Curriculum Vitae of Dr. Vasanthy Muthunarayanan



Dr. Vasanthy Muthunarayanan Professor Department of Environmental Biotechnology School of Environmental Sciences Bharathidasan University Tiruchirappalli – 620 024 Tamil Nadu. India. <u>Mobile</u> : +919443022816 <u>E-mail</u> : drvasanthy02@gmail.com/vasanthy@bdu.ac.in

A. Personal Details:

Full name	: Vasanthy Muthunarayanan
Title	: Professor
Nationality	: Indian
Date of Birth	: 17.04.1966

- Place of Birth : Tirunelveli, Tamil Nadu
- Family : One Child: Son (23 yrs)

Home Address	: Plot No.65, Aashritha Gateway	
	120 FT-IT Park Road	
	Gundur	
	Tiruchirappalli – 620 007	
	Tamil Nadu. India.	
	Mobile: 094430 22816	

B. Academic Qualifications:

1991 - 1997 Thesis title:	Ph.D., Department of Environmental Science, Bharathiar University, Coimbatore, India. Removal of Reactive dyes from aqueous solutions and dyeing industry effluent by Cashewnut hull carbon. supervised by Professor Dr. P. Lakshmana Perumalsamy.
1989 - 1990	M.Phil., Environmental Science (First Class), Bharathiar University, Coimbatore, India.
1986 - 1988	M.Sc., Environmental science (First Class / Gold Medal), Bharathidasan University, Tiruchirappalli, India.
1983 - 1986	B.Sc., in Chemistry (First Class), Bharathidasan University, Tiruchirappalli, India.

C. Appointments:

Position	Date	Comments
Department Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.	20.07.2023 onwards	Professor
Department Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.	04.07.2018 onwards	Associate Professor
Department Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.	04.07.2015 to 03.07.2018	Assistant Professor Grade – III
Department Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.	From 04.07.2010 to 03.07.2015	Assistant Professor Grade - II
Department Environmental Biotechnology, Bharathidasan University, Tiruchirappalli, Tamilnadu, India.	04.07.2008 - 03.07.2010	Assistant Professor Grade - I

Department of Environmental sciences, Government Arts College, Ariyalur, Tamilnadu	28.08.2004	Senior lecturer
Department of Environmental sciences, Government Arts College, Ariyalur, Tamilnadu	28.08.2000	Lecturer
Department of Microbiology, Sri Ramakrishna College of Arts and science for women, Coimbatore	20.8.1998	Lecturer
Department of Environmental sciences, St. Joseph's college, Bangalore	06.07.1988	Lecturer

D. Esteem indicators and Awards:

2015 - 2017 **Rank 1- Recommended for UGC Research award** by University Grants Commission, New Delhi on 20.2.2015.

2012 Awarded "**STATE ENVIRONMENTAL MANAGEMENT AWARD-2010**"- by Tamil Nadu Government on 05.04.2012

2005 Awarded **AQUAGUARD YOUNG SCIENTIST- 2005** at Bharathiar University, Coimbatore, Tamil Nadu, India.

1990 Cleared State Level Eligibility Test in Life sciences conducted by Madras University, Chennai, Tamil Nadu, India.

1988 University First Rank (Bharathidasan University), Tiruchirappalli, Tamil Nadu, India.

E. Memberships and Recognitions:

31.07.2018 -	Academic Council University Nominee, Seethalakshmi Ramaswami College for women, Tiruchirappalli – 620 002.
01.08.2018-	BOS University Nominee, Dept. of Biotechnology, Seethalakshmi Ramaswami College for women, Tiruchirappalli – 620 002.
10.5.2018- 09. 5. 2021	BOS University Nominee, Dept. of Biotechnology, Dhanalakshmi college of Arts and Science for women, Perambalur- 621 212.
2016 -	Life Member and Fellow, Bose Science society, Pudukkottai-620 003 from 23.3.2016
2015 -	Member, Green campus Initiative, Bharathidasan University, Trichy
2015 -	Served as Co-coordinator of Refresher course in Environmental Sciences from 28.2.2015 – 20.3.2015

- 2014 Serving as a member of Board of studies of P.S.G. College of Arts and Science, Coimbatore, Tamilnadu for M.Sc., Environmental Sciences.
- 2014 Present Serving as a member of Board of studies of J.J. College of Arts and Science, Pudukkottai for M.Sc., Environmental Sciences.
- 2012 Present Serving as a member of Board of studies of Bishop Heber College for M.Sc., Biotechnology.
- 2011 2013 Academic council member for NEHRU MEMORIAL COLLEGE, Puthanapatti by the Bharathidasan University, Tiruchirappalli.
- 2012 Present Membership of International Society of Waste Management, Air and Water.
- 2009 2011 Member of Board of studies of Bharathidasan University for M.Sc., Env-Sciences from 2009 onwards.
- 2007 2009 Member of Board of studies of Thiruvalluvar University for B.Sc., Env. Management.
- 2005 2007 Member, Board of studies of Bharathidasan University for M.Sc., Env. Sciences under choice based credit system.
- Life member of Society of Sciences, Karad, India from 2005onwards.
- 2004 Life member of Society of Environmental Sciences, Karad, India from 2004 onwards.

F. Research grants awarded:

S.	Duration	Source of	Project Title	Role	Duration	Total
No	(Year)	Funding			(months)	Value (Rs)
01	2015 -	University	Studies on the	Principal	24	(3,00,000+
	2017	Grants	Biomolecules of the	Investigator		13,55,050+
		Commission,	traditional seeds			13,05,050)
		New Delhi	employed for water			
			purification-UGC			
			Research award			
02	2014 -	Department of	Quantification and	Principal	36	20,00,000
	2017	Science and	characterization of	Investigator		
		Technology,	disinfection by-products			
		New Delhi	in drinking water from			
			various places of			

Tamilnadu

03	2010 - 2013	Ministry of Environment and Forests, New Delhi	Utilization of soil macro and microorganisms for the decomposition of cellulosic waste materials	Principal Investigator	36	30, 04,080
04	2010 - 2013	University Grants Commission, New Delhi	Nitrate removal from drinking water using phytochemical components	Principal Investigator	36	11,15,567
05	2009 - 2012	Bharathidasan University, Tiruchirappalli	Solid waste management inside the university campus	-	36	3,00,000
06	2007	state council	Ambient air quality monitoring in and around Ariyalur, cement city.	Researcher	03	10,000
07	1.03.2004	University Grants Commission, New Delhi	Treatment of distillery wastewater and recycling of the treated effluent for the growth of horticultural plants.	Principal Investigator	36	Rs 60,000

G. Co-author in Books:

- 1. "A Comprehensive Text Book for Environmental Studies" in English by New Century Book House (P) Ltd., 41-B, SIDCO Industrial Estate, Chennai during September 2021. ISBN:978-81-234-112-2.
- 2. Organic Pollutants -Toxicity and Solutions in English by Springer International Publishing, Switzerland AG during September 2021. ISBN: 978-3-030-72440-5.
- 3. "Glimpses of Environmental Sciences" in English by Notion Press, Chennai during August 2018. ISBN No:978-93-88263-01-6.

- 4. Study material for M.Sc., Environmental Sciences (Distance Education), Bharathiar University, Coimbatore. Lesson: Environmental Engineering. Year 2008.
- 5. Study material for M.Sc., Environmental Sciences (Distance Education), Bharathiar University, Coimbatore. Lesson: Instrumental analysis. Year 2007.
- 6. "Environmental studies" in Tamil by Bharathidasan University by 2005.
- 7. "Environmental studies" in English by Bharathidasan University by 2004.

CHAPTERS IN BOOKS PUBLISHED

- Selvakumar Muniraj1, Vasanthy Muthunarayanan, Sivasankar Venkataraman, T.G. Sunitha, C. Thamaraiselvi (2023). Drinking water treatment with natural coagulants—a promising alternative for sustainable water usage: Resource Recovery in Drinking Water Treatment. DOI: https://doi.org/10.1016/B978-0-323-99344-9.00002-5. Elsevier Inc,Pp 117-127, ISBN: 978-0-323-99344-9.
- Shanthi TR, M. Vasanthy, and A. A. Mohamed Hatha. (2021). Bioremediation of Lindane-Contaminated Soil and Water Ecosystems: A Review. Organic Pollutants Toxicity and Solutions. Springer, Pp-199-227, ISBN 978-3-030-72441-2.
- 3. Swabna, V and **M. Vasanthy**. (2021). DNA Damage and Effects of Antioxidant Enzymes in Earthworm (*Eudrilus eugeniae*) Exposed to Contaminated Soil with Organic Environmental Pollutant: Triclosan. Organic Pollutants Toxicity and Solutions. Springer, Pp- 279-292. ISBN 978-3-030-72441-2.
- 4. Arumugam Karthika, R. Seenivasagan, and **M. Vasanthy**. (2021). A Review on Technological Approach for Obtaining Nutrient from Solid Waste. Organic Pollutants Toxicity and Solutions. Springer, Pp- 475-502. ISBN 978-3-030-72441-2.
- Ravindran Balasubramani, Vasanthy Muthunarayanan, Karthika Arumugam, Rajiv Periakaruppan, Archana Singh, Soon Woong Chang, Thamaraiselvi Chandran, Gopal Shankar Singh and Selvakumar Muniraj. (2020). Treatment of Waste, Waste Valorisation: Waste Streams in a Circular Economy, John Wiley & Sons, Inc. Pp 33-49. doi.org/10.1002/9781119502753.ch3.
- Susila Sugumar, Selvakumar Muniraj, Tamilselvi Duraisamy, Ramarajan Selvam, Vasanthy Muthunarayanan. 2020. Toxicity and Histopathological Effect of Distillery Industrial Sludge on the Earthworm *Eudrilus eugeniae*. *Earthworm Assisted Remediation of Effluents and Wastes. Springer*, Pp- 269-279. ISBN 978-981-15-4522-1.
- 7. Susila Sugumar, Tamilselvi Duraisamy, Selvakumar Muniraj, Ramarajan Selvam, Vasanthy Muthunarayanan. 2020. Influence of Distillery Sludge-Based

Vermicompost on the Nutritional Status of *Rapanus sativus L.* (Radish). *Earthworm Assisted Remediation of Effluents and Wastes. Springer*, Pp-69-83. ISBN 978-981-15-4522-1.

- 8. **Vasanthy Muthunarayanan**, Gueguim kana Evariste Bosco, Thamaraiselvi Chandran, Tamilselvi Duraisamy, Selvakumar Muniraj, Yeshona Sewsynker-Sukai, Preshanthan Moodley, and Zanenhlanhla Gumbi. 2018. Biologically Renewable Resources of Energy: Potentials, Progress and Barriers. *Microbial Fuel Cell Technology for Bioelectricity. Springer*, Pp-1 – 22. ISBN 978-3-319-92904-0 (eBook).
- A. Karthika, R. Seenivasagan, R. Kasimani, Olubukola Oluranti Babalola and M. Vasanthy. The Role of *Eudrillus eugenia* in the Degradation of Paper Cup Waste and the Morphological, Physiological and Histological Changes in the Organism. *Bioremediation and Sustainable Technologies for Cleaner Environment. Springer*, Pp-65 78. ISBN 978-3-319-48439-6 (eBook).
- 10. Mylsamy Prabhakaran, Venkataraman Sivasankar, Kiyoshi Omine, and **M. Vasanthy**. 2017. Microalgae Biofuels: A Green Renewable Resource to Fuel the Future. *Green technology and Environmental Sustainability*. *Springer*, Pp-105 130. ISBN 978-3-319-50654-8 (eBook).
- M. Vasanthy, V. Sivasankar, M. Prabhakaran, A. Karthika, D. Tamilselvi and Kiyoshi Omine. 2017. Eco-friendly Post-consumer waste management utilizing Vermitechnology. Green technology and Environmental Sustainability. *Springer*, Pp-259-287. ISBN 978-3-319-50653-1. (eBook).
- Vasanthy, M., Thamarai, C., Swabna, V. and A. Karthika. 2014. Reuse and Recycling of Treated Distillery Spent Wash: A Novel Approach. Recent Trends in Life Sciences, M.H. Fulekar (Author, Editor) and R.K. Kale (Author, Editor) I K International Publishing House, Pp- 199- 218. ISBN-13: 978-9382332251.

H. Articles in Journals:

- Thamaraiselvi C, S.T. Athira, Santina , Kala K , Vasanthy M , Manikandan E , V. Rajakannan , Mahmoud Nasr, Murugesan Chandrasekaran g, Woo Jin Chung , Soon Woong Chang , Balasubramani Ravindran, (2024) Effective reduction of carboncontaining pollutants in coffee cherry pulping wastewater using natural polysaccharide from *Tamarindus indica* L. seeds. Environmental Research: 259 119527. https://doi.org/10.1016/j.envres.2024.119527
- B Sowmiya Rajalakshmi, A Annes Silva Fathima, B Sunitha Jasmine, M Vasanthy, C Thamarai Selvi, Rajinikanth Rajagopal, Ramsha Khan, Ashraf Atef Hatamleh, Bassam Khalid Alnafisi, Mansour K Gatasheh, Soon Woong Chang, Balasubramani Ravindran (2022). Pollutant removal from cheese processing effluent using effective indigenous natural scavengers. Environmental Monitoring and Assessment. 2 Oct 22;195(1):12.doi: 10.1007/s10661-022-10535-5

- 2. Sofiavizhimalar asaithambi A, **Vasanthy Muthunarayanan**, Thamaraiselvi C, Biruntha M, Paul JJ, Thirupathi A, Chang SW, Xu Z, Al-Rashed S, Munuswamy-Ramanujam G, Ravindran B. (2022). Greener production of compost from agricultural biomass residues amended with mule dung for agronomic application. Chemosphere, 132561.
- 3. B Sowmiya Rajalakshmi, **Vasanthy Muthunarayanan**, V Rajakannan, Balasubramani Ravindran, Soon Woong Chang, Murugesan Chandrasekaran, Mona S Alwahibi, M Ajmal Ali, Siham Albuluwi, C Thamarai Selvi. (2021). Defluoridation of water with a coagulant, *Strychnos potatorum* L. seed–agglutinin, Environmental Technology & Innovation, 101983.
- Karunakaran Gowri Ahila, Balasubramani Ravindran, Vasanthy Muthunarayanan, Dinh Duc Nguyen, Xuan Cuong Nguyen, Soon Woong Chang, Van Khanh Nguyen and Chandran Thamaraiselvi. (2021). Phytoremediation Potential of Freshwater Macrophytes for Treating Dye-Containing Wastewater, Sustainability, 13 (1), 1-13, doi.org/10.3390/su13010329.
- Ancy Jenifer A, Vasanthy. M, Thamaraiselvia C, Ravindran B, Woo Jin Chung, Soon Woong Chang. (2021). Treatment of coffee cherry pulping wastewater by using lectin protein isolated from *Ricinus communis* L. seed. Journal of Water Process Engineering, 39, doi.org/10.1016/j.jwpe.2020.101742.
- 6. Selvakumar Muniraj, Ramarajan Selvam, Tamilselvi Duraisamy and **Vasanthy Muthunarayanan.** (2020). Hydrochemical Analysis and Evaluation of Groundwater Quality in Solid Waste Dumping Site in Tiruchirappalli, India. The Indian Geographical Journal, 95 (2), 233-240.
- T.G. Sunitha, V. Monisha, S.Sivanesan, M. Vasanthy, M. Prabhakaran, K. Omine, V. Sivasankar and A. Darchen. (2020). Micro-plastic pollution along the Bay of Bengal coastal stretch of Tamil Nadu, South India. Science of the Total Environment, 756, doi.org/10.1016/j.scitotenv.2020.144073.
- 8. Ahila Karunakaran Gowri, Margaret Jenifer Karunakaran, **Vasanthy Muthunarayanan**, Balasubramani Ravindran, Phuong Nguyen-Tri, H. Hao Ngo, Xuan-Thanh Bui, X. Hoan Nguyen, D. Duc Nguyen, S. Woong Chang and Thamaraiselvi Chandran. (2020). Evaluation of bioremediation competence of indigenous bacterial strains isolated from fabric dyeing effluent. Bioresource Technology Reports, 11, 1-7. DOI: doi.org/10.1016/j.biteb.2020.100536.

- Ancy Jenifer, Thamaraiselvi Chandran, Vasanthy Muthunarayanan, Balasubramani Ravindran, V. Khanh Nguyen, X. Cuong Nguyen, Xuan-Thanh Bui, H. Hao Ngo, X. Hoan Nguyen, S. Woong Chang and D. Duc Nguyen. (2020). Evaluation of efficacy of indigenous acidophile- bacterial consortia for removal of pollutants from coffee cherry pulping wastewater. Bioresource Technology Reports, 11, 1-9. DOI: doi.org/10.1016/j.biteb.2020.100533.
- Karthika, A., R. Seenivasagan, R. Kasimani, O.O. Babalola and M. Vasanthy. (2020). Cellulolytic bacteria isolation, screening and optimization of enzyme production from vermicompost of paper cup waste. Waste management, 116, 58-65. DOI: doi.org/10.1016/j.wasman.2020.06.036.
- 11. Selvakumar Muniraj, Logeswari Ravi, Harisankar Ganesh, Murugavel Sethuraman and **Vasanthy Muthunarayanan**. (2020) Effective Utilization of Fly Ash for Vermicompost Production by Employing *Eisenia fetida*. Nature Environment and Pollution Technology, 19 (02), 687-694. Doi.org/10.46488/NEPT.2020.v19i02.023.
- Thamaraiselvi Chandran, Sofiavizhimalar asaithambi, Nandhini Senthilkumar, Vasanthy Muthunarayanan, Ravichandran Subramanian and Boselin prabhu S.R. (2020) Cost effective and natural plant based coagulant for removal of chloride from potable water. Asian journal of Chemistry, 32 (4).pp. 871-875. April-2020
- 13. Swabna Vivekanandam, Vasanthy Muthunarayanan, Selvakumar Muniraj, Lydia Rhyman, Ibrahim A. Alswaidan and Ponnadurai Ramasami. (2018). Ingenious bioorganic adsorbents for the removal of distillery based pigment-melanoidin: preparation and adsorption mechanism, Journal of Macromolecular Science, Part A: Pure and Applied Chemistry, 56 (1), 52-62., Doi.org/10.1080/10601325.2018.1527180.
- 14. Ramarajan Selvam, Selvakumar Muniraj, Tamilselvi Duraisamy and **Vasanthy Muthunarayanan.** 2018. Identification of disinfection by-products (DBPs) halo phenols in drinking water. Applied Water Science. 8:135, 1-8. ISSN: 2190-5495.
- 15. Ramarajan Selvam, Susila Sugumar, Tamilselvi Duraisamy and **Vasanthy Muthunarayanan**. 2018. Trace minerals pollution in south indian branded tea, and from the tea waste disposal sites. Eurasian Journal of Soil Science. 7 (3): 230 237. ISSN: 2147-4249.
- 16. Ahila KG, **Vasanthy Muthunarayanan**, Thamaraiselvi C. 2018. Preparation of iron magnetic nanoparticles using aquatic macrophyte Salvinia adnata Desv and its

application in dye decolorization. International Journal of Advanced Research and Development.3 (2) :175-179.

- 17. Arumugam Karthika, Renganathan Seenivasagan, Olubukola Oluranti Babalola and Muthunarayanan Vasanthy. 2017. Investigation on paper cup waste degradation by bacterial consortium and *Eudrillus eugeinea* through vermicomposting. Waste Management. 74, 185 – 193. ISSN: 0956-053X.
- 18. Tamilselvi Duraisamy, Ramarajan Selvam, Selvakumar Muniraj, Habibunisha Mubarakali and Vasanthy Muthunarayanan. 2017. Deportation of melanoidin in distillery spent wash using bacterial consortia – confirms through structural changes and AO-EB fluorescence. International Journal of Development Research.07 (09), pp.15392-15400, September, 2017. ISSN: 2230-9926.
- 19. Karthika Arumugam, **Vasanthy Muthunarayanan**, Seethdevi Ganesan, Swabna Vivek. 2014. Efficacy of Vermicomposting for Recycling Tectona grandis and Casuarina Leaf Litter for Organic Fertilizer Production. Indian Journal of Advances in Chemical Science 3(2), 122-127.
- 20. Karthika Arumugam, Seethadevi Ganasen, **Vasanthy Muthunarayanan**, Swabna Vivek, Susila Sugumar, Vivekanadhan. 2014. Potentiality of *Eisenia fetida* to degrade disposable paper cup waste- An Eco-friendly Solution to Solid Waste Pollution. Environmental Science and Pollution Research. 22 (4), 2868–2876. DOI 10.1007/s 11356-014-3456-9.
- 21. Karthika Arumugam, Anbuarasi Venkatachalam, **Vasanthy Muthunarayanan**, Seetha Devi Ganesan, Swabna Vivek and Susila Sugumar 2014. Role of Microorganisms in Temple wastes Management Assisted by *Eudrillus eugenia*. Malaysian Journal of Science 33(1) 50-62.
- 22. Swabna Vivekanandam, **Vasanthy Muthunarayanan**, Karthika Arumugam, Santhiya Mahalingam .2014. Deportation of Distillery Melanoidins Using Plant Based Adsorbents, Biosorbents and Microbial Inoculants-A Comparative Assessment. Indian Journal of Advances in Chemical Science 2(3) (2014) 194-203.
- 23. Karthika Arumugam, **Vasanthy Muthunarayanan**, Seethadevi Ganasen, Susila Sugumar and Swabna Vivek. 2014. Post-consumer waste management by virtue of vermicomposting with the help of leaf litter. Indian Journal of Chemical, Biological and Physical Sciences. 4(2):1765-1772.

- 24. C.Thamaraiselvi and **M. Vasanthy**, 2013. Study on management of sugarcane industry solid waste using the technique of composting. J. Nature, Environment and Pollution Technology.12(3):471 74.
- 25. Karthika Arumugam, **Vasanthy Muthunarayanan**, Seethadevi Ganasen, Susila Sugumar and Swabna Vivek. 2013. Dynamics of Biological, Physical and chemical parameters during vermicomposting of market waste mixed with cow dung. International Journal of Plant, Animal and Environmental Sciences .3(4):187-194.
- 26. Susila Sugumar, Ackmez Mudhoo, Seetha Ganesan, Karthiga Arumugam, Aasha Madiq Ravi and **Vasanthy Muthunarayanan**. 2012. Vermicomposting of Vegetable and Fruit wastes—Effects of Bioaugmentation on process parameters and manural value of Composts. The Journal of Solid Waste Technology and Management. (38) 4:240 248.
- 27. Seetha devi,G, Karthiga, A, Susila,S and **Vasanthy Muthunarayanan**. 2012. Bioconversion of fruit waste into Vermicompost by employing *Eudrillus eugeniae* and *Eisenia fetida*. International Journal of Plant, Animal and Environmental Sciences. 2(4):245-252.
- 28. Mayilsamy, M, M.Santhiya, V.Swabna and **Vasanthy Muthunarayanan**. 2011. Utilization of Citrus medica for the reduction of nitrate-nitrogen from aqueous solution. Malaysian Journal of Science. 30(3):216 - 224.
- 29. **Vasanthy Muthunarayanan**, Santhiya. M, Swabna. V and Geetha, A. 2011. Phyto degradation of textile dyes by Water Hyacinth (*Eichhornia Crassipes*) from aqueous dye solutions. International Journal of Environmental Sciences.1 (7): pp 1702-1717.
- 30. **Vasanthy Muthunarayanan**. M, Santhiya.M, Thivya.S. 2011. Utlization of *Trigonella foerum graceum* (Fenugreek) as a coagulant for the treatment of drinking water. Ind. jour. of Env. and Ecoplanning.18 (2 & 3):225 -230.
- Vasanthy. M, A.Geetha, M. Jeganathan and A.Anitha.2009. A study on drinking water quality in Ariyalur area. J. Nature Environment and Pollution Technology. 8(2):253-256.
- 32. **Vasanthy. M**, A. Geetha and G.Seetha devi.2008. Removal of reactive dye (Red RB) by the bacterial species isolated from dyeing industry effluent. J. Nature Environment and Pollution Technology., 7(4):683 686.

- 33. **Vasanthy. M**, S. Murugavel and A. Geetha. 2008. Effective treatment methods of COD and TDS from dyeing industry effluent. J. Nature Environment and Pollution Technology. 7(3): 509-512.
- 34. **Vasanthy.M** and M. Jeganathan.2007. Ambient air quality in terms of Nitrogen di oxide NOx in and around Ariyalur, perambalur dt, tamilnadu. Poll Res.,27(1):165-167.
- 35. **Vasanthy.M**, R.Vel murugan and Babu Rajendran. 2007. Ambient air quality scenario at Port Blair, Andaman Island. J. Nature Environment and Pollution Technology. 6(3): 437-441.
- 36. **Vasanthy.M** and A. Geetha, 2007. Phytoremediation of aqueous solution containing direct dye E dye with *Hydrilla verticillata*. Nature Environment and Pollution Technology. 6(3): 417-420.
- 37. **Vasanthy.M**, C. Thamaraiselvi.2007. Removal of the nitrate from aqueous solutions using powdered peel of *Citrus reticulate* fruits. Nature Environment and Pollution technology. 6(4):737-740.
- Vasanthy.M, C. Thamaraiselvi and M. Sangeetha.2007. Effective treatment of distillery spent wash using selective coagulants & Oxidising agents. J. of Ecobiology. 2(12):141-145.
- 39. **Vasanthy.M,** C. Thamaraiselvi and R. Mangalasundari.2006. Effective treatment of diluted with sugar effluent by using chemical agent. Jr. of Nature, Environment and Pollution Tech., 5(3): 361-365.
- 40. **Vasanthy.M,** Thamaraiselvi.C and N. Narmatha 2006. Effect of untreated distillery effluent of growth and Biochemical character of Brassica Juncea, Pollution Research. 25(2):363-365.
- 41. **Vasanthy.M** and Thamaraiselvi.C 2006. Bio remediation of Distillery spent wash using indigenous Microbial strains low cost adsorbent CHC, J. Ecotoxicol. Environ. Monit,16(4):301-305.
- 42. **Vasanthy.M** and Sangeetha.M. 2006. Effective Heavy Metal Cr(VI) removal using low cost adsorbent *Prosopis spicigera*. J of Ecotoxicology and Environmental Monitoring., 16(3);251-257.

- 43. **Vasanthy.M**, C.Thamaraiselvi and A.Ramadoss. 2005. Utilization of Garden Waste for the production of vermicompost, J. of Ecotoxicology and Environmental Monitoring 15(3): 207-211.
- 44. **Vasanthy.M** and M. Sangeetha, 2004. Effective heavy metal removal using bacterial strains. Indian Journal of Environment and ecoplanning -8(3):787-792.
- 45. **Vasanthy.M**, M. Sangeetha and A. Geetha, 2004. Removal of mixed dye (PBBMR & POM2R) using *Bacillus SP.*, S4 & *Alkaligenes Sp.*, Asian Journal of Microbiology, Biotechnology and Environmental Science. 6(4): 579 581.
- 46. **Vasanthy.M**, M. Sangeetha and R.Kavitha, 2004. Positive utilisation of mixture of Sorghum Vulgare spike carbon, Flyash and CAC for the removal of Cr from synthetic effluents, Indian journal of Environmental Protection .24(7):513-516.
- 47. **Vasanthy.M**. 2004. An investigation on removal of chromium(V1) using Bacterial Starins, Asian journal of Microbiology, Biotechnology & Environmental science.6(4):583-586.
- 48. **Vasanthy.M** and Sangeetha.M. 2004. Effective Heavy Metal Cr(VI) removal using bacterial strains. Indian J.Environ. and Ecoplan. 8(3);787-792.
- 49. **Vasanthy.M**, Thamaraiselvi.C and R. Sathya.2003. Effect of untreated distillery effluent on growth and biochemical characters of *Trigoncella foenum*, J. Ecology, Environment and conservation 10(3):239-242.
- 50. **Vasanthy.M**, M. Sangeetha and C. Kavitha, 2003. Removal of chromium from aqueous solution using a mixture of flyash and activated carbon, Indian journal of Environmental Protection, 23(12):1321-1325.
- 51. **Vasanthy.M**, and M. Murugasen, 2003, Biosorption of Chromium using *Pseudomonas Sp.* S5, J of Ecotoxicology and Environmental Monitoring 13(1): 69 71.
- 52. **Vasanthy.M**, M. Sangeetha and C. Thamarai Selvi, 2003 "Decolourisation of reactive dye (PBBMR) by using bacterial strains, Indian Journal of environment and eco planning, 7(1): 171-174.
- 53. **Vasanthy.M**. and P. Lakhsmanaperumalsamy 2000,' Copper accumulation by Pseudomonas VL-61. Indian journal of Environmental Protection, 10(2): 280 –283.

- 54. **Vasanthy**, **M**. and P.Lakhsmanaperumalsamy , 1998. "Removal of reactive dyes from aqueous solution using cashewnut hull carbon as an adsorbent., Journal of Nature, Environmental and pollution ,5(1);49-58.
- 55. **Vasanthy**, **M**. and P. Lakshmanaperumalsamy, 1998 "Effect of untreated and treated dyeing industry wastewater on germination and biochemical characters of maize (*Zeo mays* L)". Pollution Research ,17(2):173-176.
- 56. **Vasanthy, M**. S. Hemalatha and P. Lakshmanaperumalsamy 1997. "Biosorption of Chromium by *Bacillus sp.* HL-1 and Pseudomonas sp. HL –2 species. J. Eco. Toxicology and Env. Monitoring ,7:181-184.
- 57. **Vasanthy, M** and P. Lakshmanaperumalsamy ,1993, "Removal of Chromium using various adsorbents J. Eco. Toxicology and Env. Monitoring. 3;47-50.

Papers Published in Proceedings:

- 1. Manjula Purushothaman, Mohd. Gousuddin Inamdar and **Vasanthy Muthunarayanan**. (2020) Socio-economic impact of the e-waste pollution in India, Materials Today: Proceedings, 1-4. Doi.org/10.1016/j.matpr.2020.05.242.
- Sridhar Kesavan, Mohd. Gousuddin Inamdar and Vasanthy Muthunarayanan. (2020) Concentration of benzene, toluene, napthalene and acenaphthene on selected bacterial species, Materials Today: Proceedings, 1-7. doi.org/10.1016/j.matpr.2020.05.241.
- 3. Jeganathan Muthaiyan, Mohammed Saleh Nusari and **Vasanthy Muthunarayanan**. (2020) Determination of physical and chemical materials of marine water, Materials Today: Proceedings, 1-10. Doi.org/10.1016/j.matpr.2020.05.243.
- Satheesh Kumar Purushothaman, Janani Selvam and Vasanthy Muthunarayanan. (2020) Ambient indoor air pollution and its consecutive effect on environment materials and health, *Materials Today: Proceedings*, 1-5. Doi.org/10.1016/j.matpr.2020.05.483.
- 5. Swabna Vivekanandam, Selvakumar Muniraj and **Vasanthy Muthunarayanan**. (2020). Melanoidin Induced DNA Damage and Effects on Antioxidative Enzymes in Earthworm (*Eudrilus eugeniae*), Bioresource Utilization and Bioprocess, Pp 223-243. ISBN 978-981-15-1606-1.
- Sowmiya Rajalakshmi. B, Thamaraiselvi. C and Muthunarayanan Vasanthy. (2019). Natural Coagulants—An Alternative for Conventional Chemical Coagulants for Potable Water Purification. Waste Water Recycling and Management. Pp 265 –284. ISBN 978-981-13-2619-6.

- Selvakumar Muniraj and Vasanthy Muthunarayanan. (2019). Innovative Usage of Traditional Seeds for Drinking Water Purification. Waste Water Recycling and Management. Pp 285 – 304. ISBN 978-981-13-2619-6.
- 8. Thamaraiselvi, C. A. Ancy Jenifer and **Muthunarayanan Vasanthy**. (2019). Coagulation Performance Evaluation of Natural and Synthetic Coagulants for the Treatment of Sugar Wash. Waste Water Recycling and Management. Pp 53–64. ISBN 978-981-13-2619-6.
- 9. Vaishnavi, S. Thamaraiselvi, C and **Muthunarayanan Vasanthy**. (2019). Efficiency of Indigenous Microorganisms in Bioremediation of Tannery Effluent. Waste Water Recycling and Management. Pp 151–164. ISBN 978-981-13-2619-6.
- Ahila, KG, Vasanthy Muthunarayanan and C. Thamaraiselvi. 2018. Green Synthesis of Magnetic Iron Nanoparticle Using *Moringa oleifera* Lam Seeds and Its Application in Textile Effluent Treatment. Utilization and Management of Bioresources, 315 324. ISBN 978-981-10-5349-8 (eBook).
- Ramarajan Selvam, Tamilselvi Duraisamy and Vasanthy Muthunarayanan. (2018). Chromium (VI) Reduction from Tannery Wastewater and Aqueous Solutions by Adsorption and Biosorption. Waste Management and Resource Efficiency. pp 1237-1251. ISBN: 978-981-10-7290-1.
- 12. Sowmiya Rajalakshmi, B, Ancy Jenifer, A, Ahila KG, **Vasanthy Muthunarayanan** and Thamaraiselvi, C. (2018). Effective Removal of TDS and COD from Sugar Effluent Using Green Synthesized Magnetic Iron Nanoparticle with Trigonella foenum-graecum Seed Mucilage. Waste Management and Resource Efficiency. Pp 961-973. ISBN: 978-981-10-7290-1.
- 13. **Vasanthy Muthunarayanan**, Karthika Arumugam, Tamilselvi Duraisamy. 2016. Possibility of Eco Friendly Postconsumer Waste Management. Procedia Environmental Sciences, 35: 416 – 424.
- 14. Vasanthy Muthunarayanan, A. Karthika, G. Seethadevi. 2011. Determination of The Potentiality of *Eisenia foetida* to Degrade Disposable Paper Cup Waste- A Solution to Solid Waste Pollution. Presented and Published in the Proceedings of the International Conference on Solid Waste 2011 Moving Towards Sustainable Resource Management. Hongkong. 2nd to 6th May,2011.
- 15. **Vasanthy Muthunarayanan**. 2009. Environmental ethics. Presented and published in the Proceedings of the National conference on Effect of climate change and sustainable resource management. School of civil engineering. *SRM University*. Chennai. 22nd and 23rd January 2009.

I. H index and Citations:

	Total Citation	Since 2019
Citations	1004	800
h-Index	17	15
i10-Index	25	21

Source: Google Scholar

J. Conference contributions:

International

- Application of microbes ensuring Sustainability Third International conference on Emerging Trends in Microbial Technology ICETMT-2024 – department of Microbiology, Jamal Mohammed College, Tiruchirappalli on 24th January 2024.
- Role of Biotechnology Ensuring betterment of life in Planet Earth -Second International conference on Advances in Biosciences and Biotechnology-ICABB-2023- department of Biotechnology, Mother Teresa Women's University, Kodaikanal on 24th February 2023.
- CIRCULAR ECONOMY The Need of the Hour to Ensure Sustainability International Conference on Environmental Management and Sustainable development – PG Department of Environmental Science, Holy Cross College, Tiruchirappalli on 24th January 2023.
- 4. Characterization of the Distillery sludge based Compost and Vermicompost. Presented at the International Conference on Sustainable Biowaste Management" (SBM2021) at Online through Zoom meeting, Hong Kong Baptist University, Kowloon Tong, Hong Kong during 12th to 15th April 2021.
- Toxicity and histopathological effect of distillery industrial sludge on the earthworm *Eudrilus eugeniae*. Presented at the International Conference on Sustainable Biowaste Management" (SBM2021) at Online through Zoom meeting, Hong Kong Baptist University, Kowloon Tong, Hong Kong during 12th to 15th April 2021.
- 6. Quantification and Characterisation of microplastics in freshwater kaveri river sediments collected at Tiruchirappalli, India. Presented at the 10th International Conference on Sustainable Waste Management towards Circular Economy-ICONSWM 2020 at Online through Go to meeting, Jadavpur University at Kolkata during 02nd to 07th December, 2020.
- Dye removal from aqueous solution by adsorption on low cost activated carbons. Presented at the 9th International Conference on Sustainable Waste Management towards Circular Economy- ICONSWM 2019 at Kalinga Institute of Industrial Technology (KIIT) (DU), Bhubaneswar, Odisha, during 27th to 30th November, 2019.
- 8. Analysis and Characterization of (*Auxin Like Activities*) Humic Substances in The Compost and Vermicompost Using FT-IR, NMR and HPLC. Presented at the

International Conference on Solid Waste – ICSW 2019 at International Expo centre, APEC Secretariat, Zhejiang University, Hangzhou, China during 13th to 16th November, 2019.

- DNA Damage and effects on Antioxidative enzymes in earthworm (*Eudrillus Euginae*) induced by melanoidin. Presented at the 8th International Conference on Solid waste management –ICONSWM 2018 at Acharya Nagarjuna University, Vijayawada, AP, during 27th to 30th December, 2018.
- 10. Innovative Usage of Traditional Seeds for Drinking Water Purification. Presented at the 7th International Conference on Solid waste management –ICONSWM 2017 at PJTSA University, Hyderabad, Telangana, during 15th to 17th December, 2017.
- 11. Vermiconversion of Distillery Industrial Sludge in Combination with Market Based Vegetable Waste Employing *Eiseina fetida* and *Eudrillus eugenia*. Presented at the 6th International Conference on Solid waste management –ICONSWM 2016 at Jadavpur University at Kolkata during 24th to 26th November, 2016.
- 12. Possibility of Eco friendly Post-consumer waste management. Presented at the 5th International Conference on Solid waste management –ICONSWM 2015 at IISc, Bangalore during 25th to 27th November, 2015.
- 13. Analytical Study of Decomposed Postconsumer Waste. Presented at the third International Conference on Solid waste management –ICONSWM at Infosys Learning Institute. Mysore July 30th to 1st August, 2012.
- 14. Determination of the Potentiality of *Eisenia Foetida* to Degrade Disposable Paper Cup Waste- A Solution to Solid Waste Pollution. Presented at the International conference on solid waste 2011 moving towards sustainable development. Hongkong.2-5th May,2011.http://arcpe.hkbu.edu.hk/conf2011.
- 15. Citrus reticulate An effective anti oxidizing agent facilitating removal of nitrate N from aqueous solutions was presented in International Conference on Frontiers in Environmental Sciences and Engineering in India, Department of Env. Sciences, Bharathiar University, Coimbatore. Sept' 15 - 17, 2005.

National

- "Water Resources significance and Management" Seminar on Problems and Prospects of Ground water usage in urban areas, Department of Geography, Bharathidasan University, Tiruchirappalli on 10th March 2023.
- Innovative usage of traditional seeds for drinking water purification. Presented in VI National Conference on Natural Sciences, Department of Zoology, Holy cross college, Trichy on 12th January 2017.
- 3. Participated in One-day workshop on "Art of Publishing" organized by Publications Department, Bharathidasan University, Trichy on 27th November 2014.

- Participated in Faculty Development Programme on "Multidisciplinary perspective for Pharmaceutical. Life Sciences Educators and Researchers" organized by Department of Pharmaceutical Technology, Anna University, Trichy from 9th – 15th December, 2013.
- Evaluation of Drinking Water Quality in Tiruchirappalli Taluk" presented in National Seminar on Geoinformatics for River basin studies 2012, Department of Geography, School of Geosciences, Bharathidasan University, Trichy – 24. 3 – 4th March – 2012.
- Effective Treatment of Sugar wash using Indigenous microorganisms", presented in International symposium on Environmental Risk Assessment 2011 (ISREA 2011), unit of Toxicology, Department of Zoology, School of Life Sciences, Bharathiar University, Coimbatore-641046, 17-19th October-2011.
- Management of sugar cane Industry solid waste using the technique of composting A study". Presented in International seminar "Emerging Trends in Life Science" (AURORA-2KX1), Navarasam Arts and Science College for women, Erode,18th August-2011.
- 8. Environmental Awareness: The Need for the Day. Presented in Spatial Strategies for Sustainable Management organized by Department of Environmental Management, Bharathidasan University, Tiruchirappalli held from February 14-16th, 2011.
- 9. Environmental ethics. Presented in the National conference on Effect of climate change and sustainable resource management. School of civil engineering. SRM University. Chennai.22nd and 23rd January 2009.
- 10. A comparative study on the photodegradation of aqueous dyes with blue devil. Presented in the National conference on Environmental challenges and Management. Department of Environmental Sciences, Bharathiar University, Coimbatore. March 8 and 9th, 2007.
- 11. Studies on the removal of reactive dyes using bacterial strains. Presented in the national seminar on the Trends in Modern Biology. Department of Plant Sciences. Bharathidasan University, Trichy. March 15th, 2007.
- 12. Utilisation of solid wastes using an effective technique. Presented in the National Conference on ensuring environmental sustainability. Department of Environmental Sciences, Bishop Heber College (Autonomous), Tiruchirappalli. March 7th, 2007.
- Removal of chromium (VI) using bacterial strains. Presented in National seminar on Prespectives of Biological sciences, Institute of biotechnology, Namakkal. August 24th and 25th, 2007.
- 14. A comparative study on the absorption of different dyes using bacterial strains. Presented in the National Conference on ensuring environmental sustainability. Department of Environmental Sciences, Bishop Heber College (Autonomous), Tiruchirappalli. March 7th 2007.

- 15. Environmental ethics. Presented at the 4th national teacher's science conference-2007, A programme of RVPSP, DST, Govt of India and NCSTC-Network, at Rajeev Gandhi Navodaya Vidyalaya, Dehradun. September 22 – 25th .2007.
- Monitoring of air quality in terms of respirable particulate matter A case study. was presented in Envirovision – 2K6, Department of Environmental Sciences, Bishop Heber College (Autonomous), Tiruchirappalli. March 17 & 18th. 2006.
- 17. Phytoremediation of aqueous dye solution by an Ecological Indicator. Presented in National seminar on Recent Trends in Biosciences, Department of Biosciences, Vivekanandha College of Arts and Sciences for Women, Elayampalayam, Tiruchengode. Feb' 23 & 24th. 2006.
- 18. Biosorption and Biofiltration–An Emerging Waste water treatment technology was presented in National Conference on Environment and Sustainable Development, Department of Environmental Management, Bharathidasan University, Trichy, Tamil Nadu, India. Feb'16-17th. 2006.
- 19. Sorption removal of mixture of reactive dyes from aqueous solution (PBBMR+POM2R) and from effluent using Eichhornia crassipes". was presented in State Level Seminar on Emerging Trends in Risk Assessment and Remedial Measures of Environmental Pollution, Department of Chemistry, TBML College, Porayar, Aug' 11th & 12th .2005.
- 20. Eco-friendly approach to manage market waste in Ariyalur, Perambalur District" was presented in State Level Seminar on Emerging Trends in Risk Assessment and Remedial Measures of Environmental Pollution, Department of Chemistry, TBML College, Porayar, Aug' 11th & 12th. 2005.
- 21. Decolourisation of aqueous solution using Prosopis spicigera Presented in UGC sponsored Proceedings of Regional Symposium on Environmental Impact held on September 2-3rd, 2004 at ADMC College for women at Nagapattinam.
- 22. Bio remediation of Distillery spent wash using indigenous Microbial strains low cost adsorbent CHC presented in an UGC sponsored national symposium on recent trends in environment and biotechnology held on July 26-28th,2004 at Kumbakonam.
- 23. Characterisation of drinking water in and around Ariyalur Perambalur District, Tamilnadu" Presented in proceedings of the 3rd National seminar on Inland Water Resources and Environment organized by Dept. of Environmental Science, University of Kerala & Limnological Association of Kerala, 2nd -4th Feb 2004, Thiruvanantrapuram.
- 24. Identification of Bacterial strains resistant to mixed dye (POM2R & PBBMR) presented in National seminar on Pollution Management strategies and Environmental Protection Organised by Dept of Chemistry, Nirmala College for women Coimbatore on Oct 10th 2003.

- 25. Environmental education A tool to control pollution "Presented in UGC sponsored state level inter disciplinary Seminar on Scientific & economic dimensions of integrating Envtl. Management with development held on August 1st & 2nd 2003. PSG Arts & Science College, Coimbatore.
- 26. A threat to natural aquatic eco systems whom to be blamed? Man or Nature?" Poster presentation in National Conference "Ecovision 2003" at Bharathiar University, Coimbatore on March 5th 2003.
- 27. Sorption potential of Pseudomonas Sp S5. A study presented in Seminar cum workshop on "Jeopardized environment & its protection", J.J College of Arts and Science Pudukkottai. 2001.
- 28. Biosorption –An effective alternative for the removal of pollutants. Presented in the National Seminar on Pollution a treat to the nation –Enviro 2k, Bishop Heber College, Trichy, India on March 8th and 9th 2001.
- 29. Environmental Management in a cement factory. Presented in state level seminar on Environmental pollution & Bioremediation P.S.G. Krishnammal College for Women, Coimbatore, India on 19 and 20th Feb. 2001
- 30. Influence of pH and time on the Biosorption of a reactive dye, PBBMR by Aspergillums flavus. Presented in National Symposium on "Problem & prospectus of Environment in the new millennium" Dept. of Biosciences, Mangalore University, Dec '2000.
- 31. "Influence of the media composition on the biodegradation of the reactive dye PBBMR" Presented in the 40th Annual Conference of AMI, Bhuvaneshwar, Orissa, India on Feb22nd to 24th 2000.

Countries visited

China-2019 Hongkong- 2011

K. Workshops Participated

- Participated in a 3 Days On-line Training Course on Compliance, Verification and Reporting of Environment Social Governance (ESG) Standards by Indian Industries & Companies" during 1st – 3rd September 2021 at conducted by the National Productivity Council (NPC), Kanpur-208005, U.P.
- Participated in a 6 days' "Academic Leadership Training Course" during 06th -12th February 2021 at conducted by the UGC-Human Resource Development Centre of Bharathidasan University, Tiruchirappalli – 620024, Tamil Nadu, India.
- Participated in a 15 days' workshop on Hands on training in Cell and Molecular Biology techniques" during 14th -27th March 2018 at Department of Biochemistry, Bharathidasan University, Tiruchirappalli, Tamil Nadu.

- 4. Participated in a one-day workshop on Energy Conversion from MSW & Biomass and Composting, conducted by International Society of Waste Management, Air and Water (ISWMAW) at IISc, Bangalore on 24.11.2015.
- Participated in Three-day workshop on "Molecular genomics and Proteomics "org by Dept. of Biotechnology, Alagappa University, Karaikudi during 18th – 20th Feb 2015.
- 6. Participated in a Short term course on "Integrating Energy and Environmental issues towards cleaner Environment" organized by Dept. of Chemical /Engineering and Chemistry, NITT, Trichy on 2nd and 3rd Dec,2013.
- Participated in Two Days Workshop on R&D Proposals to National and International Funding for Researchers - Approach & Preparation, NIT, Trichy during 16th and 17th August 2013.
- 8. Participated in INDO-UK Workshop-2011 on "Current Developments of Wastewater Treatment in India" held at Department of Chemical Engineering, National Institute of Technology, Tiruchirappalli India, during 29th -31st August, 2011.
- 9. Participated in Genei workshop during 2010.

Workshops/Seminars/Conferences organized

S.No	Title	Place	Duration	Funding Agency
	4 th National Workshop on Biotechnological Solutions for Environmental Challenges (BITSFECs- 2024)	University,	5th and 6th April 2024	RUSA 2.0
	Two days Training Workshop on Water analysis and Solid waste Management	University,	10 th and 11 th January 2024	nil
	Two days Training Workshop on Water analysis and Solid waste Management		13 th and 14 th October 2022	nil
	One day Awareness program for college students On the role of Biotechnology for Sustainable Environment	University,	23 rd September 2022	nil

3 rd National Workshop on	Bharathidasan	22^{nd} and 23^{rd}	RUSA 2.0
Biotechnological Solutions	University,	February	and DST-
for Environmental	Tiruchirappalli	2022	PURSE
Challenges (BITSFECs-			New Delhi
2021)			
2 nd National Seminar cum	Bharathidasan	17 th -18 th	UGC- SAP,
Industry – Academia	University,	December,	and DST-
Workshop on	Tiruchirappalli	2019	FIST
Biotechnological Solutions			New Delhi
for Environmental			
Challenges (BITSFECs-			
2019)			
1 st National Seminar on	Bharathidasan	17 th -18 th	UGC- SAP
Biotechnological Solutions	University,	December,	and MoWR,
for Environmental	Tiruchirappalli	2018	New Delhi
Challenges (BITSFECs-			
2018)			
One-day seminar on	Bharathidasan	16 th February	UGC – XII
"Awareness on	University	2017	Plan
Environmental Health and	constituent		Extension
Environmental Issues	college,		activity,
	Perambalur		UGC, New
			Delhi
State Level Workshop on	Bharathidasan	08 th -11 th	(UGC- XII
Phytochemistry for Health	5.	February,	Plan)
and Environment	Tiruchirappalli	2016	UGC, New
			Delhi
"GO GREEN" Competition	Bharathidasan	4 th -6 th June,	TNSCST,
and Training Workshop	University,	2012	Tamil
	Tiruchirappalli		Nadu
Life Sciences day	Bharathidasan	6 th September	GE
	University,	2012	Healthcare
	Tiruchirappalli		Ltd.,
			Bangalore.

L. Reviewer Responsibilities:

I act as a manuscript reviewer for the following journals:

Biotechnology Letters Bioresource Technology Biotechnology Progress Chemosphere Applied and Environment Biotechnology Journal of Environmental Biology Environmental Science and Pollution Research

M. Talks in various institutions:

- 1. 24.07.2024 Delivered a talk on LEITMOTIV "SDGS- Need of the Hour" in Department of Botany, Bharathidasan University, Trichy.
- 2. 28.06.2024 Presided the World Environment Day Celebrations and delivered a talk on "World Environment day – Importance and Significance " in S.B.I.O.A Matric and Hr.Sec.School (managed by S.B.I.O.A Educational Trust, Chennai) Airport Post, Trichy-7.
- 3. 24.01.2024 Delivered a talk on 3rd International Conference "Applications of Microbes Ensuring Sustainability" in P.G & Research Department of Microbiology, Jamal Mohamed College (Autonomous), Tiruchirappalli.
- 4. 8.02.2024 Delivered a talk on "The topic is Ecological: Igniting passion for Environmental Responsibility. Bon Secours College of Education, Thanjavur.
- 5. 22.05.2023 Delivered a talk through online on "Micro level Management and Circular Economy Need of the Hour" and "Vermiconversion of distillery industrial sludge in combination with market based vegetable waste employing *Eiseina fetida* and *Eudrillus eugeniae*" in Department of Centre for Environmental Sciences, Anna University, Chennai 600 025.
- 6. 24.03.2023 Delivered a talk on "Micro level Management and Circular Economy of Solid wastes and Water Resources, Significance and Management" in Department of Marine and Coastal Studies, School of Energy, Environmental and Natural Resources, Madurai Kamaraj University, Madurai.
- 7. 14.03.2023 Delivered a talk on "Conscious transformation ensures sustainability" in the Department of Botany and Chemistry Association Inaugaration, Kongu arts and Science college, Karur.
- 8. 13.03.2023 Delivered a talk on "Circular Economy-A boon for Sustainable development in the Department of Biotechnology, SRM University of Science and Technology, Ramapuram Campus, Chennai (online)
- 9. 23.09.2022 Delivered a talk on "Water quality parameters, water and water treatment" in the Department of Chemistry, National College (Autonomous), Tiruchirappalli 620 001.
- 10. 16.09.2022 All India Radio- Live Recording on Ozone layer depletion in FM 102Hz Rainbow place- Trichy.
- 11. 30.08.2022 Delivered a talk on "Earth Restoration Behaviour for ensuring SDGs" in the Department of Botany, Jamal Mohammed College (Autonomous), Tiruchirappalli -620020.

- 12. 22.03.2022 Delivered a talk on "Sustainable Water Management" in the Department of Centre for Study of Social Exclusion and Inclusive Policy, Bharathidasan University, Tiruchirappalli – 620 024.
- 13. 26.02.2022 Delivered a talk on "Journals and their Importance" in the Department of Microbiology, Sri Ramakrishna College of Arts and Science for Women, Coimbatore.
- 14.07.03.2022 Delivered a talk on "Recent Trends in Waste Management" in the Department of Biotechnology, Srimad Andavan Arts and Science College (Autonomous), Tiruchirappalli -620005.
- 15.05.02.2022 Delivered a talk on "Water quality parameters, water and water treatment" in the UGC-Sponsored Refresher Course in Environment & Sustainable Development (Multidisciplinary), HRDC, Bharathidasan University, Tiruchirappalli 620 001.
- 16.10.10.2021 Delivered a talk on "Water quality parameters, water and water treatment" in the Department of Chemistry, National College (Autonomous), Tiruchirappalli 620 001.
- 17.06.10.2021 Delivered a talk on "A word of Inspiration" in the Department of Biotechnology, Mother Teresa university for women, Kodaikanal.
- 18. 16.09.2021 OZONE DAY Special Lecture on Atmospheric Ozone Depletion: Issues and Challenges in the Department of Geography, Bharathidasan University, Tiruchirappalli – 620024.
- 19. 02.06.2021 Delivered a talk on "Responsibilities to Ensure Ecosystem Restoration" in the Department of Botany, Telangana University, Hyderabad, Telangana – 503322.
- 20. 24.01.2021 Delivered a talk on "Water quality parameters, water and water treatment" in the Department of Chemistry, National College (Autonomous), Tiruchirappalli 620 001.
- 21. 06.03.2020 Delivered a talk on "Beat solid waste pollution-A ecofriendly approach" in the Department of Biotechnology, Mother Teresa university for women, Kodaikanal.
- 22. 27.02.2020 Delivered a talk on "Emerging Challenges and Issues Related to Environmental Health- a Bird's eye view" in the International conference on Frontiers in Environmental Health and Mitigation organized by the Dept. of Zoology, Government Arts college, Ariyalur.
- 23. 27.12.2019 Delivered a talk on "Water resources management" in Winter Science camp organized at the Anna Planetarium, Tiruchirappalli.
- 24. 02.10.2019 Delivered a talk on "Water Quality Parameters and Standards" in the Department of Chemistry, National College (Autonomous), Tiruchirappalli 620 001.
- 25. 04.02.2019 Delivered a talk on "Solid Postconsumer Waste Management" International Conference on Advanced Nanomaterial for Energy, Environment and

Healthcare Applications (ANEH-2019). Organized by Department of Physics, Bishop Heber College, Tiruchirappalli 620 017.

- 26. 29.01.2019 Delivered a talk on "Environmental Awareness" at Annai Women's College, Karur 639 136.
- 27. 20.12.2018 Delivered a talk on "Pollutants induced changes in the marine environment". Refresher Course on Sustainable Management Strategies for Coastal Environment and Agriculture. Organized by Department of Entomology, Annamalai University, Chidambaram.
- 28. 05.10.2018 Delivered a talk on "Natural Resources Utilisation Ensuring Sustainability- Need of The Hour" National Conference on Sustainability of Resources: Spatial Challenges using Geospatial Technologies. Organized by Department of Geography, Madurai Kamaraj University, Madurai – 625 021.
- 29. 15.09.2018 Delivered a talk on "Water Quality Parameters" in the Department of Chemistry, National College (Autonomous), Tiruchirappalli 620 001.
- 30. 11.07.2018 Delivered a talks on "Biotechnological Solutions for Sustainable Development" in the Department of Biotechnology, St, Joseph's College (Autonomous), Tiruchirappalli 620 002.
- 31.05.06.2018 Delivered a talk on "Beat Plastic Pollution" in the Divisional Environment and House – Keeping, Tiruchirappalli Division, Southern Railway, Tiruchirappalli – 01.
- 32. 12.03.2018 Delivered a talk on "Ecofriendly waste management –need of the hour" in the Department of Botany, Jamal Mohammed college, Tiruchirappalli 620 023.
- 33. 23.08.2017 Delivered a talk on "An overview on the Possibility of Natural methods for waste water management" in the 2 days' workshop on "Rain water Harvesting and recycling of treated wastewater for agriculture" in the Department of Zoology, Nehru memorial college, Puthanampatti, Tiruchirappalli.
- 34. 09.08.2017 Delivered a talk on "Pollutants in the environment-A concern" in the National Seminar on "Recent trends in Eco toxicological Research" in the Department of Zoology, Directorate of Distance Education, Madurai Kamaraj university, Madurai.
- 35. 23.03.2017 Radio talk in Trichy station broadcasted on 'Water Management -in Tamil
- 36. 17.11.2016 Radio talk in Trichy station broadcasted on 'Maram valarpoom suzhal kaapoom'-in tamil (Save Environment by Planting trees)
- 37.06.10.2016 Delivered a talk on "Ecofriendly waste management" in the Exon Association inauguration of Dept. of Biotechnology at Seethalakshmi Ramaswami College, Trichy.
- 38. 18.09.2016 Delivered a talk on Water in http://tamil.eenaduindia.com/State/Trichy/2016/09/17212831/World-Water-surveillence-day-on-sep-18.vpf via @EEnadu.

- 39. 18.03.2016 Delivered a talk on "Ecofriendly waste water treatment technologies" in a National seminar at Dept. of Biotechnology, Mother Teresa University, Kodaikanal.
- 40. 07.03.2016 Delivered a talk on "Environmental awareness" regarding biodiversity loss at Sri Balalaya Vidyalaya, Aravathoor campus, Trichy during the valedictory function of Science week celebrations.
- 41. 21.01.2016 Delivered a lecture on Impact of Electronic Wastes on Environment and Health at the National Seminar on E-Waste organized by Department of Computer Science, Seethalakshmi Ramaswami College, Trichy on 21.01.2016.
- 42. 20.11.2015 Delivered a lecture on Eco friendly Post-consumer waste management at NIT, Trichy organized by The Institution of Engineers (India), Tiruchirappalli Local Centre (IEI TLC) in an All India Seminar on "Cost Effective Effluent Treatment Systems" on 20th Nov 2015.
- 43. 02.11.2015 Delivered a lecture on "Environmental awareness" –Need of the hour at the Rotary club, Trichy at Hotel Ramyas, Trichy.
- 44. 20.10.2015 Delivered a lecture on "Environmental awareness" St.Joseph's Girls higher secondary school, Trichy.
- 45. 03.03.2015 "Solid waste Management" UGC Sponsored Refresher Course in Environmental Science, Academic staff college, Trichy.
- 46. 26.02.2015 Delivered lead lecture "Sustainability Through Ecofriendly Waste Management" in the National Seminar on the Futuristic prospects of biological sciences at Department of Biochemistry, Holy cross college, Trichy.
- 47. 03.02.2015 Delivered a lecture on "Sustainable environment"- Department of Mathematics, Urumu Dhanalakshmi College, Trichy.
- 48. 15.12.2014-17.12.2014 Post-consumer waste management -International Conference on Environment and Energy (ICEE-2014) – Institute of Science and technology and JNTUH College of Engineering Hyderabad, Hyderabad.
- 49. 12.10.2014 Alternate energy issues of India Bishop Heber College, Trichy under students Exchange program from Davidson College, USA.
- 50.05.06.2014 Environmental awareness and Sustainable development Dalmia cements, Ariyalur.
- 51. 04.01.2013 Environmental Issues"- Aiman college of Arts and science, Trichy.
- 52. 14.8.2012 Electronic waste and its management"-National Seminar on "E-Waste an emerging pollution", Dept of Zoology, Rajah Serfoji's Govt College for Men, Tanjore.
- 53. 03.10.2011 Biotechnological approaches for solid waste management"- JJ college of arts and science, Pudukkottai.
- 54. August 2010 "Environmental Awareness a tool for sustainable development"-Refresher course in Global warming and Sustainable development, Tamil University, Thanjavur.
- 55. June 2010 "Nuclear pollution & Social issues of Environment"- Prist University, Thanjavur.

- 56. March 2010 "Role of Biotech in waste treatment"- Kalaigar Karunanidhi Institute of Technology, Coimbatore.
- 57. 23.10.09 "Environmental Awareness regarding Pollution" Inner Wheels, Cauvery college for women, Tiruchirappalli.
- 58. 20.10.09 "Biotechnological approaches for wastewater treatment" Silver jubilee celebration, Dept. of Environmental sciences, Bishop Heber college, Tiruchirappalli.
- 59. 28.09.2009- 04.10.2009 All India Radio- Talk- To present "Soozhal Kappom"- 7 Talklets in Tamil. Date, place- Trichy.
- 60. 11.09.09 "Global warming" Mathematics Association, Dept. of Math's, Cauvery College for women, Tiruchirappalli.
- 61. 6.08.2009 "Environmental Education and Awareness Effective tools "–UGC National seminar on Global warming, Department of zoology, St. Joseph's college for Women, Alappuzha, Kerala- 11.09.09.
- 62. 13.03.2008 "Bioremediation "– Refresher course in Environmental sciences, Kerala University, Trivandrum.
- 63. 17.10.2007 "Awareness on Ozone layer and Ozone day "– Association activity Dept. of Environmental sciences, Bishop Heber College, Trichy.
- 64. 11.10.2007 "Environmental awareness" Orientation Programme Academic staff college Bharathidasan University Tiruchirappalli.
- 65. 22.07.2007 "Application of biotechnology in wastewater treatment" Association inauguration Dept. of Biotechnology, Periyar Maniammai university, Vallam, Thanjavur.
- 66. 10.04.2006 "Stress management and Success"- Association inauguration- Dept. of Zoology, National college, Trichy.

Patent Application Submitted

Application Number – 202441040790

Journal Number – 22/2024 Journal Date: 31/05/2024

N. Ph.D and M.Phil Supervision:

Completed: 15 Thesis Submitted: 0

Pursuing: 04

I Student: Dr. M. Sangeetha

Title: Recycling and Reuse of Chromium containing wastewater after treatment with low cost adsorbents

II student: Dr. C. Thamaraiselvi

Title: Utilization of treated distillery effluent for the growth of Marigold (*Tagetes erecta L*.)

III student: Dr.M.Jeganathan

Title: Effect of Cement kiln exhaust on air quality of Ariyalur and its impact on the growth and biochemical parameters of Sunflower plant (*Helianthus annuus L.*)

IV student: Dr.A.Geetha

Title: Removal of Dyes from aqueous solutions using Adsorption Biosorption and Phytoremediation techniques

V student: Dr.R. Velmurugan

Title: Environmental monitoring studies for the development of Ecotourism in selected areas of Andaman and Nicobar Islands

VI student: Dr.M. Santhiya – Sept 2015

Title: "Physico-chemical characterization and Nitrate –N reduction of drinking water sampled from four districts of Tamilnadu – utilizing *Citrus aurantifolia*"

VII student: Dr.V. Swabna –July 2015

Title: Characterization, Toxicity Evaluation, Metabolization and Deportation of the distillery based pigment – Melanoidins

VIII student: Student: Dr.S. Susila - Sept 2015

Title: Vermiconversion of distillery industrial sludge in combination with market based vegetable waste employing *Eisenia fetida* and *Eudrillus eugeniae*

IX student: Dr.M. Karthika – December 2015

Title: Vermitechnological approach for degrading disposable paper cup wastes by employing *Eudrilus eugeniae*- An eco-friendly solution to solid waste pollution

X student: Dr.G. Seethadevi – August- 2016

Title: Vermicomposting of lignocellulosic waste material using *Eisenia fetida* and *Eudrilus eugeniae*-A comparative study

XI student: Dr. L. Rama- April 2018

Title: Vermicomposting and composting of *Musa paradisica* (Natural and Artificial) leaf waste using *Eisenia fetida* – a comparative study

XII student: Dr. S. Ramarajan - June 2019

Title: "DBPs in Drinking Water: A Study in Selected Locales of Tamil Nadu Involving *In-Vitro* and *In-Vivo* Analysis and Its Treatment"

XIII student: Dr. S. Murugavel - April 2021

Title: "Potentiality of *Eisenia fetida* for Sustainable Vermicomposting of Coal Fly Ash on Amendment with Leaf and Flower Wastes"

XIV student: Dr. M. Selvakumar – October 2021

Title: "Utilization of zeolitic sand materials collected from Rameswaram Island for water softening and their characterization"

XV student: Dr. D. Tamilselvi – March 2022

Title: "Assessment of Toxicity Accumulation in *Eisenia fetida* during Vermicomposting of Textile Industry Sludge"

M. Phil., Scholars awarded: 17 no's

QUESTION PAPER SETTING: Nominated by Teachers Recruitment Board, Chennai for Question Paper setter on 3.4.2024 & 4.4.2024.

O. Teaching Profile:

1. Current Teaching Profile 2012-18

I currently teach the following modules: **Post-graduation modules:**

- 1. Environmental Chemistry M. Sc., I handle certain units
- 2. Energy Resources, Environmental audit and Sustainable development- M. Sc., I am In-charge of the entire paper
- 3. Environmental Chemistry Practical –M.Sc., In-charge of the entire paper
- 4. Eco restoration and Remediation M. Sc., Practicals In charge
- 5. Research Projects– M. Sc., Environmental Science and Technology -Project Guide
- 6. Solid waste management M. Phil., Environmental Biotechnology

7. Research Projects– M. Phil., Environmental Biotechnology - Project Guide

<u>Ph. D.,</u>	Students	<u>Placement</u>

S.N	Student Name	level	year	Contact details
0				
1	Dr.C.Thamaraiselvi	Assistant professor, Department of Biotechnology, Mother Theresa Women's	2006	+91-9655583375 ckthamarai@yahoo.com
2	Dr. M.Sangeetha	University, Kodaikanal Environmentalist, Associate with indo American Wildlife society, Krishna Accolade, Jayachandra nagar, pallikaranai, Chennai - 100	2006	+91-9941180804 Sangee_kalidoss@yahoo.c o.in
3	Dr. M. Jeganathan	GuestLecturer,DepartmentofEnvironmentalandHerbalScience,University,Thanjavur	2009	+91-9585076770 jegann1978@gmail.com
4	Dr. R.Velmurugan	Environmental Lead / Deputy manager - HSE Al Taweelah Alumina – BPJV, Dome DZ International General Contracting LLC, Abudhabi –UAE	2014	+97-1504995746 velandaman@gmail.com
5	Dr. V.Swabna	AssistantProfessor,DepartmentofBiotechnology,St,Joseph'sCollege,Tiruchirappalli - 02	2015	+91-9791506863 swabna.vivek@gmail.com
6	Dr. A. Karthika	Post-Doctoral Fellow, Department of Microbiology, The standard Fireworks Rajaratnam College for	2019	+91-9489142440 karthika1386@gmail.com

		Women		
		Sivakasi		
7	Dr.M.Santhiya	Director, Global	2015	+91-6381069768
		Scientific Research		msanthiya01@yahoo.com
		Services Pvt ltd,		
		No: 8 GS Complex,		
		Tamilkalam Book Shop		
		upstairs, Sendurai		
		Road, Ariyalur.		
8	Dr. L. Rama	Assistant Section	2018	+91-9486877662
		Officer (ASO),		ramalakshmananbt@gmai
		Directorate of Distance		l.com
		Education, Annamalai		
		University,		
		Chidambaram - 02		
9	Dr. S. Ramarajan	Assistant Professor	2020	+91-9677644986
		Department of		ramjinaturephd@gmail.co
		Environmental Sciences		m
		Bishop Heber College,		
		Tiruchirappalli-620 017		
10	Dr. S. Murugavel	Assistant Professor	2021	+91-8778304210
		Department of		
		Environmental		
		Management		
		Jawahar Science		
		College, Neyveli T.S,		
		Tamil Nadu- 607807		
11	Dr. M. Selvakumar	Senior	2021	+91-9095624881
		Executive(Enviroment),		drselvakumar92@gmail.co
		Aadhi Boomi Mining		m
		and Enviro Tech (P)		
		Ltd.,K.S.V nagar,		
		Narasothipatti, Salem-		
		636 004.		
4.0		Tamil Nadu, India	0.001	04.0040500000
12	Dr.D.Tamilselvi	Assistant Professor	2021	+91 8012792396
		Department of		+91 9384383667
		Biotechnology		tamildhurai@gmail.com
		A.V.R College of Arts		

and Science, 4,
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Poondi(PO) Tirupur-
641 652

ADDITIONAL UNIVERSITY RESPONSIBILITIES

- 1. GREEN CAMPUS INITIATIVE MEMBER 2014 2015, 2015 2016, 2016 2017.
- 2. AAA AUDIT MEMBER- August 2015 2016.
- 3. HOSTEL SQUAD March 2016 2017.
- 4. Co-ordinator Centre for Spirituality and Yogic Sciences from 22.02.2023 onwards.

M.VASANTHY

Laboratory outcomes

- Solid waste management of Post-consumer wastes employing vermicomposting is focused and its possibility is well understood.
- Industrial wastes especially distillery sludge, cement fly ash, thermal power plant fly ash was also managed employing vermicomposting along with the addition of carbon and nitrogen containing wastes.
- The focus on Post-consumer wastes namely the paper cups has made us understand the presence of high density polyethylene coating in the paper cups.
- This finding has been appreciated by the Ministry of Environment, Forests and Climate change and they have directed the CPCB and Hazardous substances division of MOEF&CC to replace the paper cups with biodegradable cups and stainless steel cups.
- The knowledge regarding solid waste management makes the research scholars and students to impart awareness among the public of especially rural areas.
- The quality of drinking water sampled from different districts in and around Tiruchirappalli district was understood by regular analysis.

- The removal of hardness and turbidity is highly concentrated and is being attained with plant based coagulants.
- The treatment of dyeing industry wastewater with ref to colour is also being executed.
- Further the filing of patent is under progress for the drinking water and industrial wastewater treatment.