



## **Tharanga Bandara**

Research Assistant,  
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### **Career Development**

- ❖ **Research Assistant**, Chemical and Environmental Systems Modeling Research Group, National Institute of Fundamental Studies, Hantana Road, Kandy, Sri Lanka (2014- to date)
- ❖ **Volunteer research student**, Chemical and Environmental Systems Modeling Research Group, Institute of Fundamental Studies, Hantana Road, Kandy, Sri Lanka (January to October 2014)

### **Education**

- ❖ **M.Sc.** in Environmental Soil Science, Postgraduate Institute of Agriculture, University of Peradeniya, Sri Lanka (2015-2016)
- ❖ **B.Sc.** in Agricultural Sciences and Management, Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka (2009-2013)

### **Professional Experience:**

- ❖ Experimentation on plant heavy metal uptake, role of biochar on plant growth under heavy metal stress, soil enzyme activity analysis, general soil nutrient analysis, heavy metal adsorption studies and data modeling
- ❖ Served as a reviewer in Journal of Environmental Management
- ❖ Served as a member of the Organizing Committee of the International Symposium of Sri Lanka Association of Young Scientists, at the NIFS, November, 2014
- ❖ Science popularization through National Newspapers on general scientific themes related to environment

### **Instrumentation experience:**

- ❖ UV spectrophotometer, Microwave digester, Atomic Absorption Spectrophotometer, Fourier Transform Infra-red (FTIR) spectrophotometer and Kjeldahl apparatus

## **Publications of Referred Journals**

- ❖ Seneviratne M, Gunaratne S, **Bandara T**, Weerasundara L, Rajakaruna N, Seneviratne G, Vithanage M. 2016. Plant growth promotion by *Bradyrhizobium japonicum* under heavymetal stress. South African Journal of Botany 105, 19–24
- ❖ Vithanage M, Herath I, Achinthya S.S, **Bandara T**, Weerasundara L, Mayakaduwa S.S, Jayawardana Y, Kumarathilaka P. 2016. Iodine in Commercial Edible Iodized Salt and Assessment of Iodine Exposure in Sri Lanka; Implications for Iodine Induced Hyperthyroidism. Archives of Public Health 74, 1-7
- ❖ **Bandara T**, Herath I, Kumarathilaka P, Seneviratne M, Seneviratne G, Rajakaruna N, Vithanage M, Ok Y. 2015. Role of woody biochar and fungal-bacterial co-inoculation on enzyme activity and metal immobilization in serpentine soil. Journal of Soil and Sediments 1-9
- ❖ Seneviratne M, Seneviratne G, Madawala H M S P, Iqbal M C M, Rajakaruna N, **Bandara T**, Vithanage M. 2015. A preliminary study of the role of bacterial–fungal co-inoculation on heavy metal phytotoxicity in serpentine soil. Australian Journal of Botany 63, 261-268

## **Journal articles (Under review)**

- ❖ **Bandara T**, Herath I, Kumarathilaka P, Hseu Z-Y, Ok Y , Vithanage M. 2016. Efficacy of woody biomass and biochar for alleviating heavy metal bioavailability in serpentine soil. Environmental Geochemistry and Health.

## **Journal articles (Submitted)**

- ❖ Vithanage M, **Bandara T**, Herath I, Al-Wabel M I, Abduljabbar A, Usman A R A, Ahamad M, Ok Y. 2016. Soil enzyme activities in woody biochar amended multi-metal contaminated soil; Effect of different pyrolysis temperature and application rates. Communications in Soil Science and Plant Analysis.

## **Abstract Publications in International Conferences**

- ❖ **Bandara T**, Jayawardhana Y, Mayakaduwa S, Vithanage M (2016). Use of steam-activated corn biochar to remove carbofuran from water. Asia Pacific Biochar Conference 2016, Gangwon Province, Korea, Oct 19-23, 2016 (Submitted)

- ❖ **Bandara T**, Jayawardhana Y, Weerasundara L, Kumarathilaka P, Wickramasinghe S, Vithanage M (2016). Role of rice husk biochar on restoring fertility of tea (*Camellia sinensis* L.) growing soils. Asia Pacific Biochar Conference 2016, Gangwon Province, Korea, Oct 19-23, 2016 (Submitted)
- ❖ Karawita H, Jayawardhana Y, Weerasundara L, **Bandara T**, Kapuwella K, Vithanage M (2016). Nutrient releasing behavior of an inorganic fertilizer amalgamated biochar. Asia Pacific Biochar Conference 2016, Gangwon Province, Korea, Oct 19-23, 2016 (Submitted)
- ❖ Herath I, Kumarathilaka P, Jayawardhana Y, Mayakaduwa S, **Bandara T**, Wickramasinghe S, Vithanage M (2015). Rice husk derived engineered biochar for glyphosate removal in aqueous media: Engineered biochar for pesticides removal. In. Muhammad Aqeel Ashraf, Wan Syaidatul Aqma, Khaled S. Balkhair. International Conference on Clean Water, Air & Soil (CleanWAS 2015). Springer international publishing
- ❖ **Bandara T**, Yathavakulasingam T, Vithanage M. Role of biochar as a bioamendment to reduce heavy metals translocation in to *Zea mays* plants. 13<sup>th</sup> International Conference on the Biogeochemistry of Trace Element (ICOBTE 2015), Fukuoka, Japan, 12-16 July 2015
- ❖ Vithanage M, **Bandara T**, Hewage B, Herath I, Seneviratne M, Kumarathilaka P, Yapa P, Wekumbura C, Rajakaruna P, Dissanayake S, Seneviratne G. Role of Fungal-Bacterial Biofilm and Woody Biochar on Soil Enzyme Activities and Ni Immobilization in Serpentine Soil. Contaminated Land, Ecological Assessment and Remediation (CLEAR 2014), Chuncheon, Korea, 5-8 October 2014

### **Abstract Publications in Local Conferences**

- ❖ Vithanage M, **Bandara T**, Herath I. Effect of biochar on heavy metals in polluted soils. Annual session and 45<sup>th</sup> Annual general meeting, Soil Science Society of Sri Lanka, 26<sup>th</sup> March 2015
- ❖ **Bandara T**, Hewage B, Herath I, Kumarathilaka P, Yapa P, Wekumbura C, Rajakaruna P, Dissanayake S. Role of Woody Biochar on Soil Microbial Activities, Organic Fraction and Heavy Metal Immobilization in Serpentine Soil. Driving

Research Towards Economy, 2<sup>nd</sup> International conference, IFS, Kandy, 13-14 November 2014

## Book Chapter

- ❖ **Bandara, T** and Vithanage, M (2015). Phytoremediation of Shooting range Soils. In A. A. Ansari, S. S. Gill, R. Gill and G. R. Lanza (Eds), “Phytoremediation: Management of Environmental Contaminants”. New York, Springer International Publishing (Submitted)

## Dissemination of Knowledge

### *Newspaper Articles*

- ❖ “මිනේන් හයිඩ්‍රේට් මහ සයුර තුළ සැඟවුණු බලශක්ති ප්‍රභවය”. 27<sup>th</sup> May 2015. **Vidusara**
- ❖ “සාගර සම්පත වනසන ස්ථායී කාබනික සංයෝග”. 11<sup>th</sup> February 2015. **Vidusara**
- ❖ “මානව ක්‍රියාකාරකම් මගින් උග්‍ර වූ නාය යෑම්”. 17<sup>th</sup> December 2014. **Vidusara**

## Awards

- ❖ The **Best Presenter** at the Final Year Research Presentation, Module Plantation Management, Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka, 23 July 2014

## Travel Grants

- ❖ Travel grant to 13<sup>th</sup> International Conference on the Biogeochemistry of Trace Element (Fukuoka, Japan, 2015)

## Professional Activities

### *Associations*

- ❖ Member – Soil Science Society of Sri Lanka

## Personal Information

**Name in full** : Dissanayaka Mudiyansele Tharanga Uditha Bandara  
**Name with initials** : Bandara D.M.T.U  
**Date of Birth** : 25<sup>th</sup> of October 1987  
**Marital Status** : Married  
**Nationality** : Sri Lankan

## **Non-Related Referees**

Dr. Meththika Vithanage, Senior Research Fellow

Chemical and Environmental Systems Modeling Research Group, National Institute of Fundamental Studies, Kandy, Sri Lanka

E mail: [meththikavithanage@gmail.com](mailto:meththikavithanage@gmail.com)

Adjunct Associate Professor

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Dr. R. S. Dharmakeerthi, Senior Lecturer

Department of Soil Science, Faculty of Agriculture, University of Peradeniya, Peradeniya Sri Lanka

E mail: [dharmakeerthirs@gmail.com](mailto:dharmakeerthirs@gmail.com)

Dr. P.I. Yapa, Senior Lecturer

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