

### Dr. T. KAVITHA Assistant Professor

# Contact

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# Academic Qualifications

Degree	Institution	Year	Branch	Class
M. Sc	J. J. College of Arts and Science, Pududkkottai	April 2002	Microbiology	First
M. Phil	Bharathidasan University,Tiruchirapalli	April 2005	Biotechnology	First
Ph. D	Bharathidasan University,Tiruchirapalli	November 2014	Microbiology	First

## **Teaching Experience**

Total Teaching Experience : 16 Years

Position	Institution	Duration
Assistant Professor	J. J. College of Arts and Science, Pududkkottai	2007-2016
Assistant Professor	Alagappa University, Karaikudi.	2016-till date

# **Research Experience**

Total Research Experience : 8 Years

Position	Institution / University	Duration
Assistant Professor	Alagappa University	2016-till date

## Academic and Additional Responsibilities

S.No	Position	University Bodies	Period	
			From	То
1.	Women's club	Department of Microbiology, Alagappa	2016	Till
	Coordinator	University, Karaikudi.		date
2.	Deputy Coordinator	Department of Microbiology, Alagappa	2016	Till
	for Journal club	University, Karaikudi.		date
3.	Coordinator -	Department of Microbiology, Alagappa	2016	Till
	Department IQAC	University, Karaikudi.		date
	Committee			

4.	Deputy Coordinator	Department of Microbiology, Alagappa	2016	Till
	for Academic audit	University, Karaikudi.		date
5.	Coordinator -	Department of Microbiology, Alagappa	2016	Till
	Department student	University, Karaikudi.		date
	affairs and counseling			
6.	Associate Editor in -	Department of Microbiology, Alagappa	2016	Till
	ALU-Micro Fanzine,	University, Karaikudi.		date
	Departmental			
	Magazine,			
7.	Coordinator- Village	Department of Microbiology, Alagappa	2016	Till
	placement programme-	University, Karaikudi.		date
8.	Member - Department	Department of Microbiology, Alagappa	2016	Till
	Research Committee	University, Karaikudi.		
9.	Member - Department	Department of Microbiology, Alagappa	2016	Till
	Purchase Committee	University, Karaikudi.		
10.	Supervisor of Swachh	Department of Microbiology, Alagappa	2018	2019
	Bharat	University, Karaikudi.		
11.	Coordinator for	Department of Microbiology, Alagappa	2019	Till
	Swayam and MOOCs	University, Karaikudi.		date
	courses			
12.	Internal question paper	Department of Microbiology, Alagappa University, Karaikudi.	2016	Till
	setting in charge			date
13.	Department NIRF in	Department of Microbiology, Alagappa University, Karaikudi.	2016	Till
	charge			date

## **Areas of Research**

- Agricultural and Environmental Microbiology
- Biocontrol of plant microbial diseases
- Biodegradation
- Antimicrobial metabolites
- Enzyme Biotechnology

# **Research Supervision / Guidance**

Program	n of Study	Completed	Ongoing
PDF		_	_
Research	Ph. D	2	3
	M. Phil	9	-
	PG	52	9
Project	UG / Others	_	-

# **Publications**

International		National		Others	
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals	
17	30	3	12	2	

Cumulative Impact Factor (as per JCR)	: 37.5
h-index	: 8
i10 index	: 7
Total Citations	: 134

## **Funded Research Projects**

### **Ongoing Projects:**

		Per	iod		
S.No	Agency	From	То	Project Title	<b>Budget</b> (Rs. In lakhs)
1.	RUSA- EIR	15.02.2023	15.02.2024	Bio-char based inoculum Development for sustainable agriculture	9.0

### **Completed Projects:**

	Period				
S.No	Agency	From	Project Title To		<b>Budget</b> (Rs. In lakhs)
1.	AURF – Alagappa University Karaikudi	7.3.2017	7.3.2019	Screening for antagonistic substances against Tikka Disease of Arachis hypogaea L.	1.0
2.	DST/SERB- ECRA	28.9.2017	28.9.2020	Evaluation of Tomato Associated Rhizobacteria for Biocontrol of Wilt Pathogen <i>Fusarium oxysporum</i>	14.29

## **Distinctive Achievements / Awards**

• Early Career Research Award-2017 from DST-SERB, Govt. of India

### **Events organized in leading roles**

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

Position	Programme	Duration	Institution
Organizing secretary	Recent Trends in Microbiology (RTM- 2016)	Two days	Alagappa University,Karaikudi
Organizing Committee Member	Recent Trends in Microbiology (RTM- 2018)	Two days	Alagappa University, Karaikudi
Organizing secretary	Commercialization Prospects of Microbial Formulates (Jan -2018)	Four days	Alagappa University, Karaikudi
Organizing secretary	Recent Trends in Microbiology (RTM- 2019)	Two days	Alagappa University, Karaikudi
Organizing Committee Member	International Conference on Bio plastics (April -2019)	Two days	Alagappa University, Karaikudi
Organizing Committee Member	4thInternationalConference onRecentTrendsinMicrobiology(RTM-2023)	Two days	Alagappa University, Karaikudi
Organizing Committee Member	Spark Sponsored International Symposium on Bio Plastics	Two days	Alagappa University, Karaikudi
Organizing Committee Member	5thInternationalConferenceonRecent	Two days	Alagappa University, Karaikudi

	Trends in			
	Microbiology (RTM-			
	2024)			
Organizing	One day National level	One day	Alagappa	University,
Committee Member	workshop on Patenting		Karaikudi	
	and Collaboration with			
	Industries			

#### **Events Participated**

#### Conferences / Seminars / Workshops: 47

- 1. Workshop 11
- 2. National Conferences- 12
- 3. International Conferences-27

#### **Training Programs**

- 1. Participated in the Faculty development program on Accreditation Preparedness Engagement held during 18<sup>th</sup> -23<sup>th</sup> September, 2016 in Alagappa University, Karaikudi.
- 2. Participated in the Faculty development (Enrichment) program on Accreditation Quality Enhancement held during 6<sup>th</sup> -12<sup>th</sup> January, 2017 in Alagappa University, Karaikudi.
- 3. Participated in One Week Short Term Training Programme on Research Publication and Anti- plagiarism, organized by Department of English and Foreign Languages and Centre for Technical and Academic Writing, Alagappa University, Karaikudi.
- 4. Participated in the 100<sup>th</sup> orientation Programme from 15.11.2017 to 12.12.2017 conducted at UGC-Human Resource Development centre, Bharathidasan University, Tiruchirappalli.
- 5. Participated in the UGC-Sponsored Refresher Course in Life Sciences (Interdisciplinary) from 16.07.2019 to 29.07.2019 conducted by UGC-Human Resource Development centre, Bharathidasan University, Tiruchirappalli.
- Participated in the UGC-Sponsored Refresher Course in Life Sciences (Interdisciplinary) from 17.03.2023- 30.03.2023 conducted by UGC-Human Resource Development centre, Madurai Kamaraj University, Madurai.

Visited Malaysia to present a research paper in the International Conference on Recent Trends in Agriculture, Environmental Sustainability and Climate Change-2019 hosted at University of Malaya, Kuala Lumpur.

#### Membership

#### **Professional Bodies**

- 1. Life Member: Association of Microbiologists of India (NO: 4760/2018)
- 2. Life Member: The Indian Science Congress Association (NO: L36858)

#### **Advisory Board**

Year / Period	Name of the BoS / AdministrativeCommittee / Academic Committee	Role
2023-Till date	Board of Studies –Department of Microbiology, Alagappa University, Karaikudi	Member
2023-Till date	Board of Studies in M.Sc., Microbiology for the affiliated colleges of Alagappa University, Karaikudi.	Member
2023- Till date	Board of Studies in B.Sc., Microbiology and Clinical Lab Technology for the affiliated colleges of Alagappa University	Member
2023- Till date	Board of Studies in B.Sc., Microbiology for the affiliated colleges of Alagappa University	Member

#### Academic Bodies in Other Institutes/ Universities

Year / Period	Name of the BoS / AdministrativeCommittee / Academic Committee	
	Board of Studies for the Microbiology (M.Phil) Bharathidasan University, Tiruchirappalli-620024.	Member

### Ph.D. Thesis Guided

1. No. of PhD Thesis evaluated

### 2. No. of PhD Public Viva Voce Examination conducted : 2

S. No	Name of the Scholar	Title of the Thesis	Year of Completion
1.	N. Arumugam	Utilization of agrowaste for xylitol	2022
		production using acid tolerant yeast species	
2.	K. Vijay	Production and characterization of rhizosphere microbial metabolites for plant growth promotion and	2023
		antagonism against fungal wilt pathogen <i>fusarium oxysporum</i> f.sp. <i>lycopersici</i> in tomatoes	

## List of Research Articles / Recent Publications

S. No	Authors/Title of the paper/Journal	Impact Factor
1.	K. Vijay ., N. Suganthy ., G. Muralitharan ., Munirah Fahad Aldayel., Noorah Alsowayeh., T. <b>Kavitha .,</b> Development of siderophore-based rhizobacterial consortium for the mitigation of biotic and abiotic environmental stresses in tomatoes: An in vitro and in planta approach (2022), Journal of Applied Microbiology, 00, 1–12. <u>https://doi.org/10.1111/jam.15625</u>	4.05

2.	K. Vijay., Saqib Hassan., M. Govarthanan., T. Kavitha., Biosurfactant lipopeptides and polyketide biosynthetic gene in rhizobacterium Achromobacter kerstersii to induce systemicresistance in tomatoes (2022) Rhizosphere23, 100558. https://doi.org/10.1016/j.rhisph.2022.100558	3.4
3.	S. Dheepthi GunaVathana., M. Shibasini ., S.Girija., J.Wilson., <b>T. Kavitha</b> ., A.Cyrac Peter, Palladium nanospheres incorporated polythiophene nanocomposite: Investigation of potency promising antimicrobial efficacy (2022), <i>Inorganic Chemistry Communications</i> <u>Volume 144</u> ,109867. <u>https://doi.org/10.1016/j.inoche.2022.109867</u>	3.428
4.	N. Prakashkumar, R. Mohamed Asik, <b>T. Kavitha</b> , G. Archunan, N. Suganthy. Unveiling the anticancer and anti bioflim potential of catechin overlaid reduced Graphene oxide /zinc. <i>Journal of cluster Science</i> . 2021, № 6, p. 2813-2830. https://doi.org/10.1007/s10876-021-02194-2.	3.44
5.	Arumugam, N., Boobalan, T., Pugazhendhi, A., Arun, A., Jothi Basu, M., Suganya Devi, T., and <b>Kavitha, T</b> ., Particle size influence on the composition of sugars in corncob hemicellulose hydrolysate for xylose fermentation by <i>Meyerozymacaribbica</i> , <i>BioresourceTechnology</i> (2021),doi:https://doi.org/10.101 6/j.biortech.2021.125677	11.88
6.	<ul> <li>6. Devi, T. S., Vijay, K., Vidhyavathi, R. M., Kumar, P., Govarthanan, M., &amp; Kavitha, T. (2021). Antifungal activity and molecular docking of phenol, 2, 4-bis (1, 1- dimethylethyl) produced by plant growth-promoting actinobacterium Kutzneria sp. strain TSII from mangrove sediments. Arch Microbiol, 1-14. https://doi.org/10.1007/s00203-021-02397-1 (Indexing: Scopus; WoS; Springer-Verlag, Germany; NAAS score: 7.64)</li> </ul>	2.66
7.	Vijay, K., Kiran, G. S., Divya, S., <b>Thangavel, K.,</b> Thangavelu, S., Dhandapani, R., & <b>Selvin, J.</b> (2021). Fatty Acid Methyl Esters From the Coral-Associated Bacterium <i>Pseudomonas aeruginosa</i> Inhibit Virulence and Biofilm Phenotypes in Multidrug Resistant <i>Staphylococcus aureus</i> : An in vitro Approach. <i>Front Microbiol</i> , 12, 394. <u>https://doi.org/10.3389/fmicb.2021.631853</u>	6.06

8.	Karuppiah Vijay, Thangarasu Suganya Devi, Karthikeyan Kirupa Sree, Abdallah M. Elgorban, Ponnuchamy Kumar, Muthusamy Govarthanan and	2.66	
	Thangavel Kavitha (2020). In vitro screening and in silico prediction of		
	antifungal metabolites from rhizobacterium Achromobacter kerstersii JKP9.		
	Arch Microbiol., 202: 2855-2864. (Springer-Verlag; IF: 2.66; NAAS score:		
	7.64) https://doi.org/10.1007/s00203-020-01982-0		
9.	Karuppiah Vijay, Karthikeyan Kirupa Sree, Thangarasu Suganya Devi,	0.157	
	Soundarya Soundarapandian, Vidhyavathi Ramasamy and Kavitha		
	Thangavel (2020). Computational Biology Approaches Revealing Novel		
	target in Vascular Wilt Pathogen Fusarium oxysporum f. sp. lycopersici for		
	the Ligands of Marine Actinobacterial Origin. J. Pure Appl. Microbiol.,		
	14(1):363-373		
10.	Arumugam Nagarajan, Boobalan Thulasinathan, Saravanan Soorangkattan,	4.6	
10.	Jothi Basu Muthuramalingam, Arun Alagarsamy, SuganyaDevi Thangarasu		
	and Kavitha Thangavel (2020) In silico and in vitro comparison of		
	nicotinamide adenine dinucleotide phosphate dependent xylose reductase		
	rossmaan fold in Debaryomycetaceae yeast family. Biocatal. Agric.		
	Biotechnol., 24: 101508.		
11	Arumugam N, Thulasinathan B, Pasubathi R, Kavitha. T,		
11.	Muthuramalingam JB, Arunachalam A. (2017) Biogenesis of silver	5.5	
	nanoparticles using selected plant leaf extract; characterization and		
	comparative analysis of their antimicrobial activity. Nanomed J. 4(4): 208-		
	217.		
10	Nagarajan, A., Soorangkattan, S., Kavitha. T., Thulasinathan, B.,	10	
12.	Muthuramalingam, J.B. and Alagarsamy, A. (2017) Campus-Wide Floristic Diversity	4.8	
	of Medicinal Plants in Indian Institute of Technology-Madras (IIT-M), Chennai. Am. J.		
	Plant Sci., 8, 2995- 3012.		

National Conferences:3International Conferences:21Invited Lectures:8

Date : 02.03.2024

Place : Karaikudi

Dr. T. Kavitha Assistant professor