

CHENNAI RAMAPURAM



SRM
INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)

FACULTY OF SCIENCE AND HUMANITIES
(A PLACE FOR TRANSFORMATION)

DEPARTMENT OF BIOTECHNOLOGY

BIOTALK

(BIANNUAL NEWSLETTER)

YEAR 2025 - 2026 | VOLUME - III | ISSUE - I



Welcome to Biotalk!

Volume 3, Issue 1: Biannual Roundup from the Department of Biotechnology. Dive into our odd semester highlights, achievements, and milestones for the even semester 2025-2026. Big thanks to all contributors and supporters! Enjoy!

visit us



hod.biotech.rmp@srmist.edu.in



<https://fsh.srmrmp.edu.in/departments-of-biotechnology/>

RESEARCH TRIUMPH: EXCELLENCE UNLEASHED !

CHENNAI RAMAPURAM
SRM
INSTITUTE OF SCIENCE & TECHNOLOGY
Awarded A+ International Accreditation by AACSB, EQUIS, AMBA

FACULTY OF SCIENCE AND HUMANITIES
(A Place for Transformation)

Congratulations

Dr. G. Rajendran
Assistant Professor
Department of Biotechnology

For securing Research Grant
Rs 19 Lakhs

MINISTRY OF AYUSH under

FOR ADMISSION ENQUIRIES
1800 102 1525

Huge cheers for Dr. G. Rajendran, Assistant Professor, Department of Biotechnology, SRM IST Ramapuram, Chennai, on securing a prestigious research grant of ₹19 Lakhs!

This funding from the Ministry of AYUSH under the National Medicinal Plants Board marks a significant milestone. It promises to fuel innovative research in medicinal plants and biotechnology.

May this achievement lead to groundbreaking discoveries and further contributions to science and society. Wishing Dr. Rajendran continued success and many more accolades ahead!

ICBEST - 2026: INTERNATIONAL CONFERENCE



&



The Department of Biotechnology, Faculty of Science & Humanities, SRMIST Ramapuram, Chennai, Organized 2-Day International Conference on Biotechnological Emergence in Science and Technology (ICBEST–2026) on February 26 & 27, 2026. Partnered with **UNISZA & INTI University (Malaysia)**, **University of Jember (Indonesia)**, and **Laureate Institute of Pharmacy (India)**, it brought together top experts and students from Malaysia, Sri Lanka, Indonesia, Taiwan, UK, and USA. This brings the international connect to the students community to learn beyond the borders and to gain insightful about the latest trends in biotechnology.



IKSHH - 2026: NATIONAL CONFERENCE



Department of Biotechnology, FSH, SRMIST Ramapuram, hosted a national conference on Indian Knowledge Systems (IKS) in Health and Healing on Jan 30, 2026.

Key speakers:

- Dr. R. Shailaja, Medical Officer (Siddha), AIIMS Jodhpur
- Dr.K.Parthasarathy, Scientist II, AMDRL/SCRI/CC RS Chennai

It bridged traditional wisdom with modern science, inspiring students and researchers.

Celebrating India's healing heritage!

GLOBAL IMMERSION PROGRAMME



Our students Ms. Gracy S (II B.Sc.), Ms. Yazhini. J (I B.Sc.) embarked on an exhilarating **International Immersion Program in Malaysia** from March 15 to 22, 2026, stepping beyond the classroom for hands-on learning. This transformative experience immersed participants in new cultures, broadened global perspectives, and fostered essential skills like independence, adaptability, and confidence in navigating unfamiliar environments and responsibilities.

Students of II B.Sc, Biotechnology, Megadharshini R., Rahema Safrin S.M., Sraddha G., Swathi S., and Yamuna Shree R turned their pedagogical assignment into a fun kids' book on Genetic Engineering, guided by Dr. T. Ramesh. Published by Bribooks (Singapore), it showcases their science skills globally.



AVAL VIKATAN TALKS ABOUT OUR STUDENT ENTREPRENEUR



Alumni Spotlight: Mahalakshmi G's Green Success B.Sc. Biotechnology 2025 grad Mahalakshmi G runs GSM Vermicompost, blending innovation, sustainability, and entrepreneurship. Our department mentors students to turn ideas into real ventures. Featured by student reporter Preeti in Aval Vikatan!



STIPEND-POWERED INTERNSHIPS

Ms. Gracy S, II B.Sc. Biotechnology, completed a **1-month internship** at **Tulasi Seeds Pvt. Ltd.,** Andhra Pradesh. She earned a **₹5,000 stipend** and gained key industry experience.

STUDENT WINS AT SMILE-2025



Ms. K.Anu Varshini, II B.Sc. Biotechnology, has won the **Best Poster Award** for her poster titled “Production of Bioplastic from Algae” which was guided by Dr.S.Suresh, Assistant Professor, in the ANRF Sponsored International Conference. Organised by the Department of Chemistry, SRMIST, Ramapuram, in association with Association of Chemistry Teachers (ACT), Mumbai.

INTERNSHIP ODYSSEY: UNLOCKING DOORS AT TOP INDUSTRIES, STATE & CENTRAL INSTITUTES, AND PREMIER RESEARCH HUBS

116 students from M.Sc. and B.Sc. Biotechnology students gained invaluable hands-on experience through internships at premier research centers, labs, and industries across India.

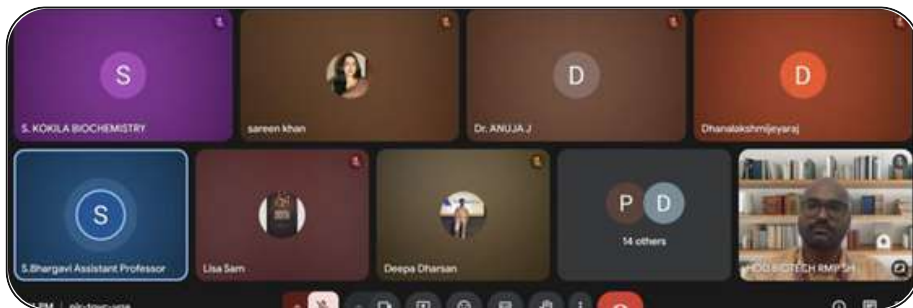
 	11 2 1 5 1 21 6	 	2 1 8 1 2 16	 	3 1 1 1 1 1
------------------------------	-----------------------------------	----------------------	-----------------------------	------------------	----------------------------

STUDENTS EXTRACURRICULAR ACHEIVEMENTS



Students of I M.Sc Biotechnology (Suruthi V, Gohilavarshini K, Yamini S, Sakthi Uma Mageswari S, and Dakshini N.S) for securing the **Runner-Up Trophy in the “Quantum Quasar 3.0”** event, which featured a blend of technical and non-technical competitions, held on 8th & 9th January 2026 at S.A. Arts and Science College, Chennai. Their all-round performance, versatility, teamwork, and enthusiasm truly reflect the excellence of department of biotechnology beyond the classroom.

FACULTIES ACHEIVEMENTS



Dr. M. Kamaraj, Associate Professor & HoD, Department of Biotechnology, FSH, SRMIST-Ramapuram, delivered expert guest sessions across institutions:

- Justice Basheer Ahmed Sayeed College for Women: Insights on interdisciplinary biotech, boosting collaboration.
- Kongunadu Arts and Science College: "Small Science, Big Breakthroughs: Nanotechnology in Biomedical Science."
- Sona College of Arts and Science: "Tiny Tools for Tiny Life: Nanotechnology in Modern Microbiology."
- 7-Day International FDP, Kongunadu: "Drafting and Structuring Manuscripts" (Feb 9–16, 2026), covering structure, ethics, and pitfalls.



Global Classroom: SRM Biotech Faculty Enlightens UniSZA MBBS Students

As part of our MoU with **UniSZA Malaysia**, Biotechnology faculty delivered expert sessions:

- **Dr. S. Suresh:** Therapeutic Enzymes: From Bench to Bedside—enzyme engineering for clinical use.
- **Dr. G. Priya:** Microbes as Friends and Foes—probiotics, gut health, and pathogen mechanisms.
- **Dr. R. Vinoth Kumar:** Emerging Viral Diseases and Molecular Diagnostics—tools for detection and control.

Proud to enrich global medical education!



We are proud to share that **Dr. S. Suresh and Dr. G. Priya**, Assistant Professors from the Department of Biotechnology, FSH, SRMIST, Ramapuram, Chennai have been **honoured with an award for their Excellence in Biology by Sci Edu Awards in association with Makkal Kural**.

The prestigious recognition was presented on 22.02.2026 at IIT Research Park, celebrating their dedication to teaching, research, and academic leadership.

Their achievement reflects an unwavering commitment to scientific excellence, inspiring students and strengthening the academic community.



Dr. G. Rajendran, Assistant Professor, delivered an insightful **guest lecture** on “Clinical Waste Management”, emphasizing the scientific, environmental, and regulatory aspects of biomedical waste handling at **University of Madras**. The session was informative, practical, and impactful, contributing significantly to green skill enhancement and environmental responsibility among participants.



Dr. T. Ramesh, Assistant Professor, served as the **Chief Guest for Project Day 2025 at PSBB Millennium School, OMR**, on November 8, 2025. He motivated students to explore the fascinating world of science and pursue meaningful careers in research and innovation through guest speech.

RESEARCH SCHOLAR ACHIEVEMENT



Ph.D Research scholar **Mr. Barani. E**, Department of Biotechnology, **guided by Dr. G. Priya**, Assistant Professor, has awarded with **silver medal** at Research Day 2026 held on Friday, 17 April 2026, for presenting research titled “Microplastics as Emerging Stressors: Evidence of Lipid Peroxidation in Flathead Grey Mullet”, in SRMIST, KTR, campus

MOU SIGNIGED WITH INDUSTRY



The Department of Biotechnology, FSH, SRMIST-Ramapuram, has inked a key **MoU with Salt Crops, Gujarat**, to boost industry-academia ties in saline crop research. Signed online on February 11, 2026, by Dr. Kathiravan Velusamy and Salt Crops Founder Mr. Hamza Taher Burhani, it enables joint research, internships, training, and projects on salinity-resilient crops and bioresource management. A big step for training future biotech leaders!

BRAND BUILDING EVENTS



"Lab on Live" Outreach at Two Chennai Schools Department of Biotechnology, FSH, SRMIST-Ramapuram, ignited food safety awareness via hands-on workshops: Feb 5, **St. George Anglo Indian Higher Secondary School** (Dr. G. Priya): Adulterants, detection tricks, daily science. **MMDA Colony Govt Model School** (Dr. R. Vinoth Kumar): Risks, basic tools, biotech for safer food. Energetic student engagement highlights community science passion!

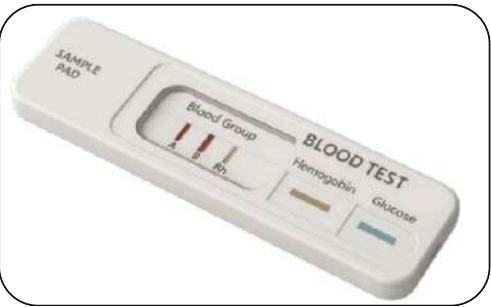


Hands-On Azolla Cultivation Training at Adithya Public School. The Department of Biotechnology, FSH, SRMIST-Ramapuram, led a dynamic session on **Azolla cultivation** for **Adithya Public School (CBSE), Sholinganallur, Chennai**. Dr. T. Ramesh and student facilitators. Ms. L. S. Ananya, Mr. P. Dharshan, Mr. Debarnik Chowdhury, Ms. P. Tharika, Mr. G. Sandeep, and Mr. A. Lokeshwaran—demoed techniques and highlighted Azolla's scientific value.



Dr.S. Suresh successfully organized a Brand Building event titled **“Ignite Minds: Career Guidance and Exam Motivation Program”** on 6th February 2026 at PSBB, Higher Secondary School. He strongly emphasized the importance of systematic study planning, smart revision techniques, and effective time management. The session further transitioned into an inspiring segment on career guidance, where students were guided on how to choose appropriate courses after school, particularly with respect to undergraduate degree programs.

PATENT



Students from III B.Sc., Biotechnology **Kajal Yadav, Akshaya, and Kunal Kumar** published the patent for the innovative **“Blood Diagnostic Device.”** This breakthrough came under the guidance of Dr. M. Kamaraj (HoD) and Dr. G. Priya (Assistant Professor). It's the first patent by our undergraduate students, showcasing real-world biotech applications and the power of dedicated mentorship. This achievement highlights our department’s commitment to research excellence and inspiring future innovators.

(12) PATENT APPLICATION PUBLICATION		(21) Application No.202541123166 A
(19) INDIA		
(22) Date of filing of Application :06/12/2025		(43) Publication Date : 02/01/2026
(54) Title of the invention : Sensor based management of relative humidity and metabolic heat in Solid state fermentation		
(51) International classification	:C12P 5/02, C12P 7/64, C12P 7/06, C12P 7/10, C12P 1/00	(71)Name of Applicant : 1)Senthil Address of Applicant :New No 41, Old no 32, Veera Chetty Street, Pullanthope Tamil Nadu India 2)SRM Institute of Science and Technology, Faculty of Science and Humanities, Ramapuram Campus,Chennai 3)Dr. S. Suresh
(31) Priority Document No	:NA	(72)Name of Inventor : 1)Dr. S. Suresh 2)V. Gowridevi
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:	
Filing Date	:01/01/1900	
(87) International Publication No	:NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

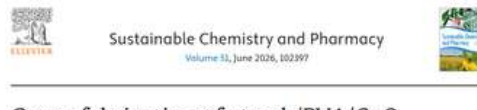
Dr. S. Suresh and research scholar Ms. V. Gowridevi have secured a patent titled **“Sensor based management of relative humidity and metabolic heat in Solid state fermentation”**. Solid state fermentation excels for producing biofuels, fermented foods, and enzymes like proteases and phytase using dry agro-industrial wastes with minimal water. Their innovation tackles key challenges: controlling metabolic heat, moisture, relative humidity, aeration, and substrate uniformity without agitation. This work advances efficient bioproduct manufacturing and reflects our department's innovative research spirit.

PUBLICATIONS

The Department of Biotechnology, faculty and research scholars have published papers in **Q1, Q2, Q3 and Q4 journals** with good impact factor. Their work has also received a strong number of citations.



Full Length Article
Starch/PVA electrospun nanoscaffolds loaded with ultrasonic-assisted green-synthesis of CuO nanoparticles from marine macroalgae (*Gracilaria corticata*) extract: Cytotoxicity and antioxidant analysis
Aksitha Sakthiraj¹, Sivaramakrishnan R.², Suresh Subramaniam³, Gopalakrishnan Velliur Kannappan⁴, Vijayalakshmi Pandurangan⁵, Selvaraj Jayaraman⁶, Vinch Kumar Bhayalaa⁷, Monica Mironescu⁸, Ion Dan Mironescu⁹, Chella Perumal Palanisamy¹⁰



Green fabrication of starch/PVA/CuO nanoscaffolds using marine macroalgae extract for enhanced anti-inflammatory activity
Jinjin Pei^{1,2}, Mathangi Vinayakar Senthil Kumar^{3,4}, Kamel Hessini⁵, Suresh Subramaniam⁶, Sivaramakrishnan R.⁷, Gopalakrishnan Velliur Kannappan⁸, Selvaraj Jayaraman⁹, Chella Perumal Palanisamy¹⁰



Research article
Development of bioplastic from seaweed and chitin from crustacean shells: A study of novel blending techniques, environmental degradability, and structural strength
S A Marathakara^{1,2,3}, Navinraj T.I.⁴



Full Length Article
Sustainable fabrication of starch/PVA/CuO electrospun nanoscaffolds from *Turbinaria ornata* (marine macroalgae) extract: Physicochemical characterization and antidiabetic evaluation
Martina Ainslay Paul Arul Raj¹, Suresh Subramaniam², Sivaramakrishnan R.³, Gopalakrishnan Velliur Kannappan⁴, Selvaraj Jayaraman⁵, Chella Perumal Palanisamy⁶

DIAGNOSTIC UTILITY OF INFLAMMASOMES AMONG SUBJECTS WITH BOH IN POST-COVID-19

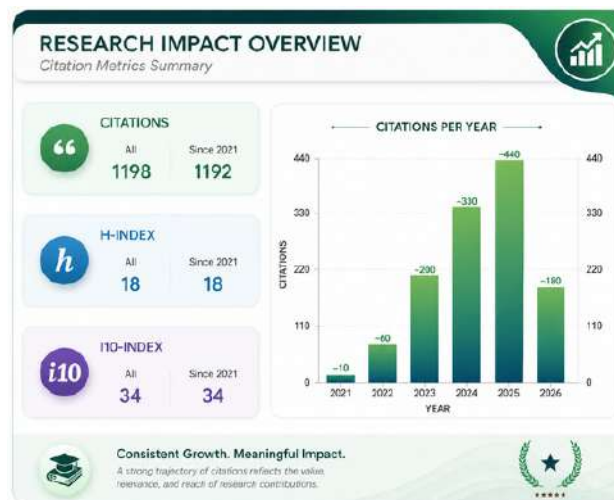
Palakattu Veetil A.¹, Nalluammy D.², Ganapathy R.³, Senthil Kumar S.⁴, Joseph S. M.⁵, Krishna P.⁶, Panmeswarar N. N.⁷, Jose J.⁸, Divakaran D. R.⁹

¹ Meenakshi Academy of Higher Education (Deemed to be university) Chennai, Tamil Nadu, India

² Meenakshi Medical College Hospital and Research Institute, Enathur, Kanchipuram, Tamil Nadu, India

³ SRM Institute of Science and Technology, Ramapuram, Tamil Nadu, India

⁴ Genetika Centre for Advanced Genetic Studies, Thiruvananthapuram, Kerala, India



In Vitro and In Silico Evidence for a Putative Role of *Lannea coromandelica* Bark's Methanolic Extract in the Treatment of Ulcerative Colitis

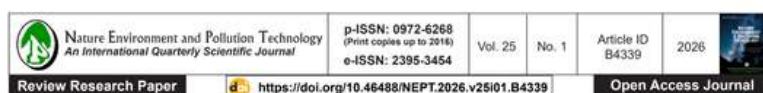
T. Ramesh¹, Nivaedhitha Mohan Kumar², C. Jesinthal Gnanamani³, M. Macdalen Rubavathy³, K. Keerthana³, G. Manivannan⁴, A. Ganesh Kumar², A. Amuthavalli⁵, V. Parthasarathy⁶, P. Sankarganesh⁷



REVIEW ARTICLE

Sustainable Innovative Approaches on Catalytic-Carbon Nanocomposites for Environmental Remediation

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



Biopolymers Production Strategies and Their Usage as Clean Material for Environmental Remediation

Peraman Muthukumar¹, Murugesan Kamaraj², Palanisamy Suresh Babu³ and Jeyaseelan Aravind^{1,4}

¹Department of Biotechnology, Kumaraguru College of Technology, Coimbatore-641049, Tamil Nadu, India

²Department of Biotechnology, Faculty of Science and Humanities, SRM Institute of Science and Technology, Ramapuram Campus, Chennai-600089, Tamil Nadu, India

³Department of Biotechnology, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences (SIMATS), Thandam, Chennai-602105, Tamil Nadu, India

⁴Corresponding author: Jeyaseelan Aravind; drj.aravind@gmail.com



Sustainable fabrication of starch/PVA/CuO electrospun nanoscaffolds from *Padina tetrastrum* (Brown macroalgae) extract: Physicochemical characterization and antidiabetic assessment

Jinjin Pei^{1,2}, Saravana Ganes N.^{3,4}, Suresh Subramaniam⁵, Sivaramakrishnan R.⁶, Gopalakrishnan Velliur Kannappan⁷, Selvaraj Jayaraman⁸, Chella Perumal Palanisamy⁹



Research article

Development of bioplastic from seaweed and chitin from crustacean shells: A study of novel blending techniques, environmental degradability, and structural strength

S A Marathakara^{1,2,3}, Navinraj T.I.⁴

¹ Department of Plant Biology and Biotechnology, Loyola College (Autonomous), Chennai, Tamil Nadu 600034, India

² Department of Biotechnology, Faculty of Science and Humanities, SRM Institute of Science and Technology, Ramapuram Campus, Chennai, Tamil Nadu 600089, India



RENEWABLE ENERGY AND RESOURCE RECOVERY SYSTEMS USING AI TOOLS

Gunasekaran Priya¹, Murugesan Kamaraj² and Jeyaseelan Aravind^{4,3}

¹ Department of Biotechnology, Faculty of Science and Humanities, SRM Institute of Science and Technology, Ramapuram, Chennai 600089, Tamil Nadu, India

² Department of Biotechnology, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, Chennai 602105, Tamil Nadu, India

PLACEMENTS - 2026

In Department of Biotechnology, 27 M.Sc. and B.Sc. students registered for placements. Of these, 13 received offers from 3 out of 4 companies, with good CTC packages.

LAUNCHED GLOBAL - CTC 5 -7 LPA



Aarthi. P (M.Sc., Biotechnology)



Fathima Hiba. N.Y ((M.Sc., Biotechnology)



Durgadevi. S (M.Sc., Biotechnology)



Elavarasan. A (M.Sc., Biotechnology)



Swetha. S (M.Sc., Biotechnology)



Divya Tejaswini. D (M.Sc., Biotechnology)



Sareen Khan (M.Sc., Biotechnology)

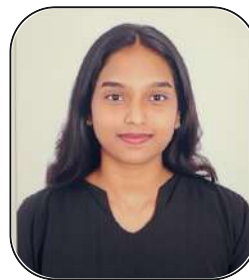
LUMINADATAMATICS - CTC 3 LPA



Chaganti Harika Divya (M.Sc., Biotechnology)



Haripriya. P (M.Sc., Biotechnology)



Vandhana. K (M.Sc., Biotechnology)



Aswini. M (B.Sc., Biotechnology)

TCS BPS - CTC 1.8 LPA



Madhumita. D (B.Sc., Biotechnology)



EXCELLENCE IN NPTEL

Students from B.Sc Biotechnology have cleared their NPTEL course under the mentorship of Dr.T.Ramesh and got good scores

ELITE WITH SILVER



Neva Irene Joseph
I B.Sc. Biotechnology



Nethra G S
I B.Sc. Biotechnology



Sri Moulikha B
II B.Sc. Biotechnology



Sampradha Balasubramanian
I B.Sc. Biotechnology



Aditi Sanjay
I B.Sc. Biotechnology



Debarnik Chowdhury
II B.Sc. Biotechnology

ELITE



V Harini
I B.Sc. Biotechnology



K Anu Varshini
II B.Sc. Biotechnology



Janani Sri D
I B.Sc. Biotechnology



Muhammed Abu Sufiyan SA
I B.Sc. Biotechnology



Regina R
II B.Sc. Biotechnology



E Venila Vishaal
II B.Sc. Biotechnology

Course: Waste to Energy Conversion

ELITE with Silver: 07

ELITE: 05

PASS: 01

MENTOR



T. RAMESH
ELITE with Silver

2026 - 2027 ADMISSION OPEN NOW

Faculty of Science & Humanities
(A Place For Transformation)

Department of Biotechnology



Programs Offered (2026 - 2027)

B.Sc. - Biotechnology

M.Sc. - Biotechnology

Ph.D. - Biotechnology (FT & PT)



Highlights :

- ✓ Well Qualified and Experienced Faculties
- ✓ Research & Industry - Oriented Curriculum
- ✓ State-of-Art Infrastructure
- ✓ Global exposure through immersion programs
- ✓ Collaborations with national & international organizations
- ✓ Job-oriented mentorship
- ✓ Internship Opportunities
- ✓ Research Connectivity
- ✓ Industrial Connect & Visits



f srm.rmp.fsh

Instagram srmistfsh_ramapuram

Website fsh.srmrmp.edu.in

FOR ADMISSION ENQUIRIES
1800 102 1525

NEXT ISSUE WILL BE RELEASED ON DECEMBER 2026