

Curriculum Vitae

Pavani Dulanja Dissanayake



Senior Lecturer

**Department of Soil Science, Faculty of Agriculture, University of Peradeniya,
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Research Interests (Keywords)

- Soil and water quality
- Soil and water pollution
- Soil and water remediation
- Mitigation of climate change
- Sustainable Agriculture
- Sustainable Waste Management
- Emerging pollutants
- Biochar

Educational Qualifications

➤ **PhD in Environmental Science & Ecological Engineering (2022)**

Korea Biochar Research Center, Division of Environmental Science and Ecological Engineering, Korea University, Seoul, Korea

Visiting PhD Scholar - Department of Science and Environmental Studies, The Education University of Hong Kong, Hong Kong (2019) and Laboratory of Soil and Groundwater Management, School of Architecture and Civil Engineering, University of Wuppertal, Wuppertal, Germany (2021)

Thesis title: Sustainable Use of Biochar for Immobilization of Potentially Toxic Elements and Soil Quality Improvement in Soil Contaminated with Solar Panel Waste

➤ **M. Sc. in Environmental Soil Science (2018)** (GPA: 3.95/ 4.00)

Postgraduate Institute of Agriculture, University of Peradeniya, Sri Lanka

- **B.Sc. (Hons) in Agricultural Technology and Management (2013)** (GPA: 3.66/ 4.00)
Faculty of Agriculture, University of Peradeniya, Sri Lanka

Professional Experience

- **Senior Lecturer (Gr. II) in Soil and Environmental Chemistry**, Department of Soil Science, Faculty of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka (From July 2024 to date)
- **Senior Research Officer**, Soils and Plant Nutrition Division, Coconut Research Institute of Sri Lanka (From August 2022 to July 2024)
- **Research Officer**, Soils and Plant Nutrition Division, Coconut Research Institute of Sri Lanka (From January 2014 to August 2022)
- **Visiting Lecturer**, Board of Study of Soil Science, Postgraduate Institute of Agriculture, University of Peradeniya, Sri Lanka (From September 2023 to date)
- **Guest Lecturer**, Division of Environmental Science and Ecological Engineering, Korea University, South Korea (Spring semester, 2022)
- **Teaching Assistant**, Division of Environmental Science and Ecological Engineering, Korea University, South Korea (2019 to 2020)
- **Research Assistant**, Department of Soil Science, Faculty of Agriculture, University of Peradeniya, Sri Lanka under a project on Nitrous oxide (N₂O) emission from six rice varieties as governed by soil microbial communities, rhizosphere characteristics and agronomic practices funded by the National Research Council of Sri Lanka (Grant number: NRC 11/148) (From February 2013 to January 2014)
- **Teaching Assistant**, Department of Soil Science, Faculty of Agriculture, University of Peradeniya, Sri Lanka (from November 2012 to February 2013).

Awards

- National Research Council Merit Award for scientific publications in 2020 (Awarded in 2024)
- “Prof. Yoo Hang Kim Young Women Scientists Award” awarded by the Association of Academies and Societies of Sciences in Asia (AASSA) in 2023
- “Korea University Graduate Student Achievement Award” for the best PhD student in Korea University, South Korea in Fall semester, 2021
- “Excellent publication award” for the most outstanding paper awarded by the College of Life Science at Korea University, South Korea in Fall semester, 2021
- Outstanding contribution in reviewing for the Environmental Pollution journal, Elsevier (2020)
- Excellence in Reviewing Award (Top 25 Reviewers), The Journal of Soils and Sediments, Springer
- “Excellent publication award”, for the most outstanding paper published by the College of Life Science at Korea University, South Korea in 2020 granted by Seorin Bioscience Co. Ltd., South Korea
- Best student poster presentation award for the outstanding poster presentation presented at 20th International Conference on Heavy Metals in the Environment, 25-29th October 2020, FKI Tower, South Korea
- Best poster presentation for the poster presented at the 3rd International Conference on Biological Waste as Resource (BWR 2018), 17-19th December 2018, The Hong Kong Education University, Hong Kong
- Best oral presentation award for the outstanding presentation at 4th Asia Pacific Biochar Conference (APBC 2018), 4-7th November 2018, Crowne Plaza Hotel, Foshan, China

Scholarships

- Foreign Global Leader Scholarship, Foreign Natural Sciences and Engineering Scholarship, Research scholarship, Brain Korea 21 plus program (BK21 plus) Scholarship - Korea University, South Korea (2018 – 2022)
- Ce de S.W. Siriwardena scholarship for the best performance in 1100 series - Faculty of Agriculture, University of Peradeniya, Sri Lanka (2009)

Patents

- Patent for production of carbon dioxide adsorbent using biochar (South Korea)
Grant No.: 102392508
Grant date: 29-04-2022
Inventors: Ok, Y.S., Lee, K.B., **Dissanayake, P.D.**, Kwon, J.H., Choi, S.W., Igalavithana, A.D., Ura, C.

Publications

Number of citations (Google Scholar): 2630

H Index (Google Scholar): 24

H10 Index (Google Scholar): 27

Articles in SCI Index Journals

1. **Dissanayake, P.D.**, Alessi, D.S., Yang, X., Kim, J.Y., Yeom, K.M., Roh, S.W., Noh, J.H., Shaheen, S.M., Ok, Y.S. and Rinklebe, J. (2024). Redox-mediated changes in the release dynamics of lead (Pb) and bacterial community composition in a biochar amended soil contaminated with metal halide perovskite solar panel waste. *Science of The Total Environment*, 934, 173296 (Impact Factor: 10.753)
2. **Dissanayake, P.D.**, Withana, P.A., Sang, M.K., Cho, Y., Park, J., Oh, D.X., Chang, S.X., Lin, C.S.K., Bank, M.S., Hwang, S.Y. and Ok, Y.S. (2024). Effects of biodegradable poly (butylene adipate-co-terephthalate) and poly (lactic acid) plastic degradation in soil. *Soil Use and Management*, 40(2), 13055 (Impact Factor: 5.000)
3. Palansooriya, K. N., **Dissanayake, P. D.**, Igalavithana, A. D., Tang, R., Cai, Y., and Chang, S. X. (2023). Converting food waste into soil amendments for improving soil sustainability and crop productivity: A review. *Science of The Total Environment*, 881:163311 (Impact Factor: 10.753)
4. **Dissanayake, P.D.**, Yeom, K.M., Sarkar, B., Alessi, D.S., Hou, D., Rinklebe, J., Noh, J.H., and Ok, Y.S. (2023). Environmental impact of metal halide perovskite solar cells and potential mitigation strategies: A critical review. *Environmental Research*, 219: 115066. (Impact Factor: 8.431)
5. Yuan, X., Wang, J., Deng, S., **Dissanayake, P.D.**, Wang, S., You, S., Yip, A.C., Li, S., Jeong, Y., Tsang, D.C., and Ok, Y.S. (2022). Sustainable food waste management: synthesizing engineered biochar for CO₂ capture. *ACS Sustainable Chemistry & Engineering*, 10(39), pp.13026-13036. (Impact Factor: 9.224)

6. Xiong, T., Ok, Y. S., **Dissanayake, P.D.**, Tsang, D. C., Kim, S., Kua, H. W., and Shah, K. W. (2022). Preparation and thermal conductivity enhancement of a paraffin wax-based composite phase change material doped with garlic stem biochar microparticles. *Science of the Total Environment*, 827, 154341. (Impact Factor: 10.753)
7. **Dissanayake, P.D.**, Kim, S., Sarkar, B., Oleszczuk, P., Sang, M.K., Haque, M.N., Ahn, J.H., Bank, M.S. and Ok, Y.S. (2022). Effects of microplastics on the terrestrial environment: A critical review. *Environmental Research*, 209: 112734. (Impact Factor: 8.431) [**Highly Cited Paper**].
8. Sarkar, B., **Dissanayake, P.D.**, Bolan, N.S., Yousuf, D.J., Kumar, M., Haque, N., Ramanayake, S., Mukhopadhyay, R., Biswas, J.K., Tsang, D. C.W., Rinklebe, J., and Ok, Y.S. (2022). Challenges and opportunities in sustainable management of microplastics and nanoplastics in the environment. *Environmental Research*, 207: 112179. (Impact Factor: 8.431) [**Highly Cited Paper**].
9. **Dissanayake, P.D.**, Palansooriya, K.N., Sang, M.K., Oh, D.X., Park, J., Hwang, S.Y., Igalavithana, A.D., Gu, C., and Ok, Y.S. (2022). Combined effect of biochar and soil moisture on soil chemical properties and microbial community composition in microplastic-contaminated agricultural soil. *Soil Use and Management*, 38(3): 1446-1458 (Impact Factor: 3.672)
10. Palansooriya, K.N., Li, J., **Dissanayake, P.D.**, Suvarna, M., Li, L., Yuan, X., Sarkar, B., Tsang, D.C., Rinklebe, J., Wang, X. and Ok, Y.S. (2022). Prediction of Soil Heavy Metal Immobilization by Biochar Using Machine Learning. *Environmental Science & Technology*. 56 (7): 4187- 4198 (Impact Factor: 11.357) [**Highly Cited Paper**].
11. Zhang, M., Shen, J., Zhong, Y., Ding, T., **Dissanayake, P.D.**, Yang, Y., Tsang, Y.F., and Ok, Y.S. (2022). Sorption of pharmaceuticals and personal care products (PPCPs) from water and wastewater by carbonaceous materials: a review. *Critical Reviews in Environmental Science and Technology*, 52(5), 727-766. (Impact Factor: 11.750)
12. Maged, A., **Dissanayake, P.D.**, Yang, X., Pathirannahalage, C., Bhatnagar, A., and Ok, Y.S. (2021). New mechanistic insight into rapid adsorption of pharmaceuticals from water utilizing activated biochar. *Environmental Research*, 202: 111693 (Impact Factor: 8.431)
13. Masrura, S.U., **Dissanayake, P.D.**, Sun, Y., Ok, Y.S., Tsang, D.C.W., and Khan, E. (2021). Sustainable Use of Biochar for Resource Recovery and Pharmaceutical Removal from Human Urine: A Critical Review. *Critical Reviews in Environmental Science and Technology* 51(24): 3016-3048 (Impact Factor: 11.750)

14. Yuan, X., **Dissanayake, P.D.**, Gao, B., Liu, W. J., Lee, K. B., and Ok, Y.S. (2021). Review on upgrading organic waste to carbon materials for energy and environmental applications. *Journal of Environmental Management*, 296: 113128 (Impact Factor: 8.7)
15. Kumar, A.N., **Dissanayake, P.D.**, Masek, O., Priya, A., Lin, C. S.K., Ok, Y.S., and Kim, S-H. (2021). Recent Trends in Biochar Integration with Anaerobic Fermentation: Win-Win Strategies in a Closed Loop. *Renewable and Sustainable Energy Reviews*, 149: 111371 (Impact Factor: 16.799)
16. Khan, M.U., Lee, J.T.E., Bashir, M.A, **Dissanayake, P.D.**, Ok, Y.S., Tong, Y.W., Shariati, M.A., Wu, S., and Ahring, B. K. (2021). Current status of biogas upgrading for direct biomethane use: A review. *Renewable and Sustainable Energy Reviews*, 149: 111343 (Impact Factor: 16.799) [*Highly Cited Paper*].
17. Senadeera, S. S., Withana, P.A., **Dissanayake, P.D.**, Sarkar, B., Chopra, S.S., Rhee, J. H., and Ok, Y.S. (2021). Scoring environment pillar in environmental, social and governance (ESG) assessment. *Sustainable Environment*, 7(1): 1-7 (Impact Factor: 2.30)
18. Lee, J.T.E., Ok, Y.S., Song, S., **Dissanayake, P.D.**, Tian, H., Tio, Z. K., Cui, R., Lim, E. Y., Jong, M-C. Hoy, S.H., Lum, T.Q.H., Tsui, T.H., Yoon, C.S., Dai, Y., Wang, C.H., Tan, H.T.W., and Tong, Y.W. (2021). Biochar utilization in the anaerobic digestion of food waste for the creation of a circular economy via biogas upgrading and digestate treatment. *Bioresource Technology*, 333:125190 (Impact Factor: 11.889)
19. Yuan, X., Suvarna, M., Low, S., **Dissanayake, P.D.**, Lee, K.B., Li, J., Wang, X., and Ok, Y.S. (2021). Applied machine learning to predict CO₂ adsorption on biomass waste-derived porous carbons. *Environmental Science & Technology*, 55(17): 11925-11936 (Impact Factor: 11.357)
20. Wang, T., **Dissanayake, P.D.**, Sun, M., Tao, Z., Han, W., An, N., Gu, Q., Tian, B.B., Ok, Y. S., and Shang, J. (2021). Adsorption and visible-light photocatalytic degradation of organic pollutants by functionalized biochar: Role of iodine doping and reactive species. *Environmental Research*, 197: 111026 (Impact Factor: 8.431)
21. Gupta, S., Palansooriya, K.N., **Dissanayake, P.D.**, Ok, Y.S., and Kua, H. W. (2020) Carbonaceous inserts from lignocellulosic and non-lignocellulosic sources in cement mortar: Preparation conditions and its effect on hydration kinetics and physical properties. *Construction and Building Materials*, 264: 120214 (Impact Factor: 7.693)
22. Igalavithana, A.D., Choi, S.W., Shang, J., Hanif, A., **Dissanayake, P.D.**, Tsang, D.C.W., Lee, K.B., and Ok, Y.S. (2020). Carbon dioxide capture in biochar produced from pine sawdust and paper mill sludge: Effect of pyrolysis temperature and steam activation. *Science of the Total Environment*, 739: 139845 (Impact Factor: 10.753)

23. Zhao, W., Chen, C., Yang, X., Qian, X., Liu, C., Zhou, D., Sun, T., Zhang, M., Wei, G., **Dissanayake, P.D.**, and Ok, Y.S. (2020). Recent Advances in Photocatalytic Hydrogen Evolution with High Performance Catalysts without Precious Metals. *Renewable and Sustainable Energy Reviews*, 132: 110040 (Impact Factor: 16.799)
24. Igalavithana, A.D., Choi, S.W., **Dissanayake, P.D.**, Shang, J., Wang, C.H., Yang, X., Kim, S., Tsang, D.C.W., Lee, K.B., and Ok, Y.S. (2020). Gasification biochar from feedstock mixtures of food waste and wood waste for effective CO₂ adsorption. *Journal of Hazardous Materials*, 391: 121147 (Impact Factor: 14.224) [**Highly Cited Paper**].
25. **Dissanayake, P.D.**, Choi, S.W., Igalavithana, A.D., Yang, X., Tsang, D.C.W., Wang, C.H., Kua, H.W., Lee, K.B., and Ok, Y.S. (2020). Sustainable gasification biochar as a high efficiency adsorbent for CO₂ capture: A facile method to designer biochar fabrication. *Renewable and Sustainable Energy Reviews*, 124: 109785 (Impact Factor: 16.799)
26. **Dissanayake, P.D.**, You, S., Igalavithana, A.D., Xia, Y., Bhatnagar, A., Gupta, S., Kua, H.W., Kim, S., Kwon, J.H., Tsang, D.C.W., and Ok, Y.S. (2020). Biochar-based adsorbents for carbon dioxide capture: A Critical Review. *Renewable and Sustainable Energy Reviews*, 119:109582 (Impact Factor: 16.799) [**Highly Cited Paper**].
27. Xia, Y.F., Zhang, M., Tsang, D.C.W., Geng, N., Lu, D., Zhu, L., Igalavithana, A.D., **Dissanayake, P.D.**, Rinklebe, J., Kim, K.H., and Ok, Y.S. (2020). Recent advances in control technologies for nutrient pollution from agricultural runoff: current practices and prospects. *Applied Biological Chemistry*, 63(8): 1-13 (Impact Factor: 3.206) [**Highly Cited Paper**].

Book Chapters

1. Perera, L., Ramaswamy, M., **Dissanayake, P.D.**, Yang, C. and Kalaipandian, S. (2024). Breeding and Genetics for Coconut Improvement. In: Adkins, S.W., Biddle, J.M., Bazrafshan, A., Kalaipandian, S. (Eds.) *The Coconut: Botany, Production and Uses*. CABI, UK. pp. 111-125.
2. **Dissanayake, P.D.**, Palansooriya, K.N., Withana, P.A., Senadeera, S.S., Samaraweera, H., Wang, S., Yuan, X., Masek, O., and Ok, Y.S. (2022). Engineered biochar as a potential adsorbent for carbon dioxide capture. In: Tsang, D.C.W., Ok, Y.S. (Eds.), *Biochar in Agriculture for Achieving Sustainable Development Goals*. Academic Press, London, United Kingdom. pp 345-359
3. **Dissanayake, P.D.** and Perera, L. (2021). Emerging non-food applications in the coconut industry. In: Ghosh, P.K. (Ed.), *The Coconut palm (Cocos nucifera)*. Nova Science Publishers, Inc. USA, pp 283-300

Full papers published in conference proceedings

1. **Dissanayake, D.M.P.D.**, Kumari, L.M.S.S., Herath, H.M.I.K., Wijebandara, D.M.D.I., and Nirukshan, G.S. (2016). Effect of Sodium chloride application on nitrification rates in coconut growing Sandy Regosol. In: V.R.M. Vidhanaarachchi, H.M.I.K. Herath, M.K. Meegahakumbura, A.D.N.T. Kumara and M.K.F. Nadheesha (Eds.), Proceedings of the Sixth Plantation Crop Research Symposium, Colombo. Sri Lanka. 2nd-4th November, 2016. pp. 185-194.
2. Nirukshan, G.S., Herath, H.M.I.K., Wijebandara, D.M.D.I., and **Dissanayake, D.M.P.D.** (2016). Soil microbial population and activity affected by fertilizer and manure addition in a coconut growing sandy regosol. In: V.R.M. Vidhanaarachchi, H.M.I.K. Herath, M.K. Meegahakumbura, A.D.N.T. Kumara and M.K.F. Nadheesha (Eds.), Proceedings of the Sixth Plantation Crop Research Symposium, Colombo. Sri Lanka. 2nd-4th November, 2016. pp. 163 - 172.

Abstracts and extended abstracts published in conference proceedings

1. **Dissanayake, P.D.**, Alessi, D.S., Yang, X., Kim, Y., Hussain, M.M., Shaheen, S.M., Yeom, K.M., Roh, S.W., Noh, H., Rinklebe, J., and Ok, Y.S. (2023). Redox mediated changes in (im)mobilization of lead in a biochar amended soil contaminated with metal halide perovskite solar cell waste. 1st joint ICOBTE & ICHMET Conference. 4-6 September 2023 Wuppertal, Germany. pp. 339.
2. Ok, Y.S., Senadeera, S., Yuan, X., Palansooriya, K., **Dissanayake, P.D.**, Igalavithana, A., Vithanage, M., Yang, X., El-Naggar, A., Ahmad, M., Rajapaksha, A., and Chang, S. (2022). Biochar from biomass and waste: fundamentals and applications. 9th International Conference on Engineering for Waste and Biomass Valorization (WasteEng 2022). 27-30 June 2022. Copenhagen, Denmark. pp 721
3. **Dissanayake, P.D.**, Roh, S.W., Kim, J. Y., Yeom, K.M., Rinklebe, J., Noh, J.H., and Ok, Y.S. (2021). Effect of rice husk biochar on lead dynamics and bacterial phylotype composition in solar cell waste contaminated soil. Nature Conference. 26-28 October 2021, Seoul, Korea. pp 50
4. Palansooriya, K.N., Li, J., **Dissanayake, P.D.**, Suvarna, M., Lanyu, L., Yuan, X., Sarkar, B., Tsang, D.C.W., Rinklebe, J., Wang, X., and Ok, Y.S. (2021). Prediction of soil heavy metal immobilization by biochar using machine learning. Nature Conference. 26-28 October 2021, Seoul, Korea. pp. 105
5. Yuan, X., Suvarna, M., Low, S., **Dissanayake, P.D.**, Lee, K.B., Li, J., Wang, X., and Ok, Y.S. (2021). Applied machine learning to predict CO₂ adsorption on biomass waste-derived porous carbons. Nature Conference. 26-28 October 2021, Seoul, Korea. pp. 77
6. **Dissanayake, P.D.**, Kim, S., Sarkar, B., Sang, M. K., Haque, N., Ahn, J.H., Banks, M., and Ok, Y.S. (2020). A Critical Review on Microplastics as an Emerging Contaminant in Terrestrial

- Environment. 2nd Food Innovation and Engineering Conference (FOODIE 2020). 23-24 November 2020. Online Conference. pp 27.
7. **Dissanayake, P.D.**, Yeom, K.M., Sarkar, B., Yamauchi, Y., Alessi, D., Noh, J.H., and Ok, Y.S. (2020). Potential Risk of Metal Halide Perovskite Solar Cells in the Environment: A Critical Review. 20th International Conference on Heavy Metals in the Environment. 25-29 October, FKI Tower, Korea. pp. 264
 8. Cho, Y., Igalavithana, A.D., **Dissanayake, P.D.**, Masek, O., Sang, M. K., and Ok, Y. S. (2020). Heavy metal immobilization and nutrient release by standard biochar. 20th International Conference on Heavy Metals in the Environment. 25-29 October, FKI Tower, Korea. pp. 267
 9. **Dissanayake, P.D.**, Kim, S., and Ok, Y.S. (2020). Effect of Plastic Mulch Wastes on Soil Quality and Crop Productivity in Agro-Environments. Sustainable Waste Management Workshop. National University of Singapore, Singapore. 7-9 January 2020. pp. 9
 10. Shin, H.S., **Dissanayake, P.D.**, Igalavithana, A.D., Palansooriya, K.N., Park, J., Yu, S., Ryu, C., and Ok, Y.S. (2019). Effect of Biochar Pyrolysis Temperature on Chemical Immobilization of Pb and As in Contaminated Soils. Engineering Sustainable Development 2019. 12-13 December 2019, Korea University, Seoul, Korea. pp. 55
 11. Herath, H.M.I.K., **Dissanayake, D.M.P.D.**, Nirukshan, G.S., and Kottegoda, N. (2019). Use of Nano-Fertilizer to Minimize Nutrient Losses from Sandy Regosols. 14th International Conference on the East and Southeast Asia Federation of Soil Science Societies. 3-8 November 2019. National Taiwan University, Taipei, Taiwan. pp. 136
 12. Hong, Y., Kwon, S.G., Park, M., **Dissanayake, P.D.**, and Ok, Y.S. (2019). The Performance of Standard Biochars for the Sustainable Recovery of Vaporized Hydrocarbons During Low Temperature Thermal Remediation of Diesel Contaminated Soil. IBI Biochar World Congress 2019, 10-14 November 2019, Korea University, Seoul, Korea. pp. 95.
 13. **Dissanayake, P.D.**, Xia, Y.F., Tsang, D.C.W., Shang, J., and Ok, Y.S. (2018). Biochar-Based Adsorbents for Capturing Carbon Dioxide. 3rd International conference on Biological Waste as Resource (BWR 2018). The Hong Kong Education University, Hong Kong, 17-19 December 2018. pp. 158
 14. **Dissanayake, P.D.**, Choi, S.W., Igalavithana, A.D., Yang, X., Wang, C.H., Shang, J., Tsang, D.C.W., Lee, K.B., and Ok, Y.S. (2018). Effect of Carbon Dioxide and Potassium Hydroxide Modification on CO₂ Adsorption Capacity of Biochar. 4th Asia Pacific Biochar Conference (APBC 2018). 3-8 November 2018. Crown Plaza Hotel, Foshan, China. pp. 113.
 15. Wijebandara, D.M.D.I., **Dissanayake, D.M.P.D.** (2018). Status of Copper and Zinc in Coconut (*Cocos nucifera*) Growing Soils in Sri Lanka. Proceedings of Sri Lanka Council for Agricultural Research Policy (SLCARP) International Agricultural Research Symposium. 13-14 August 2018. Colombo, Sri Lanka. pp 53.
 16. Wijebandara, D.M.D.I., **Dissanayake, D.M.P.D.**, and Imaya, S.A.S. (2018). Assessment of Soil Nutrient Status in Batticaloa District in Sri Lanka for Expansion of Coconut Cultivation. Proceedings of Wayamba International Conference (WinC 2018), 24-25 August 2018. Kuliypatiya, Sri Lanka. pp 307.

17. **Dissanayake, D.M.P.D.**, Wijebandara, D.M.D.I., and Hewapathirana. H.P.D.T. (2018). Comparison of Nutrient Status in Drooped and Healthy Coconut Palms (*Cocos nucifera* L.) in Sri Lanka. Proceedings of Wayamba International Conference (WinC 2018), 24-25 August 2018. Kuliyaipitiya, Sri Lanka. pp 312.
18. Wijebandara, D.M.D.I., **Dissanayake, D.M.P.D.**, Nishanth, R., and Vidhanaarachchi, L.P. (2018). Evaluating Quality of Different Types of Poultry Manure Use for Coconut (*Cocos nucifera* L.) Cultivations in Sri Lanka. 2nd International Conference on Bioresource, Energy, Environment and Materials Technology. 10th-13th June 2018, Hongcheon, Korea. pp 562.
19. Wijebandara, D.M.D.I., **Dissanayake, D.M.P.D.**, and Imaaya, S.A.S. (2018). Soil Fertility Status of Non-traditionally Coconut Growing Soils in Sri Lanka. Second International Conference on Bioresource, Energy, Environment and Materials Technology. 10th-13th June 2018, Hongcheon, Korea. pp 563.
20. Hewapathirana, H.P.D.T., Yalegama, L.L.W.C., Samaranayake, H.A.E., and **Dissanayake, D.M.P.D.** (2018). In-vitro analysis of Glycemic Index of coconut jaggery and table sugar. Proceedings of the International Symposium on Agriculture and Environment (ISAE 2018). 17th January 2018. Galadari Hotel, Colombo, Sri Lanka. pp.156-158.
21. Wanasinghe, W.M.R.A., Wijebandara, D.M.D.I., Nugawela, R.C.W.M.R.A., and **Dissanayake, D.M.P.D.** (2017). Phosphorus availability in goat manure and inorganic phosphorous treated coconut growing soils in the Dry Zone of Sri Lanka. Proceedings of the 16th Agricultural Research Symposium of the Wayamba University of Sri Lanka. 9th and 10th November 2017. pp. 595-599.
22. Wickramaarachchi, W.A.M.S., **Dissanayake, D.M.P.D.**, and Duminda., D.M.S. (2017). Sulphur status of soils in coconut estates in Gampaha district, Sri Lanka. In: Proceedings of the 9th Annual Research Symposium of Rajarata University of Sri Lanka, Anuradhapura, Sri Lanka. 21st September 2017. Faculty of Agriculture, Rajarata University, Anuradhapura, Sri Lanka. pp.47.
23. **Dissanayake, D.M.P.D.**, Kumari, L.M.S.S., Herath, H.M.I.K., and Wijebandara, D.M.D.I. (2016). Inhibitory effect of chloride application on nitrification rates of coconut growing Sandy Regosol. In: S. Jayakody and R.A.R.Prabodinie (Eds.), Proceedings of the Wayamba International Conference - WinC 2016, Kuliyaipitiya, Sri Lanka. 19-20th August 2016. Wayamba University, Sri Lanka. pp. 289.
24. **Dissanayake, D.M.P.D.** and R.M.C.P. Rajapaksha. (2016). Nitrous oxide emission from wetland rice fields grown with six rice varieties in Sri Lanka. Poster presented at: Fifth International Eco summit. Montpellier, France. 29th August – 1st September 2016.
25. Adikari, A.M. N., **Dissanayake, D.M.P.D.**, Herath, H.M.I.K., Wijebandara, D.M.D.I., and Gajanayake, B. (2016). Investigation of status of sulphur in coconut lands in the Intermediate Zone of Sri Lanka. In: Proceedings of the 15th Agricultural Research Symposium, Makandura,

Sri Lanka. 28th–29th June 2016. Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka. pp. 359-362.

26. Chathuranga, N.W.K.L.D.N., Nirukshan, G.S., **Dissanayake, D.M.P.D.**, and Duminda, D.M.S. (2016). Relationship between phosphate solubilizing bacteria and soil phosphorus of coconut growing soils. In: Proceedings of the 8th Annual Research Symposium of Rajarata University of Sri Lanka, Anuradhapura, Sri Lanka. 11th February 2016. Faculty of Agriculture, Rajarata University of Sri Lanka, Anuradhapura, Sri Lanka. pp. 29.
27. **Dissanayake, D.M.P.D.** and Rajapaksha, R.M.C.P. (2015). Controlling nitrate leaching losses from fertilized Sandy Regosol using neem (*Azadirachta indica*). In: A. Bandaranayake, P. Bandaranayake, D. Bandupriya, S. Chelvendran, C. Jayawardena and M. Vithanage (Eds.), Proceedings of the fifth Young Scientists Forum symposium, Colombo, Sri Lanka. 22nd January 2016. National Science and Technology Commission, Colombo, Sri Lanka. pp. 27-29.
28. Nirukshan G.S., **Dissanayake, D.M.P.D.**, Hearth, H.M.I.K., and Tennakoon, N.A. (2015). Comparison of plant and soil nutritional status between organically and conventionally cultivated two coconut lands in the intermediate zone of Sri Lanka. In: A. Bandaranayake, P. Bandaranayake, D. Bandupriya, S. Chelvendran and M. Vithanage (Eds.), Proceedings of the fifth Young Scientists Forum symposium, Colombo, Sri Lanka. 22nd January 2016. National Science and Technology Commission, Colombo, Sri Lanka. pp. 62-65.
29. **Dissanayake, D.M.P.D.** and R.M.C.P. Rajapaksha. (2012). Accumulation of nitrate in selective crops and well water in Kalpitiya as affected by chemical fertilizer inputs. In: N.V.I.Ratnathunga (Ed.), Proceedings of Peradeniya University Research Session 2012. Peradeniya, Sri Lanka. 4th June 2013. University of Peradeniya, Peradeniya, Sri Lanka. pp.104.

Newsletters/ other articles

1. Dissanayake, P.D. (2023). ප්ලාස්ටික්: මිතුරු වෙසින් ආ සතුරෙක්ද?. Chemical Watch, 3, pp 14. (English translation of the title: Plastic: Is it a foe who came as a friend)
2. Dissanayake, P.D. (2023). ක්ෂුද්‍ර ප්ලාස්ටික් යෙදූ පසෙහි පාංශු රසායනික ලක්ෂණ හා ක්ෂුද්‍ර ජීවී ක්‍රියාකාරීත්වය ජීව අභුරු භාවිතයෙන් වැඩි දියුණු කිරීම. Chemical Watch, 3, pp 17 (English translation of the title: Use of biochar for improving chemical and microbial properties of microplastic contaminated)

Professional Services and Dissemination of Knowledge

- Contribution in national level committees
 - Representative of Coconut Research Institute for the project on establishment of the new coconut triangle in the Northern province of Sri Lanka, Ministry of Plantation Industries, Sri Lanka (2023)
 - Judging panel member of the competitions and grant schemes for commercialization of inventions (National & Provincial Level Competitions of Sahasak Nimawum) organized by the Sri Lanka Inventors' Commission (2023)
 - Technical committee member of the committee on development of national policy on agriculture, climate change and food security, Biennial Conference on Science and Technology organized by the National Science and Technology Commission (2023)

- Contribution as a resource person/ invited speaker
 - Resource person, Training programs for the coconut growers organized by the Coconut Cultivation Board (2022-2024).
 - Resource person, Growers' training program organized by the Coconut Research Institute of Sri Lanka (2022-2024).
 - Resource person, Training program for the coconut development officers and assistant coconut development officers organized by the Coconut Cultivation Board (2022-2024).
 - Resource person, Seminar on "Unlock your future exploring graduate opportunities & success stories organized by the Soil Science Society of Faculty of Agriculture, University of Peradeniya on 29th October 2023
 - Resource person, Research Extension Dialogues organized by the Coconut Research Institute of Sri Lanka and Coconut Cultivation Board on 20th July 2023 and 8th December 2023
 - Invited speaker, First National Symposium on Sustainable Nitrogen Management in Sri Lanka on 22-23rd June 2023
 - Invited speaker, Technical Session of the Annual General Meeting of the Soil Science Society of Sri Lanka on 27th April 2023
 - Resource person, Training program for the new research officers conducted by the Coconut Research Institute of Sri Lanka on 26th April 2022.

- Invited lecturer, National Diploma in Plantation Management, National Institute of Plantation Management, Sri Lanka (November 2022)
- Invited speaker, Sustainable Waste Management Workshop on Microplastics in the Environment which was held from 7th to 9th January 2020 at National University of Singapore, Singapore.
- Invited speaker, Harmful Organisms Conference which was organized by the Korean Society of Environmental Biology on 26th April 2019 in Busan, Korea.

➤ Organizing National/ International Conferences/ Events

- Organizing Committee Member, Photo contest for university students on “Role of Soil Management for Protecting Water Resources” organized by the Soil Science Society of Sri Lanka (2023)
- Organizing Committee Member, Inter-school quiz competition on “Soil for Life” organized by the Soil Science Society of Sri Lanka (2022)
- Secretary, Sustainable Waste Management program organized by the Association of Pacific Rim Universities (APRU) (2019-2021)
- Member of the Organizing Committee, 2nd Food Innovation & Engineering Conference (FOODIE Asia), 23-24 November 2020, Seoul, Korea
- Member of the Local Organizing Committee, 20th International Conference on Heavy Metals in the Environment, 25-29 October 2020, FKI Tower, Seoul, Korea
- Secretary, 20th International Conference on Heavy Metals in the Environment (ICHMET 2020), 25-29 October 2020, FKI Tower, Seoul, Korea
- Secretary, IBI Biochar World Congress 2019, 10-14 November 2019, Korea University, Korea
- Committee Member, Development of training manual for the international training for coconut community conducted by the Coconut Research Institute of Sri Lanka in 2018.
- Committee member of the proceeding organizing committee, 6th Plantation Crop Symposium organized by Coconut Research Institute, Lunuwila, Sri Lanka in 2026.
- Rapporteur, International Symposium on Organic Coconut Farming in Sri Lanka organized by the Coconut Research Institute, Lunuwila, Sri Lanka in 2015.

➤ Editorial Work

- Review Editor, Frontiers in Soil Science (Since March 2023 to date)
- Editor, Journal of Soil Science Society of Sri Lanka (April 2023 to March 2024)

- Editorial Committee Member, Journal of Soil Science Society of Sri Lanka (March 2022 to April 2023)

- Reviewer of International Journals
 - Journal of Hazardous Materials (IF: 14.224)
 - Critical Reviews in Environmental Science and Technology (IF: 11.750)
 - Biochar (IF: 11.452)
 - Environmental Pollution (IF: 9.988)
 - Chemosphere (IF: 8.943)
 - Environmental Geochemistry and Health (IF: 5.411)
 - Frontiers in Environmental Science (IF: 4.898)
 - Journal of Soils and Sediments (IF: 3.536)
 - Heliyon Journal (IF: 3.776)
 - Journal of Environment Quality (2.751)
 - Canadian Journal of Soil Science (IF: 1.723)
 - Frontiers in Soil Science

- Reviewer of Local Journals and Conferences/ Symposia
 - 35th Annual Congress of the Postgraduate Institute of Agriculture, University of Peradeniya, Sri Lanka
 - Journal of the Coconut Research Institute of Sri Lanka (COCOS)
 - Journal of Soil Science Society of Sri Lanka
 - Annual symposium on export agricultural crops (ASEAC 2023)
 - 11th Symposium of the Young Scientists Forum, National Science and Technology Commission, Sri Lanka.
 - International Research Conference of SLTC 2022 (IRC 2022)
 - Fifth Symposium of the Young Scientists Forum, National Science and Technology Commission, Sri Lanka.

- Membership/ positions in local/ international societies
 - Secretary, Soil Science Society of Sri Lanka (From March 2024 to date)
 - Executive Committee member of the Soil Science Society of Sri Lanka (From March 2022 to April 2023)

- Vice President of the Research Officers' Association of Coconut Research Institute of Sri Lanka (From July 2023 to July 2024)
- President of the Research Officers' Association of Coconut Research Institute of Sri Lanka (From August 2022 to July 2023)
- Treasurer of the Research Officers' Association of Coconut Research Institute of Sri Lanka (From July 2017 to March 2018).
- Life member of the Sri Lanka Association for Advancement of Science (From 2022 to date)
- Member of the Korean Society of Soil Science (From 2019 to date)
- Life Member of the Young Scientists Forum of Sri Lanka (From 2014 to date)
- Life Member of the Soil Science Society of Sri Lanka (From 2013 to date)

Pavani Dulanja Dissanayake

9th September 2024