



Vel Tech High Tech
Dr. Rangarajan Dr. Sakunthala Engineering College
An Autonomous Institution
(Approved by AICTE, New Delhi Affiliated to Anna University, Chennai)
DEPARTMENT OF BIOTECHNOLOGY
NEWSLETTER JAN TO MAR 2022

GUEST LECTURES- 1

Lecture No 1: Importance of Bioprocess Technology

Date: 24th February 2022

Resource Person: Dr. Sathyanarayana N.Gummadi

Description Style-

The Department of Biotechnology conducted a Guest Lecture on 24th February 2022 on the topic “Importance of Bioprocess Technology” by Dr. Sathyanarayana N.Gummadi, Professor, Department of Biotechnology, AIM Lab, Indian Institute of Technology (IIT) Madras

He has given an brief introduction on Bioprocess development for production of industrial metabolites: enzymes, biopolymers, ethanol, glycerol, and polyols. His lecture also covered Statistical design of experiments and bioprocess optimization. The expert also explained about Recombinant protein production and Protein Purification, Biodegradation: Microbial and enzymatic degradation of caffeine in food products and effluents

GUEST LECTURES- 2

Lecture No 2: Role of Computational Biology in Biotechnology Industry Date: 15th March 2022

Resource Person: Dr. M. Michael Gromiha

Description Style-

The Department of Biotechnology conducted a Guest Lecture on 15th March 2022 on the topic “Role of Computational Biology in Biotechnology Industry” by Dr. M. Michael Gromiha, Professor, Department of Biotechnology, Bhupat and Jyoti Mehta School of Biosciences Indian Institute of Technology (IIT) Madras

He has given lecture on bioinformatics, protein structure and function, protein interactions: computational techniques, big data analysis and handling computational biology lab. Also, the expert covered main topics in structural analysis, prediction, folding and stability of globular and membrane proteins, protein interactions and development of bioinformatics databases and tools.

INDUSTRIAL VISITS

Visit No 1: MODERN BAKERS PVT. LTD, Chennai

Date of Visit: 25th March 2022

The Department of Biotechnology arranged an Industrial Visit on 25th March 2022 to Modern Bakers Pvt. Ltd., Chennai for the IV Semester Students. Faculty Ms. R. Ragavy, Assistant Professor and Ms. B. Bhavani Sowndharya, Assistant Professor, Department of Biotechnology accompanied the students to the visit.

In the fourth Semester students learning subject called Fluid Mechanics and Heat Transfer Operations which needs exposure on heat transfer associated equipments. Thus this industrial visit made the students to explore with the various steps involved in the biscuits manufacturing and also they learnt about the machines and their unit operations in the manufacturing of biscuits.



Visit No 2: CENTRE OF ADVANCED STUDY IN MARINE BIOLOGY, Parangipettai

Date of Visit: 25th March 2022

The Department of Biotechnology arranged an Industrial Visit on 25th March 2022 to CAS-MB, Annamalai University, Parangipettai for the VI Semester Students. Faculties Dr. M. Gopinath, Associate Professor and Ms. M. Udayamathi, Assistant Professor Department of Biotechnology accompanied the students to the visit.

In the sixth semester students having a subject called Marine Biotechnology which needs some hands on exposure and elaborate knowledge in it. Also, this field of study which is utmost required in current scenario of Scientific research. Hence, to add value to the curriculum, this industrial visit was selected and students gained much knowledge from it.



EVENTS CONDUCTED BY THE DEPARTMENT

Name of the event: **Education and Career Opportunities Overseas**

Event scheduled date: 31.01.2022 (11.00 am- 12.00 pm)

Name of the resource person: **Mr. M. Arul Kirubakaran**, Centre Head, Azent Overseas Education Limited

The program has created awareness among our students, about the top ranking universities all over the world with their scholarship schemes, visa details etc. which will enhance the testing skills on these test processing, procedure to apply and get courses according to their scores. Also this programme made the students to gather knowledge in the field of linguistic, arithmetic and logical reasoning skills, It will be helpful in attending test on CAT, GMAT, GRE, and IELTS



Department of Biotechnology
In Association with
BRSI- Professional Society & Institution's Innovation Council (IIC)

Organizes
Webinar
On

“Education & Career Opportunities Overseas”

Resource Person

 **Mr. Arul Kirubakaran M.**
Central Head
Azent Overseas Education Ltd
Chennai

Chief Patrons
Col. Prof. Dr. Vel. Shri. R. Rangarajan,
Founder President and Chairman
Dr. Sagunthala Rangarajan,
Vice Chairman

Patron
Prof. Dr. E. Kamalanaban,
Principal

Convener
Dr. D. Yuvaraj,
Dean SoBCE
Dr. R. Gnanasekaran
HOD Biotechnology

Co-Convener
Dr. M. Gopinath,
Associate Dean IIC
Dr. N. Gayathri
Deputy Dean Professional Society
Coordinator
Dr. A. Sai Ramesh,
Associate Professor

Register through:
<https://bit.ly/3IMXYNz>

Name of the event: **FDP on ADVANCES IN BIOLOGICAL, BIOCHEMICAL, BIOMEDICAL AND BIOENERGY**

Event scheduled date: 04.03.2022 to 11.03.2022

ABOUT THE INSTITUTION

Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College was established in 2002 by Col. Prof. Vel. Dr. R. Rangarajan, Founder Chairman and Dr. Mrs. Sakunthala Rangarajan Foundress Vice Chairman of R.S. Trust is a minority institution. A well-formulated vision to offer high quality Engineering Education emboldens our institution to be in the best of educational institution in the country. Our institution is approved by AICTE, New Delhi and an Autonomous Institution affiliated to Anna University, Chennai, Tamil Nadu. Our college was accredited with A Grade & 3.27 CGPA by the National Assessment and Accreditation Council (NAAC) and four of our UG Programs are also accredited by National Board of Accreditation, New Delhi (Biotechnology, Chemical, Information Technology, Electronics and Communication Engineering). Our College has excellent infrastructure facilities which facilitate hands on experience for students in various disciplines. The institution offers eight B.E. / B.Tech programmes in AI&DS, ECE, CSE, IT, Chemical, Biotechnology, Mechanical and Civil Engineering. It also offers M.E. degree programme in Structural engineering, in addition to that, MBA is also offered. The college has consistently stood top among colleges affiliated to Anna University.

ABOUT THE DEPARTMENT

The department was started in the year of 2006 with an intake of 60 students with highly dedicated faculty from various specialization of Biotechnology. The department has well equipped advanced laboratories. Laboratories have been designed to cater the academics as well as research. The departments initiate many student projects to acquire knowledge in the field of biotechnology and allied sciences. The department regularly organizes staff development program and national level symposium to bring the industry

close to the academia. With the team of dedicated faculty members, the department maintains to achieve 100 % result in the university exams. Many of the faculty members have published the research findings in peer reviewed SCI journals with a cumulative citation of 1500+ and h-index of 21. Apart from academic assignments, all faculty members of the department involve themselves in research activities. Department has completed around Rupees one crore worth funded short term programs and projects from AICTE, DBT and Tamil Nadu state council for science and technology(TNSCST).

ABOUT THE FDP

Biotechnology and Biochemical Engineering are closely related to each other, as biochemical engineering can be considered as sub branch of Biotechnology. One of the primary focus of Biotechnology is in the medical field, where biochemical engineers work to design pharmaceutical, artificial organ, biomedical devices, chemical sensors and drug delivery systems.

The concern relating to global warming, climate change and increasing energy demands have led to significant research towards the development of alternative energy to substitute the fossil energy resources. Biomass based energy or bio-fuels are highly promising due to perceptible environment and socio-economic advantages.

Outcomes:

1. This FDP will give ideas on various innovative biotechnological product developments which enable the professionals to gain knowledge on recent advances in biotechnology.
2. The faculty will be able to effectively analyze complex biotechnological applications and identify solutions for real time problems.
3. The participants will develop their intrapersonal skills & predictive analytics in core theme areas.



Vel Tech High Tech

Dr. Rangarajan Dr. Sakunthala Engineering College
(An Autonomous Institution)

Department of Biotechnology

In association with

Society of Chemical & Synthetic Biology



Organizes

**A 7-Day Online
Faculty Development Program
on**

**“ADVANCES IN BIOLOGICAL,
BIOCHEMICAL, BIOMEDICAL AND
BIOENERGY”**

04.03.2022 to 11.03.2022

Vel Tech High Tech Dr. Rangarajan
Dr. Sakunthala Engineering College
#60, Avadi – Vel Tech Road, Vel Nagar, Avadi,
Chennai-600 062, Tamil Nadu, India.

www.velhightech.com

EXPERTS & TOPICS TO BE COVERED

- Bioreactor Engineering
 - Dr. M. Gopinath, Asso. Prof., VTHT
 - Dr. P. Prakash, Asso. Prof., Sathyabama University
- Enzyme Engineering
 - Dr. M. Chandran Asso. Prof., Addis Ababa University, Ethiopia
 - Dr. N. K. Udayaprakash Asso. Prof., VISTAS
- Food Biotechnology
 - Dr. D. Yuvaraj Professor, VTHT
- Bionanotechnology
 - Dr. A. Vishnu Kirithi Assistant Professor, LPU
 - Dr. A. Saravanaraj Assistant Professor, VTHT
- Bioenergy
 - Dr. B. Bharathiraja Professor, VTHT
 - Dr. R. Senthil Kumar Assistant Professor, SASTRA
 - Dr. K. Tamil Arasan Asso. Professor, SRMIST
 - Dr. V. R. Manoj Professor, VTU
- Biomedical Engineering
 - Dr. G. Saravanakumar Professor, Karpagam University
 - Dr. A. Sai Ramesh Asso. Prof., VTHT
- IPR Issues in Biofuel
 - Dr. P. K. Gayathri Patent Consultant

TARGET AUDIENCE AND GUIDELINES

1. Faculty members, Research Scholars, PG Students of AICTE Approved Engineering Colleges and participants from Industry can attend this FDP
2. Registration cum selection process is based on First Come First Serve basis and confirmation mail will be sent to the selected participants.

REGISTRATION FEE: Rs. 100/-

A/c No. 75330400000012
 Bank Name : Bank of Baroda
 Branch Name: Vel Tech Branch
 A/c Name : Vel Tech High Tech
 Dr. Rangarajan Dr. Sakunthala Engineering College Owned by RS Trust
 IFSC : BARB0VJVELT (5th Letter is ZERO)
 TYPE : OD Account

HOW TO APPLY

Eligible candidates may apply by filling the Google form along with their payment proof on or before 03.03.2022

<https://forms.gle/kyEcl8naNf1Nc7GL8>

FOR CORRESPONDANCE

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 Chennai-600 062, Tamil Nadu, India
 E-mail:- drsairamesh@velhightech.com
 Mobile:- 9791071031

CHIEF PATRONS

Col. Prof. Dr. Vel. Shri. R. Rangarajan
Founder President and Chairman
 Dr. Sagunthala Rangarajan
Foundress Vice Chairman

PATRON

Prof. Dr. E. Kamalanaban
Principal

CONVENERS

Dr. V. R. Ravi
 Dean – Academics
 Dr. D. Yuvaraj,
 Professor & Dean - SoBCE

CO-CONVENERS

Dr. R. Gnanasekaran,
 Assistant Professor & Head / BT

PROGRAM ORGANIZING SECRETARY

Dr. M. Gopinath,
 Associate Professor/BT
 Dr. A. Sai Ramesh,
 Associate Professor/BT

ORGANIZING COMMITTEE

Ms. M. Udayamathi, Assistant Professor/BT
 Ms. R. Hanisha, Assistant Professor/BT
 Ms. K. Abinaya, Assistant Professor/BT
 Ms. R. Ragavy, Assistant Professor/BT
 Ms. T. P. Karunya, Assistant Professor/BT
 Ms. B. Bhavani Sowndharya, Assist. Prof./BT
 Ms. S. Sangeetha Gandhi, Assist. Prof./BT

STUDENTS CORNER (PHOTOS ARE WELCOME)**Students Publications**

S. No.	Student Name	VH no	Year	Article Name	Journal Name	Year	Impact Factor
1	S. Vigneshwar, A. Kowsalya	9156 & 9145	Passed out (2017-2021)	Phyto-chemical and biological activity of Myristica fragrans, an ayurvedic medicinal plant in Southern India and its ingredient analysis	Saudi Journal of Biological Sciences	Mar 2022	Scopus

Patent Applied

S. No.	Student Name	VH no	Year	Patent Title	Year	Status
1	Harini. B, Bhavani Poojitha	9111 & 9142	Passed out (2017-2021)	Preparation and Validation of Value Added Biodegradable Mulch Films derived from Domestic Waste	Jan 2022	Patent Filed and Awaiting Complete Specification

Student Participation/Paper Presentations in Conferences and Seminars

S. N O	VH NO	Name	Sem ester	Conference / Seminar Title	Hosted by	Date and Venue	Paper Title
1	9925	Gowtham SS	06	VISAI 2022	Vel Tech Rangarajan Dr. Sagunthala R & D Institute of Science and Technology	24.02.2022	Synthesis and Characterization of Biodegradable Nursery Grow Bags from Peanut Shell Waste
2	9892	Amarnath. N	06	VISAI 2022	Vel Tech Rangarajan Dr. Sagunthala R & D Institute of Science and Technology	24.02.2022	Synthesis and Characterization of Biodegradable Nursery Grow Bags from Peanut Shell Waste
3	9909	Karthikeyan. G	06	VISAI 2022	Vel Tech Rangarajan Dr. Sagunthala R & D Institute of Science and Technology	24.02.2022	Synthesis and Characterization of Biodegradable Nursery Grow Bags from Peanut Shell Waste

4	9940	Anandhasayan T	06	Recent trends in biotechnology & its applications	Vels Institute of Science, Technology and Advanced Studies (VISTAS)	10.03.2022	Participated
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Student Participations in Webinars-

S.NO	VH NO	Name	Semester	Webinar	Hosted by	Date and Venue
1	9938	Mahalakshmi T D	6	Webinar on "Financial empowerment through wealth creation"	S.K. Roy College, Assam	28.03.2022
2	9912	Mohamed Hasan M.	6	Recent Progresses in Biological Sciences	Ayya Nadar Janaki Ammal College	04.03.2022 to 05.03.2022
3	9898	Gayathri. R	6	National Level Seminar on "Fish-an experimental research Tool"	National College (Autonomous), Trichy	04.03.2022

GATE cleared students

S.NO	VH NO	Name	Semester	GATE score
1	9335	P. Muthukumar	08	48
2	9331	G. Nivedha	08	43

STUDENT AWARDS

Gowtham. SS, Amarnath. N and Karthikeyan. G have won second prize in the paper presentation entitled “**Synthesis and Characterization of Biodegradable Nursery Grow Bags from Peanut Shell Waste**” in VISAI 2022 on 24th Feb 2022 hosted by Vel Tech Rangarajan Dr. Sagunthala R & D Institute of Science and Technology



Faculty Participation/Paper Presentations in Conferences and Seminars-

S.N O	HT S NO	Name	Designation	Conference/ Seminar Title	Hosted by	Date and Venue	Paper Title
1	981	Dr.D.Yuvaraj	Professor and Dean SoBCE	Recent trends in Biotechnology and its applications	Vels University, Chennai	10.03.2022 to 11.03.2022	Participated

Faculty Participations in FDPs and Workshops

S.NO	HTS NO	Name	Designation	FDP/Workshop	Hosted by	Date and Venue
1	1396	Dr. A. Sai Ramesh	Associate Professor	Bio-nano interface: Studying nano-biophysicochemical interaction to toxicity	University of Madras, Chennai	21.03.2022 to 27.03.2022

2	1503	Ms. R. Hanisha	Assistant Professor	Competence of meiobenthic tiny copepod live feed for marine finfish larvae	AMET University, Chennai	08.02.2022

Faculty Publications

S.NO	HTS NO	Name	Designation	Article Title	Journal Name	Period of Publication	Indexing
1	981	Dr. D. Yuvaraj	Professor and Dean SoBCE	In-silico profiling of SLC6A19, for identification of deleterious ns-SNPs to enhance the Hartnup disease diagnosis	Computational Toxicology	Jan 2022	SCI 2.477
2	981	Dr. D. Yuvaraj,	Professor and Dean SoBCE	In silico profiling of non-synonymous SNPs in IDS gene for early diagnosis of Hunter syndrome	Egyptian Journal of Medical Human Genetics	Feb 2022	SCI 0.59
3	981	Dr. D. Yuvaraj,	Professor and Dean SoBCE	Phyto-chemical and biological activity of Myristica fragrans, an ayurvedic medicinal plant in Southern India and its ingredient analysis	Saudi Journal of Biological Sciences	Feb 2022	SCI 4.219

4	1429	Dr. M. Gopinath	Associate Professor	Transgenicism in algae: Challenges in compatibility, global scenario and future prospects for next generation biofuel production	Renewable and Sustainable Energy Reviews	Feb 2022	SCI 14.982
5	1396	Dr. A. Sai Ramesh	Associate Professor	In-silico profiling of SLC6A19, for identification of deleterious ns-SNPs to enhance the Hartnup disease diagnosis	Computational Toxicology	Jan 2022	SCI 2.477
6	1396	Dr. A. Sai Ramesh	Associate Professor	In silico profiling of non-synonymous SNPs in IDS gene for early diagnosis of Hunter syndrome	Egyptian Journal of Medical Human Genetics	Feb 2022	SCI 0.59

Patent Applied

S. No.	HTS NO	Name	Designation	Patent Title	Year	Status
1	981	Dr. D. Yuvaraj	Professor and Dean SoBCE	Preparation and Validation of Value Added Biodegradable Mulch Films derived from Domestic Waste	Jan 2022	Patent Filed and Awaiting Complete Specification
2	1342	Dr. R. Gnanasekaran	Assistant Professor and Head	Preparation and Validation of Value Added Biodegradable Mulch Films derived from Domestic Waste	Jan 2022	Patent Filed and Awaiting Complete Specification
3	1490	Ms. M. Udayamathi	Assistant Professor	Preparation and Validation of Value Added Biodegradable Mulch Films derived from Domestic Waste	Jan 2022	Patent Filed and Awaiting Complete Specification

By the implementation of Activities Beyond Classroom our students have able to inculcate many skills apart from academic courses. Through various activities students have gained knowledge in Communication Skill Development (CSD), mini project, NPTEL and Value Added Courses. Many students have actively attended the NPTEL classes and started preparing for the exams. Also the guest lectures and the industrial visit facilitated the students to get exposure more on the fields related to their subjects. Students of third year (2019-2023 batch), Gowtham. SS, Amarnath. N and Karthikeyan. G have attended an International Conference

VISAI, 2022 and won second prize in the same. Furthermore, our passed out students, Vigneshwar. S and Kowsalya. A have published their research works in reputed journal. Our faculty have progressed well in publishing research papers, attending National level FDPs and workshops to polish their skills further.