

**SRI SANKARA ARTS & SCIENCE COLLEGE**

**ENATHUR, KANCHIPURAM**

**STAFF PROFILE**

**DEPARTMENT OF MICROBIOLOGY**



1.	<b>Name of the Staff</b>	<b>K. KAVITHA</b>
2.	<b>Designation</b>	<b>Assistant Professor</b>
3.	<b>Date of Joining</b>	<b>1<sup>st</sup> August 2005</b>
4.	<b>Mobile Number</b>	<b>7397545859</b>
5.	<b>E-Mail ID</b>	<b>kaviswamy@gmail.com</b>
6.	<b>Nationality</b>	<b>Indian</b>
7.	<b>Academic Qualification</b>	<b>M.Sc., M.Phil., Qualified SET and NET</b>
8.	<b>Field of Specialization</b>	<b>Immunology, Bacteriology, Soil and Agricultural Microbiology, Bioinformatics.</b>

**9. Work Experience (in chronological order):**

<b>S. No.</b>	<b>Name of the Institution</b>	<b>Designation</b>	<b>Period</b>
1.	<b>Sri Sankara Arts and Science college</b>	<b>Assistant Professor</b>	<b>2005 to till date</b>

**10. Publications:**

**Web of Science Indexed**

- Arumugam Rajalakshmi, Manickam Ramesh, Ellappan Divya, **Kuppuswamy Kavitha**, Rengarajulu Puvanakrishnan, Balasubramanian Ramesh. **2021**. Production and characterization of naturally occurring antibacterial magnetite nanoparticles from magnetotactic *Bacillus* sp. MTB17. **J Appl Microbiology**. 00:1– 11. **Impact Factor – 3.772**.
- C Deepa, G Suresh, P Devagi, A Kowsalya, **K. Kavitha**, B Ramesh. **2021**. Evaluation of the antibacterial activity of silver nanoparticles, doxycycline, collagen and their amalgamation – An *in vitro* study. **Materials Today: Proceedings**. **Impact factor- 0.9**
- **Kuppuswamy Kavitha**, Subramaniam Sivakumar, Balasubramanian Ramesh. **2020** 1,2,4 triazolo[1,5-a] pyrimidin-7-ones as novel SARS-CoV-2 Main protease inhibitors: In silico screening and molecular dynamics simulation of potential COVID-19 drug candidates. **Biophysical chemistry** 267, 106478. **Impact factor- 1.995**
- Balasubramanian Ramesh, Govindababu Kavitha, Sendurpandi Gokiladevi, Rajagopal K Balachandar, **Kuppuswamy Kavitha**, Akelayil C Gengadharan, Rengarajulu. **2020** Effect of Extremely Low Power

Time-Varying Electromagnetic Field on Germination and Other Characteristics in Foxtail Millet (*Setaria italica*) Seeds. **Bioelectromagnetics** Vol.41 Issue-7 526-539. **Impactor factor- 2.278**

### Scopus Indexed

S. Balamurugan, B.Ramesh , **K.Kavitha** and V. Guruchandran. Design of novel microbial fuel cell and effect of humic acid on bioelectricity generation. Asian Jr. of Microbiol. Biotech. Env. Sc. Vol. 21 (February Suppl): **2019**: S269-S271.

### Other Publications

- **Kavitha Kuppuswamy**; Suganya Arumugam; Rani, Kuppusamy Umaa; Ramesh Balasubramaniyan, **2017**. Screening and Partial Purification of Hydroxamate Type Siderophore from *Pseudomonas sp.* Int. J. Curr. Microbiol. App. Sci. 6(9); 2380-2385.
- Vijayameena C, and **Kavitha K.**, Studies and Evaluation of Phytosynthetic Silver Nanoparticles against UTI Causing Pathogens, International Journal of Current Biotechnology., **2013**,1(1):22-24.
- B.Ramesh, V.Prabakaran, **K.Kavitha**, G.Suresh, N.Ravichandran and G.Vijaiyansiva, **2010**. Antimicrobial peptide from *Euphlyctis Hexadactylus* and its Efficacy against Plant Pathogens. International Journal of Current Research. 6: 14-17. **ISSN: 0975-833X**.
- B.Ramesh, **K.Kavitha**, G.Suresh, B.Usharani, N.Ravichandran and G.Vijaiyansiva, **2010**. Studies on distribution of biosurfactant producing bacteria in contaminated and undisturbed soils of Kanchipuram. Australian Journal of Basic and Applied Sciences. 4(9): 4429-4434. ISSN 1991-8178.
- S.Sivakumar, B.Ramesh, **K.Kavitha**, V.Gopalakrishnan and V. Kanniyappan, **2010**. Bitter Gourd (*Momordica charantia*) Peroxidase in decolorization of Dyes from Tannery Effluent. Recent Research in Science and Technology. 2(2): 49-53. ISSN: 2076-5061.
- G.Suresh, B.Ramesh, **K.Kavitha**, N.Ravichandran, A.Suresh, V.Gopalakrishnan and G. Vijaiyan Siva, **2010**. Preliminary screening of antibacterial compounds from Palar river basin flora. Journal of Phytology. 2(2):24-29. ISSN: 2075-6240,
- C.Vijayameena, V.Guruchandran, M.Janani, **K.Kavitha** and B.Ramesh, **2012**. Effect of Random mutagenesis on enhanced synthesis L-Asparaginase by *Fusarium solani*. Microbiology newsletter, 2 (2): 6-10. 2231-136X.
- **Kuppuswamy Kavitha** and Balasubramanian Ramesh, **2012**. Chitosan –A Wonder Material for Biomedical and Other Industrial Applications. Bhamathi Microbiology newsletter, 2 (1): 18-23. 2231-136X.
- **Kavitha, K.** and B.Ramesh, **2011**. Alkaliphiles and alkaline lipases: A new insight into an old enzyme. Bhamathi Microbiology newsletter, 1 (2): 15-18. ISSN: 2231-136X.

### Book Publications:

Work shop manual - Workshop on Diagnostic microbiology in collaboration with Himedia – **ISBN-13: 978-6202081382** -LAP LAMBERT academic publishing.

### Nucleotide Database Sequence Published:

- **Kavitha, K.**, Dinesh. S., Ramesh. M. and Ramesh. B. **2020**. Bio degradation of endocrine disrupter Benzyl Butyl Phthalate using *Klebsiella pasteurii* S-21. **GenBank accession no: MT162712**
- **Kavitha, K.**, Bhavithra. J., Ramesh. M. and Ramesh. B. **2020**. Isolation and characterization of Zinc solubilizing *Pseudomonas aeruginosa* strain ZNSB-13 from rhizosphere soil of groundnut plant. **GenBank accession no: MT162696**
- **Kavitha. K.**, Merlin Preetha. S., Ramesh. M. and Ramesh, B. **2020**. Isolation and Characterization of Black dye degrading *Bacillus amyloliquefaciens* strain DDB-10 from contaminated soil samples. **GenBank accession no: MT162458**
- **Kavitha, K.**, Thirumoorthy. R., Ramesh. M. and Ramesh. B. **2020**. Isolation and characterization of anti-bacterial compound from endophytic *Fusarium ambrosium* EFT-9. **GenBank accession no: MT179765**
- **Kavitha, K.**, Raghu, N., Ramesh, M. and Ramesh, B., **2019**. *Aspergillus* sp. isolate EF8 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. **GenBank: MK738129.1**
- **Kavitha, K.**, Aarthi, P., Ramesh, M. and Ramesh, B., **2019**. *Fusarium equiseti* isolate EF-2 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. **GenBank: MK733980.1**
- **Kavitha, K.**, Prakash, G., Ramesh, M. and Ramesh, B., **2018**. *Aspergillus* sp. strain EF-1 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. **GenBank: MH064483.1**.
- **Kavitha, K.**, Yuvaraj, U., Ramesh, M. and Ramesh, B., **2018**. *Lasiodiplodia pseudotheobromae* strain CEF-9 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. **GenBank: MH062942.1**.
- Ramesh, B., Divya, E., Ramesh, M., **Kavitha, K.** and Puvanakrishnan, R., **2018**. *Bacillus* sp. (in: Bacteria) strain MTB17 16S ribosomal RNA gene, partial sequence. GenBank: MH062891.1.
- Harshini Teja, S., Ramesh, M., **Kavitha, K.** and Ramesh, B., **2018**. *Aspergillus awamori* strain E6 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. **GenBank: MH062890.1**.
- **Kavitha, K.**, Padmini, P., Tamilvannan, V., Suresh, G. and Ramesh, B., **2017**. *Aspergillus niger* strain SS4 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. **GenBank: KY657577.1**.
- **Kavitha, K.**, Gomathy, M. and Ramesh, B., **2016**. Bacterium S13 AtzA (atzA) gene, partial cds. **GenBank: FJ907175.1**.

- **Kavitha,K., Saranya,V. and Ramesh,B., 2011.** *Bacillus licheniformis* strain AL5 16S ribosomal RNA gene, partial sequence. **GenBank: JF709975.1.**
- **Kavitha,K., Durga,G. and Ramesh,B., 2011.** *Bacillus subtilis* strain B5 16S ribosomal RNA gene, partial sequence. **GenBank: JF709974.1.**
- Venkatesan,R., **Kavitha,K.** and Ramesh,B., **2011.** *Streptomyces albidoflavus* strain AS-9 16S ribosomal RNA gene, partial sequence. **GenBank: JF738110.1.**
- **Kavitha,K., Sharmila,K., Sivakumar,S., Gopalakrishnan,V. and Ramesh,B.,2010.** *Bacillus subtilis* strain AL2 alkaline lipase-like gene, complete sequence. **GenBank: HM053975.1.**
- **Kavitha,K., Sharmila,K., Sivakumar,S., Gopalakrishnan,V. and Ramesh,B.,2010** *Bacillus subtilis* strain AL2 16S ribosomal RNA gene, partial sequence. **GenBank: HM053974.1.**
- Ramesh,B., Srinath,N., **Kavitha,K., Usharani,S. and Vijaiyan siva,G., 2010.** Bacterium VELCS-14 16S ribosomal RNA gene, partial sequence. **GenBank: EU625353.1**

### 11. Membership in Professional Bodies:

- Associate Editor Bhamathi Microbiology News Letter, ISSN: 2231-136X from January 2011 Issue.
- Member board of studies, Department of Microbiology, Sri Sankara arts and college Enathur,2015 to till date.

### 12.Question Paper Setter:

- Question paper setter for UG and PG Microbiology - **Nehru Arts and Science College (Autonomous), Coimbatore.**
- Question paper setter for PG Microbiology - **Selvamm Arts and Science College (Autonomous) Namakkal.**
- Question paper setter for UG and PG Microbiology - **Vivekanandha College of Arts and Sciences for women, Tiruchengode.**
- Question paper setter for UG and PG Microbiology- **Thiruvalluvar University.**

### 13. Improvement of Professional Competence:

- Completed a MOOC platform NPTEL course on **Cell culture technologies** and received an **ELITE certificate** (Jul-Sep 2021).
- Completed the **Faculty development program** through NPTEL for the duration of **8 weeks** (Jul- Sep 2021)
- Completed a MOOC platform NPTEL course on **Functional Genomics** and received an **ELITE certificate** (Aug-Sep 2019).
- Completed the **Faculty development program** through NPTEL for the duration of **4 weeks** (Aug- Sep 2019).

- Completed a MOOC platform NPTEL course on **Nanotechnology in agriculture** and received an **ELITE certificate** (Aug-Sep 2018).
- Completed the **Faculty development program** through NPTEL for the duration of **8 weeks** (Aug- Sep 2018).

#### 14. Online Certification Program.

- **Infection Prevention and Control (IPC) for Novel Coronavirus (COVID-19)** conducted by World health organization on April 10, 2020.
- **E-PROTECT Respiratory Infections (EN)** conducted by World health organization on April 22, 2020.

#### 15. Seminars Conferences organized /Participation:

##### E- Conferences

- Presented an oral paper ID/ABSD OP34 in the International E- Conference Applied Bioscience for sustainable development held on 3-4 September 2021 organized by Dept of Microbiology and Biochemistry, St. Pious X Degree & PG College, Hyderabad, Telangana.

##### Offline mode

S. No.	Program Attended	Place	Organized/ Participated	Period
1.	National seminar on marine natural products as pharmaceutical agents	Centre for ocean research. Sathyabama University	Participated	17 <sup>th</sup> &18 <sup>th</sup> September, 2019.
2.	International conference on “Contemporary praxis in Academics &Research: A multidisciplinary approach”	Asan Memorial college of arts and science	Participated	12 <sup>th</sup> October 2019.
3.	International conference on Recent advances in biomedical technology RABT 2018	Department of Biotechnology, Thiruvalluvar university Vellore	Participated	29-31 <sup>st</sup> august 2018.
4.	Recent Advances in Zebra Fish Immunology research: An ideal model For Human Health	Centre for Drug Discovery and Development, Sathyabama University.	Participated	20 <sup>th</sup> and 21 <sup>st</sup> September 2017.
5.	"Biomarkers in Clinical Research"	Dept. of Biochemistry, Sri Sankara Art and Science College, Kanchipuram	Participated	8 <sup>th</sup> March, 2017.
6.	“Bio entrepreneurship and Funding Opportunities”	Dept. of Biotechnology, Sri Sankara Art and Science College, Kanchipuram	Participated	8 <sup>th</sup> September, 2017.

7.	International Conference on Biotechnology and its applications in Aquaculture and Fisheries”	CAS Marine Biology, Annamalai University	Participated	23-25, August 2017.
8.	“International Conference on Recent Advances in Bioresource Technology”	Dept. of Biotechnology, Thiruvalluvar University, Vellore	Participated	15 <sup>th</sup> -17 <sup>th</sup> February 2017.
9.	National Conference on “Clinical Applications of Biomaterials”	Dept. of microbiology Sri Sankara arts and science college	Member, Organizing committee.	22 <sup>nd</sup> Feb, 2018.
10.	2 nd National Conference on “Frontiers in Translational Microbiology.	Dept. of microbiology Sri Sankara arts and science college	Member, Organizing committee.	28 <sup>th</sup> -29 <sup>th</sup> Jan 2016.
11.	1 st National Conference on “Frontiers in Translational Microbiology.	Dept. of microbiology Sri Sankara arts and science college	Member, Organizing committee.	8 <sup>th</sup> Jan 2015.
12.	“ELIXIR 2013” Science Exhibition for School Students.	Life Science Departments	Member, Organizing committee.	10-11 <sup>th</sup> Oct, 2013.
13.	“ELIXIR 2012” Science Exhibition for School Students.	Life Science Departments	Member, Organizing committee.	10-11 <sup>th</sup> Oct, 2012

#### 16. Participated as Resource Person:

S. No.	Program	Venue	Period
1.	Oncocon- 2019	Meenakshi medical college hospital & research Institute Enathur, Kanchipuram.	19 <sup>th</sup> October 2019
2.	National level workshop on Diagnostic microbiology in collaboration with Himedia laboratories	Sri Sankara arts and science college	25 <sup>th</sup> & 26 <sup>th</sup> September-2017.
3.	Value added milk and milk products- production and preservation” in Application of Science and technology in rural areas (ASTRA-2017) sponsored by Tamilnadu State council for Science and Technology	Kanchi Shri Krishna college of arts and science, Kanchipuram	18 <sup>th</sup> September 2017.

#### 17. Workshop & Training Programs:

S. No.	Programs	Venue	Period
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1.	Workshop on the art of writing winnable projects	Dept. of Biotechnology, Sri Sankara arts and science college. Kanchipuram	12 <sup>th</sup> July 2019
2.	Technical Writing and Publishing with Advanced Computer Tools: Hands-On Training	IIITDM Kancheepuram	8-9 September 2018
3.	Microscopy and Photomicrography	Dept. of Microbiology, D.G. Vaishnav College	27 September 2011

### 18. Titles of M.Sc., Dissertation's guided

S. No	Name of the Student	Register Number	Title of the Thesis	Year
1.	S. DINESH	1801212041003	Isolation and characterization of the Bacterial strain degrading the Endocrine Disrupting-Benzyl Butyl Phthalate (BBP)	2020
2.	R. THIRUMOORTHY	1801212041005	Partial purification and characterization of antibacterial compounds from endophytic fungi using by plant leaves	2020
3.	J. BAVITHRA	1801212041008	Isolation and characterization of zinc solubilizing bacteria	2020
4.	S. MERLIN PREETTA	1801212041016	Isolation and characterization of dye decolorizing bacteria ddb-10, <i>Bacillus amyloliquefaciens</i> from soil samples	2020
5.	P. ARTHI	1701212041008	Isolation of endophytic fungi <i>Fusarium equiseti</i> Ef-2 from <i>leucas aspera</i> and assessment of mosquito larvicidal	2019
6.	N. RAGHU	1701212041005	Isolation of endophytic aspergillus sp. Ef8 from <i>Embllica officianalies</i> and characterization of antibacterial bioactive compounds	2019
7.	N. TAMILARASI	1701212041024	A study on antibiotic resistance patterns of urinary tract pathogens isolated from Kanchipuram population	2019
8.	G. PRAKASH	P16MY005	“Isolation and characterization of antibacterial compound from endophytic <i>Aspergillus sp.</i> Ef-1”	2018
9.	U. YUVARAJ	P16MY012	Screening, partial purification and characterization of antibacterial compound bis(2-ethylhexyl) phthalate from endophytic <i>Lasiodiplodia pseudotheobromae</i> strain-e9”	2018
10.	HONEST RAJ	P15MY001	Surveillance study on antibiotic resistance patterns of bacterial uropathogens in kanchipuram	2017

11.	P. PADMINI	P15MY010	Chitosan production by <i>Aspergillus niger</i> ss4 and its ptimization by response surface methodology: application studies on dye degradation	2017
12.	R. INDRA	611400225	synthesis, characterization and determination of antioxidant properties of chitosan coated selenium nanoparticles.	2016
13.	R. RUTHRA	611300158	A study on antibacterial activity of Entophytic fungus <i>Aspergillus</i> Sp. EF15	2015
14.	K. DEVI	2320184	Isolation and characterization of antibacterial agents producing endophytic fungi from medicinal plants	2014
15.	G. SWATHI	2310165	Isolation and characterization of biosurfactant producing bacteria from compost sampless	2013
16.	M.J. YAMUNA	2300152	Adrenochrome semicarbazone sulphonate as a novel inhibitor against ESBL isolates form urine sample.	2012
17.	R. RAJA	2290163	Phytochemical screening and bio efficacy of <i>Ruellia tuberosa</i> linn	2011
18.	N. DEEPA	2290166	Studies on antimicrobial and anticancer propertice of chitosan from <i>Aspergillus niger</i>	2011
19.	G. DURGA	2290168	Bio emulsifier from <i>Bacillus subtilis</i> : optimization and characterization studies.	2011
20.	V.SARANYA	2290175	Screening, isolation and optimization of alkaline lipase <i>Bacillus licheniformis</i> .	2011
21.	M.V. TAMILVANNAN	2281087	Adrenochrome semicarbazone sulfonate as novel inhibitor of beta-lactamase identified by QSAR studies.	2010
22.	R. DEEPIGA	2281088	Polyphenol from <i>Calotropies gigantea</i> as potent antibacterial agent.	2010
23.	J. JAYASHREE	2281094	A surveillance study on the microflora of dental caries and efficacy of different tooth paste against the isolates.	2010
24.	K. SHARMILA	2281102	Molecular characterization and optimization of alkaline lipase from <i>Bacillus subtilis</i> .	2010
25.	R. GAYATHRI	2270223	Alkaline lipase from <i>Micrococcus</i> species: Optimization studies using response surface method	2009
26.	M.GOMATHI	2270226	Atrazine degradation by <i>Acidomonas</i> species and molecular characterization of AtzA gene	2009
27.	A. SUGANYA	2270233	Screening and partial purification of hydroxamate type siderophore from <i>Pseudomonas</i> species.	2009
28.	M.PRABAVATHI	2250958	Studies on biodegradable films based on chitosan matrix extracted from mycelium of <i>Mucor</i> species.	2007



29.	B. USHARANI	2250962	Studies on distribution of biosurfactant producing bacteria in undisturbed and contaminated soils of Kanchipuram.	2007
30.	P. AMUDHA	2240870	Surveillance of multidrug resistant nosocomial pathogens and isolation of host specific bacteriophage from the Government hospital, Kanchipuram.	2006
31.	V.BHUVANA	2240871	Detection of mutagenic agents using <i>Salmonella typhimurium</i> TA100 reverse mutation test	2006