ABOUT INDUSTRIAL SYSTEMS BIOLOGY LAB

Professor and Head
Industrial Systems Biology Lab
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TEAM LEADER

Researcher Profile

Vidwan ID : 591497
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Scopus ID : 56277026000
Researcher ID : HII-9530-2022
Loop ID : 1057242
Google Scholar ID : dUCqXvUAAAAJ
Research Gate ID : Paulchamy Chellapandi

Area of Research Interest

- Evolutionary systems microbiology
- Systems space microbiology
- Systems medicine and healthcare
- Network pharmacology and drug discovery
- Microbial cell factories
- Industy 4.0 enabled bioprocess engineering
- Aquaculture automation

Industrial systems biology is an interdisciplinary field that integrates biological science with engineering principles and data-driven approaches to optimize and manipulate biological systems for industrial applications. High-throughput data and computational models are used to simulate and predict cellular and metabolic behaviors, improve product yields, and reduce costs. Modifying the metabolic pathways of microorganisms to produce biofuels and pharmaceuticals more efficiently. Designing and constructing new microbial cell factories or devices to perform useful industrial functions. Our team has focused on optimizing and engineering microbial cell factories and consolidated bioprocessing for efficient and sustainable production of biofuels, biorefineries, chemicals, and recombinant vaccines. Systems Microbiology allows smart biomanufacturing and process automation, leading to an Industry 4.0 transition. Our team also utilized a systems medicine approach to develop human therapeutics, integrating complex biological data to investigate treatment options for gut-organ microbial axis diseases. Hence, our group integrates biological data and synthetic gene circuits to develop innovative solutions for smart biomanufacturing and systems healthcare.

BIOGRAPHY

Dr. P. Chellapandi, a prominent academic and researcher in Bioinformatics, holds M.Sc. in Biotechnology from the School of Biotechnology at Madurai Kamaraj University and a Ph.D. in Biotechnology from Bharathidasan University. He currently serves as Professor and Head of the Department of Bioinformatics at Bharathidasan University, with 26 years of experience in academia and research. His primary research interests include Industrial Systems Biology and Engineering Microbiology. He authored 150 research articles in peer-reviewed journals and a book with his work garnering 1,712 citations, an h-index of 20, and an i10-index of 60. His research had a cumulative SCI Impact Factor of 296.889, with an average of 2.991 per publication, and a 5-year average of 3.269. He has mentored eight Ph.D. candidates, currently supervising seven research scholars and one Postdoctoral Fellow. He received more than INR 5.20 Crore in research grants from various funding agencies. He has been awarded 20 honors, including the Tamil Nadu Young Scientist Award. His innovations not only can provide new emerging platform for motivating young buds in systems and synthetic biology but also capitalize on this growth for smart biomanufacturing and systems healthcare in India.

1. ACADEMIC PROFILE

Education

- **Post-Doctoral Fellow** (DST-TARE Awardee) in **Systems Microbiology**, (2018-2021) from CSIR-Central Electrochemical Research Institute
- **Post-Doctoral Fellow** (UGC-Research Awardee) in **Systems Medicine**, (2013-2016) from Bharathidasan University
- **Ph.D.** Biotechnology (2005-2011) from Bharathidasan University (Date: **02-09-2011**)
- **CSIR-UGC-JRF-NET in Life Sciences** (1998-99)
- **M. Sc.** Biotechnology (1997-99) from School of Biotechnology, Madurai Kamaraj University
- **B. Sc.** Chemistry (1994-97) from NMSSVN College (Autonomous), Madurai Kamaraj University

Life Member in Scientific Societies

- Society of Chemical and Synthetic Biology (ID: LM0034)
- The Association of Microbiologists of India (ID: 414-2009; AMI0186)

2. PROFESSIONAL PROFILE

- **March 26, 2019, onwards,** Professor of Bioinformatics, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu (Pay scale: 14)
- **March 26, 2016, to March 25, 2019,** Associate Professor in Bioinformatics, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu (Pay scale: 13A)
- **November 02, 2005, to March 25, 2016,** Assistant Professor in Bioinformatics, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu
  (Pay scale: INR 8000-275-1350)
- **March 31, 2000, to October 28, 2005**, Lecturer in Microbiology (Regular), Biogas Research Centre, Gujarat Vidyapith (A Central University), Ahmedabad-380 014, Gujarat (Pay scale: INR 8000-275-1350)

3. ADMINISTRATIVE PROFILE

- **January 09, 2026, onwards,** Coordinator, Centre for School of Life Sciences, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu
- **July 02, 2025, onwards,** Programme Coordinator, School of Life Sciences, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu
- **July 02, 2025, onwards,** Librarian, School of Life Sciences Library, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu
- **November 24, 2026, onwards,** Chair, School of Life Sciences, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu
- **March 01, 2023, onwards,** Senate member of Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu
- **March 01, 2023, onwards,** Head, Department of Bioinformatics, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu
- **June 16, 2019 to June 31, 2022,** Senate member of Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu
- **June 16, 2019 to June 31, 2022,** Head, Department of Bioinformatics, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu
- **April 01, 2007, onwards,** Chief/Principal Investigators of various external funding agencies, Bharathidasan University, Tiruchirappalli-620 024, Tamil Nadu

4. MEMBERS OF ACADEMIC COUNCIL

Nature of the duty	:	Project Monitoring Unit
Organization	:	RUSA-Bharathidasan University
Role	:	Governing body (23-10-2025)
Reference No.	:	439/BDU/BECH-RUSA 2.0/2025 Dt. 23-10-2025
Nature of the duty	:	University Representative
Organization	:	Rajah Serfoji Government College, Thanjavur
Role	:	Governing body (23-08-2024 to 22-08-2030)
Reference No.	:	19385/R/CCCD/L/2022 Dt. 24-04-2025
Nature of the duty	:	University Representative
Organization	:	Jamal Mohamed College, Tiruchirappalli
Role	:	Academic Council member (29-03-2025 to 28-03-2028)
Reference No.	:	19868/R/CCCD/L/2022 Dt. 08-04-2025
Nature of the duty	:	University Representative
Organization	:	Nehru Memorial College, Puthanampatti
Role	:	College Committee member (04-02-2025 to 03-02-2028)
Reference No.	:	19701/A2/2014/ Dt. 19-02-2025
Nature of the duty	:	University Representative
Organization	:	Servite Arts and Science College, Edaiyapatty
Role	:	College Committee member (04-02-2025 to 03-02-2028)
Reference No.	:	19701/A2/2014/ Dt. 19-02-2025
Nature of the duty	:	Chairman
Organization	:	Teacher Recruitment Board, Government of Tamil Nadu
Role	:	Biotechnology panel
Reference No.	:	01079/E/S1/2024 Dt. 23-02-2025
Nature of the duty	:	Reviewer
Organization	:	CSIR, New Delhi
Role	:	Proposal for Emirates Scientist
Reference No.	:	Dt. 23-04-2024
Nature of the duty	:	Selection Committee member
Organization	:	ADM College for Women, Nagapattinam
Role	:	Principal appointment
Reference No.	:	Dt. 08-01-2024
Nature of the duty	:	University Representative
Organization	:	ADM College for Women, Nagapattinam
Role	:	College Committee member
Reference No.	:	19701/A2/2014/ Dt. 08-09-2023
Nature of the duty	:	Issuance of course equivalence
Organization	:	Tamil Nadu State Council for Higher Education
Role	:	Chairperson

Reference No.	:	2515/2021/A Dt. 05-04-2022
Nature of the duty	:	University Representative
Organization	:	ADM College for Women, Nagapattinam
Role	:	College Committee member
Reference No.	:	19701/A2/2014/ Dt. 30-03-2022
Nature of the duty	:	University Representative
Organization	:	Bishop Heber College, Tiruchirappalli
Role	:	Academic Council member
Reference No.	:	19868/R/CCCD/L/2022 Dt. 18-03-2022
Nature of the duty	:	Research advisor for project proposals
Organization	:	Shrimati Indra Gandhi College, Tiruchirappalli
Role	:	Research advisor
Reference No.	:	08-12-2021
Nature of the duty	:	Issuance of course equivalence
Organization	:	Tamil Nadu State Council for Higher Education
Role	:	Chairperson
Reference No.	:	1410/2021/A Dt. 08-10-2021
Nature of the duty	:	Selection committee meeting for CAS
Organization	:	Pondicherry University
Role	:	Subject expert
Reference No.	:	06-07-2021
Nature of the duty	:	Appointment document analyzing committee
Organization	:	Bharathiar University, Coimbatore
Role	:	Subject expert
Reference No.	:	E7/DVAC/DSC/2021/7543-3 Dt. 21-04-2021
Nature of the duty	:	Student Ready Programme
Organization	:	Tamil Nadu Agriculture University, Coimbatore
Role	:	Host trainer
Reference No.	:	Dean (Agri)/BTECH(Bioinfo)/SRP/2021 Dt. 29-01-2021
Nature of the duty	:	Scrutinizing the Research Advisor
Organization	:	Bharathidasan University, Tiruchirappalli
Role	:	Subject expert
Reference No.	:	DIR-RES/RA-RECO/2020 Dt. 16-03-2020
Nature of the duty	:	ASRB-ARS exam evaluation
Organization	:	ASRB, New Delhi
Role	:	Evaluation committee member
Reference No.	:	PA/CE/EVL/05/17 Dt.17-08-2018
Name of the Duty	:	Manpower appointment
Organization	:	Alagappa University, Karaikudi

Role : Subject expert
Reference No. : AU:DBI: DST project: PA: 2014 Dt. 20.06.2014 (21-07-2014)

5. MEMBERS OF BOARD OF STUDIES

Nature of the duty : Board of Studies for Biomedical Science
Organization : Bharathidasan University, Tiruchirappalli
Reference No. : 80182/CCCD/C1/BOS/2025 dated 25-08-2025

Nature of the duty : Board of Studies for Pharmaceutical Technology
Organization : Anna University, Chennai
Reference No. : May 10, 2025

Nature of the duty : Board of Studies for Biotechnology and Bioinformatics
Organization : SAFI Institute of Advanced Study, Malapuram
Reference No. : Bo/M/1/2024 Dt. 29-07-2024

Nature of the duty : Board of Studies for Biochemistry Programme
Organization : Holy Cross College, Tiruchirappalli
Reference No. : 03555/R/CCCD/L/2023 Dt. 05-05-2023

Nature of the duty : Board of Studies for Bioinformatics Programme
Organization : National College, Tiruchirappalli
Reference No. : 6589/R/CCCD/I/2023 Dt. 28-04-2023

Nature of the duty : Board of Studies for Bioinformatics Programme
Organization : Bharathidasan University, Tiruchirappalli
Reference No. : 51195/C3/BOS/2021 Dt. 23-08-2022

Nature of the duty : Board of studies for Life Sciences
Organization : Bharathidasan University, Tiruchirappalli
Reference No. : 51195/C3/BOS/2021 Dt. 20-04-2022

Nature of the duty : Board of Studies for Biotechnology Programme
Organization : Bharathidasan University, Tiruchirappalli
Reference No. : 51363/C3/BOS/2021 Dt. 27-09-2021

Nature of the duty : Board of Studies for Bioinformatics Programme
Organization : Thiruvalluvar University, Vellore
Reference No. : TU/R/ RC of BOS/2020/339 Dt. 17-02-2020

Nature of the duty : Board of Studies for Bioinformatics Programme
Organization : Holy Cross College, Tiruchirappalli
Reference No. : 29331/R/CCCD/L/2019 Dt. 08-02-2020

Nature of the duty : Board of Studies for Bioinformatics Programme
Organization : Thiruvalluvar University, Vellore
Reference No. : TVU/BOS Meeting/2020/339 Dt. 06-02-2020

Nature of the duty : Board of studies for Life Sciences

Organization : Bharathidasan University, Tiruchirappalli
Reference No. : BU/SLS/CO/2018/53706 Dt. 11-05-2018

Nature of the duty : Board of Studies for Academic Programmes
Organization : Bharathidasan University, Tiruchirappalli
Reference No. : 8487/C3/BoS/2013 Dt. 24-04-2018

Nature of the duty : Board of Studies in Bioinformatics
Organization : Bharathidasan University, Tiruchirappalli
Reference No. : 48749/C3/BoS/2015 Dt. 28-12-2015

Nature of the duty : Board of Studies in Bioinformatics
Organization : Bharathidasan University, Tiruchirappalli
Reference No. : 46211/C2/BoS/2014 Dt. 13-07-2015

Nature of the duty : Board of Studies in Bioinformatics
Organization : Bharathidasan University, Tiruchirappalli
Reference No. : 43488/C1/CCCD-BoS/2011 Dt. 17-08-2012

Nature of the duty : Board of Studies in Bioinformatics and Information technology
Organization : Thiruvalluvar University, Vellore
Reference No. : TU/R/Reconst. BoS/2009-2010/A/1433 Dt. 28-04-2010

6. VISITING FELLOWSHIPS

Name of the Event : DBT-NER-Visiting Faculty Award
Organizer : DBT, New Delhi
Date : 18-04-2018 to 17-10-2018

Name of the Event : UGC Research Award
Organizer : UGC, New Delhi
Date : 20-12-2013 to 20-12-2015

Name of the Event : TNSCST- Young Scientist Visiting Fellow
Organizer : Gujarat Vidyapith, Ahmedabad
Date : 01-11-2012 to 31-12-2012

Name of the Event : Summer Research Teacher Fellow
Organizer : Indian Science Academies
Date : 03-05-2012 to 27-06-2012

Name of the Event : Visiting Fellow
Organizer : JNCASR, Bangalore
Date : 12-01-2012 to 12-04-2012

Name of the Event : CSIR JRF
Organizer : UGC, New Delhi
Date : 01/07/1999

Name of the Event : Summer Research Student

Organizer : Central Leather Research Institute, Chennai
Date : 01-06-1998 to 30-07-1998

7. AWARDS/HONORS

Name of the Award : Outstanding Scientist Award
Awarding Authority : VDGOOD Technology Factory
Purpose of award : Research contribution in Bioinformatics
Year : 2020

Name of the Award : Best Scientist Award
Awarding Authority : PEARL - A Foundation for Educational Excellence
Purpose of award : Research contribution in Bioinformatics
Year : 2019

Name of the Award : Best Scientist Award
Awarding Authority : GRABS Educational Charitable Trust
Purpose of award : Research contribution in Bioinformatics
Year : 2019

Name of the Award : Teachers Associateship for Research Excellence
Awarding Authority : DST-SERB, New Delhi
Purpose of award : Development of microbial electrolysis cell to unravel the mechanism of electrical interplay systems for electromethanogenesis
Year : 2018-2021

Name of the Award : Tamil Nadu Young Scientist Award
Awarding Authority : Dept. of Higher Education, Govt. of Tamil Nadu
Purpose of award : Research contribution in Life Sciences
Year : 2018

Name of the Award : NER-Visiting Research Faculty
Awarding Authority : DBT, New Delhi
Purpose of award : Molecular involvement of human gut methanogens in colorectal cancer metabolism – A systems biology approach
Year : 2018

Name of the Award : Young Scientist Travel Award
Awarding Authority : Sri Balaji Vidyapeeth, Puducherry
Purpose of award : International Conference on Microbiome in Health, Disease, and Environment
Year : 2017

Name of the Award : Young Faculty Award
Awarding Authority : Venus International Foundation, Chennai
Purpose of award : Contribution in Biotechnology
Year : 2015

Name of the Award : Research Award

Awarding Authority	:	UGC, New Delhi
Purpose of award	:	Genome-scale metabolic modeling and simulation of rumen methanogens – An *in silico* attempt to methane attenuation
Year	:	2014-2016

Name of the Award	:	Young Scientist
Awarding Authority	:	Friends Foundation, Theni
Purpose of award	:	Molecular Systems Biology
Year	:	2014

Name of the Award	:	Young Scientist
Awarding Authority	:	DST-SERB, New Delhi
Purpose of award	:	Cloning and expression of engineered uronate dehydrogenase (*Udh*) in *Saccharomyces cerevisiae*
Year	:	2013-2016

Name of the Award	:	Young Scientist
Awarding Authority	:	Tamil Nadu State Council for Science and Technology, Govt. of Tamil Nadu
Purpose of award	:	Systems biology
Year	:	2012

Name of the Award	:	Summer Research Teacher Fellow
Awarding Authority	:	Indian Science Academies, Bangalore
Purpose of award	:	Genome-scale metabolic modelling and simulation of a rumen methanogen, *Methanobrevibacter ruminantium* M1
Year	:	2012

Name of the Award	:	Visiting Fellow
Awarding Authority	:	Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore
Purpose of award	:	Structural and functional evolution of 2-C-methyl-D-erythritol 4-phosphate cytidylyltransferase homologs (*Isp*D) among Plasmodium genomes
Year	:	2012

Name of the Award	:	Raja's Young Scientist Award
Awarding Authority	:	H.H. Rajah's College, Pudukottai
Purpose of award	:	National Seminar on Recent Advances in Life Sciences
Year	:	2011

Name of the Award	:	Best Poster Award
Awarding Authority	:	National Seminar on Genomics, Proteomics and Systems Biology, IISc, Bangalore
Purpose of award	:	Metabolomic analysis of lactose utilizing metabolism in *Aspergillus* genomes
Year	:	2008

Name of the Award	:	CSIR-UGC-JRF

Awarding Authority : CSIR, New Delhi
Purpose of award : Life Sciences
Year : 1999

Name of the Award : Chemistry Association Award
Awarding Authority : NMSSVN College, Madurai
Purpose of award : Chemistry Knowledge Competition
Year : 1997

8. STUDENT'S AWARDS/HONORS

Student name : Dr. S. Saranya
Name of the Award : Best Paper Presentation Award
Awarding Authority : Mary Matha College of Arts and Science, Periyakulam
Purpose of award : International Conference on Bio-Innovation
Year : 2024

Student name : Dr. S. Saranya
Name of the Award : Best Paper Presentation Award
Awarding Authority : Jamal Mohamed College, Tiruchirappalli
Purpose of award : International Conference on Biotechnological Approaches for Global Environmental Problems
Year : 2024

Student name : Dr. S. Saranya
Name of the Award : Best Paper Presentation Award
Awarding Authority : Muthayammal College of Arts and Science, Rasipuram
Purpose of award : National Conference on Disease Diagnosis and Drug Development
Year : 2023

Student name : Ms. L. Thammana
Name of the Award : Best Paper Presentation Award
Awarding Authority : Mary Matha College of Arts and Science, Periyakulam
Purpose of award : National Conference on Emerging Trends in Biotechnology
Year : 2023

Student name : Dr. S. Saranya and Ms. L. Thammana
Name of the Award : Best Paper Presentation Award
Awarding Authority : Jamal Mohamed College, Tiruchirappalli
Purpose of award : National Conferences on Post-COVID-19 Complications: A Biotechnological Approaches
Year : 2022

Student name : A. Prisilla
Name of the Award : Young Scientist Travel Award
Awarding Authority : Sri Balaji Vidyapeeth, Puducherry
Purpose of award : International Conference on Microbiome in Health, Disease, and Environment
Year : 2017

Student name	:	M. Bharathi
Name of the Award	:	Best Paper Presentation Award
Awarding Authority	:	Bharathidasan University, Tiruchirappalli
Purpose of award	:	National Seminar on Bioinformatics
Year	:	2015

Student name	:	R. Prathiviraj
Name of the Award	:	Best Oral Presentation Award
Awarding Authority	:	Srinivasan College of Arts and Science, Perambalore
Purpose of award	:	Intercollegiate Competition on Aspects in Life Science
Year	:	2015

9. EXTERNAL FUNDING

Scheme	:	MoES-Reachout Ocean
Project title	:	Seawater as a pertinent substrate for biomethane production
Sanctioned Fund	:	3676816
Sanction No.	:	
Duration	:	01-01-2026 t0 31-12-2029

Scheme	:	CMRG
Project title	:	Development of membrane-active peptide antibiotics for nosocomial wound infections
Sanctioned Fund	:	INR 28, 77, 000
Sanction No.	:	CMRG2400803
Duration	:	01-09-2025 t0 30-08-2028

Scheme	:	DBT-NER
Project title	:	Development of a database for authentication of medicinal plants abundance in the protected forests of Mizoram
Sanctioned Fund	:	INR 90, 92, 078/-
Sanction No.	:	BT/PR32289/NER/95/1633/2020
Duration	:	13-05-2023 to 12-05-2026

Scheme	:	DST-VRITHIKA
Project title	:	Network modeling-based drug repurposing for respiratory infection
Sanctioned Fund	:	INR 1, 50, 000/-
Sanction No.	:	AV/VRI/2021/0079
Duration	:	01-05-2022 to 30-06-2022

Scheme	:	TANSCHE
Project title	:	A systems biology approach for elucidation of molecular virulence mechanism of *Clostridium botulinum* type A1 in the mammalian gut
Sanctioned Fund	:	INR 20, 35, 250/-
Sanction No.	:	RGP/2019-20/BDU/HECP-0042
Duration	:	16-05-2021 to 15-10-2024

Scheme	:	DST-SERB-EEQS
Project title	:	Design and development of a synthetic medium for bioconversion of industrial flue gases to methane – A systems biology approach
Sanctioned Fund	:	INR 51, 68, 800/-
Sanction No.	:	EEQ/2020/000095
Duration	:	01-04-2021 to 05-08-2024

Scheme	:	DST-SERB-MATRIX
Project title	:	Repurposing of clinically approved drugs for SARS-CoV-2 (COVID-19) using systems pharmacology-based network modeling
Sanctioned Fund	:	INR 5, 50, 000/-
Sanction No.	:	MSC/2020/000438
Duration	:	07-09-2021 to 06-09-2021

Scheme		DST-RUSA 2.0
Project title		Bioconversion of industrial flue gases to methane using *Methanosarcina mazei* Go1
Sanctioned Fund		INR 12, 36, 000/-
Sanction No.		311/RUSA(2.0)/2018
Duration		01-04-2021-31-10-2024

Scheme		DST-RUSA 2.0
Project title		A synthetic biology approach for producing microbial cell factories for unconventional methanogenic substrates to biofuel
Sanctioned Fund		INR 6, 00, 000/-
Sanction No.		311/RUSA(2.0)/2018
Duration		01-04-2021-31-10-2024

Scheme		DST-PURSE II
Project title		Development of systems biology databases for studying growth physiology and model-driven systems metabolic engineering
Sanctioned Fund		INR 6, 45, 563/-
Sanction No.		BDU/DST-PURSE-I1/2020/003/186
Duration		25-08-2020 to 31-03-2022

Scheme	:	MietY
Project title	:	Development of top-dressing automation technology for sustainable shrimp aquaculture
Sanctioned Fund	:	INR 38, 81, 000/-
Sanction No.	:	27(1)/2020-ESDA
Duration	:	22-06-2020 to 21-12-2022

Scheme	:	DST-SERB-TARE
Project title	:	Development of microbial electrolysis cell to unravel the mechanism of electrical interplay systems for electromethanogenesis
Sanctioned Fund	:	INR 18, 30, 000/-

Sanction No.	:	TAR/2018/000342
Duration	:	30-11-2018 to 29-11-2021
Scheme	:	DBT-NER-VRF
Project title	:	Molecular involvement of human gut methanogens in colorectal cancer metabolism – A systems biology approach
Sanctioned Fund	:	INR 7, 20, 000/-
Sanction No.	:	BT/49/NE/2014
Duration	:	18-04-2018 to 17-10-2018
Scheme	:	MHRD-UGC-GIAN
Project title	:	Microbial processes for lignocellulosic biofuel production
Sanctioned Fund	:	INR 8, 16, 000/-
Sanction No.	:	GIAN/S-17/994/2017
Duration	:	18-12-2018 to 27-12-2018
Scheme	:	DST-SERB-EMQS
Project title	:	Biofuel production from amino acid metabolism: Systems-level metabolic flux profiling approach to *Clostridium sticklandii*
Sanctioned Fund	:	INR 11, 00, 000/-
Sanction No.	:	SERB/F/8173/2015-16
Duration	:	01-04-2016 to 31-03-2018
Scheme	:	UGC-Research Award
Project title	:	Genome-scale metabolic modeling and simulation of rumen methanogens – An *in silico* attempt to methane attenuation
Sanctioned Fund	:	INR 22, 00, 782/-
Sanction No.	:	F.30-1/2013/ (SA-II)
Duration	:	02-01-2014 to 01-01-2016
Scheme	:	DST-SERB-FTSYS
Project title	:	Cloning and expression of engineered uronate dehydrogenase (*Udh*) in *Saccharomyces cerevisiae*
Sanctioned Fund	:	INR 22, 00, 000/-
Sanction No.	:	SB/FT/LS-413/2012
Duration	:	01-10-2013 to 30-09-2016
Scheme	:	UGC-MRP
Project title	:	Metabolic modeling and simulation of *Methanosarcina mazei* Go1 and its microbial mutualism
Sanctioned Fund	:	INR 12, 16, 800/-
Sanction No.	:	42-864/2013 (SR)
Duration	:	01-04-2013 to 31-03-2017
Scheme	:	DRDO-LSRB
Project title	:	Structural and functional evolution of bacterial ADP-ribosylation superfamily – A special emphasis for engineering immunotoxins from binary toxin A
Sanctioned Fund	:	INR 21, 67, 050/-

Sanction No.	:	DLS/81/48222/LSRB-249/BTB/2012
Duration	:	01-04-2012 to 31-03-2015

Scheme	:	UGC (Minor)
Project title	:	Inferring metabolomes to phylome of archaeal domain
Sanctioned Fund	:	INR 95, 000/-
Sanction No.	:	32-559/2006 (SR)
Duration	:	01-04-2007 to 31-03-2009

10. PUBLICATIONS (SJR Impact factor as of 2024)

Research Papers

2026

1. Thamanna L, Saranya S, **Chellapandi P** (2026) Systems medicine-driven drug repurposing for respiratory infections: Insights into the oral-gut-lung microbial axis and the therapeutic potential of Cannabidiol and Aspirin. Theory in Biosciences (In Press) (Impact factor: **1.4**)
2. Yamini Sri S, **Chellapandi P**, Suresh KP, Saranya S, Papanna M, Gulati BV, Amachawadi RG, Khatoon M, Hemadri D, Archana CA, Rani S, Patil A, Palavesam A, Sagar N, Anand J, Patil SS (2026) Genomic adaptability and virulence of *Bacillus anthracis*: A machine learning-based pan-genome and comparative analysis. BMC Genomics 27: 141(Impact factor: **3.7**)
3. Dhayanithi S and **Chellapandi P** (2026) Renewable methane production from marine microalgal biomass via *Methanosarcina mazei* Gö1: Optimization and genomic insights. Bioresource Technology Reports 33: 102487 (Impact factor: **5.301**)

2025

4. Saranya S, **Chellapandi P** (2025) Process parameter optimization for scalable extracellular lipase production by *Bacillus* isolates under submerged fermentation. Bioresource Technology Reports 32: 102399. (Impact factor: **5.301**)
5. Saranya S, **Chellapandi P** (2025) Comparative evaluation of chemical and UV mutagenesis with post-mutagenesis process optimization for enhanced cellulolytic enzyme production by *Aspergillus oryzae* NCIM 637. Bioresource Technology Reports 32: 102349. (Impact factor: **5.301**)
6. Bakiya Lakshmi SV, Kalaivani R, Sulochana S, Saranya S, **Chellapandi P** (2025) Impact of hydrothermal treatment on the bioactive compounds of different brown rice varieties in India. Applied Biochemistry and Biotechnology 197: 7001-7012 (Impact factor: **3.3**)
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2008

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2007

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Books and Chapters

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11. PATENTS

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2. Babu R, Ramakrishnan R, Chellapandi P, Dhana Sekaran G, Saravanan K, Vijayan ML, Alagarsamy A, Gunasekaran T, Shanmugam P, Balasubramanian S, Gajalakshmi P (2025) Subunit vaccine development against human botulism: evolutionary-imprint-based design from Botulinum toxin type A3. Indian Patent Application No. 202541023374A. Published on 28 March 2025.
3. Shanmugapriya N, Kavitha P, Manoharan G, Bhagat BR, Balasubramanian K, Chandrashekar K, Chellapandi P, Roja B (2025) Deciphering metabolic regulatory mechanisms in vital anaerobes for enhanced biogas productions from protein-rich waste. Indian Patent Application No. 202541035260 A, Publication Date: 09 May 2025.
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12. MANPOWER DEVELOPMENT

2025

Name of the Fellow	:	G. Thenral
Designation	:	University Research Fellow
Fellowship	:	5, 000/Month
Duration	:	20-11-2025
Name of the Scheme	:	BDU
Reference No.	:	37061/URF/DIR-RES/2025 Dt. 20-11-2025
Name of the Fellow	:	L. Lourdu Lincy
Designation	:	Project Assistant
Fellowship	:	25, 000/Month
Duration	:	08-10-2025
Name of the Scheme	:	BDU
Reference No.	:	9103/P2/2024 Dt. 26-11-2024

2024

Name of the Fellow	:	L. Lourdu Lincy
Designation	:	University Research Fellow
Fellowship	:	5, 000/Month
Duration	:	06-11-2024
Name of the Scheme	:	BDU
Reference No.	:	023929/URF/DIR-RES/2024 Dt. 29-11-2024
Name of the Fellow	:	S. Dhyanithi
Designation	:	University Research Fellow
Fellowship	:	5, 000/Month
Duration	:	06-11-2024
Name of the Scheme	:	BDU
Reference No.	:	023929/URF/DIR-RES/2024 Dt. 29-11-2024

2023

Name of the Fellow	:	K. Heshma
Designation	:	Student Intern

Fellowship : 4, 000/Month
Duration : 08-08-2023
Name of the Scheme : DBT-NER
Reference No. : 10812/P3/2022 Dt. 03-08-2023

Name of the Fellow : L. Thamanna
Designation : Research Fellow
Fellowship : 16, 000/Month
Duration : 12-07-2023
Name of the Scheme : DBT-NER
Reference No. : 10812/P3/2022 Dt. 03-08-2023

Name of the Fellow : S. Saranya
Designation : Research Associate-I
Fellowship : 67, 280/Month
Duration : 12-07-2023
Name of the Scheme : DBT-NER
Reference No. : 10812/P3/2022 Dt. 03-08-2023

Name of the Fellow : R. Sasikumar
Designation : Research Fellow
Fellowship : 5,000/Month
Duration : 02-01-2023
Name of the Scheme : BDU-URF
Reference No. : 150927/URF/DIR-RES/2023 Dt. 14-02-2023

2022

Name of the Fellow : L. Lourdu Lincy
Designation : Project Assistant
Fellowship : 10, 000/ Month
Duration : 01-08-2022
Name of the Scheme : TANSCHE
Reference No. : 01710/P6/2021 Dt. 24-08-2022

Name of the Fellow : R. Sasikumar
Designation : Senior Research Fellow
Fellowship : 35, 000/- +16% HRA Month
Duration : 05-05-2022
Name of the Scheme : MietY
Reference No. : 07098/P2/2019/ Dt. 26-05-2022

Name of the Fellow : L. Lourdu Lincy
Designation : Project Fellow
Fellowship : 14, 000/ Month
Duration : 05-05-2022
Name of the Scheme : MietY
Reference No. : 07098/P2/2019/ Dt. 26-05-2022

Name of the Fellow : M. Sowmiya
Designation : Field Assistant

Fellowship : 9, 400/ Month
Duration : 05-05-2022
Name of the Scheme : MietY
Reference No. : 07098/P2/2019/ Dt. 26-05-2022

Name of the Fellow : S. Dhayanithi
Designation : Junior Research Fellow
Fellowship : 29, 000/ Month
Duration : 26-04-2022
Name of the Scheme : SERB-EMEQ
Reference No. : 43166/P4/2020/Dt. 16-06-2022

Name of the Fellow : V.P. Sreekutty
Designation : Project Fellow
Fellowship : 14, 000/ Month
Duration : 08-04-2022
Name of the Scheme : RUSA 2.0
Reference No. : 127-3BDU/RUSA 2.0/TRP/TS/Dt. 03-04-2021

Name of the Fellow : L. Thamanna
Designation : Research Fellow
Fellowship : 5,000/ Month
Duration : 07-01-2022
Name of the Scheme : BDU-URF
Reference No. : 43166/P4/2020 Dt. 19-08-2021

2021

Name of the Fellow : K. S. Praveenkumar
Designation : Project Assistant
Fellowship : 10,000/ Month
Duration : 28-09-2021
Name of the Scheme : SERB-EMEQ
Reference No. : 43166/P4/2020 Dt. 19-08-2021

Name of the Fellow : S. Dhayanithi
Designation : Project Assistant
Fellowship : 10,000/ Month
Duration : 27-08-2021
Name of the Scheme : TANSCHE
Reference No. : 01710/P6/2021 Dt. 27-08-2021

Name of the Fellow : M. Vaishnavi
Designation : Junior Research Fellow
Fellowship : 29,500/ Month
Duration : 02-06-2021
Name of the Scheme : SERB-EMEQ
Reference No. : 43166/P4/2020 Dt. 19-08-2021

Name of the Fellow : R. Sasikumar
Designation : Research Fellow

Fellowship	:	5,000/ Month
Duration	:	20-04-2021
Name of the Scheme	:	BDU-URF
Reference No.	:	024946/URF/DIR-RES/2020 Dt. 15-07-2021

Name of the Fellow	:	K. S. Praveenkumar
Designation	:	Research Fellow
Fellowship	:	5,000/ Month
Duration	:	20-04-2021
Name of the Scheme	:	BDU-URF
Reference No.	:	024946/URF/DIR-RES/2020 Dt. 15-07-2021

Name of the Fellow	:	S. Saranya
Designation	:	Research Associate
Fellowship	:	25,000/ Month
Duration	:	26-04-2021
Name of the Scheme	:	RUSA 2.0
Reference No.	:	02BDU/RUSA 2.0/ TRP/BS/Dt. 22-04-2021

Name of the Fellow	:	V. Gokulakannan
Designation	:	Project Fellow
Fellowship	:	14,000/ Month
Duration	:	22-04-2021
Name of the Scheme	:	RUSA 2.0
Reference No.	:	02BDU/RUSA 2.0/TRP/BS/Dt. 22-04-2021

2020

Name of the Fellow	:	N.B. Ramya
Designation	:	Student Internship
Fellowship	:	5,000/ Month
Duration	:	29-10-2020
Name of the Scheme	:	MietY
Reference No.	:	07098/P2/2019 Dt. 20-10-2020

Name of the Fellow	:	S Saranya
Designation	:	Research Associate
Fellowship	:	47,000/ Month
Duration	:	05-10-2020
Name of the Scheme	:	DST-SERB-MATRIX
Reference No.	:	40927/P4/2020 Dt. 15-10-2020

Name of the Fellow	:	Kashmiri Gogoi
Designation	:	Research Fellow
Fellowship	:	16,000/ Month
Duration	:	12-08-2020
Name of the Scheme	:	MietY
Reference No.	:	07098/P2/2019 Dt. 05-09-2020

Name of the Fellow	:	Divya Deogharia
Designation	:	Research Fellow

Fellowship	:	16,000/ Month
Duration	:	12-08-2020
Name of the Scheme	:	MietY
Reference No.	:	07098/P2/2019 Dt. 05-09-2020

2019

Name of the Fellow	:	Divya deogharia
Designation	:	Research Fellow
Fellowship	:	5000/ Month
Duration	:	17-12-2019
Name of the Scheme	:	BDU-URF
Reference No.	:	028128/URF/DIR-RES/2020 Dt. 24-02-2020

Name of the Fellow	:	M. Vaishnavi
Designation	:	Research Fellow
Fellowship	:	5000/ Month
Duration	:	17-12-2019
Name of the Scheme	:	BDU-URF
Reference No.	:	028128/URF/DIR-RES/2020 Dt. 24-02-2020

Name of the Fellow	:	R. Sasikumar
Designation	:	Research Fellow
Fellowship	:	12, 960/ Month
Duration	:	10-12-2019
Name of the Scheme	:	DST-PURSE-II
Reference No.	:	28888/P7/2019/PA/ Dt. 10-12-2019

Name of the Fellow	:	K. S. Praveenkumar
Designation	:	Project Fellow
Fellowship	:	15,120/ Month
Duration	:	26-06-2019
Name of the Scheme	:	DST-TARE
Reference No.	:	06858/P4/2019 Dt. 26-06-2019

2017

Name of the Fellow	:	M. Saranya
Designation	:	Research Fellow
Fellowship	:	12, 800/ Month
Duration	:	07-12-2017
Name of the Scheme	:	DST-PURSE-I
Reference No.	:	28888/E12/2016/JRF Dt.07-12-2017

2016

Name of the Fellow	:	A. Prisilla
Designation	:	Project Fellow
Fellowship	:	12, 000/ Month
Duration	:	22-06-2016
Name of the Scheme	:	SERB-EMEQ
Reference No.	:	04937/E8/2014 Dt.13-08-2016

2014

Name of the Fellow	:	Dipti Mothay
Designation	:	National Fellow

Fellowship	:	31, 000/ Month
Duration	:	01-04-2014
Name of the Scheme	:	UGC-RGNF
*Reference No.	:	34171/E15/2016 Dt. 09-11-2016

2013

Name of the Fellow	:	M. Bharathi
Designation	:	Project Fellow
Fellowship	:	14, 000/ Month
Duration	:	01-06-2013
Name of the Scheme	:	UGC
Reference No.	:	44524/E4/2011 Dt.15-05-2013

Name of the Fellow	:	A. Prisilla
Designation	:	Junior Research Fellow
Fellowship	:	12, 800/ Month
Duration	:	10-12-2013
Name of the Scheme	:	SERB-FTSYS
Reference No.	:	31864/E2/2011 Dt.10-02-2014

Name of the Fellow	:	R. Prathiviraj
Designation	:	Junior Research Fellow
Fellowship	:	16, 800/ Month
Duration	:	02-12-2013
Name of the Scheme	:	DRDO-LSRB
Reference No.	:	001973/E13/2011 Dt. 17-09-13

Name of the Fellow	:	R. Jayalakshmi
Designation	:	Junior Research Fellow
Fellowship	:	16, 800/ Month
Duration	:	29-01-2013
Name of the Scheme	:	DRDO-LSRB
Reference No.	:	001973/E13/2012 Dt. 24-01-13

13. RESEARCH SCHOLARS

Name of the Scholar	:	V. Saveetha Priya
Discipline	:	Biotechnology interdisciplinary Bioinformatics
Proposed Topic	:	Development of oral healthcare formulations for methanogens-associated periodontitis
Date of Registration	:	21-11-2024
Registration No.	:	BDU2510372781260

Name of the Scholar	:	S. Yamini Sri
Discipline	:	Bioinformatics
Proposed Topic	:	From genes to global health: Unraveling bacillus anthracis complexity through pan-genome analysis, comparative genomics, codon bias evaluation, and epidemiological insights
Date of Registration	:	09-02-2024
Registration No.	:	BDU2410242780750

Name of the Scholar	:	G. Thenral
Discipline	:	Bioinformatics
Proposed Topic	:	Development of a database for authentication medicinal plants abundance in the protected forests of Mizoram
Date of Registration	:	09-02-2024
Registration No.	:	BDU2410242780911

Name of the Scholar	:	L. Lourdu Lincy
Discipline	:	Zoology interdisciplinary Bioinformatics
Proposed Topic	:	Dietary Monosodium Glutamate as a feed additive for striped snakehead murrel in biofloc automation System
Date of Registration	:	10.08.2023
Registration No.	:	BDU2310362780387

Name of the Scholar	:	S. Dhayanithi
Discipline	:	Biotechnology interdisciplinary Bioinformatics
Proposed Topic	:	Consolidated methanogenic bioprocessing of microalgae in Seawater
Date of Registration	:	10.7.2023
Registration No.	:	BDU2310372780366

Name of the Scholar	:	V.P. Sreekutty
Discipline	:	Bioinformatics
Proposed Topic	:	Development of consolidated bioprocessing for methane production in space-like environment
Date of Registration	:	26.09.2022
Registration No.	:	BDU2210242780168

Name of the Scholar	:	L Thamanna
Discipline	:	Bioinformatics
Proposed Topic	:	Development of biogas plant simulators using metabolic flux balance analysis of anaerobic digester microbiome
Date of Registration	:	07-01-2022
Registration No.	:	BDU2110242779709

Name of the Scholar	:	J Praveen
Discipline	:	Bioinformatics
Proposed Topic	:	*Crataegus oxyacantha* derived phytochemicals as potential therapeutics against atherosclerosis and post-myocardial infarction calcium dysregulation
Date of Registration	:	11-08-2021
Registration No.	:	BDU2110242779366

Name of the Scholar	:	R Sasikumar
Discipline	:	Zoology interdisciplinary Bioinformatics
Proposed Topic	:	Development of top-dressing automation technology for sustainable shrimp aquaculture
Date of Registration	:	12-12-2019

Registration No.	:	BDU1910240176
Name of the Scholar	:	B. Roja
Discipline	:	Biotechnology
Proposed Topic	:	Unraveling the mechanisms of molecular pathogenesis in *Clostridium botulinum* type A1 at genome-scale
Date of Registration	:	01-01-2016
Registration No.	:	43359/Ph.D.K7/Biotechnology/Part-time/Jan 2016
Name of the Scholar	:	R. Murugan
Discipline	:	Bioinformatics
Title of the Thesis	:	Development of bioprocess systems for improved D-glucaric acid production using engineered uronate dehydrogenase – A *in silico* approach
Date of award	:	06-07-2021
Registration No.	:	44946/Ph.D.K1/Bioinformatics/Part-time/Jan 2014
Name of the Scholar	:	A. Prisilla
Discipline	:	Biotechnology
Title of the Thesis	:	Development of genetically engineered subunit vaccine from *Clostridium botulinum* C2I toxin based on its evolutionary imprints
Date of award	:	07-02-2019
Registration No.	:	44947/Ph.D.K7/Biotechnology/Full time/Jan 2014
Name of the Scholar	:	C. Sangavi
Discipline	:	Biotechnology
Title of the Thesis	:	Model-driven metabolic systems engineering of *Clostridium sticklandii* for biofuel production from protein catabolism
Date of award	:	05-08-2019
Registration No.	:	34494/Ph.D/K7/Biotechnology/Part-time/Oct 2013
Name of the Scholar	:	R. Prathiviraj
Discipline	:	Bioinformatics
Title of the Thesis	:	Reconstruction, modeling and metabolic simulation of *Methanothermobacter thermoautotrophicus* delta H: 'Power-to-methane gas' application
Date of award	:	20-05-2019
Registration No.	:	7933/Ph.D/K1/Bioinformatics/Full time/April 2013
	:	M. Bharathi
Discipline	:	Bioinformatics
Title of the Thesis	:	Unravelling molecular and metabolic mechanisms of *Methanobrevibacter ruminantium* M1 in the gut ecosystem using its genome-scale model
Date of award	:	04-06-2019
Registration No.	:	746908/Ph.D/K1/Bioinformatics/Full time/April 2012

14. DOCTORAL COMMITTEE MEMBERS

Name of the Candidate	:	V. Ramanarayanan
Organization	:	Madurai Kamaraj University, Madurai
Reference No.	:	MKU24FFOS11506 Dt. 04-09-2024
Name of the Candidate	:	Oishee Mondal
Organization	:	VIT University, Vellore
Reference No.	:	24PHD0162 Dt. 30-07-2024
Name of the Candidate	:	Angeline Priscilla
Organization	:	SRM University, Chennai
Reference No.	:	15-11-2023
Name of the Candidate	:	S. Naveenkumar
Organization	:	Bharathidasan University, Tiruchirappalli
Reference No.	:	PhD/K10/DR03/231204151053
Name of the Candidate	:	C M. Durga
Organization	:	Bharathidasan University, Tiruchirappalli
Reference No.	:	PhD/K10/DR03/231204151903
Name of the Candidate	:	T S. Shalini
Organization	:	Bharathidasan University, Tiruchirappalli
Reference No.	:	PhD/K5/DR03/220928143425
Name of the Candidate	:	S K. Vandhana
Organization	:	Bharathidasan University, Tiruchirappalli
Reference No.	:	PhD/K10/DR03/220728144322
Name of the Candidate	:	B. Rengasamy
Organization	:	Bharathidasan University, Tiruchirappalli
Reference No.	:	PhD/K9/DR03/2201331152713
Name of the Candidate	:	H. Sreenithya
Organization	:	SRM University, Chennai
Reference No.	:	16-08-2021
Name of the Candidate	:	T. Kokila Prinsha
Organization	:	Bharathidasan University, Tiruchirappalli
Reference No.	:	PhD/K10/DR03/210701120229
Name of the Candidate	:	S Maharaja
Organization	:	Bharathidasan University, Tiruchirappalli
Reference No.	:	BDU/PhD/2020/0145-5133 Dt. 31-03-2020
Name of the Candidate	:	R. Sujatha
Organization	:	Periyar E.V.R College, Trichy
Reference No.	:	34466/PhD.K9/Zoology/FT/Oct-2019

Name of the Candidate	:	P. Chandra Sekar
Organization	:	VIT University, Vellore
Reference No.	:	18PHH0098 Dt. 04-03-2019
Name of the Candidate	:	M. Indhumathi
Organization	:	Bharathidasan University, Tiruchirappalli
Reference No.	:	26966/PhD-K1/Plant Science/FT/Oct-2016
Name of the Candidate	:	Bela Rani Bhagat
Organization	:	Bharathidasan University, Tiruchirappalli
Reference No.	:	8426/PhD-K1/Microbiology/FT/April-2013
Name of the Candidate	:	C. Thiyagarajan
Organization	:	Bharathidasan University, Tiruchirappalli
Reference No.	:	47152/PhD-K1/Bioinfo/PT/April-2012
Name of the Candidate	:	S. Kalaivanan
Organization	:	Bharathidasan University, Tiruchirappalli
Reference No.	:	46918/PhD-K1/Bioinfo/FT/April-2012
Name of the Candidate	:	J. Febin Prabhu Dass
Organization	:	VIT University, Vellore
Reference No.	:	VIT/Dir(AR)/PhD/SBST/06PHD002/1110895/2012

15. ORGANIZED ACADEMIC EVENTS

Name of the Event		Demonstration - MolSoft
Organization		Bharathidasan University and Advent Informatics, Bangalore
Date		31-07-2025
Role		Organizing Secretary
Name of the Event		Free Oral HealthCare Camp
Organization		Bharathidasan University and Lions Club, Cumbum
Date		09-02-2025
Role		Organizing Secretary
Name of the Event	:	New Beginning of Snake Head Murrel Fish-Tank Culture
Organization	:	Bharathidasan University and Willow way Fish Farming, Tirunelveli
Date	:	27-01-2025
Role	:	Organizing Secretary
Name of the Event	:	Systems and Synthetic Biology Lecture Series
Organization	:	Bharathidasan University
Date	:	17-10-2024
Role	:	Organizing Secretary
Name of the Event	:	National Conference on Engineering in Biological Applications-2024
Organization	:	Bharathidasan University

Date	:	12-04-2024
Role	:	Organizing Secretary
Name of the Event	:	Entrepreneurship Awareness programme
Organization	:	BECH-RUSA 2.0
Date	:	23-02-2024
Role	:	Organizing Secretary
Name of the Event	:	Workshop on COSMOsuite
Organization	:	Zastra Innovations, Bangalore
Date	:	19-10-2023
Role	:	Organizing Secretary
Name of the Event	:	National Level Farmer Training Program on "Automatic Biofloc Shrimp Cultivation
Organization	:	Bharathidasan University and CTAC-T
Date	:	31-03-2023
Role	:	Organizing Secretary
Name of the Event	:	Workshop on Machine Learning in Computational Biology
Organization	:	Bharathidasan University
Date	:	28-08-2022
Role	:	Organizing Secretary
Name of the Event	:	MultiOmics: A road to Interdisciplinary Research
Organization	:	Bharathidasan University and Build Geeks Pvt. Ltd
Date	:	23-04-2021
Role	:	Organizing Secretary
Name of the Event	:	Virtual School on Intellectual Property
Organization	:	Bharathidasan University and BDU-IPR Cell
Date	:	17-03-2021
Role	:	Organizing Secretary
Name of the Event	:	Online Workshop on Python
Organization	:	Bharathidasan University and University of Wisconsin, USA
Date	:	18-11-2020; 24-11-2020
Role	:	Organizing Secretary
Name of the Event	:	Workshop on Data Science
Organization	:	Bharathidasan University and Live Wire Pvt. Ltd.
Date	:	06-09-2019
Role	:	Organizing Secretary
Name of the Event	:	Awareness campaign on IPR: Relevance to your career
Organization	:	Bharathidasan University and BDU-IPR Cell
Date	:	04-00-2019
Role	:	Organizing Secretary

Name of the Event	:	Microbial processes for lignocellulosic biofuel production
Organization	:	Bharathidasan University and GIAN
Date	:	18-12-2017 to 27-12-2017
Role	:	Course Coordinator

16. INVITED TALKS/RESOURCE PERSONS

2025

Name of the Event	:	In-Service Training for Science Teachers
Organizer	:	Government Arts College, Perambalur
Date	:	24-01-2025
Topic	:	Career opportunities for Science students
Name of the Event	:	Aquamap-2025
Organizer	:	National Centre for Aquatic Animal Health, Cochin University of Science and Technology, Kochi
Date	:	17-01-2025
Topic	:	Precision Aquaculture, Aquaculture System Design and Automation for Socio-economic and Environmental Sustainability
Name of the Event	:	Knowledge Enrichment Programme
Organizer	:	Srimad Andavan Arts and Science College, Tiruchirappalli
Date	:	06-01-2025
Topic	:	Current perspectives on systems and Synthetic biology

2024

Name of the Event	:	National Seminar on Data Science and Emerging Computational Applications for Sustainable Management of Biodiversity and Environment
Organizer	:	Jamal Mohamed College, Tiruchirappalli
Date	:	11-12-2024
Topic	:	Systems biology and its applications
Name of the Event	:	ATAL Online Faculty Development Programme
Organizer	:	Rathinam College of Arts and Science, Coimbatore
Date	:	04-12-2024
Topic	:	Systems biology and its applications
Name of the Event	:	Lecture Series entitled Evolutionary Approaches to DNA Design in Synthetic Biology
Organizer	:	Bon Secours College for Women (Autonomous) Thanjavur
Date	:	23-08-2024
Topic	:	Synthetic biology and its applications
Name of the Event	:	Bioinformatics club
Organizer	:	Bishop Heber College, Trichy
Date	:	23-08-2024
Topic	:	Systems and synthetic biology
Name of the Event	:	Refresher course in Bioinformatics and Biotechnology

Organizer	:	University of Calicut, Calicut
Date	:	16-03-2024
Topic	:	Systems and synthetic biology
Name of the Event	:	National Level Seminar on Vulnerability of biomedical waste, animal waste on human health and environment: Disposal management by nano and geospatial technologies for sustainable development
Organizer	:	Government Arts College, Salem
Date	:	27-02-2024
Topic	:	Vulnerability of biomedical and animal waste on environment

2023

Name of the Event	:	National Conference on Disease Diagnosis and Drug Development
Organizer	:	Muthayammal College of Arts and Science, Rasipuram
Date	:	17-11-2023
Topic	:	Recent trends in systems and synthetic biology
Name of the Event	:	National Seminar on Socioeconomic upliftment of marginalized farmers through value addition in Traditional rice varieties
Organizer	:	Bon Secure College for Women, Tanjavur
Date	:	26-09-2023
Topic	:	Network pharmacology in type 2 diabetes
Name of the Event	:	National Seminar on Emerging Trends in Computer-Aided Drug Discovery
Organizer	:	Periyar College of Pharmaceutical Sciences, Trichy
Date	:	12-08-2023
Topic	:	Drug discovery
Name of the Event	:	National Conference on Emerging Trends in Biotechnology
Organizer	:	Mary Matha College of Arts and Science, Periyakulam
Date	:	17-03-2023
Topic	:	Systems and synthetic biology of industrial microorganisms
Name of the Event	:	National Seminar on Recent Innovations in Biological Sciences
Organizer	:	H.H. Rajah's College, Pudhukottai
Date	:	11-03-2023
Topic	:	Plant bioinformatics and its applications

2022

Name of the Event	:	Refresher Course in Botany
Organizer	:	Madurai Kamaraj University
Date	:	10-11-2022
Topic	:	Plant Bioinformatics and its applications
Name of the Event	:	COMBIGS
Organizer	:	SASTRA University
Date	:	16-11-2022

Topic	:	Systems biology
*Name of the Event	:	In-service Training to Science Teachers
Organizer	:	Government Arts and Science College, Perambalore
Date	:	25-07-2022
Topic	:	Bioinformatics awareness among students
Name of the Event	:	Three day seminar on Research Methodology
Organizer	:	Vinayaka Mission's Research Foundation
Date	:	06-05-2022
Topic	:	Data collection-Type of data-Sources-Tools for data collection-Constructing Questionarie-Reliability and validity-Pilot Study
2021		
Name of the Event	:	DST-STAR scheme-Special Lecture
Organizer	:	Jamal Mohamed College, Tiruchirappalli
Date	:	15-12-2021
Topic	:	Phylogenetic analysis and molecular evolution
Name of the Event	:	Workshop on Research Methodology
Organizer	:	Vinayaka Mission's Research Foundations
Date	:	30-11-2021
Topic	:	Biostatistics and its applications
Name of the Event	:	Student Induction Program
Organizer	:	Bon Secours College of Women, Thanjavur
Date	:	21-09-2021
Topic	:	Scope of research in biological sciences
Name of the Event	:	Faculty Development Program
Organizer	:	Holy Cross College, Tiruchirappalli
Date	:	28-07-2021
Topic	:	Systems and synthetic biology in biomedical sciences
Name of the Event	:	Workshop on Research Methodology
Organizer	:	Vinayaka Mission's Research Foundations
Date	:	21-06-2021
Topic	:	Biostatistics and its applications
Name of the Event	:	DBT-Workshop on Synthetic Biology
Organizer	:	Pondicherry University, Pondicherry
Date	:	24-02-2021 to 27-02-2021
Topic	:	Systems and Synthetic Biology
2020		
Name of the Event	:	Training Programme in Translational Bioinformatics
Organizer	:	Presidency College, Chennai
Date	:	21-02-2020
Topic	:	Industrial systems biology
Name of the Event	:	National Seminar on Computing Platforms for Biological Big

		Data Analytics
Organizer	:	NGP Arts and Science College, Coimbatore
Date	:	DRN/PASC/FCS/2019-20/201 Dt. 01-02-2020
Topic	:	Big data analytics and systems biology
Name of the Event	:	National seminar on Cancer Biology and Epidemic diseases
Organizer	:	Meenakshi Chandrasekaran College of Arts and Science
Date	:	31-01-2020
Topic	:	Drug Discovery
2018		
Name of the Event	:	DBT-Workshop on Synthetic Biology
Organizer	:	Pondicherry University, Pondicherry
Date	:	21-05-2019 to 22-05-2019
Topic	:	Systems and Synthetic Biology
Name of the Event	:	Mini-Symposium on Metabolic Bioengineering for The Production of Small Molecules
Organizer	:	NIPER, Kolkata
Date	:	01-11-2018
Topic	:	Systems medicine approach for type-2 diabetes
Name of the Event	:	Basic Bioinformatics Workshop
Organizer	:	St. Joseph's College (Autonomous), Calicut, Kerala
Date	:	20-03-2018 to 21-03-2018
Topic	:	Basic Bioinformatics Workshop
2017		
Name of the Event	:	National Workshop on Taxonomic Identification of Coastal and Oceanic Copepods
Organizer	:	Bharathidasan University, Tiruchirappalli
Date	:	12-07-2017 to 14-07-2017
Topic	:	Phylogenetics and molecular evolution of Copepoda (*Crustacea*) Molecular phylogenetic analysis of Copepoda (*Crustacea*): Practice and applications
Name of the Event	:	National Conference on Recent Advancements in Material Science
Organizer	:	Jayaraj Annapackiam College for Women, Periyakulam
Date	:	10-02-2017
Topic	:	Bionanotechnology and its medical applications
2016		
Name of the Event	:	National Level Workshop on Modernization in Bioinformatics and Big data
Organizer	:	Anna University, BIT Campus, Tiruchirappalli
Date	:	19-12-2016 to 25-12-2016
Topic	:	Genome-scale modeling: A computational platform for microbial metabolic engineering
Name of the Event	:	National Seminar on Emerging Trends in Control of Vectors and Vector-Borne Diseases

Organizer	:	Nehru Memorial College, Puthanampatti
Date	:	29-09-2016 to 30-09-2016
Topic	:	*In silico* approach for anti-malarial drugs discovery
Name of the Event	:	International Conference on Environment and Health in Changing Climate
Organizer	:	Bharathidasan University, Tiruchirappalli
Date	:	14-09-2016 to 16-09-2016
Topic	:	Chairperson
Name of the Event	:	Guest Lecture Series
Organizer	:	Karpagam University, Coimbatore
Date	:	13-07-2016
Topic	:	Genome sequence analysis
Name of the Event	:	National Conference on Achievements, Challenges and Opportunities in Environmental Biotechnology for Sustainable Livelihood Security
Organizer	:	Tamil Nadu Scientific Research Organization, Pudukkottai
Date	:	28-02-2016
Topic	:	Molecular systems biology of methanogens for environmental applications

2015

Name of the Event	:	Refresher Course in Life Sciences
Organizer	:	Calicut University, Kozhikode
Date	:	07-12-2015
Topic	:	Plant bioinformatics tools and their applications
Name of the Event	:	Faculty Development Programme on New Perspectives in Drug Discovery and Progressive Technological Developments
Organizer	:	BIT Campus, Anna University, Tiruchirappalli
Date	:	13-05-2015
Topic	:	Pharmaceutical bioinformatics and its applications in drug discovery
Name of the Event	:	National Workshop Application of Bioinformatics in Science and Research in Pharmaceutical Industries
Organizer	:	JSS College of Pharmacy, Ooty
Date	:	12-02-2015 to 14-02-2015
Topic	:	Bioinformatics resources and their applications
*Name of the Event	:	Guest Lecture Series
Organizer	:	Srimad Andavar College of Arts and Science, Tiruchirappalli
Date	:	10-01-2015
Topic	:	Recent trends in Bioinformatics

2014

Name of the Event	:	National Seminar on Role of Biotechnology in Development of Therapeutics/Drugs and Vaccines
Organizer	:	JSS University, Mysore

Date	:	14-08-2014
Topic	:	Peptide-based vaccine designing and engineering
Name of the Event	:	Biocomets 2014 Inter-collegiate Competitions
Organizer	:	Srinivasan College of Arts and Science, Perambalore
Date	:	27-02-2014
Topic	:	Systems biology for metabolic engineering of industrial organisms

2012

Name of the Event	:	National training-cum-workshop on DNA Barcoding of Fish and Marine Life-Molecular Analysis and Bioinformatics Approach
Organizer	:	Bharathidasan University, Tiruchirappalli
Date	:	14-09-2012
Topic	:	Bioinformatics resources for DNA barcoding

2011

Name of the Event	:	Wilmut Association-2011
Organizer	:	Dhanalakshmi Srinivasan College of Arts and Science for Women, Perambalore
Date	:	12-08-2011
Topic	:	Systems biology and its applications
*Name of the Event	:	Faculty Improvement Programme
Organizer	:	Vellore Institute of Technology, Vellore
Date	:	24-01-2011
Topic	:	Molecular docking and visualization software

2010

Name of the Event	:	Wilmut club of Biotechnology: Lecture-cum-Training Programme on Bioactive Natural Products and Bioinformatics
Organizer	:	JJ College of Arts and Science, Pudhukottai
Date	:	06-10-2010
Topic	:	Protein structure prediction and folding mechanism

2009

Name of the Event	:	Seminar on Molecular Modeling and Drug Design
Organizer	:	Srinivasan College of Arts and Science, Perambalore
Date	:	08-09-2009
Topic	:	Molecular modeling and drug designing
*Name of the Event	:	Botanical Association-2009
Organizer	:	Jamal Mohamed College, Tiruchirappalli
Date	:	18-08-2009
Topic	:	Plant Bioinformatics and its applications
Name of the Event	:	Seminar-cum-Workshop on Systems Biology
Organizer	:	Sathiyabama University, Chennai
Date	:	18-03-2009
Topic	:	Systems biology for metabolic engineering of industrial microorganisms

17. TRAINING PROGRAMMES

Name of the Event	:	International Workshop on Ocean Energy–Recent Trends
Organizer	:	IIT, Madras
Date	:	30-31, 10-2023

Name of the Event	:	Bioinformatics Workshop
Organizer	:	St. Joseph's College, Calicut, Kerala
Date	:	20-03-2018 to 21-03-2018

Name of the Event	:	Bioinformatics for Whole Genome Sequencing
Organizer	:	ICAR-Indian Institute of Spices Research, Kozhikode
Date	:	27-01-2016 to 29-01-2016 and 01-02-2016

Name of the Event	:	DST sponsored Training Workshop on Advances in Biotechnology
Organizer	:	The Energy and Resources Institute, New Delhi
Date	:	14-11-2011 to 19-11-2011

Name of the Event	:	National Workshop on Petroleum Exploration
Organizer	:	Bharathidasan University, Tiruchirappalli
Date	:	31-03-2011 to 01-04-2011

Name of the Event	:	Refresher course in Bioinformatics
Organizer	:	Bharathidasan University, Tiruchirappalli
Date	:	03-12-2010 to 23-12-2010

Name of the Event	:	National Workshop on Molecular Modelling and Drug Design
Organizer	:	CMSD, University of Hyderabad, Hyderabad
Date	:	02-08-2010 to 07-08-2010

Name of the Event	:	Access to e-Resources and Digital Library Consortium
Organizer	:	Bharathidasan University, Tiruchirappalli
Date	:	01-08-2008 to 02-08-2008

Name of the Event	:	Refresher course in Life Sciences
Organizer	:	Bharathiar University, Coimbatore
Date	:	10-09-2007 to 30-09-2007

Name of the Event	:	Hands-on Training on Bioinformatics: Tools and Applications
Organizer	:	Lady Doak College, Madurai
Date	:	02-06-2007 to 12-06-2007

Name of the Event	:	Training Course on The aspects of Remote Sensing
Organizer	:	Bharathidasan University, Tiruchirappalli
Date	:	26-10-2006 to 30-10-2006

Name of the Event	:	Orientation course
Organizer	:	Bharathidasan University, Tiruchirappalli

Date : 10-06-2006 to 06-06-2006

Name of the Event : Faculty Induction Programme
Organizer : Bharathidasan University, Tiruchirappalli
Date : 26-12-2005 to 27-12-2005

18. PRESENTATION IN INTERNATIONAL ACADEMIC EVENTS

Author's Name : Chellapandi P
Name of the Event : International Conference on Microbiome in Health, Disease and Environment
Date : 3-4, March 2017
Organizer : Sri Balaji Vidyapeeth, Puducherry
Abstract Title : Systems-biological approach for the development of anti-methanogenic vaccine against *Methanobrevibacter ruminantium* M1 found in the rumen gut.

Author's Name : Prisilla A and Chellapandi P
Name of the Event : International Conference on Reasserting Microbial Biotechnology to Deflate Global Disease Burden
Date : 28-29, September 2015
Organizer : Manonmaniam Sundaranar University, Tirunelveli
Abstract Title : Structure, function and evolution of *Clostridium botulinum* C2 and C3 toxins: Insight to poultry and veterinary vaccines
:

Author's Name : Chellapandi P
Name of the Event : International Science Congress
Date : 24-25, December 2011
Organizer : Maharaja Ranjit Singh College of Professional Sciences, Indore
Abstract Title : Exploring methylotrophic capability of cyanobacteria based on their genome functional homologies

Author's Name : Chellapandi P and Divya C
Name of the Event : International Conference on Bioinformatics and Systems Biology
Date : 3-4, March 2011
Organizer : Annamalai University, Chidambaram
Abstract Title : Metabolic reconstruction of C_1 assimilation pathways in the genomes of *Prochlorococcus*

Author's Name : Chellapandi P, Nandhini J and Sivaramakrishnan S
Name of the Event : International Conference on Climate Change and Bioresource
Date : 9-12, February 2010
Organizer : Bharathidasan University, Tiruchirappalli
Abstract Title : Computational analysis of enzyme-substrate complexes for reverse methanogenesis

Author's Name : Karthigeyan G, Sivaramakrishnan and P. Chellapandi
Name of the Event : International Seminar on Biotechnological approach for Bio-resource management

Date	:	23-26, January 2007
Organizer	:	Bharathidasan University, Tiruchirappalli.
Abstract Title	:	Super gene families based phylogenomics of archaeal domain

Author's Name	:	Chellapandi P and Amin SB
Name of the Event	:	International Conference on New Horizons in Biotechnology
Date	:	18-21, April 2001
Organizer	:	Regional Research Laboratory, Thiruvananthapuram, India.
Abstract Title	:	Production and characterization of extra cellular alkaline proteinase from *Aspergillus foetidus* NCIM 505

19. PRESENTATION IN NATIONAL EVENTS

Author's Name	:	Chellapandi P
Name of the Event	:	National Conference on Heavy Metals in the Environment
Date	:	28-30, November 2013
Organizer	:	Mahadma Gandhi University, Kottayam
Abstract Title	:	Elucidating heavy metal ions-coupled reverse methanogenesis in the genomes of methanogenic archaea

Author's Name	:	Chellapandi P
Name of the Event	:	National Seminar on Recent Advances in Life Sciences
Date	:	28-29, December 2011
Organizer	:	H.H. Rajah's College, Pudukottai
Abstract Title	:	Sequence-structure-function integrity of ADP-ribosylation superfamily for engineering avirulent toxins from identical hypothetical proteins.

Author's Name	:	Chellapandi P and Nandhini J
Name of the Event	:	National Seminar in Frontiers in Biotechnology
Date	:	22-24, July 2009
Organizer	:	Bharathiar University, Coimbatore
Abstract Title	:	Molecular mimics for understanding the mechanism of reverse methanogenesis in methanobacteria

Author's Name	:	Chellapandi P, Kalaiarasi M and Sangavai C
Name of the Event	:	National Conference on Genomics, Proteomics and Systems Biology
Date	:	1-3, October 2008
Organizer	:	IISC, Bangalore
Abstract Title	:	Metabolomic analysis of lactose utilizing metabolism in Aspergillus genomes

Author's Name	:	Chellapandi P
Name of the Event	:	National Seminar on reaching for unreached
Date	:	27-30, December 2003
Organizer	:	Kumaraguru College of technology, Coimbatore
Abstract Title	:	Rural biotechnology: An integrated approach for rural development in India

Author's Name	:	Chellapandi P
Name of the Event	:	National Symposium on Microbial Diversity for Sustainable Development
Date	:	1-2, March 2003
Organizer	:	Gujarat University, Ahmadabad
Abstract Title	:	Biodiversity of industrial enzymes producing microorganisms

Author's Name	:	Chellapandi P, Patel JP, Patel A and Takkur M
Name of the Event	:	National Symposium on Environmental Biotechnology and Biodiversity
Date	:	31 January to 1 February 2003
Organizer	:	S.P. University, Anand
Abstract Title	:	Aerobic degradation potential of *Aspergillus oryzae* and *Fusarium lini* on groundnut shell

Author's Name	:	Chellapandi P, Pokar VD, Thiagarajan VR and Suman LS
Name of the Event	:	National Seminar on Solid Waste Management at Current Status and Prospectus
Date	:	12-14, December 2002
Organizer	:	Bangalore University, Bangalore
Abstract Title	:	Anaerobic digestion of enzyme and microbial pretreated oil-industry wastes

Author's Name	:	Chellapandi P and Jani HM
Name of the Event	:	National Seminar on Microbial Technology
Date	:	1-2, June 2001
Organizer	:	G.R.D. College of Science, Coimbatore
Abstract Title	:	Optimizing Production of extracellular endogluconase from *Streptomyces* sp.BRC.2

Author's Name	:	Chellapandi P and Patel JK
Name of the Event	:	National Seminar on Microbial Technology
Date	:	1-2, June 2001
Organizer	:	G.R.D. College of Science, Coimbatore
Abstract Title	:	Production of extra cellular lipase production from *Bacillus* spp PCP.11 & 12

20. EXTERNAL EXAMINERS

Name of the Exam		Ph.D. Thesis valuation for BINISHA R B
Organization		Bharathiar University
Date		15-01-2023

Name of the Exam	:	Ph.D. Thesis valuation for J.J. Venkata Nagamani
Organization	:	CSIR-IICT, Hyderabad
Date	:	19-09-2024

Name of the Exam	:	Ph.D. Thesis valuation for A. Yamuna
Organization	:	Bharathiar University
Date	:	22-11-2023

Name of the Exam	:	Ph.D. Thesis valuation for T. Lokesh
Organization	:	Bharathiar University
Date	:	15-01-2023

Name of the Exam	:	Ph.D. Thesis valuation
Organization	:	Mizoram University
Date	:	22-04-2022

Name of the Exam	:	M.Sc. Bioinformatics
Organization	:	Bishop Heber College, Tiruchirappalli
Date	:	11-03-2020

Name of the Exam	:	B. Tech. Bioinformatics
Organization	:	SASTRA University, Thanjavur
Date	:	09-05-2019

Name of the Exam	:	M.Sc. Bioinformatics
Organization	:	Bishop Heber College, Tiruchirappalli
Date	:	24-04-2019

Name of the Exam	:	Ph.D. Viva -Voce examination
Organization	:	Bharathiar University, Coimbatore
Date	:	COE/Ph.D./1st Noti/2019/2860 Dt. 22-02-2019

Name of the Exam	:	M.Sc. Biomedical Science
Organization	:	Bharathidasan University, Tiruchirappalli
Date	:	BU/BMS/2016 Dt. 20-10-2016

Name of the Exam	:	M. Phil. and PGD in Bioinformatics Project Viva -Voce
Organization	:	Alagappa University, Karaikudi
Role		External examiner
Date	:	17-07-2014

Name of the Exam	:	M.Sc. Biomedical Science
Organization	:	Bharathidasan University, Tiruchirappalli
Date	:	BDU/BMS/4145 Dt.17-04-2013

Name of the Exam	:	M.Phil. Bioinformatics dissertation evaluation
Organization	:	Bharathiar University, Coimbatore
Date	:	COE/MPhil/2013/002 Dt. 21-01-2013

Name of the Exam	:	M.Sc. Biotechnology practical examination
Organization	:	Thiruvalluvar University, Vellore
Date	:	TVU/COE/Practical/ 2009/1727 Dt. 24-03-2009

Name of the Exam	:	PGD in Bioinformatics
Organization	:	Ayya Nadar Janaki Ammal College, Sivakasi
Date	:	17-05-2008

21. CAPACITY BUILDING

Infrastructure Details	:	Lab infrastructure
Funding Agency	:	RUSA 2.0
Quantum of Grant	:	INR 4, 63, 000/-
Year of Establishment	:	2021-2024
Position Held	:	Head of the Department
Reference No.	:	311/RUSA (2.0)/2018

Infrastructure Details	:	Bioinformatics Lab, Department of Bioinformatics
Funding Agency	:	Bharathidasan University, Tiruchirappalli
Quantum of Grant	:	INR 6, 07, 600/-
Year of Establishment	:	2019-2020
Position Held	:	Head of the Department
Reference No.	:	14967/J/2019 Dt.14-11-2019

Infrastructure Details	:	Bioinformatics Lab, Department of Bioinformatics
Funding Agency	:	DST-PURSE-II
Quantum of Grant	:	INR 3, 62 563/=
Year of Establishment	:	2020-2021
Position Held	:	Principal Investigator
Reference No.	:	38651/P7/2020/ Dt. 20-10-2020

Infrastructure Details	:	Bioinformatics Lab, Department of Bioinformatics
Funding Agency	:	DST-PURSE-I
Quantum of Grant	:	INR 2, 00, 000/=
Year of Establishment	:	2017-2018
Position Held	:	Principal Investigator
Reference No.	:	28888/E12/2016/Infra/ Dt. 15.02.2018

22. RESEARCH COLLABORATIONS

Name of Agencies	:	Bishop Heber College, Tiruchirappalli-01
MoU formulated Year	:	2021-2024
Activities done	:	Academic research on Bioinformatics

Name of the Collaborator	:	Mkshinika Feeds and Needs, Chidambaram
Purpose	:	Sustainable shrimp farming
Duration	:	2019

Name of the Collaborator	:	Rajiv Gandhi Centre for Aquaculture, Sirkazhi
Purpose		Sustainable shrimp farming
Duration	:	2019

Name of the Collaborator		CDAC, Tiruvendram
Purpose		Aquaculture automation system
Duration		2019

Name of the Collaborator	:	Mizoram University, Aizawl
Purpose	:	Colorectal cancer and Medicinal plants

Duration	:	2019
Name of the Collaborator	:	Department of Marine and Coastal Studies Madurai Kamaraj University
Purpose	:	Phylogenetics
Duration	:	2019
Name of the Collaborator	:	Department of Molecular Microbiology Madurai Kamaraj University
Purpose	:	Biofuel technology
Duration	:	2018

23. LAB FACILITIES

Equipment Name	Make	Model
Air pump	Hailea	HAP-120
Aquaculture automation system	Own construction	
Anaerobic Culture Jar	GENIST INTERNATIONAL	3.5 L
Analytical balance	G-LAB	0.01 TO 300GM
Automated autoclave	Hasihas	HSI-101
Bacteriological Incubator	LabTech	LTINS-3
Bench top centrifuge	REMI	R-8C-DX
Binocular Microscope	Gemkolabwell	G-S-725-10
Bio safety cabinet class IIB2 (4×2 ×2)	KEMI	KBSC-3
Biogas plant 500L	Biotech India Pvt Ltd	
Bioreactor 5L	Bio-Age	BIO-Spin 05A
Bioreactors 10L	Own fabrication	
Biofuel cell (Single chamber)	Own fabrication	500 mL
Biofuel cell (Double chamber)	Own fabrication	500 mL
Bioreactor 10L	Own fabrication	
Clear water sludge pump	Kirloskar	1 HP
Colony counter, DS	Deep vision	361
Computer workstation	HP	Z820
Consolidated bioprocessing unit	Own fabrication	
Cooling microcentrifuge	Eppendorf	5418R
Cyclomixer	REMI	CM-101
Dual vertical electrophoresis unit	Genei	Medium
Deep freezer -20^{o}C, 170 L	Blue Star	
Digital pH meter	ELICO	LI-120
Digital spectrophotometer	Lab Junction	LJ-306
Digital multi-meter		
Digital water and soil analysis kit	SKY TECH	STI-440P6
Doctor centrifuge	REMI	R-304
Double distillation unit	Borosil	34/35
Dry bath	Genei	LI-DB-120
Electronic balance	Shimadzu	BL-220H
Electronic balance	SHIMADZU	ELB-300
Electrophoresis Power Supply	Tarsons	7090
ELISA reader	BioChrome	
Fluorescence spectrophotometer	PerkinElmer	L845

Freeze Dryer	Thermostar	SLFD 5Kg
Gas chromatograph with FID/TCD	Agilent Inc.	GC8890
Gel Caster for Electrophoresis	Tarsons	7024
Heating mantle	GUNA	
Hot air oven	LABLINE	
Hot air oven	Labtech	LTHOS-3
HPLC with UVD/RID	Agilent Inc.	1260 Infinity
Incubator (Bottom heated)	LABLINE	
Industrial Conductivity Probe Kit	ATLAS SCIENTIFIC	AS KIT-106E
Industrial DO Probe Kit	ATLAS SCIENTIFIC	AS KIT-103D
Industrial ORP Probe Kit	ATLAS SCIENTIFIC	AS Kit-103O
Industrial pH Probe Kit	ATLAS SCIENTIFIC	AS KIT--102P
Industrial Temperature Probe	ATLAS SCIENTIFIC	ENV-TMP-D
Mass flow controller	Alicat	
Magnetic stirrer with hot plate	Tarsons	MC-02
Microwave oven	Whirl pool	Magicook
Midi Submarine Electrophoresis	Tarsons	7050
Mini Cooler -20^{o}C	Tarsons	525060
Mini Dual Vertical Electrophoresis	Tarsons	7080
Mini Oscillating Granulator Machine	SS 316	
Mini Submarine Electrophoresis	Tarsons	7030
Monocular Microscope	OLYMPUS	HAS
Motor speed controller	Robodo	MO39
Orbital shaker incubator	BIO CHROME INDIA	BS-1
Orbital shaker incubator (25x250 ml)	Bio-Age	BSR-R2
pH meter	ELICO	
Rocking Shaker	Tarsons	Rockymax
RT-PCR	ABI	
Semi-automatic gassing manifold	Own fabrication	
Single distillation unit	BHANU	PH4/BASIC
Vortex Shaker	Tarsons	3020
Microcentrifuge	Tarsons	MC-01
Thermocycler (PCR)	Eppendorf	NexusX1
Tissue homogenizer	REMI	10 ml
UV/VIS spectrophotometer	Agilent	Cary60
UV-Trans illuminator	Genei	107171GB
UV-VIS spectrophotometer	ELICO	SL-150
Vacuum drying oven		
Vacuum oven	Hasihas	HSI-137
Vacuum pump	Tarsons	M/N300
Vertical autoclave 25 Lit	Labline	AV101
Water bath 2KVa	Guna	
Water bath incubator shaker	LABLINE	WBIS-2
Water distillation Unit	GENIST	International

Last updated on 12-02-2026

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