COLLEGE OF ENGINEERING & TECHNOLOGY

(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambara Nadar - C.Nagammal Campus
S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR).

NEWSLETTER

DEPARTMENT OF BIOTECHNOLOGY

ACCREDITED BY NATIONAL BOARD OF ACCREDIATION , NEW DELHI

BIO - NEXUS

APRIL TO JUNE 2025



EDITORIAL BOARD



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Vision: To make the Department of Biotechnology, unique of its kind in the field of research and development activities pertaining to the field of biotechnology in this part of the world

Mission: To impart highly innovative and technical knowledge in the field of biotechnology to the urban and rural student folks through "Total Quality Education"

Program Educational Outcome (PEO)

- **PEO 1:** The student will be able to pursue higher education in India/Abroad in Biotechnology and its related fields by taking up competitive exams like GATE, CSIR, TANCET, GRE, TOEFL etc.
- **PEO 2:** The student will be able to come up with solutions for any scientific or technical problems related to Biotechnological industries/institutes.
- **PEO 3**: The student will be able to plan and conduct experiments in modern biotechnology and allied field laboratories including interpreting the significance of resulting data, reporting results and writing technical reports.
- **PEO 4:** The student will be able to get familiarized with professional and economical issues in biotechnology and foster important job related skills such as communications and experience in working as a team that will help them to become good Entrepreneurs.

Program Specific Outcomes (PSOs)

PSO1: Future ready graduates: The student will be able to identify, choose and perform to their best ability in the next career step: Higher education/Job/Entrepreneurial initiatives.

PSO2: Industry ready graduates: The student will be able to apply the acquired knowledge to provide cost-effective and sustainable solutions in Biotechnology.

Program Outcomes (PO)

- **PO1**: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **PO2**: 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.
- **PO3**: 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.
- **PO4**: 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.
- **PO5**: 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.
- **PO6:** 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.
- **PO7**: 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.
- PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **PO9**: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO10**: 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.
- **PO11 :** Project management and finance:Demonstrate knowledge and understanding of the engineering and 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.
- **PO12**: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

STUDENT

ACHIEVEMENTS

Technical & Innovation

Achievements

- N.KARANYA (23ubt027), K.RAKSHANA (23UBT048) of II year B.Tech Biotechnology has written an NPTEL exam on the course Food microbiology for safe and sustainable development on 26/4/25
- **K.Rakshana (23UBT048)**, II Year B. Tech Biotechnology, successfully completed the NPTEL (8 weeks) course titled "Food microbiology safety and sustainable food systems" and achieved Elite Certification with 72% marks in the examination conducted by NPTEL, during (17/02/2025 to 11/04/2025).
- Priyadharshini. M (23ubt012) of ll year biotechnology completed NPTEL course on Food science and Technology held on April 26/2025
- Elakiya S.R [23UBT007] completed the NPTEL course in FOOD MICROBIOLOGY FOR SAFE AND SUSTAINABLE SYSTEMS conducted by IIT KHARAGPUR and scored 70%



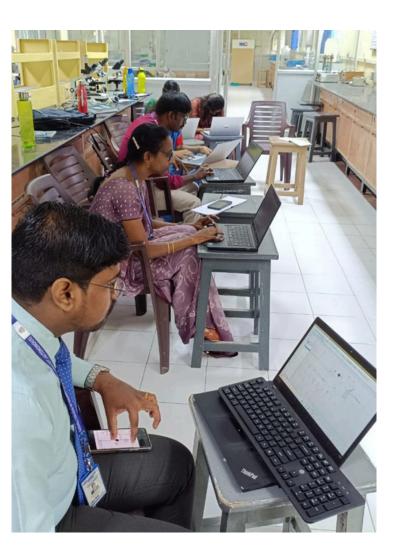
Congratulations to **Er.Karl Joseph Samuel** and his students team for being selected in the Top 150 teams in the **Niral Tiruvizha Project Competitions.**





Our students R. Sujitha of IV BT and N.Janani of III CSE got selected in the Semi- finals and participated in the Speech competition, 'Sattam Pesuvom' organised by Vinayaga Mission Law college, Salem.

Faculty development program







The department of biotechnology is committed to excellence in education, research, and innovation. It brings together highly qualified faculty members who are experts in diverse fields, providing students with a strong academic foundation and opportunities for interdisciplinary learning. The faculty fosters a dynamic environment for knowledge creation, industry collaboration, and societal impact.

Faculty Achievements

- EliteBio club of Department of Biotechnology organized a brainstorming session on Identifying Problem statements and Developing Practical Solutions on 16th April 2025.
- Er. Suresh Lingam of 2020 batch delivered q guest lecture on Career Opportunities for Biotechnologist in IT sector for our third year BT students
- Dr. SHYAM KUMAR R, Professor/BT/ participated online Seminar on "SUSTAINABLE ENVIRONMENT" Apr 22, 2025 Organized by Centre for Earth and Atmospheric Sciences, Sathyabama Institute of Science and Technology, Chennai.
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- ELITEBIO CLUB of department of Biotechnology conducted a brain storming session which primarily focussed on solving problem statements from industries on 23rd April 2025.
- EliteBio Club of Department of Biotechnology organized a discussion on the available problem statements and designing solutions to them. Mr Balaji R, III Year BT is appointed as the President of EliteBio Club on 29th April 2025. Also Mr. Vibhu Purushoth III BT is appointed as the Treasurer of the Club on 23rd April 2025.
- Dr K.Geetha, ASP, BT attended a one-day online workshop on "PTE Academic English Exams for Higher Studies Abroad" on 07.05.2025 organized by GSTE Global Society For Technical Education (GSTE).
- Dr. R. SHYAM KUMAR /Professor/BT Participated ECHO Webinar on "Apitherapy: Healing through the Wonders" Organized by ECHO India, Hyderabad. on 26/05/2025.
- Dr. SHYAM KUMAR R, Professor/BT/ participated online Seminar on "DEEP SEA RESEARCH – CURRENT TRENDS AND OPPORTUNITIES" 09, June 2025 Departmen of Environmental Sciences, School of Marine Sciences, Bharathidasan University, Trichirapalli.
- Dr. SHYAM KUMAR R, Professor/BT/ participated National Symposium on "Mushroom Research: Mycelium to Medicine" 21, June 2025 Department of Microbiologym School of Bioengineering and Biosciences, Lovely professional University, in Collaboration with Association of Microbiologists of India and Association of Fungal Biologists, India.

TECHNOVISION - 2025



Mr.Mohamed Aasim of III year BT is the winner of Mini Technovision – 2025 under the guidance of Dr.K.Geetha, AP/BT.



Ms.Pebina of III year BT is the runner of Mini Technovision – 2025 under the guidance of Dr.R.Shyam Kumar , HOD/BT.