



Objective

Seeking a position to utilize my skills and abilities in the field of microbial research that offers professional growth while being resourceful and innovative

Academic Record

| Qualification | Specialisation | College / University |
|----------------------|-----------------------|-------------------------------------|
| Ph.D) | Microbiology | Anna University,Chennai |
| Ph.D | Vermitechnology | Vinayaka Missions University, Salem |
| M.Tech | Biotechnology | PRIST University |
| M.Sc | Applied Microbiology | University of Madras |
| B.Sc | Microbiology | University of Madras |
| M.Phil | Biotechnology | Bharathidasan University |

Experience Profile:

| Institution/University | Designation | Period | Total years of Experience |
|---|--------------------|----------------------|----------------------------------|
| Kanchi Shri Krishna College Of Arts and Science,Kanchipuram. University of Madras | Lecturer | 29.06.2000-14..06.05 | 5 Years |
| Bharath University, Chennai | Lecturer | 15.06.05 - 30.09.05 | 0.3 Years |
| Karpaga Vinayaga College of Engineering and Technology, Anna University | Lecturer | 06.10.05 -14.06.07 | 1.8 Years |
| | Asst. Professor | 15.06.07- 30.06.10 | 3 Years |
| | Professor | 30.06.10- Till date | 9.11Years |

Academic projects

| S.No | Course | Title |
|------|--------|--|
| 1. | M.Sc. | Bacteria count in Milk with special reference to <i>Psychrophilic</i> bacteria |
| 2. | M.Phil | Proteolytic activity of bacterial in raw milk |
| 3. | M.Tech | Low cost Mosquito Larvicidal fluid preparation |
| 4. | Ph.D | Vermicomposting Enzyme Analysis |
| 5. | Ph.D | Molecular Epidemiology of MRSA |

PROJECT GUIDENCE:

| Course | Subject | No. of students guided |
|---------|---------------|------------------------|
| M.Sc. | Microbiology | 12 |
| M.Phil. | Biotechnology | 36 |
| B.Tech. | Biotechnology | 45 |
| M.Tech | Biotechnology | 34 |

Seminars Organized

| S.No | Date | Title | Responsibility | Institution |
|------|-----------------------|---|----------------------|---|
| 1 | 25.8.2004 | Seminar on current trends in microbial research | Co Convener | Kanchi Shri Krishna College of Arts and science, Kanchipuram. |
| 2 | 28.1.2005 | Seminar on recent trends in diagnosis of microbial diseases | Coordinator | Kanchi Shri Krishna College of Arts and science, Kanchipuram. |
| 3 | 16.02.2006-17.02.2006 | Faculty Orientation programme on current trends and challenges in biotechnology | Organizing secretary | Karpaga Vinayaga College of Engineering and Technology |
| 4 | 16.02.2007 | Symposium on Bioblaze-07 Technical | Coordinator | Karpaga Vinayaga College of Engineering and Technology |
| 5 | 5.10.2007 | Workshop on Vermicomposting practices for sustainable agriculture | Coordinator | Karpaga Vinayaga College of Engineering and Technology |
| 6 | 19.03.2008- | Symposium on Bioblaze-08 | Convener | Karpaga Vinayaga |

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|----|-----------------------|--|----------------------|--|
| | 20.03.2008 | Technical | | College of Engineering and Technology |
| 7 | 20.08.2008 | FDP on innovative approaches in biotechnology | Chairman | Karpaga Vinayaga College of Engineering and Technology |
| 8 | 19.09.2008-20.09.2008 | Symposium on Bioblaze Technical | Coordinator | Karpaga Vinayaga College of Engineering and Technology |
| 9 | 30-12-2009-31.12.2009 | Workshop on Molecular techniques | Co Convener | Karpaga Vinayaga College of Engineering and Technology |
| 10 | 11.03.2010-12.03.2010 | ICMR aided national Seminar on Application of PCR techniques in the diagnosis of infectious diseases | Organizing secretary | Karpaga Vinayaga College of Engineering and Technology |
| 11 | 11.03.2011-12.03-2011 | DBT sponsored conference Application of regenerative medicine current perspective and future frontiers | Organizing secretary | Karpaga Vinayaga College of Engineering and Technology |
| 12 | 10.08.2011-11.08.2011 | AICTE sponsored sponsored conference Application of regenerative medicine current perspective and future frontiers-Phase II | Organizing secretary | Karpaga Vinayaga College of Engineering and Technology |
| 13 | 21.02.13-22.02.13 | DBT Sponsored Workshop On Vermicomposting practices for sustainable agriculture | Organizing secretary | Karpaga Vinayaga College of Engineering and Technology |
| 14 | 23.07.2015-24.07.2015 | DBT,DST-SERB,NAABARD sponsored Seminar cum workshop on Applications of Green Technologies for the improvisation of Agrobased system in India- A.Biotechnological Approach | Organizing secretary | Karpaga Vinayaga College of Engineering and Technology |

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|----|----------------------------|---|-------------------------|---|
| 15 | 04.01.2016 - 08.01.2016 | DST INSPIRE Internship camp | Organizing secretary | Karpaga Vinayaga College of Engineering and Technology |
| 16 | 26.09.2016- 30.09.2016 | DST INSPIRE Internship camp | Organizing secretary | Karpaga Vinayaga College of Engineering and Technology |
| 17 | 14.09.2016- 15.09.2016 | Application of green technology for the improvisation of agro based system in India- A biotechnological approach | Organizing secretary | Karpaga Vinayaga college of Engineering and Technology |
| 18 | 12.03.2019 | International conference on Ecobiology | Organizing secretary | Karpaga Vinayaga college of Engineering and Technology |

List of publications:

1. M. Prakash, **V. Karthikeyan** and N. Karmegam. Determination of total counts of psychotropic bacteria and coliforms in milk samples. *J. Ecotoxicol. Environ. Monitor.* 16 (3); 2006, 291-296
2. **V. Karthikeyan**, M. Prakash, S. Kuppasamy and N. Karmegam. Synergistic activity of certain plants extracts against methicillin resistant *Staphylococcus aureus*. *J. Ecotoxicol.* 16 (4); 2006, 387-389.
3. **V. Karthikeyan**, M. Prakash, V. Indra and N. Karmegam. Bacteriological studies on marketed marine fish samples with special reference to *Vibrio parahaemolyticus*. *J. Ecobiol.*, 20(2); 2007, 175-178.
4. **V. Karthikeyan**, N. Karmegam, C.R. Sairajsekhar, M. Saravanan and M. Sukumar. Presence and activity of proteolytic and lipolytic bacteria in raw milk. *Asian J. Micro.Biotech.Env.Sc.*, 10 (2); 2008, 265-268.
5. **V. Karthikeyan**, C.R. Sairajsekhar and M. Saravanan. Studies on the evaluation of Hepatitis C virus by molecular techniques. *Res.J.Biotech.*, 3(2); 2008, 40-44.
6. **V. Karthikeyan**, N. Karmegam, M. Saravanan and C.R. Sairajsekhar. Synergistic effect of ethanolic leaf extracts of selected plant species against bacteria. *Res.J.Biol.Sci.* 2008, 6-13.
7. K. Sivakumar, T. Jayavelan, R. Prabha, R. Magesh and **V. Karthikeyan**. Effect of cadmium and zinc on biochemical parameters of freshwater planktonic copepod *Thermocyclops decipiens*. *Elec.J.Env.Sci.* 2; 2009. 37-40.
8. M. Jayakumar, **V. Karthikeyan** and N. Karmegam. Comparative studies on physico chemical microbiological and enzymatic activity of vermicults of earthworms, *Eudrilus euginae*, *Lampito mauritii* and *Perionyx ceylaensis* cultured in press mud. *Int.J.Appl.Agri.Res.*, 4(1); 2009, 75-85.
9. **Karthikeyan, V.**, Sivakumar, K., Magesh, R., Aishwarya, G. and Sugumar, M. 2011. Immobilization of *Aspergillus niger* for protease activity. *International Journal of Advanced Biotechnology Research*, 1 (1): 31-42.
10. **Karthikeyan, V.**, Sivakumar, K., Magesh, R., Aishwarya, G. and Sugumar, M. 2011. Comparative studies on the production of Alpha-amylase by *Aspergillus fumigates* and *Aspergillus oryzae*. *International Journal of Advanced Biotechnology Research*, 1 (1): 21-30.
11. .S. Mohanasundaram,**V. Karthikeyan**, K. Sivakumar and R. Magesh. Studies on the Assay of Digestive Enzymes in the Gut Extracts and Gut Bacterial Population in the Vermicomposting earthworm *Lampito mauriti*. *Int.J. Gen. Eng. and Biotech.* 2(2).2011.125-131.

12. Mohana Sundaram, Sivakumar, **Karthikeyan**, Bhuvaneshwari, Aishwarya, Thirumalai and Pennarasi. Studies on *in vitro* Antibacterial, Antifungal Property and Antioxidant Potency of *Murraya paniculata*.2011.
13. Mohanasundaram, S., **Karthikeyan, V.**, Sivakumar, K. and Magesh. 2011. Studies on assay of digestive enzymes in the gut extracts and gut bacterial population in the vermicomposting earthworm *Lampito marutii*. *International Journal of Genetic Engineering and Biotechnology*, 2(2): 125-131.
14. Mohanasundaram, Sivakumar, **Karthikeyan**, Magesh, Gopinath, Sheeladevi, Thirumalai, Pennarasi and Prasanna. 2011. Studies on phytochemicals, antibacterial and antioxidant effects of leaf extracts of *Lamprachaenium microcephalum* *Journal of Research Biology*, 1(4): 279-284.
15. Karmegam, N., **Karthikeyan, V.** and Ambika, D. 2012. Vermicomposting of sugarcane trash and leaf litter in combination with pressmud using the earthworm, *Perionyx ceylanesis*. *Dynamic Soil, Dynamic Plant*. 6(1):
16. Gopinath, **Karthikeyan**, Sivakumar, Magesh, Mohanasundaram, Poongodi, Ramesh and Rajamohan. 2012. Studies on removal of malachite green from aqueous solution by sorption method using water hyacinth – *Eichornia crassipes* roots. *Journal of Biodiversity and Environmental Sciences*, 2(10): 1-8.
17. Poongodi, Mohanasundaram, Sivakumar, **Karthikeyan**, Sheeladevi, Thirumalai and Pennarasi. 2012. Invitro antioxidant effects of different local varieties of banana (*Musa sp.*). *International Journal of Pharma and Bio Sciences*, 3(1): 634-644.
18. Rajathi D Modilal, M., **Karthikeyan, V.**, Sivakumar, K., Magesh, R., Karthika, V.C., Smera Sureshan, Bhuvaneshwari, V., Abarna, K. and Vishal Anand. 2011. Isolation, purification and characterisation of proteases from fish waste. *International Journal of Institutional Pharmacy and Life Sciences*, 1(3): 36-45.
19. **V.Karthikeyan**, K. Sivakumar, Aishwarya Gokuldass and S.Mohanasundaram. 2012 Studies on larvicidal activity of *Leucas aspera*, *Vitex negundo* and Eucalyptus against *culex quinquefasciatus* collected from Coovum river of Chennai, India. *AJPSCR*, 5(3):189-192.
20. **V.Karthikeyan.**, S.Ramya and Reshma.V.K.2012. Comparative Studies on the Prevalence of Bacterial Population and Physicochemical Analysis in Raw and Pasteurised Milk with special reference to Honey as a Natural Preservative. *International Journal of Scientific & Engineering Research*.3(6):1-8.
21. M Rajathi D Modilal, R Magesh, **V Karthikeyan**, K Sivakumar, M Gopinath, C Mohanapriya, Aswathi Ramachandran, Neethu Devi VS., 2013. A.Comparative Study on

- the Adsorption of Methylene Blue Using Rice and Coconut Husk. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*, 4(1), 241-247
22. Gopinath, **Karthikeyan**, Sivakumar, Magesh, Mohanasundaram, Poongodi, Ramesh and Rajamohan. 2012. Studies on removal of malachite green from aqueous solution by sorption method using water hyacinth – *Eichornia crassipes* roots. *Journal of Biodiversity and Environmental Sciences*, 2(10): 1-8.
 23. **V Karthikeyan**, P. A. Mohsin, J. Gowthamkumar, Sumaiya faiz & R Vijayakumar.2013. Studies on the preparation and analysis of low cost eco-friendly organic fertilizer *International Journal of Agricultural Science and Research* .3(2):213-218
 24. **V Karthikeyan**, Gowtham kumar, 2013. Studies on the Insecticidal Activity of *Bacillus thuringiensis* against Lepidoptera, *Research and Reviews: A Journal of Biotechnology*.161-165
 25. **Chelladurai Mohanapriya**, Ramesh rajprasanth, **Vijayan Karthikeyan**, **Rangaraju Magesh**, Shanmugam Karthikeyan. Preliminary phytochemical screening of *Mimosa pudica* root extracts and comparative analysis of its FTIR profile. *World journal of pharmaceutical research*. 3(3)2014.
 26. **V.Karthikeyan**, Sulochana Somasundaram, M. Adithyan, V. Rajesh Siva, **C. Mohanapriya**. Enhancement in the cow feed value of some agro industrial by products mediated by solid state fermentation with *Trichoderma viride*. *Int J pharmacy and pharmaceutical sciences*. 6(9)2014.
 27. **K.Jayaprakash**, **V.Karthikeyan**. Does polyandrous impede mosquito control by autocidal? *Int J Mosquito research* 1(2)2014, 11-13.
 28. **Mohanapriya chelladurai**, Sangeetha Damodaran, Rengaraj Sahasranam, Vaishnavi devi srinivasan, **Karthikeyan vijayan**, **Gopinath Margavelu**. Neurodegenerative and neuroinflammatory disarrays in progenies and adults. *Int J pharm bio sci* 6 (1)2015,636-648.
 29. Karthikeyan ,V, Sulochana, S , Catherine, L,& Jayaprakash,2017, ‘Surveillance of variant mecA gene and analysis of efflux pump in mecA negative MRSA infections’*Pakistan journal of Pharmaceutical sciences*, Vol.30, No.5,2007-2011.
 30. V. Karthikeyan, D. Keerthika, K. Gokulpriyan and I. Harini (2019), “Studies on Physiochemical Analysis of Water from Different Sources”, *International Journal of environment, agriculture and biotechnology*, Vol.4, No.2, pp. 310-313
 31. Sindhu S,Sivakumar K,**Karthikeyan** V, and Justin P Jacob (.2021).Antidiabetic potential of *Andrographischioides*Nees.Leaf Extract on High Fat Diet-Fed C57BL/6J Diabetic Mice. *Pakistan journal of pharmaceutical sciences*.
 32. Mohanapriya Chelladurai,Renganathan Sahadevan Gopinath Margavelu **KarthikeyanVijayan** DharaniBalaji K C.(2021). Anti-skin cancer activity of *Alpinia calcarata* ZnO nanoparticles: Characterization and potential antimicrobial effects. *Journal of Drug Delivery Science and Technology*, 2021,61,102180

Grants Received

| S.No | Name of the agency | Purpose | Amount in Rs |
|------|--|------------------------|--------------|
| 1 | Department of Biotechnology, New Delhi (DBT/CTEP/01/201000713) | National Conference | 75000 |
| 2 | Department of Biotechnology, New Delhi (DBT/CTEP/01/201201191) | Workshop | 50000 |
| 3 | Department of Biotechnology, New Delhi (DBT/CTEP/01/201100925) | National Conference | 50000 |
| 4 | AICTE (F.No.8024/RIFD/MOD- 141(Pvt)/Policy-III/2011-12) | MODROB | 10,00,000 |
| 5 | AICTE (F.No.RIFD/SEM/169/2010-11) | National Conference | 1,00,000 |
| 6 | TNSCST (TNSCST Lt.No.TNSCST/SPS/AR/2010-2011) | Research Project | 6,000 |
| 7 | TNSCST TNSCST (Lt.No.TNSCST/SPS/AR/2011- 2012) | Research Project | 6,000 |
| 8 | ICMR (ICMR LtNo.7/376/2009 Admin-II) | National Conference | 25,000 |
| 9 | TNSCST (Lt.No.TNSCST/SPS/AR/2007- 2008) | Research Project | 6,000 |
| 10 | TNSCST (ES-19) (Lt.No.TNSCST/SPS/AR/2013- 2014) | Research Project | 7,500 |
| 11 | TNSCST (ES -21) | Research | 7,500 |

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| | (Lt.No.TNSCST/SPS/AR/2013-2014) | Project | |
| 12 | DBT ,DST SERB,NAABARD | National Sminar cum workshop | 1,35,000 |
| 13 | TNSCST Lt.No.TNSCST/SPS/AR/2017-2018 | Research Project | 10000 |
| 14 | DST DST/INSPIRE/01/2016/ 000311 | Students science and innovation | 8.75 LAKHS |
| 15 | DST DST/INSPIRE/01/2015/003358 | Students science and innovation | 8.75 LAKHS |
| 16 | NCOF | FTR | 3.0 LAKHS |

Awards

Life Time Achievement Award – Green techniques in Agriculture

Industrial Consultancy

1. Aqua industries
2. Serva Seva Diary Federation Limited
3. Innovative Healthcare

Product Development

1. Organic manure – Biodynamic
2. Liquid fertilizer