VIT®

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)

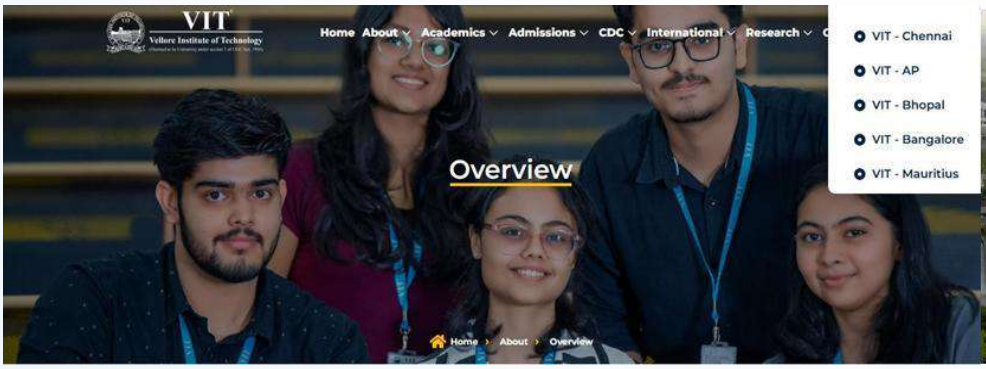
SCHOOL OF BIO SCIENCES AND TECHNOLOGY

BIOBROADCAST

OCTOBER- DECEMBER 2025

VELLORE INSTITUTE OF TECHNOLOGY

Vellore Institute of Technology (VIT) is a premier institution of higher education, dedicated to excellence in teaching, research, and innovation. Established with the vision of delivering high-quality education aligned with international standards, VIT has consistently demonstrated academic and research leadership. TThe VIT Group of Institutions offers a comprehensive and diverse academic portfolio, comprising 71 undergraduate programs, 58 postgraduate programs, 15 integrated programs, two research programs, and two M.Tech industrial programs. In addition, VIT provides a strong research ecosystem with full-time PhD programs, deep-tech PhD programs in Engineering and Management, PhD programs in Science and Languages, and Direct PhD programs in engineering disciplines, all available in 2025. This extensive range of programs reflects VIT's commitment to fostering academic excellence, interdisciplinary learning, and advanced research.



Dr. G. Viswanathan
Founder & Chancellor

Mr. Sankar Viswanathan, Vice President
Dr. Sekar Viswanathan, Vice President
Dr. G. V. Selvam, Vice President
Dr. Sandhya Pentareddy, Executive Director
Ms. Kadhambari S. Viswanathan, Assistant Vice President
Dr. V. S. Kanchana Bhaaskaran, Vice Chancellor
Dr. Partha Sharathi Mallick, Pro-Vice Chancellor
Dr. T. Jayabharathi, Registrar

OUR INSPIRATION

Hon'ble Chancellor Dr. G. Viswanathan stands as a guiding light for the younger generation, inspiring countless students to pursue excellence with purpose, integrity, and social commitment. Under his visionary leadership, the Vellore Institute of Technology (VIT) has evolved into a globally recognized, multi-campus university, comprising campuses in Vellore, Chennai, Amaravati, and Bhopal, and hosting a vibrant academic community of students from across India and over 70 countries.

VIT is consistently ranked among India's leading institutions in national frameworks, such as NIRF, and is internationally recognized through global ranking systems for its academic quality, research output, and industry engagement. The university fosters a dynamic, inclusive, and innovation-driven environment that encourages creativity, discipline, interdisciplinary learning, and a shared responsibility toward societal progress. As Dr. Viswanathan aptly states, *"Knowledge is a protective shield which cannot be ruined by any external force,"* a philosophy that forms the cornerstone of VIT's academic and ethical framework.

The institution promotes a culture where faculty and students thrive through care, accountability, and continuous improvement, supported by strong national and international collaborations with academia, research organizations, and industry. Anchored in service and compassion, VIT's mission extends beyond education to uplifting communities through socially relevant research, sustainability initiatives, and inclusive growth, shaping its enduring legacy of transformation through knowledge.

Thank you so much, sir, for your blessings, encouragement, and support…

VIT UNIVERSITY RANKINGS - 2025

SUBJECT	World Rank	India Rank
Engineering & Technology	**142**	**9**
Computer Science & Information Systems	110	4-7
Data Science and Artificial Intelligence	51-100	1-7
Engineering - Electrical & Electronic	151-200	7-10
Engineering - Mechanical, Aeronautical & Manufacturing	201-250	9-10
Engineering - Chemical	251-300	9-11
Natural Sciences	**362**	**11**
Materials Science	151-200	7
Mathematics	201-250	7-9
Statistics & Operational Research	251-275	8
Chemistry	301-350	9-11
Physics & Astronomy	401-450	10-15
Environmental Sciences	451-500	13
Biological Sciences	**351-400**	**8-9**
Agriculture & Forestry	**351-400**	**11-12**
Business & Management Studies	**551-600**	**23-27**

VIT UNIVERSITY RANKINGS - 2025

QS WORLD UNIVERSITY RANKINGS

BY SUBJECT 2025

Vellore Institute of Technology (VIT)

351-400

in QS World University Rankings by Subject 2025:

BIOLOGICAL SCIENCES

March 2025

Date

Ben Sowter
Senior Vice-President
QS Quacquarelli Symonds

VIT UNIVERSITY RANKINGS - 2025

VIT
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Pioneering Sustainability

QS WORLD UNIVERSITY RANKINGS
SUSTAINABILITY | 2026

Sl. No	World Rank	India Rank	Institution Name	Location	Overall Score
1	=205	1	Indian Institute of Technology Delhi (IITD)	India	83.1
2	235	2	Indian Institute of Technology Bombay (IITB)	India	81.4
3	=236	3	Indian Institute of Technology Kharagpur (IIT-KGP)	India	81.3
4	=241	4	University of Delhi	India	80.9
5	305	5	Indian Institute of Technology Madras (IITM)	India	77.3
6	=310	6	Indian Institute of Technology Kanpur (IITK)	India	77
7	**=352**	**7**	**Vellore Institute of Technology (VIT), Vellore, India**	**India**	**74.9**
8	=352	7	Indian Institute of Technology Roorkee (IITR)	India	74.9
9	=462	9	Indian Institute of Science (IISc) Bangalore	India	70.5
10	=467	10	Manipal Academy of Higher Education, Manipal, Karnataka, India	India	70.3
11	478	11	Anna University	India	69.8
12	487	12	Birla Institute of Technology and Science, Pilani	India	69.4

Vellore Institute of Technology (VIT) | vellore-institute-of-technology | vituniversity | VIT_univ | Vellore Institute of Technology | vellore_vit

DEAN'S MESSAGE

It is with great pleasure that I present the October-December 2025 edition of ***BioBroadcast***, highlighting the robust research ecosystem and scholarly excellence of the School of Bio Sciences and Technology (SBST). This quarter has been marked by significant advancements in fundamental and translational research, reinforcing SBST's position as a hub for cutting-edge life science innovation.

Faculty members and research scholars have made notable contributions through high-impact publications, patents, competitive grant awards, and interdisciplinary collaborations, addressing critical challenges in health, biotechnology, and environmental sustainability. This issue features key research breakthroughs in sustainable bioprocess engineering, microbiome modulation, and novel approaches to combat antimicrobial resistance, underscoring the depth and diversity of scientific inquiry at SBST.

Our growing emphasis on translational research and industry engagement has strengthened pathways for technology development, knowledge transfer, and real-world implementation. Collaborative projects with academic institutions and industry partners continue to enhance the relevance and societal impact of our research outcomes.

The School also hosted a series of specialized workshops, seminars, and research symposiums, facilitating intellectual exchange and fostering interdisciplinary dialogue. These initiatives have enriched research training, encouraged innovation, and empowered young scientists to pursue impactful and globally relevant research agendas.

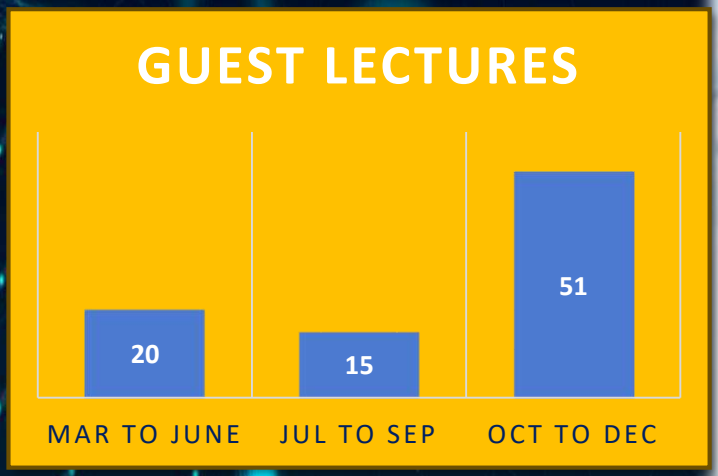
As we advance into the next quarter, SBST remains committed to excellence in research, innovation, and capacity building. I congratulate our faculty, scholars, and students for their outstanding contributions and look forward to continued scientific progress and collaboration.

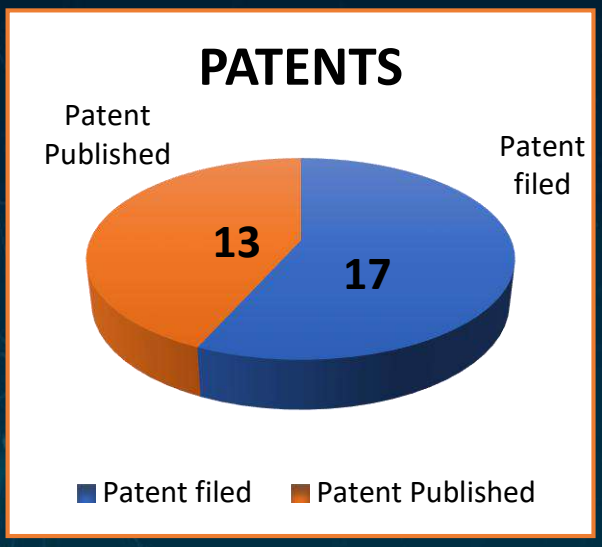
With best wishes,

Dr. Suneetha V.

Dean, School of Bio Sciences and Technology, VIT

SBST'S HIGHLIGHTS





NEWLY JOINED FACULTY

The School of Biosciences and Technology (SBST) is delighted to extend a warm and heartfelt welcome to our newly joined faculty members. We are pleased to have accomplished academicians and researchers join the SBST family, bringing with them diverse expertise, fresh perspectives, and a strong commitment to excellence in teaching, research, and innovation.

Our new faculty members strengthen SBST's academic ecosystem through their specialized knowledge across emerging and interdisciplinary areas of biosciences and biotechnology. Their presence is expected to further enrich our curriculum, foster collaborative research, and contribute meaningfully to ongoing and future research initiatives aligned with national and global priorities.

At SBST, we strongly value collegiality, mentorship, and a vibrant research culture. We are confident that our new colleagues will play a significant role in nurturing young minds, advancing impactful research, and upholding the academic values and vision of VIT.

We wish our new faculty members a fulfilling and successful journey at SBST and look forward to their valuable contributions to the growth and excellence of the School.

Erp ID	Name	Designation	
23248	Dr. Namo Dubey	Assistant Professor (Research)	

BIRTHDAY CELEBRATION OF HONOURABLE CHANCELLOR SIR

The birthday of our Honourable Chancellor was celebrated with great joy and reverence at Anna Auditorium on 8 December 2025 (Monday). Faculty and staff from various Schools, Centres, and Sections participated in the celebrations as per the scheduled program.

CHANCELLOR'S DINNER AND UNDERGRADUATE FAREWELL

The Office of Students' Welfare hosted the Chancellor's Dinner and **Undergraduate Farewell 2025** on 30th October 2025, marking a heartfelt send-off to the Class of 2026 from SBST and the allied schools. The event stood as a warm tribute to the journey of the Class of 2026—honoring their growth, resilience, and the community they built within these walls.

FRANCO-INDIAN TWINNING PROGRAMME - SBST MSC STUDENTS (BIOTECHNOLOGY 2023-25)

VIT BIO-SUMMIT 2025

BIOTECHNICA 2025

26th SET CONFERENCE

ICNAN-25 @CNR, VIT

Dr. Moungi G. Bawendi

(Nobel Laureate in Chemistry, Massachusetts Institute of Technology, USA)

FACULTY ACHIEVEMENT

Dr. Suneetha V., Professor (HAG) and Dean, SBST participated in the **"IP-to-IPO"** Innovation Competition under **Startify 3.0**, organized by the Centre for Entrepreneurship Development, Anna University, Chennai, held on 8 October 2025 at PSG Institute of Technology and Applied Research, Coimbatore.

9	IPO-94kbsa	Vellore Institute of Technology, Vellore	Provisionally Selected

FACULTY ACHIEVEMENT

Dr. George Priya Doss C and **Ms. Sree Haryini S** (research scholar) from the School of Biosciences and Technology (SBST) has been awarded the **Grand Prize – AMR Global Leadership Award** in the prestigious 2025 Vivli AMR Surveillance Data Challenge.

Dr. George Priya Doss C has also received the Sanction of **VAIBHAV International Fellowship** under the DST-sponsored Research Grant.

Our heartfelt congratulations to the Professor for this remarkable achievement!

FACULTY ACHIEVEMENT

PROJECTS GRANTED

	Project Title	Faculty	Sanctioned Amount	Type
1	Formulation of Functional 3D food from Pineapple	Dr. Sandeep Singh Rana Dr. Payel Ghosh	Rs. 1,18,000 /-	Industrial Consultancy
2	Recovery and Reuse of Nutrients as struvite from Industrial waste water (Anaerobic Process) using a fluidized Bed Reactor	Dr. Sangeetha Subramanian	Rs. 2,36,000 /-	Industrial Consultancy

Dr. Sandeep Singh Rana

Dr. Payel Ghosh

Dr. Sangeetha Subramanian

FACULTY ACHIEVEMENT

PATENTS PUBLISHED

1. Title: Method for Production and Characterization of Lycopersene by Endophytic *Actinomycete* Isolated from Tomato Tissues (Published on 5th September 2025)
   Dr. J Godwin Christopher, Veilumuthu P

2. Title: A Nanofibrous Membrane Comprising Polyvinyl Alcohol (PVA) And Gelatin As Polymeric Film Forming Agents, Loaded With Vancomycin Hydrochloride And Clove Essential Oil (Published on 5th September 2025)
   Dr. Natarajan Chandrasekaran, Dr. George Priya Doss C, Mohanraj Gopikrishnan, Disha Pramanick

3. Title: Bioink Composition Comprising Collagen Peptide Encapsulated Eugenol Microemulsion And Bone Powder For 3d Bioprinting (Published on 19th September 2025)
   Dr. Natarajan Chandrasekaran, Dr. George Priya Doss C, Mohanraj Gopikrishnan, Disha Pramanick

4. Title: Primaquine Nanoemulsion For G6pd-Safe Malaria Relapse And Transmission Control (Published on 19th September 2025)
   Dr. Natarajan Chandrasekaran, Dr. George Priya Doss C, Mohanraj Gopikrishnan, Parvathy Mohan Menon, Bithia R

5. Title: Formulation Of Serratiopeptidase Using ZnO And Chitosan Composite For Topical Application (Published on 19th September 2025)
   Dr. C. Subathradevi, Dr. Mohanasrinivasan. V, Sreelakshmi R Nair

6. Title: Antimicrobial Peptide (Am1) And Ceftaroline Antibiotic And Bioactivity Against Drug-Resistant Staphylococcus Aureus (Published on 19th September 2025)
   Dr.Gothandam Kodiveri Muthukaliannan, Rudra Awdhesh Kumar Mishra

7. Title: A Biofertilizer Composition Comprising Vermicompost And *Magnetospirillum gryphiswaldense* For Enhanced Crop Yield (Published on 31st October 2025)
Dr. Suthindhiran K, Dr. Jayasri M. A, Shraddha Shirsat


8. Title: Molecular Dynamics-Based Stability Assessment And Experimental Validation Of Biofilm Eradication (Published on 31st October 2025)
Dr.Gothandam Kodiveri Muthukaliannan, Rudra Awdhesh Kumar Mishra

9. Title: Incorporation Of Colistin, Meropenem, And Sulbactam In *Allium sativum* Oil To Combat Drug Resistant By *Acinetobacter baumannii* (Published on 31st October 2025)
Dr. Natarajan Chandrasekaran, Dr. George Priya Doss C, Mohanraj Gopikrishnan

10. Title: Inert Gas Pretreatment for Controlling pH Variability in Alginate Based Biomedical Hydrogels and Process Thereof (Published on 31st October 2025)
Dr. Debasish Mishra, Subhasis Dash

11. Title: Process For Isolation Of An Antimycobacterial Compound Pyrrolo[1,2-A]Pyrazine-1,4-Dione, Hexahydro-3-(2 Methylpropyl) From Marine *Streptomyces Zingiberis* (Published on 28th November 2025)
Dr. K. V. Bhaskara Rao, Apsara S. Babu

12. Title: Biopolymer-Based Controlled Release Multiparticulate Composition (Published on 28th November 2025)
Dr. Natarajan Chandrasekaran, Dr. George Priya Doss C, Mohanraj Gopikrishnan, Disha Pramanick

JOURNAL PUBLICATIONS

Research Papers

1. Tang, L.P.; Zhai, L.M.; Li, J.; Gao, Y.; Ma, Q.L.; Li, R.; Liu, Q.F.; Zhang, W.J.; Yao, W.J.; Mu, B.; Qin, C.; Tian, X.; Shaw, R.; Xia, K.; Xu, J.; Su, Y.H.; Zhang, X.S. (2025). Time-resolved reprogramming of single somatic cells into totipotent states during plant regeneration. Cell (IF: 42.5)
2. A.B. Narayan; E.J.R. Nelson (2025). Molecular dynamics simulations of perforin mutations associated with familial hemophagocytic lymphohistiocytosis type 2 among Indian patients. International Journal of Biological Macromolecules (IF: 8.5).
3. Dasgupta, S.; Noor, A. (2025). *Citrus sinensis* peel polyphenols loaded alginate nanoparticles: Enhanced stability and anti-diabetic efficacy via bidirectional AMPK regulation and NF-κB suppression. International Journal of Biological Macromolecule (IF: 8.5).
4. Kumar, S.S.; Sonthalia, M.; Jaiswal, A.K.; Sadanandan, S.; Appukuttan, A. (2025). Highly tunable coconut shell lignin-gelatin crosslinked hydrogel for controlled drug delivery in wound healing. International Journal of Biological Macromolecule (IF: 8.5).
5. Sishu, N.K.; Selvaraj, C.I. (2025). Cichoriin, a coumarin glycoside with antidiabetic effect and cardioprotective activity against H2O2 induced oxidative stress in H9c2 cells: in-vitro and in-silico study. Free Radical Biology and Medicine (IF: 8.2).
6. R. Varghese; C. Natarajan; S. Ramamoorthy (2025). Bixin stability enhancement through novel nanoemulsion system for advancing its applications. Food Research International (IF: 8).
7. Suri, H.; Suri, H.; Nagda, N.; Misra, T.; Vuppu, S. (2025). Current perspectives on the human skin microbiome: Functional insights and strategies for therapeutic modulation. Biomedicine and Pharmacotherapy (IF: 7.5).
8. A. Pootheri; P. Chinnaiyan; N. Ashok; R. Saraswathy (2025). Association between ambient air pollution and increased risk of respiratory diseases in Vellore and Ranipet, Tamil Nadu, India: A retrospective study. Environmental Pollution (IF: 7.5).
9. Joseph, S.; Govardhan, V.; Nedunchezhian, S.T.; Varkey, D.R.; Abraham, J.; Choudhary, R.; Sasikumar, S. (2025). Zinc-doped calcium magnesium silicate ceramics: A comprehensive study on bioactivity, mechanical strength, and microbial resistance. Journal of Science: Advanced Materials and Devices (IF: 6.8).
10. D., Sharma; S. Arumugam (2025). A machine learning-Assisted QSAR and integrative computational combined with network pharmacology approach for rational identification of tankyrase inhibitors in colon adenocarcinoma. Computers in Biology and Medicine (IF: 6.3).
11. S. Priyadarsini; V. S. Laxmikarthika; S.S., Rana; F., Ahmad; Y. Chaudary; M. Panda; Y. Kumar (2025). Comparative physicochemical analysis of freeze-dried milk powders from camel, goat and donkey. Applied Food Research (IF: 6.2).

12. A. Rithvik; S. Bhattacharjee; M.K. Gupta; C.S. Sudandiradoss; A. Wadud; M. Rasool (2025). Habbe Gule Aakh prevents glycolytic program and alleviates disease progression in a rheumatoid arthritis animal model. Frontiers in Immunology (IF:5.9).
13. S., Mudipalli Elavarasu; K. Sasikumar (2025). Rational design of an epitope-centric vaccine against *Pseudomonas aeruginosa* using pangenomic insights and immunoinformatics approach. Frontiers in Immunology (IF:5.9).
14. Bell I, P.J.; Rajiniraja, R. (2025). Targeting the two-component Agr system in *Staphylococcus aureus*: Molecular docking and dynamics insights into natural compound inhibition. Food Bioscience (IF:5.9).
15. Vignesh, R.; Sankara Narayanan, T.S.N.; Nandagopal, P.B.; Manickam, V.; Sridhar, T.M. (2025). Simulated Coating Interface of (Au-n-HAP TiO2) Ti-Metal Bone Implants: Improved Coating Thickness and Long-Term Corrosion Resistance by the Electrophoretic Deposition Method. ACS Biomaterials Science and Engineering (IF:5.5).
16. Vijayakanth, V.; Vinodhini, V.; Vijayababu, M.; Smitha, A.S.S.; Krishnamoorthi, K.; Madhu Mohan, V.M.; Brahadeeswaran, S.; Tamizhselvi, R.; Rosaiah, P.; Radhalayam, D.; Mohammad abaidur, S.M.(2025). Different surfactants-engineered CoFe2O4 nanoparticles: A multifunctional platform for magnetic hyperthermia and wastewater purification applications. Inorganic Chemistry Communications (IF: 5.4).
17. Hadkar, V.M.; Murthy, H.C.A.; Selvaraj, C.I. (2025). Sustainable synthesis of Ag3PO4-ZnO nanocomposite using *Couroupita guianensis* (Aubl.) leaf extract for biological and photocatalytic applications. Inorganic Chemistry Communications (IF: 5.4).
18. Ulaganambi, M.; Tetala, K.K.R. (2025). Bioinformatic based protein-ochratoxin A screening studies and fabrication of a protein-based electrochemical sensor for specific detection of ochratoxin A in food samples. Microchimica Acta (IF: 5.3).
19. P.P. Mahapatra; D., Bae; M., Notaguchi; S., Muneer (2025). Grafting enhances drought stress tolerance by regulating the proteome and targeted gene regulatory networks in tomato. Frontiers in Plant Science (IF: 4.8).
20. Mohan Kumar, D.; Talwar, P. (2025). Amyloid-β, Tau, and α-Synuclein Protein Interactomes as Therapeutic Targets in Neurodegenerative Diseases. Cellular and Molecular Neurobiology (IF: 4.8).
21. Mohan Kumar, D.; Talwar, P. (2025). Neurotherapeutics across blood-brain barrier: screening of BBB-permeable and CNS-active molecules for neurodegenerative disease. Frontiers in Pharmacology (IF: 4.8).
22. S. Suresh; P. Mohamed Imran; M. Poornimaa; G. Kannayiram; V. Radhakrishnan; R. Karuppasamy; F. Nawaz Khan (2025). Synthesis of functionalized quinazolines and quinazolinones: A theoretical and experimental investigation of photophysical properties and biological activities. Journal of Molecular Structure (IF: 4.7).
23. Suresh Babu, P.; Pattapulavar, V.; Godwin Christopher, J.; Kandasamy, A. (2025). Solvent-mediated structural-photophysical modulations on a halogenated bioactive Schiff base crystal. Journal of Molecular Structure (IF: 4.7).

24. S.K. Barnwal; A.M. Saleh (2025). Antibiotic resistance patterns of environmental bacteria from sewage water in Vellore, India: isolation, virulence analysis, and characterization. Frontiers in Microbiology (IF: 4.5).

25. N. Gupta; S. Arunachalam (2025). From consortium design to bioaugmented filters: scalable yeast-based strategies for lead remediation in water systems. Frontiers in Microbiology (IF: 4.5).

26. V.M. Vinodhini; M. Kavitha (2025). Targeted inhibition of mecA and agrA genes in clinical MRSA isolates by natural bioactive compounds. Frontiers in Microbiology (IF: 4.5).

27. D.M. Mathkor; S. Tawil; A.K. Johargy; H.S. Faidah; A.O. Babalghith (2025). Respiratory and gastrointestinal infections among Hajj pilgrims during the 2012-2025 seasons: A systematic review. Journal of Infection and Public Health (IF: 4).

28. Haque, S.; Bantun, F.; Jalal, N.A.; Faidah, H.; Babalghith, A.O.; Alobaidy, M.A.; Aldairi, A.F.; Ahmad, F. (2025). Gut microbiota alterations and their association with tumorigenic pathways in colorectal cancer: insights from a pooled analysis of 109 microbiome datasets. Gut Pathogens (IF: 4).

29. S. Sriram; C. Palanichamy; P.T. Subash; M.K. Gupta; C.S. Sudandiradoss (2025). Molecular dynamics simulations based siRNA design against GPR10 reveals stable RNAi therapeutics for hormone-dependent uterine fibroids. Scientific Reports (IF: 3.9).

30. Vinayagam, Y.; Vijayarangan, D.R. (2025). Biological applications of yttrium oxide nanocomposites synthesized from *Aspergillus penicillioides* and their potential role in environmental remediation. Scientific Reports (IF: 3.9).

31. Panickar, A.; Manoharan, A.; Ramaiah, S. (2025). Machine learning-based virtual screening and density functional theory characterisation of natural inhibitors targeting mutant PBP2x in *Streptococcus pneumoniae.* Scientific Reports (IF: 3.9).

32. Devi, S.; Gurunathan, G (2025). Unraveling the molecular basis of snake venom nerve growth factor: human TrkA recognition through molecular dynamics simulation and comparison with human nerve growth factor. Frontiers in Bioinformatics (IF: 3.9).

33. R. Sreena; A.J. Nathanael (2025). Design and process optimisation of shape memory polymer based three-dimensional (3D) scaffolds for biomedical applications. Smart Materials and Structures (IF: 3.8).

34. I.P. Latha Laxmi; R. Tamizhselvi (2025). Methylsulfonylmethane Mitigates Neurobehavioral Impairment, Oxidative Stress, Changes in Trace Elements and Clock Expression in Alcohol and CircadianDisrupted C57BL/6J Mice Brain. Neurochemical Research (IF: 3.8).

35. Nallakaruppan, N.; Rajasekaran, R.; Thiagarajan, K. (2025). Bio-efficacy of *Hedyotis sithiravaraiensis* callus extract: A stepwise evaluation through phytochemical profiling, antioxidant activity, molecular docking, and cytotoxicity. Biocatalysis and Agricultural Biotechnology (IF: 3.8).

36. V. Magizhvannan; V. Shanthi (2025). Genome-wide analysis of *Burkholderia* for the management of antimicrobial-resistance in cystic fibrosis patients. AMB Express (IF: 3.7).

37. Deo, L.; Osborne, J.W.; Benjamin, L.K.(2025). Biotranslocation of lead and cadmium in *Spinacia oleracea* amended with *Klebsiella* sp. VITLLJ4: an effective microbe. Frontiers in Environmental Science (IF: 3.7).

38. Lazarus, H.P.S.; Easwaran, N. (2025). Unveiling the dual role of *Priestia megaterium* VIT-2021 membrane vesicles as an antimicrobial and immunomodulator in supporting the growth of *Oryza* sativa ADT38. Plant Signaling and Behavior (IF: 3.6).

39. Biswas, D.; Shenoy, S.V.; Chauhan, A.; Halder, A.; Padhye, A.; Dutta, S.; Auromahima, S.; Bavaskar, H.; Yadav, D.; Ghosh, B.; Sasmal, S.; Kumari, N.; Kumar, T.R.; Mukherjee, A.P.; Srivastava, S. (2025). BrainProt v3.0: An Integrative and Simplified Omics-Based Knowledge-Base About the Human Brain and Its Associated Diseases. Journal of Proteome Research (IF: 3.6).

40. Arumugam, K.V.; Shanmugam, V.K. (2025). Improved biodegradation of 17β-estradiol by indigenous microorganisms and assessment of its ecotoxicity. Microbial Pathogenesis (IF: 3.5).

41. Patel, N.; Lawarde, A.; Surisetti, S.M.; Premkumar, P.; Lingasamy, P.; Vino, V.; Lulu S, S.; Salumets, A.; Modhukur, V. (2025). Serum-MiR-CanPred: deep learning framework for pan-cancer classification and miRNA-targeted drug discovery. RNA Biology (IF: 3.4).

42. Augustine, J.; Abraham, J. (2025). *Talaromyces sayulitensis* as a Potential Bioremediation Agent for Metformin. Applied Biochemistry and Biotechnology (IF: 3.3).

43. Das, U.; Dasgupta, T.; K.; M.; Senthil Kumar, A.; Kushwaha, R.; Das, R.; Mondal, D.; Maji, K.; Ghosh, P.; Banerjee, S.; Tamizhselvi, R.; Chakrabarty, R.; Paira, P. (2025). Dual functioning Ru(ii)/Ir(iii) complexes for ferroptosis and apoptosis in triple-negative breast cancer: a proof of concept by glutathione depletion. Dalton Transactions (IF: 3.3).

44. Ibezim, A.; Onah, E.; Osigwe, S.C.; Okoroafor, P.U.; Ukoha, O.P.; Siqueira-Neto, J.L.; Ntie-Kang, F.; Ramanathan, K. (2025). Potential dual inhibitors of Hexokinases and mitochondrial complex I discovered through machine learning approach. Scientific African (IF: 3.3).

45. A. Aseef; S.V.V. Kumar (2025). Prodigious biodegradation of polycyclic aromatic fluorene with manganese oxide nanoparticles from *Stenotrophomonas sp.* Biodegradation (IF: 3.2).

46. Mishra, T.; Vuppu, S. (2025). Exploring the pharmacological potential of plant-based hand sanitizer composition: characterization, activity evaluation, and *in silico* assessment. Naunyn Schmiedeberg's Archives of Pharmacology (IF: 3.1).

47. Kavitha, S.M.; Shenbagamuthuraman, V.; Vaibhav, N.H.; Sinha, S.; Manian, R.; Geca, M.J.; Jambulingam, R.; Kasianantham, N. (2025). Modeling and optimization of acid hydrolysis for spirulina-based ethanol production by response surface methodology and neural network techniques. Folia Microbiologica (IF: 3.1).

48. B, T.; S, S.L. (2025). POLR2C, HIF1A, CD4, and CREB1 as the identified key regulators in geriatric insomnia: A comprehensive approach using systems biology and machine learning methods. Computational Biology and Chemistry (IF: 3.1).

49. Mishra, A.; Maiti, P.; Chatterjee, A.; Mishra, N.S.; Meikap, B.C. (2025). Co-pyrolysis of rice stubble and waste motor oil for transformative biofuel generation. International Journal of Green Energy (IF: 3.1).

50. N.K. Sishu; C.I. Selvaraj; K.P. Arunachalam; H.C. Ananda Murthy (2025). Therapeutic potential of *Anamirta cocculus* (L.) Wight & Arn. leaf aqueous extract mediated biogenic gold nanoparticles. Green Processing and Synthesis (IF: 3).

51. A.; U.S.; Dey, P.; Celin, S.M.; D.B.; A.; Osborne, W.J. (2025). Biodegradation of 2,4,6-trinitrotoluene by Biofilm Forming and Plant Growth Promoting *Burkholderia gladioli*: An Approach Towards Degradation Pathway Prediction. Water, Air, and Soil Pollution (IF: 3).

52. Aswini, S.; Asha Devi, S. (2025). Exploring the impact of SNPs rs2476601, rs2488457, and rs33996649 on PTPN22 expression, structure, and anti-CCP level in rheumatoid arthritis of the Indian population: a case-control and computational study. Frontiers in Medicine (IF: 3).

JOURNAL PUBLICATIONS

Review Papers

1. Kheto, A.; Choudhury, D.B.; Sarkhel, S.; Sarkar, A.; Kumar, Y.; Kaur, S.; Gupta, A.K.; Bist, Y.; Vashishth, R.; Bharath, N.; Sehrawat, R.; Roy, A.; Gul, K.; Kumar, L. (2025). Anti-nutritional factors: Nutrient interactions, processing interventions, and health aspects. Food Chemistry (IF: 9.8).
2. S, S.K.; P, J.J.; Rao, D.R.; Koshy, J.T.; Sangeetha, D.; Vinod, A.R.; R, R.; Dalvi, Y.B. (2025). Unlocking the potential of cellulose and its derivatives from biomass as active packaging solutions for meat products: Recent advancements, applications and shelf-life assessment. Results in Engineering (IF: 7.9).
3. Abraham Gnanadass, S.; Pandey, S.; Viswanathan, P. (2025). Decoding cuproptosis and cuproplasia: implications for therapeutic strategies in renal cell carcinoma. Cell Death Discovery (IF: 7).
4. Bibha Mishra, A.; Tomer, V. (2025). Recent Insights on Synthesis, Stability, and Complexities of Water-in-Oil Pickering Emulsion: From Theory to Applications. Food Frontiers (IF: 6.9).
5. Kumar, A.; Das, S.; Ali, S.; Jaiswal, S.G.; Rabbani, A.; Rahman, S.M.E.; Chelliah, R.; Oh, D.-H.; Liu, S.; Wei, S. (2025). Mechanisms, applications and challenges of natural antimicrobials in food system. Food Bioscience (IF: 5.9).
6. Manimaran, K.; Rojviroon, T.; Rojviroon, O.; Ranjith, R.; Yuli Yanto, D.H.; Venkatesh, G.; Segaran, G.; Niamlang, S. (2025). Advances in metal nanofabrication using microbial exopolysaccharides: Emerging biomedical applications.International Journal of Pharmaceutics (IF: 5.2).
7. Dhanasekaran, P.; Chittibabu, S.; Mouzeyar, S.; Boulaflous Stevens, A.; Delattre, C.; Roche, J. (2025). From waste to wonder: The potential of protein hydrolysates as plant biostimulants in agriculture. Bioresource Technology Reports (IF: 4.3).
8. Lawrence, L.V.; Rewanwar, C.; Shown, O.; Vishnu, D. (2025). Impact of nanoparticles in microalgal quantification: Advancements in enhancing biomass valorization and evaluating toxicity effects. Bioresource Technology Reports (IF: 4.3).
9. V.S. Shanthini; C. Devarajulu; G. Moorthy (2025). Biodiesel: A comprehensive review of properties, catalyst types, and feedstock sources. Results in Chemistry (IF: 4.2).
10. S., Biswas; L., Muruganandam; I.M. Ganesh Moorthy (2025). Innovations and strategies for sustainable wastewater-integrated microalgal biodiesel production. Current Research in Biotechnology (IF: 4).

11. Matin, M.; K Singla, R.; Jóźwik, A.; Horbańczuk, J.O.; Ksepka, N.; Wysocki, K.; Ijinu, T.P.; Krishnakumar, N.M.; Sasidharan, S.P.; Obidike, I.C.; Igoli, J.; Fusi, F.; Frazzini, S.; Rossi, L.; Mickael, M.-E.; Joshi, A.; Adamska, O.; Stolarczyk, A.; Capanoglu, E.; Gunal-Koroglu, D.; Cheng, S.-H.; Atrooz, O.M.; Kharat, K.; Abu-Reidah, I.M.; Rani, N.; Kabra, A.; Kabra, R.; Preethidan, D.S.; Surendran, P.; Abdallah, E.M.; Harilal, S.; Sachdeva, R.; Abidullah, S.; Hemanth Kumar, H.K.; Arora, V.; Ramalingam, P.S.; Elangovan, S.; Arumugam, S.; Alam, T.; Aruci, E.; González-Burgos, E.; UreñaVacas, I.; López-Miranda, V.; Herradón Pliego, E.; Gautam, R.K.; Goyal, R.; Khan, S.A.; Rajan, L.; Onoja, J.O.; Vats, S.; Akinrinde, A.; Babiaka, S.B.; Simoben, C.V.; Enow, D.E.; Abuga, K.O.; Talwar, P.; Ravanan, P.; Boukhari, R.E.; Fatimi, A.; Schultz, F.; Gan, R.-Y.; Jean Noël, J.N.; Ba Njock, G.B.; Karpiński, T.M.; Mohaiminul Islam, M.; Uddin, S.J.; Fimognari, C.; Devkota, H.P.; Carev, I.; Wang, D.; Yongabi, K.A.; Mbeku, L.B.; Chakraborty, S.; Patnaik, S.S.; Thangapandiyan, S.; Baral, B.; Chandragiri, S.S.; Souto, E.B.; Lizard, G.; Brahmi, F.; Khallouki, F.; El Midaoui, A.E.; Lordan, R.; Bishayee, A.; Li, M.-Y.; Szymańska-Czerwińska, M.; Niemczuk, K.; Shill, M.C.; Ławiński, M.; Lushchak, O.; Wojtasik-Kalinowska, I.; Wierzbicka, A.; Jakschitz, T.; Dan, M.; Ghzaiel, I.; Rezig, L.; Vejux, A.; Zarrouk, A.; Ali, A.; Kan Yeung, A.W.; Bonn, G.K.; Shen, B.; Atanasov, A.G. Pieme, C.A.; Hing, G.B.; Lagoa, R.; Tzvetkov, N.T.; Matin, F.B.; Santini, A.; Arora, J.; Vasu, A.C.; Kadunganattil, S.; Noman, A.E.; Alsubhi, L.M.; Tarigan, I.L.; Khan, S.Y.; Zarrabi, A.; Kemung, H.M.; Varadaraju, K.R. (2025). Health-promoting and medicinal properties of *Zingiberaceae* family plants: A minireview with a special focus on galangal, turmeric, cardamom, and ginger. Current Research in Biotechnology (IF: 4).

12. Segueni, N.; Noor, A.; Ashok, M.; Basu, R.; Farqadain, S.; Górecka, A.; Czuba, Z.; Abdellatieff, H.; Acaroz, U.; Arslan-Acaroz, D.; Tas, N.; Hulaj, B. (2025). Benefits and Challenges of Propolis in Active Packaging: A Review. Packaging Technology and Science (IF: 3.7).

13. D.M. Mathew; A.V. Gopalakrishnan (2025). Targeting Nrf2 in acute myeloid leukemia: an updated review on its role in chemoresistance and emerging therapeutic strategies. Medical Oncology (IF: 3.5).

14. Das, R.; Deb, S.; Suresh, P.K. (2025). TMB as a predictive biomarker for ICI response in TNBC: current evidence and future directions for augmented anti tumor responses. Clinical and Experimental Medicine (IF: 3.5).

15. Roy, A.; Jk, N.; Italiya, G.; Subramanian, S. (2025). Emerging contaminants jeopardizing groundwater integrity: environmental implications. Environmental Pollutants and Bioavailability (IF: 3.2).

16. Babu, A.S.; Rao, K.V.B. (2025). A comprehensive review on antifungal compounds and biogenic nanoparticles from marine actinobacteria against opportunistic fungal infections. Folia Microbiologica (IF: 3.1).
17. Samrot, A.V.; Faradjeva, E.; Mohamed, A.A.; Sean, T.C.; Norbert, E.; Ng, X.Q.; Mun, C.Y.; Sze, C.H.; Arif, A.; Jie, L.S.; Cypriyana, J.; Saigeetha, S.; Angalene J, L.A.; Shree S, K.; Kumar, H.S.; Keerthika, V. (2025). Extraction, Purification, Characterization, Applications of Chitosan, Plant Gum Polysaccharides, and Other Polysaccharides: A Review. Scientifica (IF: 3.1).
18. Sharma, D.; Anabala, M.; Jain, V.V.; Shyam, M.; Prince, S.E.; Rajiniraja, R. (2025). Computational Landscape in Drug Discovery: From AI/ML Models to Translational Application. Scientifica (IF: 3.1).

GUEST LECTURES

"Regenerative Medicine Strategies for Bone Tissue Engineering"

By Dr. H. Balaji Raghavendran, Professor, Biomaterial Laboratory, Faculty of Clinical Research, Sri Ramachandra Institute of Higher Education and Research, Chennai

Date: 14th October 2025

Faculty Coordinator: Dr. Ganesh V, and Dr. Devi Rajeswari V

"NGS in Immunotech and Vaccination Development"

By Mrs. Sanjucta Adak, Research Staff, Beaudoin Lab, UConn Health, Connecticut, USA

Date: 17th October 2025

Faculty Coordinator: Dr. Gayathri M

"Factories and the Future: An Environmental View"

By Dr. J. K. Samson Ponselvan, Vice President – EHS, Viyash Life Sciences, Hyderabad

Date: 17th October 2025

Faculty Coordinator: Dr. Godwin Christopher J

"Sustainable Industry, Sustainable Earth"

By Dr. J. K. Samson Ponselvan, Vice President – EHS, Viyash Life Sciences, Hyderabad

Date: 17th October 2025

Faculty Coordinator: Dr. Godwin Christopher J

"Antibody-Based Therapeutics for Pancreatic Cancer"

By Dr. Prakash Radhakrishnan, Professor, University of Louisville, USA

Date: 27th October 2025

Faculty Coordinator: Dr. Ganesh V, and Dr. Devi Rajeswari V

GUEST LECTURES

"Traffic Rules in Neurons: What Happens if You Break Them?"

By Dr. B. Prasad Tammineni, Assistant Professor, University of Hyderabad

Date: 27th October 2025

Faculty Coordinator: Dr. Naveen Kumar P

"Artificial Intelligence and Computational Techniques in Cancer Informatics"

By Dr. Vasavi C. S., Assistant Professor (Senior Grade), Amrita Vishwa Vidyapeetham, Bengaluru

Date: 27th October 2025

Faculty Coordinator: Dr. Tamizhselvi R

"Biorefinery"

By Dr. Ramakrishna Sen, Professor and Dean, IIT Kharagpur

Date: 28th October 2025

Faculty Coordinator: Dr. Debasish Mishra

"Biology of Cancer: Cellular and Molecular Mechanisms"

By Dr. Sutapa Mukherjee, Senior Scientific Officer & HOD, Chittaranjan National Cancer Institute, Kolkata

Date: 29th October 2025

Faculty Coordinator: Dr. Abul Kalam Azad Mandal

"Transgenic Crops for Sustainable Agriculture – Entrepreneurship View"

By Dr. P. Murugesa Boopathi, Former Vice Chancellor – TNAU

Date: 29th October 2025

Faculty Coordinator: Dr. Rajasekaran C, and Dr. Kannan P

GUEST LECTURES

"Harnessing Immunity: Exploring the Modern Landscape of Vaccinology"

By Dr. K. Sundar, Senior Professor and Dean, Kalasalingam Academy of Research and Education

Date: 29th October 2025

Faculty Coordinator: Dr. Sankar Ganesh D

"FSSAI Legal Requirements and International Standards for Food Business Operators (FBO)"

By Mr. Rajesh Thiyagarajan, Lead Consultant & Food Auditor, Nucleus Consultants, Chennai

Date: 30th October 2025

Faculty Coordinator: Dr. Ramalingam C

"CRISPR/Cas9 Genome Editing: Basics to Application"

By Dr. Madan Kumar Perumal, Scientist & Assistant Professor (AcSIR), CFTRI, Mysuru

Date: 30th October 2025

Faculty Coordinator: Dr. Kanagavel Deepankumar

"From Bench to Bedside: Emerging Trends in Genetic Counselling"

By Dr. Veronica Preetha Tilak, Clinical Geneticist, St. John's Medical College Hospital, Bengaluru

Date: 30th October 2025

Faculty Coordinator: Dr. Abilash VG, and Dr. Babu G

"Understanding Membrane Transport: Gateways of the Cell"

By Dr. Vinoth Kumar Selvaraj, Assistant Professor, AIMST University

Date: 30th October 2025

Faculty Coordinator: Dr. Sabina EP, and Dr. Rahul Vashishth

GUEST LECTURES

"Metagenomics"

By Dr. L. Karthik, Founder and CEO, Arqgene, Vellore

Date: 30th October 2025

Faculty Coordinator: Dr. Mythili S, and Dr. Sangeetha Subramanian

"HACCP Practices in Food Industry"

By Mr. Rajesh Thiyagarajan, Lead Consultant & Food Auditor, Nucleus Consultants, Chennai

Date: 31st October 2025

Faculty Coordinator: Dr. Kanagavel Deepankumar, and Dr. Ramalingam C

"Engineering the Future: Bioprocess Advancements to Scale the Protein Therapeutics Market towards a Trillion-Dollar Valuation"

By Dr. Vikas Chandrawanshi, Assistant General Manager of R&D, Instas Pharmaceuticals, Ahmedabad

Date: 31st October 2025

Faculty Coordinator: Dr. Sreeja S, Dr. Dhanya V, and Dr. Thirupathi Kumar Raja S

"Genetic Treatment for Hematological Disorders"

By Dr. Saravanabhavan Thangavel, Scientist, CSCR, CMC Vellore

Date: 3rd November 2025

Faculty Coordinator: Dr. K. M. Gothandam

"How Hackers Think — and How to Stop Them"

By Mr. Monis, Senior Programmer (Information Security Professional), CMC, Vellore

Date: 3rd November 2025

Faculty Coordinator: Dr. Jayanthi Abraham and Dr. Danie Kingsley J

GUEST LECTURES

"Reflections on My Career Path from Academia to Industry: A Memorable Journey of Value Creation"

By Dr. Dinesh Palanivelu, Director – R&D, Thermo Fisher Scientific, Bangalore

Date: 3rd November 2025

Faculty Coordinators: Dr. Shanthi V, and Dr. Ramanathan K

"Cutting-Edge Tools in Antibody Discovery to Innovate Research Products and Drive Breakthroughs in Immunoassay Applications"

By Dr. Dinesh Palanivelu, Director – R&D, Thermo Fisher Scientific, Bangalore

Date: 3rd November 2025

Faculty Coordinators: Dr. Ramanathan K, and Dr. Shanthi V

"Drug Repurposing and Virtual Lab Tour for IREX Program"

By Dr. Vinodh Kannappan, CTO, Disulfcan Ltd | University of Wolverhampton, UK

Date: 4th November 2025

Faculty Coordinator: Dr. Mohanasrinivasan V, and Dr. Subathra Devi C

"Fundamental Statistical Methods for Research Data"

By Prof. Upendra Kumar Pradhan, ICAR-IASRI, New Delhi

Date: 4th November 2025

Faculty Coordinator: Dr. Subhash Kumar, Dr. Asmita Mishra, and Dr. Payel Ghosh

"Haematopoietic Stem Cell Transplantation"

By Dr. Uday Prakash Kulkarni, Professor, CMC Ranipet

Date: 4th November 2025

Faculty Coordinator: Dr. Balaji Balakrishnan

GUEST LECTURES

"miRNA Mediated Regulation of Synaptic plasticity"

By Dr. Kumar Aavula. Research Associate, Department of Cell Biology, Harvard Medical School, Boston, Massachussets, USA

Date: 5th November 2025

Faculty Coordinator: Dr. Gothandam MK

"Mechanoimmunology in Microgravity – A Modelling Perspective"

By Dr. Anirudh Murali, CSIR-NCL, Pune

Date: 5th November 2025

Faculty Coordinator: Dr. Everett Jacob Remington N

"Genetic Engineering of Stem Cells for Treatment of Genetic Diseases"

By Dr. Gurbind Singh, Scientist and Head, GMP Facility, CSCR, CMC Vellore

Date: 6th November 2025

Faculty Coordinator: Dr. Dhanasingh Immanuel (CBST), and Prof. Siva R

"Protein Engineering and Its Application in Protein Cage Formation & Targeted Drug Delivery"

By Dr. Soumyananda Chakraborti, Associate Professor, BITS Pilani – Hyderabad

Date: 6th November 2025

Faculty Coordinator: Dr. Arkyajit Dutta, and Dr. Syama HP

"Process of Drug Discovery in Industry"

By Dr. Deepak H. B., Group Leader, Jubilant Biosys, Bengaluru

Date: 6th November 2025

Faculty Coordinator: Dr. Sabina EP, and Dr. Jabez Osborne W

GUEST LECTURES

"From Field to Fork: The Journey of Millets into Innovative Food Products"

By Mrs. R. Subathra, Founder and CEO, PVR Foods, Coimbatore
Date: 6th November 2025
Faculty Coordinator: Dr. Jeevitha GC, and Dr. Kanagavel Deepankumar

"Precision Fermentation for the Production of Functional Proteins"

By Dr. Tamilvendan Manavalan, Illinois Advanced Research Center at Singapore
Date: 7th November 2025
Faculty Coordinator: Dr. Babu G, and Dr. Abilash VG

"Nanotechnology: Future of Gene Manipulation"

By Dr. B. S. Unnikrishnan, Dalhousie University, Canada
Date: 7th November 2025
Faculty Coordinator: Dr. Syama HP, and Dr. Arkyajit Dutta

"Bacterial Whole Genome Sequencing – From Sequencing Data to Genome Assembly & Beyond"

By Dr. Roli Budhwar, CSO, Bionivid Technology Pvt. Ltd., Bengaluru
Date: 7th November 2025
Faculty Coordinator: Dr. Nalini E

"Translating Research Experience into Innovations in Plant Biotechnology"

By Dr. Venugopal Rajanbabu, Tamil Nadu Agricultural University, Coimbatore
Date: 7th November 2025
Faculty Coordinator: Dr. Sunantha G, Dr. Kannan P, and Dr. Ponraj P

GUEST LECTURES

"Biomarkers at the Frontlines: Shaping the Future of Heart and Brain Diagnostics"

By Dr. Siddarth Raajasekar PhD, Assistant Professor, Department of Biotechnology, Kalaingnar Karunanidhi Institute of Technology, Coimbatore

Date: 7th November 2025

Faculty Coordinator: Dr. Everette Jacob Remington N

"Journey as an Entrepreneur in the Food Industry"

By Mrs. Deepa Muthukumarasamy, Founder and CEO, Some More Foods Pvt. Ltd., Tiruppur

Date: 7th November 2025

Faculty Coordinator: Dr. Nalini E

"Genomics for the Next Generation: Preparing for the Data Deluge"

By Ms. Anushree Dileep, Clinical Genomics Scientist, M42 Health, Abu Dhabi

Date: 8th November 2025

Faculty Coordinator: Dr. Radha Saraswathy

"Genetic Counselling – A Growing Career in the Genomic Era"

By Ms. Pooja R Rayasam, Consultant Genetic Counsellor, CGC, Bengaluru

Date: 10th November 2025

Faculty Coordinator: Dr. Priti Talwar

"From Mutation to Eye Color: Genetic Pathways in *Drosophila melanogaster*"

By Dr. Raju Baskar, UT Southwestern Medical Center, USA

Date: 10th November 2025

Faculty Coordinator: Dr. Aravind Selvin Kumar R

GUEST LECTURES

"Role of DJ-1D Proteins in Plant Abiotic Stress Responses"

By Dr. Melvin Prasad, Technical University of Denmark
Date: 11th November 2025
Faculty Coordinator: Dr. Naveen Kumar P, and Dr. Kannan P

"Millet Biotechnology: Yesterday, Today, and Tomorrow"

By Dr. Muthamilarasan M, University of Hyderabad
Date: 11th November 2025
Faculty Coordinator: Dr. Ponraj P, Dr. P. Kannan, and Dr. Sunantha G

"Decoding Viral Diversity: Classification and Mechanisms of Pathogenesis"

By: Dr. D. Prabu, Head, Department of Microbiology, Dr. ALM PB IGMS, University of Madras, Chennai
Date: 11th November 2025
Faculty Coordinator: Dr. Jabez Osborne W and Dr. Rahul Vashishth

"From Concept to Impact: Pioneering Avesthagen's Journey in Food, Pharma and Population Genetics"

By Dr. Villoo Morawala Patell, Founder and CMD, Avesthagen Ltd.
Date: 12th November 2025
Faculty Coordinator: Dr. Karthikeyan S

"Computer-Aided Design of Molecular Therapeutics"

By Dr. G. Chandra Sekhar, ACS International India Pvt. Ltd.
Date: 12th November 2025
Faculty Coordinator: Dr. R. Rajasekaran, and Dr. C. Sudandiradoss

"Trends of Infectious Diseases and Vaccine Development"

By Dr. Vivekanandan Perumal, IIT Delhi
Date: 12th November 2025
Faculty Coordinator: Dr. Asit Ranjan Ghosh

GUEST LECTURES

"Next Generation Sequencing and Related Genomic Technologies: Transforming Precision Medicine"

By Dr. Shri Preethi Manikandan, Variant Scientist, M42 *Global Tech-Enabled Healthcare Company*, Abu-Dhabi, UAE

Date: 13th November 2025

Faculty Coordinator: Dr. Asha Devi S

"Cloud Computing"

By Mr. Rajavelan G, Lead Consultant, Infosys Limited, Chennai

Date: 13th November 2025

Faculty Coordinator: Dr. Rameshkumar Santhanam

"From Data to Discovery: AI–Tech Synergy Powering Next-Generation Research"

By Dr. Amit Roy, Ph.D, Senior Scientist and Group Leader, Faculty of Forestry and Wood Sciences, Czech University of Life Sciences, Prague, Czech Republic

Date: 15th December 2025

Faculty Coordinator: Dr. Radha Saraswathy

"Recent Approaches in Food Waste Management"

By Ms. Parul (Kamat) Khatav, Director, SS Techno; Founder & CEO, EcoBacs, Pune, Maharashtra

Date: 15th November 2025

Faculty Coordinator: Dr. Suneetha V.

"From Entry to Epidemic: New Perspectives on Beetle–Fungus–Tree Interactions in Forests"

By Dr. Amit Roy, Ph.D, Senior Scientist and Group Leader, Faculty of Forestry and Wood Sciences, Czech University of Life Sciences, Prague, Czech Republic

Date: 18th December 2025

Faculty Coordinator: Dr. Suthindhiran K and Dr. Jayasri MA

RESEARCH AND DEVELOPMENT SERIES

"Bone Morphogenetic Proteins: Discovery and Application in Orthopedic Medicine"

by Dr. T. Kuber Sampath, Cofounder and CEO of perform Biologics Inc., and founder and CEO of Skeletogen LLC, Boston MA

Date: 31st October 2025

"Ocular Hypertension and Primary Open Angle Glaucoma Research"

by Dr. Padmanabhan Pattabiraman, Associate Professor, Biochemistry and Molecular Biology, Eugene and Marilyn Glick Eye Institute, Member of the Stark Neuroscience Research Institute, Member of Pharmacology and Toxicology Indiana University School of Medicine

Date: 11th November 2025

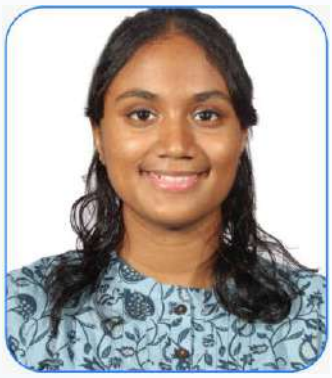
"Accelerating AMR Discovery: Integrating NGS and AI for the Next Generation of Microbial Surveillance"

By Dr. Basil Britto Xavier, Senior Researcher and Research Co-Ordinator, DRAIGON EU Project, department of Medical Microbiology and Infection Prevention, University Medical Center Groningen, University of Groningen

Date: 9th December 2025

STUDENT ACHIEVEMENTS

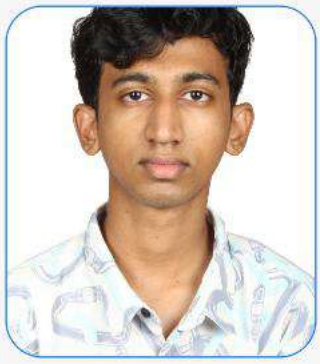
Makeathon 2025



Manasvi Jagannath (23BBT0140)

Shreya Pattanayak (23BBT0111)

Pranay Tyagi (23MSI0162)

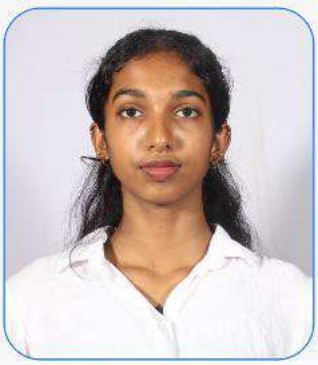


Rajamanickam M (23BBT0047)

Congratulations to the Second Prize winners, who were awarded Rs. 15,000/- for their outstanding project titled **"Badam Halwa."**

STUDENT ACHIEVEMENTS

Atharv Ranbhoomi 2025
Dance Competition First Place



Geethika P Nambiar (23BBT0091)

V. Varnavi (23BBT0102)

Vismaya Madhusoodanan (24BBT0218)

STUDENT ACHIEVEMENTS

SRM Model UN 2025
Best Delegation Award

Geethika P Nambiar (23BBT0091)

STUDENT ACHIEVEMENTS

iGEM 2025 Paris Silver Medal

STUDENT ACHIEVEMENTS

iGEM 2025 Paris Silver Medal

Naisarg Patel (22BBT0278)

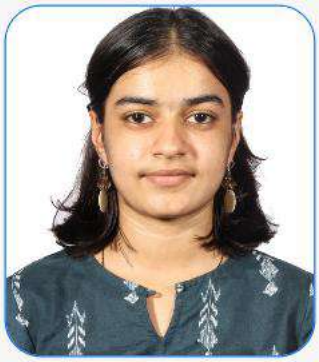
Mohak Bhattacharyya (22BBT0174)

Advin Shaju Puthussery (22MSI0183)

Afnan Rahman Kausar (23BBT0128)

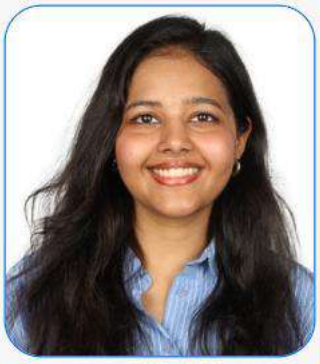
Atharva Prashant Purohit (22BBT0025)

Kevin Thomas Paul (22BBT0320)

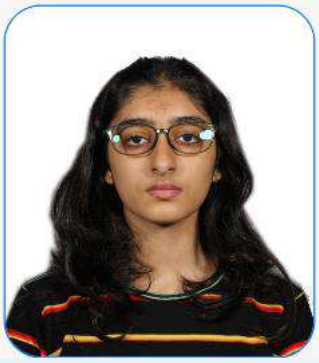


Kunjal Ningoo (23BBT0157)

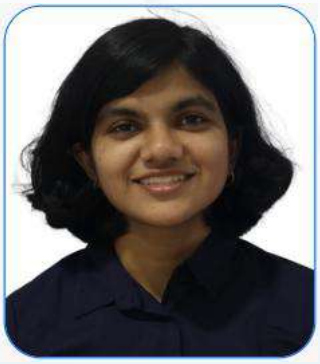
Manas Kulkarni (22BBT0125)



Namyaa Singh (22BBT0112)



Riya Shadija (23BBT0104)



Shwetha R (22BBT0121)

Srinidhi Kannan (23BBT0014)

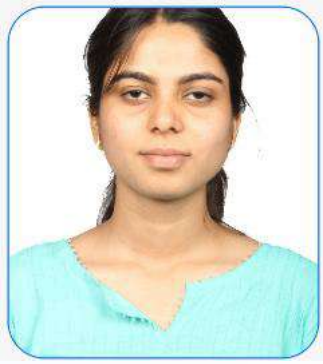
Suganth G. S. (23BBT0077)

Suhas Manikant Surisetti (22BBT0290)

Vivek Adhikary (22BBT0042)

STUDENT ACHIEVEMENTS

BITS Pilani TechSeva Ideathon Second Place



Harshita Kumar (23BBT0130)

STUDENT ACHIEVEMENTS

EatWise Short Video Competition
Third Place

Akash Tiju
(24MSI0131)

STUDENT ACHIEVEMENTS

BioMANTHAN 2025 Best Poster Presentation Award

Dibyanshu Lahiri (23BBT0073)

Anushka Mukherjee (23BBT0079)

Bio-MANTHAN
Innovation for health

40th International Conference Bio-MANTHAN 2025
Organised by
Indian Institute of Technology Ropar

BEST POSTER AWARD
This is to certify that
DIBYANSHU LAHIRI
has been conferred with the Best Poster Award
at Bio-MANTHAN
4th - 7th December, 2025

Prof. Ashok Kumar
President, SBAOI

Prof. Navin Kumar
Convener & Organising Secretary

Prof. Dhirendra S. Katti
President, STERMI

Bio-MANTHAN
Innovation for health

40th International Conference Bio-MANTHAN 2025
Organised by
Indian Institute of Technology Ropar

BEST POSTER AWARD
This is to certify that
ANUSHKA MUKHERJEE
has been conferred with the Best Poster Award
at Bio-MANTHAN
4th - 7th December, 2025

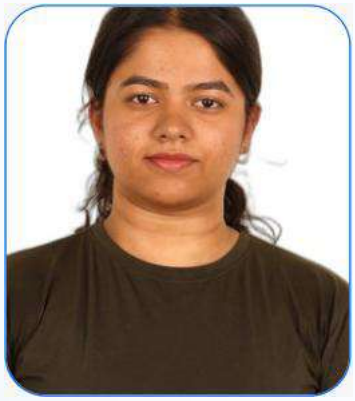
Prof. Ashok Kumar
President, SBAOI

Prof. Navin Kumar
Convener & Organising Secretary

Prof. Dhirendra S. Katti
President, STERMI

STUDENT ACHIEVEMENTS

Freshers' Tournament 2025



Avishka Dhingra
(25BBT0048)
Winner — Basketball

Shivani Muralidharan
(25BBT 0195)
Winner — Volleyball

Swarnavarshini Alagappan
(24BBT0180)
Winner — Volleyball 3v3

Akshaya Priya YM
(25MFI0061)
Winner — Throwball

Teli Yash Gurunath Ankita (25MSG0030)
Runner-up — Cricket

Monalika Saha
(24BBT0036)
Runner-up — Kabaddi

Janavi Ragavan
(25BBT0136)
Runner-up — Volleyball

Ria Prashant Vaishna
(25BBT0002)
Runner-up — Volleyball

Sohinee Ray
(24BBT0080)
Runner-up — Kabaddi

Anoushka Hemanth
(25MFI0024)
Runner-up — Throwball

SCHOLAR ACHIEVEMENTS

NPTEL course - Principles of Downstream Techniques in Bioprocess Top Scorer

G. Madhubala
(24PHD0481)

Elite

NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

Skill India

This certificate is awarded to

MADHUBALA G

for successfully completing the course

Principles of Downstream Techniques in Bioprocess

with a consolidated score of 62 %

Online Assignments	24.06/25	Proctored Exam	37.5/75

Total number of candidates certified in this course: 12

TOPPER

Prof. Andrew Thangaraj
Chair
Centre for Outreach and Digital Education, IITM

Jul-Oct 2025
(12 week course)

Prof. Vignesh Muthuvijayan
NPTEL Coordinator
IIT Madras

Indian Institute of Technology Madras

swayam

International Conference cum Workshop on Global Summit on Innovative Drug Design, Discovery, and Translational Research Best Oral Presentation Award

Elizabeth Annie George
(24PHD0013)

BIDDS

Bioinformatics and Drug Discovery Society

INTERNATIONAL CONFERENCE
CUM WORKSHOP

Global Summit on Innovative Drug Design, Discovery and Translational Research

October 29 - 31, 2025

CERTIFICATE OF MERIT

This certificate is presented to

Elizabeth Annie George

for securing the Best ~~Poster~~ / Oral Presentation Award in the Global Summit on Innovative Drug Design, Discovery and Translational Research organized at Pondicherry University, Puducherry.

(Dr. R. Krishna)
HoD

(Dr. S. Mohane Coumar)
Organizing Secretary

(Dr. A. Dinakara Rao)
Convener

(Dr. Velumurugan)
Chairman, BIDDS

SCHOLAR ACHIEVEMENTS

24th International Conference on Bioinformatics (InCoB 2025) Best Oral Presentation Award

Soumyajit Sarkar (23PHD0764)

24th International Conference on Bioinformatics (InCoB 2025)

BEST ORAL PRESENTATION AWARD

is presented to

Soumyajit Sarkar

for the oral: "Unravelling the possible mechanisms of the anti-angiogenic effects of the Oroxylum indicum against non-small cell lung cancer (NSCLC): a combinatorial in silico approach ".

at the 24th International Conference on Bioinformatics (InCoB 2025) held at Bose Institute from 18th - 20th September 2025

Dr. Sudipto Saha | Dr. Shoba Ranganathan | Dr. Harpreet Singh

International Conference- 27 BioInquirer 2025 Silver Medal for Oral Presentation

Aarthi Y (22PHD0153)

IIHS Scientific Committee

IIHS MULTIVERSITY

Silver Medal Award

This is to certify that

A. Yesupatham

won the Silver Medal Award for Oral Presentation at the 27th BioInquirer Research Forum

"All for Health, Health for All: Collaborative Innovations for Equitable Healthcare"

held at the International Institute of Health Sciences, Sri Lanka on 21st November 2025

Dr. Renuka Jayatissa, Vice Chancellor, International Institute of Health Sciences

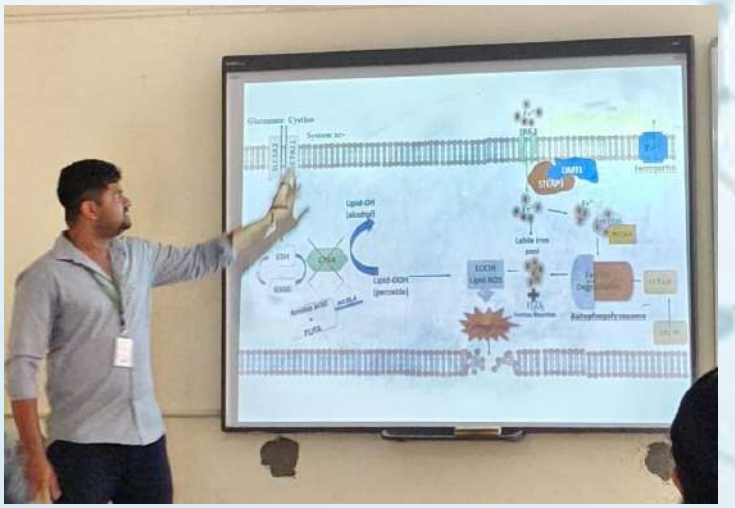
Dr. Kithsiri Edirisinghe, Dean, Faculty of undergraduate studies, International Institute of Health Sciences

Deakin | Metropolia | VIT | NUS | une

Date of Issue: 21st of November, 2025

JOURNAL CLUB MEETINGS

	DATE	TOPIC	RESEARCH SCHOLAR	MODERATOR
1	15.10.2025	Enhanced aqueous phosphate removal using chitosan-modified zirconium-loaded cork biochar	Ms. Vharshini S	Dr. Reena Rajkumar B
2	15.10.2025	Spatial and functional diversity of innate lymphoid cells in the human female genital tract may contribute to antiviral responses to HIV	Mr. Faraz Ahmed S	Dr. Reena Rajkumar B
3	22.10.2025	Green and facile synthesis of silver nanoparticles (Ag NPs) using Rhamnusprinoides (Gesho) leaf extract for antibacterial, and photocatalytic activities	Mr. Zoubiya Afshan A	Dr. Gothandam K M
4	22.10.2025	Alzheimer's disease pathology propagation by exosomes containing toxic amyloid-beta oligomers	Mr. Bharathi K	Dr. Gothandam K M
5	29.10.2025	Identification of the Shared Gene Signatures and Biological Mechanism in Type 2 Diabetes and Pancreatic Cancer	Ms. Blessy Kiruba	Dr. Kavya D
6	29.10.2025	Akkermansia muciniphila-derived extracellular vesicles influence gut permeability through the regulation of tight junctions	Mr. Anjan Kumar D	Dr. Kavya D
7	05.11.2025	Construction of a prognostic model for endometrial cancer related to programmed cell death using WGCNA and machine learning algorithms	Ms. Oishee Mondal	Dr. Jeevitha G C
8	05.11.2025	Discovery of a novel ferroptosis inducer-talaroconvolutin A—killing colorectal cancer cells in vitro and in vivo	Mr. Jose Mathew D	Dr. Jeevitha G C & Dr. Marttin G P



COMPLETED DOCTORATES THIS SEMESTER

Our heartfelt congratulations to the scholars who have given their final *viva voce* presentations this semester. We wish you the best in your future endeavors.

	Scholar	Supervisor	Thesis Title	Date
1	Ms. Praveena V	Dr. Mythili S	Phyocoremediation of tannery effluent of Cr(VI) by using microalgae- *Chlamydomonas moewusii, Auxenechlorella pyrenoidosa* and *Scenedesmus sp.*	01.12.2025
2	Ms. Ajila V	Dr. Sowbiya Muneer	Circadian clock based chloroplast proteomics and gene regulatory network in *Spinacia oleracea* under drought and salt stress	28.11.2025
3	Ms. Geetha G	Dr. Amitava Mukherjee	Removal of emerging pollutants from aqueous system using green synthesized clay-nzvi nanocomposites	25.11.2025
4	Ms. Swati Punetha	Dr. Suneetha V	Identification and characterisation of microbial biopolymer and biochar from floral waste	25.11.2025
5	Ms. Durga Anusha S	Dr. Deepa Sankar P	Analysing the secondary metabolites of *Gardenia jasminoides* suspension cultures on elicitation	14.11.2025
6	Ms. Poornimaa Mu	Dr. Ramanathan K	Development of machine learning model and novel therapeutics for glioma: focus on MIDH proteins	24.11.2025
7	Mr. Ananthaselvam A	Dr. Chandra Sekaran N	Investigating the effects of microplastics and nanoplastics on the digestive enzymes function and gut probiotic with special reference to *Limosilactobacillus reuteri*	13.11.2025
8	Mr. Premkumar T	Dr. Sajitha Lulu S	Illuminating the molecular routes of Alzheimer's disease; a multifaceted approach	25.11.2025
9	Ms. Pavidharshini S	Dr. Ramalingam C	Exploring gel-based low-fat cocoa butter substitutes and complex coacervate as an emulsifier for the production of dark chocolates	16.10.2025
10	Ms. Shrila Banerjee	Dr. Abul Kalam Azad Mandal	Anticancer study of epigallocatechin-3-gallate-regulated microRNAs and evaluation of epigallocatechin-3-gallate and mir-21 inhibitor co-treatment against mda-mb-231 breast cancer cells	30.10.2025
11	Mr. Karun Wilson	Dr. Sathiavelu A	Microbial consortium mediated plant defence mechanism against early blight disease in tomato (*Solanum lycopersicum* l.)	27.10.2025
12	Ms. Babitha Joseph	Dr. Babu S	Development and evaluation of organic nutrient management strategy and its impact on molecular physiology for stress tolerance in sunflower (*Helianthus annuus* l.)	16.10.2025

LABORATORIES AND INFRASTRUCTURE

B.Tech. Biotechnology Teaching Labs: Bioinformatics Labs (I–III), Central Instrumentation Lab, SEM Lab, Biochemistry & Immunology Lab, Cell & Molecular Biology Lab, Bioprocess & Downstream Processing Labs, Stem Cell Lab, Tissue Culture Lab, High Throughput Screening Lab, Animal House, and Histopathology Lab.

Centralized Facilities: UV Transilluminator, Deep Freezers (including –80°C), Rotary Evaporator, Ice Maker, Milli-Q, Sonicator, Viscometer, Lyophilizer, Gel Documentation System, UV Spectrophotometer, ELISA Reader, Gas Chromatography, HPLC, Inverted Microscope, Nanodrop, and more.

STUDENTS' CORNER

Artificial Intelligence Driven Multi-Omics Integration for Precision Biology

The rapid expansion of high-throughput sequencing and molecular profiling technologies has generated unprecedented volumes of biological data across genomics, transcriptomics, proteomics, metabolomics, and epigenomics. While these multi-omics datasets offer a comprehensive view of biological systems, their sheer complexity presents significant analytical challenges. In this context, artificial intelligence (AI) has emerged as a transformative tool for integrating heterogeneous omics data and extracting biologically meaningful insights that transcend traditional statistical approaches. AI-driven multi-omics integration employs machine learning and deep learning architectures, including random forests, autoencoders, graph neural networks, and attention-based models, to identify non-linear relationships across molecular layers. These models enable the discovery of regulatory networks, pathway crosstalk, and disease-associated molecular signatures that remain elusive when individual omics datasets are analyzed in isolation. By learning hierarchical patterns from large datasets, AI systems can uncover emergent properties of biological systems with enhanced predictive accuracy. In biomedical research, AI-based multi-omics approaches are redefining precision medicine. Integrative models have been successfully applied to stratify cancer subtypes, predict therapeutic responses, and identify prognostic biomarkers based on patient-specific molecular profiles. By correlating transcriptomic signatures with proteomic activity and metabolic flux, AI frameworks facilitate a systems-level understanding of disease heterogeneity and progression. This capability is particularly valuable in complex disorders such as neurodegenerative, metabolic, and immune-mediated diseases, where single-layer analyses are insufficient. Beyond human health, AI-enabled multi-omics integration is increasingly applied in microbial, environmental, and agricultural biotechnology to characterize microbial communities, optimize bioprocesses, enhance bioremediation, and link gene expression with phenotypic traits under environmental stress. Despite its potential, challenges remain in data standardization, model interpretability, and dataset bias. Ongoing efforts in explainable AI, robust validation, cloud computing, and federated learning are improving transparency and enabling secure, large-scale collaboration. Overall, AI-driven multi-omics integration represents a significant advancement in modern biotechnology, accelerating progress in precision biology, translational research, and sustainable biotechnological applications.

Source: Tarasava, K. (2023, November 14). How AI is transforming synthetic biology: Reaching far beyond biopharma. SynBioBeta.

Ansh Bahri (22BBT0293)

The Identification of Regulatory T cells and FOXP3

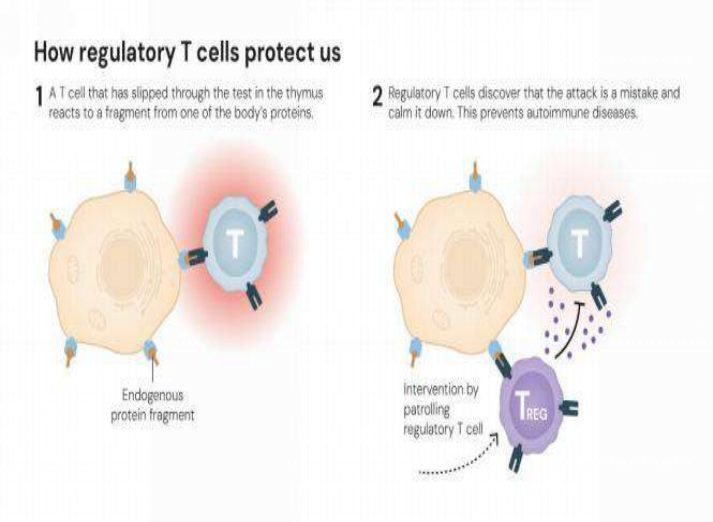
Every so often, science makes a discovery that shifts how we understand life itself and how we might treat diseases. The Nobel Prize in Physiology or Medicine honours those rare breakthroughs that change our view of the human body forever.

In 2025, it was awarded to Mary Brunkow, Fred Ramsdell and Shimon Sakaguchi for discovering how the immune system knows when to stop attacking. Your immune system is your body's defence army. It is built to fight virus, bacteria, and even cancer cells. Among its most skilled fighters are the T-cells, the elite commandos trained to identify enemies. But before battle, they are trained inside a tiny organ above your heart called the thymus. Here, any T-cell that attacks its own body fails the test, and gets killed. This process is called Central Tolerance.

But even after all that training, some dangerous cells escape into the bloodstream. They should have caused diseases, but they didn't. So, scientists asked, "What's stopping them?". In Japan, Shimon Sakaguchi removed tiny groups of T-cells from mice just to see what would happen. When those cells were gone, the mice's immune system went wild, attacking their own organs, when he added those cells back, the chaos stopped. He named them regulatory T-cells, or T-regs, the guardians of immune balance.

Meanwhile, two scientists from Seattle were facing their own mystery. Mary Brunkow and Fred Ramsdell studied mice that looked fine at birth until their immune system self-destructed. They searched gene by gene until they found the culprit, Foxp3. A single mutation in Foxp3 destroyed the body's ability to form peacekeeper cells. Sakaguchi had found the cells, Brunkow and Ramsdell found the genes. The puzzle was complete. The same mutation appeared in children with a rare autoimmune disease, IPEX syndrome.

This discovery changed medicine, from autoimmunity to transplants to cancer. They showed that immunity isn't an on/off switch, it's a balance. In autoimmune diseases, T-regs are too weak, scientists can now strengthen them. In cancer, the opposite happens. The T-regs are too strong, lifting that break helps the body to fight back. In organ transplants, T-regs may one day help us accept new organs naturally without any lifelong immunosuppressive drugs.



Source: Immune tolerance: The identification of regulatory T cells and FOXP3. The Nobel Prize in Physiology or Medicine 2025, 6 October 2025 (www.nobelprize.org)

Sai Neelakshi Mohanty (23BBT0098)

A New Era in Brain Research: Growing Human-Like Brain Tissues in the Lab

One of the most exciting breakthroughs in biotechnology right now comes from researchers at MIT, who have developed a three-dimensional human brain tissue model that may change how we study neurological diseases and discover new treatments. Traditionally, understanding human brain disorders like Alzheimer's or Parkinson's has been limited by our access to actual human brain tissue. While animal models and simple cell systems have helped, they can't fully mimic the complexity of the human brain.

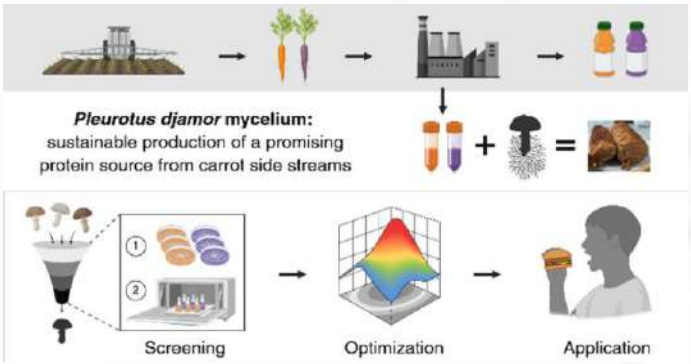
The team at MIT has now built what they call Multicellular Integrated Brains (miBrains) — lab-grown structures that include all the major types of cells found in human brain tissue, such as neurons, support cells, and blood vessel components. These tissues are grown from a person's own induced pluripotent stem cells, meaning they can reflect individual genetic backgrounds. This could allow scientists to study how specific diseases affect different people and test drug candidates far more effectively than before.

What makes this work particularly powerful is not just that it mimics brain tissue structure, but that it functions more like real brain material. Researchers can introduce genetic changes to simulate disease states, watch how cells interact, and screen potential treatments in a controlled setting. This bridges a major gap between simple lab experiments and human clinical trials, opening new paths for understanding complex neurological conditions and accelerating drug discovery.

Such advancements are part of a broader shift in biotechnology toward models that closely represent human biology, which promises more precise science and better outcomes for patients in the future.

Source: Human Brain Model for Disease Research and Drug Discovery, MIT News

Transforming Carrot Waste into Preferred Protein: A Sustainable Food Innovation



Scientists have developed a novel approach to convert carrot processing waste into a nutritious and palatable protein source, offering a promising strategy for sustainable food production and circular economy systems. This research, reported in the Journal of Agricultural and Food Chemistry and highlighted by the American Chemical Society, demonstrates how agricultural by-products can be repurposed into valuable food ingredients with enhanced sensory qualities.

The global demand for efficient and environmentally responsible protein sources is rising alongside population growth and concerns over food security. Traditional protein production, whether from animal or plant sources like soy and chickpeas, often requires substantial land, water, and energy inputs. In contrast, the study explored using carrot side streams as a substrate to cultivate edible fungal mycelium, the vegetative network of fungi known for rapid growth and nutrient richness.

Researchers screened over 100 fungal strains to identify the most effective candidate for converting carrot biomass into protein. Pleurotus djamor, commonly known as the pink oyster mushroom, emerged as the top performer in terms of both growth efficiency and protein yield. Under optimized conditions, the resulting fungal mycelium exhibited protein quality comparable to conventional plant proteins, with low fat content and appreciable dietary fiber — a profile desirable for human nutrition.

To assess the culinary potential of this novel protein, the research team incorporated the fungal mycelium into experimental vegan patties and sausages. Sensory evaluation by volunteer participants revealed a marked preference for products made entirely with the mycelium-derived protein over those formulated with traditional plant proteins such as soy and chickpea. These findings suggest that not only is the protein nutritionally promising, but it also meets or exceeds consumer expectations for taste and texture — a critical factor for real-world food adoption.

This innovation exemplifies how food systems can be redesigned to reduce waste and enhance sustainability. By turning side streams — typically considered low-value or discarded — into high-quality food components, the process minimizes environmental impact without the need for additional agricultural resources. The authors argue that such mycelium-based proteins could contribute meaningfully to efforts aimed at securing resilient, sustainable diets worldwide. Therefore, transforming carrot waste into preferred protein not only addresses waste management challenges but also opens new avenues for sustainable nutrition, with significant implications for food science, environmental stewardship, and global health.

Source: American Chemical Society. "Scientists turn carrot waste into protein people prefer." ScienceDaily. ScienceDaily, 30 December 2025.

Toshika Mishra (21PHD0218)

SOME GLIMPSES OF SBST

EMP ID	FACULTY NAME	DESIGNATION	ACHIEVEMENTS	DETAILS
10357	Dr. KARTHIKEYAN S	Professor and Director Alumni Affairs	Service	>25 years
10357	Dr. KARTHIKEYAN S	Professor and Director Alumni Affairs	Industry Consultancy Projects	>75 Lakhs
10791	Dr. SIVA R	Professor Higher Academic Grade	International Visit	More than 10 countries
10832	Dr. SUNEETHA V	Professor Higher Academic Grade & Dean SBST	Awards @ > 55	RED CROSS, DST, FICCI, ICMR, Govt. of India
10832	Dr. SUNEETHA V	Professor Higher Academic Grade & Dean SBST	Patents	20
12175	Dr. GEORGE PRIYA DOSS	Professor	Publications	> 350
12175	Dr. GEORGE PRIYA DOSS	Professor	Citations	6,656 Citations by 5,098 documents
12175	Dr. GEORGE PRIYA DOSS	Professor	h- index	41
12365	Dr. PRITI TALWAR	Professor	Most cited paper	1683- Autophagy

STUDENT NOTABLE ACHIEVEMENT

Reg. No	Alumni Name	ACHIEVEMENTS
06BBT090	Ms. Kadhambari S Viswanathan	"Limca Book of Records"
08BBT166	Mr. Rachit Raj	Indian Administrative Service Govt. of India with more distinguished awards - UPSC 3rd Rank Holder
08BBT178	Mr.Rajveer Meena	Guinness World Record
11BBT0081	Mr. Vidur Sabharwal	secured All India Rank (AIR)-1 in GATE EXAMINATION 2015 (Biotechnology).
12BBT0104	Lt.Shubhangi Swaroop	First female pilot of the Indian Navy. She is a pilot of Maritime reconnaissance aircraft in Indian Navy

STAFF

EMP ID	STAFF NAME	ACHIEVEMENTS
10123	Mrs. Santhi Veerasamy	>27 years of service
12176	Mrs. K. Mythili	Proficient in multiple languages

EMP ID	FACULTY NAME	DESIGNATION	ACHIEVEMENTS	DETAILS
10515	Dr. KANNABIRAN K	Professor Higher Academic Grade	Guided more Ph.D Scholars and awarded	>18
10712	Dr. SUDHA RAMAIAH	Professor	Sports and games	Participated and Won Prizes > 15 years
10791	Dr. SIVA R	Professor Higher Academic Grade	International Visit	More than 12 countries
10832	Dr. SUNEETHA V	Professor Higher Academic Grade & Dean SBST	UG Publications	>72
10832	Dr. SUNEETHA V	Professor Higher Academic Grade & Dean SBST	Abroad University Visited @ >25	Nanyang Technological University (NTU), National University of Singapore (NUS), , and Singapore Management University (SMU), Tribhuvan University, Kathmandu University, Pokhara University, University of Oxford, University of Cambridge, Imperial College London, UCL (University College London), the University of Edinburgh, and King's College London, University of Florida, Boston University, Florida State College of Jacksonville, University of North Florida, Santa Fe College, University of Chicago, University of Illinois, Illinois State University, Illinois Wesleyan University, DePaul University, North Western University and Bradley University etc.
11264	Dr. GOTHANDAM K.M	Professor Higher Academic Grade	Guest Lectures and training programs or workshops Organized	>50

11468	Dr. ANAND A	Professor Higher Academic Grade & Associate Dean SBST	Research	More Collaborations with top Institutes
11993	Dr. RASOOL M	Professor Higher Academic Grade & Director Purchase Dept	Administrative Roles Experience at VIT	>6
12175	Dr. GEORGE PRIYA DOSS	Professor	Fund Generated	Above 6 crores
12175	Dr. George Priya Doss C	Professor	High Citation	1431
12175	Dr. GEORGE PRIYA DOSS	Professor	Publications	353
12175	Dr. GEORGE PRIYA DOSS	Professor	Citations	7,059 Citations by 5,098 documents
12175	Dr. GEORGE PRIYA DOSS	Professor	h- index	42
12365	Dr. PRITI TALWAR	Professor	Most cited paper	1806- Autophagy
13290	SUDHAKARAN R	Asso. Prof Sr.	2025 more collaboration and MOU for research	Japan

STUDENT NOTABLE ACHIEVEMENT

Reg. No	Alumni Name	ACHIEVEMENTS
06BBT090	Ms. Kadhambari S Viswanathan	"Limca Book of Records"
08BBT166	Mr. Rachit Raj	Indian Administrative Service Govt. of India with more distinguished awards - UPSC 3rd Rank Holder
08BBT178	Mr.Rajveer Meena	Guinness World Record
11BBT0081	Mr. Vidur Sabharwal	Secured All India Rank (AIR)-1 in GATE EXAMINATION 2015 (Biotechnology).
12BBT0104	Lt..Shubhangi Swaroop	First female pilot of the Indian Navy. She is a pilot of Maritime reconnaissance aircraft in Indian Navy

STAFF

EMP ID	STAFF NAME	ACHIEVEMENTS
10123	Mrs. Santhi Veerasamy	>28 years of service
12176	Mrs. K. Mythili	Sports and games (won >20 prizes) VIT Tournaments
80225	Mrs. Lathapriya R	Voluntary Service Rendered at Darshini and Thaai Karangal by VIT from 19th to 26th May 2025 for Basic Computers for Visually Challenged.

FACULTY TOTAL SCOPUS PUBLICATIONS MORE THAN 155 WITH VIT AFFILIATION

Sl. No	ERP NO	FACULTY NAME	DESIGNATION	Total Scopus Publications
1	10832	Dr. Suneetha V	Professor Higher Academic Grade & Dean, SBST	166
2	11468	Dr. Anand A	Professor Higher Academic Grade & Associate Dean, SBST	167
3	10613	Dr. Ramanathan K	Professor Higher Academic Grade	159
4	10678	Dr. Bhaskara Rao K.V	Professor Higher Academic Grade	156
5	10791	Dr. Siva R	Professor Higher Academic Grade	182
6	11264	Dr. Gothandam K.M	Professor Higher Academic Grade	163
7	11477	Dr. Jayanthi A	Professor Higher Academic Grade	184
8	10712	Dr. Sudha Ramaiah	Professor Grade 2 & HoD	159
9	12175	Dr. George Priya Doss C	Professor Grade 1	369
10	12611	Dr. Abilash V.G.	Associate Professor Sr.	218

SPONSORED RESEARCH

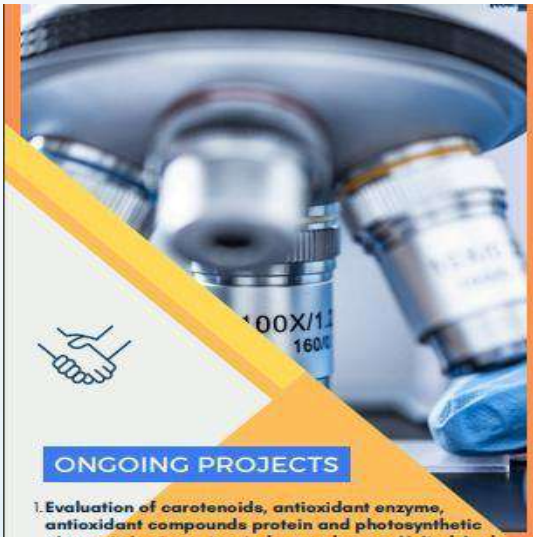
CONSULTANCY PROJECTS

School of Bio Sciences and Technology

Research facilities

- Agri & Environmental Biotechnology
- Animal House
- Antibiotic Resistance
- Apoptosis and Cell Death
- Aquaculture Biotechnology
- Bio Materials
- Biochemical & Analytical Instrumentation
- Biochemistry and Immunology
- Bio-inspired Design
- Biomedical Genetics
- Bioprocess & Downstream
- Bioremediation
- Cancer Biology
- Cell & Molecular Biology
- Cell Culture
- Central Cell Culture
- Central Instrumentation
- Centre Instrumentation
- Computational Biology
- Environmental Biotechnology
- Fermentation
- Gene Cloning
- Gene Therapy
- High Throughput Screening
- Immunopathology
- Instrumental and Food Analysis
- Marine Biotechnology &Bioproducts
- Medical Biological Computing
- Medical Biotechnology

- Medical Informatics
- Microbial Biotechnology
- Microbial Molecular Biology
- Microbiology
- Molecular Biology
- Molecular Endocrinology
- Nano Bioengineering
- Nano therapy
- Plant Biotechnology
- Protein Chemistry
- Protein Engineering
- Renal Research
- Scanning Electron Microscope
- Structural Biology
- Systems Biology
- Tissue Culture
- Vector Production



ONGOING PROJECTS

1. Evaluation of carotenoids, antioxidant enzyme, antioxidant compounds protein and photosynthetic pigments in stress-treated grape leaves- United Arab Emirates , United Arab Emirates
2. Inhibition of EHP in Marine Ecosystem- Aarpy Bio Solution, India
3. Gene editing of the virulent gene from E.coli using CRISPR system- Salem Microbes Pvt Ltd, India
4. Disinfection of factory and godown with pre and post treatment- Otto clothing Pvt Ltd, India
5. Fabrication of collagen patch- Healthium Medtech Ltd, India
6. Application of various formulation for the restriction of microbial growth- Otto clothing Pvt Ltd, India
7. Confirmation of Anti-WSSV activity of potential bioactive molecules towards commercialisation process- Kyntox Biotech India Pvt LTD, India
8. Inhibition of microbes in textile fabric- Otto clothing Pvt Ltd, India
9. Preparation of semichemicals-based formulation for pigs-MAGAPOR S L, Spain
10. Inhibition of Microbial growth in textile fabrics- Otto clothing Pvt Ltd, India
11. ETP treatment by phycoremediation-microbes- SOLISTAA Pharmaceuticals, India

COMPLETED PROJECTS

1. Gene editing of the virulent gene from E.coli using CRISPR system- Salem Microbes Pvt Ltd, India
2. Studies on Antiviral and antibacterial activities of Novel Combinations- KYNTOX BIOTECH INDIA PVT LTD, India.
3. Oleogels for prototypes melting at 37c with a good sensory chocolates (project Elixir)- ITC, India
4. Optimizing the extraction molecular characterization bio-activities of chlorella growth factor- E I D Parry India Limited, India
5. AC and Air Purifiers Microbial Quality Analyzed- Eureka Forbes, India
6. Scientific and Technical Consultancy- Eureka Forbes, India
7. Consultancy P A Footwear- Ms P A Footwear Pvt. Ltd, INDIA
8. Viral and Actinomycetes assay in Air conditioning missions and air purifiers- EUREKA FORBES, India
9. Scale up of microbes for liquid biofertilizers- OmniActive Health Technologies, India
10. APR Applied Pharma Research s.a.- APR Growing Innovation, Switzerland
11. Preventive and prophylactic Efficacy of Commercial probiotics in Tilapia Fishes Experimentally Infected with Vibrio parahemolyticus- Organic Biotech Pvt. Ltd, India
12. Disinfection of factory and godown with pre and post treatment- otto clothing Pvt Ltd, India
13. Fabrication of collagen patch- Healthium Medtech Ltd, India
14. Confirmation of Anti-WSSV activity of potential bioactive molecules towards commercialisation process- Kyntox Biotech India Pvt LTD, India
15. ETP treatment by phycoremediation-microbes- SOLISTAA Pharmaceuticals, India
16. Metabolic Engineering of Corynebacterium glutamicum for hyper production of Citric acid- Wisecorner Laboratories Pvt Ltd, India
17. Characterisation of fat developed using oil structuring technology- Fattastic Technologies Pvt Ltd, Singapore
18. Effect of phyto compound PHY-XXI on Nucleolin levels in TAXOL and Cis-Platin resistant HeLa,MCF-7 and MDA-MB231 cell lines- Phyto Specialities Pvt ltd, India
19. Development of Bioceramic 3D scaffolds by extrusion-based printing technique using Cellink BIOX system- Altem Technologies pvt ltd, India
20. Antimicrobial activity of the effective molecules against pathogens- ManushyaaBlossom Private Limited, India
21. Herbal-Nano based Bio application studies- Xcellogen Biotech India Pvt Ltd, India
22. Development of bacteriocin for the food industry application- Salem Microbes Private Limited , India
23. Chemical Characterization Of Plant Extracts- AYUSH, India
24. Research personnel and technical information exchange- Next Big innovation Lab, India

FUTURE PROJECTS

1. Development of biofertilizers and biopesticides
2. Flower waste management strategies
3. Bioplastic production
4. Soil microbiome optimization
5. Sustainable development of biofuels
6. Healthcare and personalized medicines

Trust us to bring your vision to life.

SIGNIFICANT EVENTS

Foreign Faculty Visits

VIT SPORTS Prize Distribution Function 2025

LAUNCH OF NEW EVENTS
(VOICE OF BIOTECHNOLOGY AND BIO-EXPO)

Anti- Microbial Agarbattis from VIT flowers

VIT Healthy protein bar - Beetroot and coconut modak

Biofertilizers, bio source based Ointments, Gels, Creams

VIT®
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

School of Bio Sciences and Technology

HAPPY
New Year
2026

As we welcome 2026, may it usher in new discoveries, scientific rigor, and transformative innovations. Wishing you a year of good health, and excellence in research, learning, and societal impact.

Dr. Suneetha V.
Dean, SBST

https://vit.ac.in/schools/sbst vituniversity vellore_vit

PROGRAMS OFFERED

PROGRAMMES OFFERED
School of Bio-Sciences and Technology

Undergraduate Program	B. Tech Biotechnology
Postgraduate Program	M.Sc. Biotechnology, M.Sc. Biomedical Genetics M.Sc. Applied Microbiology M. Tech. Biotechnology M.Sc. Biotechnology (Integrated 5yrs) M.Sc. Food Science & Tech. (Integrated 5 yrs)
Research Program	Doctor of Philosophy (Ph.D.) Integrated PhD Deep-Tech PhD

"Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less."

- Marie Curie

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Thank
You