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Dr. A. Nirmala, Associate.Prof.

**Faculty's**

Dr.. R.Devika, Professor cum

RPMO

Dr. Nagarajan L, Associate Prof.

Ms. Sasikala A, Asst.Prof., (Gr-II)

Dr. Shanmuga Sundar S, Assy. Prof

(Gr- II)

Mrs. M. Subathra, Asst.Prof.

**Full time research scholar**

Ms. Vineta Tirkey

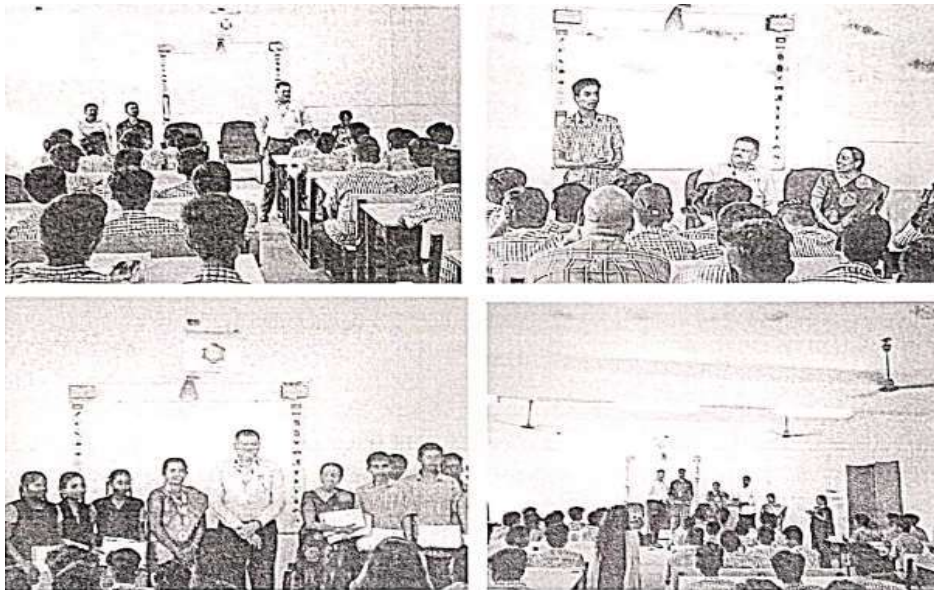
Ms. Selvi S and Mrs. Radhamani T

**DEPARTMENT OF BIOTECHNOLOGY**  
**BIOTRACK – 2022 - 2023**  
**JULY2023- JUNE 2024**

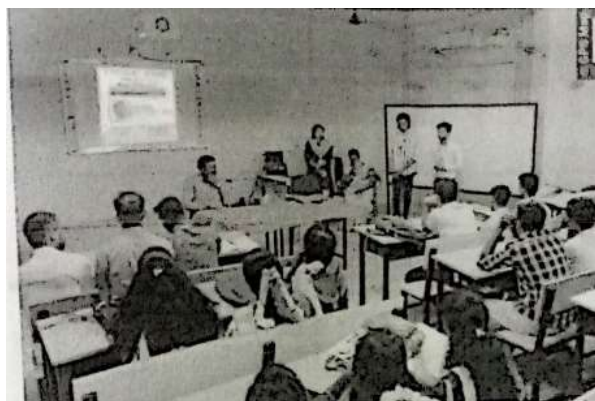
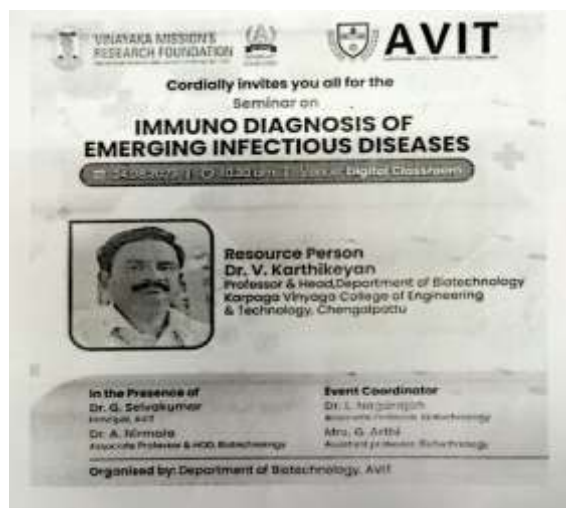
**News Letter**

The Department of Biotechnology was conceptualized and started in AVIT by the year 2004 with an ambition to apply engineering knowledge and to create novel technology. The Department offers Under Graduate, Post Graduate (FT / PT) and Ph.D (FT /PT) Program. The Department has six major laboratories mainly Plant tissue culture, Microbiology, Immunology, Biochemistry, Cell and Molecular Biology which imparts training for the students to make them competent and gain thorough knowledge. The Department has extensive research facilities and infrastructure to support ongoing teaching and research initiatives in the area of, clinical biochemistry, Environmental science, Medicinal plants, Nanotechnology, Plant tissue culture etc. The Department organizes guest lectures, seminars, conferences, workshops, hands on training, industrial visits, internships, industrial credit courses to create confidence and explore the recent trends in the young minds. The Department received fund from Department of Biotechnology, Ministry of Earth Sciences. Ministry of Environment and Forests, Entrepreneurship Development Institute of India etc

## EVENTS ORGANIZED BY DEPARTMENT FROM JULY 2023- 2024



The hands-on training program on “Basics of Cell and Molecular Techniques” was incredibly informative and well-organized by Aarupdai veedu institute of technology. The main contribution by the Department of biotechnology faculty and students.



The seminar on “Emerging Infectious Diseases of Immuno Diagnosis” was highly informative and engaging. Dr. V. Karthikeyan’s insights were particularly enlightening, providing a deep understanding of current challenges and advancements in the field. The event was well-organized, and the digital classroom at AVIT on 24.08.2023 setup facilitated smooth interaction. It was a valuable experience for all attendees, enhancing our knowledge significantly.

**AVIT**  
 Cardially invites you all for the  
**Expert Talk on**  
**Applications of Receptor Pharmacology In Drug Discovery:  
 An Industrial Perspective**

📅 25.08.2023 🕒 10.30 am 📍 Digital Classroom

**Resource Person**  
**Dr. Murugesan Arumugam**  
 M.Pharm, Ph.D.,  
 Assistant Professor in Pharmacology  
 Sri Ramachandra Institute of  
 Higher Education and Research  
 (Deemed to be University)  
 Porur, Chennai

**VINAYAKA MISSION'S  
 RESEARCH FOUNDATION**

Organised by: Department of Biotechnology, AVIT



The seminar on “Applications of Receptor Pharmacology in Drug Discovery” was exceptionally insightful. Dr. Murugesan Arumugam’s presentation was clear and informative, shedding light on the latest advancements in the field. The digital classroom format was well-executed, allowing for seamless interaction and engagement. The event was well-organized by AVIT the department of biotechnology chennai-603104.

**AVIT** **VINAYAKA MISSION'S  
 RESEARCH FOUNDATION**

**AVIT** **MOHARRI**

Seminar on  
**Evolution of Herbal Remedies in India:  
 Bridging Tradition with Scientific Validation &  
 Regulatory Vigilance**

📅 22.03.2024 🕒 11.30 am 📍 Digital Classroom


**Resource Person**  
**Dr. R. LAKSHMI SUNDARAM**  
 Assistant Professor (Research)  
 Sri Ramachandra Faculty of Pharmacy  
 Sri Ramachandra Institute of  
 Higher Education and Research,  
 Chennai-78.

Organised by: Department of Biotechnology, AVIT

**VINAYAKA MISSION'S  
 RESEARCH FOUNDATION**



The seminar on “Evolution of Herbal Remedies in India” was enlightening and well-organized. Dr. R. Lakshmi Sundaram’s presentation effectively bridged traditional knowledge with scientific validation. The digital classroom format facilitated smooth interaction and engagement. The event provided valuable insights into regulatory vigilance in herbal medicine. Overall, it was a highly informative and enriching experience which is welly organized in department of biotechnology on 22.03.24 at AVIT.



Cordially invites you all for the  
**Alumni talk on**  
**Career Guidance on Higher Education**

**Resource Person**  
**PREETHI R**  
 Research Scholar (Full Time),  
 Government Arts College for Men,  
 Nandanam,  
 University of Madras.

01<sup>st</sup> April 2024      10.00 a.m.      Digital classroom

Organised by Department of Biotechnology  
 in association with AVIT Alumni Association



ALUMNI TALK ON CAREER GUIDANCE ON HIGHER EDUCATION IN  
 BIOTECHNOLOGY, DATE 01/04/2024

The alumni talk on “Career Guidance on Higher Education” was incredibly insightful and motivating. Preethi R’s experiences and advice provided valuable direction for students considering higher education paths. The event was well-organized, at the AVIT the department of biotechnology on 1.04.2024

## INDUSTRIAL VISIT



**DEPARTMENT OF BIOTECHNOLOGY**  
**INDUSTRIAL VISIT REPORT**  
**Medo Pharm Private Limited, Guduvanchery**  
**On 02.09.2023**



**Faculty Member In-charge: Dr Shanmuga Sundar S, Assistant Professor (Gr-II)**

**Students Participated: Second, Third & Fourth-Year Students – 58.**  
**Faculty participated : 6 Teaching faculty and 2 Non -teaching faculty members**

## INDUSTRIAL VISIT

The industrial visit to Medo Pharm Private Limited was an enriching experience for all participants. The visit provided valuable insights into the pharmaceutical industry's operations and real-world applications of biotechnology concepts. Dr. Shamuga Sundar-A and the accompanying faculty ensured the visit was well-organized and educational. The participation of second, third, and fourth-year students, along with teaching and non-teaching faculty, fostered a collaborative learning environment. Overall, it was a highly informative and beneficial visit that enhanced our understanding of the industry.

## PUBLICATION OF FACULTY

Name of the faculty	Paper Title	Journal-name	Month & Year	Indexing
Shanmuga Sundar Saravanabhavan	Green synthesis of silver nanoparticles using <i>Ocimum sanctum</i> Linn. and its antibacterial activity against multidrug resistant <i>Acinetobacter baumannii</i>	PeerJ	July2023	Scopus, WoS
Dr Shanmuga Sundar S	Preparation and evaluation of physicochemical studies of novel natural cellulose microfibril (CMF) reinforced poly (sodium acrylate) hydrogel	Carbon Letters	August 2023	Scopus / WoS/ UGC Care List
L. Nagarajan	Adsorption isotherm and kinetic characteristics of sawdust, shrimp shell, and wild sugarcane-based activated carbon for CO <sub>2</sub> capture	Biomass Conversion and Biorefinery	November 2023	Scopus, Web of Science
Nagarajan L	Sorption of hexavalent chromium adsorption and its subsequent removal from Aqueous Environment using algae <i>Sargassum myriocystum</i>	Brazilian Journal of Development	January 2024	Non-indexed

# PUBLICATION OF FACULTY

Shanmugasundar S	In vitro study on the inflammatory response of chitosan nanoparticles as a potential siRNA carrier targeting towards osteosarcoma cell	De-Gruyter	January 2024	Non-indexed
Shanmugasundar S	Preparation and evaluation of a niosomal delivery system containing G. mangostana extract and study of its anti-Acanthamoeba activity	Nanoscale Advances	January 2024	Wos- indexed
Shanmuga Sundar Saravanabhavan	Inhibitory and anti-adherent effects of Piper betle L. leaf extract against Acanthamoeba triangularis in co-infection with Staphylococcus aureus and Pseudomonas aeruginosa: A sustainable one-health approach	Veterinary World	April 2024	Scopus/Web of Science
Shanmuga Sundar Saravanabhavan	Examination of hybrid electrode material for energy storage device supercapacitor under various electrolytes	Carbon Letters	April 2024	Scopus/Web of Science
Shanmuga Sundar Saravanabhavan	Examination of hybrid electrode material for energy storage device supercapacitor under various electrolytes	Carbon Letters	April 2024	Scopus/Web of Science
Nirmala A.	Molecular Farming: Biotechnological Approaches for Producing High-Value Plant-derived Pharmaceuticals	African Journal of Biological Sciences (South Africa)	May 2024	Scopus
Nagarajan L	An overview of technologies for Capturing, Storing, and utilizing carbon Dioxide: Technology Readiness, large-scale Demonstration, and cost.	Chemical Engineering Journal	May 2024	WoS, Scopus

## RECOGNITION OF FACULTY MEMBERS

Year & Month	Name(s) of teachers who received the awards	Designation	Title of the Award (s)	Name of the agency /agencies that awarded	Purpose
2023	Nirmala A	Associate Professor	Excellence of review	Asian journal of Advances in Agriculture research	Reviewer
2023	Nirmala A	Associate Professor	Excellence of review	Asian basic and applied research journal	Reviewer
2023	Nagarajan L	Associate Professor	Best Researcher award	Indian academic research association	Published papers with impact factor of 20 in SCI, Q1, Journals.
2023	Devika R	Professor	Guinness Record	ESN Publication	Guinness world record for contributing as editor in the thickest book



## NPTEL COMPLETION BY FACULTY

Name of teachers who attended Faculty Development Programmes (including online programmes)	Title of the Programme	Dates From – To)	Duration	Organized by
Nagarajan L, Nirmala A	Forests and their management	Jan2024-Apr2024	4 months	Swayam NPTEL - IIT Madras

## FDP AND TRAINING COMPLETED BY FACULTY

Nature Of the Program (Ex.Seminar..)	Name of the Faculty	Date/ No. of days	Title of the Program	Organised By	International / National / State / Local Level
FDP	Nirmala A	21-7-2023	Food standards in global health care to combate life style disease	Prathyusha college of Engineering and technology	Local level
FDP	Nirmala A	21.08.2023 - 30.08.2023	National level Professional development programme for Higher Education Teachers	Shri Shakaral sundarbai shashun Jain college for women	Local level
FDP	Subathra M	Jul to Oct 2023	Dairy and food process and product technology	AICTE	National level
FDP	Nirmala A	Jul to Oct 2023	Dairy and food process and product technology	AICTE	National level
FDP	Sasikala A	20.11.2023 to 25.11.2023	Sustainability in food industry : Fundamentals, evolving needs and future	NIFT	Local level



## NPTEL BY STUDENT

Name of the Course	Date and Duration of the event	Name of Student	Year
Dairy and Food process and product technology	July 2023 to October 2023	Bipin Kumar	II Year

## TRAINING COMPLETED BY STUDENT

Organizing agent	Training program	Name of the student	Duration
Human Resource Skills	Human Resource Skills	Sintu Kumar	09.10.2023

## CONFERENCE PARTICIPATION BY STUDENT

Name of Participant	Name of the event	Date and Duration of the event	Level of the Event	Year of study
Krishna Kumar	CHEM-TECHNOVA 2024 - International Conference "Sustainable Green Chemical Technologies: Challenges and Opportunities"	21.03.2024	International	II Year
Ashish Kumar	CHEM-TECHNOVA 2024 - International Conference "Sustainable Green Chemical Technologies: Challenges and Opportunities"	21.03.2024	International	II Year

# Student prize winners in sports & culturals

Name of the Event	Name of the award/ medal	Select appropriate event		Name of the student
		Sports	Cultural	
Cricket	winner	sports		Anshu kumar
Cricket	Winner	sports		Deepak kumar J
Badminton	Runner	sports		Rajesh N
Foot ball	Runner	sports		Rajesh N
Kho-Kho	Runner	sports		Rajesh N
Chess	Winner	sports		Deepak kumar J
Chess	Winner	sports		Amit Kumar
Basket Ball	Winner	sports		Hemalatha m
Throw ball	Winner	sports		Hemalatha m
Carrom	Runner	sports		Sunil D
Badminton	Runner	sports		Sharmila N
Kho-Kho	Runner	sports		GajaLakshmi U
Badminton	Runner	sports		Praveena B
Veg Craving	Frist prize		Cultural	Nawazish Ekwat
Debate	Frist prize		Cultural	Iniyavan V
Debate	Frist prize		Cultural	Rajesh N
Hindi poetry	Thrid prize		Cultural	Nawazish Ekwat



# CONFERENCE PARTICIPATION BY STUDENT

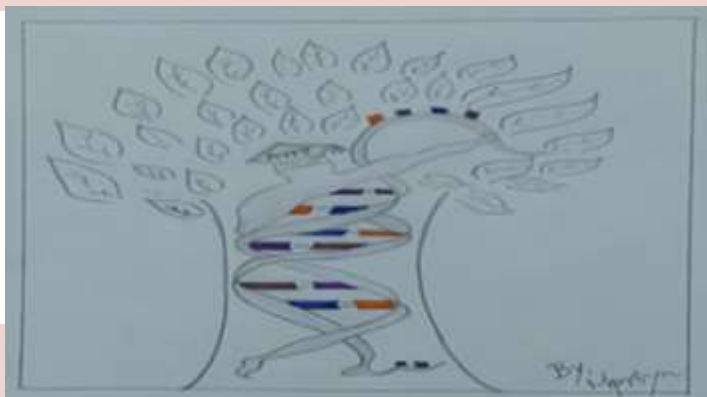
Name of Participant	Name of the event	Date and Duration of the event	Level of the Event	Year of study
Iniyavan V	International Safety and Occupational Health - Improving the care and wellbeing of the workers through science & Technology	17.08.2023 to 18.08.2023	International	IV Year
Hemalatha M	International Safety and Occupational Health - Improving the care and wellbeing of the workers through science & Technology	17.08.2023 to 18.08.2023	International	IV Year
Praveena B	National conference on " Revolutionary application of Nutraceuticals and Functional foods as Next Generation metabolites -A biotechnological approach via sustainable agriculture .	07.09.2023 to 08.09.2023	National	IV Year
Gajalakshmi U	National conference on " Revolutionary application of Nutraceuticals and Functional foods as Next Generation metabolites -A biotechnological approach via sustainable agriculture .	07.09.2023 to 08.09.2023	National	IV Year
Guljar Alam	National conference on " Revolutionary application of Nutraceuticals and Functional foods as Next Generation metabolites -A biotechnological approach via sustainable agriculture .	07.09.2023 to 08.09.2023	National	IV Year
Iniyavan V	Bioinformatics career conference	26.11.2023	National	IV Year
Sintu Kumar Ray	IICHE-CHEMCON 2023	27.12.2023 to 30.12.2023	International	IV Year
Machiyile pame	IICHE-CHEMCON 2023	27.12.2023 to 30.12.2023	International	IV Year

## Freehand Drawing



**Name of the Student: Mr. Sumit Kumar, Third Year,  
Biotechnology**

## Freehand Drawing



**Name of the Faculty: Ms. P. Mohanapriya, Assistant Professor ,  
Biotechnology**

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## Articles

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**V - Versatile**

**M - Majestic**

**R - Robust**

**F - Family**

**A - Adept**

**V - Venerable**

**I - Innovative**

**T - Titanic**

**B - Beaming**

**T - Titillating**

**E - Emboldened**

**Subathra M**

**Assistant Professor**

**Department of Biotechnology**

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**Name of the Faculty: Mrs. M. Subathra, Assistant Professor ,  
Biotechnology**

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