

**DEPARTMENT OF
BIOTECHNOLOGY**

NEWSLETTER

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BIOGAZETTE

Echoing multidisciplinary perspectives



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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.

Events Conducted

Faculty Development Program

AICTE ATAL SPONSORED NATIONAL FDP ON “Unraveling Molecular Mechanisms and Artificial Intelligence Approaches of Drug Design in Cancer”, 18th – 23rd December 2023

The Department of Biotechnology, SVCE is grateful to AICTE, Government of India to receive sponsorship of Rs. 3.5 Lakhs for conducting National FDP on “Unraveling Molecular Mechanisms and Artificial Intelligence Approaches of Drug Design in Cancer” from 18th – 23rd December 2023. 48 participants from around 25 different Institutions from all over India have applied for FDP.

Inauguration function of FDP program started on the first day by lighting Kuthuvillaku and releasing the FDP manual by invited Chief Guest, Prof.M. Sivanandham. He also enlightened the event by presenting a guest lecture on “Immunotherapeutic design by Computational Methodology”. After Lunch break, Hands-on session was scheduled from Ms. Dhivya Shanmugarajan, Senior Application Scientist, Altem Technologies, Bengaluru on “AI based model in drug design in Cancer”. On second day, a guest lecture was presented by Dr. Manikandan Narayanan, Professor, Department of Computer Science and Engineering, Indian Institute of Technology Madras, Chennai on “Computational approaches on Multi-tissue Genomics”. After that, Dr. Ezhilarasan, Professor, Saveetha Dental College Hospital presented a lecture in “Non-alcoholic fatty liver diseases: pathogenesis and current treatments”.

On third day, a guest lecture was presented by Dr. I. Arnold Emerson, Professor & HOD, Department of Biotechnology, VIT Vellore on “Role of molecular modelling and data science in cancer research” on forenoon session and a guest lecture on “Construction of protein-protein interaction networks for mitochondrial ribosomal small subunit MRPS23” from Dr.Gopisetty Gopal, Professor, Cancer research institute, Chennai. On fourth day, a guest lecture was presented by Dr. Suresh Kumar Rayala, Professor, Department of Biotechnology, Indian Institute of Technology Madras, Chennai on “P21 activated kinase-1 role in pancreatic cancer” on forenoon session and a guest lecture is arranged from Dr. Badrinathan, Dean (Educational Development), SVCE on “Implementation of NEP2020 policy”. We had gone for Industrial visit to IITM research park on 22nd December 2023 and had a guest lecture on “Cancer drug discovery” from Dr. Pazhanimuthu Annamalai, Managing director, Aura Biotech, Chennai. A guest lecture was arranged on “OMICS based strategies in precision

medicine” from Dr. Pawan Kumar Gupta, Associate Professor, SVKMs Institute of Pharmacy Dhule on the last day. The FDP program was concluded through a Valedictory function by receiving the feedback from the participants by the Principal, SVCE.

In addition to the lectures, Hands-on-experience was provided on software tools like Biovia Pipeline pilot server from Ms. Dhivya Shanmugarajan, Yasara from Prof. Arnold Emerson, Autodock, Pyrx, Discovery studio, Cytoscape and MATLAB from Prof. P.K.Praveen Kumar.

Snapshots of FDP

Day 1: Inauguration Function



Day 1: Guest Lecture from Prof. M. Sivanandham, SVCE



Day 1: Guest Lecture from Ms. Dhivya Shanmugarajan, Altem Technologies



Day 2: Guest Lecture from Prof. Manikandan Narayanan, IIT Madras



Day 2: Guest Lecture from Dr. Ezhilarasan, Saveetha Dental College Hospital



Day 3: Guest Lecture from Dr. I. Arnold Emerson, VIT Vellore



Day 3: Guest Lecture from Dr. Gopisetty Gopal, Cancer Research Institute



Day 3: Guest Lecture from Prof. P.K.Praveen Kumar, SVCE



Day 4: Guest Lecture from Prof. Suresh Kumar Rayala, IIT Madras



Day 4: Guest Lecture from Prof. Badrinathan, SVCE



Day 5: Industrial visit to IITM Research Park, Chennai



Day 5: Guest Lecture from Dr. Pazhanimuthu Annamalai, Aura Biotech



Day 6: Guest Lecture from Dr. Pawan Kumar Gupta, SVKM Institute of Pharmacy



Day 6: Valedictory Function from Prof. Ganesh Vaidyanathan, SVCE



Grand Alumni Meet

On the 10th of December 2023, alumni from the Department of Biotechnology, Sri Venkateswara College of Engineering spanning both undergraduate (UG) and postgraduate (PG) levels, returned to their alma mater.

This reunion provided a platform for graduates to engage in nostalgic reflections, sharing and reliving cherished experiences and memories from their academic journey in the field of biotechnology. The event served as a meaningful opportunity for the alumni community to reconnect with one another and strengthen the bonds forged during their time at the educational institution.



Parents-Teachers Meet

The Department of Biotechnology of Sri Venkateswara College of Engineering hosted the Parent-Teacher Meeting for First Year Students (2023-27 Batch) on 23rd December 2023. It was a productive and enthusiastic gathering where parents of the students actively engaged in discussions about their wards' academic performance over the current semester. The meeting commenced with a warm welcome from the department's head, Prof. Nakkeeran Ekambaram followed by an overview of the semester's curriculum and academic expectations. Parents had the opportunity to interact with individual teachers and inquire about their ward's progress, coursework, and any concerns they may have had. The Parents and teachers exchanged valuable insights and suggestions to support the students in their academic journey. The enthusiastic participation of parents demonstrated their commitment to their children's education. The department extends its gratitude to all the parents for fostering a strong partnership between home and school to ensure the success and well-being of our students.



Graduation Day

The B.Tech and M.Tech Biotechnology Graduates of 2022 batch of Sri Venkateswara College of Engineering stand proud on their graduation day, a moment etched in time. The photo captures the essence of hard work, perseverance, and the shared journey that brought them to this significant achievement. As they don their gowns, it symbolizes not just the end of an academic chapter but the beginning of a new adventure.



Consultancy



Prof. E. Nakkeeran



Dr. A.J. Aswin Jenö



Dr. K. Ganesh Prasath

Prof. E. Nakkeeran, Head of the Department, **Dr. A.J. Aswin Jenö**, Assistant Professor and **Dr. K. Ganesh Prasath**, Assistant Professor have completed a consultancy work on “Preparation of PLA discs and its anti-bacterial activity with plant-based oils” from Sri Ramachandra Institute of Higher Education and Research, Chennai and performed the Preparation of PLA discs with essential oils coating, Evaluation of anti-bacterial activity of the prepared PLA discs against *Bacillus subtilis* and *Escherichia coli* and Evaluation of anti-bacterial activity of the prepared PLA discs against *Streptococcus mutans*.

Placement Updates



Ms. R. Rajavarshini
(2020-2024)

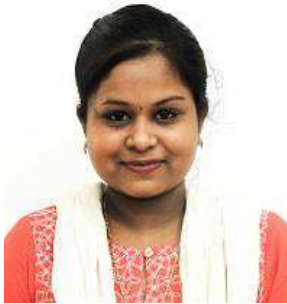


- **Ms. R. Rajavarshini (2020-2024) of B. Tech Biotechnology** has been selected for the LEAP program (Internship) at Zifo RnD on January 2024 for a period of 3 months.

Higher Studies



Dundee University, Scotland – MS in Biomedical and Molecular Sciences



**Ms. Ananya RC
2020-24 Batch**

**Kingston
University
London**

**Kingston University, London – MSc in Biomedical Science –
Medical Microbiology with Management Studies**

- **Mr. Gurucharan J K** of the 2020-24 batch B.Tech Biotechnology has scored 7.0 out of 9.0 on the IELTS test.

Research Activities

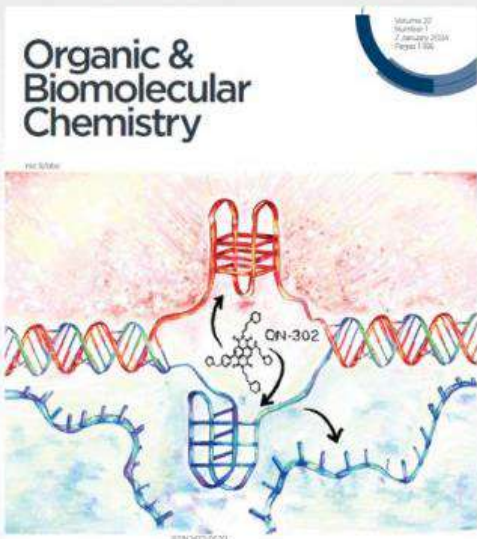
Research Publication

Dr. Divakar K, Associate Professor published a research article entitled "Metal-free synthesis of functionalized tacrine derivatives and their evaluation for acetyl/butrylcholinesterase and α -glucosidase inhibition" in the Journal, Organic and Biomolecular Chemistry.

Recent Research Publication

"Metal-free synthesis of functionalized tacrine derivatives and their evaluation for acetyl/butrylcholinesterase and α -glucosidase inhibition"

Journal: Organic and Biomolecular Chemistry



Organic & Biomolecular Chemistry


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COMMUNICATION
Stephan Hecht, 200-4, G. Shihor et al.
DOI: 10.1039/D3OB01760E
any correspondence should be addressed to the proprietor of the journal.

AUTHOR



Dr. K. Divakar
Associate Professor
Biotechnology

DOI: doi.org/10.1039/D3OB01760E

Research Publication

Ms. Karishma S.K, Ms. Hemapriya M and Mr. Abishek V.S (Batch 2018-22) and Dr. K. Vasantharaj, Assistant Professor published a research article entitled "Fabricating a biochar from *Artocarpus heterophyllus* peels for methylene blue sequestration from synthetic wastewater: Isotherm, kinetic, and thermodynamic analysis" in the Journal of Dispersion Science and Technology published by Taylor and Francis with an impact factor of 2.2 (2022).

Recent Research Publication

"Fabricating a biochar from *Artocarpus heterophyllus* peels for methylene blue sequestration from synthetic wastewater: Isotherm, kinetic, and thermodynamic analysis"

Journal of Dispersion Science and Technology



AUTHORS



Ms. KARISHMA S K
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Dr. K. VASANTHARAJ
Assistant Professor
Biotechnology


DOI: doi.org/10.1080/01932691.2023.2297796

Students Activities


Mr. Monish Kumar Sankaran, M. Tech Biotechnology (2023-25), for receiving the **AICTE GATE-PG Scholarship** of Rs. 12,400/- per month for the next two years for having a valid GATE score in Biotechnology.

congratulates our M.Tech student on receiving the

AICTE - GATE PG Scholarship of ₹ 12,400/- per month for 2 years



Mr. Moniish Kumaar SA
I - M. Tech
Biotechnology



Mr. Moniish Kumaar SA is receiving a monthly scholarship of ₹12,400/- from **AICTE** as **GATE PG Scholarship** for having a valid GATE score in Biotechnology for the next two years

Internship

- **Ms. Jyotsna R** of the 2020-24 batch B.Tech Biotechnology has completed a 2-week internship National Agro Foundation in the soil analysis department in “Physicochemical and Instrumental methods of Soil and Water analysis” from 8th December to 23rd December 2023.
- **Mr. Mohamed Shadir V O A and Mr. Srihariharan** of the 2020-24 batch B.Tech Biotechnology have completed a 2-week internship training programme at the Department of Pharmacognosy of Siddha Central Research Institute from 18th December to 27th December 2024.
- **Mr. Nithishwaran K S** of the 2020-24 batch B.Tech Biotechnology has completed a 2-week internship training programme at the Department of Pharmacognosy in Siddha Central Research Institute of DNA Barcoding from 18th December 2023 to 1st January 2024.
- **Ms. Kirtana S** of the 2020-24 batch B.Tech Biotechnology has completed an internship at the Research and Development laboratory of Weevil Biotech, Chennai on Drug Discovery from 26th December 2023 to 30th December 2023.
- **Ms. Thulasi Kalaivani B** of 2021 – 2025 batch has secured 2nd prize in the 1st Chennai inter district Throwball tournament 2023, organized by challengers sports club Chennai (affiliated to Chennai district throwball association) from 30th December 2023 to 31st December 2023.
- **Ms. Thulasi Kalaivani B** of 2021 – 2025 batch has attended internship at Suman multi-speciality hospital in the Department of Biochemistry from 15th December 2023 to 21st December 2023.
- **Ms. Maseera Ahmedi M** of 2021 – 2025 batch has attended internship at Life Cell International, Keelakottiyur from 14th December 2023 to 19th December 2023.
- **Ms. Varsha G** of 2021 – 2025 batch has attended internship at Cancer Institute (W.I.A) in the Department of Clinical Biochemistry from 4th December 2023 to 21st December 2023.
- **Mr. Girish** of 2021 – 2025 batch has attended internship at Cancer Institute (W.I.A) in the Department of Clinical Biochemistry from 18th December 2023 to 04th January 2024.
- **Mr. Sriram M** of 2021 – 2025 batch has attended internship at Cancer Institute (W.I.A) in the Department of Clinical Biochemistry from 18th December 2023 to 02nd January 2024.

- **Ms. Tharanghini S** of 2021 – 2025 has attended internship at bversity in Bioinformatics from 15th December 2023 to 19th December 2023.
- **Ms. Ashwini P, Ms. Nandita S and Ms. Nithila S** of 2021 – 2025 have completed internship at Rapture Biotech from 11th December 2023 to 29th December 2023.
- **Mr. Kevin M** of 2021 – 2025 has done internship at Rapture Biotech from 13th December 2023 to 05th January 2024.
- **Ms. Swalakshana A S** of 2021 – 2025 has undergone internship at Central Leather Research Institute (CLRI) in the department of leather processing department from 11th December 2023 to 29th December 2023.
- **Ms. Anushya N, Ms. Parinitha S and Ms. Srinidhi Srikanth** of 2021 – 2025 have undergone internship at CisGEN Biotech Discoveries Pvt Ltd from 11th December 2023 to 29th December 2023.
- **Ms. Tharanghini S** of 2021 – 2025 has attended workshop in the topic " RNA sequence analysis" organised by Rajiv Gandhi centre for biotech on 29th December 2023.
- **Ms. Kaaviya V** of 2021 – 2025 has undergone internship at Central Leather Research Institute (CLRI) in the department of Biotechnology from 18th December 2023 to 29th December 2023.
- **Ms. Sulakshuna B** of 2021 – 2025 has undergone internship training at Rapture Biotech from 12th December 2023 to 28th December 2023.
- **Ms. Keerthana J, Ms. Kanika Loganathan and Ms. Gopikrishnan K** of 2021 – 2025 have undergone internship training at Rapture Biotech from 13th December 2023 to 30th December 2023.

NPTEL Course

The Department of Biotechnology of Sri Venkateswara College of Engineering is thrilled to announce that **Ms. Bhagya Shree S** (2023-27), a First-Year B.Tech Biotechnology student, has been recognized as an NPTEL BELIEVER!. She has earned elite certificates, silver medals, and the prestigious 'Top 5% - Topper' badge for her outstanding performance in Four NPTEL course exams during the July-December 2023 semester.

Student achievement as NPTEL STAR



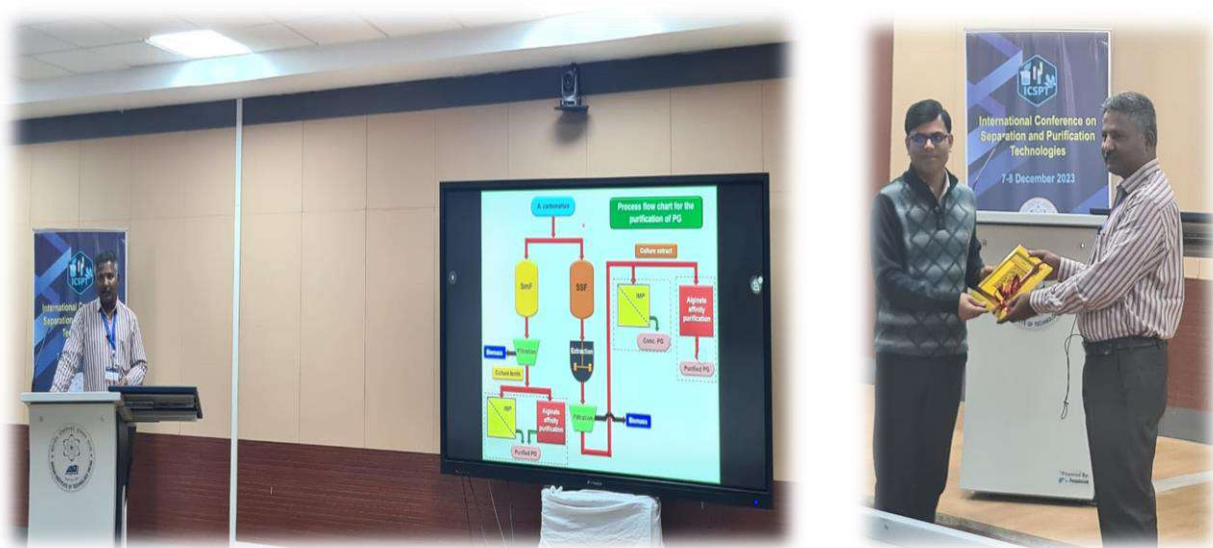
Ms. Bhagya Shree S
I-B.Tech Biotechnology

Ms. Bhagya Shree S recognized as **NPTEL BELIEVER** earning elite certificates, silver medals, and the prestigious '**Top 5% - Topper**' badge for being excelled in **Four NPTEL course** exams for the July-December 2023 semester.

Faculty Activities

Guest Lecture at International Conference

Prof. E. Nakkeeran, Head of Biotechnology Department, has delivered an expert guest lecture entitled “Polygalacturonase from *Aspergillus carbonarius* - Production, Purification and its Applications in Food Industries” at International Conference on Separation and Purification Technologies (ICSPT) 2023 Department of Chemical and Biochemical Engineering Indian Institute of Technology Patna On 8th December 2023.



Guest Lecture presented by the Faculty

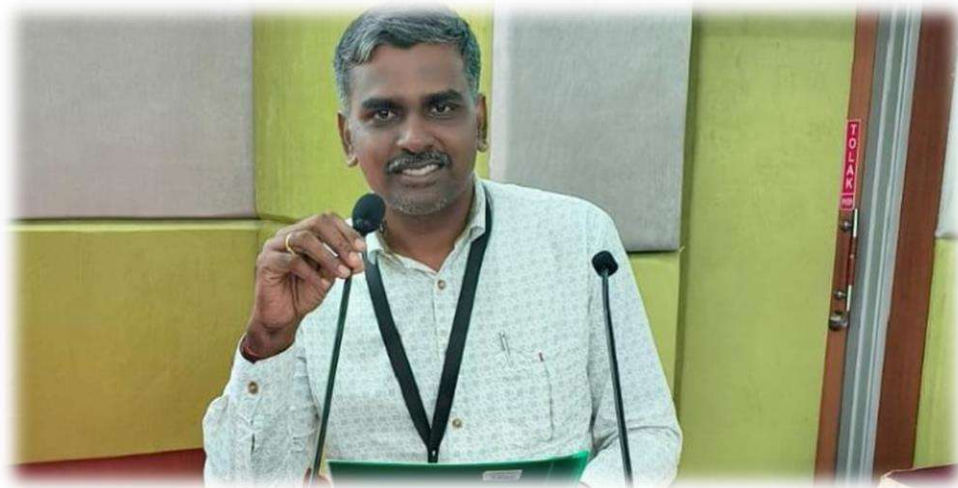
Prof. E. Nakkeeran, Head of Biotechnology Department, has delivered an expert guest lecture in One Week Online Faculty Development Programme (FDP) on Green Biotechnology and Bioenergy from 18th to 24th December 2023 organized by Department of Biotechnology, Arunai Engineering College, Tiruvannamalai, Tamilnadu, India in association with Biotech Research Society, India (BRSI), Indian Society for Technical Education (ISTE) and Institution’s Innovation Council (IIC) chapter of this Institution.

External expert for the Academic Audit

Prof. E. Nakkeeran, Head of Biotechnology Department, performed as an External expert for the Academic Audit at Internal Quality Assurance Cell (IQAC), Bannari Amman Institute of Technology (BIT), Sathyamangalam on 11th December 2023.

Events Attended by the Faculty

Dr. Divakar K, Associate Professor attended the Overseas Training Program on "Oil Palm and Pineapple Cultivation and Management" sponsored by Government of Tamilnadu, held at University of Putra, Malaysia, from 18th - 20th December 2023.



Events Attended by the Faculty

- **Mr. J. Hariharan**, Assistant Professor participated an International Workshop on Web of Science Training & Certification Program, Clarivate, UK, 20th -24th Novmber 2023.
- **Dr. K. Vasantharaj**, Assistant Professor participated and completed AICTE Training And Learning (ATAL) Academy sponsored Faculty Development Program on "Sustainability in the Food Industry: Fundamentals, Evolving Needs and The Future" at National Institute of Food Technology Entrepreneurship and Management, Thanjavur (formerly Indian Institute of Food Processing Technology) from 20th -25th November 2023.
- **Dr. M. Naresh Kumar**, Assistant Professor participated and completed AICTE Training And Learning (ATAL) Academy sponsored Faculty Development Program on "Sustainability in the Food Industry: Fundamentals, Evolving Needs and The Future" at National Institute of Food Technology Entrepreneurship and Management, Thanjavur (formerly Indian Institute of Food Processing Technology) from 20th -25th November 2023.
- **Dr. J. G. Aswin Jen**, Assistant Professor participated and completed AICTE Training And Learning (ATAL) Academy sponsored Faculty Development Program on Valorization of agro-residues for biofuels, biochemicals and bioproducts at TNAU, Coimbatore, 05th -10th December 2023.
- **Mr. J. Hariharan**, Assistant Professor participated and completed AICTE Training And Learning (ATAL) Academy sponsored Faculty Development Program on Unleashing The Power Of Data Science For Industry 4.0 at SRMIST,Chennai, 11th - 16th December 2023.
- **Mr. S. Naga Vignesh**, Assistant Professor participated and completed AICTE Training and Learning (ATAL) Academy sponsored Faculty Development Program on Unleashing The Power Of Data Science For Industry 4.0 at SRMIST,Chennai, 11th - 16th December 2023.
- **Prof. S. Pandi Prabha** participated and completed AICTE Training and Learning (ATAL) Academy sponsored Faculty Development Program on Inculcating Universal Human Values in Technical Education”, 12th-16th December 2023.

- **Prof. V. Sumitha** participated and completed AICTE Training and Learning (ATAL) Academy sponsored Faculty Development Program on Inculcating Universal Human Values in Technical Education”, 12th-16th December 2023.
- **Dr. G. Karthigadevi**, Assistant Professor participated and completed AICTE Training And Learning (ATAL) Academy sponsored Faculty Development Program on Inculcating Universal Human Values in Technical Education”, 12th-16th December 2023.
- **Mr. A. Vimal Arasan**, Assistant Professor participated and completed AICTE Training and Learning (ATAL) Academy sponsored Faculty Development Program on “Unraveling Molecular Mechanisms and Artificial Intelligence Approaches of Drug Design in Cancer” at Sri Venkateswara College of Engineering, 18th-23rd December 2023.
- **Prof. P.K. Praveen Kumar**, participated and completed AICTE Training and Learning (ATAL) Academy sponsored Faculty Development Program on “Unraveling Molecular Mechanisms and Artificial Intelligence Approaches of Drug Design in Cancer” at Sri Venkateswara College of Engineering, 18th-23rd December 2023.
- **Dr. K. Vasantharaj**, participated and completed AICTE Training and Learning (ATAL) Academy sponsored Faculty Development Program on “Unraveling Molecular Mechanisms and Artificial Intelligence Approaches of Drug Design in Cancer” at Sri Venkateswara College of Engineering, 18th-23rd December 2023.
- **Prof. P.K. Praveen Kumar**, attended the AICTE, MoE's Innovation Council, Institution Innovation Council (IIC) regional meet at B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai on 01/12/2023.

Alumni Write-up


B. Kamalavarshini
UG Batch 2019-2023

The education I received from the Department of Biotechnology, SVCE wasn't just about textbooks and exams; it was a journey of self-discovery and personal growth. The foundation laid during my time as a student has been a compass guiding me through challenges, and the memories created are cherished reflections of a transformative period. Grateful for the education and camaraderie, I proudly carry the banner of my alma mater in the broader landscape of life.

Upcoming Events

ABOUT SVCE

Sri Venkateswara College of Engineering (SVCE), is a unit of Sri Venkateswara Educational and Health Trust (SVEHT). SVCE is one of the premier technical institutions in Tamilnadu, the College is situated on the Chennai – Bengaluru National Highway (NH4) about 37 km south-west of Chennai. The college is in a 95 acre lush green Campus. It is housed in architecturally exquisite buildings with ample infrastructure such as classrooms, laboratories, libraries, sports arena, canteen, hostels, dispensary etc. The college offers 12 UG programmes and 7 PG programmes. SVCE is an ISO 9001:2015 certified institution and Accredited by 'NAAC' with 'A+' grade.



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DEPARTMENT OF BIOTECHNOLOGY
&
STUDENTS' BIOTECH FORUM
Proudly presents

BioBids

"Bid, Trade, & Innovate"

A TWO-DAY BIO AUCTION
ON
JANUARY 30 & 31, 2024

CHIEF PATRON
Prof. M. SIVANANDHAM
Secretary, SVEHT

PATRON
Prof. S. GANESH VAIDYANATHAN
Principal, SVCE

CONVENOR
Prof. E. NAKKEERAN
HOD-BIO, SVCE

ADVISORY COMMITTEE

All the faculty members of Department of Biotechnology, SVCE

FACULTY COORDINATORS

Dr. K. Divakar
Associate Professor/BIO

Dr. K. Vasantharaj
Assistant Professor/BIO

Dr. G. Karthigadevi
Assistant Professor/BIO

SBF OFFICE BEARERS

STUDENTS' BIOTECH FORUM

PRESIDENT: Mr. Udayarajan Y
IV Yr, B.Tech Biotechnology

STUDENT ADVISOR: Ms. Yamunadevi B
II Yr, M.Tech Biotechnology

GENERAL SECRETARY: Mr. Kevin M
III Yr, B.Tech Biotechnology

JOINT SECRETARY: Mr. Yashwanth Kumar S
II Yr, B.Tech Biotechnology

TREASURER: Ms. Varsha G
III Yr, B.Tech Biotechnology

EXECUTIVE MEMBERS:

Ms. Keerthanaa S G
II Yr, B.Tech Biotechnology

Ms. Abinaha A
II Yr, B.Tech Biotechnology

Upcoming Events

ABOUT THE EVENT	EVENT DETAILS	EXCITING PRIZES
<p>"BioBids," where participants embark on an exciting journey of problem-solving! Attendees can choose a specialized track from our diverse list, ranging from environmental restoration to recombinant technology. Once they have selected their track, participants engage in a thrilling auction where they bid for the essential materials required to tackle the unique problem statement associated with their chosen track. The bidding process adds an element of strategy and excitement as teams compete to secure the resources needed for success. Armed with their acquired materials, participants then pitch their innovative solutions to a panel of experts, showcasing their resource management, teamwork, and ability to come up with an innovative solution.</p>	<ul style="list-style-type: none"> • Date: 30th and 31st January 2024 • Time: FN session: 9:00 – 12:30 AN session: 1:30 – 3:00 • Location: Department of Biotechnology, SVCE <p>To secure your spot in "BioBids", please complete the registration process by January 20th. Spaces are limited, so we encourage early registration to avoid disappointment.</p>	<p>Every participant will receive a participation certificate, acknowledging their contribution to the event.</p> <p>Stand a chance to be recognized as the best in your track! Winners from each category will be awarded a prestigious medal in recognition of their outstanding achievement.</p> <p>Overall winner may receive exclusive "internship" opportunities from prestigious Start-ups.</p> <p>This is not just an event, it's an opportunity to shine and be celebrated for your exceptional talents and accomplishments.</p>
<p>DAY 1</p> <p>SESSION 1 Register and select your track in the morning, followed by an exciting auction where teams bid for essential resources needed to tackle their challenge.</p> <p>SESSION 2 Engage in the trading sessions with fellow participants throughout the rest of the day, fostering teamwork and strategic alliances to maximize resources for your team's success.</p> <p>DAY 2 Embark on a journey of creativity as teams pitch innovative solutions to problem statements, leveraging the acquired resources from the auction and trade sessions.</p>	<h3>REGISTRATION FEE</h3> <p>Each participant has to pay Rs.500 (including 18% GST) (working lunch will be provided).</p> <p>PAYMENT DETAILS</p> <p>A/C Name: PRINCIPAL, SRI VENKATESWARA COLLEGE OF ENGG A/C No: 467302331</p> <p>Bank Info: Indian Bank, Sriperumbudur IFSC Code: IDIB000S080 MICR No: 600019112</p>	<h3>FOR FURTHER DETAILS</h3> <p>☎ Ms. Nandita- 9884102082 Ms. Varsha- 7603956525 Ms. Rajavarsini- 9840345580 Mr. Udayarajan- 9840023171 Mr. Thapasvi- 9344173831</p> <p>✉ bioacademy@svce.ac.in</p> <p>🌐 https://www.svce.ac.in/departments/biotechnology</p> <p>📷 @biotechnology_svce</p> <p>✂ biotech_svce</p> <p>📺 BIOTECHNOLOGY SVCE</p>
	<h3>REGISTRATION LINK</h3>  <p>https://forms.gle/ucwYJBVddbjtefA6</p>	

Upcoming Events

Resource Persons:

Faculty members from IIT's, NITs, Central Universities, Scientists, Bioinformaticians from Industries and Research Laboratories will deliver lectures and demonstrate the experiments for Hands-On sessions.

Registration is open to:

All the faculty members, research Scholars, PG students from AICTE approved institutions and also for scientists, technical officers, bureaucrats working in government institutions and industry. Number of participants is limited to 50.

No Registration fee will be charged from the participants.

How to Apply:

Eligible candidates may apply online through AICTE-ATAL Portal.

<https://atalacademy.aicte-india.org/>. Candidates are advised to apply early to avoid disappointment. Selected applicants will be intimated through E-mail **on or before 05-01-2024**.

Accommodation:

Accommodation can be arranged in the campus on prior notice, for which the participants will have to bear the subsidized charges and the participants are advised to send the request on or before **15-01-2024** to ensure the accommodation.

For further details, please contact

Dr. K. Divakar / Dr. E. Nakkeeran

Department of Biotechnology

Sri Venkateswara College of Engineering

Sriperumbudur Tk -602 117, Tamilnadu, India

Ph.: 9488013671 / 9791668110

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Webpage



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YouTube

ATAL FDP

on

“Microbial Metagenomics and Next Generation Sequencing”

5th- 10th February, 2024

Sponsored by

AICTE Training and Learning Academy (ATAL)



Patrons

Prof. M. Sivanandham, Secretary, SVEHT

Prof. S. Ganesh Vaidyanathan, Principal, SVCE

Coordinators

Dr. K. Divakar, Associate Professor/BIO

Dr. E. Nakkeeran, Professor/BIO



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Department of Biotechnology

SVCE | Sri Venkateswara
College of
Engineering

(An Autonomous Institution - Affiliated to Anna University, Chennai)

Sriperumbudur Tk -602 117, Tamil Nadu, India

Upcoming Events

About the Institution:

Sri Venkateswara College of Engineering (SVCE) is one of the premier technical institutions in Tamilnadu; the College is situated on the Chennai – Bengaluru National Highway. The college offers 12 UG programs and 7 PG programs. SVCE is an ISO 9001:2015 certified institution and Accredited by “NAAC” with A+ grade.

For more details visit: www.svce.ac.in.

About the Department of Biotechnology

The Department of Biotechnology was established in 2005. The department offers B.Tech and M.Tech Biotechnology programs approved by AICTE. It is also approved as a Research Centre in Biotechnology for MS (by Research) and Ph.D. programs by Anna University, Chennai. The Department has well-established laboratory facilities. The Department received Research Grants (2.85 Crores) from various funding agencies such as SERB, ICMR, AICTE, CTS and also several grants for organizing Short Term Training courses, Workshops, Faculty Development Programs from various funding agencies such as DBT, SERB, ICMR, CSIR and EDII.

Vision of the Department

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 of the Department

1. 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.
2. To develop special skilled training programs for graduates to meet the personality characters stipulated by the industries within a period of five years.
3. To build potential biotechnologists capable of dealing with new challenges and socio-ethical implications.

Overview of the FDP

Next-Generation sequencing technologies (NGS) are an essential part of almost all life sciences research and diagnostics. Due to their quantity and especially their complexity, NGS data are typically processed by qualified bioinformaticians. Considering the significance, the faculties and research scholars/students need to update and reorient themselves to meet the rapidly changing genomic data analysis tools. This FDP is designed to bring together the experts working in Metagenomics and Next Generation Sequencing to overcome the inherent lag in teaching and learning of concepts in genomics, high throughput genome sequencing and NGS data analysis. This ATAL-FDP will allow the participants to understand the basics of NGS data processing, including manipulation of raw data, quality control, and removal of low quality sequences, sequence adapters and artifacts.

Objectives of the FDP:

- To explain conceptual framework and create an awareness among the faculty members teaching biotechnology, on the importance of metagenomics and next generation sequencing.
- To catalyze and motivate participants to perform research in the field of metagenomics and next generation sequencing techniques and incorporate the same in teaching curriculum.

Topics covered in the FDP:

- Microbial Metagenomics and its application in bioproduct development.
- Functional metagenomics for bioprospecting of enzymes.
- Metagenomics for surveillance of Antibiotic Resistant Genes.
- NGS technology and platforms: Fundamental Concepts to Applications.
- Hands-on session on DNA sequencing using Oxford Nanopore Sequencer.
- Essential computing skills for NGS bioinformatics.
- Overview and Advances in Clinical NGS Technology.
- NGS technology, algorithms and data formats.
- Hands-on session on sequence data processing: MGnify, MGRAST, HMMER, InterPro, Gene Ontology (GO), FASTQC, Galaxy server and pathway analyses.
- Metagenomics Data Analysis and Population Dynamics analysis.

Expected Outcomes:

After attending workshop, Participants can be able to

- Design experiment to isolate/purify metagenomic DNA from environmental samples.
- Construct metagenomic fosmid library for functional screening of industrial/therapeutic enzymes.
- Get confidence to introduce the metagenomics experiments in the regular teaching in curriculum.
- Perform next generation sequencing using nanopore sequencer and analyze the DNA sequence data.



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.

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
- 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

- Research Assistant
- Technical Officer
- Clinical Scientist
- Pharma Engineer
- Biostatistician
- Academic Jobs
- Project Assistant
- Research Interns
- 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

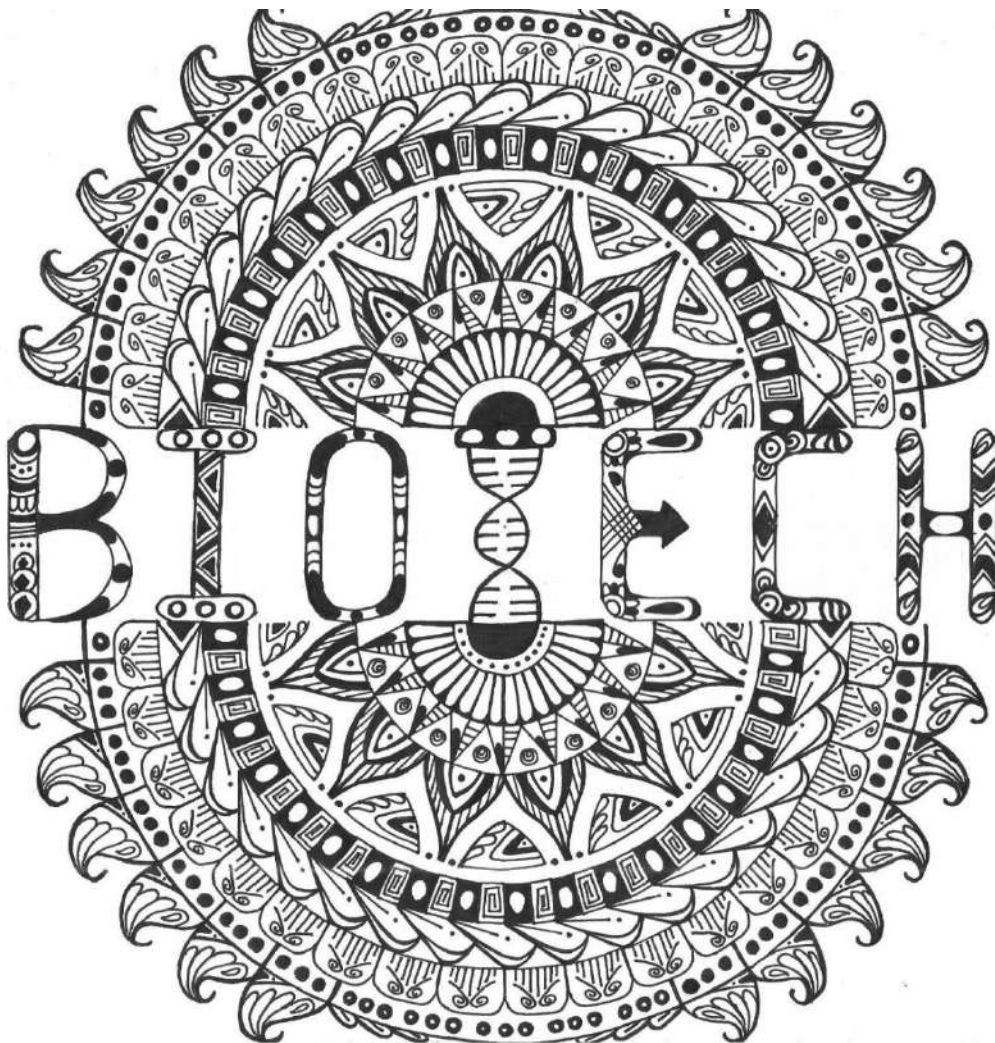
Eligibility: As per Anna University Guidelines. Admissions are through Common Engineering Entrance Test and Admission by Anna University & Entrance Examinations conducted by Consortium of Self Financing Professional, Arts and Science Colleges in Tamilnadu.

Connect @ [in](https://www.linkedin.com/company/svce) [fb](https://www.facebook.com/svce) [ig](https://www.instagram.com/svce) www.svce.ac.in/departments/biotechnology/ hodbt@svce.ac.in 9791668110

BIO-ART

Mandala Artwork by Ms. Jyotsna R, final year B. Tech Biotechnology

Mandala art, rooted in ancient traditions, mirrors the principles of geometry in nature and science. Through its symmetrical beauty and mathematical precision, mandala art serves as a visual representation of the interconnectedness between science, mathematics, and the natural world.



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



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**FOR
FURTHER DETAILS
OR
ENQUIRIES**

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