CURRICULUM VITAE

PERSONALDETAILS

Name : Family name : Liyanage
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Yasodara Sex : Female
Date of Birth : 27th August1988
Nationality : Sri Lanka
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CONTACT DETAILS

Permanent Address **:** 497/7, Weerodara Mawatha, Arawwala, Pannipitiya.
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EDUCATIONAL QUALIFICATIONS

2014- 2017 Ph. D in Zoology, Department of Zoology, University of Sri Jayewardenepura, Sri Lanka.
Thesis: ***Isolation and characterization of selected veterinary and health important antibiotic resistant bacteria and their prevalence in sediment and water in aquaculture farms, poultry farms and hospital effluent***

2009- 2013 B.Sc. Special Degree in Aquatic Science
First class honors with degree with chemistry as the subsidiary subject. University of Sri Jayewardenepura, Sri Lanka. The dissertation was titled "***Isolation and Characterization of Oil Degrading Bacteria from Coastal Water and Sediments, Sri Lanka".***

MEMBERSHIPS

1. Life member- Institute of Biology [M.I. Biol (Sri Lanka)]
2. Life member- SLAFA, Sri Lanka
3. Member- American Society of Microbiology
4. Life Member-Young Scientist Forum

Employment Experiences

Senior Lecturer (Grade II) (2021-to date) : Department of Aquatic Bioresources, Faculty of Urban and Aquatic Bioresources, University of Sri Jayewardenepura
Research Assistant (2018 to 2021) **:** Faculty of Graduate Studies, University of Sri Jayewardenepura
Department Research Assistant : (2014 to 2018) Department of Zoology, University of Sri Jayewardenepura

Demonstrator (2014) **:** Department of Zoology, University of Sri Jayewardenepura

Academic Services

- **Editorial board member** of Sri Lankan Association for Fisheries and Aquatic Resources (SLAFAR) Journal-2021-2022
- **Editorial board member** of National Aquatic Resources Research and Development Agency (NARA) Journal-2022-2023
- **Member- Senate Board, University of Sri Jayewardenepura-**
- **Student counselor**, Faculty of Urban and Aquatic Bioresources, University of Sri Jayewardenepura
- **Member, Quality Assurance Cell**, Faculty of Urban and Aquatic Bioresources, University of Sri Jayewardenepura
- **Member**, **Ethics Review Committee**, Faculty of Graduate Science, University of Sri Jayewardenepura

Patents

1. Domestic drinking water filter capable of removing drinking water contaminants: Cva notoxins, Taste and Odour forming compounds, Antibiotics and Pesticides using Natural Rutile and Activated Carbon (20615).

Research Experience

1. **2013** - Conducted the final year research on "*Isolation and Characterization of Oil Degrading Bacteria from Coastal Water and Sediments, Sri Lanka*".
2. **2014 – 2017** – Conducting the post graduate research on *"Screening of some selected antibiotic contaminations and characterization of antibiotic resistant bacteria in water and sediment, Sri Lanka*"
3. **2016-2017** -Research assistant for the study of *"Introducing Biological Control Methods to Spread of Invasive Alian Aquatic Species in Irrigation Systems in Sri Lanka*" Funded by Department of Irrigation.
4. **2016**- Research assistant for the study "*Kelani River Basin Water Quality Status Monitoring Programme*" Collaborated with IUCN/UNDP
5. **2017-2018**- Research assistant for the study *"Screening of pharmaceutical contamination status in environmental samples in Sri Lanka*" Research collaboration with Yalk University, UK and IWMI, Sri Lanka
6. **2017**- Research assistant for the project "*Later part of the Kelani River Basin Monitoring Programme*" collaborated with Ministry of Mahaweli development and Environment.
7. **2017**- Research assistant for the study "*Analyze water samples and biodiversity Boralesgamuwa Lake,* State Ministry of Irrigation and Water Resource Management".
8. **2017-2018**- Working as a member for the study *"Tackling the "U" in Chronic Kidney Disease of Unknown Aetiology (CKDu) in Sri Lanka; a study of biological and environmental factors for identification of CKD u etiology*"- Research collaboration with

Faculty of Medical sciences, USJP and Research Triangle Institute (RTI) International, USA"

9. **2018**- A research was carried out on *"Aflatoxin contaminations of rice varieties in Sri Lanka"*
10. **2018/2019**- Research assistant for the study "*Water Quality monitoring in coastal water samples in Sri Lanka"* Research collaboration with Coast Conservation Department"
11. **2018/2020-**Research assistant for the study "*Pollution status of surface and ground water adjacent to the coir pith industry in Puttalam, Gampaha and Kurunagala districts*" collaborated with Coconut Research Institute
12. **2018/2019-**A research was carried out on "*Microbiology and molecular analysis in soil samples in Bolgoda lake"* Collaborating with German
13. **2018/2019-** "Analysis in soil and water quality in wetlands located in Thalangama, Katuwana GN, Kiriwaththuduwa GN and Walpitayaya to promote native rice varieties" Collaborated with UNDP
14. **2019/2020**- Research assistant for the study *"Monitoring water quality and soil quality in environment samples in Knuckles Mountain Range*
15. **2019/2020-** Research assistant for the study *"Pollution status of surface and ground water adjacent to the coir pith industry in Puttalam, Gampaha and Kurunagala districts*" collaborated with Coconut Research Institute
16. **2019/2023-** Research assistant for the study "*Impact from Norochcholai coal plant for aquatic environment"*
17. **2021/2023-** *Water quality analysis and interpreting results in the coastal stretches, Preethipura, Ethulkala,Morawala and Negombo Lagoon in Gampaha District-* Granted by Coast Conservation Department
18. **2021/2023-** "*Environmental Screening for Surveillance of viruses in surface and ground water in some selected areas in Sri Lanka"*- granted by Ministry of Water Supply

POSTGRADUATE RESEARCH SUPERVISION AS CO- INVESTIGATOR

1. MSc- Water Quality Monitoring Along the Selected Segment of The Kelani River Using GIS and Remote Sensing (MSC/GIS/338)

Books

1. Nature therapy ISBN 978-624-5629-00-8
(Repartriation of a forgotten nature by the regression of the human footprint During the COVID-19 lockdown in Sri Lanka)

2. Training manual of "Detection of microcyctins and Cylindrospermopsin in water" ISBN 978-955-590-128-4– 2018

3. Training manual of "Methods for Questionnaire Preparation and Data Management" ISBN 978-624-5703-72-2

4. Training manual of "Laboratory Methods and Field Techniques for Water, Soil and Biological Sample Collection, Analysis and Data Reporting" ISBN 978-624-5703-18-0

5. Impact of The MV X-Press Pearl Ship Disaster on the Coastal Environment from Negombo to Benthota

Book Chapters

1. **Liyanage. G.Y.** and Manage. P.M. (2019), Antibiotics induced antibacterial resistance, Pharmaceuticals and Personal Care Products: Waste Management and Treatment Technology, Elsevier, 429-444
2. **Liyanage, G.Y.,** Ekanayake, E.M.M.S. and Manage, P.M. (2022) Oil pollution remediation technologies- novel technologies with future challenges. The upcoming book "Microbial Technologies, and its Application", Edited by Dr. Santosh Kumar Karn and Anne Bhambri, published by Nova Science Publishers, NY, USA.
3. Sirisena, K.A, **Liyanage, G.Y.,** Sadeepa, H.D.D., Manage, P.M. Extremophiles and Enzymes. The upcoming book "Microbial Technologies, and its Application", Edited by Dr. Santosh Kumar Karn and Anne Bhambri, published by Nova Science Publishers, NY, USA.
4. Bandara, K.R.V., **Liyanage, G.Y**., Sirisena, K.A., and Manage, P.M. (2022) Hydrocarbon Remediation- A green solution to the problem of hydrocarbon pollutants. The upcoming book "Microbial Technologies, and its Application", Edited by Dr. Santosh Kumar Karn and Anne Bhambri, published by Nova Science Publishers, NY, USA.
5. **Liyanage, G.Y**., Kulasooriya, S.A., Manage, S.P., Dissanayake, D.M.P.I., Manage, P.M**.** (2023). Molecular Identification of Microcystin Synthetase Genes mcyE in Cyanobacteria Using PCR. In: Thajuddin, N., Sankara narayanan, A., Dhanasekaran, D. (eds) Protocols for Cyanobacteria Sampling and Detection of Cyanotoxin. Springer, Singapore. https://doi.org/10.1007/978-981-99-4514-6_59
6. Abeyrathne, P.A.B.P., Imanthi, K.P.A., Abeysiri, H.A.S.N., **Liyanage, G.Y.,** Pathmalal, M.M., Kulasooriya, S.A. (2023). Risk Assessment of Microcystin in Water Resources. In: Thajuddin, N., Sankara narayanan, A., Dhanasekaran, D. (eds) Protocols for Cyanobacteria Sampling and Detection of Cyanotoxin. Springer, Singapore. https://doi.org/10.1007/978-981-99-4514-6_24
7. Abeysiri, H.A.S.N., **Liyanage, G.Y.,** Sirisena, K., Kulasooriya, S.A., Pathmalal, M.M. (2023). Molecular Detection of Mcy Genes in Toxic Cyanobacteria: Anabaena, Microcystis, Planktothrix. In: Thajuddin, N., Sankara narayanan, A., Dhanasekaran, D. (eds) Protocols for Cyanobacteria Sampling and Detection of Cyanotoxin. Springer, Singapore. https://doi.org/10.1007/978-981-99-4514-6_56
8. Bandara, K. R. V., Samudrani, P. M., Abeysiri, H. A. S. N., **Liyanage, G. Y**., Sandupama, P. M., Dissanayake, D. M. P. I., Pathmalal, M.M. and Kulasooriya, S. A. (2023). Chemical and Toxicological Studies of the Toxic Freshwater Cyanobacterium: Microcystis aeruginosa. In: Thajuddin, N., Sankara narayanan, A., Dhanasekaran, D. (eds) Protocols for Cyanobacteria Sampling and Detection of Cyanotoxin. Springer, Singapore. https://doi.org/10.1007/978-981-99-4514-6_22
9. Sadeepa, H.D.D., Bandara, K.R.V., **Liyanage, G.Y**., Manage, P.M., and Kulasooriya, S.A. (2023). Genotoxicity of Cyanotoxins. In: Thajuddin, N., Sankara narayanan, A., Dhanasekaran, D. (eds) Protocols for Cyanobacteria Sampling and Detection of Cyanotoxin. Springer, Singapore. https://doi.org/10.1007/978-981-99-4514-6_37
10. Imanthi, K.P.A., Abeyrathne, P.A.B.P., Wijerathna, P.A.K.C., **Liyanage, G.Y.,** Manage, P.M., and Kulasooriya, S.A. (2023). Extraction of Cyanotoxins Using Filtration and Other Methods. In: Thajuddin, N., Sankara, N.A., Dhanasekaran, D. (eds) Protocols for Cyanobacteria Sampling and Detection of Cyanotoxin. Springer, Singapore. https://doi.org/10.1007/978-981-99-4514-6_39
11. **Liyanage, G.Y.,** Manage, S.P., Abeysiri, H.A.S.N., Manage, P.M., and Kulasooriya, S.A. (2023). Rapid Detection Method of Microcystin in Water. In: Thajuddin, N., Sankara, N.A.,

Dhanasekaran, D. (eds) Protocols for Cyanobacteria Sampling and Detection of Cyanotoxin. Springer, Singapore. https://doi.org/10.1007/978-981-99-4514-6_50

12. **Liyanage, G.Y.,** Kulasooriya, S.A., Manage, S.P., Dissanayake, D.M.P.I., Bandara, K.R.V., Budhdhika, P., and Manage, P.M. (2023). Screening of Polyketide Synthase Genes in the Anatoxin-a-Producing Cyanobacteria. In: Thajuddin, N., Sankara, N.A., Dhanasekaran, D. (eds) Protocols for Cyanobacteria Sampling and Detection of Cyanotoxin. Springer, Singapore. https://doi.org/10.1007/978-981-99-4514-6_51
13. **Liyanage, G.Y.,,** Koolasooriya, A, S. P. Manage , Pasindu D, Bandara K.R.V, Budhdhika Prabhath and Manage, P.M. (2023). Screening of polyketide synthase genes in the anatoxin-a producing cyanobacteria In: Thajuddin, N., Sankara, N.A., Dhanasekaran, D. (eds) Protocols for Cyanobacteria Sampling and Detection of Cyanotoxin. Springer, Singapore. https://doi.org/10.1007/978-981-99-4514-6_50

National and International Grants

1. Team member-"Development of a low cost textile waste water effluent treatment unit, Innovation, Invention and Venture creation council, USJP
2. Team member- Development of a filter capable of removing, cyanotoxins, taste and odour forming compounds, heavy metals and pesticides from drinking water- Innovation, Invention and Venture creation council, USJP
3. Co-investigator- Water quality analysis and interpreting results in the coastal stretches, Preethipura, Ethulkala, Morawala and Negombo Lagoon in Gampaha District- Coast conservation and coastal resource management department
4. Co-investigator -Environmental Screening for Surveillance of viruses in surface and ground water in some selected areas in Sri Lanka- Ministry of Water Supply
5. Co-investigator -Scale up opf developed domestic water filter for removal of Geosmin, 2-MIB, cyanotoxins, and antibiotics in drinking water- National Science Foundation

PUBLICATIONS

PEER REVIEWED INDEX/SCI JOURNAL PUBLICATIONS

1. **Liyanage, G.Y.** and Manage. P.M. (2014) Quantification of Oxytetracycline and Amphicillin in two waste water discharging points in Colombo, Sri Lanka, Journal of Environemnt and Natural Resources, Thailand.pp 193-198.
2. **Liyanage, G.Y.** and Manage. P.M. (2015) Optimisation of Environmental Factors on Oil Degrading Bacteria Isolated from Coastal Water and Sediments in Sri Lanka. Journal of Tropical Forestry and Environment, 13-25.
3. **Liyanage, G.Y.** and Manage. P.M. (2015) Presence of Tetracycline and Oxytetracycline Resistant Bacteria and Resistant Genes in Effluent Water of Zoological Garden, Sri Lanka. Proceeding of 11th International Academic Conference on Development in Science and Technology (IACDST-2015). 11-14.
4. Manage, P.M. and **Liyanage, G.Y.**. (2015) Role of native bacteria as a bio remediating agent for naphthalene and phenanthrene, Proceeding of 11th International Academic

Conference on Development in Science and Technology (IACDST-2015).8-11

5. **Liyanage, G.Y.** and Manage. P.M. (2016). Isolation and Characterization of Oil Degrading Bacteria from Coastal Waters and Sediments in Sri Lanka. J.Natn.Sci.Foundation Sri Lanka 2016 44 (4): 351 - 358
6. **Liyanage, G.Y.** and Manage. P.M. (2016) Evaluation of Amoxicillin and Sulfonamide removal by *Bacillus cereus*, *Enterobacter ludwigii and Enterobacter* sp. Journal of Environment and Natural Resources. 14(1). 39-43.
7. **Liyanage, G.Y.** and Manage. P.M.(2016**)** Occurrence, fate and ecological risk of antibiotics in hospital effluent water and sediments in Sri Lanka, International Journal of Agriculture and Environmental Research, 4. 909-935.
8. **Liyanage, G.Y.** and Manage. P.M. (2017) Risk of prophylactic antibiotics in livestock and poultry farms; a growing problem for human and animal health. Pharmaceutical Journal of Sri Lanka. Vol 7 (1). 13-22.
9. **Liyanage, G.Y.** and Pathmalal M. Manage (2017). Occurrence and Abundance of Multiple Antibiotic Resistance bacteria in Hospital Effluent Water, Asian Journal of Microbiology, Biotechnology and Environmental Sciences, 19 (4). 276-284.
10. Dharmadasa, P.S., **Liyanage. G.Y.** and Manage. P.M. (2017) Bioremediation of MC-LR and selected antibiotics using native bacteria, Journal of Tropical Forestry and Environment, 7 (2). 21-30.
11. **Liyanage. G.Y.** and Manage. P.M. (2018) Degradation of Ciprofloxacin (CIP) by bacteria isolated from effluent water and identification of degradation pathways, International Journal of Medical, Pharmacy and Drug Research, 2(3), 37-47
12. **Liyanage. G.Y.** and Manage. P.M. (2019) Occurrence and distribution of tetracycline resistance determinants and their pollution profile in the aquaculture environment in Sri Lanka, Journal of National Science Foundaation,47 (4), 455-465.
13. **Liyanage. G.Y**., Illango A. and Manage. P.M. (2021) Prevalence and quantitative analysis of Antibiotic Resistance Genes (ARGs) in surface and ground water in meandering part of Kelani river basin in Sri Lanka, Water, Air and Soil Pollution, 351, 232-245**.** https://doi.org/10.1007/s11270-021-05300-2
14. **Liyanage. G.Y.,** Weerasekara, M.M. and Manage. P.M. (2022) Screening and quantification of the selected penicillin and tetracycline resistance genes in the environmental samples, Sri Lanka J.Natn.Sci.Foundation Sri Lanka 2022 50 (2): 361 – 370.
15. **Liyanage. G.Y.** and Manage. P.M. (2021) Identification and characterization of antibiotic resistance bacteria in nile thilapia (*O.niloticus*) and determination of Multiple Antibiotic Resistance, Pollution Research, 34-39.
16. Manage. P.M., **Liyanage. G.Y**., Illango A., Madhushanka D.A.T. and Bandara, K.R.V.

(2022) Pollution levels in Sri Lanka's west-south coastal waters: Making progress toward a cleaner environment, Regional Studies in Marine Sciences, 51, 102193.

17. Athauda, A. M. N., Abinaiyan, I., **Liyanage, G. Y.,** Bandara, K. R. V., & Manage, P. M. (2023). Spatio-Temporal Variation of Water Quality in the Yan Oya River Basin, Sri Lanka. Water, Air, & Soil Pollution, 234(3), 207.
18. Pathmalal, M. M., RSKWD, H., Dilena, P. K., **Liyanage, G. Y**., Chalani, H. T. R., Bandara, K. R. V., ... & Abeysiri, H. A. S. N. (2023). Impact of the MV X-Press Pearl ship disaster on the coastal environment from Negambo to Benthota in Sri Lanka. Regional Studies in Marine Science, 58, 102788.
19. Peduruarachchi H.T., **Liyanage, G. Y.,** & Manage, P. M. (2023). Biodegradation of the Cyanotoxin Cylindrospermopsin using *Bacillus cereus*, *Micrococcus luteus* and *Alcaligenes faecalis*., Accepted (Journal of National Science Foundation)
20. Weerasinghe N.L.C., **Liyanage, G. Y.,** & Manage, P. M. (2023) Integrated biological control of *Eichhornia crassipes* (Mart.) Solms using phytopathogenic fungi and water hyacinth mite: *Orthogalumna terebrantis*. Accepted (International Journal of Multidisciplinary Studies)
21. Liyanage D., Sirisena K., **Liyanage G.Y**., Manage, P.M. (2023). Screening of Amoxicillin Degradation by Isolated Amoxicillin-Resistant Bacteria, (Accepted for Open University Research Sessions 2023 (OURS 2023).
22. P. A. K. C. Wijerathna, K.T Dilrukshi, **Liyanage G.Y**.,, K. R.V. Bandara, M.G.Y. L. Mahagamage, P. M. Manage (2023) Status of Cyanotoxin Contamination and Water Quality in Major Irrigational and Recreational Reservoirs in Sri Lanka (Accpeted to be published on Sustainable Water Resources Management).
23. Liyanage G.Y.,, Dilini Sadeepa and P. M. Manage (2024) Screening the Presence of Cyanotoxin in Selected Reservoirs in Sri Lanka and Employing Molecular Markers as an Advanced Alert System (Submitted to Journal of Water and Health)
24. **Liyanage. G.Y.,** Weerasekara, M.M. and Manage. P.M. (2024) Prevalence of Antibiotic Residues, Antibiotic Resistance Bacteria and Antibiotic Resistance Genes in Hospital Wastewater: Silent threat to Human Health (Submitted Journal of Ecology, Environment and Conservation)
25. **Liyanage G.Y.,** PA. K. C. Wijerathna,Bandara T. and Manage. P.M. (2024)Assessment of Virulence Potential and Antibiotic Resistance Profiles in E. coli Isolates from Selected Control Open Dump Sites in Sri Lanka (Submitted to Waste and Biomass Valorization)

INTERNATIONAL / LOCAL -ABSTRACT

01. **Liyanage, G.Y.** and Manage. P.M. (2014) Isolation and characterization of oil degrading bacteria from coastal water and sediments, 19th International Forestry and Environment Symposium Proceeding. Pg 129.
02. **Liyanage, G.Y.** and Manage. P.M. (2014) Effects of environmental factors on oil degrading bacteria from coastal water and sediments in Sri Lanka, 19th International Forestry and Environment Symposium Proceeding. Pg 130.
03. **Liyanage, G.Y.** and Manage. P.M. (2014) Quantification of Oxytetracycline and Amphicillin in two waste water discharging points in Colombo, Sri Lanka, The 1st Environment and Natural Resources International Conference Proceeding. Pg 30.
04. Manage, P.M. and **Liyanage, G.Y.** (2015) Role of native bacteria as a bioremediating agent for naphthalene and phenanthrene, 11th International Academic Conference on Development in Science and Technology (IACDST-2015).
05. Manage, P.M. and **Liyanage, G.Y.** (2015) Isolation of hydrocarbon degrading bacteria from groundwater contaminated with crude oil in Jaffna,Sri Lanka. 4th International Symposium on "Water quality and Human health; Challenges Ahead Proceeding. Pg.35.
06. **Liyanage, G.Y.**., Manage, P.M. and De Alwis, A. (2015) Study on the occurrence of Antibiotic Contaminations in the Aquatic Environment, Sri Lanka. International Conference on Multidisciplinary Approaches Proceeding, Pg. 198.
07. **Liyanage, G.Y.** and Manage. P.M. (2015) Removal of Amoxicillin and Sulfanomide by freshwater bacteria in Sri Lanka, 20th International Forestry and Environment Symposium Proceeding. Pg 52.
08. **Liyanage, G.Y.** and Manage. P.M. (2015) Detection of microbial degradation of natural rubber latex by isolated native bacteria in Sri Lanka, 20th International Forestry and Environment Symposium Proceeding. Pg 37.
09. **Liyanage, G.Y.**. and Manage. P.M. (2015) Presence of Tetracycline and Oxytetracycline Resistant Bacteria and Resistant Genes in Effluent Water of Zoological Garden, Sri Lanka. 11th International Academic Conference on Development in Science and Technology (IACDST-2015).
10. Manage. P.M. and **Liyanage, G.Y.** (2016) Bacterial remediation of hydrocarbons, antibiotics and cyanotoxins; Green solution for sustainable pollution management.Proceeding of the International Conference on Green Technologies for Sustainable Ecosystems and Trade show. India.pg 36.
11. **Liyanage, G.Y.** and Manage. P.M. (2016). Removal of amoxicillin and ampicillin from

aqueous solution by using *B.cereus* and Granular Activated Carbon (GAC). Proceeding of the Challenges ahead-water quality and human health- 5th International Symposium. Post Graduate Institute of Science, University of Peradeniya. pg 25.

12. **Liyanage, G.Y.** and Pathmalal M Manage (2016). Risk of prophylactic antibiotics in livestock and poultry farms; a growing problem for human and animal health and for the environment. Proceeding of 2nd Environment and Natural Resources International Conference. Thailand. pg 20.
13. **Liyanage, G.Y.**. and Manage. P.M. (2016) The Role of Hospital Effluent for Occurrence and Distribution of Ecologically Important Antibiotic in Sri Lanka, 21st International Forestry and Environment Symposium Proceeding. Pg 45.
14. **Liyanage, G.Y.**. and Manage. P.M. (2016) Occurrence and distribution of tetracycline resistance determinants and their pollution status in the aquaculture environment of Sri lanka. 3rd International Conference on Multidisciplinary Approaches Proceeding, Pg. 8.
15. **Liyanage, G.Y.,** and Manage, P.M. (2017) Screening of Antibiotic Resistance Bacteria at Hospital Effluent Water in Sri Lanka. Proceeding of International Conference in Post Graduate Institute of Science, University of Peradeniya, pg 26.
16. **Liyanage, G.Y.,** De Alwis, A. and Manage. P.M. (2017) Detection of tetracycline resistance genes in isolated bacteria from aquaculture sites in Sri Lanka, Proceeding of the 4th International Conference on Multidisciplinary Approaches. pg 162.
17. **Liyanage, G.Y.,** and Manage, P.M. (2017) Determination of Multiple Antibiotic Resistance (MAR) and MAR in bacteria isolated from Aquaculture farms in Sri Lanka, Proceeding of International research symposium on Pure and Applied Sciences (IRSPAS), 144.
18. Ekanayake, E.M.M.S., Manage, P.M. and **Liyanage, G.Y**. (2017) Isolation of fungi as biological control agents against water hyacinth (*E. crassipes*), Proceeding of 22nd International Forestry and Environmental Symposium, 98.
19. **Liyanage, G.Y.,** and Manage. P.M. (2017) Bacterial remediation of Ciprofloxacin (CIP) by CIP resistance bacteria isolated from environment samples, Proceeding of 22nd International Forestry and Environmental Symposium, 43.
20. **Liyanage, G.Y.,** Manage. P.M. and Weerasekara M.M. (2018) Screening and quantification of the *bla* $_{TEM}$ and *tet M* resistence genes in the environmental samples in Sri Lanka. Proceeding of South Asian Biotechnology Conference, 88.
21. **Liyanage, G.Y.,** and P.M. Manage (2018) Contamination status of ciprofloxacin and cloxacillin in Sri Lankan hospital effluents, 6th International Symposium on Water Quality and Human Health: Challenges Ahead, pg 31.

22. **Liyanage, G.Y.,** Weerasekara M.M and Manage. P.M. (2018) Penicillin and tetracycline resistance genes as emerging environmental contaminant in the hospital waste water effluent and aquaculture effluent in Sri Lanka, International Conference on Health Sciences, pg 54.
23. **Liyanage, G.Y.,** and Manage. P.M. (2018) Screening of antibiotic resistance bacteria and determination of MAR index in isolated bacteria from *O.niloticus*, 5th International Conference on Multidisciplinary Approaches, pg 18.
24. **Liyanage, G.Y.,** and Manage. P.M. (2019) Screening and Quantification of Tetracycline and Sulfonamide Resistance Genes in Natural Environmental Samples, International Research Conference Uwa Wellassa University (IRCUWU), pg 305.
25. **Liyanage, G.Y.** and Manage. P.M. (2019) Hospital effluent water as hotspots for antibiotic contamination and antibiotic resistant genes in Sri Lanka, International Symposium on Water and Air Pollution: recent Trends in Research, pg 32.
26. **Liyanage, G.Y.** and Manage. P.M. (2019) Bacterial degradation of TET by TET resistant bacteria; A green solution for antibiotic pollution, 4th International Symposium on Pure and Applied Sciences, pg 32.
27. **Liyanage, G.Y.** and Manage. P.M. (2019) Screening and quantification of oil and grease in selected harbors and lagoons in Sri Lanka, 7th International Symposium on Waer Quality and Human Health: Challenges Ahead, pg 44.
28. **Liyanage, G.Y.** and Manage. P.M. (2019) Hospital effluent water as hotspots for antibiotic contamination and antibiotic resistant genes in Sri Lanka, International Symposium on Water and Air Pollution: recent Trends in Research, pg 32.
29. Serasinghe D.S.W. **Liyanage, G.Y.** and Pathmalal M. Manage (2019) Determination of the insecticide Azamathiphos in water and soil using High-Performance Liquid Chromatography, 25th International Conference on Forestry and Environmental Sciences, pg 32.
30. Ekanayake, E.M.M.S., **Liyanage, G.Y.**, Mahagamage M.G.Y.L. and Manage. P.M. (2019) Invasion of water hyacinth (*Eichhornia crassipes*) in selected irrigation tanks in Sri Lanka, 7th International Symposium on Water Quality and Human Health: Challenges Ahead, pg 20.
31. **Liyanage, G.Y.** and Manage. P.M. (2019) Characterizing multiple antibiotic resistant (MAR) and determination of MAR index in cultured bacteria from hospital effluent, Sri Lanka, 6th International Conference on Multidisciplinary Approaches, pg 20.
32. Athauda, N., Ilango, A., **Liyanage, G.Y.,** Kodippili, N.P. and Manage, P.M. (2020) Study on spatial and temporal variation of water quality of the yan oya river basin, 7th PGIS Research Congress, University of Peradeniya.

33. Athauda, A.M.N., **Liyanage, G.Y.,** Abinaiyan, I. and Pathmalal M. Manage (2019) Effects of catchment characteristics land use practices on surface water quality in Yan Oya river basin, 7th International Symposium on Water Quality and Human Health: Challenges Ahead, pg 14.
34. **Liyanage, G.Y.** and Pathmalal M.M (2020) Occurrence and distribution of antibiotic resistance bacteria isolated from shrimps (penaeus monodon) in aquaculture ponds in negombo area, 7th International Conference on Multidisciplinary Approaches, pg 121.
35. **Liyanage, G.Y.** and Manage, P.M. (2021) Presence of Antibiotics in Aquaculture Wastewater; The Challenge on Animal and Human Health. International Conference on Multidisciplinary Approaches in Science.
36. Peduruarachchi H.T., **Liyanage, G.Y.** and Manage, P.M. (2021) Biodegradation of the cyanotoxin Cylindrospermopsin using *Bacillus cereus*. International Conference on Multidisciplinary Approaches in Science.
37. Peduruarachchi H.T., **Liyanage, G.Y.** and Manage, P.M. (2021) Water Quality and Cylindrospermopsin Contamination of Surface Water Sources in North Central Province. Conference of the 9 th International Symposium on Water Quality and Human Health: Challenges Ahead. University of Peradeniya.
38. Manage P. M., Abinaiyan I., **Liyanage, G.Y.**., Madusanka D. A. T., Madushanka G. C. (2021) Water Quality and Microbial Contamination Status of West-South Coastal Waters in Sri Lanka. International Conference on Multidisciplinary Approaches in Science.
39. Peduruarachchi H.T., **Liyanage, G.Y.** Manage P.M. (2021) Odor, Taste and Toxin Producing Cyanobacteria and Algae in Source Waters in North Central Province. Conference of 26 th International Forestry and Environment. University of Sri Jayewardenepura.
40. Manage P.M., **Liyanage, G.Y.** Abesekara A.W.A.K.L. and Wijesinghe L.P.R.J. (2021) Algae Cyanobacteria, and Water Quality in Selected Drinking Water Bodies in the Dry and Wet Zones of Sri Lanka. Conference of the 9th International Symposium on Water Quality and Human Health: Challenges Ahead. University of Peradeniya.
41. Abeyrathna B., Chinthaka, S.D.M., **Liyanage, G.Y**. and Manage P.M. (2022) Water quality and microbial contamination status of ground and surface waterbodies in Anuradhapura district, International Research Conference of Uva Wellassa University.
42. Wijerathna P.A.K.C., **Liyanage G.Y.,** Mahagamage M.G.Y.L. and Pathmalal M.M., (2022) Determination of water quality status and contamination level of E. coli in Negombo Lagoon, Sri Lanka. Proceedings of the 9th International Conference on Multidisciplinary Approaches, Sri Lanka. Pg. 43.
43. Shiham., F.S.M. **Liyanage G.Y.,** and Pathmalal M.M., (2022) Determination of removal efficiency of amoxicillin resistant bacteria and amoxicillin resistant genes from the conventional water treatment process in a hospital. Proceedings of the 9th International Conference on Multidisciplinary Approaches, Sri Lanka. Pg. 44.
44. Abeyrathne P.A.B.P., Imanthi K.P.A., Wijerathna P.A.K.C., Dilrukshi K.T., **Liyanage G.Y.,** and Pathmalal M.M., (2022) Water Quality and Microbial Contamination Status of Ground and Surface in Chronic Kidney Disease of Uncertain Aetiology (CKDu) high Prevalence Polonnaruwa in North Central Province, Sri Lanka. Proceedings of the 9th International Conference on Multidisciplinary Approaches, Sri Lanka. Pg. 45.

45. Liyanage, D., Sirisena, K., **Liyanage, G.Y.,** Manage, P.M. (2023). Screening of Amoxicillin Degradation by Isolated Amoxicillin-Resistant Bacteria. Open University Research Sessions 2023 (OURS 2023), Pg 103
46. Wijerathna, P.A.K.C., **Liyanage, G.Y**., Mahagamage, M.G.Y.L., and Pathmalal, M.M. (2024). Evaluation effect of water quality on mangrove system in Negombo Lagoon. proceedings of the 1st international conference on mangroves . 2024, January, Colombo, Sri Lanka.
47. A.M.S. Methsara, R.H.T.M. Dharmasiri, G.Y Liyanage, M.G.Y.L. MahagamageM.S. Ekanayake1 (2024). Evaluation of the heavy metal contamination status and some selected water quality parameters in the Anawilundawa mangrove restoration site. 2024, January, Colombo, Sri Lanka.
48. Apsara, D., Wijerathna, P.A.K.C., **Liyanage, G.Y.,** and **Manage, P.M.** (2024). Detection of *E .coli* O-157 In Polluted Cannels of Colombo District, Sri Lanka. 28th International Forestry and Environment Symposium, 2024, January, Colombo, Sri Lanka, Pg 80
49. Wijerathna, P.A.K.C., **Liyanage, G.Y.,** Mahagamage, M.G.Y.L., and Pathmalal, M.M.(2023). Effect of water quality on mangrove system in Negombo Lagoon. Sri Lanka. Proceedings of the 1st International Conference on Mangroves for Ecological & Economic Sustainability (ICMS) – 2023, The Open University of Sri Lanka.
50. Parameshwaran, R., **Liyanage, G.Y.,** Wijerathna, P.A.K.C., and Manage, P.M. (2024). Characterization of Compost and Screening of Antibiotic Residues, Antibiotic Resistant Bacteria in Commercially Available Compost in Sri Lanka. 28th International Forestry and Environment Symposium, 2024, January, Colombo, Sri Lanka, Pg 82
51. Bandara, S.M.T.V., Wijerathna, P. A. K. C., **Liyanage, G.Y.,** and Pathmalal, M.M. (2024). Identification of E.coli O157 strain, Salmonella sp. and Shigella sp. In Negombo Lagoon, Sri Lanka. 28th International Forestry and Environment Symposium, 2024, January, Colombo, Sri Lanka, Pg 61
52. Dehvanayagam, M.S.J., Sadeepa, H.D.D., **Liyanage, G.Y.,** and Manage, P.M. (2024). Isolation of Endophytes with Antimicrobial Activity from Selected Indigenous Medicinal Plants Against Amoxicillin-Resistant Environmental Bacteria. 28th International Forestry and Environment Symposium, 2024, January, Colombo, Sri Lanka, Pg 29
53. Liyanage, D., **Liyanage, G.Y.,** Sirisena, K., and Manage, P.M. (2024). Optimizing Environmental Conditions for Amoxicillin-Resistant Bacterial Strain in the Degradation of Amoxicillin and Exploring the Degradation Mechanism. 28th International Forestry and Environment Symposium, 2024, January, Colombo, Sri Lanka, Pg 189
54. Bandara, S.M.T.V., Wijerathna, P. A. K. C., Liyanage, G.Y., and Pathmalal, M.M. (2024) Detection of E.coli O157 and analysis of chemical parameters along the Sarakkuwa to Mirissa Coastal Belt in Sri Lanka. Proceedings of 11th Ruhuna International Science & Technology Conference University of Ruhuna, Matara, Sri Lanka

Awards

Name of student	Award	Occasion
G.Y. Liyanage	Best oral presentation	21st International Forestry and Environmental Symposium
G.Y. Liyanage	Best oral presentation	22nd International Forestry and Environmental Symposium
G.Y.Liyanage	Most outstanding paper- Health Risk and environmental pollution	2nd International conference on Environment and natural resources, Thailand.
Manage P.M., Ganegoda S., **G.Y. Liyanage**	**Bronze Award**	**Innovate Sri Lanka 2019**
Manage P.M., Ganegoda S **G.Y. Liyanage**	**First Place under Energy and Environment**	**Innovate Sri Lanka 2019**
G.Y. Liyanage	Best oral presentation	4th International Symposium on Pure and Applied Sciences
G.Y. Liyanage	Best oral presentation	5th International Symposium on Pure and Applied Sciences

INTERNATIONAL CONFERENCE/SYMPOSIUM ATTENDED

1. The 1st Environment and Natural Resources International Conference, 2014, Thailand
2. 1st International Conference on Multidisciplinary Approaches, 2014
3. 2nd International South Asian Biodiversity Conference, 2014
4. 19th International Forestry and Environment Symposium, 2014
5. 4th International Symposium on “Water quality and Human health; Challenges Ahead,

2015

6. 11th International Academic Conference on Development in Science and Technology (IACDST-2015), Singapore
7. 2nd International Conference on Multidisciplinary Approaches, 2015
8. 20th International Forestry and Environment Symposium, 2015
9. WONCAR-SAR, 2016
10. The 2nd Environment and Natural Resources International Conference, 2016, Thailand
11. 5th International Symposium- the Challenges ahead-water quality and human health, 2016
12. 21st International Forestry and Environment Symposium, 2016
13. 3rd International Conference on Multidisciplinary Approaches, 2016
14. International Conference in Post Graduate Institute of Science, 2017
15. 4th International Conference on Multidisciplinary Approaches, 2017
16. International research symposium on Pure and Applied Sciences (IRSPAS), 2017
17. 4th International Conference on Multidisciplinary Approaches, 2017
18. 22nd International Forestry and Environment Symposium, 2016
19. South Asian Biotechnology Conference-2018
20. 2nd International Symposium on Cyanobacteria and Public Health and Workshop on "cyanotoxin toolbox II"-2018

NATIONAL WORKSHOP/ TRAINING ATTENDED

1. Participated for the international training programme on "**Cyanotoxin toolbox**" conducted by **Dept of Zoology, University of Sri Jayewardenepura and School of pharmacy and life science, The Robert Gordon University, Aberdeen** (2013).
2. One day workshop on "**Scientific writing"** conducted by the SLAFAR & BOBLME (2013).\
3. One day workshop on "**Scientific writing"** conducted by the National Science Foundation (NSF), Sri Lanka (2013).
4. One day workshop on "**Scientific writing with LATEX"** conducted by the Department of physics, Faculty of Applied science, University of Sri Jayewardenepura (2014).
5. One day workshop on **"Monitoring water quality for safe drinking water"** conducted by the Sri Lanka Association for Fisheries and Aquatic Resources - SLAFAR (2015).
6. One day workshop on **"Uses of Natural sciences in Medical Research"** conducted by the Medical Research Institute - MRI (2015).
7. Two days' workshop on **"Invasive Plant Control"** conducted by the Invasive Alien Species Project, Bio Diversity Secretariat, Ministry of Mahaweli Development and Environment with the Collaboration of Irrigation department and International Training Institute of Irrigation and Water Management (2016).
8. One day workshop on **"Enhance emotional Intelligent and Strength of Life Skills"** conducted by the Department of Zoology, Faculty of Applied science, University of Sri Jayewardenepura (2016).

9. Two days' workshop on **"JOSM (open street mapping)"** conducted by the International Union for Conservation of Nature (IUCN) (2017).
10. One day workshop on **"Review Writing and Publication Metrics"** conducted by the Sri Lankan Academy of Young Scientists (SLAYS) and Faculty of Applied science, University of Sri Jayewardenepura (2017).
11. Two days' workshop on **"Young Scientists'' Meeting on Effect of Climate change on Biodiversity** organized by the Boards of Study in Zoological Sciences and Environmental Science and PGIS, University of Peradeniya in collaborated with The World Academy of Science (TWAS) – Regional Office for Central and South Asia (ROCASA) and Jawaharlal Nehru Centre for Advanced Scientific Research, India (2017).
12. Hands on experience in **HPLC** (High-Performance Liquid Chromatography), **ELISA** (Enzyme-Linked Immunosorbent Assay), **AAS** (Atomic Absorption Spectroscopy), **GC-MS** (Gas Chromatography Mass Spectrometry) and **Spectrophotometer** applications.
13. Participated for the international training programme on "**Cyanotoxin toolbox II**" conducted by **Dept of Zoology, University of Sri Jayewardenepura and School of pharmacy and life science, The Robert Gordon University, Aberdeen** (2018).
14. One day workshop on **"Current and future trends on Molecular biology and Biotechnology"** conducted by the Institute of Biochemistry, Molecular Biology and Biotechnology, University of Colombo (2018) and NASTEC.

Extra-Curricular Activities

- Junior prefect - Devi Balika Vidyalaya- 2003/2004
- Senior prefect - Devi Balika Vidyalaya- 2006/2007
- President of the "Science Society " - Devi Balika Vidyalaya- 2003/2004
- Secretary – "Aquatic Club" , Department of Zoology, University of Sri Jayewardenepura -2009/2010.
- Member of the "Genetic Society", Department of Zoology, University of Sri Jayewardenepura -2009- 2011.
- Served as a resource person to train GCE A/L students for international **Biological Olympiad** completion on 2014, 2015,2017 and 2018 at University of Sri Jayewardenepura
- Senior Treasurer-Aquatic Society, Faculty of Urban and Aquatic Bioresources

I certify that the information given here is true and accurate

G.Y. Liyanage