



*You Choose, We Do It*

**St. JOSEPH'S COLLEGE OF ENGINEERING**

**(An Autonomous Institution)**

**St. Joseph's Group of Institutions**

OMR, CHENNAI - 119



**BIO**



**VOICE**



# DEPARTMENT OF BIOTECHNOLOGY

# NEWSLETTER

**August 2025**

## About Us

The Biotechnology Department was incepted in the year 2002 and Accredited by NBA.

Having a state-of-art laboratory, the department offers both Bachelors and Ph.D courses which are affiliated with Anna University, Chennai

## Vision

To provide a world-class department to facilitate learning, training and research in Biotechnology by providing infrastructural facilities and competent faculty leading to technological innovations to serve the global society

## Mission

The Mission of the Department is to provide quality education to students and to produce competent Biotechnologists to meet the challenges faced by industry and mankind.


To inculcate high moral and professional standards among our students.

To develop the overall personality of the students.


# STUDENT ACHIEVEMENTS





## MAKE-A-THON

Our final year students **Amsapraba A P, Janane K S, Laura Jean F and Swathi V** as won first place in Makeathon 2.0 an internal hardware hackathon with the cash prize of Rs. 10,000 under the supervision of **Dr. G. Baskar**





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### CONGRATULATIONS

The Management, Principal, Faculty members and students are proud to congratulate the following Students for Winning positions in "Makeathon 2.0" an Internal Hardware Hackathon, conducted by the Hackathon Committee of St. Joseph's College of Engineering.

NAME	YEAR & DEPT	PRIZE DETAILS	EVENT PHOTO
<b>TEAM NAME :</b> <b>HACK2CURE</b> AMSAPRABA A P JANANE K S LAURA JEAN F SWATHI V	<b>IV</b> <b>BIOTECH</b>	<b>1<sup>st</sup> PRIZE</b> <b>Rs. 10,000</b>	
<b>TEAM NAME :</b> <b>MECHOSPIES</b> MUKUL RICHARD G PRAKATHEESH ARUN K HESANTH KUMAR S LIBIN JM	<b>IV</b> <b>MECHANICAL</b>	<b>2<sup>nd</sup> PRIZE</b> <b>Rs. 7,000</b>	
<b>TEAM NAME :</b> <b>CIVILNOVA</b> SHAARAN K M SUTHISH G KRITHIKA S HARINI M MANJU PRIYA K	<b>IV</b> <b>CIVIL</b>	<b>3<sup>rd</sup> PRIZE</b> <b>Rs. 3,000</b>	
<b>TEAM NAME :</b> <b>MAVERICKS</b> KRISHNA RAJU RAGHAV VYAS MAHESWARAN A S JOSHUA DANIEL S	<b>IV</b> <b>EEE</b>		

# STUDENT ACHIEVEMENTS

## Sports Winner

Our final year student **Sushma R** as won 1<sup>st</sup> place in Badminton, SRM Founder's Day Trophy held on 7<sup>th</sup> and 8<sup>th</sup> of August at SRMIST .



# STUDENT ACHIEVEMENTS

## Internship

Our final and 3<sup>rd</sup> Year student **Sushma R, Abirami S and Santhosh MD** have been selected for the internship at **ICMR** for the duration of 15 days month.

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**DEPARTMENT OF BIOTECHNOLOGY**  
**CONGRADULATIONS FOR GETTING INTERNSHIP IN**

**ICMR - National Institute for Research in Tuberculosis**  
சென்னை மருத்துவ ஆய்விதழ் ஆய்விதழ் ஆய்விதழ்

**SUSHIMA R**  
312322214049

**SANTHOSH M D**  
312323214044

**ABIRAMI S**  
312323214001

**DURATION:**  
**15 DAYS**

Chetpet, Chennai, Tamil Nadu  
600031

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*The Choice of*  
**Disciplined Toppers**

# Industrial Visit

Our second year students visited **United Breweries Pvt Ltd** as a part of our Industrial Visit on **1<sup>st</sup> August 2025**



# NGO Visit

Our second year students visited **Alai Foundation** as a part of our NGO Visit on **2<sup>nd</sup> August 2025**



# Alumni Talk

The Department of Biotechnology hosted an engaging Alumni Talk highlighting the Global Career Opportunities for Biotech Graduates on 17.08.2025.

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 **DEPARTMENT OF BIOTECHNOLOGY** 

## Alumni Talk

### "Global Career Opportunities for Biotech Graduates"

**Ms. Sneha Anna Alexander**  
(Batch :2018-2022)  
Regulatory and Scientific Affairs Specialist  
at **Arbonne International, California**

 **Date: 17.08.2025** **Time: 06.30 to 08.00 PM**

<https://meet.google.com/diy-dzss-kqf>

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*The Choice of Disciplined Toppers*

JAFFERIN D.R (Presenting)

FROM UG → PG (INDIA TO THE U.S.)

<u>Undergraduate</u>	<u>Postgraduate</u>
<ul style="list-style-type: none"><li>• Internships</li><li>• Symposiums</li><li>• Inter/Intra department activities</li><li>• Courses (online)</li><li>• Mini-projects</li><li>• Project</li><li>• IELTS/GRE</li></ul>	<ul style="list-style-type: none"><li>• Thesis – research</li><li>• Student researcher</li><li>• Company projects</li><li>• Additional courses</li><li>• Conferences</li><li>• Internship</li><li>• NETWORKING</li></ul>

6:40 PM | diy-dzss-kqf

Sneha Anna Ale...  
JAFFERIN D.R  
L.f.a Anand Raj  
Srimathi P  
24 others  
Justin Jacob

# Symposium

The Department of Biotechnology hosted a vibrant National level symposium titled **“BIOGENX”** on **30.09.2025** which brought together a diverse group of 101 participants from 18 different colleges.



# STAFF ACHIEVEMENTS

## Paper Publication

**Dr. S. Justin Packia Jacob** has published the research article entitled “Molecular mechanism of action, resistance to antibiotics and modern approaches: An overview” in **The Microbe** journal (Q3).

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Journal logo



Molecular mechanism of action, resistance to antibiotics and modern approaches: An overview

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#### ARTICLE INFO

**Keywords:**  
Antibiotics  
DNA replication  
Mechanism  
Penicillin  
Resistance

#### ABSTRACT

Antibiotics have revolutionized modern medicine, significantly reduced the mortality rate due to microbial contamination. These drugs exert their effect through targeting particular bacterial structures and functions, such as cell wall synthesis, protein synthesis, and replication of DNA, thereby resulting in bacterial growth inhibition or killing the microorganisms. Despite their success, the prevalent and often improper use of antibiotics has led to the emergence of antibiotic resistance, a rising worldwide health concern. Resistance occurs when bacteria change mechanisms to avoid the antibiotic's effects, such as altering drug targets, producing enzymes that deactivate the drug, or effluxing the drug from the cell. This phenomenon is driven by genetic mutations, horizontal gene transfer, and discriminatory compression from overuse or misuse of antibiotics. The implications of antibiotic resistance are profound, as it threatens the effectiveness of current treatment regimens and complicates the management of infectious diseases. This review explores the mechanisms through which antibiotics exert their effects, the various strategies bacteria employ to resist these drugs, and the crucial need for new antibiotics and alternative therapeutic strategies to combat the rise of resistant pathogens.

# STAFF ACHIEVEMENTS

## Oral Presentation

**Dr. M. Chamundeeswari** has presented her research paper in the **International Congress on Nutrition, Food, Agriculture and Climate** held on **22<sup>nd</sup> August 2025**.



# STAFF ACHIEVEMENTS

## ATAL FDP

**Dr. B. Sangeetha, Ms. A. Anli Dino and Ms. Mu. Poornimaa, Ms. S. Vinitha and R. Sridevi have successfully completed their ATAL FDP from 25<sup>th</sup> to 30<sup>th</sup> August 2025**



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**August 2025**

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