

DEPARTMENT OF BIOTECHNOLOGY

BIO TALK

(Biannual Newsletter)

Year: 2025-2026 | Volume: 2 | Issue: 2

Welcome to BioTalk!

Presenting Volume 2, Issue 2 of BioTalk biannual roundup from the Department of Biotechnology. Drive in to discover highlights of our events, achievements, and milestones from the odd semester, academic year 2025 - 2026. A big thank you to all contributors and supporters who made this edition possible! Enjoy the reading!

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B.Sc., Biotechnology

Batch 2022 - 2025



Mr. S. GOPINATH
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Ms. S. HEMAVARSHINI
Second rank CGPA – 9.84



Mr. V. L. VIBASH KALYAAN
Third rank CGPA – 9.78

MICROFEST'25

September

10

To

September

17

The Department of Biotechnology, Faculty of Science and Humanities, SRM Institute of Science and Technology, Ramapuram, celebrated International Microorganism Day 2025 through MICROFEST'25, organized from 10th to 17th September 2025. The week-long event included engaging activities such as an Art Competition featuring agar art, sketches, and 3D models; a Meme Contest showcasing creative insights on microbes; and Micro-Talks where students shared short videos on the vital roles of microorganisms.

FUSION OF SCIENCE AND ART THROUGH “PORTRAITS OF BIOLOGY”

The Department of Biotechnology, Faculty of Science and Humanities, SRMIST Ramapuram, organized an inspiring event titled “Portraits of Biology”, which beautifully blended science with art. The program featured photography, drawings, and paintings that reflected biological concepts with creativity. Distinguished guests, including Dr. S. Renganathan, Professor of Biotechnology at Anna University, and Dr. S. Thirumagan, Dean (FSH), graced the occasion and encouraged students. Participants presented works on themes such as Life under the Microscope and The circle of Life. Every contributor received certificates and awards. The initiative promoted creativity and sustainability aligned with the UNSDGs



GUEST LECTURE AND EXPERT TALK HIGHLIGHTS

OFFLINE

The Resource Person, **Prof. Dr. S. Renganathan**, Anna University, Chennai, delivered an insightful seminar on “**Extraction of Bio-Oil from Algal Biomass for Food Applications and Biodiesel Production.**” He elaborated on esterification and transesterification reactions, the potential of algal sources, and their applications in food sciences, particularly fatty acids and nutritional benefits. He further explained the criteria for biodiesel production as per ASTM standards and discussed quality confirmation techniques for biodiesel on **9th September**.



The resource person **Dr. Sagarika Devi**, Professor of Microbiology, Sandip University, Nashik, shared insights on how microorganisms are shaping a greener and more sustainable future through innovation in biotechnology under the topic “**Microbial Innovation for a Sustainable Tomorrow**” on **9th September**.



ONLINE

The Resource Person, **Dr. Naveen Kumar Perumal** Assistant Professor (Sr.GrI), School of Bioscience and Technology, VIT, has delivered and expert talk on the topic “**MICROMANAGERS: miRNA IN THE FIGHT AGAINST CANCER**” on **2nd July**.

A screenshot of a virtual expert talk event page. The header includes the SRM Institute of Science and Technology logo and the Faculty of Science and Humanities. The event is organized by the Department of Biotechnology. The title is 'MICROMANAGERS: miRNA IN THE FIGHT AGAINST CANCER'. The resource person is Dr. Naveen Kumar Perumal, Assistant Professor (Sr.GrI), School of Bioscience and Technology, VIT. The event is scheduled for 22.07.2022, Wednesday, from 2:00 PM to 3:30 PM. The mode of the event is online. The page also includes a Zoom Meet Link and a list of participants: UG, PG Students & Research Scholars. An E-Certificate will be provided to all the participants.

The Resource Person, **Dr. R. S. Suresh Kumar**, Associate Professor, Arba Minch University, Ethiopia has delivered virtual expert talk on “**Insights into conventional and contemporary methods in toxicology testing on new drugs**” on **31st July**.

A screenshot of a virtual expert talk event page. The header includes the SRM Institute of Science and Technology logo and the Faculty of Science and Humanities. The event is organized by the Department of Biotechnology. The title is 'GHS - warning labels for chemicals' and 'Warning labels on drugs'. The resource person is Dr. R. S. Suresh Kumar, Associate Professor, Arba Minch University, Ethiopia. The event is scheduled for 31.07.2022, Wednesday, from 2:00 PM to 3:30 PM. The mode of the event is online. The page also includes a Zoom Meet Link and a list of participants: UG, PG Students & Research Scholars. An E-Certificate will be provided to all the participants.

BIOCONSORTIUM CLUB OFFICE BEARER INTRODUCTION



The event featured the formal introduction of the Bioconsortium Club Office Bearers – President, Vice President, Secretary, and Treasurer – of this academic and technical club. The objective of the program was to provide a platform for students to develop and showcase their leadership skills while gaining exposure to advancements and research in the field of biological sciences.



INDUSTRIAL VISIT HIGHLIGHT

The Department of Biotechnology, Faculty of Science and Humanities, SRM IST, Ramapuram successfully organized an industrial visit to Britannia Industries, Oragadam for M.Sc students. A group of 42 students accompanied by 2 faculty members had the opportunity to explore the production facility, guided by the Production Manager and Safety Manager of the unit. The visit began with a formal briefing, followed by a comprehensive walkthrough of the mixing, baking, cooling, and packaging sections. Students gained valuable exposure to large-scale automated food manufacturing processes, enhancing their understanding of industry practices and safety protocols.



OUTREACH FOR A BRIGHTER TOMORROW

The Department of Biotechnology, in association with the National Service Scheme (NSS), Faculty of Science and Humanities, SRMIST – Ramapuram, conducted an outreach program to support community welfare and sustainable development. Faculty and students donated stationery items to visually challenged and underprivileged rural students, spreading smiles and hope. The program reflected the department's commitment to social responsibility and the values of inclusivity and compassion.



STUDENT'S EXTRACURRICULAR ACHEIVEMENT'S

SPORTS

Students have participated in various events and won prizes as follows, which adds another feather to the hat towards department.

Ms. R. Thenmozhi, 3rd B.Sc Biotechnology, has won 1st place in Thiruvavarur district level air gun shooting championship, 1st TamilNadu inter school open air gun champion, District & inter school level competition.



Ms. K. Riyashini & Ms. G. Monica, 3rd B.Sc Biotechnology, with their team members from other departments, won the 2nd runner-up trophy in the SMT Padmavathy State level intercollegiate Tournament organised by Bhaktavatsalam Memorial College for Women, Chennai, from 20-22 Aug 2025.



CULTURALS

Ms. Mehek Fathima, 1st B.Sc Biotechnology, has won 1st place, Ms. Rechana Varma M and Sapna Gupta of 1st B.Sc Biotechnology, has won 3rd place in face painting in national level competition IGNIXION 25 held at VelTech Ranga Sanku Arts College.

STUDENT AS A REPORTER IN VIKATAN

Kudos to **Ms. J. Preethi, 3rd B.Sc. Biotechnology**, selected as a **Student Reporter for Vikatan Magazine**, a leading media house in Tamil Nadu. Her achievement demonstrates outstanding communication skills and dedication to science outreach.



KARATE CHAMPION

Congratulations to **Ms. Aditi Sanjay, I B.Sc. Biotechnology**, for receiving her **First Degree Black Belt (1st Dan)** from **Isshin-Ryu Karate-Do, UK** on **29th July 2025**. Her hard work and perseverance shine as an inspiration beyond academics.



WORKSHOP ON OYSTER MUSHROOM CULTIVATION

The Department of Biotechnology, Faculty of Science and Humanities, SRM Institute of Science and Technology, Ramapuram Campus, organized a Workshop on Oyster Mushroom Cultivation on **23rd August 2025**. A group of 30 students from Guru Nanak College, Chennai actively participated in the programme, gaining hands-on training in sustainable mushroom farming techniques. The workshop covered the complete lifecycle of oyster mushroom cultivation, while also highlighting its relevance in modern agri-biotechnology. Through practical sessions and expert guidance, participants not only enhanced their technical skills but also developed an awareness of eco-friendly farming practices and the potential of mushroom cultivation as a sustainable enterprise.



INNOVATIVE - INITIATIVES AT THE DEPARTMENT

The Department of Biotechnology, FSH, SRMIST – Ramapuram has initiated various innovative activities for students to learn hands on training in **oyster mushroom cultivation, vermicompost making**. Where students will be volunteering themselves to learn the techniques as well every student in the department were given hands on training in the department by the respective faculty in-charge. This provides a great opportunity to students to learn by practicing. Harvested mushrooms were also be sold inside the campus based on the requirement. In future value added products will also be released for sale as a part of the mushroom cultivation project



The department has been publishing weekly series called **Arivucharam Series** – an initiative to propagate scientific information to everyone. This **align with SDG goals as per the series topic** whenever it is released. As of now seven series under different topics has been published in the university social media pages. As follows Series 1: World Environmental Health Day, Series 2: Carbon foot print , Series 3: Peripheral immune tolerance, Series 4: Crown shyness, Series 5: Zombie cells, Series 6: Standard systemic injections, Series 7: Reason for Hiccups



CHENNAI RAMAPURAM
SRM
INSTITUTE OF SCIENCE & TECHNOLOGY
Chennai to be Internationally as 1st of its kind



SUSTAINABLE
DEVELOPMENT
GOALS

FACULTY OF SCIENCE AND HUMANITIES
(A Place for Transformation)

DEPARTMENT OF BIOTECHNOLOGY
PRESENTS

Arivucharam (அறிவுச்சரம்)
(An initiative to propagate scientific information to everyone)

SERIES
1

Global Classroom – Expert Sessions

Department of Biotechnology, Faculty of Science and Humanities, SRMIST, Chennai Ramapuram in association with Faculty of Medicine, UniSZA, Malaysia, as part of the MoU activity, delivered three insightful expert sessions to MBBS students of **Faculty of Medicine, UniSZA, Malaysia**



ACHIEVEMENTS



Dr.M.Kamaraj, Associate Professor & HOD Received the ERA Asian Research Excellence Award 2025 in the category of Environmental Nanotechnology. The award was presented at the Global Congress on Sustainable Growth & Development 2025 held on 10th October 2025 at INTI International University, Malaysia.

Dr. R. Vinoth Kumar, Assistant Professor, Served as Chief Guest and delivered a keynote address titled Genomics as a Strategic Tool Against Antiviral Resistance at the International Seminar on Innovative Trends and Techniques in Life Sciences organized by New Prince Shri Bhavani Arts and Science College on 26th August 2025.



Dr.G.Rajendran, Assistant Professor, has been Invited as a Resource Person for the workshop Nanocraft: From Fabrication to Functionality organized by the Department of Biotechnology, Microbiology, and Chemistry at PERI Arts and Science College, Chennai, on 29th August 2025.

Dr. T. Ramesh, Assistant Professor, Honored with the Best Teacher Award 2025 by the Antiviral Research Society for outstanding contributions to academics and research during the International Conference held on 22nd August 2025 at M.S. Swaminathan Research Foundation, Chennai. Dr.T.Ramesh also recognized by Arivukkan Tamil Science Magazine for his impactful science communication and contributions to students and society. The award was presented on 5th July 2025 by eminent dignitaries and scientific leaders.

Dr.S.Suresh, Assistant Professor, had been invited as keynote speaker in 3rd International Conference on Emerging Trends in Health Care Sciences organized at Eastern University, Sri Lanka on 3rd September 2025. He also been invited as a Keynote speaker at D.G.Vaishnava College, during TECHNOSAIVOUR - 2025 held on 12th September 2025



RESEARCH SCHOLAR ACHEIVEMENT - HIGHLIGHTS

Ms. S. A. Marathakarani, research scholar guided by Dr. M. Kamaraj, Associate Professor and Head of the Department, **won the Gold Award at the ERA Inter-Varsity Innovation Competition 2025**. Her project, “Development of Novel Bioplastic from Seaweed–Prawn Waste Mixture with Enhanced Durability and Tensile Strength,” was recognized at the Global Congress on Sustainable Growth & Development 2025, INTI International University, Malaysia. Ms. Marathakarani **also received the Best Paper Award at the International Conference on Advanced Materials and Characterization (ICAMC 2025)** held at Sathyabhama Institute of Science and Technology, Chennai.



Ms.V.Gowridevi, guided by Dr. S. Suresh has **won the Second Prize in Presentation at the National Conference on “Innovations on Cancer Biology: Bridging Science, Technology and Medicine,”** organized by Valliammal College of Women.



Mrs. Indhu S, Research Scholar, **successfully cleared the Tamil Nadu State Eligibility Test (TNSET – 2024)** for Assistant Professor, reflecting her dedication to academic and research excellence.



Electronic Certificate No. 2241185

GOVERNMENT OF TAMILNADU

TAMILNADU STATE ELIGIBILITY TEST (TNSET – 2024)

For ASSISTANT PROFESSOR

Conducted by
Teachers Recruitment Board
(Valid in the State of Tamil Nadu only)

TNSET Ref. No. TNSET/1/2024 Roll No. TNSET1030080239

Certified that **INDHU S.**
Son/Daughter of **SUNARAJ K.**

(Father/ Mother) has qualified the Tamil Nadu State Eligibility Test (TNSET - 2024) for Eligibility for Assistant Professor held from 6th March 2025 to 9th March 2025 in the Subject **LIFE SCIENCES** under the Category **BC/W**

As per the information provided by the candidate, he/she had completed / appeared or was pursuing Higher Master's degree or equivalent examination at the time of applying for TNSET.

The date of Eligibility for Assistant Professor is the date of declaration of TNSET result **25 September 2025** or the date of completion of Master's degree or equivalent examination with required percentage of marks within two years from the date of declaration of SET result **25 September 2027**

The authenticity of this electronic certificate should be verified from the TRB by the employer. It can also be verified by scanning the QR Code printed on the electronic certificate.

Validity of this electronic certificate is **Forever**.

Controller of Examinations Teachers Recruitment Board

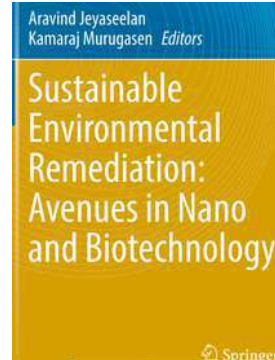
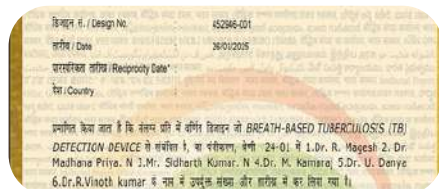
Chairman Teachers Recruitment Board

RESEARCH HIGHLIGHT'S

PATENT'S

BOOK

The Department of Biotechnology, FSH, SRMIST – Ramapuram congratulates **Dr. M. Kamaraj, Dr. G. Priya, and Dr. R. Vinoth Kumar** on being granted Indian Design Patents for innovative biomedical devices. **Patented designs: Sugar Level Detecting Device from Urine Sample, Breath-Based Tuberculosis (TB) Detection Device.** These non-invasive diagnostic designs underscore our focus on translational research and societal impact.



PAPER PUBLICATIONS



REVIEW ARTICLE

Sustainable Innovative Approaches on Catalytic-Carbon Nanocomposites for Environmental Remediation

Narayanan Mahesh, Srinivasan Balakumar, Murugesan Kamaraj, Suresh Babu Palanisamy, Jeyaseelan Aravind

First published: 21 July 2025 | <https://doi.org/10.1002/tqem.70126>

Funding: The authors received no specific funding for this work.



Balakumar, N. Mahesh, M. Kamaraj & J. Aravind

Vidhya et al. Discover Chemical Engineering
<https://doi.org/10.1007/s43998-025-00098-5>

Discover Chemical Engineering

RESEARCH

Open Access

Phyto-assisted synthesis of ZnO nanoparticles using *Ananas comosus* peel extract: dual functionality in dye removal and cancer cell inhibition

Vidhya¹, Arkadeep Das¹ and M. Kamaraj^{1*}

> Cell Tissue Bank. 2025 May 14;26(2):25. doi: 10.1007/s10561-025-10175-2.

Bioactive human platelet lysate gel for enhanced proliferation of human umbilical cord tissue derived mesenchymal stem cells

Seetha S Babu¹, M. Kamaraj^{2,3}, T. G. Nithya⁴, P. Raghu Babu⁵, Gayathri Anoop¹

Affiliations + expand

PMID: 40366481 DOI: 10.1007/s10561-025-10175-2

ASIAN JOURNAL OF PHARMACEUTICAL AND CLINICAL RESEARCH

Vol 10, Issue 8, 2025



Online - 2655-2891
Print - 0974-2441
Research Article

INTEGRATED PHYTOCHEMICAL ANALYSIS OF STRYCHNOS NUX-VOMICA USING MOLECULAR SPECTROSCOPY (ULTRAVIOLET-VIS AND FOURIER TRANSFORM INFRARED) AND HYPHENATED CHROMATOGRAPHY (GAS CHROMATOGRAPHY-MASS SPECTROMETRY)

RAMU C¹, GAYATHRI N², PRIYA G³, SATHISH KUMAR BOOBALAN^{1,2,4}, SEKAR T^{1,4*}

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Received: 28 April 2025, Revised and Accepted: 26 June 2025

BOOK CHAPTERS

Proceedings of the 3rd International Conference on Sustainable Computing and Data Communication Systems (ICSCDS-2025)
IEEE Xplore Part Number: CFP25AZS-ART; ISBN: 979-8-3315-1250-7

AI-Driven Smart Crop Disease Prediction using Federated Learning on Cloud-based Platforms

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Chapter 16 Nanoparticles and Nanomaterial Green Synthesis and Their Application as an Environmental Remediation Tool: A Mini Review

P. Suresh Babu, M. Kamaraj, and Aravind Jeyaseelan

Agricultural antibiotics from marine microbes

T. Ramesh

Department of Biotechnology, Faculty of Science and Humanities, SRM Institute of Science and Technology, Ramapuram Campus, Chennai, Tamil Nadu, India

DEPARTMENT OF BIOTECHNOLOGY

Students pursuing higher studies in foreign Universities



Ms. Sathvika Rajagopal

(Batch: 2020–2023)

University of Leeds, UK



Ms. Kanishka Suresh

(Batch: 2021–2024)

University of Birmingham, UK



Ms. Tanushree Amarnath

(Batch: 2022–2025)

University of South Florida, USA



Mr. S. Gopinath

(Batch: 2022–2025)

University of Birmingham, UK



Mr. Kailash P. Rajpurohit

(Batch: 2022–2025)

National Tsing Hua University, Taiwan



Mr. V.L. Vibash Kalyaan

(Batch: 2022–2025)

Texas Tech University, USA

Students placed in reputed companies



Ms. Smrithi Soman

(Batch: 2020–2023)

Parikshan FSS Private Limited



Ms. V.G. Dhivyalakshmi

(Batch: 2020–2023)

i3 Digital Health (P) Ltd



Ms. Aishwarya S.

(Batch: 2020–2023)

Meril Life Sciences

Ms. Ishita Saha

(Batch: 2021–2024)

Zifo



Ms. Indhumathi G.

(Batch: 2022–2025)

FE Fundinfo

FACULTIES COMPLETED NPTEL/SWAYAM COURSES

We are proud to announce that the faculty members of the Department of Biotechnology have successfully completed NPTEL/SWAYAM courses with Elite grades with excellent scores.

 ELITE Dr. M. Kamaraj Plant Cell Bioprocessing	 ELITE Dr. G. Priya Plant Cell Bioprocessing	 ELITE Dr. G. Rajendran Pharmacognosy & Phytochemistry	 ELITE-SILVER Dr. R. Vinoth Kumar Genetic Engineering: Theory & Principles
		 ELITE-SILVER Dr. R. Vidhya Regeneration Biology	 SCORE-90% Dr. T. Ramesh Public Health
			

Dear students! The seat of leadership is waiting for you!



Department of Biotechnology, FSH, SRMIST, Ramapuram

Next issue will be released on June 2026

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(Deemed to be University u/s 3 of UGC Act, 1956)

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