

# K. THAMARAISELVI Professor

#### Contact

Address : Department of Environmental Biotechnology

Bharathidasan University Tiruchirappalli – 620 024 Tamil Nadu, INDIA

Employee Number : BDU1700729
Date of Birth : 04-04-1970
Contact Phone (Office) : +91 4312407088
Contact Phone (Mobile) : +91 9789458400

Contact e-mail(s) : thamaraiselvi@gmail.com; kthamaraiselvi@bdu.ac.in;

kthamaraiselvi@hotmail.com

Skype id :

## 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: 22 Years** 

**Research Experience: 22 Years** 

### **Additional Responsibilities**

- 1. Executive Committee Member in Clean Green Initiative, Bharathidasan University, Tiruchirappalli 2018 onwards
- 2. Deputy Warden of Kurinji and Mullai Women's hostel, Bharathidasan University, Tiruchirappalli 2018 to 2023.
- 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. Microbial Evolution and Diversity
- 2. Molecular (Microbial) Bioremediation and Nanobiotechnology
- 3 Expression of Respiratory Biomarkers related to Air pollution
- 4. Profiling of Antibiotic resistant bacteria (ARB) and Antibiotic resistant genes (ARG) in environmental samples

## **Research Supervision / Guidance**

Progra	m of Study	Completed	Ongoing
Research	Ph.D.	12	5
	M.Phil.	10	-
Project	PG	39	-
	UG / Others	•	-

## **Publications**

	Interna	tional	Nati	Others	
	Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
ľ	48	02	08	03	08

Cumulative Impact Factor (as per JCR): 130.889h-index: 20i10 index: 26Total Citations: 2574

# **Funded Research Projects**

S. No	Agency	Period		Project Title	Budget
		From	То	Troject Title	(Rs. In lakhs)
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 AutothermalThermophilic 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
			From	To		lakhs)
ľ	1	TNPCB	2019	2029	Continuous Ambient Air Quality Monitoring	2,50,00,000
	2	ICMR-DHR	2020	2023	Effects of Air pollutants on Respiratory Health of Traffic Police Personnel of Major Cities of Tamil Nadu – An Observational Study	1,04,23,056

### **Consultancy Projects**

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

### **Patents**

1. 202141037028 dated on 16/08/2021 (Filed)

## **Distinctive Achievements / Awards**

- 1. University First rank holder and Gold Medalist, Bharathiar University 1993 2.
- 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)
- 5. Mother Theresa Woman Scientist Award 2021

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

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

- 1. DST STUTI sponsored National Training Level Programme on "Environmental Monitoring using Advanced Analytical and Molecular Tools", 9 15<sup>th</sup> November, 2022
- 2. DST STUTI sponsored National Training Programme on "Marine Bioresources and Pollutant Biomarkers", 13 19<sup>th</sup> October,2022

- 3. Health camp and sample collection as a part of the Department of Health Research Major Project entitled, "Effect of Air Pollutants on Respiratory Health of Traffic Police Personal of Major Cities Tamil Nadu An Observational Study," in association with the Tiruchirappalli City Police was conducted on 31st March, 2022.
- 4. National Seminar on Biology for Sustainable Environment (NSBSE 2022), 23<sup>rd</sup> March, 2022.
- 5. Road Safety Awareness Programme in connection with the 32<sup>nd</sup> National Road Safety Week 2021, Organised by Department of Environmental Biotechnology and National Service Scheme Cell, Bharathidasan University in association with Tiruverumbur Traffic Police, 17/02/2021
- National Conference on "Impact of Climate Change on Public Health", Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 6<sup>th</sup> – 7<sup>th</sup> March, 2018
- 7. International Seminar on "Biology for Sustainable Environment- ISBSE 2017" Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 07-08<sup>th</sup> March, 2017
- 8. International Conference on "Environment and Health in Changing Climate" (ICEHCC 2016), Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 14-16<sup>th</sup> September, 2016.
- 9. One Day Seminar on "Genome and Protein Engineering" Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 12<sup>th</sup> February, 2016.
- 10.One Day Seminar on "Environment and Health" Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 30<sup>th</sup> October 2015.

### **Events Participated (optional)**

### Conferences / Seminars / Workshops: 45

- 1. ISIM2021- International Symposium on IoT and ML for ecosystem restoration & Multi-Hazard Resilience, Amrita Vishwa Vidyapeetham, Kerala, united nations educational, scientific and cultural organization, UNESCO, Esri India and Amrita centre for wireless networks & applications, 5<sup>th</sup> to 9<sup>th</sup> of June, 2021
- 2. Two Days National webinar on Mining Environment, IIT(ISM) ENVIS Centre-RP, Department of Environmental Science & Engineering Indian Institute of Technology(ISM) Dhanbad, 14<sup>th</sup> and 15<sup>th</sup> December.
- 3. International Conference on Physiological Diseases- 2020, National Technical University, Singapore, Bharathidasan University, Tiruchirappalli, Bharathiar University, Coimbatore & Kalasalingam Academy of Research and Education, 14<sup>th</sup> to 15<sup>th</sup> October 2020
- 4. One Day International Virtual Conference Microplastics 2020, VIT, Vellore, 30<sup>th</sup> June 2020
- 5. National Conference on Plastics in the Environment: Current Status and Rethinking the Future of Plastics {NCPE'2020}, Gujarat Institute of Desert Ecology, 7<sup>th</sup> March 2020
- 6. DBT Sponsored Exhibition Cum Plenary Lectures On Immunology and Immunotechnology (EEI-2019), Department of Marine Biotechnology, Bharathidasan University, Tiruchirappalli- 620 024, 12<sup>th</sup> & 13<sup>th</sup> March 2019.
- 7. National Seminar on Biotechnological Solutions For Environmental Challenges (BTISFECs-2018), Department of Environmental Biotechnology, School of Environmental Sciences, Bharathidasan University, Tiruchirappalli- 620 024, 17<sup>th</sup> & 18<sup>th</sup> December 2018.
- 8. ICHR National Seminar on the History of Indigenous Medicine in Colonial South India, Department of History, Bharathidasan University, Tiruchirappalli- 620 024, 25<sup>th</sup> & 26<sup>th</sup> October 2018.

- 9. Science Academics' Lecture workshop on Biodiversity For Human Welfare: Current and Future Trends, Department of Botany, School Life Sciences, Bharathidasan University, Tiruchirappalli- 620 024, 24<sup>th</sup> & 25<sup>th</sup> September 2018.
- 10. Short time training on Application of Isotope Techniques in Water Resources Management, KSCSTE- Centre for Water Resources Development and Management Kozhikode- 673 571, Kerala, India, 30<sup>th - 4th</sup> July 2018
- 11. Orientation Workshop on Swayam, Department of Library & Information Science and UGC Human Resource Development Centre, Bharathidasan University, 5<sup>th</sup> May 2018.
- 12. National Conference on Recent Advances in Plant science: Towards Food Safety and Food Security, Department of Botany, School of Life sciences, Bharathidasan University, Tiruchirappalli 620 024, 15<sup>th</sup> March 2018.
- 13. National Conference on Impact of Climate Change on Public Health (ICCPH 2018), Centre for Climate Change Research, Department of Environmental Biotechnology, School of Environmental Sciences, Bharathidasan University, Tiruchirappalli- 620 024, 6<sup>th</sup> 7<sup>th</sup> March 2018.
- 14. National Science day, Department of Biochemistry, Bharathidasan University, Tiruchirappalli- 620 024, 28th February 2018.
- 15. Science Academics' Lecture Workshop on Conservation and Protection of Bioresources, Department of Botany, School of Life Sciences, Bharathidasan University, Tiruchirappalli 620 024, 24<sup>th</sup> & 25<sup>th</sup> January 2018.
- 16. Advanced Workshop on Microbial Technology for Clean Environment, Department of Microbiology, Tripura University, Agartala Jointly organized by Tripura University and the Centre of Excellence in Environmental Technology and Maulana Abul Kalam Azad University of Technology, West Bengal, 18<sup>th</sup> 21<sup>st</sup> Sept. 2017.
- 17. One day National level seminar on Regulatory Compliance Handling in Industries Towards Pollution Control, Industrial Waste Management Association & Tamil Nadu Pollution Control Board, 4<sup>th</sup> August 2017
- 18. International Conference on Nano for Energy and Water and Indo-French Workshop on Water Networking, University of Petroleum and Energy Studies (UPES), Dehradun, 22-24<sup>th</sup> February 2017
- 19. One-day Training Programme on Human Rights (National Human Rights Commission-NHRC), Department of History, Bharathidasan University, Tiruchirappalli, 31<sup>st</sup> March 2017
- 20. One day seminar on Awareness on Environmental Health and Environmental Issues (UGC XII Plan Extension activity for Rural Folks), Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 16<sup>th</sup> February 2017
- 21. National Workshop on Catalysis in Organic Transformations (NWCOT-2016), School of Chemistry, Bharathidasan University, Tiruchirappalli, 20-21st October 2016
- 22. Two Days Workshop and Training Programme on ICP-MS, Department of Environmental Sciences, Bharathiar University, Coimbatore, 16-17<sup>th</sup> March 2016
- 23. National workshop on Intelectual Property Rights, Department of Botany, Bharathiar University, Coimbatore, 3-4<sup>th</sup> March 2016
- 24. National conference on Advances in Biological and Environmental Sciences (NCABES-2016), Department of Biology, Gandhigram Rural Institue-Deemed University, gandhigram, Dindigul, 25-26<sup>th</sup> February 2016
- 25. 1st Indian International Conference on AIR Quality Management (IICAQM, 2016) Department of Civil Engineering, IIT Madras and Helmholtz Centre for Environmental

- Research, Leipzif from 15-16<sup>th</sup> February 2016
- 26. State Level Workshop on Phytochemistry for Health and Environment, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 8-11<sup>th</sup> February 2016
- 27. International Conference on New Horizons in Biotechnology, CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram, 22-25<sup>th</sup> November 2015
- 28. National Seminar on Climate change Ecosystems –Environmental and Society, Department of Environmental Sciences, Andhra University, Visakhapatnam, 21-22<sup>th</sup> September 2015
- Short term training programme on Remote Sensing and GIS for Environmental Studies, Department of Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, 23-25<sup>th</sup> March 2015
- 30. National seminar on Integrated Waste Management and Energy Recovery, Department of Environmental Management, Bharathidasan University, Tiruchirappalli, 12<sup>th</sup> February 2015
- 31. 1st International Symposium on Nanoparticles/ Nanomaterials and Applications. Caparica, Lisbon, Portuga, January 2014
- 32. 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
- 33. Workshop for Research Supervisors on Quality Research Report Writing, Curriculum Development Cell, Bharathidasan University, Tiruchirappalli, 28<sup>th</sup> February 2014
- 34. National Level Conference, Environmental Conference, Department of Environmental Sciences, Central University of Kerala, 17,18<sup>th</sup> & 19<sup>th</sup> February, 2014
- 35. International Conference on Nanotechnology ICNT 2013, Haldia, October, 2013
- 36. Nano India 2013, CSIR-NIST, Tiruvananthapuram, February, 2013
- 37. Green Technology for Sustainable Environmental Management, Dehradun, March, 2013.
- 38. American Society For Biochemistry And Molecular Biology, The Banff Centrel Banft Albertal Canada, September, 2012.
- 39. World Congress on Biotechnology, OMICS publishing group, Hyderabad, March, 2011
- 40. 80<sup>th</sup> 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
- 41. Conference on Recent Advances in Molecular Biology Techniques, Department of Maraine Biotechnology, Bharathidasan University, Tiruchirappalli, 12<sup>th</sup> September, 2011
- 42. National Semiar on Spatial Sratergies for Sustainable Management (SSSM 2011), Department of Environmental Management, Bharathidasan University, Tiruchirappalli, 14-16 February, 2011
- 43. National seminar on recent trends in environmental toxicology (RTET-2011), Sir Theagaraya College, Chennai, January, 2011
- 44. Winter School on Ciurrent Trends in Microbial Biotechnology: Genomics, Diversity and Gene Mining, Centarl Institute of Fisheries Technology (ICAR), Cochin, 9-29<sup>th</sup> November, 2010
- 45. National Seminar on Water Pollution and Control Measures, Catholicate College, Pathanamthitta, July, 2010

#### Overseas Exposure / Visits

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

### Membership in Professional Bodies

- ➤ Life Member: Environmental Mutagen Society of India
- ➤ Life Member: Society of Biological Chemists, India
- Life Member: Indian Association of Biomedical Scientists, India
- Members: Inter-American Photochemical Society (1996-2000)
- ➤ Life Member: Society for Alternatives to Animal Experiments

#### **Editorial Board**

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

Guest editor in Journal of the Taiwan Institute of Chemical Engineers, Elseiver - Investigation on the effect of wastewater on ecosystems and development of promising technologies for wastewater treatment

Guest editor in Chemosphere, Elseiver - Spotlight on polycyclic aromatic hydrocarbons and its derivatives: recent approaches in understanding the fate, toxicity, policy making and remediation strategies

Guest editor in Environmental Research, Elseiver - Effect directed analysis (EDA) of new-age pollutants: Development, application, evaluation and limitation

#### **Books Edited**

- Advances in Environmental Pollution Research Series Cost Effective Technologies for Solid Waste and Wastewater Treatment, Elsevier (2021), B978-0-12-822933-0.09992-7, 09992,
- ➤ Bioremediation and Green Technologies, Springer (2021) ISBN: 978-3-030-64121-4
- ➤ Bioremediation and Sustainable Technologies for Cleaner Environment, Springer (2015). ISBN: 978-3-319-48438-9.

#### **Advisory Board**

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

### **Board of Studies**

- Department of Environmental Science, Periyar University, Salem, 2021 2024
- ➤ P.G Environmental Science (Affiliated Colleges), Manonmaniam Sundaranar University, Tirunelveli, 2020 2023
- > Department of Environmental Science, Manonmaniam Sundaranar University,

- Tirunelveli, 2018 2021
- ➤ Department of Environmental Science, Bharathiar University, Coimbatore, 2018 2020
- Environmental Science (PG), Bharathidasan University, Tiruchirappalli, 2018 to 2021
- ➤ Bharathidasan University representative in Zoology, Bishop Heber College (Autonomous), Tiruchirappalli, 2017 to 2019
- ➤ Bharathiar University representative in Biochemistry, PSG College of Arts & Science (Autonomous), Coimbatore, 2013 to 2015
- ➤ Bharathidasan University representative in Environmental Science, J.J. College of Arts and Science (Autonomous), Pudukkottai, 2012 to 2014
- Adhoc Committee Member, M. Phil Biochemistry, Bharathidasan University 2009
- ➤ Bharathiar University representative in Biochemistry, Dr. G. R. Damodaran College of Science (Autonomous), Coimbatore, 2008 to 2010
- ➤ Biotechnology, Anna University, Coimbatore, 2007 to 2010
- ➤ Biotechnology, Pondicherry University, Pondicherry, 2006 to 2009
- Environmental Sciences (PG), Bharathidasan University, Tiruchirappalli, 2005 to 2008

### **Academic Council Member**

- ➤ St. Joseph's College (Autonomous), Tiruchirappalli, 2021 to 2024
- ➤ A.V.C College (Autonomous), Mayiladuthurai, 2017 to 2019
- ➤ A.D.M College for Women (Autonomous), Nagapattinam, 2015 to 2017

#### **Others**

- ➤ Expert, Regulating environmental spread of antibiotic resistance microbes, Centre for Science and Environment (CSE), New Delhi
- ➤ Faculty In-Charge for Continuous Ambient Air Quality Monitoring Station (CAAQMS), worth around Rs. 2 crores, sponsored by TNPCB
- ➤ Nodal Officer for the project on, "Monitoring of Aquatic Resources under National River Conservation Programme (NRCP) in Tamil Nadu" funded by TNPCB and CPCB
- ➤ Nodal Officer for the project on, "Biomonitoring of Water and Aquatic Resources under National Water Quality Monitoring Programme (NWMP) in Tamil Nadu" funded by TNPCB and CPCB
- ➤ Course Writer, PG Diploma in Environmental and Occupational Health, Indira Gandhi National Open University (IGNOU), New Delhi 2017
- ➤ Empanelment of Individual Domain Expert in Environment Management at ICFRE, Dehradun, 2018

#### Resource persons in various capacities

Number of Invited / Special Lectures delivered: 23

#### **Others**

- 1. No. of PhD Thesis evaluated: 39
- 2. No. of PhD Public Viva Voce Examination conducted: 27
- 3. Sequences submitted in GenBank: NCBI- 123; MTCC- 01; Metagenomics; 2

- ➤ Veeramani Veerasamy, Uma Maheswari Jagannathan, Sherry Davis Arakkala, Wasim Akthar Shafee, **Thamaraiselvi Kaliannan**, (2023), Exploring the bacterial genetic diversity and community structure of crude oil contaminated soils using microbiomics, *Environmental Research*, (236), 116779, (**Impact factor: 8.3**).
- Selvam Sathiyavimal, Seerangaraj Vasantharaj, **Thamaraiselvi Kaliannan**, Hakim AL Garalleh, Mazen Garaleh, Kathirvel Brindhadevi, Nguyen Thuy Lan Chi, Ashutosh Sharma, Arivalagan Pugazhendhi, (2023). Bio-functionalized copper oxide/chitosan nanocomposite using *Sida cordifolia* and their efficient properties of antibacterial, anticancer activity against on breast and lung. *Environmental Research*, (218), 114986, (**Impact factor: 8.3**).
- ➤ Selvam Sathiyavimal, Seerangaraj Vasantharaj, Thamaraiselvi Kaliannan, Arunachalam Chinnathambi, Sulaiman Ali Alharbi, Ramakrishnan Krishnan, Kathirvel Brindhadevi, Nguyen Thuy Lan Chi, Arivalagan Pugazhendhi, (2022). Synthesis of HAp/CS- SA composite for effective removal of highly toxic dyes in aqueous solution. *Food and Chemical Toxicology*, 113346, (Impact factor: 4.3).
- ➤ Subhashini, V. Veeramani, **K. Thamaraiselvi**, Aurelien Crochet, Priya Rose, Reji Philip, R. Ramesh Babu, K. Ramamurthi., (2021) Synthesis, growth and characterization of benzylideneaniline compounds: N-(4-bromobenzylidene)-4-fluoroaniline and N-(4-bromobenzylidene)-4-methoxyaniline. *Optical Materials*, 117, 111081 (**Impact factor: 3.080**)
- S. Sivakumar, B. Gowri Manogari, **K. Thamaraiselvi**, K. Kadirvelu, H. Sung-Chul, Y. Pyong-In, J. Seong-Ho, S. Jeong-Min., (2021) Assessment of foliar dust deposition and elemental concentrations in foliar dust and long rows of grand tamarind leaves along two major roads of Coimbatore, India, *Chemosphere*, 264, 128444 (**Impact factor: 7.086**)
- ➤ S. Sathiyavimal, S. Vasantharaj, V. Veeramani, S. Mythili, G. Rajalakshmi, K. Thamaraiselvi, F. A. Al-Misned, A. Pugazhenthi., (2021) Green chemistry route of biosynthesized copper oxide nanoparticles using *Psidium guajava* leaf extract and their antibacterial activity and effective removal of industrial dyes, *Journal of Environmental Chemical Engineering*, 9(2), 105033 (Impact factor: 5.909)
- Pugazhenthi, T. Sridevi Dhanarani, B. Gowri Manogari, V. Veeramani, K. Brindhadevi, N. A. Al-Dhabi, M. V. Arasu, K. Thamaraiselvi., (2021) Impact on degradation of antibiotics from poultry litter using Autothermal Thermophilic Aerobic Digestion (ATAD), Saudi Journal of Biological Sciences, 28 (1), 988-992 (Impact factor: 4.219)
- S. Sthiyavimal, S. Vasantharaj, **K. Thamaraiselvi**, A. Pugazhenthi., (2020) Ecobiocompatibility of chitosan coated biosynthesized copper oxide nanocomposite for enhanced industrial (Azo) dye removal from aqueous solution and antibacterial properties, *Carbohydrate Polymers*, 241 (1), 116243 (**Impact factor: 9.381**)
- S. Sathya, B. Gowri Manogari, K. Thamaraiselvi, S. Vadevi, K. Ruckmani, K. Pandima Devi., (2020) Phytol loaded PLGA nanoparticles ameliorate scopolamine-induced connitive dysfunctions by attenuating cholinesterase activity, oxidative stress and apoptosis in wistar rat, *Nutritional Neuroscience*, 1-17 (Impact factor: 4.028)
- Pugazhenthi, M. Dexilin, P. Deepika, K. Poornima Priyadharshini, S. Rajasree, N. A. Al-

- Dhabi, D. Veeramuthu, M. V. Arasu, **K. Thamaraiselvi.**, (2020) Antibiogram and plasimid profiling of beta-lactamase producing multi drug resistant *Staphylococcus aureus* isolated from poultry litter, *Journal of King Saud University-Science*, 32 (6), 2723-2727 (**Impact factor: 4.011**)
- ➤ Subashini, P. Priyadharsani, K. Thamaraiselvi, V. Veeramani, P. Rose, R. Philip, H. Stoeckli-Evans, K. Ramamurthi, R. Babu., (2019) 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*, 30, 2638-2646 (Impact factor: 2.478)
- ➤ K. Sowmya, R. Seenivasan, S. Subramanian, S. Chinnaraj, S. Rajasree, K. Brindhadevi, K. Thamaraiselvi., (2019) Optimization the sterilization methods for initiation of the five different clones of the Eucalyptus hybrid species. *Biocatalysis and Agricultural Biotechnology*, 22, 101361.
- ➤ K. Sowmya, R. Seenivasan, S. Subramanian, S. Chinnaraj, K. Brindhadevi, K. Thamaraiselvi., (2019) Minicutting A powerful tool for the clonal propagation of the selected species of the Eucalyptus hybrid clones based of their pulpwood studies, Biocatalysis and Agricultural Biotechnology, 22, 101357
- ➤ Gowri Manogari, A. Murugadas, P. Prakash, A. Pugazhendhi, S. K. Smita, N. A. Al-Dhabi, A. M. Ghilan, M. V. Arasu, **K. Thamaraiselvi.**, (2019) Clinically important microbial diversity and its antibiotic resistance pattern towards various drugs, Journal of Infection and Public Health, , 12(6), 783-788 (**Impact factor: 3.718**)
- ➤ Murugadas, D. Mahamuni, N.D. Shrinithivihahshini, **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*, 17, 680-684.
- ➤ 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*, 4, 505-509.
- ➤ 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
- ➤ 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), 106-109.
- ➤ 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 (**Impact factor: 2.478**)
- ➤ 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: 2.520)

- ➤ 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: 2.395**)
- 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: 9.297).
- ➤ 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.
- ➤ 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: 4.223**).
- ➤ Pugazhendhi, A., Sridevi Dhanarani, T., Shankar, C., Prakash, P., Ranganathan, K., Rijuta Ganesh Saratale, & **Thamaraiselvi, K.,** (2017), Electrophoretic pattern of glutathione Stransferase (GST) in antibiotic resistant Gram-positive bacteria from poultry liter, *Microbial Pathogenesis*, 110, 285-290 (**Impact Factor: 3.738**)
- ➤ 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: 4.220**)
- ➤ 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: 2.478**).
- ➤ 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: 5.876**)
- 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: 5.133**)
- ➤ 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 thermophelic aerobic digestion: A remedy for solid waste management, *Management of Environmental Quality: An International Journal*, 27, 4- 14 (**Impact Factor: 0.652**)
- ➤ 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: 4.035**).
- ➤ Valsala, H., Prakash, P., Elavarasi, V., Pugazhendhi, A., & Thamaraislevi, K., (2014),

- Isolation of *Staphylococcus nepalensis* for Degradation of pyrene from Diesel Contaminated Site, *International Journal of Computer Applications*, 2, 1-24 (**Impact Factor: 0.220**)
- 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: 0.220)
- 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: 0.220)
- ➤ 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: 0.220**).
- ➤ 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: 0.601**).
- 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: 2.253**)

# **Book Chapters**

- ➤ Subpiramaniyam Sivakumar, **K. Thamaraiselvi**, Duraisamy Prabha, Thyagarajan Lakshmi Priya, Hong Sung-Chul, Yi Pyoung-In, Jang Seong-Ho, And Suh Jeong-Min (2022). Vermicomposting: An efficient technology for the stabilization and bioremediation of pulp and paper mill sludge. Advances in Environmental Pollution Research Series Cost Effective Technologies for Solid Waste and Wastewater Treatment, Elsevier, B978-0-12-822933-0.09992-7, 09992.
- ➤ M. Dexilin, B. Gowri Manogari, and **K. Thamaraiselvi** (2021). Optimization of Culture Conditions for Enhanced Decolorization of Azo Dyes by *Aspergillus flavus* Isolated from Dye Contaminated Soil.Bioremediation and Green Technologies, pp.143-154. Springer . ISBN: 978-3-030-64121-4.
- ➤ 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.
- ➤ 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.
- 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.
- ➤ 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.
- ➤ Kais Ghedira, Houcemeddine Othman, Taieb Saied, Zouhair Majdi Baccar, Faouzi Hosni, Ahmed Hichem Hamzaoui, **Kaliannan Thamaraiselvi**, Hafedh Abedlmelek, 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.
- ➤ 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	Monitoring of Aquatic Resources under	2017
(CPCB), Delhi and Tamil Nadu	National River Conservation	
Pollution Control Board (TNPCB)	Programme (NRCP) in Tamil Nadu	
Central Pollution Control Board	Biomonitoring of Water and Aquatic	2017
(CPCB), Delhi Tamil Nadu	Resources under National Water	
Pollution Control Board (TNPCB)	Quality Monitoring Programme	
	(NWMP)	
Tamil Nadu Pollution Control	Continuous Ambient Air Quality	2016
Board (TNPCB)	Monitoring Station (CAAQMS)	