

NEWSLETTER

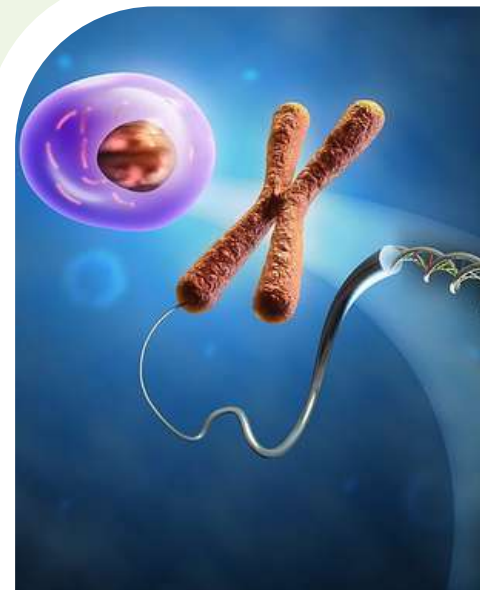
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BIOGAZETTE

ECHOING MULTIDISCIPLINARY PERSPECTS

Inside:

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- 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

SATY 2024

Sri Venkateswara College of Engineering, in collaboration with Springboards, recently hosted SATY-2024, a one-week Summer Camp on Engineering and Technology for school children from 6th to 10th May 2024, at SVCE Campus.

With 19 enthusiastic school students participating, SATY-2024 aimed to ignite curiosity and passion for Science and Technology while showcasing various career opportunities in these fields.

Throughout the week, participants engaged in hands-on practical sessions covering topics like Engine Mechanics, Refrigeration Systems, Ship Construction, Advanced Welding Techniques, and even a visit to a Solar Power Plant!

Field trips to SPEL, an Integrated Circuits manufacturing unit, provided students with real-world insights into modern technology applications. They also got to try their hands at soldering, power metering, wireless communication, and more exciting activities.

Additionally, students explored Civil Engineering models and gained valuable experience in Biotechnology, SVCE, including microscope handling for visualizing ultra-small objects. Amidst enriching sessions, students enjoyed delicious meals, refreshing refreshments, and invigorating sports events throughout the week.

SATY is an annual initiative by SVCE and Springboards, dedicated to nurturing young minds and fostering a love for technology.



Snapshots of SATY 2024



Placement Corner

congratulates our
final year student
for getting placed
at



MR. R. JAYARAMAN
FINAL YEAR STUDENT
BIOTECHNOLOGY

Trainee in Quality Assurance Department in Bioengineering Division

congratulates our
final year student
for getting placed
at



MS. DHARSHINI N S
FINAL YEAR STUDENT
BIOTECHNOLOGY

ROLE: Graduate Engineering Trainee

Higher Studies



Indian Institute of Technology - Madras
into
M.Tech in Bioprocess engineering under
Half-Time Teaching Assistantship
(HTTA) Category

through her **GATE (BT) 2024 - All India Rank - 45**



Ms. Nithyasree V

Final Year Student
Biotechnology



Birla Institute of Technology And
Science, Pilani (BITS - Pilani)
into
M.E Biotechnology

through her **GATE (BT) 2024 - All India Rank - 861**



Ms. Subasree S

Final Year Student
Biotechnology

Research Activities

Yukthi Innovation Grant



Prof. P.K.Praveen Kumar

Prof. P. K. Praveen Kumar and his team members, Ms. Preethi J, Ph.D Scholar, Ms. Nithyasree V, IV year, B. Tech Biotechnology (2020-2024 Batch) and Ms. Magdalene, IV year, B. Tech Biotechnology (2020-2024 Batch) have received the first instalment of grant support to Yukthi Innovation of Rs. 2.5 Lakhs from All India Council for Technical Education, Government of India on 06/05/24 (File No: P/11/2024-US C1/1).

Student Activities

Internship

Ms. Tharangini senkathiravan of 2021-25 Batch of B. Tech Biotechnology has been selected for a two-month internship offer to join CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM) at Jammu and Kashmir. The Department of Biotechnology at Sri Venkateswara College of Engineering extends heartfelt congratulations to Ms. S. Tharangini for this significant achievement.



Research Scholar Corner

Pre-confirmation Seminar Presentation & DC Meeting

Ms. Linekha R (Reg. No. 23235991126) Full-Time Research Scholar, under the guidance of **Prof. E. Nakkeeran**, Head, Department of the Biotechnology, completed her pre-confirmation seminar presentation and DC meeting in the presence of Prof. G. Baskar, St. Joseph College of Engineering, Chennai and Dr. Nishad Fathima, CLRI, Chennai on 30th May 2024.



Research Scholar Corner

Pre-confirmation Seminar Presentation & DC Meeting

Ms. Hanisha R Full-Time Research Scholar, under the guidance of Prof. E. Nakkeeran, Head, Department of the Biotechnology, completed her pre-confirmation seminar presentation and DC meeting in the presence of Prof. D. Anuradha, Alagappa College of Technology, Chennai and Dr. Nathiya Muthalagu, IIT Madras, Chennai on 30th May 2024.



Guest Lecture Delivered by the Faculty

Prof. P. K. Praveen Kumar has delivered a talk on “Applications of Prokaryotic and Eukaryotic Genomics in Health and Biological Research: Computer-aided Drug Design” on 17/05/24 organized by Bioinformatics Centre, Madras Veterinary College, Chennai.



- Prof. P.K.Praveen Kumar has delivered a talk on “Importance of Natural products in Therapeutics and Drug Discovery: Plant derived secondary metabolites for the treatment of diseases” on 21/05/24 organized by Altem Technologies, Bengaluru.
- Prof. P.K.Praveen Kumar has delivered a series of talks in Internship and online Certificate course on “AI & ML approaches of Drug and Vaccine Design in Cancer” from 16/05/24 to 30/05/24 organized by Institute of Innovations, Tiruvanamalai (Registered MSME, Government of India).

Events Attended by the Faculty

- Prof. P. K. Praveen Kumar has participated in a National workshop on “Applications of Prokaryotic and Eukaryotic Genomics in Health and Biological Research” conducted during 13/05/24 to 17/05/24 at Bioinformatics Centre, Madras Veterinary College, Chennai.
- Prof. P. K. Praveen Kumar has participated in a Hands on workshop on “Biosynthesis of Nanomaterials and Assessment of Cytotoxicity” conducted during 22/05/24 to 24/05/24 at Centre for Laboratory Animal Technology and Research, Sathyabama Institute of Science and Technology, Chennai.

Alumni Write-up



Ms. Rajashree
(2019-2023 Batch)

In the episode of my SVCE life it was filled with happiest learning and wonderful memories. Though we had lost two years of college life due to covid our professors made great efforts and kept us on track in learning through virtual mode without any breaks, even our practical classes was conducted during lock down relaxation period. As an engineer, we should have a better industrial exposure, Our department of biotechnology has conducted various webinars of industrial experts in different fields, so we came to know about the recent trends and research in industries. Each semester we have industrial visit according to our college regulations, again this provide us a great industrial exposure. In SVCE, I also developed the managerial skills as I had been a part of students' biotech forum of our department , we have conducted various webinars and symposium. Our teachers were most friendly, they offered best guidance and constantly motivated us to ace every competition and to crack competitive exams. Overall, I had a best college life experience in department of biotechnology, SVCE.



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.



SVCE Sri Venkateswara
College of
Engineering

**DEPARTMENT OF
BIOTECHNOLOGY**



APPLICATIONS ARE INVITED!

Join our Team:

1. Professor of Practice
(through physical mode for the below course)

BY22104 – Scaffold Designing and 3D Bioprinting

for the students of M.Tech Biotechnology

**MORE DETAILS IN
DESCRIPTION**

Interested applicants may send
their resume to hodbt@svce.ac.in

Connect @

www.svce.ac.in/departments/biotechnology/

hodbt@svce.ac.in

9791668110



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.

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



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"> > Research Assistant > Technical Officer > Clinical Scientist > Pharma Engineer > Biostatistician > Academic Jobs | <ul style="list-style-type: none"> > Project Assistant > Research Interns > Bioinformatician > Medical Writer > Research Analyst > Scientific Assistant | <ul style="list-style-type: none"> > 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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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



BIOFLO 415, BENCHTOP SIP FERMENTOR, NEW BRUNSWICK SCIENTIFIC CO. INC, GERMANY

**FOR
FURTHER DETAILS
OR
ENQUIRIES**

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