



SHANMUGAM ACHIRAMAN
Professor
CHEMICAL ECOLOGY RESEARCH LAB (CERL)

Contact

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Google Scholar ID : <https://scholar.google.co.in/citations?user=wIBHrYAAAAJ>
Scopus ID : <https://www.scopus.com/authid/detail.uri?authorId=6507245829>
Web Science ID : <https://www.webofscience.com/wos/author/record/A-3537-2016>
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In 1998, Dr. G. Archunan (my mentor), a pioneer mammalian pheromone scientist introduced me the fascinating field of Chemical Ecology (pheromone biology). Chemical ecology is the study integrating chemistry and biology to examine the chemical interactions among organisms and their environment. In the past two decades my research focused on endocrine modulating and disrupting chemicals. My primary research started with identification and characterization of pheromones and their role in chemical signaling (Sex attraction), particularly male specific and estrus (Ovulation) specific metabolites in scent sources of rodent in view of developing eco-friendly pheromone trap. Further, we developed interest towards livestock in order to develop cost-effective estrus detection kit (Estrus indicator) in farm animals. Currently, our team is intent to use metagenomic approaches of gut/faecal microbiota to detect the reproductive status. Recent research deals with the interference of endocrine-disrupting chemicals (EDCs) with human metabolism and hormonal balance, contributing to pollutant induced metabolic syndrome such as obesity, PCOD and diabetes. In addition, we also focus on endocrine modulating role of pheromones/allelochemicals in alleviating the toxic effects of pollutants (Endocrine disruptors) in rodent and fish mode using plant based products and nanotechnology.

Academic Qualifications : M.Sc., M.Phil., Ph.D

Degree	University	Year	Subjects	Class/Grade obtained
B.Sc.,	Bishop Heber College/Bharathidasan University	1991-1994	Zoology	I class (University 12th rank)
M.Sc.,	Jamal Mohamed College/Bharathidasan University	1994-1996	Zoology	I class (University 1st rank) Gold Medalist
M.Phil.,	Bharathiar University	1996-1998	Zoology	I class / Highly commended
Ph.D.,	Bharathidasan University	1998-2003	Zoology	Highly commended
M.Phil.,	Bharathidasan University	2007-2008	Biotechnology	I class Distinction

Teaching Experience : 18 Years

Research Experience : 23 Years

Designation & Office address	Period		Nature of duties/ Responsibilities
	From	To	
Professor Bharathidasan University	02.06.2021	Till date	Teaching and Research
Associate Professor Bharathidasan University	02.06.2018	01.06.2021	Teaching and Research
Assistant Professor (Stage 3) Bharathidasan University	02.06.2015	01.06.2018	Teaching and Research
Assistant Professor (Stage 2) Bharathidasan University	02.06.2010	01.06.2015	Teaching and Research
Assistant Professor (Stage 1) Bharathidasan University	02.06.2008	01.06.2010	Teaching and Research
Research Associate (CSIR) Bharathidasan University	01.04.2005	01.05.2008	Teaching and Research
Lecturer in Zoology Bishop Heber College	24.06.2004	31.03.2005	Teaching
Senior Research Fellow (Extended - CSIR) Bharathidasan University	02.05.2003	30.04.2004	Research
Senior Research Fellow (ICAR) Bharathidasan University	16.07.1998	15.07.2001	Research

Additional Responsibilities

- **Collaborator and Member** in the **Centre for Pheromone Technology (CPT)** Bharathidasan University from **2010**.
- **Collaborator and Faculty Member** in the **National Centre for Alternatives to Animal Experiments (NCAAE)**, Bharathidasan University, from **2016-2021**.
- **Coordinator** in **Sustainable Integrated Farming System (SIFS)** from **2015** at Bharathidasan University, Trichy.
- **Programme Coordinator for CSIR NET (Life Sciences) coaching classes** at Bharathidasan University, Trichy
- **Internal Quality and Assessment Cell (IQAC) member (2016-2018)**, Bharathidasan University, Trichy.
- **Internal Quality and Assessment Cell (IQAC) member (Alumni) 2021-2023**, Jamal Mohamed College Trichy.
- **Nominee of Committee for the Purpose of Control and Supervision of Experiments of Animals (CPCSEA)**, from **2017** Animal welfare Division, Ministry of Environment, Forest and Climate Change, Government of India, Government of India.
- Member in **Departmental Research Committee** and **Purchase Committee at Bharathidasan University** (2008 onwards)
- **Summer training, internship programme and Six months Project works** for B. Tech, M. Tech and M. Sc., Students from Bharathidasan University and other colleges in and around Tamilnadu. since 2008.

Areas of Research

Chemical Ecology, Pheromone biology, Neurobiology, Reproductive Toxicology, Nanotechnology, Obesity, Cancer Biology

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	15	7
	M.Phil.	21	-
Project	PG	50	5
	UG / Others		

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
64	34	10	46	2

Total Impact Factor- 245 (as on 2022)				
	Google scholar	Scopus index	Web Of Science	BDU IRNIS
Publications	84	64	61	80
Citation	2899	2016	1674	2007
h - index	26	21	21	22
i10- index	46	---	---	---

Funded Research Projects

S.No.	Title of Project Principle Investigator	Funding Agency	Amount (Rs)	Duration / Status
1	Elucidation of the underlying mechanism of adipose tissue browning driven polycystic ovarian syndrome recovery.	Indian Council of Medical Research (ICMR) Government of India, New Delhi.	45,10,748/-	2021-2024 (ongoing)
2.	Identification and characterization of chemical cues in vaginal fluids of female kangayam breed cattle (<i>Bos indicus</i>): Enhancement of reproductive efficiency	University Grant Commission- Research Award, Government of India, New Delhi	23,12,953/-	2016-2018 (Completed)
3.	Eco-friendly pheromones in restoration of reproductive status in pesticide induced toxicity: An innovative study in rat model	Council of Scientific and Industrial Research, Government of India, New Delhi.	Rs.13,08,200/-	2010-2014 (4 Years) (Completed)
4.	Assessment of estrus specific urinary pheromones and their binding protein in goat (<i>Capra indicus</i>) : A new insight in livestock production	Department of Science and Technology Government of India, New Delhi.	Rs.10,50,000/-	2010-2013 (3 Years) (Completed)
.5.	Efficacy of Eco friendly pheromones in protecting pollutant induced male reproductive toxicity in rat model: An innovative strategy to protect environment	University Grant Commission, Government of India, New Delhi.	Rs.8,93,800/-	2009-2012 (3 Years) (Completed)

S.No.	Title of Project Co- Principle Investigator	Funding Agency	Amount (Rs)	Duration
1	Effects of Air pollutants on Respiratory health of Traffic Police personnel of Major Cities of Tamil Nadu - An Observational Study"	Indian Council of Medical Research (ICMR) - Department of Health	Rs.1,04,23,056/-	2020-2023 (on going)

		Research (DHR Government of India, New Delhi		
2.	Perseverance of Microphage Inhibitory Factor (MIF) In Pulmonary Leptospirosis. ICMR		RS. 35,97,000	2017-2020)
2.	Analysis and evaluation of Indian staple food fortified with veldate grape (<i>Cissus quadrangularis</i>) stem power to overcome osteoporosis	SERB-DST	Rs.31,98,200/-	2016-2019
4	Study on neuro productive effect of egg fruit (<i>Pouteriacampechiana Linn.</i>)on pilocarpine mediated seizure in mice hippocampus: therapeutic potential for Epilepsy.	SERB-DST	Rs.5,70,000/-	2015-2016
5	Quantification and characterization of disinfection by – products in drinking water sampled from various places of Tamilnadu	DST	Rs.20,00,000/-	2014-2017
6	Bioactivity of pheromonal compounds and their effect on cytosolic Ca ²⁺ dyanamics in rat olfactory system	DST-JSPS	Rs.4,00,000/-	2008-2010 (2 Years)

Patents

Patent Number 1	319107
Application Number	36040/CHE/2015
Date of Filing	16.07.2015
Patentee	S. Achiraman , U. Suryakalaa, R. Ramachandran, D. Sankarganesh and S.Kamalakkannan
Invention Title	SYNERGISTIC COMPOSITION FOR SYNCHRONISED AROMATASE AND PPAR REGULATION
Date of Grant	27.08.2019
Country Granted	India (National Patent)
Granted by	The Patent Office, Government of India

Application Number 2	202341042046 / CBR No. 27917
Provisional Patent filed	17.06.2023
Patent published	28.06.2024
Applicants	Dr. J. Anitha, Dr. Chandramohan Batcharalam, Dr. S. Ravi, Dr. S. Achiraman ,
Invention Title	HERBAL FORMULATION FOR PREVENTION AND TREATMENT OF PCOS

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 9

1. Co-organized the **Workshop on Trends in Animal Models, In Vitro Tools, and *in silico* Approaches in Scientific Research**, funded by RUSA 2.0 12th – 16th February, **2024**
2. **4rd National Workshop on Biotechnological Solutions for Environmental Challenges (BITSFEC's - 2024)** Bharathidasan University, funded by RUSA 2.0, Date: 5th and 6th April 2024
3. **3rd National Seminar cum Industry-Academia workshop** on Biotechnological Solutions for Environmental Challenges (**BITSFECs-2021**) Bharathidasan University, funded by RUSA 2.0, DST – PURSE Date: 22nd – 23rd February, 2022
4. **International webinar** on Physiological Diseases in collaboration with Nanyang Technological University (NTU) Singapore, Bharathiar University Coimbatore and Kalasalingam Academy of Research and Education, Krishnankoil. Date 14th and 15th October 2020.
5. **2nd National Seminar cum Industry-Academia workshop** on Biotechnological Solutions for Environmental Challenges (**BITSFECs-2019**) Bharathidasan University, funded by UGC- SAP, Date: 17th-18th December, 2019
6. **National Seminar** on Biotechnological Solutions for Environmental Challenges (**BITSFECs-2018**) Bharathidasan University, funded by UGC- SAP, MoWR, New Delhi and TNSCST, Tamil Nadu Date: 17th-18th December, 2018
7. **Lecture series** by Dr. S. Gokul Shankar, Senior Associate Professor, Microbiology Unit, Faculty of Medicine, AIMST University, Malaysia – 08100 under **Inviting Renowned Professors from Foreign Universities scheme** on 22-26 October 2018.
8. **Workshop on Phyto-chemistry** for health and environment Environmental Biotechnology and Plant Science 8th -11th February 2016
9. One day **workshop on qPCR** Date on 4th May 2015, in the Seminar hall at Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli – 620 024.
10. One day **seminar on Awareness** on Environmental Health and Environmental Issues : Bharathidasan University constituent college, Kurumbalur, Perambalur Date: 15th and 16th December 2011.
11. **35th Annual Conference of Ethological Society** of India and Symposium on "Chemical Signals in Animal Welfare" funded by CSIR, Bharathidasan University and Ethological Society of India. Date: 15th and 16th December 2011

Events Participated (optional)

Conferences / Seminars / Workshops: 80

Conference/Seminar attended: 47	Workshop/Training attended	: 33
National : 38	National	: 29
International : 09	International	: 04

Distinctive Achievements / Awards

IV. AWARDS, MEDALS, AND FELLOWSHPS

- ❖ **UGC Research Award** - University Grant commission, Government of India: 2016-2018.
- ❖ **SRM Gold medal** for presentation of the paper entitled "Laser University Grant commission, Government of India receptive Drug delivery applications" in the Research Day held on 28th Feb 2014 at SRM University, Tamil Nadu.
- ❖ **DBT CREST Award** – Department of Biotechnology, Government of India: 2012-13

- ❖ **DST Young Scientist Award** – Department of Science and Technology, Government of India: 2009-12.
- ❖ **Fellow Award in Society for Applied Biotechnology (FSAB)** 2010.
- ❖ **JSPS-fellowship** (Japan) for one month in view of Indo-Japan (DST-JSPS) collaborative project 2008.
- ❖ **CSIR Research Associate (Direct)** – Council of Scientific Industrial and Research, Government of India: 2005-2008
- ❖ **CSIR Senior Research Fellow Extended (Direct)** – Council of Scientific Industrial and Research, Government of India: 2003-2004
- ❖ **ICAR Senior Research Fellow** – Indian Council of Agricultural Research, Government of India: 1998-2001
- ❖ **Dr. Alagirisamy Gold Medal** for proficiency in Zoology for the year 1996-1997.

V. APPRECIATION

1. **Certificate of Appreciation** from Bharathidasan University for **Contribution** towards patent grant issued on 27th August 2019
2. **Certificate of Appreciation** for the invaluable support and commendable contribution to the panel discussion on Paradigm Shift in Pedagogical practices–Quality Enhancement Higher Education held at National College in 24th August 2019
3. **Certificate of Appreciation** from Bharathidasan University for **Outstanding Contribution** during 2016-18 issued on January 2019
4. **Certificate of Appreciation** from Bharathidasan University for **Outstanding Contribution** during 2012-13 issued on January 2019

VI. ACHIEVEMENTS

- ✓ **“3rd Rank”** in Top 25 Hottest articles Pharmacology, Toxicology and Pharmaceutical Science “Spermidine may decrease autophagy pathway” *Medical Hypotheses, Volume 77, Issue 4, October 2011, Pages 677-67* (July to September 2011).
- ✓ **Best paper (Oral session, Second Prize) presentation** the National Symposium on Current Trends in Biotechnology held at Department of Biotechnology St. Michael College of Engineering and Technology, Kalyarkoil-51, presented on 22nd February, 2007.
- ✓ **Best paper (Poster session) presentation** in the in the State Level Seminar on Recent Trends in Biological Sciences held at Avinashilingam University, Coimbatore, presented on December 1998
- ✓ **II prize** in the event **Quiz Zoo**. In Animalia 1996 Inter-Collegiate competition held at Jamal Mohamed College Tiruchirappalli.

VII. ACADEMIC DISTINCTION

- **“Distinction”** Master of Philosophy in Biotechnology 2008.
- **“Highly Commended”** Doctor of Philosophy in Zoology 2002.
- **“Highly Commended”** Master of Philosophy in Zoology 1998.
- **I prize for proficiency in Zoology** for the year 1996-97 at Jamal Mohamed College, Tiruchirappalli.
- **University I rank** in M.Sc., Zoology (1996) at Jamal Mohamed College, Tiruchirappalli.
- **University 12th rank** in B.Sc., Zoology (1994) at Bishop Heber College in Bharathidasan University, Tiruchirappalli.
- **I prize** for **proficiency in allied chemistry** in the B.Sc., 1992-93.

VII. TRAVEL SUPPORT

- **International Centre for Theoretical Physics (ICTP)** financial support for Travel and Living expenses to participate in Conference in Trieste, **Italy** 2017.
- **DST Travel Support** - Department of Science and Technology (Government of India) travel support to participate International IRSEA Congress and workshop and Scientific interaction at France during 19th Nov to 05th Dec, 2014
- **CSIR** Council of Scientific Industrial and Research (Government of India), travel support to participate International IRSEA Congress and workshop and Scientific interaction at France during 19th Nov to 05th Dec, 2014
- **Benzon Foundation** 50% travel fellowship to attend Bazon Symposium at **Copenhagen, Denmark**, 2003.

- **International Centre for Theoretical Physics (ICTP)** Travel Fellowship and Living expenses to participate in School and Conference in **Trieste, Italy** 2002.

Membership in Professional Bodies

1. Appointed as the member **Research Board of Advisors** in **The American Bibliographical Institute** from 2001.
2. **Annual member in Society for Reproductive Biology and Comparative Endocrinology (SRBCE)** for the year 1999, 2002 & 2003.
3. **Life Member** in **Society for Applied Biotechnology** since the year 2010
4. **Life Member** in **Ethological Society of India** Since the year 2011
5. **Life Member** in **SOCIETY FOR ALTERNATIVES TO ANIMAL EXPERIMENTATION (SAAE)** 2019.
6. **Life Member** in **SOCIETY FOR BIOLOGICAL CHEMISTS (SBC)** 2022.

Academic Bodies (such as Board of Studies etc.,)

- i. UG Biotechnology (2010-12) and PG Biotechnology in **ANJAC College** (Autonomous), Sivakasi (2012-2014).
- ii. Member in Framing the Syllabus for UG and PG Environmental Sciences under the **World class Curriculum Development Cell, Government of Tamilnadu** (2013-2016)
- iii. PGMolecular Biosciences (2009-2011) and Zoology (University Nominee) in **Bishop Heber College** (Autonomous) Trichy (2015-2017).
- iv. UG and PG Zoology in **Jamal Mohamed College** Trichy (2015-2017)
- v. UG and PG Zoology (University Nominee) in **Government Arts College** Kumbakonam (2015-2017)
- vi. UG and PG Biotechnology (University Nominee), **A.V.C College** (Autonomous) Mannapandal (2016-2018)
- vii. UG and PG Biotechnology (University Nominee), **Seethalakshmi Ramaswami College** (Autonomous) Trichy (2016-2018)
- viii. UG and PG Biotechnology (University Nominee), **Srimad Andavan College** (Autonomous) Trichy (2016-2018 & 2021-2023).
- ix. UG and PG Biotechnology (University Nominee), **National College** (Autonomous), Trichy (2017-2019).
- x. UG and PG Biotechnology (University Nominee), **J.J College of Arts and Science** (Autonomous), Pudukkottai (2017-2019).
- xi. UG Biotechnology, **Rajah's Serfoji Government College**, Thanjavur (2018-2021)
- xii. M.Sc., Eco-Biotechnology, M.Sc., Environmental Biotechnology and M. Sc Environmental Science and Technology, **School of Environmental Sciences, Bharathidasan University** (2010 onwards).

Overseas Exposure / Visits

Name of the place	Country	Duration of the visit with dates	Purpose	Funded by
ICTP, Trieste	Italy	July, 24-28 2017	Conference	ICTP
IRSEA- Research Institute in Semiochemistry and Applied Ethology	France	19 th Nov to 05 th Dec, 2014	International IRSEA Congress; Training & Research Discussion	DST & Bharathidasan University

AVRDC- the World Vegetable Center	Taiwan	29 th Mar to 28 th Apr, 2013	DBT-CREST Award	DBT
Genomic Institute, Singapore	Singapore	Aug 14, 2009	Scientific interaction	Bharathidasan University
Kulalumpur	Malaysia	Aug 12 &13 , 2009	MASO Conference	Bharathidasan University
Hokkaido University Sapparo	Japan	Sep 1, 2008 – Oct 1 2008	DST-JSPS (Foreign Exchange program)	DST-JSPS
Copenhagen	Denmark	Aug 25-28, 2003	Benzon Symposium	Benzon Foundation
ICTP, Trieste	Italy	May 20 – 31 2002	School and Conference	ICTP

Resource persons in various capacities

Number of Invited / Special Lectures delivered	: 53
Visiting Faculty	: 01
Guest of honor	: 07
Invited Lectures	: 46
Chaired Session	: 13

I. VISITING FACULTY

- 1. Visiting Faculty for PG Diploma in Structural Phramocogenomics Programme (UGC Innovative programme)** at Department of Bioinformatics, Alagappa University Karaikudi. Tamilnadu during **2013-2017**.

II. GUEST OF HONOR

- 1. Valedictory address** on “Microbiome in Animal Communication” organized by the P.G and Research Department of Microbiology Jamal Mohamed College (Autonomous) Trichy held on 19-05-2022.
- 2. Inaugural address** on “FAUNA-2018” organized by Department of Zoology Ethiraj College for women Chennai during 3rd September 2018.
- 3. Inaugural address** on one day Seminar on Environmental Ethics and Resource management organized by IQAC, Government College of Education, Pudukkotai on 19.04.2018
- 4. Chief guest address** on “VITA FEST” organized by Srimad Andavan Arts and Science College Trichy on 28-29th March -2018
- 5. Plenary Lecture in the National Seminar on Animal Transmitted Diseases in Tropics** at PG and Research Department of Zoology, Rajah Serfoji Government College Thanjavur on 26th September 2012
- 6. Inaugural address in the National Science Day Celebrations** held at Government Arts college, Karur on 28th February 2012
- 7. Keynote address in the intercollegiate meet BIOFEST’11** at Department of Bioinformatics, Bishop Heber College, Trichy on 2nd December 2011.

III. EVALUATOR/ JUDGE/ CHAIRING THE SESSION

- 1. Nominated as Local Convener** of the Research Committee on Ecological and Environmental Science Research Committee in **XLVI Indian Social Science Congress** hosted by Bharathidasan University during 27th - 31th January 2023.

2. Served as member of the **Venue arrangements committee** in **XLVI Indian Social Science Congress** hosted by Bharathidasan University during 27th -41th January 2023.
3. **Acted as Judge** for the poster presentation in the **International Conference Scientific and Technological Advancements for Reliable and Sustainable Future (STARS - 2022)** Conducted by the Deanery of Academics and all the science Departments at Bishop Heber College on from 16th to 18th November 2022
4. **Chaired a Session in National Seminar** on "Disease Progression and Treatment Strategies" Organized by Department of Animal Science, Bharathidasan University during 29 & 30th March, 2022.
5. **Acted as Evaluator** on Modelling using biodegradable materials on the theme India 's Achievements in Science and Technology in the national Science Week, organized by the Office of the Principal Scientific Advisors to the Government of India and Ministry of Culture in association with Tamilnadu Science and Technology centre, Tamilnadu Astronomical Science Society, Bishop Heber College on 25th February 2022.
6. **Acted as Adjudicator** in the **Innovation Research Convention 2020**, organized by the Deanery of Academics at Bishop Heber College on 24th February 2020.
7. **Chaired a Session** in the **National Seminar** on Microbes in Women health organized by the Department of Microbiology Bhartahidasan Univeristy during 11-12^h July 2019.
8. **Judged a Session** in the **Exhibition cum Plenary Lectures on Immunology and Immunotechnology** organized by the Department of Marine Biotechnology, Bhartahidasan Univeristy during 12th and 13th 2019
9. **Chaired a Session in International Conference** on "Environment and health in changing climate" Organized by Department of Environmental Biotechnology, Bharathidasan University during 14-16th September, 2016.
10. **Chaired a Session in National Conference** on "Emerging Trends in Plant Science" Organized by Department of Plant Science, Bharathidasan University during 10-11th March 2016
11. **Chaired a Session in National Conference** on "Advances in Biological and Environmental Sciences" (NCABES-2016) organized by Department of Biology Gandhigram Rural Institute - Deemed University, Gandhigram, Tamilnadu, during 25-26th February 2016.
12. **Chaired a Session in National Conference** on "Recent Trends in Bioprospecting of Plants" Organized by Department of Plant Science, Bharathidasan University during 28 & 29th March 2014.
13. **Chaired a Session in National Conference** on "Recent Trends in Plant Biotechnology" Organized by Department of Plant Science, School of Life Science, Bharathidasan University during 27 & 28th February 2013.

INVITED LECTURES

1. Resource person in the Special lecture on the topic of "Chemical Ecology" organized by Zoology Association, in the Department of Zoology, Thanthai Periyar Government Arts and Science College, Tiruchirappalli – 620 023 on 26th July 2024.
2. Resource person in the Invited talk on the topic of "History of Antibiotics – Journey from Microbes to Cancer & Cardiomyopathy" organized by the Department of Biotechnology, School of Engineering and Technology, Dhanalakshmi Srinivasan University, Tiruchirappalli – 621 112 on 13th July 2024.

- 3.** Resource person in Skill Enhancement Programme on the title "Journey of Antibiotics: from Penicillin to doxorubicin" organized by Bolivar Club, in the Department of Biotechnology, Cauvery College for Women (Autonomous), Tiruchirappalli- 620 018 on 12th July 2024.
- 4.** Resource person in the National Conference on "Recent trends in Microbial Biotechnology RTMBT-2023 organized by Department of Marine Biotechnology Bharathidasan University, Tiruchirappalli on 24th February 2023
- 5.** Resource person in the refresher course on topic Nanotechnology in health organized by UGC-Human Resource Development Centre, Bharathiar University, Coimbatore on 22nd November 2022.
- 6.** Resource person in the DST-STUTI Sponsored National Training Programme on "Environmental Monitoring using advanced Analytical and Molecular tools organized by School of Marine Sciences and Environmental Sciences Bharathidasan University, Tiruchirappalli in collaboration with National Institute of Technology Warangal on 9th to 15th November 2022.
- 7.** Delivered a special lecture on "Adipose-ovary cross talk in PCOS pathogenesis" in Biotechnology Association Jamal Mohamed college Trichy on 23rd August 2022.
- 8.** Delivered a lecture in TANSCHÉ sponsored in-service Teacher Training programme on Life Sciences, for Government and Aided College Teacher at Government Arts College (Autonomous) Kumbakonam on 6th May 2022.
- 9.** Felicitation for the National Science Day Celebrations conducted by NSS and Red Ribbon Club Bharathidasan University, Tiruchirappalli on 28.02.2022.
- 10.** Served as a Resource Person for the academic sessions Refresher Course in Environmental Sciences (MD) conducted by UGC-Human Resource Development Centre Bharathidasan University, Tiruchirappalli on 03.03.2021.
- 11.** Served as a Resource Person in the Refresher Course in Life Sciences Entitled "Chemical Ecology and Toxicogenomics" conducted by S. V. University, Tirupati, Tamilnadu on 02.03.2021
- 12.** Served as a Resource Person in A State level Workshop Entitled "Experimental Animal's Model: Care Maintenance and Handling" conducted by JJ College of Arts and Science (Autonomous), Pudukottai, Tamilnadu on 26.02.2021.
- 13.** Served as a Resource Person in Online Workshop on "Sustainable Integrated Farming System (DBT Star - Student Enrichment Programme)" conducted by Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamilnadu on 22.08.2020.
- 14.** Served as a Resource Person in A National Webinar on "How to design an Experiment in Biology" conducted by Periyar EVR College (Autonomous), Tiruchirappalli, Tamilnadu on 06.08.2020.
- 15.** Served as a Guest Speaker in International Virtual workshop on "Experiment, Data, Report and Beyond - 2020" (EDRB-2020) organized by the Department of Biotechnology, Kalasalingam Academy of Research and Education, Krishnankoil, India during 15.07.2020 to 16.07.2020.
- 16.** Served as a Resource Person in the webinar on "Nature as Medicine" conducted by Seethalakshmi Ramaswamy College (Autonomous), Tiruchirappalli, Tamilnadu on 11.06.2020.

- 17.** Acted as Resource Person in UGC Sponsored National Seminar on Current Scenario in Biotechnology at Department of Biotechnology Rajah Serfoji Government College (Autonomous) Tanjavur on 9th March 2020.
- 18.** Delivered a special lecture in the National Level Seminar on Approaches and Future Aspects For Cancer Therapy (ONCO – T20) organized by the school of life sciences in Marudupandiyar College, Thanjavur, held on 07.02.2020.
- 19.** Invited Speaker for the Bolivar Club Activity in the Department of Biotechnology at Cauvery College for Women (Autonomous) Trichy on 6th September 2019
- 20.** Presented a paper on Glucose and Fatty acids – The untold story in the Animal Science Club at Department of Animal Science Bharathidasan University on 28th August 2019.
- 21.** Delivered a Invited lecture entitled “Microbes Emerging as saviour” in the RUSA 2.0 and INSA sponsored 3rd International Conference on Recent Trends in Microbiology organized by Department of Microbiology, Alagappa University, Karaikudi on 24th 25th January 2019
- 22.** Delivered a lecture on “Chemical Ecology” organized by Department of Biotechnology, St. Joseph’s college, Tiruchirappalli on 1st March 2018.
- 23.** Delivered a lecture on “Art of writing Research proposal” in Capacity building programme on Research projects : funding Agencies and proposal writing, Sponsored by Tamilnadu State council of Higher Education held at Training and placement cell Periyar E.V.R College Trichy on 28th February 2018
- 24.** Acted as a Resource person in refresher course conducted by UGC-Human Resource Development Centre, Bharathidasan University, Tiruchirappalli on 10th November 2017.
- 25.** Delivered a lecture on “Present and Future Prospects of Biotechnology in Health and Environment” organized by Department of Biotechnology, Rajah Serfoji Government College, Thanjavur on 5th October 2017.
- 26.** Resource person in the refresher course on topic Nanotechnology in health organized by UGC-Human Resource Development Centre, Bharathiar University, Coimbatore on 2nd June 2016.
- 27.** Delivered a lecture during the guest lecture cum Workshop programme entitled “Nanobiotechnology and its applications” organized by the Department of Biotechnology on 04-03-2016 under DBT-STAR college scheme at Ayya nagar Janaki Ammal College Sivakasi.
- 28.** Delivered a expert lecture National Level Conference on “Recent Advances in Modern Microbiology” organized by the Department of Biotechnology on 29-02-2016 at Dr.Umayal Ramanathan College for Women Karaikudi.
- 29.** Acted as Resource person and delivered a talk in the Faculty development programme on “New Perspectives in Drug Discovery and Progressive Technological developments organized by Department of Pharmaceutical Technology, Anna University BIT Campus, Tiruchirappalli on 8th May 2015.
- 30.** Guest lecture on Farm animal Conservation and management at Department of Zoology and Microbiology, Thiagarajar College, Maduarai on 18th September 2014.
- 31.** Lecture on Heart and its related Disorders in the Department of Zoology, Holy Cross College on September 2nd 2014.
- 32.** Resource person in “Refresher course on Life Sciences”, organized by UGC-Academic Staff College, Bharathidasan University, Tiruchirappalli, on 28th July 2014.

- 33.**Special talk in TNSCST sponsored "Scientific Awareness programme for school students" at Government Arts College (Autonomous), Karur on 11th July 2014.
- 34.**Lecture in National level workshop on "Hands on training in protein characterization and plant tissue culture techniques", at Ayya Nadar Janaki Ammal College, Sivakasi on 9th July 2013.
- 35.**Invited Talk on Nanomedicine in the National Conference on Biodiversity and Biotechnology at PRIST University, Vallam, Thanjavur on 11th -12th April 2012.
- 36.**Guest lecture in National level symposium on "Nanotechnology and Nanobiotechnology" at St. Michael college of Engineering and technology, Kalayarkoil on 29th February 2012.
- 37.**Lecture on "Pheromone Biology" at Dr. G R Damodaran College of Science, Coimbatore on 7th September 2011.
- 38.**Acted as resource person to deliver a talk in the Refresher Course in Recent Advances in Biosciences at UGC-Academic Staff College Bharathidasan University, Tiruchirappalli on 21 June 2011.
- 39.**Lecture on "Molecular Characterization of Proteins" at the State level Hands on training cum workshop on "Essentials of Molecular Biology" organized by E.G.S Pillay Arts & Science College, Nagapattinam on 2nd March 2011.
- 40.**Lecture on the topic of "Plant as Nanofactories" in the Two day National Seminar on current Scenario in Environmental Biotechnology ENVIBIO 2011) at Jamal Mohamed College, Tiruchirappalli on 23rd February 2011.
- 41.**Lecture on the topic of "Nanotechnology" in the EXON association of Seethalakshmi Ramaswami College on 7th October 2010.
- 42.**Special lecture on the topic of "Plant as Nano-Factories: An Overview" at Ayya Nadar Janaki Ammal College, Sivakasi on 14th September 2010.
- 43.**Lecture on "Pheromones" in the "Gene Genera" association of Madha Engineering College, Kunrathur, Chennai on 21st July 2010.
- 44.**Guest lecture titled "Molecular Characterization of proteins" at PRIST University, Vallam, Thanjavur on 18th February 2010.
- 45.**Lecture in "Drug Designing" on EXON association at Seethlakshmi Ramaswami College, Tiruchirappalli on 11th December 2009.
- 46.**Acted as resource person to deliver a talk in the Refresher Course in Environmental Education at UGC-Academic Staff College Bharathidasan University, Tiruchirappalli on 23rd October 2008
- 47.**Special lecture on the topic "Drug Designing" at Meenakshi Chandrasekaran College of Arts and Science, Pudukkottai on 6th March 2008.
- 48.**Lecture on "Drug Designing" in the National Seminar on Recent trends in Drug discovery conducted by Biomedical Research Unit and Lab Animal Centre (BRULAC), Saveetha University, Chennai on 29th February 2008.
- 49.**Lecture on "Drug Designing" in the National Seminar on Emerging trends in Medical Biotechnology conducted by Biomedical Research Unit and Lab Animal Centre (BRULAC), Saveetha University, Chennai on 21st September 2007.

No. of PhD Thesis evaluated : 14

No. of PhD Public Viva Voce Examination conducted: 14

Sequences submitted in GenBank: NCBI-; MTCC-; Metagenomics; 28

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List of Ph. D Students

Name of student & Fellowship received	Year of award	Title of thesis	Current status Placement / Postdoc
Dr. K.Shanker Part-Time	2013	Unravelling the architecture of human cancer Transcriptome using Next Generation Sequencing	<i>University of Michigan</i>
Dr. P. Kokilavani <i>RGNF JRF and SRF</i>	2014	Antioxidant mediated ameliorative steroidogenesis by <i>Commelina benghalensis</i> L. and <i>Cissus quadrangularis</i> L. Against pollutants (Quinalphos, Anthracene and Carbamazepine) induced male reproductive toxicity.	Guest Lecturer, Institute of Biomedical Science, University of Madras, Taramani (Campus), Chennai
Dr. U. Suriyakalaa <i>UGC-Project Fellow & CSIR SRF (Direct)</i>	2015	Scientific validation of the traditional belief in regulating estrous cycle using <i>Ficus religiosa</i> L.: A study employing Polycystic Ovary Syndrome (PCOS) induced rat model	Assistant Professor Hindustan college, SERB-NPDF And Scientist Bharathiar University, Coimbatore
Dr. S. Kalaiselvi <i>CSIR –SRF</i>	2015	Elucidating the plausible mechanism for the Adriamycin induced lipotoxicity leading to type II diabetes, cardiomyopathy and reproductive toxicity: A remedy through <i>Costus pictus</i> supplementation.	Assistant Professor, JAIN Deemed to be University. Bangalore
Dr. R. Sukirtha <i>BDU-Project fellow</i>	2015	Green Synthesis Of Silver Nanoparticles A Possible Anti-tumour Agent Against Dalton Ascites Lymphoma	ARO Postdoc, Israel
Dr. D. Sankarganesh <i>UGC-Project Fellow</i>	2014	Multidimensional analysis of scent sources with behavioural observation in male and female goat (<i>Capra hircus</i>) pertaining to livestock improvement	Assistant Professor VIT, Vellore Postdoc, IRSEA France Post doc, Texas Tech University, Texas Assistant Professor Kalasalingan University UGC Kothari PDF, Bharathiar University, CBE
Dr. Jacob Joe Antony	2016	Potential Therapeutic Applications of Biosynthesized Silver Nanoparticles: Antimicrobial, Hepato-protective and Antitumor applications	Postdoc, China
Dr. R. Ramachandran	2017	Interplay of endocrine, biochemical and volatile profile in relation to behavioural expression: A comprehensive study in Kangayam breed cattle (<i>Bos indicus</i>)	SERB –NPDF Bharathiar University, CBE Assistant professor Srimad Andavan College POST DOC Texas USA
Dr. B. Abirami BDU-Project Fellow	2019	<i>Acorus calamus</i> rhizome extract mediated green synthesis of silver nano particles and it role as antibacterial and anticancer agents	Assistant Professor, Imayam College, Tiruchirappalli.

Dr. D. Siva	2019	Explicating The Possible Mechanism Of Adriamycin Induced Toxicity: A Remedy Through Conjugated Chitosan Nanoparticles With Propionic Acid Supplementation	Scientist D Satyabama University, Chennai.
Dr. S. Abinaya	2019	Attenuation of hyperandrogenism and regulation of estrous cycle by aqueous fruit extract of <i>Ficus religiosa</i> L. in PCOS rat model	Assistant Professor, Cauvery College, Tiruchirappalli.
Dr. A. Vinoth kumar <i>Research fellow DST - PURSE</i>	2023	Morphometric and metagenomic analysis in selected Indigenous cattle with accentuating on bargur Breed (<i>Bos indicus</i>) conservation	Assistant Professor, Bishop Heber College, Tiruchirappalli.
Dr. D. Praveenkumar <i>RGNF-JRF, SRF</i>	2024	Ascertaining the unexplored scent factories in the uropygial gland of siruvidai chicken (<i>Gallus gallus domesticus</i>) through histoarchitecture along with metagenomic and metabolomic profiling	Research Scientist, KIRND Institute of Research & Development Pvt. Ltd. Tiruchirappalli.
T. Anto Thomas	2024 Thesis submitted	Impact Of CO ₂ -driven Acidification On Embryonic Development And Swimming Kinetics In Zebrafish Model: An Investigation Through Molecular And Behavioural Approach	Anto Thomas Research Assistant Hualien Tzu Chi Hospital, Taiwan.
G. Saravanan	2024 Thesis submitted	Exploring the secret of scent production in goat (<i>Capra hircus</i>) through host-symbiont interaction by detecting volatile organic compounds with behavioural and metagenomic approach	

Current Ph. D. Scholars

Name of the Research Scholar	Area of Research
A. Ramkumar <i>Project Fellow UGC-NCAAE</i>	Adipose Biology
M. Jishnu <i>Research Scholar Part-Time</i>	Pheromones in Asian Elephants
Dr. S. Madhu Balaji <i>Research Scholar Part-Time</i>	Biomarker identification in Breast Cancer
G. Jeeva <i>Research Assistant ICMR</i>	Metabolic dynamics of cancer associated adipose tissue (CAA)
S. Uma Priya <i>Project Technician ICMR-DHR</i>	Human genotoxicity with reference to air pollutants (Vehicular exhaust)
K. Bharathi <i>Project fellow RUSA 2.0</i>	Toxicogenomics
K. Dhinesh Research Scholar	Metabolic Crosstalk: Cancer – Adipose tissue

