



**SAHRDAYA**

College of Engineering & Technology

### **INSTITUTE VISION**

Evolve as a leading technology institute to create high caliber leaders and innovators of global standing with strong ethical values to serve the industry and society.

### **INSTITUTE MISSION**

-Provide quality technical education that transforms students to be knowledgeable, skilled, innovative and entrepreneurial professionals.

-Collaborate with academia and industry around the globe, to strengthen the education and research ecosystem.

-Practice and promote high standards of professional ethics, good discipline, high integrity and social accountability with a passion for holistic excellence.

### **DEPARTMENT VISION**

To be a national Centre of excellence in Bio Sciences and Bio Engineering.

### **DEPARTMENT MISSION**

1. Educate the next generation of engineers with a relevant curriculum that will enable them to integrate biological sciences with engineering fundamentals that can create, model, and modify biological systems for industrial applicability.
2. Encourage and facilitate research that would enable students to acquire new knowledge that is industrially and socially relevant.
3. Train students to be leaders who value professional ethics and realize the need for societal contribution and environmental sustainability in their work.

### **DEPARTMENT NEWSLETTER**

## **Department of Biotechnology**

### **Program Specific Outcomes (PSOs)**

1. To measure, model and manipulate properties of biological systems at the cellular and molecular level so as to produce sustainable products that address environmental and ethical standards.
2. To formulate and execute quantitative and design- oriented analysis of biological systems with modern tools and techniques that generate new knowledge at the interface of engineering and biology.
3. To transform as socially relevant biological engineers having a professional outlook that would enable them to work as a part of a team in an industrial, research or entrepreneurial set up and sustain a desire for higher learning and research.

### **Program Educational Outcomes (PEOs)**

1. To be equipped with the engineering skills and technical concepts enabling them to take up careers in Biotechnology and allied fields globally.
2. To instill the passion for lifelong learning scientific discovery, allowing them to conduct research, communicate and innovate technologies keeping them motivated to take research and higher education.
3. To inculcate entrepreneurial and techno management skills along with professional and ethical responsibility empowering them to be responsible and socially aware citizens.



## Special Events and Achievements

1. Department of Biotechnology Signed MoU with Zaara Biotech on 29th June 2022.



2. KSCSTE has approved the project proposal submitted by Dr. Ambili Mechoor and Dr. Dhanya, and sanctioned an amount of Rs. 3.22 lakhs under its BIRD scheme.

3. Department of Biotechnology organized Dr. George Thottapilly Memorial Lecture on 10/06/2022 and the session was handled by Dr. Radhika Nair, Scientist, RGCB, Trivandrum. Topic "Living with the Sword of Damocles- Giving hope to people living with metastatic disease".

4. Department of Biotechnology organized a technical talk on 'Intellectual property rights: An engineer's primer to the new economy' by Dr. Leon Ittiachen on 28/4/22.

5. Eighth semester results were published and the pass percentage is 76.59%. Toppers are Aiswarya Rajesh (SGPA-8.92) and Unnimaya Shanmughan (SGPA-8.92).



Aiswarya Rajesh



Unnimaya Shanmughan

## Student Placements

28 students from the department was placed in various companies (CTS-2, TCS-1, BYJUS-3, Sutherland-22) and one qualified GATE.

## Prizes Secured in Project Competitions

- Project group consisting of Angel Davis, Antony Sebastian, Merry Ann, Milna George won the best project Award and won a cash prize of Rs. 10,000/- in SCI fest organized in Sahrdaya College of Engineering and Technology, Kodakara.

## Student Project Grants

- Two projects guided by Dr. Leon Ittiachen were selected for Young Innovators Program (YIP 2020) and received a total grant of Rs.8 lakhs.

## Inter College Participation

1. Project group consisting of Anjitha Jayesh, Aparna R Daniel, Deekshitha R, Nameera presented paper in Bio Sangam 2022.
2. Angel Davis, Antony Sebastian, Merry Ann, Milna George of eighth semester Biotechnology presented paper in ICHEM'22 organized by Hindustan Institute of Technology and Science.
3. A project group consisting of Albin Antony Byju, Anna Rose, Krishna and Raisa Lal Presented Paper in ICRTB '22.
4. Adwide Vijay Narayanan ,Amy Elizabeth ,Catherine B, Jestin Jimmy of eighth semester Biotechnology presented paper in ICRTB '22.
5. Project group consisting of Anagha Rajendran, Irene Susan and Juna Varghese, shortlisted for Idea Fest, Kerala Startup mission.
6. Two project groups from final year BT Participated in Sristi project competition, 2022.

## Technical Associations Report

1. Department of Biotechnology in association with BEATS organized an expert talk on 19/02/2022 on the topic 'Wastewater Treatment in Microbial Fuel Cell'. The session was handled by Dr. K Hari Babu, Assistant Professor, NIT Calicut.
2. BEATS association organized an Essay Writing Competition on 02/03/2022 on the topic 'Interdisciplinary Approach - A solution for Global Warming?'

3. Department of Biotechnology in association with BEATS organized an interdepartmental Idea Presentation Competition on 22/03/2022.

4. A training session on LaTeX was arranged for S8 BT students. The session was handled by Mr. Shyam Krishna, Faculty from CS department.

5. BEATS association won the overall trophy in the Arts Fest 2022.

6. BEATS association organized a technical Quiz Competition 'La Technologie' on 11/05/2022.

7. Department of Biotechnology in association with women grievance cell arranged a talk on cancer awareness and the session was handled by Dr. Asha Nair, Scientist, RGC B Trivandrum.

## Faculty Excellence

1. Dr. Ambili Mechoor delivered a plenary lecture on 9th March 2022 at St. Mary's College, Thrissur.





2. Dr. Leon Ittiachen received NPTEL Faculty Domain – advanced certification.
3. Dr. Amitha Joy conducted a ‘Bioinformatics skill development programme’ in connection with World Youth skill day on July 27th, 2022 at Department of Applied Biotechnology, St. Mary’s College, Thrissur.
4. Dr. Leon Ittiachen was the Resource person and Coordinator for the KSUM RINK -Research Translation and Commercialization Bootcamp.
5. Dr. Midhila Padman published two of her Malayalam literature works, ‘Virus’ and ‘Daivam’.

## **Paper Publications & Presentations by Faculties**

- Ms. Ranimol G published a Book Chapter in the Handbook of nutraceuticals and natural products: Biological, medicinal and nutritional properties and applications, Wiley Online Library, 2022.
- Ms. Ranimol G published a paper ‘A comparative study of free laccase and laccase immobilized in copper alginate’ in Indian Journal of Biochemistry & Biophysics 59:214-23, 2022.

## **Workshops & Trainings Attended by Faculties**

- Dr. Amitha Joy participated in the Skill Development Program organized by CytoGene Research & Development, Lucknow from 04/03/22 to 06/03/22.
- Dr. Amitha Joy attended a on Workshop on Computer Aided Drug Design for SARS-CoV-2 by Centre for Continuing Education, Madras.

