



K. THAMARASELVI
Associate professor

Contact

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Academic Qualifications: M.A./M.Sc./M.Phil./Ph.D./

1. Ph.D – Environmental Sciences, 2000, Bharathiar University, Coimbatore
2. M.Sc., - Eco-Biology, 1993, Bharathiar University, Coimbatore
3. B. Sc., - Biochemistry, 1991, Avinashilingam Deemed University, Coimbatore

Teaching Experience: 18 Years

Research Experience: 18Years

Additional Responsibilities

1. Executive Committee Member in Clean Green Initiative, Bharathidasan University, Tiruchirappalli - 2018 onwards
2. Deputy Warden of Kurinji Women's hostel, Bharathidasan University, Tiruchirappalli – 2018 onwards
3. Member in Anti-Raging committee, Bharathidasan University, Tiruchirappalli
4. Collaborative Faculty Member in National Centre for Alternatives to Animal Experiments (NCAAE), Centre with Potential for Excellence (UGC), Bharathidasan University, Tiruchirappalli 2017- 2023.

5. Advisory Committee Member, Women Involved in Sanitation and Hygiene (WISH), Bharathidasan University, Tiruchirappalli – 2016

Areas of Research

1. Molecular (Microbial) Bioremediation
2. Bioenergy production
3. Microbial Biodiversity
4. Environmental risk assessment in antibiotic resistant microbes
5. Nanobiotechnology

Research Supervision / Guidance

	Program of Study	Completed	Ongoing
Research	Ph.D.	10	6
	M.Phil.	08	-
Project	PG	17	-
	UG / Others	-	-

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
29	02	08	03	06

Cumulative Impact Factor (as per JCR) :	71.538
h-index :	11
i10 index :	12
Total Citations :	1258

Funded Research Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	CSIR, New Delhi	2012	2015	Molecular studies on microbial risk assessment for Antibiotic resistant microorganism and production of Class A biosolids in poultry litter by Autothermal Thermophilic Aerobic digestion (ATAD)	23,38,600
2	UGC, New Delhi	2009	2012	Bioenergy: Hydrogen production from wastewater using isolated microbial	6,25,800

				consortia and their 16s rDNA approach	
3	DRDO, New Delhi	2007	2010	To evaluate the microbial sorption capacity of heavy metals released from explosives and elucidate the mechanism involved	18,16,742

Ongoing Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1					
2					

Consultancy Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1					
2					

Others

Note: Budget must be rounded to two decimal places

Patents

Distinctive Achievements / Awards

1. University First rank holder and Gold Medalist, Bharathiar University – 1993
2. Awarded SRF (1995-1998), SRF-Ext (1999-2000) & RA (2000) from CSIR
3. Post-Doctoral Research Fellowship, CIES, France – 2002
4. Research Professor, BK21, Yonsei University, Seoul, South Korea (2006-2007)

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 05

1. National Conference on “Impact of Climate Change on Public Health”, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 6th – 7th March, 2018

2. International Seminar on “Biology for Sustainable Environment- ISBSE 2017” Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 07-08th March, 2017
3. International Conference on “Environment and Health in Changing Climate” (ICEHCC 2016), Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 14-16th September, 2016.
4. One Day Seminar on “Genome and Protein Engineering” Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 12th February, 2016.
5. One Day Seminar on “Environment and Health” Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 30th October 2015.

Events Participated (optional)

Conferences / Seminars / Workshops: 36

1. International Conference on Nano for Energy and Water and Indo-French Workshop on Water Networking, University of Petroleum and Energy Studies (UPES), Dehradun, 22-24th February, 2017
2. One-day Training Programme on Human Rights (National Human Rights Commission-NHRC), Department of History, Bharathidasan University, Tiruchirappalli, 31st March, 2017
3. One day seminar on Awareness on Environment Health and Environmental Issues (UGC XII Plan Extension activity for Rural Folks), Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 16th February, 2017
4. National Workshop on Catalysis in Organic Transformations (NWCOT-2016), School of Chemistry, Bharathidasan University, Tiruchirappalli, 20-21st October, 2016
5. Two Days Workshop and Training Programme on ICP-MS, Department of Environmental Sciences, Bharathiar University, Coimbatore, 16-17th March, 2016
6. National workshop on Intellectual Property Rights, Department of Botany, Bharathiar University, Coimbatore, 3-4th March, 2016
7. National conference on Advances in Biological and Environmental Sciences (NCABES-2016), Department of Biology, Gandhigram Rural Institute-Deemed University, gandhigram, Dindigul, 25-26th February, 2016
8. 1st Indian International Conference on AIR Quality Management (IICAQM, 2016) Department of Civil Engineering, IIT Madras and Helmholtz Centre for Environmental Research, Leipzig from 15-16th February, 2016
9. State Level Workshop on Phytochemistry for Health and Environment, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 8-11th February, 2016

10. International Conference on New Horizons in Biotechnology, CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram, 22-25th November, 2015
11. National seminar on Climate change – Ecosystems –Environmental and Society, Department of Environmental sciences, Andhra University, Visakhapatnam, 21-22th September, 2015
12. Short term training programme on Remote Sensing and GIS for Environmental Studies, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 23-25th March, 2015
13. National seminar on Integrated Waste Management and Energy Recovery, Department of Environmental Management, Bharathidasan University, Tiruchirappalli, 12th February, 2015
14. 1st International Symposium on Nanoparticles/ Nanomaterials and Applications. Caparica, Lisbon, Portuga, January, 2014
15. National Conference cum Workshop on Bioinformatics and Computational Biology, Department of Computer Science & Engineering in association with All Core Computer Engineering (ACCESS), Sikkim Manipal Institute of Technology, Sikkim, 14-15 March, 2014
16. Workshop for Research Supervisors on Quality Research Report Writing, Curriculum Development Cell, Bharathidasan University, Tiruchirappalli, 28th February, 2014
17. National Level Conference, Environmental Conferenc, Department of Environemental Sciences, central University of Kerala, 17,18th & 19th February, 2014
18. International Conference on Nanotechnology ICNT 2013, Haldia, October, 2013
19. Nano India 2013, CSIR-NIST, Tiruvananthapuram, February, 2013
20. Green Technology for Sustainable Environmental Management, Dehradun, March, 2013.
21. American Society For Biochemistry And Molecular Biology, The Banff Centre Banft Albertal Canada, September, 2012.
22. World Congress on Biotechnology, OMICS publishing group, Hyderabad, March, 2011
23. 80th Annual Meeting of the Society of Biological Chemists (India) and Conference on Metabolic Pathway Modulations-Applications in Health and Agriculture, CSIR- Central Institute of Medicinl and Aronmatic Plants, Lucknow, 12-15 November, 2011
24. Conference on Recent Advances in Molecular Biology Techniques, Department of Maraine Biotechnology, Bharathidasan University, Tiruchirappalli, 12th September, 2011
25. National Semiar on Spatial Sratergies for Sustainable Management (SSSM 2011), Department of Environmental Management, Bharathidasan University, Tiruchirappalli, 14-16 February, 2011
26. National seminar on recent trends in environmental toxicology (RTET-2011), Sir Theagaraya College, Chennai, January, 2011
27. Winter School on Ciurrent Trends in Microbial Biotechnology: Genomics, Diversity and Gene Mining, Centarl Institute of Fisheries Technology (ICAR), Cochin, 9-29th November, 2010

28. National Seminar on Water Pollution and Control Measures, Catholicate College, Pathanamthitta, July, 2010
29. National Seminar on Water Pollution and Control Measures, Catholicate College, Pathanamthitta, July, 2010

Overseas Exposure / Visits

1. Under went training on Immuno-assay under the guidance of Prof. Vijayalakshmi, Director, LIMTechS, UTC, Compiègne, France, sponsored by EGIDE and French Embassy (2002).
2. Awarded **Research Professor** under BK21 at Yonsei University, Seoul, South Korea (2006- 2007).

Membership in

Professional Bodies

1. Life Member: Environmental Mutagen Society of India
2. Life Member: Society of Biological Chemists, India
3. Life Member: Indian Association of Biomedical Scientist, India
4. Members: Inter-American Photochemical Society (1996-2000)
5. Life Member: Society for Alternatives to Animal Experiments

Editorial Board

Guest editor in *Biocatalysis and Agricultural Biotechnology, Elsevier* - Call for Papers on Burgeoning trends in Microbiology and Agriculture Sciences.

Books Edited

1. Bioremediation and Sustainable Technologies for Cleaner Environment (2015). ISBN: 978-3-319-48438-9.

Advisory Board

Academic Bodies (such as Board of Studies etc.,)

1. Member, Board of Studies, Department of Environmental Science, Manonmaniam Sundaranar University, Tirunelveli, 2018-2021
2. Member, Board of Studies, Department of Environmental Science, Bharathiar University representative in Environmental Sciences, University Department, Coimbatore- 2018-2019
3. Member, Board of Studies, Bharathidasan University representative in Zoology, Bishop Heber College (Autonomous), Tiruchirappalli – 2017 to 2019
4. Academic Council Member for A.V.C College (Autonomous), Mayiladuthurai – 2017 to 2019.
5. Member, Board of Studies, Environmental Biotechnology, Bharathidasan University, Tiruchirappalli – 2016 to 2019

6. Academic Council Member for A.D.M College for Women (Autonomous), Nagapattinam – 2015 to 2017.
7. Member, Board of Studies, Bharathiar University representative in Biochemistry PSG College of Arts & Science (Autonomous), Coimbatore – 2013 to 2015
8. Member, Board of Studies, Bharathidasan University representative in Environmental Science, J.J. College of Arts and Science (Autonomous), Pudukkottai – 2012 to 2014
9. Member, Board of Studies, Adhoc Committee Member, M. Phil - Biochemistry, Bharathidasan University 2009.
10. Member, Board of Studies, Bharathiar University representative in Biochemistry, Dr. G. R. Damodaran College of Science (Autonomous), Coimbatore – 2008 to 2010
11. Member, Board of Studies, Biotechnology, Anna University , Coimbatore – 2007 to 2010
12. Member, Board of Studies, Biotechnology, Pondicherry University, Pondicherry – 2006 to 2009
13. Member, Board of Studies, Environmental Sciences, Bharathidasan University, Tiruchirappalli – 2005 to 2008

Others

1. Expert, Regulating environmental spread of antibiotic resistance microbes, Centre for Science and Environment (CSE), New Delhi
2. Faculty In-Charge for Continuous Ambient Air Quality Monitoring Station (CAAQMS), worth around Rs. 2 crores, sponsored by TNPCB
3. Nodal Officer for project on, "Monitoring of Aquatic Resources under National River Conservation Programme (NRCP) in Tamil Nadu" funded by TNPCB and CPCB
4. Nodal Officer for project on, "Biomonitoring of Water and Aquatic Resources under National Water Quality Monitoring Programme (NWMP) in Tamil Nadu" funded by TNPCB and CPCB
5. Course Writer, PG Diploma in Environmental and Occupational Health, Indira Gandhi National Open University (IGNOU), New Delhi – 2017

Resource persons in various capacities

Number of Invited / Special Lectures delivered: 07

Others

1. No. of PhD Thesis evaluated : 10
2. No. of PhD Public Viva Voce Examination conducted : 06
3. Sequences submitted in GenBank : NCBI- 95; MTCC- 01

Recent Publications

1. A. Murugadas, D. Mahamuni, N.D. Shrinithiviahshini, K. Thamaraiselvi R. Thirumurugan, M. A. Akbarsha, (2019) Hydra as an alternative model organism for toxicity testing: Study using the endocrine disrupting chemical Bisphenol
Biocatalysis and Agricultural Biotechnology (In press)
2. J. S. Rosa, J. Omana, P. Krishna Murthy, Shruthi Iyer, S.G. Ramachandra, K. Thamaraiselvi, (2018) Effect of feeding high fat diet on reproductive parameters in male mice, *Indian Journal of Animal Research*
3. J.S. Rosa¹, J. Omana, S. Sandhya, N. Krishnaveni, K. Thamaraiselvi, S.G. Ramachandra (2018), Rapid identification of bacterial agents in fecal samples of rodents by flow cytometry, *International Journal of Research in Biosciences*,7(1), 20-29
4. J.S. Rosa, J. Omana, P. Prakash, and K. Thamaraiselvi, (2018) Role of Dietary Pattern on the Microbial Diversity in the Gut of the Experimental Mice, *Asian Journal of Engineering and Applied Technology*, 7(2)
5. A. Subashini, P. Priyadharsani, K. Thamaraiselvi, V. Veeramani, P. Rose, R. Philip, R. R. Babu, (2018), Studies on growth and characterization of (E)-N'-[4-(dimethylamino) benzylidene]-4-hydroxybenzohydrazide hemihydrate: a nonlinear optical material *Journal of Materials Science: Materials in Electronics*, 1-9
6. A. Pugazhendhi, K. Ranganathan, K. Thamaraiselvi, (2018), Biosorptive removal of Copper(II) by *Bacillus cereus* isolated from contaminated soil of electroplating industry in India, *Water, Air and Soil Pollution*, 229(3), 76 [Impact Factor: 1.769]
7. Pugazhendhi, A., Ranganathan, & Thamaraiselvi, K., (2018), Biosorptive removal of Copper(II) by *Bacillus cereus* isolated from contaminated soil of electroplating industry in India, *Water, Air and Soil Pollution*, 229(3), 76 [Impact Factor: 1.769]
8. Jeganathan, C., Thamaraiselvi, K., Sabari Girisun, T. C., (2018), Improved production of bacteriorhodopsin from *Halobacterium salinarum* through direct amino acid supplement in the basal medium, *Extremophiles*, 1-7 [Impact Factor: 2.00]
9. Pugazhendhi, A., Ranganathan, & **Thamaraiselvi, K.**, (2018), Biosorptive removal of Copper(II) by *Bacillus cereus* isolated from contaminated soil of electroplating industry in India, *Water, Air and Soil Pollution*, 229(3), 76. [Impact Factor: 1.769].
10. Pugazhendhi, A., Gowri Manogari, B., Ranganathan, K., Naushad, Mu., & **Thamaraiselvi, K.**, (2018), New insight into effective biosorption of lead from aqueous solution using *Ralstonia solanacearum*: Characterization and mechanism studies, *Journal of Cleaner Production*, 174, 1234-1239 [Impact Factor: 5.615]
11. Sridevi Dhanarani, T., Shankar, C., Prakash, P., Park, J. H., & **Thamaraiselvi, K.**, (2017), Inhibitory effects of reserpine against efflux pump activity of antibiotic resistance bacteria, *Chemical Biology Letters*, 4(2), 69-72 [Impact Factor: 2.6]
12. Sivakumar, S., **Thamaraiselvi, K.**, & Prakash, P., (2017), Deposition of absolute and relative airborne metals on eggshells: a field study, *Environmental Science and Pollution Research*, 1-7[Impact Factor: 2.800]
13. Pugazhendhi, A., Sridevi Dhanarani, T., Shankar, C., Prakash, P., Ranganathan, K., Rijuta Ganesh Saratale, & **Thamaraiselvi, K.**, (2017), Electrophoretic pattern of glutathione S-transferase (GST) in antibiotic resistant Gram-positive bacteria from poultry litter, *Microbial Pathogenesis*, 110, 285-290 [Impact Factor: 2.332]
14. Jeganathan, C., Sabari Girisun, T. C., Venugopal Rao, S., & **Thamaraiselvi, K.**, (2017), Variable ultrafast optical nonlinearity in bacteriorhodopsin achieved through simple

- chemical treatment, *Journal of Material Science*, 52, 6866-6878 [Impact Factor: 2.993]
15. Subashini, A., Poornima Priyadharsani, T. K., & **Thamaraiselvi, K.**, Helen Stoeckli-Evans., Bhagavannarayana, G., Ramamurthi, K., Ramesh Babu, R., (2017), Synthesis growth and characterization of dichlorobis(4-chloroaniline-kN)zinc semiorganic crystal, *Journal of Material Science: Materials in Electronics*, 9 (3), 1370–1374 [Impact Factor: 2.324]
 16. Sridevi Dhanarani, T., Elavarasi, V., Prakash, P., Pugazhendhi, A., & **Thamaraiselvi, K.**, (2016), Comparative study on the biosorption of aluminum by free and immobilized cells of *Bacillus safensis* KTSMBNL 26 Isolated from explosive contaminated soil, *Journal of Taiwan Institute of Chemical Engineers*, 69, 61-67 [Impact Factor: 3.849]
 17. Murugadas, A., Zeeshan, M., & **Thamaraiselvi, K.**, Ghaskadbi, S., & Akbarsha, M. A., (2016), Hydra as a model organism to decipher the toxic effects of copper oxide nanorod: Eco-toxicogenomics approach, *Scientific Reports*, 6, 29663 [Impact Factor: 4.122]
 18. Sridevi Dhanarani, T., Shankar, C., Prakash, P., Poornima Priyadharshani, T. K., & **Thamaraiselvi, K.**, (2016), Conversion of poultry litter in to class A biosolids using autothermal thermophilic aerobic digestion: A remedy for solid waste management, *Management of Environmental Quality: An International Journal*, 27, 4-14
 19. Pugazhendhi, A., Dhivya, S., Valsala, H., & **Thamaraiselvi, K.**, (2014), Removal of cadmium from aqueous solution by batch studies using *Bacillus cereus*, *Ecological Engineering*, 71, 728-735 [Impact Factor: 3.023]
 20. Valsala, H., Prakash, P., Elavarasi, V., Pugazhendhi, A., & **Thamaraiselvi, K.**, (2014), Isolation of *Staphylococcus nepalensis* for Degradation of pyrene from Diesel Contaminated Site, *International Journal of Computer Applications*, 2, 1-24 [Impact Factor: 0.715]
 21. Prakash, P., Rajan, G., Elavarasi, V., Poornima Priyadharsani, T. K., & **Thamaraiselvi, K.**, (2014), Assessment of Heavy Metal Contamination (Nickel and Arsenic) using GF-AAS in Local Brand Chocolates and Candies from Tiruchirappalli, India, *International Journal of Computer Applications*, 25-28 [Impact Factor: 0.715]
 22. Pugazhendhi, A., Valsala, H., Poornima Priyadharsani, T. K., Prakash, P. & **Thamaraiselvi, K.**, (2014), Fermentative Hydrogen Production by *Enterobacter* sp. KTSMBNL-01 Isolated from Municipal Sewage Sludge: Optimization Studies, *International Journal of Computer Applications*, 25-28 [Impact Factor: 0.715]
 23. Elavarasi, V., Pugazhendhi, A., Poornima Priyadharshini, T.K., Valsala, H., & **Thamaraiselvi, K.**, (2014), Screening and Characterization of *Weissella cibaria* isolated from food source for probiotic properties, *International Journal of Computer Applications*, 29-32 [Impact Factor: 0.715]
 24. Sathis Kumar, K., Sridevi Dhanarani, T., & **Thamaraiselvi, K.**, (2013). Utilization of petroleum hydrocarbons by *Micrococcus* and *Streptococcus* sp. isolated from contaminated site, *Journal of Microbiology and Biotechnology Research*, 3(1), 71-78 [Impact Factor: 1.32]
 25. Rajesh Kumar, R., Poornima Priyadharsani, T. K., & **Thamaraiselvi, K.**, (2012), Mycogenic synthesis of silver nanoparticles by the Japanese Environmental isolate *Aspergillus tamari*, *Journal of Nanoparticle Research*, 14 (5) 860-866 [Impact Factor: 2.127]

26. Rajesh kumar, R., Shankar, C., & **Thamaraiselvi, K.**, (2011), Evaluation of isolated fungal strain from e-waste recycling facility for effective sorption of toxic heavy metal Pb (II) ions and fungal protein molecular characterization- a mycoremediation approach, *Asian Journal of Experimental Biological Sciences*, 2(2), 342-347
27. Rajesh kumar, R., Shankar, C., Sridevi Dhanarani, T., Dexilin, M., & **Thamaraiselvi, K.**, (2010), Phosphate removal by isolated Bacteria from municipal wastewater effluent, *Environmental Pollution Control Journal*, 13(3) 17-22.

Book Chapter

1. A. Pugazhendhi and K. Thamaraiselvi (2017). Optimization of fermentative hydrogen production by *Klebsiella pneumonia* KTSMBNL11 isolated from municipal sewage sludge. *Bioremediation and sustainable environmental technologies for cleaner environment*, pp. 267-278. Springer International Publishing. ISBN: 978-3-319-48439-6.
2. Sherry Davis, P. Prakash and K. Thamaraiselvi (2017). Nanobioremediation technologies for sustainable environment. *Bioremediation and sustainable environmental technologies for cleaner environment*, pp. 13-33. Springer International Publishing. ISBN: 978-3-319-48439-6.
3. P. Prakash, M. Dexilin, B. Gowri Manogri and K. Thamaraiselvi (2016). Optimization of *Bacillus* sp. (KTSMBNL – 16) for decolourization of dye AV90 using batch studies. *Integrated Waste Management in India*, pp. 207-217, Springer International Publishing. ISBN: 978-3-319-27228-3.
4. T. K. Poornima Priyadharsani, D. Suriyaprakasham, P. Prakash and K. Thamaraiselvi (2016). Nitrate reduction by denitrifying *Bacillus cohnii*. Isolated from sewage treatment plant. *Integrated Waste Management in India*, pp. 35-48, Springer International Publishing. ISBN: 978-3-319-27226-9.
5. Kais Ghedira, Houcemeddine Othman, Taieb Saied, Zouhair Majdi Baccar, Faouzi Hosni, Ahmed Hichem Hamzaoui, Kaliannan Thamaraiselvi, Hafedh Abedmelek, Najet Srairi-Abid, Maria Clara Costa and Haitham Sghaier (2016). Insights into inozing-radation-resistant bacteria S-layer proteins and nanobiotechnology for bioremediation of hazardous and radioactive waste. *INTECH, INTECH Environmental Sciences*, pp. 155-175, "Management of Hazardous Wastes" ISBN:978-953-51-2617-1.
6. M. Dexilin, V. Elavarasi and K. Thamaraiselvi (2013). Microbial research in Agrosystem management: Biological decolorization of sulphonated azo dyes CI acid blue 193 *Bacillus cereus* KTSMD-03 and its azo reductase characterization, pp. 85-102, Springer International Publishing. ISBN: 978-81-322-1087-0.

MoUs signed

Agency	Title	Year
Central Pollution Control Board (CPCB), Delhi and Tamil Nadu Pollution Control Board (TNPCB)	Monitoring of Aquatic Resources under National River Conservation Programme (NRCP) in Tamil Nadu	2017

Central Pollution Control Board (CPCB), Delhi Tamil Nadu Pollution Control Board (TNPCCB)	Biomonitoring of Water and Aquatic Resources under National Water Quality Monitoring Programme (NWMP)	2017
Tamil Nadu Pollution Control Board (TNPCCB)	Continuous Ambient Air Quality Monitoring Station (CAAQMS)	2016