



Name: **Dr.V.Mahalakshmi**

Designation: Associate Professor and Head

Education: M.Sc., M.Phil., Ph.D

- B.Sc, Madurai Kamarajar University, 1991
- M.Sc., Applied Microbiology, Bharathiar University, 1994
- M.Phil – Microbiology, Annamalai University, 2006
- Ph.D: Microbiology, Bharathiar University, 2014

mahalakshmi@mcc.edu.in

ORCID-0000-0003-0227-792X

Courses taught: B.Sc- Microbial Physiology, Microbial Genetics & Molecular biology, Forensic science.

M.Sc- Microbial Genetics & Molecular biology, Virology, Research Methodology & Biostatistics, Microbial Physiology, Health research.

Research Projects: Microproject sponsored by the Research & development cell of Madras Christian College on the topic “An inbuilt industrial compost unit for biodegradation of plastic wastes in the campus”

Completed the doctoral programme and conferred with Ph.D degree in Microbiology on 17-11-2014 by Bharathiar University, Coimbatore. Research area: “Physicochemical, Genetic and Molecular analysis of Polyethylene degrading potential of microorganisms isolated from compost soil.”

Got qualified for the SLET exam in Microbiology conducted by Bharathidasan University in the year 1999. Participated in the Refresher Course in Microbiology (Batch III) conducted by University of Madras & Academic Staff college in the year 2003 and in the Orientation Course Batch – 104 conducted by University of Madras & Academic staff college in the year 2011. Published two books on Enzyme technology and Experimental Immunology.

External Examiner for two Ph.D Viva-Voce conducted at Hindusthan college of Arts and Science, Coimbatore. Organizing secretary and convenor for ten conferences. Co-Chairperson in the International conference organized by Justice Basheer Ahmed Sayeed college for Women, Chennai on Biotechnology- Challenging the Challenges of the Changing World in the year 2015.

Highlights

Featured Publication; Preliminary Study To Exploit Bioenergy From Luminescent Bacteria in the web of science indexed journal -Drugs and Cell Therapies in Haematology (ISSN: 2281-4876) Volume 10 Issue 1 (2021).

Positions : 1. Panel member for M. Phil. Affiliation committee nominated by the University of Madras.

2. Panel member of university staff recruitment and qualification approval and ratification committee.

3. Member of the board of examiner to adjudicate Ph.D thesis in the Bharathiar University, Coimbatore.

Prominent Recognitions:

Recipient of the Best Women Faculty award for the academic year 2019-2020 by Nature Science Foundation on 11-01-2020

2. Conferred with the Award of excellence in the field of biosciences by Biotecnika info Pvt Ltd on November 7th, 2017.

3. Chosen for the visiting Professorship to Elmhurst college, under the MCC-Elmhurst partnership programme on October 25th, 2019.

4. Participated as an Item Writer in the Question Bank Workshop on Biological Sciences held in the year 2011 By Staff Selection Commission (Southern Region), Government of INDIA.

Internal Page with complete CV with following items

1. **Name:** Dr.V.Mahalakshmi

2. **Education:** M.Sc., M.Phil., Ph.D.

Got qualified for the SLET exam in Microbiology conducted by Bharathidasan University in the year 1999

3. **Publications: Book Publication :**

Published a book titled "Enzyme Technology" by Shantha Publishers, Chennai, ISBN: 9788186689684 in the year 2009.

Published a book on 'Experimental Immunology' by the YesDee publishers, Chennai in the year 2018. ISBN: 978 93 80381 701.

Gen Bank Publication:

Deposited Three Bacterial strains In Gen Bank with the Accession numbers-JQ904750 for *Bacillus megaterium* B1, JQ904749 for and JQ904748 for *Pseudomonas mediterranea* M2 in the year 2010.

Four bacterial strains with accession numbers -MH734254, MH734244, MH715277 and MH734252 in the year 2018 and two bacterial strains with accession numbers- MT780131 and MT780132 in the year 2020.

Paper publications:

- Mahalakshmi.V. (2012). Assessment of Physicochemically treated plastics. Journal of Annals of Biological Research" ISSN- No: 0976-1233.
- Abubakker Siddiq, Mahalakshmi.V.(2012) Analysis of Polyethylene degrading potential of microorganisms isolated from compost soil. International journal of Pharmaceutical and Biological Archives 3(5):1190-1196, ISSN 0976-3333.
- Sabari, Mahalakshmi.V (2012). Genetic analysis of Plastic degrading bacterial strains. International journal of Pharmaceutical and Biological Archives 3(5):1174-1179, ISSN 0976-3333.
- Roshnee.J, Mahalakshmi.V. (2013). Evaluation of polyurethane degrading potential of microorganism by GC-MS. Journal of Microbiology and Biotechnology Research, ISSN :2231-3168.
- Shresthra Verma, Abirami.S, Mahalakshmi.V. (2013). Anticancer and antibacterial activity of silver nanoparticles biosynthesized by *Penicillium* spp and its synergistic effect with antibiotics" in the journal of Microbiology and Biotechnology Research, ISSN :3(3);54-71.
- Mahalakshmi.V.(2014). Review article on 'Evaluation of biodegradation of plastics. International journal of Innovative Research and Development.
- Selvakumari D., Deepa R., Mahalakshmi V., Subhashini P., Lakshminarayan N. Anticancer activity of ZnO Nanoparticles on MCF7 (Breast cancer cell) and A549 (Lung cancer cell). ARPN Journal of Engineering and Applied sciences,ISSN 1819-6608, Vol.10,No.12, July 2015.p.no 5418-5421.
- Abubakker Siddiq, Mahalakshmi.V. (2015). Enhanced Biodegradation of Polyethylene by development of a consortium. Journal of Advances in Applied Science Research 6-4;183-189.
- Muthuraj. K, Mahalakshmi.V. (2016). Preliminary study to enhance the growth rate of bacteria. International journal of innovative research and advanced studies: ISSN:2394-4404.

- Mahalakshmi.V., Ditisha Bhagawati. (2017). Testing the efficacy of phytohormones of microbial origin in promoting plant growth. *Journal of Microbiology and Biotechnology Research*, ISSN:2231-3168. Volume 7, Issue 1.p.no 1-8.
- Mahalakshmi.V. (2018). Fermentation process of liquid food in Sangam literature. *Aaivusudar.pannattupanmugha Tamil. min.aaivithal, ANJAC, Sivakasi, Tamilnadu, India. Malar-1, Ethal-1.*
- Sandhya.S, Mahalakshmi.V. (2018). A study on bacterial diversity undertaken at the Madras Christian college. *International journal of Basic and Applied Research*,ISSN 22493352. Vol.8, Issue 9.
- Hanumitha.S, Mahalakshmi.V. Abirami.S.(2018). Biosynthesis of Zinc oxide Nanoparticles using *Bacillus* species potentiates Anticancer and Antimicrobial activity. *International journal of trend in scientific research and development*, ISSN: 2456-6470. Volume 2, Issue 5, p.no 1797-1802.
- Arthi.V., Mahalakshmi.V., (2018). Phylogenetic relationship between microbial communities in waste water. *IOSR journal of Environmental science, Toxicology and Food technology*, ISSN;2319-2402.Volume 12, issue 6. p.no 57-63.
- Girish.M., Abirami.S., Mahalakshmi.V.(2018). Exploring the nutritional values of Hydrogenotrophic bacteria as space food. *International journal of scientific research and development*, ISSN: 2455-2631.Volume3, Issue 12.p.no 73-76.
- Arunmozhi Bharathi Achudhan., Mahalakshmi.V. (2021). Molecular characterization of β -agarase produced by *Sphingomonas paucimobilis*, a marine bacterium. *Bacterial Empire, Scicell*, Volume X No.X, e159.doi.org/10.36547/be.159.
- Nisha Jose., Kanmani Ganesh., Mahalakshmi.V. (2021). Preliminary Study to Exploit Bioenergy from Luminescent Bacteria. *Drugs and Cell Therapies in Haematology* (ISSN: 2281-4876) Volume 10 Issue 1. p.no 1914-1925.

4. **Research Interests:** Environmental Microbiology, Molecular biology

5. **Courses taught (UG & PG for the past 5 years)**

B.Sc- Microbial Physiology, Microbial Genetics & Molecular biology

M.Sc- Microbial Genetics & Molecular biology, Virology, Research Methodology & Biostatistics, Microbial Physiology.

6. **Awards/ Honors:**

- Chosen for the visiting Professorship to Elmhurst college, under the MCC-Elmhurst partnership programme on October 25th, 2019.
- Recipient of the Best Women Faculty award for the academic year 2019-2020 by Nature Science Foundation on 11-01-2020
- Conferred with the Award of excellence in the field of biosciences by Biotecnika info Pvt Ltd on November 7th, 2017
- Won the Award of Certificate of merit in the Paper presentation in the international conference on Modern Biology and Environmental management conducted by the department of Zoology, Vivekanandha college for women, Trichengodu, January 28th, 2017.

7. **Presentations:**

- "Microbial degradation of cellulose in sugar mill effluents in the X Southern Regional Conference on Microbial inoculants conducted by AVVM. Sri b Pushpam College, Poondi, on 10th& 11th December 1996.

- “Bio degradation of Petroleum Products” in the Indian Association of Applied Microbiologist (IAAM), Hosur, 2006.
- “Bio degradation of plastics” in IAAM, held at SRM College, Chennai and bagged the II best paper Award.
- “Assessment of plastic degradation by fungal isolates” in the National seminar on Environmental monitoring. Issues and challenges”, organized by the department of Geography, Madras Christian College on 9th February 2011.
- Assessment of Polyethylene degrading potentials of microorganisms isolated from compost soil” in the National Conference conducted by Prathyusha Institute of Technology & Management on Aug 2nd& 3rd 2012.

8. Resource Persons:

- Resource person for Microbiology department Association inauguration “The Pasteurians” on the topic “Outcome based education in research” at Hindusthan college on 13-08-2021.
 - Resource person for the value-added course on “Molecular basis of plant-microbe interaction” offered by the school of Agriculture and Biosciences, Karunya institute of Technology & Sciences on 05-06-2020.
 - Observer for the International science symposium on “HIV and Infectious diseases”, organized by YRG Care and Sri Ramachandra Institute for Higher Education and Research from October 12th to 14th,2019.
 - Delivered a Guest lecture on “Microbiology of food safety” on 13th June,2019 organized by the PG and Research Department of Microbiology at Hindusthan College of Arts and Science, Coimbatore.
 - Delivered a Guest lecture on “Microbiological standards for food safety” organized by the school of Biosciences and technology, VIT Vellore on 25th, March,2019.
 - Served as a Resource Person for the Microbiology Department Forum Inauguration “Microzeal 2018” at C.S.I. Ewart Women’s Christian College, Melrosapuram on 24th, October, 2018.
 - Served as a Subject Expert for the Board of Studies in Microbiology in reputed colleges in Chennai.
 - Resource person for the National conference 'Biosummit' organized by the Department of Biosciences, Hindustan college on February 3rd, 2018.
 - Item writer/Examiner in the Question bank workshop for Microbiology subject conducted by Tamilnadu Public Service Commission (TNPSC) from 19-09-2016 to 25-09-2016.
 - Delivered a lecture on” Hybridoma Technology” in The Standard Fireworks Rajaratnam College, Sivakasi on September 9th,2015.
 - Item Writer in the Question Bank Workshop on Biological Sciences held in the year 2011 By Staff Selection Commission (Southern Region), Government of INDIA.
- Jury in social media:**
- Participated as a jury in a talk show on the theme “Pros and cons of food security act” on 10th, December,2016 conducted by Kalaignar TV.
 - Participated as a jury in a talk show on the theme “Whether packed foods are safe or not” conducted by Kalaignar TV in July 2015.

9. Administrative Positions:

- I. Panel member for M. Phil. Affiliation committee nominated by the University of Madras
- II. Panel member of university staff recruitment and qualification approval and ratification committee nominated by the University of Madras
- III. Served as a Chairman of undergraduate University board of examinations from December 2006 to December 2007.
- IV. Currently examiner in PG board of university examinations.
- V. Chairman of the end semester examinations in MCC from Nov 2008 to December 2017 and from April 2020 onwards.
- VI. Member of the board of examiner to adjudicate Ph.D thesis in the Bharathiar University, Coimbatore.
- VII. Served as the course supervisor for the PGDMLT course offered by the school of continuing education of Madras Christian College from 2008 to 2019.