



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambara Nadar - C.Nagammal Campus

S.P.G.C. Nagar, K.Vellakulam – 625 701 (Near VIRUDHUNAGAR).

DEPARTMENT OF BIOTECHNOLOGY

DEPARTMENT HIGHLIGHTS

DEPARTMENT - ACHIEVEMENT

Permanent Affiliation from Anna University



Highlights of Faculty Contribution

50 % of the Faculty Members cleared GATE

40 % of the Faculty Members are University Rank Holders

60 % of the Faculty Members are with PhD

40 % of the Faculty Members are having PhD supervisorship

Listed in Top 10 % World Scientists listed in AD index

Toppers in NPTEL

Best Researcher Award / Research Fellowships

DEPARTMENT OF BIOTECHNOLOGY



Dr. R. Suresh Kumar, M.Sc., Ph.D.,
 Professor & Head of Department



Dr. R. Baskaran, M.Tech., Ph.D.,
 Associate Professor



Dr. V. Geetha, M.Sc., Ph.D.,
 Associate Professor



Dr. S. Karthikeyan, M.Sc., M.Tech., Ph.D.,
 Associate Professor



Dr. S. Pradeep, M.Tech., Ph.D.,
 Associate Professor



Mrs. R. Anusha, M.Tech., Ph.D.,
 Associate Professor



Mr. Rafi Joseph, M.Tech., Ph.D.,
 Associate Professor



Mrs. A. Geeta, M.Tech., Ph.D.,
 Associate Professor



Mrs. R. Rajaprasanthi, M.Tech.,
 Associate Professor



Vision

To make the Department of Biotechnology, unique of its kind in the field of research and development activities pertaining to the field of biotechnology in this part of the world

Mission

To impart highly innovative and technical knowledge in the field of biotechnology to the urban and rural student folks through "Total Quality Education"

Highlights of Students Contribution



सत्यमेव जयते

Prime Minister's Research Fellowship scheme for Ph.D. students

Fellowships / Exams

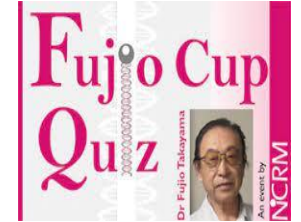


CSIR UGC NET



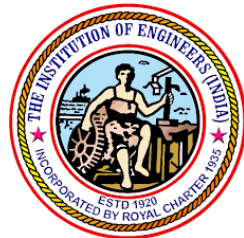
Summer Research Fellowship

International Competition



Project Fund

Rs.3,16,000 students Project Grant



IIT Delhi



NIT Agarthala

Rs.10,50,000 student Incubation Grant

Consistent Student achievements in GATE, CSIR, GAT-B and IIT – JAM Direct Ph.D admissions at IITs

Consistent performance in Co-curricular and Extracurricular activities

Publications



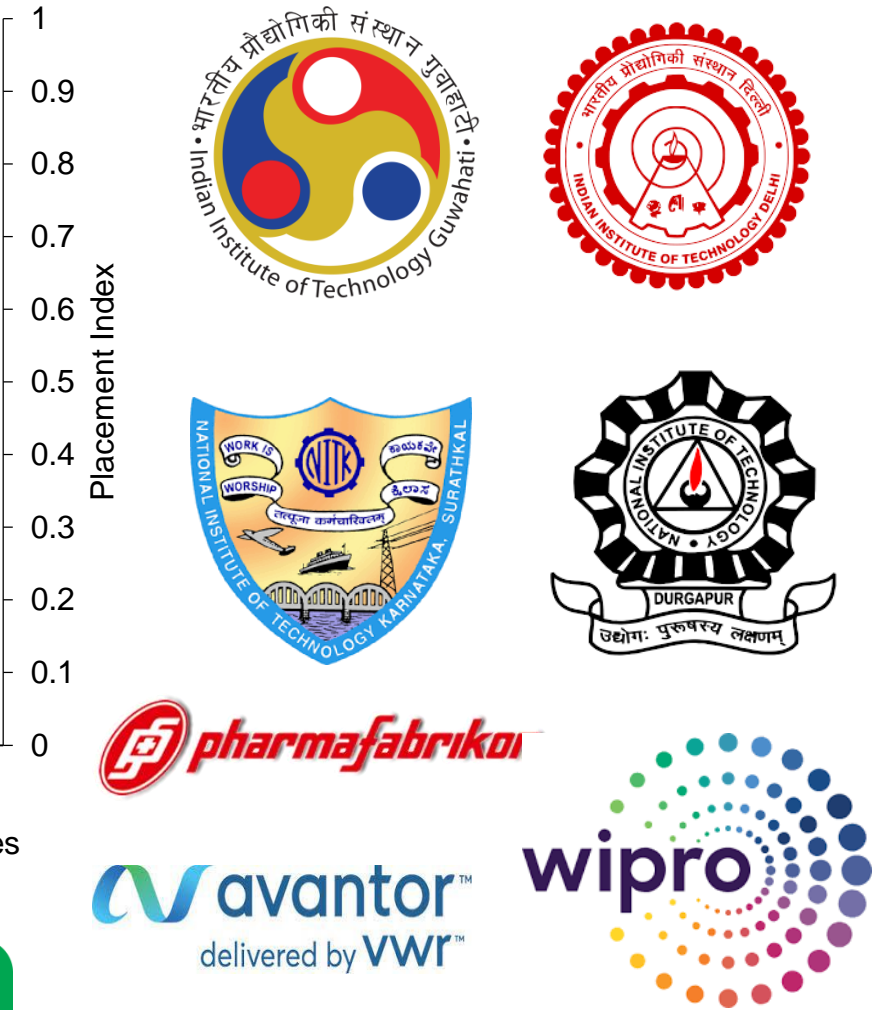
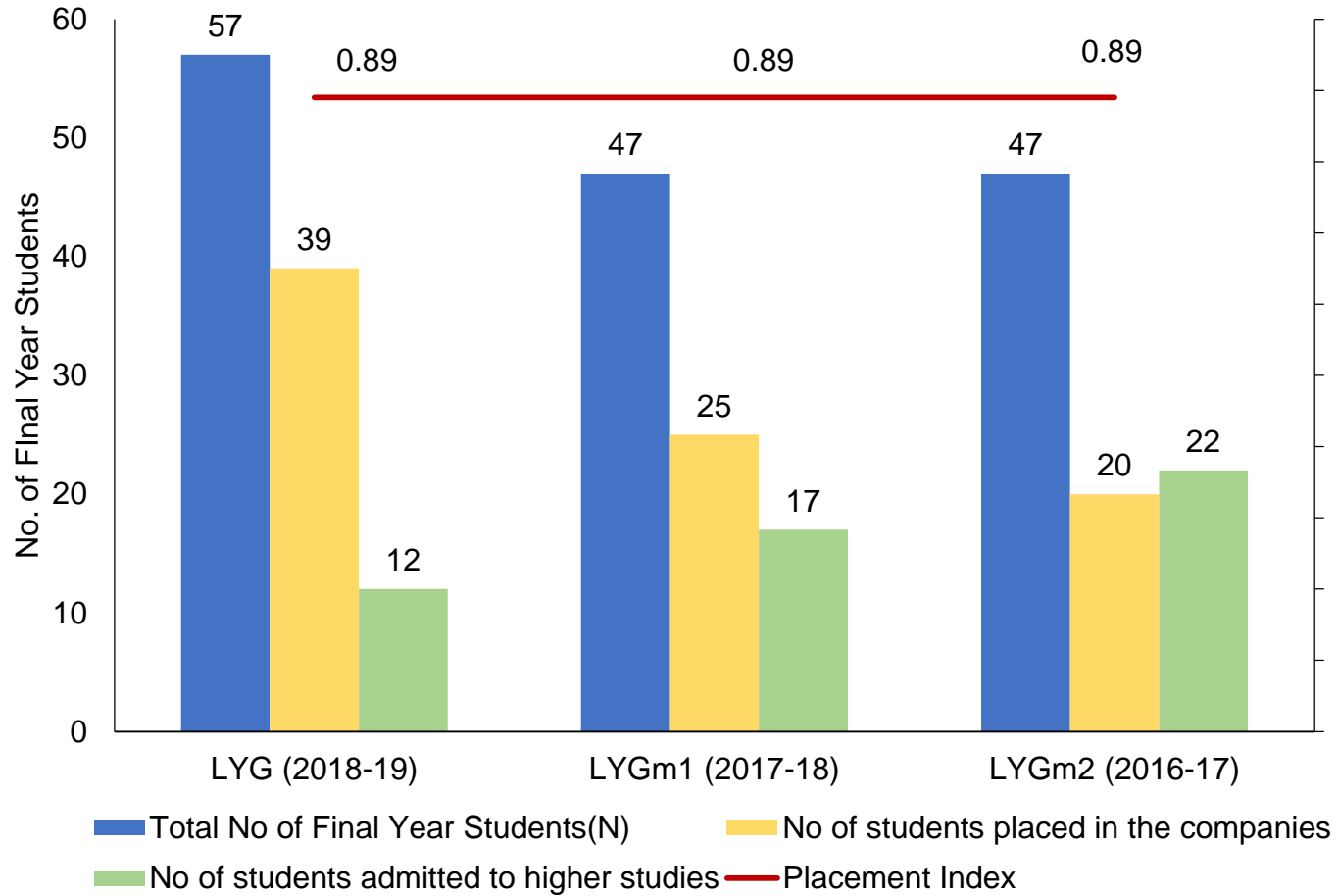
ELSEVIER

Student Publication



INTELLECTUAL PROPERTY INDIA
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

Placement, Higher Studies and Entrepreneurship



CHC Healthcare™

Infosys®

ZIFO
RnD SOLUTIONS

avantor™
delivered by VWR™

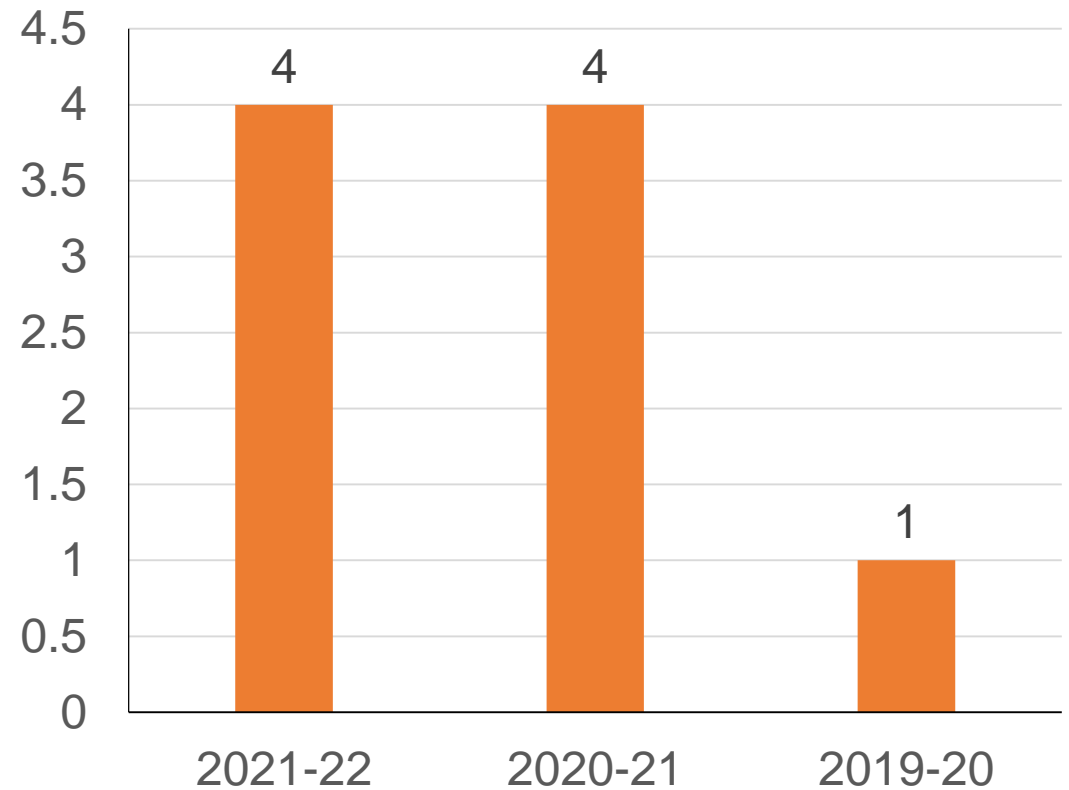


Student Publication

- Review paper with highest Impact Factor Journal, Renewable and Sustainable Energy Reviews (16.79)
- Student Conference publications
- Book chapters




No of Journal Publications



Cocurricular Activities : Presentation / Participation

S. No	Academic Year	Conference Participation		Workshop/ Symposium/ Seminar/ Contest Participation	Total Participation	Prizes/ awards received in such events
		National	Outside the state			
1	2024- 2025	56	-	88	144	29
2	2023- 2024	65	14	41	120	15
3	2022- 2023	8	8	45	61	-
4	2021- 2022	52	3	53	108	5

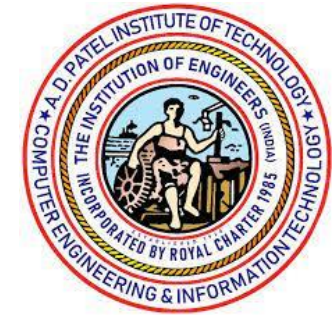


Research Project




Sl. No	Year / Period	Title of the Project	Name of the Investigator / Co investigator	Funding Agencies	Amount (Rs.)	Status
1	2023 – 24	Design And Fabrication Of Solar Assisted Smart Bokashi Composter For Onsite Conversion Of Bio-Waste To Organic Fertilizer At Infertile Soil Area	Dr.S.Karthi kumar, Jeyavarshini.B	Ministry of Micro, Small & Medium Enterprises – MSME Hackathon 2.0 (Product Development)	10,25,000	On Going
2	2023 – 24	Design And Development of AI-Based Smart Water Food Quality Analyzer as A Home Appliance To Monitor The Selected Quality Parameters, Contaminants And Adulterants	Dr.S.Karthi kumar	Ministry of Micro, Small & Medium Enterprises – MSME Hackathon 2.0 (Product Development)	11,47,500	On Going
3	2017 - 20	Culturable Actinomycetes Associated with Coastal Lichens: A Potential Source of Bioactive Compounds	Dr.R.Shyam Kumar, Dr.I.Ganesh Moorthy	Department of Biotechnology, Ministry of Science and Technology	Total amount 88,53,900 for KCET 45,89,200	Completed

Research Project



Sl. No	Year / Period	Title of the Project	Name of the Investigator / Co investigator	Funding Agencies	Amount (Rs.)	Status
4	2022 - 2023	Fabrication of Thin Biofilm using Boiled Rice water reinforced with microalgae, An Ecofriendly Approach	Dr.R.Shyam Kumar, Mousika R, Niranjana Devi R and Sudharshan G	Foundation for Advancement of Education and Research (FAER)	6,000	Completed
5	2020 - 2021	Enzymatic synthesis of feruloyl lipid to improve the oxidative stability of biodiesel	Dr.S.Karthikumar, Ms.Jemima Romola C.V	Institution of Engineers (India)	50,000	Completed
6	2020 - 2021	Design and Fabrication of Foam separation column to remove chromium Heavy metals from Leather Tannery Effluent	Dr.S.Mariamalraj, Ms. Brindhajothi	Institution of Engineers (India)	60,000	Completed

Research Project

Sl. No	Year / Period	Title of the Project	Name of the Investigator / Co investigator	Funding Agencies	Amount (Rs.)	Status
7	2022 – 23	Boiled rice water and protein-based bio-film development by injection moulding for Packaging	Dr.R.Shyam Kumar, Sumana R.	 Tamil Nadu State Council for Science and Technology	7,500	Completed
8	2020 – 21	Cost effective method development for C-Phycocyanin recovery from spirulina plantensis using Ohmic heating approach	Dr.S.Karthikumar & G.Janakiraman , R.Akash , R.S.Vishnu Shagar		7,500	Completed
9	2020 – 21	Cost effective Rice Water based green composite film development for food packaging	Dr.R.Shyam Kumar & A.Vinnarasi		7,500	Completed
10	2020 – 21	Development of Agro-Waste based heterogeneous Catalyst to produce Biodiesel from used Cooking Oil.	Dr.I.Ganesh Moorthy & R.Akash, M.Areef Sulaiman, P.Bhavesh Chandru		7,500	Completed
11	2020 - 21	Evaluation of antioxidant potential of Phytoconstituents isolated from Artocarpus haterophyllus peel	Dr.A.Ronaldo Anuf & V.S.Nivethitha		7,500	Completed

Publication

IRNS – Journal Article : 129, Citations : 2177, h-index : 21

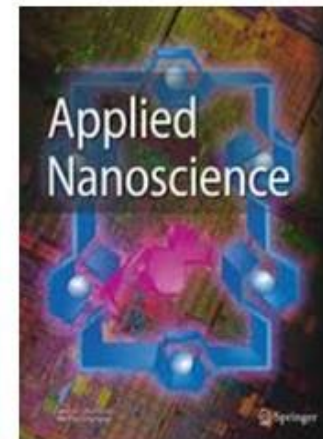
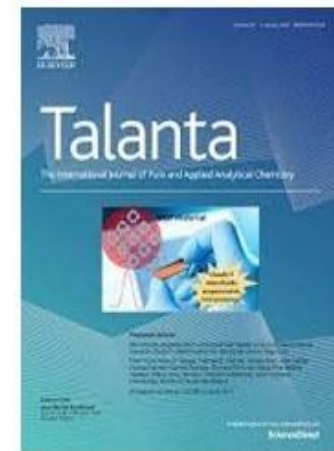
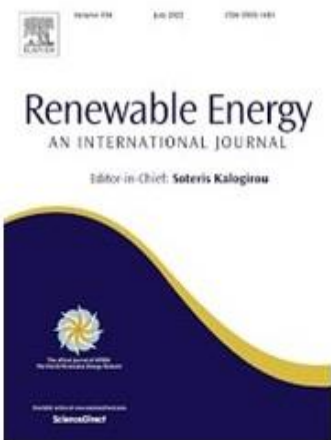
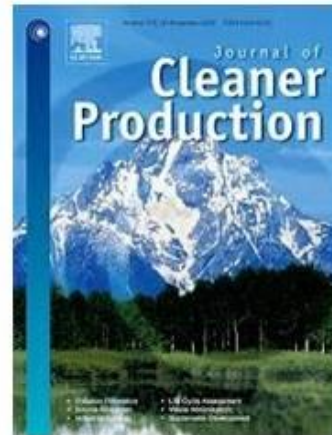
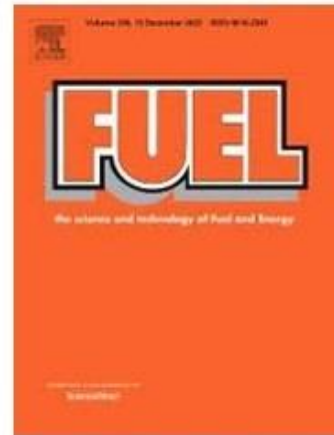
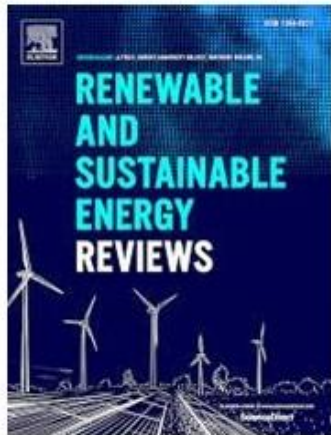
2019 to 2022

No. of Article : 47

Cumulative IF : 184.4

Ave. IF : 3.92

Highest IF : 16.79

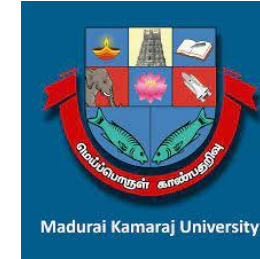


Faculty Interaction With Outside World

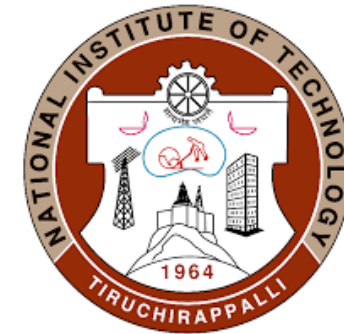
Joint Publication with



Joint Major Research Project with



Google Scholar Citation



Patent

Patent Granted : 2

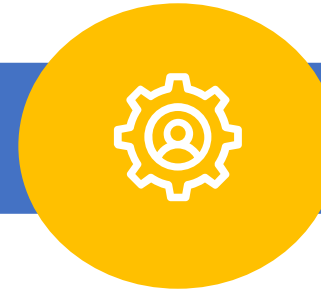
1. An Alkaline Protease Enzyme Purifying, Recovering Apparatus And Process Thereof
2. Effective Biological Delignification Of Noxious Lignocellulosic Substrate *Prosopis Juliflora* For Bioethanol Production With Newly Isolated *Paecilomyces Sp. Garj*

Patent Filed : 3

1. A Method For C-Phycocyanin Fortified Dried Agar And Gelatin Based Hydrocolloids And The Process Thereof
2. A Process Of Improvement In Activity Retention And Color Stability Of C-Phycocyanin During Ohmic Heating Assisted Recovery
3. In-Situ Automated Greenhouse Monitoring and Controlling System

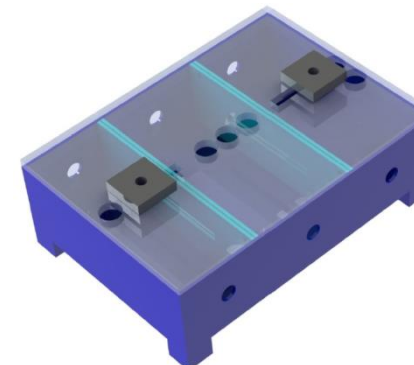
04-06-2026

Design

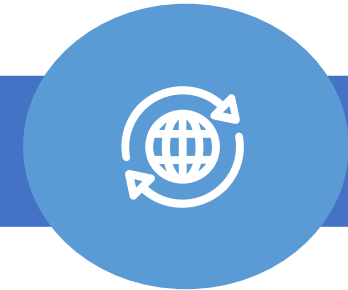


Design Registered – 2 (FER received)

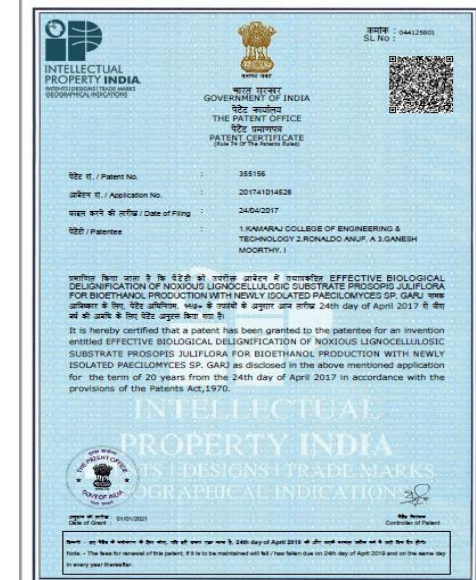
1. Algae Assisted Desalination Cell
2. Algae Assisted Fuel Cell



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Copyright Registered – 1 Submitted - 1



PhD Guidance



Centre For Research, Anna University Chennai
Recognized in 2011

6

Research Supervisor

13

Total Scholars completed PhD

Part Time : **9**

Full Time : **4**

8

Scholars completed PhD during
assessment Period

Part Time : **5**

Full Time : **3**

61.5 %

Scholars
Completed PhD
During 2019-23

10

Scholars Pursuing PhD

Part Time : **7**

Full Time : **3**

New Product Development

- Foam Fractionation Column (Patented)
- Value added product (Spirulina enriched peanut Chikki)
- Paper sensor for Chlorpyrifos pesticide detection
- Probiotic Rice Water based Soft Drink
- Biodegradable Film
- Fermented Batter Dry Powder



INDUSTRY INTERACTION

- FERMOTECH INDUSTRIES
- MANNA FOODS
- SATHYAM BIOSCIENCE
- ENZYME CO PVT LTD
- PENINSULAR INDUSTRIES
- SEA 2 FARM

Facilities/Technical Support/Teaching Labs/Special Lab



Total No. of Laboratories : 7

- Microbiology & Bioprocess Laboratory
- Downstream processing
- Molecular biology, Genetic Engineering Laboratory
- Chemical Engineering Laboratory
- Biochemistry Laboratory
- **Cell Biology & Immunology Laboratory**
- Research Laboratory

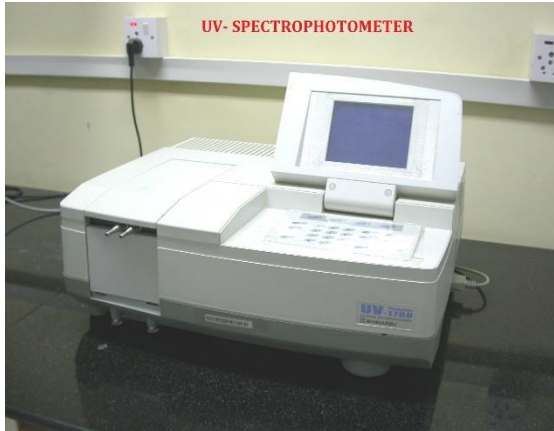
MAJOR INSTRUMENTS



BIO REACTOR



HPLC



UV -SPECTROPHOTOMETER



SPARY DRIER



CO₂ INCUBATOR



THERMO MIXER



THANK YOU