

## **NEWSLETTER**

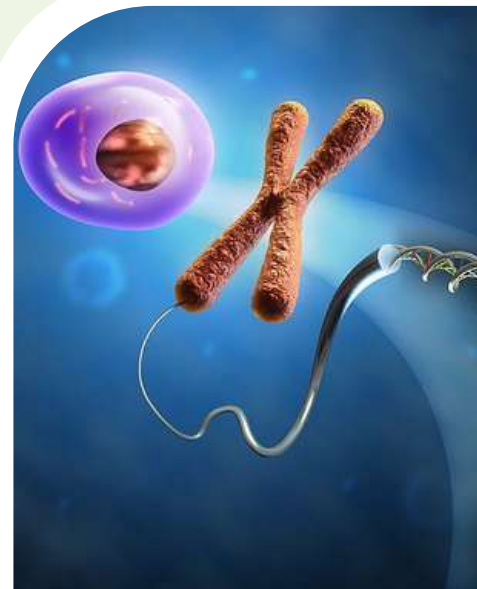
**VOLUME-3 | ISSUE-1 | FEBRUARY-2024**

# **BIOGAZETTE**

**ECHOING MULTIDISCIPLINARY PERSPECTS**

**Inside:**

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



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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.

## Visiting Professor

The Department of Biotechnology at Sri Venkateswara College of Engineering extends a warm welcome to our Visiting Professor from Industry, **Dr. Naveen Kumar Venkatesan**, PhD., Founder and Managing Director at ImmuGenix Biosciences Pvt Ltd, Chennai. Dr. Venkatesan completed his Ph.D. in Medical Microbiology from Madras University in 2015 and has extensive experience as a Scientist in various Biotechnology industries. Subsequently, he established his own successful venture, ImmuGenix Biosciences Private Limited, in Chennai in 2018. His expertise lies in Molecular Biology and Genetic Engineering. In the upcoming academic year 2023-24, Even Semester, Dr. Venkatesan will be actively engaged in teaching undergraduate students within our department.

### VISITING PROFESSOR - INDUSTRY



- **Founder and Director at ImmuGenix Biosciences Private Limited, Chennai.**
- **Expert in Molecular Biology, Genetic Engineering.**

**Dr. Naveen Kumar Venkatesan**

**FOR THE ACADEMIC YEAR 2023-2024 EVEN SEMESTER**

## Visiting Professor

The Department of Biotechnology at Sri Venkateswara College of Engineering extends a warm welcome to our Visiting Professor from Industry, **Dr. Pazhanimuthu Annamalai** Ph.D, Managing Director at Aura Biotechnologies Private Limited (AURA BIOTECH), Chennai. Dr. Annamalai completed his Ph.D. in Biotechnology from Periyar University in 2013 and has since served as a Scientist in various Biotechnology industries. Subsequently, he established his own successful venture, AURA Biotechnologies Private Limited, in Chennai in 2014. His expertise lies in Biosimilars, Cell Culture, and GLP. In the upcoming academic year 2023-24, Even Semester, Dr. Annamalai will be actively engaged in teaching undergraduate students within our department.

### VISITING PROFESSOR - INDUSTRY



**Dr. Pazhanimuthu Annamalai**

- **Managing Director at AURA Biotechnologies Private Limited, Chennai.**
- **Expert in Biosimilars, Cell Culture, GLP.**

**FOR THE ACADEMIC YEAR 2023-2024 EVEN SEMESTER**

## Visiting Professor

The Department of Biotechnology at Sri Venkateswara College of Engineering extends a warm welcome to our Visiting Professor from Industry, **Dr Balaji Somasundaram, Associate Director – CMC, Denteric Pty Ltd Brisbane, Australia**. Dr. Balaji leads Chemistry, Manufacturing and Control (CMC) Department in a Biotech company enabling translation of a recombinant vaccine candidate from bench to clinic. Specifically, his involves bioprocess development for manufacturing biotherapeutics, vaccines and modern diagnostics. In the upcoming academic year 2023-24, Even Semester, Dr. Balaji will be actively engaged in teaching undergraduate students within our department.





## Introducing B.Tech (Honours) & Minor Degree Options in Biotechnology

### INTRODUCING B.TECH (HONOURS) & MINOR DEGREE

- **B.Tech Biotechnology (Honours)**
- **B.Tech Biotechnology (Honours with Specialization)**
- **B.Tech Biotechnology (Technical Minor)**
- **B.Tech Biotechnology (General Minor)**

#### B.Tech Biotechnology (Honours)

An Honors degree typically refers to a **higher level of academic achievement** in the major area.

For **B.Tech Biotechnology (Honours)**, a student shall register for the **additional courses (20 credits)** from semester V onwards. These courses shall be from a **combination of different verticals** of the courses offered in the curriculum of B.Tech Biotechnology programme under Regulation 2022.

#### B.Tech Biotechnology (Honours with Specialization)

For **B.Tech Biotechnology (Honours with Specialization)**, a student shall register for the **additional courses (20 credits)** from semester V onwards. These courses shall be from a **single vertical** of the courses offered in the curriculum of B.Tech Biotechnology programme under Regulation 2022.

**B.Tech Biotechnology (Honours with Specialization)** can be obtained in

- B.Tech Biotechnology (Honours in Bioprocess Engineering)
- B.Tech Biotechnology (Honours in Computational Biotechnology)
- B.Tech Biotechnology (Honours in Medical Biotechnology)
- B.Tech Biotechnology (Honours in Agricultural Biotechnology)
- B.Tech Biotechnology (Honours in Animal Biotechnology)
- B.Tech Biotechnology (Honours in Quality Management)

#### B.Tech Biotechnology (General Minor)

For **B.Tech Biotechnology (General Minor)** degree, a student shall register for the **additional courses (20 credits)** from semester V onwards. All these courses have to be in a **single vertical** given below.

- B.Tech Biotechnology (General Minor in Fintech and Block Chain)
- B.Tech Biotechnology (General Minor in Entrepreneurship)
- B.Tech Biotechnology (General Minor in Business Data Analytics)
- B.Tech Biotechnology (General Minor in Environment and Sustainability)

#### B.Tech Biotechnology (Technical Minor)

For **B.Tech Biotechnology (Technical Minor)** degree, a student shall register for the **additional courses (20 credits)** from semester V onwards. All these courses have to be in a **single vertical** from any one of the curriculum of **other UG programmes** offered at SVCE **except from B.Tech Biotechnology**.

## Events Conducted

### ATAL-FDP on Microbial Metagenomics and Next Generation Sequencing

The ATAL-FDP on “Microbial Metagenomics and Next Generation Sequencing” was held from February 5<sup>th</sup> to 10<sup>th</sup>, 2024, organized by the Department of Biotechnology at SVCE and sponsored by AICTE Training and Learning Academy (ATAL). The program was coordinated by **Dr. K. Divakar**, Associate Professor, Department of Biotechnology and **Dr. E. Nakkeeran**, Professor and Head, Department of Biotechnology. The primary objective of the program was to provide participants with a comprehensive understanding of microbial metagenomics and the application of Next Generation Sequencing (NGS) techniques in various fields such as biotechnology, clinical diagnostics, and environmental sciences.

#### Day 1

Inauguration: The program commenced with an inaugural session where the objectives and expectations of the ATAL-FDP were outlined.



Session 1: Dr. C. Tamilselvan, Managing Director of Bioscience Research Foundation, delivered a lecture on “Metagenomics – GLP Perspective,” providing insights into the regulatory aspects of metagenomic research.

Session 2: Dr. Joseph Selvin, Professor of Microbiology at School of Life Sciences, Pondicherry University, discussed “Metagenomic Approaches to Explore and Exploit Marine Microbiomes: Bioactive Leads and Ecological Perspectives,” focusing on the potential applications of marine microbiomes in drug discovery and ecological conservation.

Hands-on Practical session: Participants engaged in a hands-on practical session on MGnify, an online platform for the analysis of metagenomic data by Dr. K. Divakar, ASP/BIO.

### **Day 2**

Session 3: Dr. V Naveen Kumar, Founder and Director of ImmuGenix Biosciences Pvt Ltd Chennai, conducted a session on “Metagenomic Analysis Tools and Techniques,” providing an overview of various bioinformatics tools used in metagenomic analysis.

Dr. Sushma Padmaja, Head of Clinical Genomics at Kyvor Genomics, Inc., Chennai, delivered a lecture on “Current Trends of NGS in Clinical Diagnostics,” highlighting the latest advancements in NGS technology and its applications in clinical settings.

Hands-on Practical session: Participants gained practical experience in using the Galaxy Server for metagenomic analysis.

### **Day 3**

Session 4: Session 5: Dr. GR. Gopi, Chief Operations Officer at Fermentech GSV Private Limited, Thanjavur, discussed “NGS and Industrial Biomanufacturing with Case Study from Nisin Biosynthesis and dsRNA Feed Inputs,” showcasing the application of NGS in industrial biomanufacturing processes.

Session 6: Dr. N. Manoj, Professor at the Department of Biotechnology, IIT Madras, presented on “Evolutionary History of the Neuropeptide S Receptor System: A Bioinformatics Study,” exploring the evolutionary dynamics of neuropeptide receptors through bioinformatics analysis.

Hands-on Practical session: Participants explored the MGRAST and InterPro platforms for metagenomic analysis.

### **Day 4**

Session 7: Dr. Asim Bikas Das, Associate Professor at the Department of Biotechnology, National Institute of Technology Warangal, discussed “Analysis of Next-generation

Sequencing Data for Precision Therapy: Role of Artificial Intelligence and Network Medicine,” emphasizing the role of AI and network medicine in analyzing NGS data for precision therapy.

Session 8: Dr. Prakash Saudagar, Associate Professor & Head of the Department of Biotechnology, National Institute of Technology Warangal, presented on “Genomic Analysis of Enzymes of Redox Metabolism,” discussing the genomic approaches to study enzymes involved in redox metabolism.

Hands-on Practical session: Participants learned to use the DIAMOND tool for metagenomic sequence analysis.

### **Day 5**

Industrial Visit: Participants visited M/s ImmuGenix Biosciences Pvt Ltd. Chennai, gaining insights into industrial applications of metagenomics and NGS.

Session 9: Prof. S Ganesh Vaidyanathan, Principal of SVCE, discussed “National Education Policy,” highlighting the implications of the national education policy on biotechnology education and research.

### **Day 6**

Session 10:

Dr. Alok Das, Assistant Professor at the Department of Life Sciences, RDW University, Bhubaneswar, delivered a lecture on "Insights into the Microbiome of the Microplastic Dominated Zones Across the Coasts of The Bay of Bengal, India through Metagenomics Approach," shedding light on the ecological impact of microplastic pollution using metagenomic analysis.

Reflection Journal: Participants engaged in discussions on recent research articles related to microbial metagenomics and NGS. Participants consolidated their learnings from the shared articles and discussed about the learnings from the program.

The final day included MCQ assessments, feedback collection, and interactive discussions, followed by a valedictory session to conclude the program. The ATAL-FDP on Microbial Metagenomics and Next Generation Sequencing provided the participants a platform to learn about these advanced topics in a detailed way. Through a combination of theoretical sessions, hands-on practical experiences, industrial visits, and interactive discussions, participants

gained valuable insights and skills necessary for conducting research and applying metagenomics and NGS techniques in various domains. The program received positive feedback from participants, indicating its success in achieving its objectives of fostering learning, collaboration, and innovation in the field of biotechnology.

### Snapshots of FDP



### Snapshots of FDP



## Biobids

The Department of Biotechnology of Sri Venkateswara College of Engineering (SVCE), in association with the Students' Biotech Forum, SVCE, organized the "Biobids: Bid, Trade, and Innovate" event on February 19<sup>th</sup> -20<sup>th</sup>, 2024. Dr. Rajni Chopra, Professor and Head of the Department at the National Institute of Food Technology, Entrepreneurship and Management - Kundli (NIFTEM-K), delivered the inaugural address, igniting the event with her insights. Diverse participants from various fields and colleges across Tamil Nadu engaged in the event, forming 20 teams, each assigned to one of four distinct tracks.

The first day buzzed with excitement as teams engaged in bidding and trading activities, competing to acquire resources to fuel their innovative pursuits. On the following day, participants showcased their creativity and problem-solving abilities by presenting original ideas incorporating the acquired items. This unique format fostered strategic thinking, collaboration, and resourcefulness among the teams.

The event served as a platform for the practical application of theoretical knowledge while refining essential skills like presentation and idea generation. By cultivating an environment of collaboration and innovation, "Biobids: Bid, Trade, and Innovate" contributed to nurturing future leaders in biotechnology and related fields, paving the way for transformative solutions to real-world challenges.

## Snapshots of the Event







## Alumni Interaction

The Department of Biotechnology of Sri Venkateswara College of Engineering hosted **Ms. Swetha Magesh and Ms. Sushmitha Magesh** (2022 Batch of B.Tech Biotechnology) Master's Students at McGill University, Canada visited SVCE today (12-2-2024) and interacted with our second year students regarding higher education opportunities in Canada.

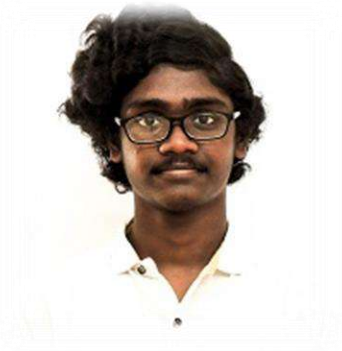


## Delegate Visit to the Department

**Dr. Mohan Venkatramanan**, CEO & Director of Syntonix, USA and Experteze, USA visited the Department of Biotechnology and interacted with Prof. E. Nakkeeran, Head of the Department and Prof. P. K. Praveen Kumar on 06<sup>th</sup> February 2024.



## Placement Update



**Mr. Y. Udaya Rajan**  
2020-24 Batch



**Ms. S.S. Dhakshni**  
2020-24 Batch



**Placed in M/s Pick Your Trail as Management Trainee-Sales with CTC of 4 Lakhs PA.**

## Higher Studies

Congratulations to our Final Year B.Tech Biotechnology student, **Ms. Rupika Rajendran** for her acceptance into the



into **Master of Science in Food Science & Human Nutrition**



**Ms. RUPIKA RAJENDRAN**

Final Year Student  
Biotechnology

Congratulations to our Final Year B.Tech Biotechnology student, **Ms. Akshara B S** for her acceptance into the



into **Master of Science in Environmental Engineering**



**MS. AKSHARA B S**

Final Year Student  
Biotechnology

## Higher Studies

Congratulations to our final year B. Tech Biotechnology Student, **Ms. Ananya R C** for her acceptance



**Kingston**  
**University**  
London

MS Medical Biotechnology

MSc in Biomedical Science



**Ms. Ananya R C**  
Final Year Student  
Biotechnology

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



Into **MS Medical Biotechnology** along with a one-time scholarship of **\$3000**



**Ms. Mathumithaa Rao**  
Final Year Student  
Biotechnology

## Higher Studies

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



Into **MS Medical Biotechnology** along with a one-time scholarship of **\$3000**



**Ms. Janani Harikrishnan**  
Final Year Student  
Biotechnology

Congratulations to our final year B. Tech Biotechnology Student, **Ms. Anu Rashmii G** for her acceptance



Into **MS Biotechnology with Entrepreneurship** along with Merit Award of **€3000**



**Ms. Anu Rashmii G**  
Final Year Student  
Biotechnology

## Higher Studies

Congratulations to our final year B. Tech Biotechnology Student, **Ms. Varshini K R** for her acceptance



## MS in Marketing



**Ms. Varshini K R**  
Final Year Student  
Biotechnology

## Research Activities

### Review Publication

**Dr. G. Karthigadevi**, Assistant Professor has published review article entitled "Biohythane production techniques and recent advances for green environment – A comprehensive review" in the Journal of Process Safety and Environmental Protection by Elsevier with an impact factor of 7.8.

## Recent Review Article Publication

"Biohythane production techniques and recent advances for green environment - A comprehensive review"

### Journal: Process Safety and Environmental Protection



Transactions of the Institution of Chemical Engineers Part B  
ISSN 0957-5033

**Process Safety and Environmental Protection**  
Official journal of the European Federation of Chemical Engineering Part B  
Volume 181 January 2024

Chemicals → Fermentation → Purging → Explosive

EFCE IChemE

### AUTHOR



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

DOI: [doi.org/10.1016/j.psep.2024.01.099](https://doi.org/10.1016/j.psep.2024.01.099)



## Research Grant

### Intramural

**Ms. Aparrajitha Viswanathan (Batch 2020-24)** received the SVCE Intramural Research Grant of Rs. 10,000/- for their project proposal titled “Preparation of Aloe Vera Enriched Orange-Ginger Marmalade for Improved Gut Health and Immune Benefits” under the guidance of **Prof. E. Nakkeeran**.

**Intramural Project Grant of ₹10,000/-**

**for their project proposal titled "Preparation of Aloe Vera Enriched Orange-Ginger Marmalade for Improved Gut Health and Immune Benefits"**

**Ms. V. Aparrajitha**  
Final Year Student  
Biotechnology

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

## Intramural

Ms. Akshara B.S. and Ms. S. Nivashini Vindhya (Batch 2020-24) received the SVCE Intramural Research Grant of Rs. 10,000/- for their project proposal titled "Unravelling the Electrogenic Potential of Symbionts for Sustainable Generation of Green Power" under the guidance of Dr. G. Karthigadevi.



**Intramural Project Grant of ₹10,000/-**

**for their project proposal titled "Unravelling the Electrogenic Potential of Symbionts for Sustainable Generation of Green Power"**

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

  
**Ms. S. Nivashini Vindhya**  
Final Year Student  
Biotechnology

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

## Intramural

**Ms. S. Kamali and Ms. S. S. Dhakshini (Batch 2020-24)** received the SVCE Intramural Research Grant of Rs. 10,000/- for their project proposal titled "Therapeutic Effect of Garlic Loaded Chitosan in the Treatment of High Glucose Induced Renal Fibrosis" under the guidance of **Dr. E. Isaivani**.

### Intramural Project Grant of ₹10,000/-

for their project proposal titled "Therapeutic Effect of Garlic Loaded Chitosan in the Treatment of High Glucose Induced Renal Fibrosis"



**Ms. S. Kamali**  
Final Year Student  
Biotechnology



**Ms. S. S. Dhakshini**  
Final Year Student  
Biotechnology



**Dr. J. Isaivani**  
Project Mentor  
Assistant Professor  
Biotechnology

## Student Activities

### Award in International Conference

**Ms. Yamuna Devi B** (Batch 2022-24) M. Tech Biotechnology, received the Best Poster Presentation award with a cash prize of Rs.1000/- for the poster titled "Production of Molecular weight Tailored Hyaluronic acid in the *Lactococcus lactis*" at the International Conference on New Horizons in Bioengineering: Fostering Academia-Industry partnership held at SRM Institute of Science and Technology during February 14<sup>th</sup> -16<sup>th</sup>, 2024 under the guidance of **Prof. Sumitha V and Prof. M. Sivanandham**.

## Best Poster Presentation Award

for the poster titled "Production of Molecular weight Tailored Hyaluronic acid in the *Lactococcus lactis*" at the International Conference on New Horizons in Bioengineering : Fostering Academia-Industry partnership



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



**Dr. V. Sumitha**  
Project Mentor  
Professor  
Biotechnology



**Prof. M. Sivanandham**  
Project Mentor  
Visiting Professor -  
Biotechnology &  
Secretary, SVEHT

## Award in International Conference

**Ms. Tharangini Senkathiravan** (Batch 2021-25), B. Tech Biotechnology, received the Best Paper Presentation award for the paper titled "Transcriptomic risk score based on immune dysregulated genes for type 1 diabetes" at the International Conference on Climate Resilience- Unraveling Molecular Solutions for a Sustainable Future organized by Vivekanandha College of Arts and Sciences for Women (Autonomous), Tiruchengode, on February 15<sup>th</sup> and 16<sup>th</sup>, 2024, under the mentorship of **Mr. S. Naga Vignesh** and **Mr. Hariharan Jayaraman**.

### Best Paper Presentation Award

for the paper titled "Transcriptomic risk score based on immune dysregulated genes for type 1 diabetes" at the International Conference on Climate Resilience- Unraveling Molecular Solutions for a Sustainable Future



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



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



**Mr. J. Hariharan**  
Project Mentor  
Assistant Professor  
Biotechnology

## Award in National Conference

**Ms. Ananya R C, Ms. Kirtana S, and Ms. Lavanya J**, (Batch 2020-24) have secured Third Position along with a cash prize of Rs 800/- in research article presentation for the paper titled "Development of Mukia infused nanoemulsion topical spray in the treatment of diabetes-induced osteoarthritis" at the National Conference on Transforming Healthcare: Advances in Bioinformatics and Biological sciences organized by Sathyabama Institute of Science & Technology, Chennai from Feb 13 to Feb 15, 2024, under the mentorship of Dr. J. Isaivani.

### Third Position with Cash Prize

for their paper presentation titled "**Development of Mukia infused nanoemulsion topical spray in the treatment of diabetes-induced osteoarthritis**" at the National Conference on Transforming Healthcare: Advances in Bioinformatics and Biological sciences



**Ms. Ananya R C**  
Final Year B. Tech Student  
Biotechnology



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



**Ms. Lavanya J**  
Final Year B. Tech Student  
Biotechnology



**Dr. J. Isaivani**  
Project Mentor  
Assistant Professor  
Biotechnology

## Intercollegiate Debate Competition

**B. Tech Biotechnology Students (2022-26 and 2021-25 Batch)** along with **Prof. P. K. Praveen Kumar** and **Mr. N. Sathish, Assistant Professor**, have attended PALS Theory to Practice Lecture on “Biomass to value added products - a sustainable approach” by Prof. Sathyanarayana N Gummadi in IIT Madras, Chennai on 01<sup>st</sup> February 2024.



## Intercollegiate Debate Competition

**Ms. Shujah Falehah Mariam and Ms. Srinidhi Varadharajan** (Batch 2023-27), B. Tech Biotechnology have secured the 2<sup>nd</sup> place along with a cash prize in an Intercollegiate Debate Competition held on 29<sup>th</sup> February 2024 organized by the Department of Political Science at Madras Christian College, Chennai.

**Congratulates our first year B. Tech Biotechnology students, Ms. Shujah Falehah Mariam and Ms. Srinidhi Varadharajan for their 2nd place along with a cash prize in an Intercollegiate Debate Competition held on 29th February 2024**





## Guest Lecture Delivered by the Faculty

**Prof. P.K.Praveen Kumar** delivered a guest lecture on “Start-up Opportunities in Biotechnology” in “Mystory - motivational session by successful innovator organized by IIC-SVCE on 06<sup>th</sup> February 2024.



**Prof. P.K.Praveen Kumar** delivered a guest lecture on “Computer-aided drug design in Cancer” at Saveetha Dental College on 10<sup>th</sup> February 2024.



## Industrial Visit

B. Tech Biotechnology students (2020-24 Batch) visited the AURA Biotechnology Private Limited, Ayanambakkam, Thiruvallur District on 14<sup>th</sup> February 2024. The students were accompanied by Mr. J. Hariharan, Assistant Professor, Dr. J. Isaivani, Assistant Professor and Mr. S. Srinivasan, supporting staff.

AURA Biotechnologies Private Limited is a company that focuses on the development of diagnostic kits as well as providing Real Time diagnostic services. They deliver top-quality products such as PFU DNA Polymerase Vial, Silsure Plant Growth Promoter, TSV PCR Detection Kit, and Magnetic Beads for RNA-DNA Extraction, Water Soluble Chitosan Powder, and Carrier RNA. The Department of Biotechnology express gratitude to the staff at AURA Biotechnology for their warm hospitality with insightful presentations and making this visit a valuable learning experience.



### Conference attended by the Students

- **Ms. Vischalli J and Ms. Kimaya G** (2020-24 Batch) B. Tech Biotechnology participated in the Oral presentation and presented on the topic “Effect of chitosan nanoparticles on Asymmetric dimethylarginine induced renal cell fibrosis under high glucose condition” under the guidance of Dr. Isaivani J at the National Conference on Transforming Healthcare: Advances in Bioinformatics and Biological Sciences (ABBS 2024) organized by the Department of Bioinformatics, Sathyabama Institute of Science and Technology from 13<sup>th</sup> February 2024 to 15<sup>th</sup> February 2024.
- **Ms. Kamali S and Ms. Dhakshni S S** of the 2020-24 batch B.Tech Biotechnology participated in the Oral presentation and presented on the topic “Garlic encapsulated chitosan nanoparticles for the treatment of high glucose-induced renal cell fibrosis” under the guidance of Dr. Isaivani J at the National Conference on Transforming Healthcare: Advances in Bioinformatics and Biological Sciences (ABBS 2024) organized by the Department of Bioinformatics, Sathyabama Institute of Science and Technology from 13/02/2024 to 15/02/2024.

### Internship attended by the Students

- **Ms. Shreeiya Swaminathan** (2022-26 Batch) B. Tech Biotechnology has completed an internship for a month at Cancer Institute Adyar (WIA) from 5th January to 5th February in the dept. of Preventive oncology.
- **Ms. Varshini R** (2022-26 Batch) B. Tech Biotechnology has completed an internship for a month at Hatsun, Kanchipuram from 8th January to 8th February.

### Events Attended by the Students

- **Mr. Tamilselvan P** (2022-26 Batch) B. Tech Biotechnology has participated in Biobids organized by Department of Biotechnology, SVCE and conducted on 19<sup>th</sup> - 20<sup>th</sup> February 2024, has secured 2<sup>nd</sup> place in paper presentation under Recombinant Technology and Therapeutics track.
- **Ms. Srinithi A, Ms. Reshma R, Ms. Dharshini R, Ms. Mrudula U, Ms. Mageshwari R and Ms. Jeevitha G** (2022-26 Batch) B. Tech Biotechnology have participated in Biobids, under Food and Agricultural Technology track organized by Department of Biotechnology, SVCE and conducted on 19<sup>th</sup> - 20<sup>th</sup> February 2024.

- **Mr. Dhivakar K, Mr. Azeez A, Ms. Harini P, Mr. Balasubramanian JM, Ms. Riduvarshini E, Ms. Monica S, Ms. Purvasri Sivakumar, Ms. Maadhangi M, Ms. Keshika D, Ms. Divyasri M, Ms. Priyadharshini D, Ms. Gayathri R and Ms. Vaishnavi Madhubhusi** (2022-26 Batch) B. Tech Biotechnology have participated in Biobids organized by Department of Biotechnology, SVCE and conducted on 19<sup>th</sup> - 20<sup>th</sup> February 2024.
- **Ms. Keerthanaa SG, Ms. Abineha A and Mr. Dhivakar K** (2022-26 Batch) B. Tech Biotechnology have participated in iCUBE, organized by science club, SVCE and conducted on 16<sup>th</sup> & 27<sup>th</sup> February 2024.
- **Ms. Keerthanaa SG, Ms. Abineha A and Ms. Mageshwari R** (2022-26 Batch) B. Tech Biotechnology have participated in INFINITUS – EWB event, organized by SVCE and conducted from 5<sup>th</sup> - 9<sup>th</sup> February 2024.
- **Ms. Dharshni R, Ms. Jeevitha G, Ms. Mrudula U, Ms. Srinithi A, Ms. Keerthana V, Ms. Varsha M, Ms. Sriharini LN, Ms. Pavithra A, Ms. Prathiba Peroline Jones B and Ms. Vaishnavi Madabhushi** (2022-26 Batch) B. Tech Biotechnology have participated in RRC stem cell donation camp, organized by RRC, SVCE and conducted on 7<sup>th</sup> February 2024.

### Events Attended by the Faculty

- **Mr. J. Hariharan**, attended the International training program on “Amazon Web Services Builders Online Series” organized by Amazon Web Services on 18<sup>th</sup> January 2024.
- **Mr. N. Sathish**, attended the PALS theory to practice lecture Biomass to Value Added Products-A Sustainable Approach organized by IIT-Madras on 01<sup>st</sup> February 2024.
- **Dr. V. Sumitha, Mr. N. Sathish, Mr. S. Naga Vignesh, Dr. K. Vasantharaj, Dr. G. Karthigadevi, Dr. K. Ganesh Prasath and Dr. J. G. Aswin Jen**o have attended the National Level FDP on AICTE sponsored ATAL FDP on “Microbial Metagenomics and Next Generation Sequencing”, held from 5<sup>th</sup> – 10<sup>th</sup> February 2024, Organized by Department of Biotechnology, Sri Venkateswara College of Engineering, Sriperumbudur.
- **Prof. P.K.Praveen Kumar** attended training on “Mentors of Standard Clubs” conducted by Bureau of Indian Standards at SVCE, Sriperumbudur during 15<sup>th</sup>–16<sup>th</sup>, February 2024.
- **Dr. K. Ganesh Prasath**, attended 5-days International FDP on Bridging Research and Innovation in Biomedical Sciences and Engineering held from 19<sup>th</sup> – 24<sup>th</sup> February 2024, Organized by the school of Biomedical Sciences, Galgotias University, Noida, Uttar Pradesh.

## Alumni Write-up



**Mr. Deva S**

**Ph.D. Scholar IIT Delhi  
Batch of PG 2021-2023**

The Department of Biotechnology at SVCE is not just a place for education; it is also a place where I was able to discuss all of my research ideas and carry them out without any hassle. It is evident that no institute under Anna University has the greatest amenities (particularly the animal house facility), but SVCE does. The faculties at the Department of Biotechnology not only taught us the courses, but also helped me build self-confidence and settle into where I am now.



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**DEPARTMENT OF BIOTECHNOLOGY**



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RECEIVED PROJECTS FROM

- > DBT
- > ICMR
- > DST-SERB
- > CSIR
- > AICTE
- > MSME
- > TNSCST
- > EDII

RESEARCH FOCUS

- > Immunology & Immuno-technology
- > Biomaterials & Tissue Engineering
- > Stem Cell Technology
- > Genetic Engineering & rDNA Technology
- > Cellular & Molecular Biology
- > Computational Systems Biotechnology
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- > Herbal Medicines & Antioxidants Research



**Biotechnology, SVCE**

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- > Bioinformatician
- > 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**

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**DEPARTMENT OF BIOTECHNOLOGY**  
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1. B.Tech Biotechnology
2. M.Tech Biotechnology
3. M.S. (By Research)
4. Ph.D. Biotechnology

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