)

**MS. JYOTSNA R**  
FINAL YEAR STUDENT  
BIOTECHNOLOGY



## Student Activities

### Award in Hackathon

**Ms. Abirami Krishnan** (M. Tech, 2022-24 Batch), **Ms. Madhumitha Kannan** and **Ms. Mathumithaa Rao** (B. Tech 2020-24 Batch) under the guidance of **Dr. K. Divakar**, have participated and presented their work on "Hydroponic Vertical Farming System for Sustainable Urban Agriculture" in the HACKATHON held on 14<sup>th</sup> March 2024, Organized by Tamil Nadu Centre of Excellence for Advanced Manufacturing - TANCAM at its one of the Spoke Centre, Sona College of Technology, Salem.

**CASH PRIZE OF ₹10,000/-**

from



**Tamil Nadu Centre of Excellence for Advanced Manufacturing (TANCAM)**



**Ms. K. Abirami**  
Final Year M. Tech Student  
Biotechnology



**Ms. K. Madhumitha**  
Final Year B. Tech Student  
Biotechnology



**Ms. M. Mathumithaa Rao**  
Final Year B. Tech Student  
Biotechnology



**Dr. K. Divakar**  
Project Mentor  
Associate Professor  
Biotechnology

for their presentation of their work "Hydroponic Vertical Farming System for Sustainable Urban Agriculture" in the Hackathon organized by the Tamil Nadu Centre of Excellence for Advanced Manufacturing (**TANCAM**)

## Award in International Conclave for Women

**Ms. Akshara B.S.** of Batch 2020-24 under the guidance of Dr. G. Karthigadevi secured Third Place and a Cash Award of INR 5000 in Prototype Presentation in the EmpowHer International Conclave for Women in STEM held at Anna University on 18th and 19th March, 2024, by Presenting a Prototype on “Exploring the Electrogenic Potential of Symbionts for the Sustainable Generation of Green Power”, under the category of Green Chemistry and Renewable Energy Application.

**THIRD PLACE WITH CASH PRIZE OF ₹5,000/-**

from

**EMPOWERHER**  
EDUCATING AND EMPOWERING WOMEN

**International Conclave for Women in STEM**

  
**Ms. Akshara B S**  
Final Year B. Tech Student  
Biotechnology

  
**Dr. Karthigadevi G**  
Project Mentor  
Assistant Professor  
Biotechnology

for their prototype presentation titled "Exploring the Electrogenic Potential of Symbionts for the Sustainable Generation of Green Power" in the in the Empowher International Conclave for Women in STEM held at Anna University

## Award in National Conference

**Ms. Priyadharshini SS and Ms. Haritha Mohan kumar** of 2020-24 Batch under the guidance of Prof. E. Nakkeeran and Dr. J.G. Aswin Jenö, have secured first position with a cash prize of Rs 3000/- in IDEA UNVEIL organized by The Department of Biotechnology, SRM Institute of Science and Technology, Ramapuram as a part of the National Level Technical Symposium BIOORIZON 24, held on 14th March, 2024.

**First Position with ₹3000/- Cash Prize**

**in the Idea presentation on the topic "Herbal and Nutritional Intervention for Menstrual health and Rehabilitation" in National Level Technical Symposium BIOORIZON 24**



**Ms. S. S. Priyadharshini**  
Final Year B. Tech Student  
Biotechnology



**Ms. M. Haritha**  
Final Year B. Tech Student  
Biotechnology



**Prof. E. Nakkeeran**  
Project Mentor  
Professor & Head  
Biotechnology



**Dr. J. G. Aswin Jenö**  
Project Co-Mentor  
Assistant Professor  
Biotechnology

## Award in National Conference

**Ms. Tharangkini S and Ms. Swalakshana S** of 2021-25 Batch under the guidance of Mr. S. Naga Vignesh who have secured first position with a cash prize of INR 2000/- in Prabhigyan, a national-level technical symposium conducted by Prathyusha Engineering College.

**First Position with Cash Prize of ₹2000/-**

**for their presentation titled "Biofertilizer using *Sesbania bispinosa*"  
at the National Level Technical Symposium – Prabhigyan on 22  
and 23 March, 2024.**



**Ms. Tharangkini S**  
Third Year B. Tech Student  
Biotechnology



**Ms. Swalakshana A S**  
Third Year B. Tech Student  
Biotechnology



**Mr. S. Naga Vignesh**  
Project Mentor  
Assistant Professor  
Biotechnology



## Award in National Conference

**Ms. Magdalene Prabhakar P and Ms. Nithyasree V** of 2020-24 Batch, under the guidance of Prof. P.K. Praveen Kumar, have received the First Prize with a cash prize of INR 1000, in the National Conference on "Innovations in Management of Lifestyle Diseases" held at Rajalakshmi Engineering College on 27<sup>th</sup> and 28<sup>th</sup> March 2024 for their oral presentation titled "In Silico Studies on the Effect of Withaferin A on Hsp90 In Type 2 Diabetes and its Association With Non-Alcoholic Fatty Liver Disease".

**First Position with Cash Prize of ₹1000/-**

**for their presentation titled "In Silico Studies on the Effect of Withaferin A on Hsp90 In Type 2 Diabetes and its Association With Non-Alcoholic Fatty Liver Disease" at the National Conference on "Innovations in management of lifestyle diseases" - EMBIOS'24 held on 27th and 28th March, 2024**



**Ms. Magdalene P**  
Final Year B. Tech Student  
Biotechnology



**Ms. Nithyasree V**  
Final Year B. Tech Student  
Biotechnology



**Dr. P. K. Praveen Kumar**  
Project Mentor  
Professor  
Biotechnology



## Award in National Conference

Ms. Thulasi Kalaivani Balamurugan, Ms. Maseera Ahmedi M, and Ms. Sudharsini V of 2021-25 Batch, under the guidance of Dr. J.G Aswin Jen0, secured First Prize, including a cash prize of INR 1000, in the National Conference on "Innovations in Management of Lifestyle Diseases" held at Rajalakshmi Engineering College on 27th and 28th March 2024 for their poster titled "Development of natural edible food coating: enhancing food safety and reducing environmental impact".

### First Position with Cash Prize of ₹1000/-

for their presentation titled "Development of natural edible food coating: enhancing food safety and reducing environmental impact" at the National Conference on "Innovations in management of lifestyle diseases" – EMBIOS'24 held on 27th and 28th March, 2024



**Ms. Maseera Ahmedi M**  
Third Year B. Tech Student  
Biotechnology



**Ms. Thulasi Kalaivani B**  
Third Year B. Tech Student  
Biotechnology



**Ms. Sudharsini V**  
Third Year B. Tech Student  
Biotechnology



**Dr. J. G. Aswin Jen0**  
Project Mentor  
Assisfant Professor  
Biotechnology

**Shortlisted for Finals of PALS InnoWAH! 23-24**

**Ms. Abirami Krishnan** (M. Tech, 2022-24 Batch), **Ms. Madhumitha Kannan** and **Ms. Mathumithaa Rao** (B. Tech 2020-24 Batch) under the guidance of Dr. K. Divakar, were shortlisted for Finals of PALS innoWAH! 23-24, competition - Startup Solutions for Sustainability Challenges. They participated in the finals and presented their idea and prototype on "Sustainable Hydroponics System Integrated with Nutrient and Microbiome Replenishment" at IIT Madras, organised by PALS, Indian Institute of Technology, Madras on 23rd March 2024.

**Finals of PALS innoWAH! 23-24 competition - Startup Solutions for Sustainability Challenges**

## Student Achievement in Sports

**Ms. Thulasi Kalaivani B** of B. Tech Biotechnology, 2021-25 Batch, for securing the third position in Javelin Throw at the Anna University Zonal Tournaments 2023-2024 hosted at SVCE on 5<sup>th</sup> March 2024.

**Congratulations to our Third Year B.Tech Biotechnology student, Ms. B. Thulasi Kalaivani for her third position in Javelin Throw at the Anna University Zonal Tournaments 2023-2024 hosted at SVCE on March 5th, 2024.**



**Ms. B. Thulasi Kalaivani**  
III Year B.Tech Student  
Biotechnology

**Ms. Aparrajitha V** of the 2020-24 batch of B.Tech Biotechnology has participated in the Anna University Zonal Tournaments 2023 – 24 held at Sri Venkateswara College of Engineering in the 4 x 100-meter Relay race from 5<sup>th</sup> March 2024 to 6<sup>th</sup> March 2024 and secured the Third position in zone II.

## Research Scholar Corner

- **Ms. M. Priya**, Research Scholar and **Dr. S. Pandi Prabha**, Professor presented a paper entitled “Exploring nanostructured macroalgae-derived nanocellulose for cost-effective pharmaceutical excipients” in the National Conference on 'Innovations in Management of Lifestyle Diseases' held on 27<sup>th</sup> and 28<sup>th</sup> March 2024 organized by Department of Biotechnology, Rajalakshmi Engineering College in association with Society of Biological Chemists, Chennai Chapter, Antiviral Research Society, Tamil Nadu, Industry Institute Interaction Cell, REC and Institution's Innovation Council, REC, Chennai.



## Faculty Activities

**Dr. Isaivani jayachandran**, Assistant Professor, Biotechnology who secured First Place with the Cash Award of INR 15,000/- in "Thesis in three minutes presentation" in the Empowher International Conclave for Women in STEM held at Anna University Chennai on 18<sup>th</sup> and 19<sup>th</sup> March, 2024, by presenting her Ph.D. work titled "Elucidation of Biomarker Role of Asymmetric Dimethylarginine (Adma) in Diabetic Nephropathy with Special Focus on Investigating Its Causal Mechanisms of Early Kidney Damage", under the category of Lab to Market.



**FIRST PLACE WITH CASH PRIZE OF ₹15,000/-**

from



**Dr. J. ISAIVANI**  
Assistant Professor  
Biotechnology

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**International Conclave for  
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in "Thesis in three minutes presentation" in the **Empowher International Conclave for Women in STEM** held at Anna University on 18th and 19th March, 2024, by presenting her Ph.D. work titled "Elucidation of Biomarker Role of Asymmetric Dimethylarginine (Adma) in Diabetic Nephropathy with Special Focus on Investigating Its Causal Mechanisms of Early Kidney Damage", under the category of Lab to Market.

## Conducted a training session on Workshop

**Dr. K. Vasantharaj** conducted a practical training session on 'Microprocessor-Based Flame Photometer' for the participants of Two-Day National Level Workshop on "Mitigating Environmental Related Occupational Safety Measurements and Exploring Biological Effects of Radioactivity" organized by Department of Physics, SVCE on 21.03.2024.



### Session chaired by the Faculty

**Dr. K. Vasantharaj** served as a session chair in "HAPTEN 2024 - A National Conference on Recent Trends in Biotechnology Research" organized by Department of Biotechnology, Arunai Engineering College, Tiruvannamalai in association with Biotech Research Society of India (BRSI) on 22<sup>nd</sup> March 2024.

**Prof. S. Pandi Prabha** graced as the distinguished Guest of Honour and esteemed Jury member at the Paper Presentation event during the prestigious National Level Technical Symposium "Bioorizon 2024" hosted by the Department of Biotechnology at SRM Institute of Science and Technology, Ramapuram, Chennai on March 14, 2024.



- **Prof. S. Pandi Prabha** Invited as an esteemed Jury member for "Thesis in 3 minutes" and served as a guest speaker for a session on "Social Debate" during the prestigious Empowher: International Conclave for Women in STEM 2024, held at Anna University on 18<sup>th</sup> and 19<sup>th</sup> March, 2024.
- **Prof. P.K.Praveen Kumar** served as a session chair in HAPTEN 2024 - A National Conference on Recent Trends in Biotechnology Research organized by Department of Biotechnology, Arunai Engineering College, Tiruvannamalai in association with Biotech Research Society of India (BRSI) on 22<sup>nd</sup> March 2024.



## Guest Lecture Delivered by the Faculty

**Prof. E. Nakkeeran** delivered a guest lecture on "Various Opportunities in Biotech Sectors" Week with a theme entitled "Realizing your Competitive Potential" on 5<sup>th</sup> March, 2024 by School of BioSciences and Technology, Vellore Institute of Technology, Vellore.





### Guest Lecture Delivered by the Faculty

Prof. E. Nakkeeran delivered a guest lecture on "Various opportunities in biotechnology sectors" at Kamaraj College of Engineering and Technology on 16<sup>th</sup> March 2024.



## Industrial Visit

The Department of Biotechnology of Sri Venkateswara College of Engineering arranged an Industrial visit to Tirutani Corporation Sugar Mills limited, Tiruvalangadu, for 2023-27 Batch B.Tech Biotechnology students on 6<sup>th</sup> March 2024.

During the visit, students gained valuable insights into various stages of sugarcane processing, quality control measures, and modern food processing technology. Experts at the plant shared their experiences in production and packaging processes. The students witnessed firsthand the operation of cutting-edge machinery and packaging units.

This Industrial Visit provided our students with practical insights into the biotechnology sector, fostering a deeper understanding of the integration of biotechnology in food processing.





## Industrial Visit

The Department of Biotechnology of Sri Venkateswara College of Engineering organized an Industrial Visit to Bioscience Research Foundation - BRF, Kandamangalam, for 2021-25 Batch, B. Tech Biotechnology students on 22<sup>nd</sup> March 2024. During this visit, students were immersed in a multitude of laboratories specializing in Toxicology, Geno-toxicology, Eco-toxicology, Pharmacology & Drug Discovery, Pathology, Microbiology, Entomology, Medical Device Testing, Vivarium, and more. Witnessing firsthand the utilization of cutting-edge technologies within the research park was an invaluable experience for our students. This Industrial Visit offered practical exposure to the R&D environment, fostering a deeper comprehension of the application of biotechnology in Good Laboratory Practices. The Department of Biotechnology remains committed to facilitating such immersive learning opportunities, ensuring our students remain at the forefront of industry standards.



### Conference attended by the Students

- **Ms. Tharanghini S** of 2021-25 Batch and **Ms. Rupika Rajendran** of 2020-24 Batch participated in the oral presentation on the topic exploring bionformatics frontiers - harnessing genomic data analysis and interpretation in the national conference on computational techniques on MAT lab under the mentorship of Mr. Nagavignesh and Mr. Hariharan held on 18<sup>th</sup> March 2024, at SSN College of Engineering.
- **Mr. Sriram, Mr. Gopikrishnan and Mr. Girish** of 2021-25 Batch presented our paper on Exploring the capability of Terahertz Imaging for Oral Diagnosis in the conference 2024 International Conference on Recent innovation in Smart and Sustainable Technology held on 15th and 16th March 2024 in online at Presidency University, Bangalore, Karnataka.
- **Ms. Ananya R C, Ms. Kirtana S, and, Ms. Lavanya J** of the 2020-24 batch B.Tech Biotechnology, presented on the topic "Evaluation Of *Mukia maderaspatana* infused Nanoemulsion topical Spray in the Treatment of Diabetes Induced Osteoarthritis - In-Vitro Study" under the guidance of Dr. Isaivani J at the Empow(H)er – International Conclave for Women in STEM idea presentation under the category Lab to Market supply held at Anna University organized by Agaram Foundation on March 18<sup>th</sup> and 19<sup>th</sup>, 2024.
- **Ms. Subasree S and Ms. Vardhini B** of the 2020-24 batch B.Tech Biotechnology presented on the topic "In silico and in-vitro evaluation of the effect of antibiotics on Cathepsin B in neurodegeneration", under the guidance of Dr. Divakar K at the National Conference on Avenues of Biotechnology for Sustainability (NCABS - 2024) organized by the Department of Biotechnology, SRM Institute of Science and Technology, Ramapuram on 23<sup>rd</sup> March 2024.
- **Ms. Sadhakshi B and Ms. Surnamalya S R** of the 2020-24 batch of B.Tech Biotechnology presented on the topic "Purification and characterization studies of Withaferin A and *In-silico* studies of the effect of Withaferin A on TRAP1 in Hepatocellular carcinoma", under the guidance of Dr. Praveen Kumar P K at the National Level Technical Symposium – BIOORIZON'24 organized by the Department of Biotechnology, SRM Institute of Science and Technology, Ramapuram on 14<sup>th</sup> March 2024.
- **Ms. Mathumithaa Rao M, Ms. Madhumitha K** of the 2020-24 batch of B.Tech Biotechnology, and **Ms. Abirami K** of the 2022-24 batch of M.Tech Biotechnology presented on the topic "Sustainable Hydroponics System Integrated with Nutrient and



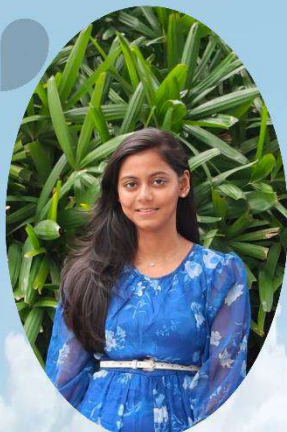
Microbiome Replenishment", under the guidance of Dr. Divakar K at Innovation Challenge Competition organized by PALS, at IIT Madras on 23<sup>rd</sup> March 2024.

- **Mr. Girish, Mr. K. Gopikrishnan, Mr. M. Sriram**, of B. Tech Biotechnology 2021-25 Batch presented a paper entitled on “Exploring the capability of terahertz imaging for oral diagnosis under the mentorship of Dr. S. Pandi Prabha, Professor at IEEE International Conference on Recent Innovation in Smart and Sustainable Technology 2024 (ICRISST 2024)” held on 15th and 16th March 2024 at Presidency University Bengaluru.
- **R. Gayathri, E. Riduvarshini, J. Shrihari**, of B. Tech Biotechnology 2020-24 Batch students presented a paper entitled Alleviating the effects of microplastic toxicity in human body using probiotics under the mentorship of Dr. S. Pandi Prabha, Dr. J. G. Aswin Jen0 in the National Conference on 'Innovations in Management of Lifestyle Diseases' held on 27th and 28th March 2024 organized by Department of Biotechnology, Rajalakshmi Engineering College in association with Society of Biological Chemists, Chennai Chapter, Antiviral Research Society, Tamil Nadu, Industry Institute Interaction Cell, REC and Institution's Innovation Council, REC, Chennai.
- **Ms. U. Mrudula** of B. Tech Biotechnology 2020-24 Batch have participated in the International Conference and presented a paper titled "Identification of novel differential RNA seq expression for Type 1 Diabetes Mellitus using machine learning approach" under the guidance of Mr. S. Naga Vignesh & Mr. J. Hariharan, Assistant Professor, Dept. Of Biotechnology, held at Anna University, Chennai on 08<sup>th</sup> March 2024.

### Events Attended by the Faculty

- **Mr. J. Hariharan**, attended the National Conference on Computational Techniques for Chemical Engineering and presented papers entitled “ Exploring Bioinformatics Frontiers: Harnessing MATLAB for Genomic Data Analysis and Interpretation” and “Leveraging Matlab for sequence analysis and variant identification in Bioinformatics” organized by Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam, Chennai on 18<sup>th</sup> March 2024.
- **Mr. S. Naga Vignesh** attended the National Conference on Computational Techniques for Chemical Engineering and presented papers entitled “ Exploring Bioinformatics Frontiers: Harnessing MATLAB for Genomic Data Analysis and Interpretation” and “Leveraging Matlab for sequence analysis and variant identification in Bioinformatics” organized by Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam, Chennai on 18th March 2024.

## Alumni Write-up



**Varsha R**  
**UG Batch 2018-2022**

As I reflect on my time with the Biotechnology Department at SVCE, I am filled with gratitude for the transformative journey it has been. From the moment I stepped into the vibrant corridors of the department, I knew I was embarking on an adventure that would shape my future in profound ways. From the captivating lectures to the hands-on laboratory experiments, every aspect of my academic experience has been meticulously designed to ignite curiosity and foster innovation. The guidance and mentorship provided by esteemed professors have not only enriched my understanding of biotechnology but have also instilled in me a passion for pushing the boundaries of scientific exploration.





**SVCE** Sri Venkateswara College of Engineering

**DEPARTMENT OF BIOTECHNOLOGY**



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- > ICMR
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- > Immunology & Immuno-technology
- > Biomaterials & Tissue Engineering
- > Stem Cell Technology
- > Genetic Engineering & rDNA Technology
- > Cellular & Molecular Biology
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- > **Sponsorships** for students to participate in conferences.

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- > Medical Writer
- > Research Analyst
- > Scientific Assistant
- > Laboratory Technician
- > Quality Control Analyst
- > Regulatory Affairs Specialist
- > Clinical Research Coordinator
- > Calibration Technician
- > Environmental Scientist



**Possible List of Industries to join after M.Tech Biotechnology Program**

**Eligibility:** As per Anna University Guidelines. Admissions are through Common Engineering Entrance Test and Admission by Anna University & Entrance Examinations conducted by Consortium of Self Financing Professional, Arts and Science Colleges in Tamilnadu.

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3. M.S. (By Research)
4. Ph.D. Biotechnology

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