



Email ID:
sathishtk@mcc.edu.in;

sathishkumar.thanikachalam@
gmail.com

ORCID ID:
<https://orcid.org/0000-0002-9569-3449>

Name: Dr T. SATHISH KUMAR

Designation: Associate Professor

Education

- UG – (B.Sc, University of Madras, 1994-1997)
- PG - (M.Sc , University of Madras, 1997-1999)
- M.Phil – (Manonmaniam Sundranar University, 2002 - 2003)
- Ph.D. – (University of Madras, 2003 – 2008)

Brief Bio-Data

Dr T. Sathish Kumar is a committed faculty member with more than a decade of experience in teaching and research. He teaches Immunology, Parasitology, Environmental Microbiology, Research Methodology, Health Research, and Pharmacovigilance to undergraduate and postgraduate students. He conducts practical lab sessions and guides the works and research of post-graduate students. He also teaches Medical Microbiology, and Language of Medicine for PGDMLT (Medical Laboratory Technology) students at MCC School of Continuing Education. He has completed four funded research projects from the Tamil Nadu State Council for Science and Technology (Government of Tamil Nadu) under the Student Project Scheme. He has also completed a project and developed a novel device “Triple Function Isolator Pen - A New Device for all Microbiologists” under the MCC Seed Money Grant. He is a recognized research supervisor from the University of Madras for the Ph.D. program to guide full-time and part-time research scholars in Microbiology. His current research involves developing a new media formulation for microbial growth, developing plant and insect models to study bacterial pathogenicity, preparing vaccines against bacterial and viral infections in commercially important marine crustaceans, and studying the prospects of fish secretions for microbiology applications. His other research interests include developing an alternative approach to the existing clinical research/diagnosis method, which is laborious, time-consuming, and expensive. He has published articles in reputed journals in his thrust areas of research. His recent research publication was on developing a Myco-model for pathogen detection and demonstrating mosquito larvicidal activity using microalgal extract.

Detailed Resume

1. **Name:** Dr T. SATHISH KUMAR

2. **Education:**

- **B.Sc.**, - University of Madras, 1994-1997.
- **M.Sc.**, - University of Madras, 1997-1999.
- **M.Phil** – Manonmaniam Sundranar University, 2002 – 2003.
- **Ph.D.** – University of Madras, 2003 – 2008.
- **Diploma in Medical Laboratory Technique (DMLT)** (2003), All India Medical Laboratory Technique Association Board, New Delhi.

3. **Publications**

Jemima Paul and **T Sathish Kumar** 2023. Bio-efficiency of Algal Mat and Algal Extract as Larvicide against Female *Anopheles* sp. Mosquito Larvae. Journal of Entomological Research (ISSN:0378-9519, E-ISSN:0974-4576), Vol. 47, Issue 2: 2023, 253 – 257.

Yuva Rani B and **T Sathish Kumar** 2023. Biopotential of Microalgal Extracts as a Mosquito larvicide: An Eco-Friendly Approach to Control *Aedes aegypti*. Biomedicine (Print ISSN: 0970 2067), Vol. 43, Issue 1 Supplementary issue: 2023, 151-156.

Suman Zimba, **Thanikachalam Sathish Kumar**, Natarajan Mohan, Polur Hanumantha Rao 2021. Evaluation of Various Waste Substrates for Biofilm Formation and Subsequent use in Aerobic Packed-Bed Reactor for Secondary Treatment of Domestic Wastewater. World Journal of Microbiology and Biotechnology (Electronic ISSN1573-0972 Print ISSN0959-3993). 37, Article number: 25.

Shiva Priya P and **T. Sathish Kumar** 2019. Screening of Pathogenic Strains of *Pseudomonas aeruginosa* in Wound Infections using a Mushroom Myco-Model as a host - A Novel Approach. Biomedicine (Print ISSN: 0970 2067), Volume 39 issue 4, 643 - 646.

A. Nithiya, Polur Hanumantha Rao and **T. Sathish Kumar** 2016. Bioremediation of Aquaculture Water using Nitrifying Bacteria-Microalga Consortium with Special Reference to Ammoniacal Nitrogen. International Journal of Current Research and Academic Review ISSN: 2347-3215 Volume 4 issue 12, 164 -177.

T. Sathish Kumar, S. Senthilkumar and D. Preetha, 2015. Screening of Pathogenic Strains of *Pseudomonas aeruginosa* from clinical Samples using *Lactuca sativa* as a plant model. International Journal of Current Microbiology and Applied Sciences. ISSN: 2319- 7706 Volume 4 number 12, 566 - 577.

T. Sathish kumar and K. Ramalingam, 2014. Trial vaccine and Immune Function Analysis of *Penaeus monodon* against *Vibrio harveyi* and *Vibrio parahaemolyticus*. Research Journal of Pharmaceutical, Biological and Chemical Sciences. ISSN: 0975-8585, Volume 5 number 3,1-7.

T. Sathish kumar and H. Aparna, 2014. Anti-Biofouling Activity of Prodigiosin, a Pigment Extracted from *Serratia marcescens*. International Journal of Current Microbiology and Applied Sciences. ISSN: 2319-7706 Volume 3 number 5,712-725.

T. Sathish Kumar and M. Ramesh Babu, 2010. Prevalence of Airborne Fungi in the Suburban of North Chennai, India - A Case study. ENVIS News Letter (ISSN – 0974 – 1550), Vol. 8, Issue 1, 4-7.

STATE OF ART SERIES – 7 (book): Research and Abstracts on Microbial Degradation of Oil and its Related Compounds (Sponsored by Ministry of Environment and Forests, Govt. of India, New Delhi), Year-2013. **Editors:** N. Munuswamy, V. Balasubramanian and **T. Sathish Kumar**.

4. Research Interests (Specialisations)

Specialization (Broad interest): Medical Microbiology and Immunology

Specific areas of research interest:

- New media formulations for Microbial growth.
- To develop alternatives to animal models to study bacterial pathogenicity.
- Prospects of fish secretions for microbiology applications.

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

B.Sc.: Parasitology, Environmental Microbiology

M.Sc.: Immunology, Parasitology, Health Research and Pharmacovigilance, Research methodology & Biostatistics, Soil, Agricultural & Environmental Microbiology.

PGDMLT (School of Continuing Education): Medical Parasitology, Medical microbiology, and Immunology.

6. Awards / Projects

- **Four research grants** have been received from the Tamil Nadu State Council for Science and Technology (Government of Tamil Nadu) under the student project's scheme during 2017-2018, 2018-2019 & 2022-2023, and duly completed.
- **Completed a project and developed a novel device** "Triple Function Isolator Pen - A New Device for all Microbiologists" under the MCC Seed Money Grant during 2022-2023.
- University Second rank in M.Sc.

7. Selected Presentations

Sathish Kumar. T. Molecular Detection of Vibriosis in Shrimp using Fecal sample as DNA Source. Presented in the National seminar on "Emerging Trends in Microbial Biotechnology" sponsored by DBT, Ministry of Science and Technology, New Delhi held at Kanchi Sri Krishna College of Arts and Science, Kilambi, Tamilnadu, during 20th & 21st February 2013.

Sathish Kumar. T. Invertebrate Immunity. Presented at the National Seminar on Recent Advances in Biotechnology and Applied Microbiology (sponsored by DBT, Ministry of Science and Technology, New Delhi), (2014, March), Kanchi Sri Krishna College of Arts and Science, Kilambi, Tamilnadu.

8. Resource Persons

Served as a resource person in the **Biological Science Association** meeting on 1st April 2024 organized by Meston College of Education (Autonomous), Royapettah, Chennai.

Served as a Resource person for TNSCST-sponsored seminar on "Creation of Scientific Awareness on Environmental Management" for college and school students on June 2013 at Kanchi Sri Krishna College of Arts and Science, Kilambi, Tamilnadu.

Served as a Chairperson for the Technical Session in National Conference on "Trends and Innovations in Biological Sciences" organized by Ethiraj College for Women (Autonomous), Chennai on February 15, 2018.

9. Conferences/Webinars Organized

Organizing Secretary for the Webinar on "An Insight into Commercial Applications of Microorganisms in the Current Era" conducted by the Department of Microbiology during 24th & 25th July 2020.

10. Administrative Positions

Nodal officer for Online End semester examination during 2020 – 2021.

Liaison officer for the College website committee since Oct 2021.

Coordinator for PG Journal club, Department of Microbiology, MCC from 2018 - 2023.

Nodal officer of IQAC since 2021.

Enrolment Officer (admission responsibility) during 2022-2023.

Committee member - Anti-Ragging Cell since 2021.

Faculty in the School of Continuing Education, MCC for PGDMLT course since 2015.

In-Charge for Department Newsletter during 2020-2021.