



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

SCHOOL OF BIO SCIENCES AND TECHNOLOGY (SBST)

Honorable Founder-Chancellor

Dr. G. Viswanathan



Honourable founder-chancellor, Dr. G. Viswanathan is an inspiration for the aspiring youth. Under his leadership, Vellore Institute of Technology aims to transform life through excellence in education and research. The institute focuses on providing world class education grounded in ethics and critical thinking, for improvement of life. It also facilitates an innovation ecosystem to extend knowledge and solve critical problems.

VIT provides nurturing environment with happy, accountable, caring and effective workforce and students. Further, it supports active collaboration with national and international industries as well as academia for productivity and economic development. Service to the region and world through knowledge and compassion is an important mission of the university.

The core values of the VIT include student focus, strong ethics, striving for excellence, social development and respect for all.

School of Bio Sciences and Technology (SBST)

- The school of Bio Sciences and Technology (SBST) was established in 2001, under the proficient leadership of Dr. Kunthala Jayaraman, who is regarded as “the mother of Industrial Biotechnology Education in the World”.
- SBST has been at the forefront of biological research and education, providing students with a strong foundation to pursue successful careers in biotechnology, pharmaceutical sciences, healthcare, and related fields.



Dean's Message



The School of Bio Sciences and Technology (SBST), established in 2001, aims to advance the future of life sciences via an exceptional integration of education, research, and innovation. In the past two decades, SBST has emerged as a leading institution for multidisciplinary education and research, focussing on addressing the global issues in environmental sustainability, agribusiness, and health. We aim to develop outstanding bioengineers and science graduates capable of innovating, creating, and sharing knowledge for the benefit of society and the environment.

Our distinguished faculty, with expertise spanning molecular biology, microbiology, bioinformatics, pharmacovigilance, computational biology, and data analytics, are at the heart of our mission. They bring their rich academic and industrial experience to the classroom and research labs, fostering an environment where students can thrive academically and professionally. In addition, SBST is associated with VIT's major research centers, the Centre for Bio Separation Technology (CBST) and the Centre for Nanobiotechnology (CNBT).

Internships and skill development are fundamental components of our training philosophy. We offer students the opportunity to innovate, experience real-world challenges, and gain hands-on experience through partnerships with top research institutes, biotech companies, and pharmaceutical industries. SBST promotes a global perspective by promoting international collaborations and student exchange programs.

We take immense pride in nurturing global leaders, thinkers, and innovators who embody the values of excellence and integrity. Join us at SBST as we continue to inspire, innovate, and contribute to building a better future.

Dr. Suneetha V

Dean & Professor Higher Academic Grade

School of Bio Sciences and Technology, VIT

Major Milestones of SBST





inshorts

Which are the top 10 Indian institutes for Engineering & Technology as per QS Rankings?

Indian Institute of Technology Bombay and Indian Institute of Technology Delhi are the top most institutes in India for Engineering & Technology with a score of 79.1 as per QS Rankings. They are followed by IIT Madras, IIT Kharagpur, IIT Kanpur, Indian Institute of Science Bengaluru, IIT Roorkee, IIT Guwahati, VIT Vellore and Anna University Chennai.

swipe left for more at QS Rankings / few hours ago



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BY SUBJECT | 2024

SUBJECT	WORLD RANK 2023	INDIA RANK 2023	WORLD RANK 2024	INDIA RANK 2024
ENGINEERING & TECHNOLOGY - OVERALL	240	9	212	9
• CHEMICAL ENGINEERING	301-350	11	251-300	11
• COMPUTER SCIENCE & INFORMATION SYSTEMS	201-250	7	136	7
• ELECTRICAL & ELECTRONICS	201-250	8	151-200	7-8
• MECHANICAL ENGINEERING	251-300	10	201-250	8-10
BIOLOGICAL SCIENCES	451-500	10	351-400	7-9
NATURAL SCIENCES	-	-	401-450	10
• CHEMISTRY	351-400	9	351-400	9-12
• ENVIRONMENTAL SCIENCES	-	-	451-500	14-15
• MATERIALS SCIENCES	-	-	201-250	7-9
• MATHEMATICS	351-400	11	201-250	7-8
• PHYSICS AND ASTRONOMY	451-500	12	451-500	14-16
BUSINESS & MANAGEMENT	-	-	551-600	21-23

<https://www.topuniversities.com/subject-rankings/2024>

Vellore_vit
 Vituniversity
 Vellore Institute of Technology
 Vellore_institute_of_technology
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Programs Offered

Undergraduate Program

B.Tech Biotechnology

Post Graduate Program

M.Sc. Biotechnology

M.Sc. Biomedical Genetics

**M.Sc. Applied
Microbiology**

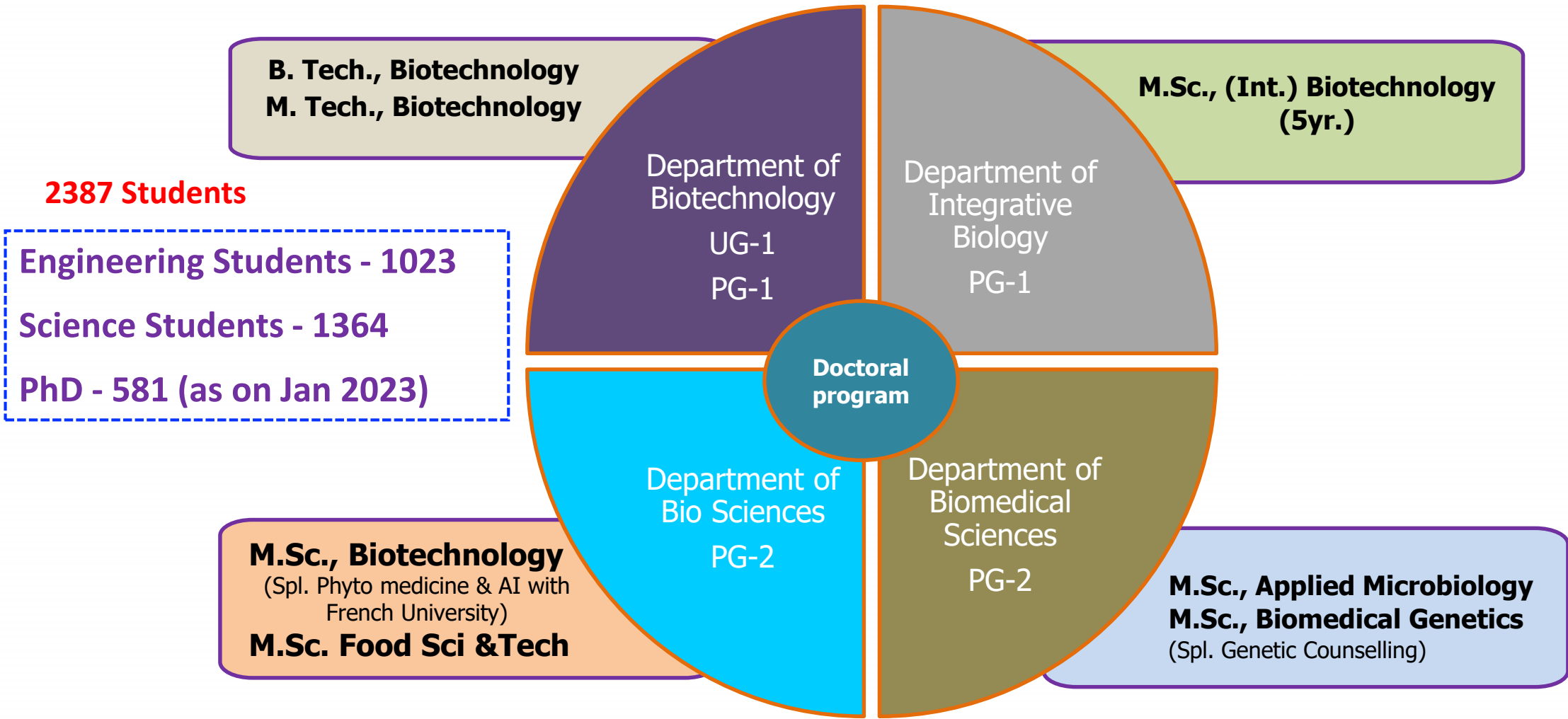
**Integrated M.Sc.
Biotechnology (5year
program)**

**Integrated M.Sc. Food
Science and Technology
(5year program)**

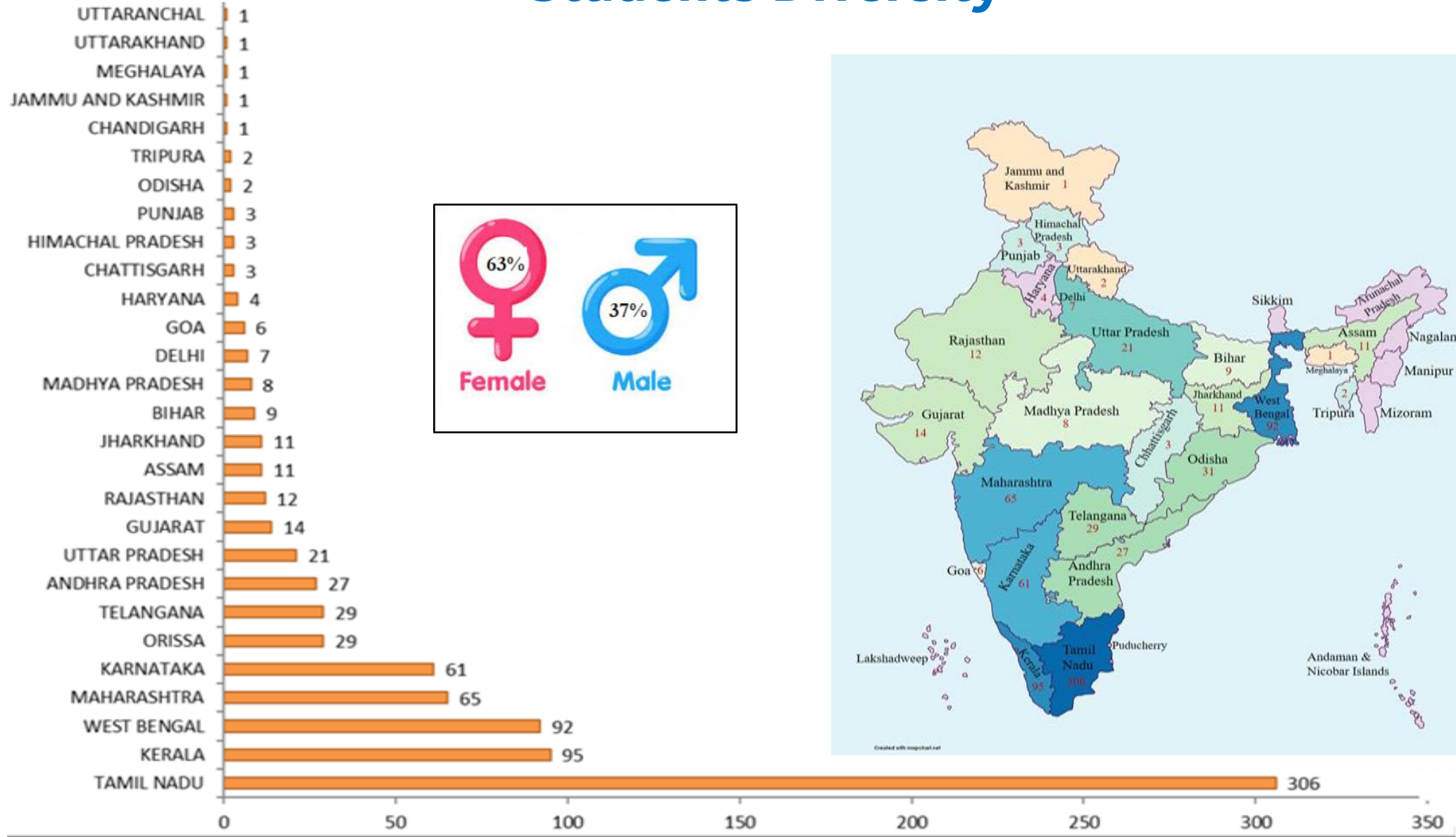
Research Program

**Doctor of Philosophy
(Ph.D)**

Integrated PhD



Students Diversity



Notable Alumni

Limca
Book of Records



Ms. Kadhambari S Viswanathan, Assistant Vice-President, has been instrumental in influencing the educational landscape at VIT. She made history when she was inducted into the “Limca Book of Records” as the youngest biographer for her book “My Grandpa”.



SHUBHANGI SWAROOP BECOMES INDIAN NAVY'S FIRST WOMAN PILOT

History was created on Wednesday when the Indian Navy inducted the first-ever woman pilot. The first batch of female officers passed out from the Indian Naval Academy, Ezhimala, Kannur. Shubhangi Swaroop, a native of Bareilly in Uttar Pradesh, was among 328 cadets who passed out. Swaroop, the only woman in her batch, became the first woman pilot in the Navy.



सत्यमेव जयते

UPSC



Rachit Raj | Photo Credit: Handout_E-Mail

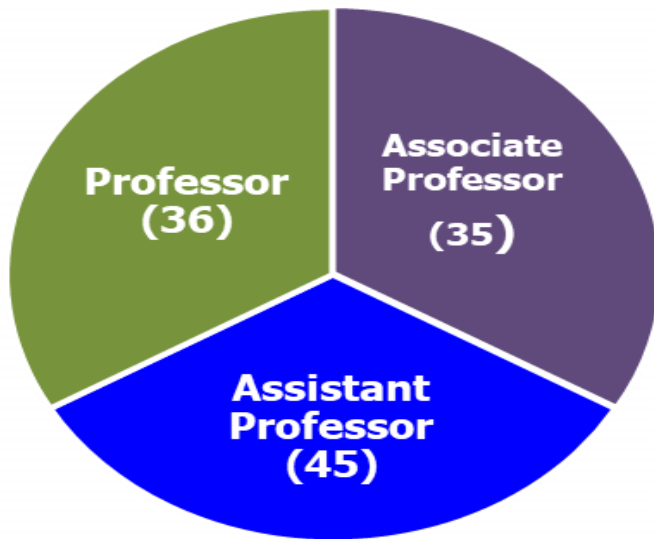
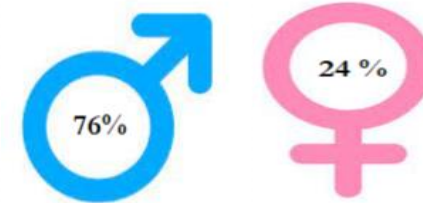
Rachit Raj, an alumnus (2008-12) of VIT University, has bagged the third position in the prestigious All-India UPSC examinations 2013. He appeared for the May 2013 prelims and the main examination in December. "After completing B.Tech in biotechnology at VIT University, I was awarded a Rs. 17 lakh scholarship from Mumbai International School of Business. But I declined the offer and started preparing for the UPSC instead," says Raj. "I made sure I did smart studying and went for multiple revisions and maximum question practice. Within five to six months, I was able to keep up with the subjects," he says.

He added that the difficulty of the paper depends on the preparation of the



Faculty Profile

No. of Faculty - 116
Faculty with PhD - 116



- ❖ Faculty members with Post-doctoral experiences (40%)
- ❖ Faculty members with International experiences (60%)
- ❖ Fellows in academic societies: International - 26 (FRSB, FRSC, & FLS)

Adjunct Faculty

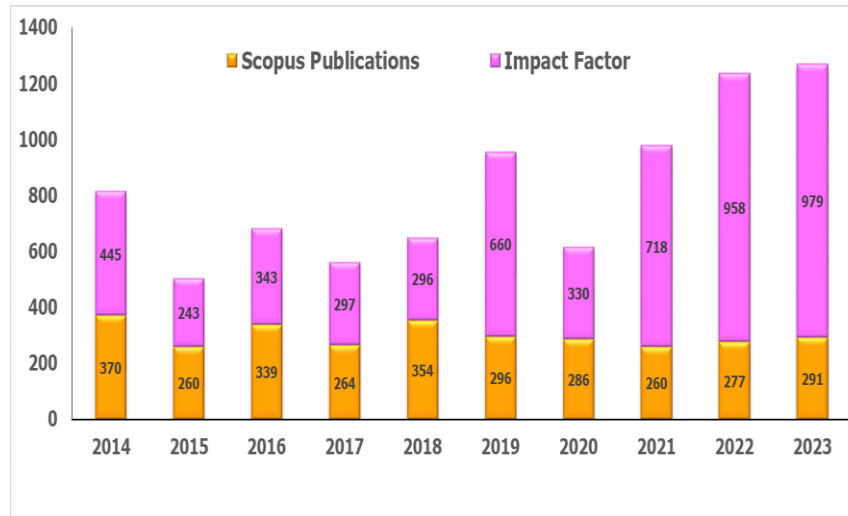
Dr. Wilner Martinez-Lopez

Head of Epigenetics and Genomic Instability Laboratory, Genetics and Molecular Biology Division, IIBCE, Uruguay



Research Publications

H- index	Total Publications	Citations	Publication / faculty	Average Impact factor
97	5862	67396	4.7	3.828

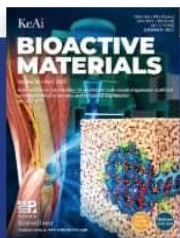


High Impact Factor Publications

THE LANCET
Oncology



Fungal Diversity.
An International Journal of Mycology



Bioactive Materials
Open access



Renewable and Sustainable Energy Reviews
Supports open access



Chemical Engineering Journal
Supports open access

nature communications



Biomaterials
Supports open access



Ageing Research Reviews

Supports open access



Trends in Biotechnology

Supports open access



Molecular Therapy

Supports open access • Open archive



Seminars in Cancer Biology

Supports open access



Asian Journal of Pharmaceutical Sciences

Open access



Chemosphere

Supports open access

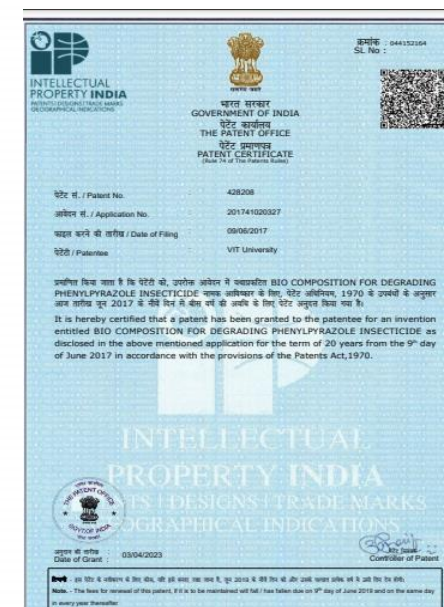
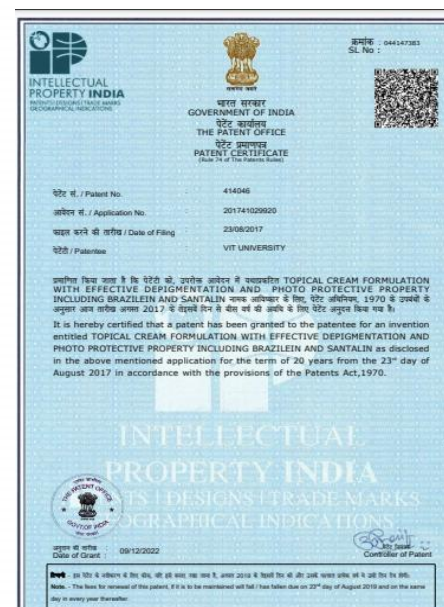
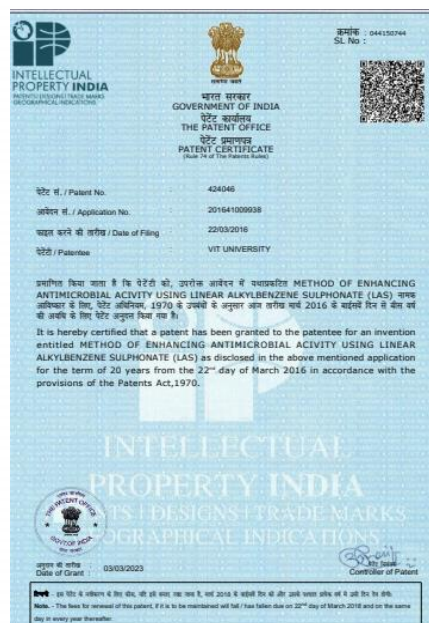


International Journal of Biological Macromolecules

Supports open access

Patents

Patent title	Investigator/s	Patent Number	Date of Grant	Patent Office
Method of Enhancing Antimicrobial activity using linear Alkylbenzene Sulphonate (LAS)	Dr. G. Jayaraman and Dr. M. Rajini Raja	402978	44988	Government of India.
Topical Cream Formulation with effective depigmentation and photo protective property including Brazilein and Santalin.	Dr. R. Siva	414046	44904	Government of India.
Bio Composition for degrading phenylpyrazole insecticide	Dr. Jayanthi Abraham	428208	45019	Government of India.



Patents from July 2021 to till date

SI No	Acad Year	Patent Title	Inventors	Status
1	AY202425	PROCESS FOR THE ENZYMATIC BIOCONVERSION OF CHITIN TO CHITOSAN FROM SHRIMP SHELL WASTE	12275 - Suthindhiran K - SBST (Academic)12179 - Jayasri M.A - SBST (Academic)21152 - PREM ANAND K – SBST (Academic)	Filed
2	AY202425	GEL-BASED COLORANT FORMULATION	10832 - Suneetha V - SBST (Academic)20115 - Toshika Mishra - SBST (Academic)22MSI0199 - Shamini K - SBST (Academic) 22MSI0164 - Vaishali C - SBST (Academic)	Published
3	AY202425	STABLE BIXIN NANOEMULSION FORMULATION	10791 - Siva R - SBST (Academic)10798 - Chandra Sekaran N - CNBT (Academic) 17898 - Ressin Varghese - SBST (Academic)	Published
4	AY202425	CITRUS FRUIT WASHING COMPOSITION AND PROCESS OF PREPARING THE SAME	10832 - Suneetha V - SBST (Academic) - Toshika Mishra - SBST (Academic)	Published
5	AY202425	HYDROGEL WITH IMPROVED ANTIMICROBIAL AND ANTIOXIDANT ACTIVITY	19721 - KANAGAVEL DEEPANKUMAR - SBST (Academic)11603 - Pragasam V - SBST (Academic) - Samson Prince H - SBST (Academic)	Published
6	AY202324	EVALUATION AND EFFICACY OF ALCOHOL FREE AND ALCOHOL-BASED SANITIZERS CUM AEROSOLS AGAINST OPPORTUNISTIC PATHOGENS DURING PANDEMIC SITUATIONS	10832 - Suneetha V - SBST (Academic)	Filed
7	AY202324	CMCH-ZN BONE FILLER	13735 - Debasish Mishra - SBST (Academic)16MTR0022 - Arushi H. Mishra - SBST (Academic)20PHD0724 - Sanjukta Mohan - SBST (Academic)	Published
8	AY202324	A RAPID PROCESS FOR BIODEGRADATION OF PETROLEUM CRUDE OIL BY INDIGENOUS BACTERIA	10515 - Kannabiran K - SBST (Academic)19PHD0477 - Gayathri Harikumar - SAS (Academic)	Published
9	AY202324	AQUASOME FORMULATION TO DELIVER FIBRINOLYTIC PROTEIN WITH PROLONGED CIRCULATION TIME AND METHOD FOR PRODUCING THEREOF	11194 - Subathradevi C - SBST (Academic)11902 - Mohanasrinivasan V - SBST (Academic)15PHD0092 - Merlyn Keziah S - SBST (Academic)	Published
10	AY202324	ACTINOBACTERIAL STRAINS-BASED BIO-FERTILIZER COMPOSITION FOR STIMULATING PLANT GROWTH AND METHOD FOR PRODUCING THE SAME	12275 - Suthindhiran K - SBST (Academic)16PHD0595 - Prem Anand K - SBST (Academic)	Published



Sl No	Acad Year	Patent Title	Inventors	Status
11	AY202324	ACTINOBACTERIAL STRAINS-BASED BIO-FUNGICIDE COMPOSITION FOR CONTROLLING PLANT PATHOGENIC FUNGI AND METHOD FOR PRODUCING THE SAME	12275 - Suthindhiran K - SBST (Academic)16PHD0595 - Prem Anand K - SBST (Academic)	Published
12	AY202324	PROCESS FOR PREPARING GECKO REPELLENT FROM FLORAL WASTE	10832 - Suneetha V - SBST (Academic) - Swati Punetha - SBST (Academic)	Published
13	AY202324	PROCESS FOR OBTAINING ADHESIVE FROM LEATHER WASTES	10832 - Suneetha V - SBST (Academic) - Nikita Sharma - SBST (Academic)	Published
14	AY202324	PROTEIN-BASED HAIR-CARE COMPOSITION FOR PROMOTING OPTIMAL HAIR HEALTH AND METHOD FOR PRODUCING THE SAME	10832 - Suneetha V - SBST (Academic) - Sathvika. K - SBST (Academic)	Published
15	AY202324	SKIN-CARE COMPOSITION FOR ANTI-PSORIATIC ACTIVITY	11993 - Rasool M - SBST (Academic) - Rithvik - SBST (Academic)	Published
16	AY202324	STABILIZATION OF LYOPHILIZED CAUDOVIRALES BACTERIOPHAGES	14811 - Ramesh N - SBST (Academic) - Prasanth M - SBST (Academic)	Granted
17	AY202324	NON-INVASIVE SALIVARY GLUCOSE ESTIMATOR FOR ESTIMATING A CONCENTRATION OF GLUCOSE PRESENT IN SALIVA SAMPLE	10416 - Radha Saraswathy - SBST (Academic) - Murugan Ezhumalai - (Academic)	Granted
18	AY202223	A COMPOSITION FOR IMPROVING, PREVENTING AND TREATING OF ARTHRITIS COMPRISING ZANTHOXYLUM BUNGEANUM EXTRACTS	11993 - Rasool M - SBST (Academic)	Filed
19	AY202223	NEBIVOLOL FOR THE MANAGEMENT OF ANAPLASTIC LYMPHOMA KINASE POSITIVE NON-SMALL-CELL LUNG CANCER "	10613 - Ramanathan K - SBST (Academic)12147 - Shanthi V - SBST (Academic)16PHD0082 - NIVYA JAMES - SBST (Academic)18PHD0001 - SARANYADEVI S - SBST (Academic)	Published
20	AY202223	TOPICAL CREAM FORMULATION WITH EFFECTIVE DEPIGMENTATION AND PHOTO PROTECTIVE PROPERTY INCLUDING BRAZILEIN AND SANTALIN	10791 - Siva R - SBST (Academic) - HRIDYA HEMACHANDRAN - SBST (Academic)	Granted
21	AY202223	BIO COMPOSITION FOR DEGRADING PHENYLPYRAZOLE INSECTICIDE	11477 - Jayanthi A - SBST (Academic)14PHD0103 - ANUDURGA G - SBST (Academic)	Granted

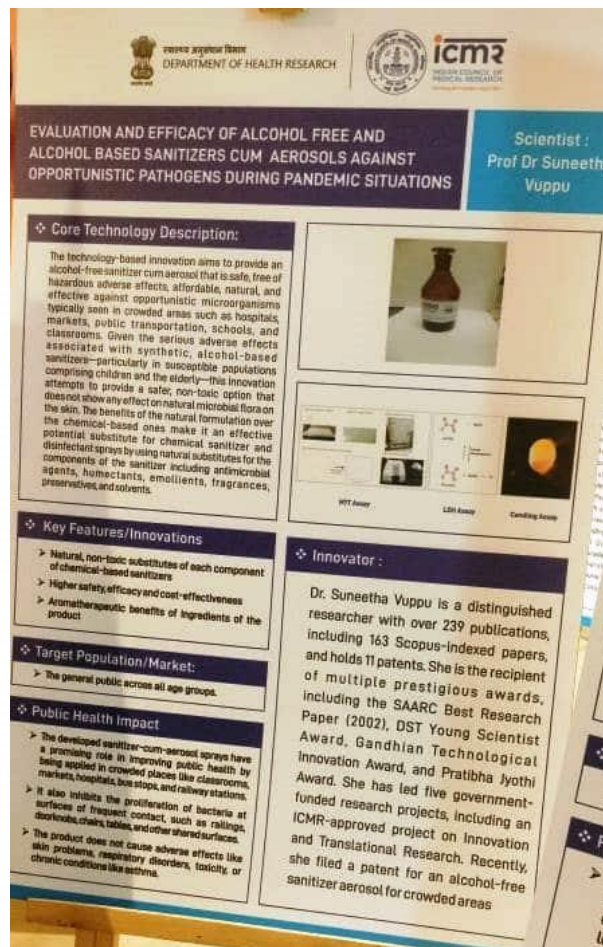
Sl No	Acad Year	Patent Title	Inventors	Status
22	AY202223	METHOD OF ENHANCING ANTIMICROBIAL ACIVITY USING LINEAR ALKYL BENZENE SULPHONATE (LAS)	12834 - Rajiniraja M - SBST (Academic) 10679 - Jayaraman G - SBST (Academic)	Granted
23	AY202122	PHARMACEUTICAL COMPOSITION FOR COMPRISING 8-SHOGAOL	11993 - Rasool M - SBST (Academic) 17PHD0050 - SNIGDHA SAMARPITA - SBST (Academic) - Dr.Sanquine Byun - (Academic) - Dr. Seongin Jo - (Academic)	Filed
24	AY202122	A PROCESS OF ISOLATION OF A PROTEASE INHIBITOR (PI) FROM MARINE STREPTOMYCES GRISEOINCARNATUS	14PHD0253 - NEETHU KAMARUDHEEN - SBST (Academic) 14PHD0160 - ASHISH KHAPARDE - CBST (Academic) 10678 - Bhaskara Rao K.V - SBST (Academic)	Published
25	AY202122	BIOFORMULATION OF FUNGAL STRAIN FOR BIOLEACHING OF HEAVY METALS FROM W-WASTE	11477 - Jayanthi A - SBST (Academic) 15PHD0221 - ANKITA CHATTERJEE - SBST (Academic)	Published
26	AY202122	A PHARMACEUTICAL COMPOSITION FOR INHIBITING THE PROTEIN KINASE B (PKNB) OF MYCOBACTERIUM TUBERCULOSIS	10757 - Sivakumar A - SBST (Academic) 10679 - Jayaraman G - SBST (Academic) - Dr.T.Panneerselvam - (Academic)	Granted

Special Awards

Best extramural Institute (Non-Government S&T Institute) at the DHR-ICMR Health Research Excellence summit 2024) on 14th November 2024 by ICMR.



Dr. Suneetha V. was awarded the “Best Innovation category award” at the DHR-ICMR Health Research Excellence Recognition Summit 2024, conducted on 14th November 2024.

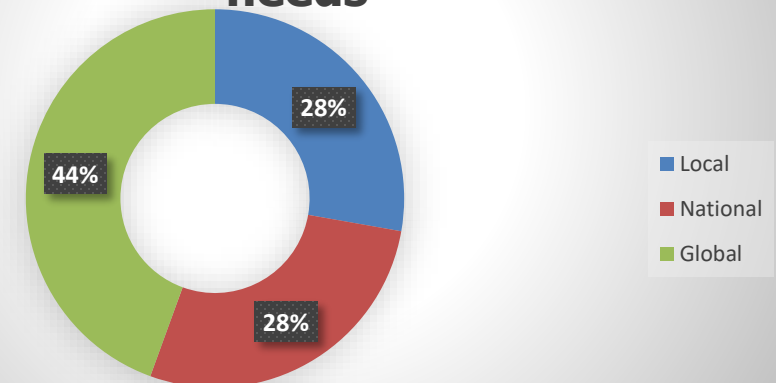


Curriculum

Courses Offered for Local / National / Global needs in Science and Engineering Programs

Local	National	Global
Microbiology	Food Process Technology	Bio business
Epidemiology	Medical Diagnostics	Social Entrepreneurship
Environmental Health	Genetics of Human Infertility	Pharmaceutical Biotechnology
Bio Business and Entrepreneurship	Bio Business and Entrepreneurship	Nanobiotechnology
Industrial Microbiology	Food Microbiology	Vaccinology
		Medical Biotechnology
		Clinical and Translational Research
		Medical Informatics

Curriculum addressing the Local, National and Global needs

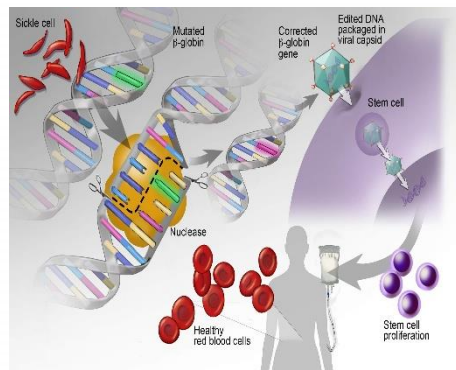


Research Domain

- The School has taken up research programme in the fields of Microbiology, Medical Genetics, Biotechnology, Biochemistry, Bioinformatics and other branches of Biomedical Sciences, thus, grown as a major center of higher education and research in India.
- An essential feature in the academic activity of SBST is its strong link with many national institutions across India.



Microbiology



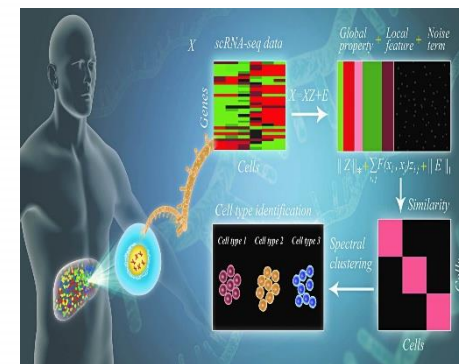
Medical Genetics



Biotechnology



Biochemistry



Bioinformatics

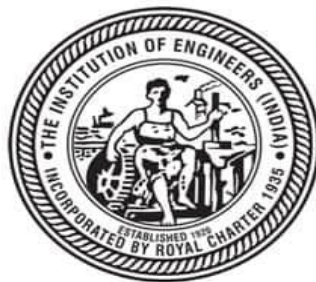
Sponsored Projects



नाभिकीय विज्ञान अनुसंधान बोर्ड
Board of Research in Nuclear Sciences



पृथ्वी विज्ञान मंत्रालय
Ministry of Earth Sciences



TNSCST



THE UNIVERSITY OF
NEW SOUTH WALES
SYDNEY • AUSTRALIA





Consultancy projects



Major Research facilities

- ❖ Scanning Electron Microscopy (DST - FIST Supported)
- ❖ Bioinspired design Lab
- ❖ HPTLC, FTIR & Ultracentrifuge
- ❖ Flow cytometry , HPLC & GC
- ❖ Fluorescence Microscopy
- ❖ Circular Dichroism
- ❖ Real Time PCR Analysis
- ❖ Microbial & mammalian
- ❖ Cell Culture Lab
- ❖ Plant Tissue Culture Lab
- ❖ Histopathology Lab
- ❖ Animal House Facility

Infrastructure (Academic)	Total Nos
Class Rooms with white Board/Smart Board	33
Teaching Labs	16
Infrastructure (Research)	
Research Labs	42

- ❖ Class rooms equipped with LCD, Wi-Fi and Smart Board
- ❖ Smart class room with Lecture Capturing System (LCS)
- ❖ Virtual Labs



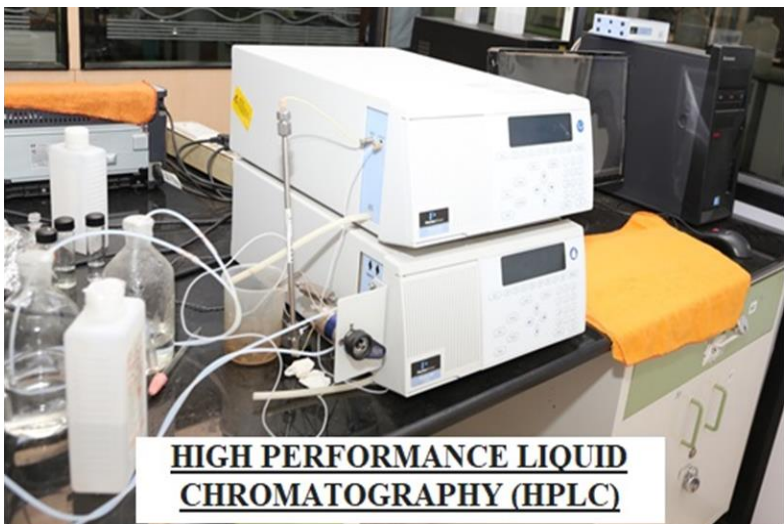
- Agri & Environmental Biotechnology
- Animal House
- Antibiotic Resistance
- Apoptosis and Cell Death
- Aquaculture Biotechnology
- Bakery and Confectionery
- Basic Training Kitchen
- Bio Materials
- Biochemical & Analytical Instrumentation
- Biochemistry and Immunology
- Bio-inspired Design
- Biomedical Genetics
- Bioprocess & Downstream
- Bioremediation
- Cancer Biology
- Cell & Molecular Biology
- Cell Culture
- Central Cell Culture
- Central Instrumentation
- Centre Instrumentation
- Computational Biology
- Computational Drug Design
- Environmental Biotechnology
- Fermentation
- Gene Cloning
- Gene Therapy
- High Throughput Screening
- Instrumental and Food Analysis
- Marine Biotechnology & Bioproducts
- Marine Biotechnology Lab
- 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
- Quantity Training Kitchen
- Renal Research
- Scanning Electron Microscope
- Structural Biology
- Systems Biology
- Tissue Culture
- Training Restaurant
- Vector Production
- House Keeping
- Immunopathology



Teaching Labs



Major Instruments



**HIGH PERFORMANCE LIQUID
CHROMATOGRAPHY (HPLC)**

HIGH PERFORMANCE LIQUID CHROMATOGRAPHY



GAS CHROMATOGRAPHY – MASS SPECTROMETRY



FLOW CYTOMETRY



3D BIO PRINTER



**FOURIER TRANSFORM
INFRARED SPECTROSCOPY**



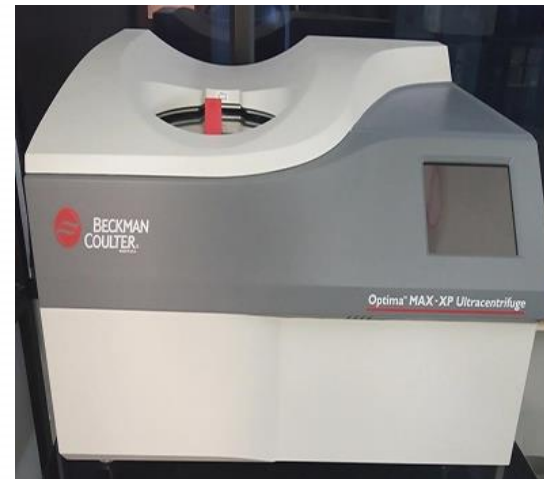
MALVEN MICRORON PARTICLE SIZER



NANOPORE



MICROTOM



ULTRACENTRIFUGE



SCANNING ELECTRON MICROSCOPE (SEM)

Youth Red Cross (YRC) VIT





Certification for organizing Blood donation camp



Collector award to Red Cross zonal coordinator and overall best institution

Best Practices - Industry Academia Conclave



- **VIT BIOSUMMIT**, a signature event of SBST focuses on bridging the gap between industry and academia organized by the SBST every year since 2012
- It provides a platform for students to network with industry experts, renowned academicians and researchers to discuss cutting-edge research and technology aspects
- Results in various MoUs, industry internships, placements and consultancy projects



- SBST organizing **Novozymes Day** every year
- Lecture workshop on Industrial Biotechnology & Outreach program with internships jointly organized by VIT and Novozymes South Asia Pvt. Ltd.



Student Achievements

iGEM 2023



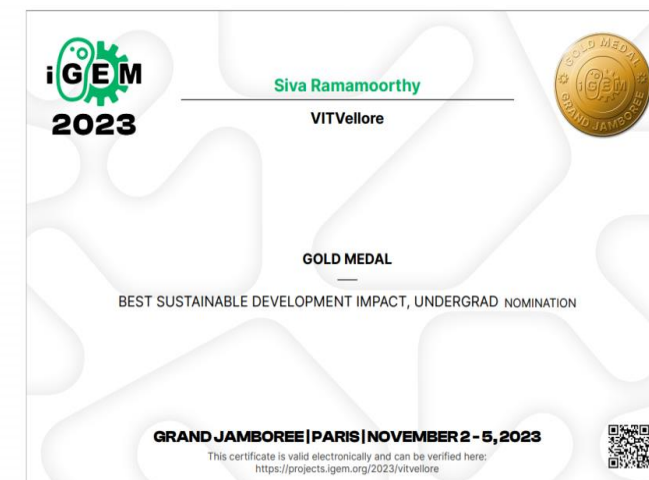
Vellore Institute of Technology (VIT) bagged the **institution's first ever gold medal**, creating history at the International Genetically Engineered Machine (iGEM) Grand Jamboree held from **November 2 - 5, 2023** at the Porte de Versailles, Paris. iGEM VIT 2023 team were also nominated for the '**Best Sustainable Development Impact**' award in the undergraduate category. The following 9 Students of the School of Bio Sciences and Technology have attended the Jamboree in-person along with **Prof. Siva Ramamoorthy**.

S No.	Reg.No	Student Name
1	20BBT0234	L Srimathi
2	20BBT0039	Shashank Venkatesan
3	20BBT0033	Aarushi Sultania
4	21MSI0083	Nishanth D S
5	20BBT0025	Devesh Kumar PS
6	20BBT0135	Rachna V
7	20BBT0273	Iniyan N
8	20BBT0117	Shruti Hazra
9	21BBT0348	Pranjali Bhagat

Project Investigators

Dr. R. Siva

Dr. K. M. Gothandam





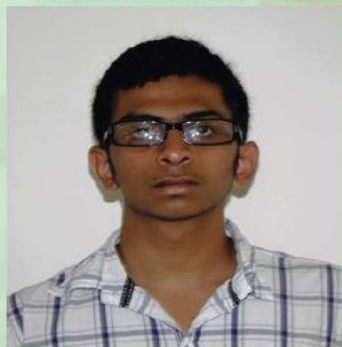
Students from SBST, VIT participated in Inventio organized by IISER Berhampur, Odisha, and won 3rd prize in the events- “The Chase”, “Sci-trek-thon” and “IIEC event”.



VIT Vellore students won a Silver Medal in the International Genetically Engineered Machine (iGEM) 2024 Grand Jamboree held at Paris, France.



Mr. Vidur Sabarwal secured All India Rank (AIR)-1 in GATE EXAMINATION 2015 (Biotechnology).



Mr. Ameya Dravid secured AIR-2 in GATE 2017 (Biotechnology).



Ms. Sneha Suchit Kelkar secured AIR-5 in GATE 2022 (Biotechnology).



Ms. Poornima Menon secured AIR-2 in GATE 2023 (Biotechnology).



Ms. Nikita Sharma secured AIR-86 in CSIR UGC NET-LS Examination.



Mr. Akshay Kisan Mundhe secured AIR-143 in CSIR UGC NET-JRF Examination.



18 Research scholars from SBST secured ICMR –
SRF fellowships

Institutional Distinctiveness - UG Research Publications

Seminars in Cancer Biology 68 (2021) 84–91

Contents lists available at ScienceDirect

IF: 15.707

Seminars in Cancer Biology

journal homepage: www.elsevier.com/locate/semcancer

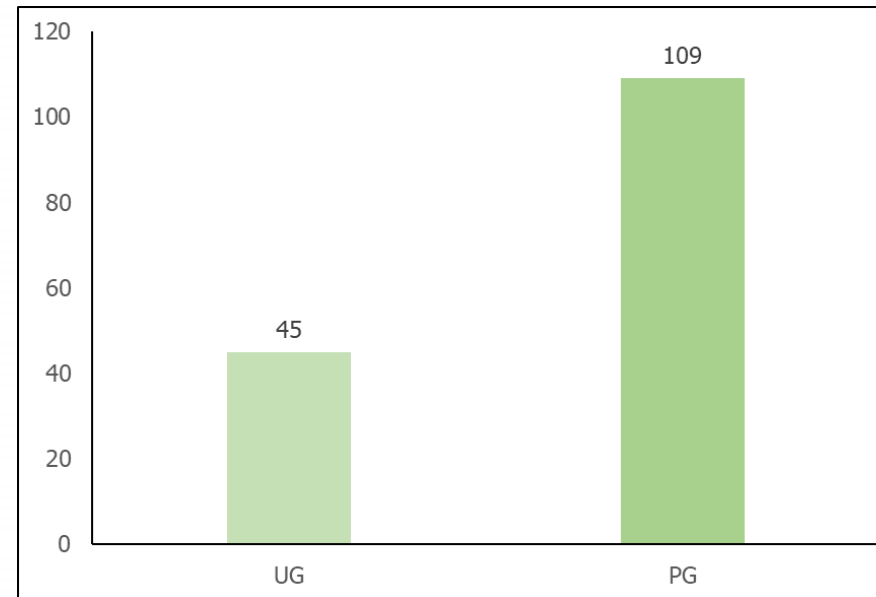
Current progress and future perspectives of polypharmacology : From the view of non-small cell lung cancer

Ramanathan Karuppasamy ^{a,*}, Shanthi Veerappapillai ^a, Sayoni Maiti ^a, Woong-Hee Shin ^{c,d}, Daisuke Kihara ^{b,e,f,g}

^a Department of Biotechnology, School of Bio Sciences and Technology, Vellore Institute of Technology, Vellore 632014, Tamil Nadu, India
^b Department of Biological Science, Purdue University, West Lafayette, IN, 47907, United States
^c Department of Computer Science, Purdue University, West Lafayette, IN, 47907, United States
^d Department of Chemistry Education, Sunchon National University, Suncheon 57922, Republic of Korea
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Materials Science and Engineering C 79 (2017) 950–957

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Review

Biomaterials and cells for cardiac tissue engineering: Current choices

Rusha Chaudhuri ^{a,1}, Madhumitha Ramachandran ^{a,1}, Pearl Moharil ^{a,1}, Megha Harumalani ^{a,1}, Amit K. Jaiswal ^{b,*}

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[13BBT0031]



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[13BBT0174]

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Biomaterials and cells for neural tissue engineering: Current choices

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Colloids and Surfaces B: Biointerfaces 170 (2018) 280–292

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Colloids and Surfaces B: Biointerfaces

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Selenium nanoparticles: A potent chemotherapeutic agent and an elucidation of its mechanism

Soumya Menon ^a, Shrudhi Devi KS ^a, Santhiya R ^a, Rajeshkumar S ^b, Venkat Kumar S ^{a,*}

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Students Outreach



- ❖ Semester Abroad Programme (SAP) scholarship
- ❖ Clubs - BRSI, SABEST and ISCB
BRSI- **Biotech Research Society, India**
SABEST- **Students Association of Bio Engineering Science and Technology**
ISCB- **International Society for Computational Biology**
- ❖ International BioSummit – An Annual Event
(To bridge the gap between Industry and Academia)
- ❖ Exposing students towards international conferences, seminars, symposiums, hands-on training with scholarship and industrial visits.
- ❖ Extra Curricular Activities – Sports and Arts



Benchmark for SBST

FST Lab Inauguration

Honorable Chancellor, Dr. G. Viswanathan, inaugurated the Food Science and Technology Laboratory on April 3, 2023. This lab is equipped for performing food analysis, new food product development, and for valorization of food wastes.



NABL Accreditation of SEM Laboratory

The Scanning Electron
Microscopy (SEM) Laboratory of
the

School of Bio Sciences and
Technology has received its
Accreditation Certificate from
NABL (National Accreditation
Board for Testing and
Calibration Laboratories).

**Accreditation of SEM
Laboratory with ISO/IEC
17025:2017**



NABL
National Accreditation Board for
Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name: SCHOOL OF BIO SCIENCES AND TECHNOLOGY LABORATORY, VELLORE INSTITUTE OF TECHNOLOGY, SIR M VISWESHWARARAJAH (SMV) BUILDING, FIRST FLOOR, ROOM NO. 130 (AI), VIT - VELLORE CAMPUS, KATPADI, THIRUVALLAM ROAD, VELLORE, TAMIL NADU, INDIA

Accreditation Standard: ISO/IEC 17025:2017
Certificate Number: TC-42948
Validity: 22/01/2024 to 21/01/2026

Page No: 1 of 1
Last Amended on:

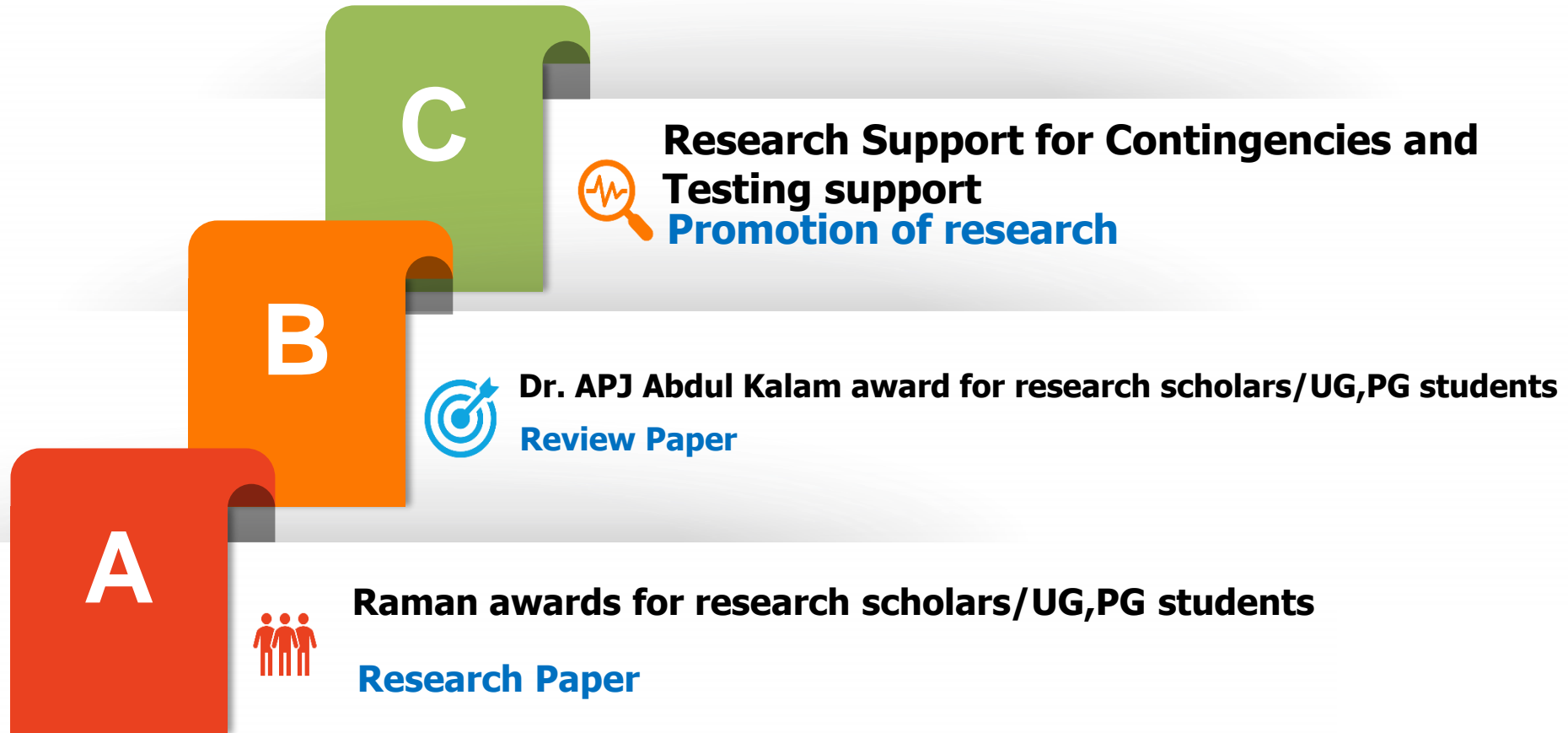
S.No	Discipline / Group	Materials or Products tested	Equipment, generation of standards, level of accuracy, Test Methodology Tests or type of tests performed	Test Method Specifications against which tests are performed and/or the techniques / equipment used
1	MECHANICAL METALLOGRAPHY TEST	Automobile Wires, Nuts & Products	Scanning Electron Microscopy (SEM) for Micro Structural Analysis	ASME Handbook Volume 9
2	MECHANICAL METALLOGRAPHY TEST	Agricultural Wires, Nuts & Products	SEM EDS (Elementary Mapping)	ASTM E2309
3	MECHANICAL METALLOGRAPHY TEST	Copper Wires, Nuts & Products	Scanning Electron Microscopy (SEM) for Micro Structural Analysis	ASME Handbook Volume 9
4	MECHANICAL METALLOGRAPHY TEST	Copper Wires, Nuts & Products	SEM EDS (Elementary Mapping)	ASTM E2308
5	MECHANICAL METALLOGRAPHY TEST	Various Materials, Nuts & Products	Scanning Electron Microscopy (SEM) for Micro Structural Analysis	ASME Handbook Volume 9
6	MECHANICAL METALLOGRAPHY TEST	Various Materials, Nuts & Products	SEM EDS (Elementary Mapping)	ASTM E2308
7	MECHANICAL METALLOGRAPHY TEST	Medical Wires, Nuts & Products	Scanning Electron Microscopy (SEM) for Micro Structural Analysis	ASME Handbook Volume 9
8	MECHANICAL METALLOGRAPHY TEST	Medical Wires, Nuts & Products	SEM EDS (Elementary Mapping)	ASTM E2308
9	MECHANICAL METALLOGRAPHY TEST	Auto Parts like Nuts, Bolts & Products	Scanning Electron Microscopy (SEM) for Micro Structural Analysis	ASME Handbook Volume 9
10	MECHANICAL METALLOGRAPHY TEST	Auto Parts like Nuts, Bolts & Products	SEM EDS (Elementary Mapping)	ASTM E2309

Institutes/Universities students recently availed under SAP

- ❖ Imperial College London
- ❖ Johns Hopkins University, USA
- ❖ Kings College, London
- ❖ National University of Singapore
- ❖ Cancer Science Institute, Singapore
- ❖ Stockholm University, Sweden
- ❖ Department of Molecular Biology, Umeå University, Sweden.
- ❖ Indiana University Purdue University Indianapolis, USA
- ❖ Institute of Molecular And Cell Biology, Singapore
- ❖ Mayo Clinic, Florida
- ❖ Nanyang Technological University, Singapore
- ❖ National Institute of Genetics, Japan
- ❖ The Australian National University, The John Curtin School Of Medical Research, Acton, Australia
- ❖ University of British Columbia, UBC Life Sciences Centre, Department of Microbiology And Immunology Health Sciences Mall, Canada



Research Promotion Schemes



**OPEN
ACCESS** 

Personality Development

- **Journal Club**
- **Research Development Series**
- **Hands-on training and workshops**
- **National and International conferences**
- **Industry Academia conclave (VIT-Biosummit)**
- **DNA Day**
- **Bio-inspired Design FEST**



Ethical Committees and Research Promotion Schemes

Research policy implementation

- ❖ Institutional Human Ethics Committee (IHEC)
- ❖ Animal Ethics Committees (AECs)
- ❖ Institutional Biosafety Committee (IBC)
- ❖ Use of Turn-it-in in projects and publications

Research Promotion Schemes

- ❖ Teaching Research Fellowship-**166**
- ❖ Raman awardees for research scholars-**99**
- ❖ Research achievements of faculty members-**400**
- ❖ No. faculty members benefited for receiving 50% of travel grant from the University-**10**

Thank you



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