

## **NEWSLETTER**

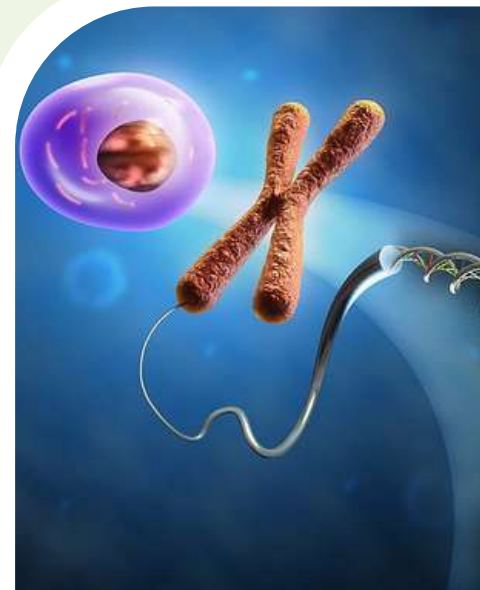
**VOLUME-3 | ISSUE-4 | APRIL-2024**

# **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 foster an environment that empowers individuals to shape their future in biotechnology on both national and global platforms, enabling them to unleash their potential and drive innovation, by providing state-of-the-art facilities and robust support systems.

## Mission

- **Empowering Excellence:** Cultivate a dynamic environment where individuals are equipped with the knowledge, skills, and resources to innovate and lead on both national and global platforms in biotechnology.
- **Advancing Innovation:** Fostering a supportive ecosystem to develop the technical skills and ethics of individuals, enabling them to explore, experiment, and push boundaries to unleash their potential.
- **Enabling Future Leaders:** To empower the next generation of leaders who will shape the future of biotechnology, by providing a conducive environment where individuals can grow, thrive, and make contributions, instilling values of excellence, integrity, and social responsibility.

## B. Tech. Biotechnology

### Program Educational Objectives

**PEO-1.** To empower students with specialized biotechnology proficiencies essential for domain based industries and software sectors, fostering their readiness for multifaceted professional opportunities.

**PEO-2.** To cultivate critical thinking, foster innovation in healthcare, sustainability, and food security, and nurture research-driven biotechnology professionals, preparing them for advanced studies in higher education.

**PEO-3.** To empower students with entrepreneurial skills and ethics, cultivating leaders for innovation-driven growth in the bioindustry and beyond.

### 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:** Design biologics to meet societal needs using insights obtained from theoretical and practical knowledge of molecular biology, genetics, and bioprocessing through computational systems biology.

**PSO-2:** Apply bioprocess knowledge to develop a techno-economic process for addressing global health and environmental challenges through sustainable solutions.

**PSO-3:** Exhibit the skill sets necessary to bridge the industry-academia gap, fulfilling the needs of domain-based sectors.

## 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.



## Events Conducted

### SVCE Pathways 2024

The Department of Biotechnology of Sri Venkateswara College of Engineering conducted a webinar on SVCE Pathways 2024 "Biotechnology: Explore the Technology that Transforms Lives" on 30<sup>th</sup> April, 2024. The program started with the welcome address given by Prof. Nakkeeran Ekambaram, Professor & Head, Department of Biotechnology, SVCE and the present the webinar as follows,

**Career Prospects in Biotechnology Industry:** Ranjith Kumar, PhD, Senior Executive R&D -Bioprocess EPYGEN Biotech, Navi Mumbai.

**Exploring the Multifaceted World of Biotechnology:** Dr. Padmanaban V C, Assistant Professor Department of Bioengineering National Institute of Technology, Agartala.

**Career Prospects in Biotechnology Research:** Dr. Shobana Shanmugam, Head & Senior Scientist Madras Diabetes Research Foundation, Chennai.

**Alumni Success Story in biotechnology Industry:** Ms. Nithya Gani, Brand Manager, Britannia Bourbon & JJ Franchise, Mumbai.

**Alumni Success Story in biotechnology Industry:** Ms. Gayathri Subramanian, Scientist III, Cambrian Bioworks, Bengaluru.

**Navigating Campus Life at SVCE:** Ms. Nithyasree V (Class of 2020-2024) GATE 2024 - AIR 45, Ms. Varshini rajakumar (Class of 2020-2024) Admitted for MS Marketing University of Arizona, Ms. Jyotsna R (Class of 2020-2024) Admitted for MS in Environmental Toxicology Uppsala University, Sweden.



**SVCE PATHWAYS**  
Biotechnology: Explore the Technology that Transforms Lives

Scan here to Register

 <b>Prof. E. Nakkeeran</b> Professor & Head Department of Biotechnology, SVCE	 <b>Dr. V.C. Padmanaban</b> Assistant Professor Department of Bioengineering National Institute of Technology, Agartala
 <b>Dr. M. Ranjith Kumar</b> Senior Executive R&D Bioprocess EPYGEN Biotech, Navi Mumbai	 <b>Dr. Shobana Shanmugam</b> Head & Senior Scientist Diabetes Food Technology Madras Diabetes Research Foundation, Chennai



**PATHWAYS**

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 <b>Ms. Nithya Gani</b> 2009-2013 Batch Brand Manager Britannia Bourbon & JJ Franchise, Mumbai	 <b>Ms. Gayathri Subramanian</b> 2019-2017 Batch Scientist III Cambrian Bioworks, Cambrian Bioworks, Bengaluru	 <b>Ms. V. Nithyasree</b> GATE 2024 - AIR 45 Class of 2020-2024
 <b>Ms. K.R. Varshini</b> Admitted for MS Marketing University of Arizona, USA Class of 2020-2024	 <b>Ms. R. Jyotsna</b> Admitted for MS in Environmental Toxicology Uppsala University, Sweden Class of 2020-2024	

## Industry Institute Interaction Meeting

The Department of Biotechnology has organized a **12<sup>th</sup> Industry Institute Interaction Meeting** titled Industry - Academia Meet on Bridging Academia and Industry: A Nexus for Innovation on 27<sup>th</sup> April 2024. Dr. S. Pandi Prabha, Professor & AHOD coordinated the event

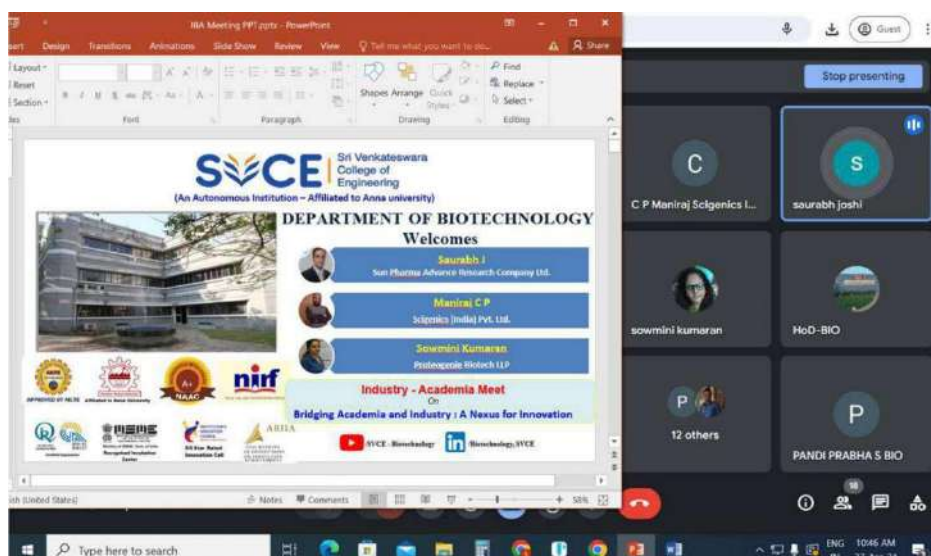
### Industry Personnel attended:

1. Mr. C. P. Raj, President, Scigenics (India) Pvt. Ltd., Chennai
2. Mr. J. Saurabh, Sr General Manager at Sun Pharma Advance Research Company Ltd., Vadodara, Gujarat, India
3. Ms. Sowmini Kumaran, Founder and CEO, Proteogenie Biotech LLP, PSG STEP, Bio-Nest, PSG college of Technology, Peelamedu, Coimbatore

### The primary objectives of this meeting are

- To receive suggestions from the industry personnel regarding the skills expected from our graduates.
- To discuss modification in the present curriculum that suits to the industry needs.
- To receive training for students and faculty members in industrial practices.
- To perform collaborative student projects relevant to industries as summer training.
- To attract consultancies from the industries.

The major points on Vision, Mission, PEOs/POs/COs/PSOs, Inputs on curriculum, Possibility of expert lectures by Industry personnel at college, Opportunities for student In-plant training / Internship / Industrial visit/ Project/ Placement, Possibility of faculty training in Industry for a week, Basic training to Industry personnel at college, Faculty Consultancy / Joint projects with Industry, Signing of MoU and semester in industry were discussed in the meeting.



## Guest Lecture

The Department of Biotechnology at Sri Venkateswara College of Engineering recently hosted a Guest Lecture on “Discovery of a Novel Pan Allergen” by Dr. Ramaswamy Kalyanasundaram, Professor & Head of Microbiology and Immunology, Department of Biomedical Sciences, University of Illinois College of Medicine at Rockford, Illinois, USA on 2nd April, 2024 (Tuesday) from 10:00 AM to 11:00 AM (IST) in the Biotechnology Conference Hall.

The Introduction to the speaker was delivered by our final-year student, Ms. Jyotsna R. The prayer song of the event was sung by Ms. Ananya R C, final-year UG student. Dr. Ramaswamy Kalyanasundaram shared his insights and experiences from his laboratory, focusing on Advanced Immunological and Vaccine Development for Filariasis and also interacted individually with the student community and cleared all their doubts and clarifications regarding the lecture topic as well as admission into University of Illinois for their Master program.

The event provided a valuable opportunity for all the students and faculty members in attendance. The Department of Biotechnology at Sri Venkateswara College of Engineering regularly organizes such informative events and guest lectures for the benefit of our students.





## Snapshots of Guest Lecture



## Guest Lecture

The Department of Biotechnology of Sri Venkateswara College of Engineering recently hosted a Guest Lecture by **Dr. Katie Lunn**, **Professor of Dementia Genomics (Medical sciences), University of Exeter Medical School, London, United Kingdom** on 12<sup>th</sup> April, 2024 (Friday) from 10:00 AM to 11:00 AM (IST) in the Biotechnology Conference Hall.

The Introduction to the speaker was delivered by our final-year student. Dr. Katie Lunn shared her insights and experiences from her laboratory, focusing on Advanced Medical Sciences Technologies in Dementia and also interacted individually with the student community and cleared all their doubts and clarifications regarding the lecture topic as well as admission into Universities of the United Kingdom for their Master's Program.

The event provided a valuable opportunity for all the students and faculty members in attendance. The Department of Biotechnology at Sri Venkateswara College of Engineering regularly organizes such informative events and guest lectures for the benefit of our students.

## Snapshots of Guest Lecture





## Placement Corner

### PLACEMENT SEASON

congratulates our  
final year student  
for getting placed  
at



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

Trainee in the Production Department of Bioengineering Division

congratulates our  
final year student  
for getting placed  
at



**MS. B. YAMUNADEVI**  
FINAL YEAR PG STUDENT  
BIOTECHNOLOGY

Trainee in the Production Department of Bioengineering Division

congratulates our  
final year student  
for getting placed  
at



**MS. K. ABIRAMI**  
FINAL YEAR PG STUDENT  
BIOTECHNOLOGY

Trainee in the Production Department of Bioengineering Division

## Higher Studies



**THE UNIVERSITY OF ILLINOIS**  
**COLLEGE OF MEDICINE**  
CHICAGO PEORIA ROCKFORD URBANA

into the **Masters in Medical Biotechnology Program**  
along with a one-time  
scholarship grant award of **US \$3000**



**MR. ARVIND SRINIVASAN**

Final Year Student  
Biotechnology



**NUS**  
National University  
of Singapore

into **Master of Science in Biotechnology**



**Ms. MAGDALENE P**

Final Year Student  
Biotechnology



UPPSALA  
UNIVERSITET

into **Master's in Biology - Environmental Toxicology**



**Ms. JYOTSNA R**

Final Year Student  
Biotechnology



## Research Activities

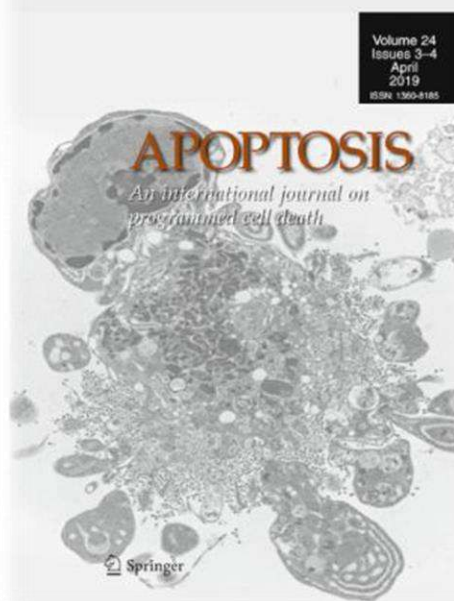
### Review Article Publication

**Mr. Karthikeyan Murugan**, passed-out B. Tech Biotechnology student (2019-2013 batch) published a review article titled "Understanding the molecular mechanism of regeneration through apoptosis-induced compensatory proliferation studies - updates and future aspects" in the Apoptosis Journal of Springer Publishers with an impact factor of 7.2.

### Recent Review Article Publication

"Understanding the molecular mechanism of regeneration through apoptosis-induced compensatory proliferation studies - updates and future aspects"

**Journal: Apoptosis (IF: 7.2)**



#### AUTHOR



**Mr. M. Karthikeyan**  
B.Tech Biotechnology  
Batch 2019-2023

DOI: [doi.org/10.1007/s10495-024-01958-1](https://doi.org/10.1007/s10495-024-01958-1)

## Research Activities

### Research Article Publication

**Prof. Nakkeeran Ekambaram**, Professor and Head of Biotechnology published a research article titled “Safety Analysis Improvement in Fire Risk Assessment Model and Optimized Risk Indexing using Deep Learning Approach” in the International Journal of Intelligent Systems and Applications in Engineering.



**Recent Research Article Publication**

“Safety Analysis Improvement in Fire Risk Assessment Model and Optimized Risk Indexing using Deep Learning Approach”

**Journal: International Journal of Intelligent Systems and Applications in Engineering (IJISAE)**

**International Journal of Intelligent Systems and Applications in Engineering**  
www.ijisae.org ISSN : 2147-6799  
Volume : 11 Issue : 1

**AUTHOR**



**Dr. E. Nakkeeran**  
Professor & Head  
Biotechnology

<https://ijisae.org/index.php/IJISAE/article/view/5351>

## Research Activities

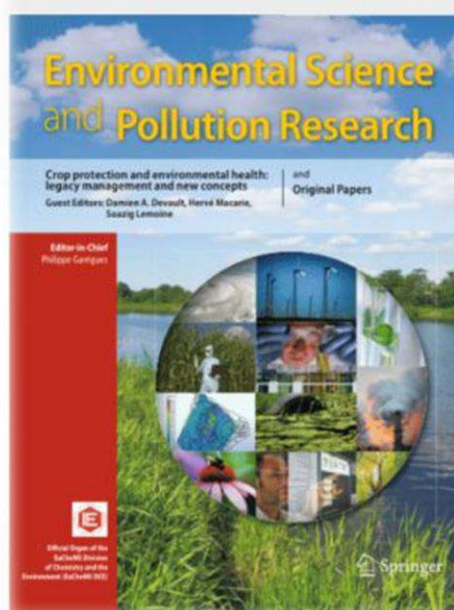
### Review Article Publication

**Dr. Pandi Prabha S**, Professor - Biotechnology published a review article titled “Nanocellulose-stabilized nanocomposites for effective Hg(II) removal and detection: a comprehensive review” in the Environmental Science and Pollution Research Journal of Springer Nature Group Publishers with an impact factor of 5.8.

### Recent Review Article Publication

“Nanocellulose-stabilized nanocomposites for effective Hg(II) removal and detection: a comprehensive review”

**Journal: Environmental Science and Pollution Research,  
Springer Nature Publishers (IF: 5.8)**



### AUTHOR



**Dr. S. Pandi Prabha**  
Professor  
Biotechnology

DOI: [doi.org/10.1007/s11356-024-33105-3](https://doi.org/10.1007/s11356-024-33105-3)



## Research Activities

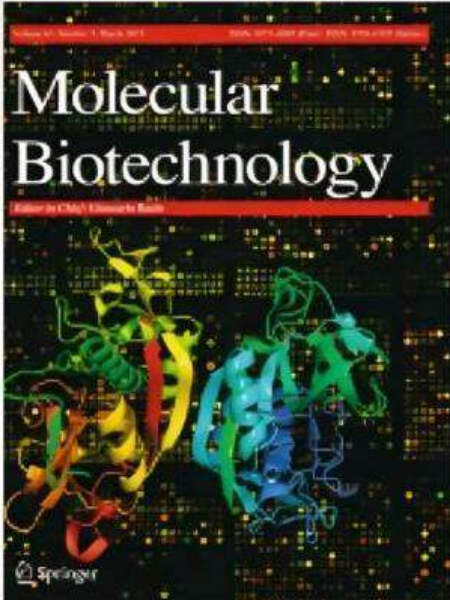
### Review Article Publication

**Ms. Harini Sundar, Ms. Kamalavarshini Balakrishnan** (2019-2023 batch), our current B. Tech Biotechnology students, **Mr. Sakthivel Subramaniam** (2020-2024 batch), **Mr. Kevin M** (2021-2025 batch), **Ms. Hemalatha Ramachandran Ph. D.** research scholar and **Prof. Praveen Kumar PK**, Biotechnology published a review article titled "The Role of HSP90 and TRAP1 Targets on Treatment in Hepatocellular Carcinoma" in the Molecular Biotechnology Journal of Springer Publishers with an impact factor of 2.6.







## Recent Review Article Publication

"The Role of HSP90 and TRAP1 Targets on Treatment in Hepatocellular Carcinoma"

Journal: Molecular Biotechnology, Springer Nature Publishers (IF: 2.6)



### AUTHORS

 <b>Ms. Harini Sundar</b> B.Tech Biotechnology Batch 2019-2023	 <b>Ms. Kamalavarshini B</b> B.Tech Biotechnology Batch 2019-2023	 <b>Mr. Sakthivel Subramaniam</b> B.Tech Biotechnology Batch 2020-2024
 <b>Ms. Hemalatha Ramachandran</b> Ph.D. Research Scholar Biotechnology	 <b>Mr. M. Kevin</b> B.Tech Biotechnology Batch 2021-2025	 <b>Dr. P. K. Praveen Kumar</b> Professor Biotechnology

DOI: [doi.org/10.1007/s12033-024-01151-4](https://doi.org/10.1007/s12033-024-01151-4)



## Research Activities

### Patent Filed

**Dr. Pandi Prabha S**, Professor - Biotechnology filed an Indian Product Patent with the Indian Patent Office on “Composition for a Vitamin B6 Enriched Biscuit” (File No: 202441011711).

**RESEARCH ACHIEVEMENTS**

**FILING OF INDIAN PATENT**

**Composition for a Vitamin B6 Enriched Biscuit**  
**(File No: 202441011711)**

  
**Ms. S. Kawya**  
M.Tech Biotechnology  
Batch 2020-2022

  
**Dr. S. Pandi Prabha**  
Professor  
Biotechnology

## Research Activities

### Grant Received

**Prof. Praveen Kumar PK**, Prof/BIO - Team Leader, Ms. J. Preethi, Ph. D Scholar - Team Member and our Final Year B. Tech Biotechnology Students, Ms. Nithyasree V - Team Member and Ms. Magdalene Prabhakar - Team Member, who has received Rs. 5 Lakhs in Yukthi 2.0 Innovation Challenge 2023 organized by the Ministry of Education Innovation Council, Govt. of India and AICTE, Govt. of India for their Innovation titled, “Withanolide A -a potent inhibitor of mitochondrial HSP90 of Hepatocellular Carcinoma (HCC)” - IR2022-773491.




**Financial Grant of ₹ 5,00,000/-**

in **Yukthi 2.0 Innovation Challenge 2023**  
 organized by the Ministry of Education  
 Innovation Council, Govt. of India and AICTE,  
 Govt. of India for the innovation titled  
**“Withanolide A -a potent inhibitor of  
 mitochondrial HSP90 of Hepatocellular  
 Carcinoma (HCC)” - IR2022-773491**



**Dr. P. K. Praveen Kumar**  
 Team Leader  
 Professor  
 Biotechnology



**Ms. J. Preethi**  
 Team Member  
 Ph.D Research Scholar  
 Biotechnology



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



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

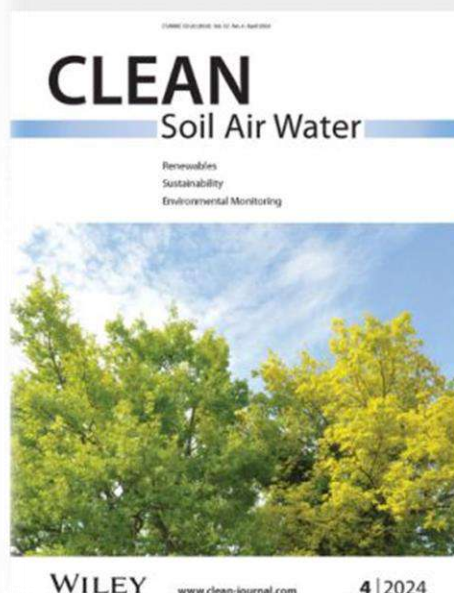
## Research Scholar Corner

**Ms. Linekha Radhakrishnan**, Ph. D. Research Scholar under the supervision of Dr. Nakkeeran Ekambaram, Professor and Head of Biotechnology along with **Ms. Yamuna Devi B and Ms. Abirami Krishnan**, of 2022-24, M. Tech Biotechnology students, Dr. Aswin Jen J G, Assistant Professor - Biotechnology published a review article titled “Halophiles and their adaptations: A comprehensive review on recent progress and prospects in biodesalination applications” in the **CLEAN: Soil, Air, Water** Journal from Wiley Publishers with an impact factor of 1.7.

### Recent Review Article Publication

“Halophiles and their adaptations: A comprehensive review on recent progress and prospects in biodesalination applications”

Journal: **CLEAN - Soil, Air, Water - Wiley Publishers (IF: 1.7)**



#### AUTHORS



**Ms. R. Linekha**  
Ph.D Research Scholar  
Biotechnology



**Ms. K. Abirami**  
M.Tech Biotechnology  
Batch 2022-2024



**Ms. B. Yamunadevi**  
M.Tech Biotechnology  
Batch 2022-2024



**Dr. J. G. Aswin Jen J G**  
Assistant Professor  
Biotechnology



**Dr. E. Nakkeeran**  
Professor  
Biotechnology

DOI: [doi.org/10.1007/s12033-024-01151-4](https://doi.org/10.1007/s12033-024-01151-4)

## Student Activities

### Award in Technical Symposium

**Ms. Sahana Sudhagar, Ms. Diksha S and Mr. Bhagawath Kumar M**, of 2023-27 Batch B. Tech Biotechnology and their mentor, **Dr. Nareshkumar Manickam**, AP/BIO, have received the First Place along with a cash prize, in the technical symposium, Biotechcellence 2024 held at Alagappa College of Technology-Chennai on 2<sup>nd</sup> April 2024 for their poster titled "AI - In Healthcare Sector".

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

**for their presentation titled "AI - In Healthcare Sector" in the technical symposium, Biotechcellence 2024 held at Alagappa College of Technology on 2nd April 2024**



**Ms. Sahana Sudhagar**  
First Year B. Tech Student  
Biotechnology



**Ms. Diksha S**  
First Year B. Tech Student  
Biotechnology



**Mr. Bhagawath Kumar M**  
First Year B. Tech Student  
Biotechnology



**Dr. M. Nareshkumar**  
Project Mentor  
Assistant Professor  
Biotechnology



## Award in Technical Symposium

**Ms. Neha Ramganesh and Ms. Tejaswini R**, of 2023-27 Batch B. Tech Biotechnology and their mentor, **Dr. Naresh kumar Manickam**, AP/BIO, who have received the Second Place with a cash prize of Rs.1500/-, in the technical symposium, Biotechcellence 2024 held at Alagappa College of Technology-Chennai on 1<sup>st</sup> April 2024 for their poster titled "AI Based Real Time Insect Detection and Pest Eradication".

**Second Position with Cash Prize of ₹1500/-**

**for their presentation titled "AI-Based Real Time Insect Detection and Pest Eradication" in the technical symposium, Biotechcellence 2024 held at Alagappa College of Technology on 2nd April 2024**



**Ms. Neha Ramganesh**  
First Year B. Tech Student  
Biotechnology



**Ms. Tejaswini R**  
First Year B. Tech Student  
Biotechnology



**Dr. M. Nareshkumar**  
Project Mentor  
Assistant Professor  
Biotechnology

## Award in Technical Symposium

**Ms. Magdalene Prabhakar P and Ms. Nithyasree V** of 2020-24 Batch B. Tech Biotechnology, and their mentor, Prof. Praveen Kumar PK, Prof/BIO, who have received the First Prize with a cash prize of INR 1000 and a Memento, for their presentation titled "In-silico studies on the effect of Withaferin A on HSP90 in Type2 Diabetes and its association with Non-Alcoholic Fatty Liver disease" at National Technical Symposium on Transfigures in Bioscience and Technology" (TBST2K24) held on 29th April, 2024.

**First Place with a cash prize of ₹1000/- and a Memento**

**for their presentation titled "In-silico studies on the effect of Withaferin A on HSP90 in Type2 Diabetes and its association with Non-Alcoholic Fatty Liver disease" at National Technical Symposium on Transfigures in Bioscience and Technology" (TBST2K24) held on 29th April, 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 Technical Symposium

**Mr. Arvind Srinivasan A, Mr. Jeya Prasath.R JP** of 2020-24 Batch B. Tech Biotechnology and their mentor, **Dr.K.Vasantharaj** , Assistant Professor-Biotechnology for receiving the Second Prize with a Memento in the Two-Day International Conference on Biorevolution-Pioneering Innovations in Life Sciences (BIO-PILS-2024) for their oral presentation titled " In-Vitro Evaluation of *Orthosiphon aristatus* as a promising agent against Urolithiasis".

### Second Place with a Memento

for their presentation titled "*In-Vitro Evaluation of Orthosiphon aristatus* as a promising agent against Urolithiasis" at the Two-Day International Conference on Bio-revolution-Pioneering Innovations in Life Sciences (BIO-PILS-2024)



**Mr. Arvind Srinivasan A**  
Final Year B. Tech Student  
Biotechnology



**Mr. Jeya Prasath R**  
Final Year B. Tech Student  
Biotechnology



**Dr. K. Vasantharaj**  
Project Mentor  
Assistant Professor  
Biotechnology

## Student Achievement in Sports

**Mr. Balasubramaniam**, 2022-26 B. Tech Biotechnology, as part of the team that secured the Second Runners up trophy in the 13th Smt Manjula Munirathinam Memorial Cricket Tournament-2024 organized by R M K Engineering College from April 1<sup>st</sup> to 5<sup>th</sup> 2024. Mr. Balasubramaniam's skill and team spirit were commendable, reflecting the values we strive to instill in our students. We congratulate on his remarkable achievement and wish him continued success both on and off the field.





## SVCE Innovates 2024

The Department of Biotechnology of Sri Venkateswara College of Engineering congratulates all the winners and participants of the Student Research Day (SVCE Innovates 2024).

First Prize: **Ms. Abirami Krishnan** (II-PG) & Dr. Divakar K (ASP/BIO, Project Mentor) for the project titled “Development of an Integrated Nutrient Replenishment System for Sustainable Hydroponics”.

**FIRST PRIZE WITH CASH AWARD**

for the project titled “Development of an Integrated Nutrient Replenishment System for Sustainable Hydroponics”



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



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

Second Prize: Ms. Jyotsna R (IV-UG), Ms. Varshini rajakumar (IV-UG) & Dr. Nareshkumar Manickam (AP/BIO, Project Mentor) for the project titled “A Novel Microfluidics-based Technology for Polyethylene Terephthalate Waste Bioconversion into Polybetahydroxy butyrate (PHB)”.

**SECOND PRIZE WITH CASH AWARD**

for the project titled “A Novel Microfluidics-based Technology for Polyethylene Terephthalate Waste Bioconversion into Polybetahydroxy butyrate (PHB)”



**Ms. R. Jyotsna**  
Final Year B. Tech Student  
Biotechnology



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



**Dr. M. Nareshkumar**  
Project Mentor  
Assistant Professor  
Biotechnology

## SVCE Innovates 2024

Second Prize: Ms. Nandita S (III-UG), Ms. Priyanka Raj (III-UG), Ms. swalakshana suresh (III-UG) & Dr. Isaivani jayachandran (AP/BIO, Project Mentor) for the project titled “VELDT Grape: Novel Insights into Its Therapeutic Potential for Inflammation Management”.

**SECOND PRIZE WITH CASH AWARD**

**for the project titled “VELDT Grape: Novel Insights into Its Therapeutic Potential for Inflammation Management”**



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



**Ms. R. Priyanka Raj**  
Third Year B. Tech Student  
Biotechnology



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



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

Third Prize: Ms. Nithila S (III-UG), Ms. Sulakshuna Balaji (III-UG) & Dr Karthigadevi Guruviah (AP/BIO, Project Mentor) for the project titled “Integration of Kelps Algal Spores in The Production of Clod Cards”.

**THIRD PRIZE WITH CASH AWARD**

**for the project titled “Integration of Kelps Algal Spores in The Production of Clod Cards”**



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



**Ms. B. Sulakshuna**  
Third Year B. Tech Student  
Biotechnology



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

**SVCE Innovates 2024**

Third Prize: Ms. Riduvarshini E (II-UG), Mr. J. Shrihari (II-UG), Dr. Pandi Prabha S (Professor/BIO, Project Mentor) for the project titled “Advances in valorisation of Industrial Wastewater by Algal-Bacterial consortium to enhance CO<sub>2</sub> fixation coupled with Bioenergy production”.

**THIRD PRIZE WITH CASH AWARD**

for the project titled “Advances in valorisation of Industrial Wastewater by Algal-Bacterial consortium to enhance CO<sub>2</sub> fixation coupled with Bioenergy production”



**Ms. E. Riduvarshini**  
Second Year B. Tech Student  
Biotechnology



**Mr. J. Shrihari**  
Second Year B. Tech Student  
Biotechnology



**Dr. S. Pandi Prabha**  
Project Mentor  
Professor  
Biotechnology

## SVCE College Day 2024

The Department of Biotechnology of Sri Venkateswara College of Engineering congratulates our second-year B. Tech Biotechnology student, **Mr. A. Azeez** for being awarded the 'Budding Bright Engineer Award' for the year 2024 during the SVCE College Day 2024.

congratulations to our second-year B.Tech Biotechnology student, **Mr. A. Azeez** for being awarded the '**Budding Bright Engineer Award**' for the year 2024 during the SVCE College Day 2024.



The Department of Biotechnology of Sri Venkateswara College of Engineering congratulates our second-year B. Tech Biotechnology student, **Mr. Tamil Selvan P** for being awarded the 'Budding Bright Engineer Award' for the year 2024 during the SVCE College Day 2024.

congratulations to our second-year B.Tech Biotechnology student, **Mr. P. Tamilselvan** for being awarded the '**Budding Bright Engineer Award**' for the year 2024 during the SVCE College Day 2024.





## SVCE College Day 2024

The Department of Biotechnology of Sri Venkateswara College of Engineering congratulates our final-year M. Tech Biotechnology student, **Ms. Yamuna Devi B** for being awarded the 'Outstanding PG Student Award' for the year 2024 during the SVCE College Day 2024 in recognition of her outstanding academic and other extra-curricular activities.

congratulations to our final-year M.Tech Biotechnology student, **Ms. B. Yamunadevi** for being awarded the '**Outstanding PG Student Award**' for the year 2024 during the SVCE College Day 2024.



The Department of Biotechnology of Sri Venkateswara College of Engineering congratulates our final-year B. Tech Biotechnology student, **Ms. Varshini Rajakumar** for being awarded the 'Outstanding Biotechnology Student Award' for the year 2024 during the SVCE College Day 2024 in recognition of her outstanding academic and other extra-curricular activities.

congratulations to our final-year B.Tech Biotechnology student, **Ms. K. R. Varshini** for being awarded the '**Outstanding Biotechnology Student Award**' for the year 2024 during the SVCE College Day 2024.



## SVCE College Day 2024

The Department of Biotechnology of Sri Venkateswara College of Engineering congratulates **Dr Karthigadevi Guruviah**, Assistant Professor of Biotechnology for being awarded the 'Star Performer Award (4-Star) for the year 2024 during the SVCE College Day 2024 for her outstanding contribution to the student fraternity at SVCE.

congratulations to **Dr. G. Karthigadevi**, Assistant Professor of Biotechnology for being awarded the '**Star Performer Award (4-Star)**' for the year 2024 during the SVCE College Day 2024.



## ISTE Awards

**Mr. Aditya Krishnan** (2020-24 Batch), **Ms. Madhumitha K** (2020-24 Batch) and **Gayathri.M** (2021-25 Batch) of B. Tech Biotechnology received the ISTE Best Student Award at Annual ISTE Tamilnadu Section Engineering Students Convention 2024, Tamil Nadu on 06<sup>th</sup> April 2024.



## Industrial Visit

An industrial visit to 'Central Footwear Training Institute, Guindy Chennai, Tamil Nadu was successfully organized by the Department of Biotechnology on 9<sup>th</sup> April 2024 (Monday) for 2022-26 B. Tech Biotechnology Students. Forty-Eight students, Mr. N. Sathish, Assistant Professor and Dr. K. Ganesh Prasath, Assistant Professor of the department visited the industry to learn and understand about the bone structure of the foot, deformities of the foot, design and manufacture of Footwear. The Technical Head and trainer of the industry shared their work experience and explained the various designs of footwear, texture and structure of the various skin such as goat, buffalo ie used for the preparation of the leather shoes. They explained various tactics to determine the difference between genuine and fake leather. The explanation also covered the importance of various levels of workmanship and training that are involved in the manufacture of footwear.

The students got exposure to the various kinds of foot deformities such as Bunions (Hallux Valgus), Hammertoe, Claw Toe, and Mallet Toe, Flatfoot (Pes Planus) and High Arches (Pes Cavus). The trainer explained the broad range of easy-to-use and proven tools for assessing foot function through force and pressure distribution analysis helps clinicians determine the root cause of problems in the lower extremities. The pressure assessing software helps in identifying the asymmetries between the left and right foot, monitoring the effectiveness of treatments, easily comparing pre and post treatments with automated reporting, educate the patients about their pathologies with visual biofeedback and identifying plantar pressure profile discrepancies between left and right feet.

Students of Biotechnology got great exposure in the technologies in the stream of footwear manufacturing based on foot deformities. The exposure led them to assess the Genuity of leather and software to analyze the pressure of the foot.



## Glimpse of Industrial Visit



## Project Presentation

**Ms. Divya Sri, Ms. Maadangi and Ms. Keshika** of 2022-26 Batch B. Tech Biotechnology students under the guidance of Dr. K. Ganesh Prasath, were selected for the E-yuva fellowship and presented their project on 15<sup>th</sup> April 2024 at E-YUVA Centre (EYC) Centre for Food Technology Building, Anna University, Chennai.

## Conference attended by the Students

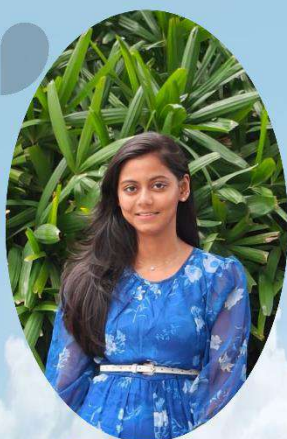
- **Ms. Nithyasree V and Ms. Magdalene P** of the 2020-24 batch of B. Tech Biotechnology presented a poster on the topic “In-silico studies on the effect of Withaferin A on HSP90 in Type 2 Diabetes Mellitus and its association with Non-alcoholic fatty liver disease”, under the guidance of Dr. Praveen Kumar P K at the Hyderabad Science Conference (HySci) organized by the Department of Biotechnology and the Department of Biomedical Engineering, Indian Institute of Technology, Hyderabad on 20<sup>th</sup> April 2024.
- **Ms. Swalakshana A.S, Ms. Nandita. S and Ms. Priyanka Raj. R** of 2021- 2025 batch B. Tech Biotechnology participated in National conference conducted by Vel Tech High Tech on 4<sup>th</sup> April, 2024.
- **Ms. Swalakshana A.S, Ms. Nandita. S and Ms. Priyanka Raj. R** of 2021- 2025 batch B. Tech Biotechnology participated in National conference conducted by Kamaraj College on 16<sup>th</sup> April, 2024.
- **Mr. Sivagurunathan R** of 2021-25 batch B. Tech Biotechnology has Completed Student Certification Programme on the topic of Transgenic Techniques which was organised by Indian Institute of Science Bangalore (IISC) in association with TalentSprint from February to April 2024.
- **Ms. Thulasi Kalaivani B, Ms. Maseera Ahmed M, and Ms. Sudharsini V** of 2021- 2025 batch under the mentorship of Dr. J.G. Aswin Jenoo have participated in the oral presentation in BASE 2024, National Conference on Biotechnological Advancements for Sustainable Environment on title “Sustainable Alternative To Conventional Packaging Using Cassava - Derived Biodegradable Polymers For Perishable Food Products” organized by Vel Tech High Tech Engineering College on 04<sup>th</sup> April 2024.
- **Ms. Varsha G** of 2021- 2025 batch has participated in BASE 2024, a National Conference organized by Vel Tech High Tech Engineering College on the title Understanding the Behaviour of breast Tumour-Scraped Luminal Cells And Tumour Organoids From

RNASEQ Gene Expression under the guidance of Mr. Naga Vignesh S, Mr.Hariharan J on 4th April 2024 .

### Events Attended by the Faculty

- **Mr. N. Sathish**, presented a paper entitled Reduction of heavy metals using Lactobacillus strains SERB sponsored Two days National conference in BASE 2024, National Conference on Biotechnological Advancements for Sustainable Environment organized by Vel Tech High Tech Engineering College on 04<sup>th</sup> April 2024.
- **Dr.G.Karthigadevi**, attended the National Program on one day awareness programme on orchid and inflienet services for scholarly communities organized by Anna University, Chennai on 11<sup>th</sup> April 2024.
- **Dr. K. Ganesh Prasath** attended the National Workshop on Intellectual Property Rights (IPRs) & IP Management for Startup, held on 26<sup>th</sup> April 2024, organized by the School of Biomedical Sciences, & Institute's Innovation Council, Galgotias University, Greater Noida, Uttar Pradesh.

### 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**



**INFORMATION BROCHURE FOR ADMISSION TO M.TECH BIOTECHNOLOGY & Ph.D PROGRAM (2024-2025)**

**EARN A DEGREE WITH CAREER AT SVCE**

**BEGIN YOUR BIOTECHNOLOGY CAREER JOURNEY AT SVCE – APPLY NOW!**

**Sri Venkateswara College of Engineering (Autonomous)** is a premier self-financing institution started in 1985 and received Autonomous status in 2016. **Department of Biotechnology** was established in 2005 under the guidance of our chairman, Governing Council Dr. A.C. Muthiah, a well-known industrialist, in order to explore and experience new frontiers of Biotechnology. The department started B.Tech Biotechnology in 2005, M.Tech Biotechnology in 2010 & and Ph.D. in 2011.

- |                               |  |                       |  |
|-------------------------------|--|-----------------------|--|
| <b>RECEIVED PROJECTS FROM</b> | <ul style="list-style-type: none"> <li>&gt; DBT</li> <li>&gt; ICMR</li> <li>&gt; DST-SERB</li> <li>&gt; CSIR</li> <li>&gt; AICTE</li> <li>&gt; MSME</li> <li>&gt; TNSCST</li> <li>&gt; EDII</li> </ul> | <b>RESEARCH FOCUS</b> | <ul style="list-style-type: none"> <li>&gt; Immunology &amp; Immuno-technology</li> <li>&gt; Biomaterials &amp; Tissue Engineering</li> <li>&gt; Stem Cell Technology</li> <li>&gt; Genetic Engineering &amp; rDNA Technology</li> <li>&gt; Cellular &amp; Molecular Biology</li> <li>&gt; Computational Systems Biotechnology</li> <li>&gt; Bioprocess Engineering</li> <li>&gt; Regenerative Medicine &amp; Diseases</li> <li>&gt; Herbal Medicines &amp; Antioxidants Research</li> </ul> |
|-------------------------------|--|-----------------------|--|



**Biotechnology, SVCE**

**Awardees of PG Scholarship - 2023**



**SCHOLARSHIPS FOR PG STUDENTS**

- > **PG scholarship of Rs.50,000/year** for 30% of the top scorers in their UG degree of sanctioned class strength for 2 years.
- > **Management Scholarships** for tuition fees and assistance for books and instruments.
- > **AICTE-GATE Scholarship of Rs. 12,400/month for 24 months** from AICTE for students having a valid GATE score.
- > **Intramural M.E/M.Tech Student Research Grant** to carry out innovative projects in Biotechnology.
- > **Sponsorships** for students to participate in conferences.

**In-Demand Biotechnology Careers that will shape your future**

- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"> <li>&gt; Research Assistant</li> <li>&gt; Technical Officer</li> <li>&gt; Clinical Scientist</li> <li>&gt; Pharma Engineer</li> <li>&gt; Biostatistician</li> <li>&gt; Academic Jobs</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Project Assistant</li> <li>&gt; Research Interns</li> <li>&gt; Bioinformatician</li> <li>&gt; Medical Writer</li> <li>&gt; Research Analyst</li> <li>&gt; Scientific Assistant</li> </ul> | <ul style="list-style-type: none"> <li>&gt; Laboratory Technician</li> <li>&gt; Quality Control Analyst</li> <li>&gt; Regulatory Affairs Specialist</li> <li>&gt; Clinical Research Coordinator</li> <li>&gt; Calibration Technician</li> <li>&gt; Environmental Scientist</li> </ul> |
|--|---|---|



**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.

Connect @ [www.svce.ac.in/departments/biotechnology/](https://www.svce.ac.in/departments/biotechnology/) | [hodbt@svce.ac.in](mailto:hodbt@svce.ac.in) | 9791668110



**DEPARTMENT OF BIOTECHNOLOGY**  
**SRI VENKATESWARA COLLEGE OF ENGINEERING**



**COURSES OFFERED**

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

**A GLIMPSE OF OUR MAJOR FACILITIES**



**ROTARY EVAPORATOR RV10 DIGITAL V (IKA - GERMANY)**

**FOR  
FURTHER DETAILS  
OR  
ENQUIRIES**

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