

Faculty Vitae

1. Name
<ul style="list-style-type: none"> - Vo Thi Dieu Hien - Lecturer (full time)
2. Education
<ul style="list-style-type: none"> - 9/2016-7/2019: Ph.D., Institute of Marine Science and Technology, National Kaohsiung University of Science and Technology, Taiwan. - 9/2010-9/2012: ME, Environmental Engineering, Faculty of Environment and Natural Resources, University of Technology, Vietnam National University-Ho Chi Minh (HCMUT), Vietnam. - 9/2002-1/2007: BE, Environmental Engineering, Can Tho University, Vietnam.
3. Academic experience
<ul style="list-style-type: none"> - 6/2020-present: Vice Dean, Faculty of Environmental and Food Engineering, Nguyen Tat Thanh University, Vietnam. - 9/2019-6/2020: Lecturer, Faculty of Environmental and Food Engineering, Nguyen Tat Thanh University, Vietnam. - 2013-present: Research Assistant, BIOSEP Research Group, Faculty of Environment and Natural Resources, HCMUT, Vietnam. - 10/2014 – 11/2018: Researcher, Environmental Engineering and Management Research Group, Ton Duc Thang University, Vietnam.
4. Non-academic experience
<ul style="list-style-type: none"> - 2007-7/2014: Environmental engineer, TRACODI company, HCMC, Vietnam
5. Certifications or professional registrations
<ul style="list-style-type: none"> - Certificate of completion for “2019 International Field Study and Research (IFSR) Program” held on March 4-22, 2019 certified by Mapua University, Philippines. - Certificate of completion for “Academic Research Ethics Education Courses” certified by Center for Taiwan Academic Research Ethics Education (issued date 22 December 2018) - Training in <i>Faecal Sludge Management Toolbox – Training to Trainer</i>, Asian Institute of Technology, Thailand (7-10 June 2016). - Training in <i>Educational Skill</i>, the University of Social Sciences & Humanities, Ho Chi Minh City, Vietnam (Jan.-Apr., 2013). - Training course on <i>Internal Evaluation of Laboratory Management System according to ISO 17025:2005 standards</i>, QUATEST 3, Vietnam (01-02 Mar 2012). - Training course on <i>Application of Clean Production into Environmental Management System according to ISO 14001:2004 standards</i>, Vietnam (20 – 21 Oct 2011). - Workshop on <i>Implementing Science-based Adaptation Strategies to Climate Change</i>. (18 Nov, 2011). South Environment and Hydrometeorology Sub-Institute, Vietnam and Brandenburg Cottbus Technology of University, Germany. - Training course on <i>Composting – An Introduction</i>. (12 Oct-13 Nov 2004). DAAD Short Term Lectureship, University of Can Tho, Viet Nam and Bonn, Germany.
6. Membership in professional organizations
<ul style="list-style-type: none"> - None
7. Honors and awards
<ul style="list-style-type: none"> - The best conference paper award: “Observation of temperature development during food waste composting process” by Huu-Tuan Tran; Rattabhorn Teerawattana; Hong-Giang Hoang; Thi-Dieu-Hien Vo; Acharee Kaewlaoyoong; Chitsan Lin. the 2019 IEEE Eurasia Conference on Biomedical Engineering, Healthcare and Sustainability (IEEE ECBIOS 2019), May 31 - June 3, 2019, Okinawa, Japan.

- Funding from Taiwan Ministry of Science & Technology (MOST-107-2922-I-992-012) for attending the international conference (2018).
- Funding from Taiwan Ministry of Science & Technology (MOST-106-2922-I-022-001) for attending the international conference (2017).
- The best presentation: “Determination of ambient volatile organic compounds using a cryogenic trapping preconcentration system coupled with gas chromatography–mass spectrometry” by Thi-Dieu-Hien Vo, Wen-Ming Mao, Chitsan Lin. 2017 International Conference on Environmental Quality Concern, Control and Conservation, April 28-29, 2017, Kaohsiung, Taiwan.
- Full scholarship for PhD program at National Kaohsiung University of Science and Technology, Taiwan (2016 - 2019)

8. Service activities

- Attending/presenting in seminars/conferences related to professional fields

9. Areas of research

- Wastewater treatment technologies (constructed wetland, wetland roof, biochar, food waste composting, membrane bioreactor, algae-based wastewater treatment)
- Air pollutant monitoring (VOCs, heavy metals, PM2.5, O3)

10. Publications, presentations, creative works

International Journals (ISI):

- 1) Nguyen D.D., Nguyen V.T., **Vo T.D.H.***, Bui X.T., Bui M.H., Nguyen L.S.P., Nguyen X.C., Tran T.K.A., Nguyen T.T.A., Ju Y.R., Huynh T.M.T., Nguyen D.H., Bui H.N., Lin C. (2021). Contamination, source attribution, and potential health risks of heavy metals in street dust of a metropolitan area in Southern Vietnam. *Environmental Science and Pollution Research (SCI, IF = 2.76, Q1, ISSN: 0944-1344)*.
- 2) Nguyen V.T., Bui X.T.*, Nguyen H.A., Lin C., Nguyen H.H., **Vo T.D.H.***, Tran L.L., Nguyen T.B., Bui M.H., Nguyen D.T., Nguyen D.D., Chang S.W. (2021). Effects of bed media and feeding patterns on wastewater treatment performance of wetland roofs, *Journal of Water Process Engineering*, 40, 101972 (**SCI, IF: 3.370**, Q1, ISSN: 2214-7144).
- 3) Nguyen D.N., Nguyen H.T., Pham T.L., Nguyen C.T., Duong T.G.H., Nguyen H.Q., Chen Y.C., Bui H.N., **Vo T.D.H.**, Nguyen V.T., Bui M.H. (2021). Degradation of tricyclazole from aqueous solution and real wastewater by electron-beam irradiation. *Environmental Technology and Innovation*, 21, 101315 (**SCIE, IF: 3.356**, Q1, ISSN:2352-1864).
- 4) Le V.G., **Vo T.D.H.**, Nguyen B.S., Vu C.T., Shih Y.J., Huang Y.H (2021). Recovery of iron(II) and aluminum(III) from acid mine drainage by sequential selective precipitation and fluidized bed homogeneous crystallization (FBHC), *Journal of the Taiwan Institute of Chemical Engineers*, 115, 135-143 (**SCI, IF: 4.040**, Q1, ISSN: 1876-1070)
- 5) Nguyen V.T., **Vo T.D.H.***, Tran T.Đ., Nguyen T.N.K., Nguyen T.B., Dang B.T., Bui X.T.* (2020). Arsenic-contaminated groundwater and its potential health risk: a study in Long An and Tien Giang provinces of the Mekong Delta, Vietnam, *Environmental Science and Pollution Research (SCI, IF = 2.76, Q1, ISSN: 0944-1344)*.
- 6) Nguyen V.T., Le T.H., Bui X.T.*, Nguyen T.N., **Vo T.D.H.**, Lin C., Vu T.M.H., Nguyen H.H., Nguyen D.D., Senoro D.B., Dang B.T. (2020). Effects of C/N ratios and turning frequencies on the composting process of food waste and dry leaves, *Bioresource Technology Reports*, (ISSN: 2589-014X).
- 7) Nguyen T.T.D., Nguyen T.T., Quach A.B., Bui X.T.* , Ngo H.H., Vo H.N.P., Lin K.Y.A., **Vo T.D.H.**, Guo W., Lin C., Florian Breider (2020). Co-culture of microalgae-activated sludge for wastewater treatment and biomass production: Exploring their role under different

- inoculation ratios. *Bioresource Technology*, 314, 123754. (**SCI, IF = 6.102**, Q1, ISSN: 0960-8524).
- 8) Bui X.T.*, **Vo T.D.H.***, Nguyen P.T., Nguyen V.T., Dao T.S., Nguyen P.D. (2020). Microplastics pollution in wastewater: characteristics, occurrence and removal technologies. *Environmental Technology and Innovation*, 19, 101013 (**SCIE, IF: 3.356**, Q1, ISSN:2352-1864).
 - 9) Nguyen T.A.H., Ngo H.H. *, Guo W.S., Nguyen T.H.H., Soda S., Vu N.D., Bui T.K.A., **Vo T.D.H.**, Bui X.T., Nguyen T.T. and Pham T.T. (2020). White hard clam (*Meretrix lyrata*) shells media to improve phosphorus removal in lab-scale horizontal sub-surface flow constructed wetlands: performance, removal pathways, and lifespan. *Bioresource Technology*, 312, 123602. (**SCI, IF = 6.102**, Q1, ISSN: 0960-8524).
 - 10) **T.D.H. Vo**, X.T. Bui*, C. Lin, V.T. Nguyen, T.K.D. Hoang, H.H. Nguyen, H.N.P. Vo, H.H. Ngo, W. Guo (2019). A mini-review on shallow-bed constructed wetlands: a promising innovative green roof, *Current Opinion in Environmental Science & Health*, 12, 38-47 (Q1, ISSN: 2468-5844).
 - 11) **Vo T.D.H.**, Vu C.T., Lin C.*, Nguyen T.K.O., Bui X.T.*, Weng C.E., Yuan C.S., Eldon R. R. (2019). An overview of the development of vertical sampling technologies for ambient volatile organic compounds (VOCs), *Journal of Environmental Management*. 247, 401-412, (**SCI, IF = 4.865**, Q1, ISSN: 0301-4797).
 - 12) Vo T.K.Q., Bui X.T.*, Nguyen H.H., Lee K., Cao N.D.T., **Vo T.D.H.**, Nguyen T.T., Hoang T.T.N. (2019). Antibiotics removal from hospital wastewater by sponge membrane bioreactor coupling with ozonation, *Chemosphere*, 230, 377-383 (**SCIE, IF = 4.427**, Q1, ISSN: 0045-6535).
 - 13) Lee S.T., Tran H.T., Lin C.*, Hoang H.G, **Vo T.D.H.**, Vu C.T., Bui X.T., (2019). Characterization of Dioctyl terephthalate (DOTP) biodegradation BY food waste composting. *Modern Physics Letters B*, 33, 1940048-1 – 1940048-5 (**SCI, IF = 0.731**, Q4, ISSN: 0217-9849).
 - 14) Nguyen V.T., Nguyen T.B., Chen C.W., Hung C.M., **Vo T.D.H.**, Chang J.H. and Dong C.D. *, (2019). Influence of pyrolysis temperature on polycyclic aromatic hydrocarbons production and tetracycline adsorption behavior of biochar derived from spent coffee ground. *Bioresource Technology*, 284, 197-203 (**SCI, IF = 6.102**, Q1, ISSN: 0960-8524).
 - 15) Nguyen T.X., Nguyen B.T., Tran H.T.T., Le T.T., Trinh T.T., Trinh T.T., Tu M.B. and **Vo H.D.T.*** (2019). The interactive effect of the season and estuary position on the concentration of persistent organic pollutants in water and sediment from the Cua Dai estuary in Vietnam. *Environmental Science and Pollution Research*, 1-11 (**SCI, IF = 2.8**, Q1, ISSN: 0944-1344).
 - 16) Huang W.Y., Ngo H.H., Lin C.*, Vu C.T., Kaewlaoyoong A., Boonsong T., Tran H.T., Bui X.T., **Vo T.D.H.**, Chen J.R. (2019). Aerobic co-composting degradation of highly PCDD/F-contaminated field soil. A study of bacterial community. *Science of the Total Environment*, 660, 595-602 (**SCI, IF = 4.9**, Q1, ISSN: 0048-9697).
 - 17) **Vo T.D.H.**, Lin C.*, Weng C.E., Yuan C.S., Lee C.W., Hung C.H., Bui X.T., Lo K.C., Lin J.X. (2018). Vertical stratification of volatile organic compounds and their photochemical product formation potential in an industrial urban area, *Journal of Environmental Management*, 217, 327-336 (**SCI, IF = 4.865**, Q1, ISSN: 0301-4797).

- 18) **Vo T.D.H.**, Bui X.T.*, Nguyen D.D., Nguyen V.T., Ngo H.H., Guo W., Nguyen P.D., Nguyen C.N., Lin C. (2018). Wastewater treatment and biomass growth of eight plants for shallow bed wetland roofs, *Bioresource Technology*, 247, 992-998 (**SCI, IF = 6.102**, Q1, ISSN: 0960-8524).
- 19) Vo H.N.P., Bui X.T.*, Nguyen T.T., Nguyen T.P., Le T.H.H., Nguyen T.S., **Vo T.D.H.**, Lin C. (2017). An in-situ transesterification of municipal activated sludge for biodiesel production, *Desalination and Water Treatment*, 98, 169-175 (**SCIE, IF = 1.383**, Q2, ISSN: 1944-3994).
- 20) **Vo T.D.H.**, Do T.B.N, Bui X.T.*, Nguyen V.T., Nguyen D.D., Sthiannopkao S. & Lin C. (2017) Improvement of septic tank effluent and green coverage by shallow bed wetland roof system, *International Biodeterioration & Biodegradation*, 124, 138-145 (**SCIE, IF = 2.593**, Q1, ISSN: 0964-8305).
- 21) **Vo T.D.H.**, Bui X.T.*, Cao N.D.T., Luu V.P., Nguyen T.T., Dang B.T., Thai M.Q., Nguyen D.D., Nguyen T.S., Dinh Q.T., Dao T.S. (2016). Investigation of antibiotics in health care wastewater in Ho Chi Minh city – Vietnam, *Environmental Monitoring and Assessment*, 188(12), 686-695 (**SCIE, IF = 1.633**, Q2, ISSN: 0167-6369).
- 22) Nguyen, T.T., **Vo, T.D.H.**, Nguyen, D.D., Bui, X.T.*, Thai, M.Q., Nguyen, P.D., Do, H.L.C., Ngo, H.H. & Guo, W. (2016). Performance and membrane fouling of sponge membrane bioreactor at different fluxes for hospital wastewater treatment, *Separation and Purification Technology*, 165, 123-129 (**SCI, IF = 3.091**, Q1, ISSN: 1383-5866).
- 23) Cao N.D.T, Nguyen T.T., Bui X.T.*, **Vo T.D.H.**, Truong C.H.S., Nguyen T.S., Dao T.S., Phan A.D., Nguyen T.L.C., Nguyen L.H., Visvanathan C. (2015). Low Cost Spiral Membrane for Improving Effluent Quality of Septic Tank, *Desalination and Water Treatment*, 1-6, (**SCIE, IF = 1.383**, Q2, ISSN: 1944-3994).
- 24) Phan T.H.V., Nguyen T.T., **Vo T.D.H.**, Thai M.Q., Vo T.H., Dinh Q.T., Le V.K., Vo L.P., Kwon, E., Park, C., Jung, J., Yoon, I., Lee, S., Nguyen P.D., Bui X.T.* (2014). Nutrient removal of different plants in wetland roof systems treating domestic wastewater, *Desalination and Water Treatment*, 1-9 (**SCIE, IF = 1.383**, Q2 ISSN: 1944-3994).
- 25) Bui X.T.*, Nguyen T.T., Phan T.H.V., **Vo T.D.H.**, Nguyen P.D., Koottatep T.* (2013). Performance of wetland roof with *Melampodium paludosum* treating septic tank effluent, *Desalination and Water Treatment*, 1-7 (**SCIE, IF = 1.383**, Q2, ISSN: 1944-3994).

International Journals (non-ISI):

- 1) Tran T., Le D.A., Nguyen H.H., Tran P.H., Nguyen C.D., Lam V.T., **Vo T.D.H.**, Bui X.T. (2020). Study on optimal conditions of poly ferric chloride (PFC) dosage treating tannery wastewater. *Materials Today: Proceedings* (ISSN: 2214-7853).
- 2) Tran H.T., Vu C.T., Lin C.*, Bui X.T., Huang W.Y., **Vo T.D.H.**, Hoang H.G. and Liu W.Y. (2018). Remediation of highly fuel oil-contaminated soil by food waste composting and its volatile organic compound (VOC) emission. *Bioresource Technology Reports*, 4, 145-152 (ISSN: 2589-014X).
- 3) Vo T.K.Q., Cao N.D.T., Luu V.P., **Vo T.D.H.**, Nguyen T.T., Nguyen N.S., Tran T.D., Bui X.T.* (2016). Enhancement of Antibiotic Removal in Membrane Permeate by Ozonation, *Journal of Water Sustainability*, 6(3), 89-97. (ISSN: 1839-1516).
- 4) **Vo T.D.H.** & Bui X.T.* (2016). Green infrastructure for buildings in the tropical coupling with domestic wastewater treatment, *GMSARN International Journal*, 10, 107-112 (**Scopus**, Q4, ISSN: 1905-9094)

- 5) Vo T.K.Q., Luu V.P., Nguyen T.T., **Vo T.D.H.**, Cao N.D.T., Dinh Q.T. & Bui X.T.* (2016). Coupling of membrane bioreactor and ozonation for removal of antibiotics from hospital wastewater, *Waste Technology*, 4(1), 31-35 (ISSN: 2338:6207).
- 6) **Vo T.D.H.**, Nguyen T.T., Le H.N., Bui X.T.*, Ding Q.T., Nguyen P.D. (2015). Investigation of Trihalomethanes Forming Potential in Surface Water Treatment Plants and Water Supply Network in Mekong Delta, Vietnam Tan Hiep water treatment plant, *Journal of Water Sustainability*, 5 (3), 85-94 (ISSN: 1839-1516).
- 7) Bui X.T.*, **Vo T.D.H.**, Nguyen P.D., Phan T.H.V., Nguyen T.T. (2012). Performance of wetland roof treating domestic wastewater in the tropic urban area, *Journal of Water Sustainability*, 2(1), 79-86. (ISSN: 1839-1516).

National Journals:

- 1) Cao N.D.T., Truong M.H., Vo T.K.Q., **Vo T.D.H.**, Tran T.D., Bui X.T.* (2017). Improvement of tap water quality for domestic use by membrane process, Tạp Chí Khoa Học Đại Học Cần Thơ [*Journal of Science - Can Tho University*], Cần Thơ, Việt Nam. ISSN: 1859-2333.
- 2) Thai M.Q., Pham T.Q., Bui X.T.*, Pham H.T., Vo T.K.Q., Nguyen V.B., Nguyen V.T., Nguyen T.T., **Vo T.D.H.**, Luu V.P., Dao T.S., Dinh Q.T., Pham M.T. (2015). Comparison of hollow fiber and flat sheet membrane bioreactor treating hospital wastewater. *Journal of Viet Nam Academy of Science and Technology*, 53(3A), 13-18. ISSN: 0866 708X.
- 3) Nguyen T.M.H, Dang T.M.T., **Vo T.D.H.**, Bui X.T.*, Dao T.S., Dinh Q.T., Dao N.K., Nguyen T.L.C., Ho T.N.H., Tran T.D. (2015). Organic and nutrient removal in wetland roof systems treating domestic wastewater. *Journal of Ton Duc Thang University of Science and Application*, 21, 60-64. ISSN: 1859-2244.
- 4) Phan T.H.V., Bui X.T.*, **Vo T.D.H.** (2013). Nutrient removal of various plants in wetland roof systems treating domestic wastewater. *Journal of Viet Nam Academy of Science and Technology*, 51(3B), 14-20. ISSN: 0866 708X.
- 5) **Vo T.D.H.** & Bui X.T.* (2011). Application of wetland roof treating domestic wastewater: Evaluation of treatment performance of different plants at hydraulic loading rates, *Journal of Viet Nam Academy of Science and Technology*, 49(5C), 28-36. ISSN: 0866 708X.

11. Professional development activities

- Participate in training for teaching E-learning, Mobile Learning (2019, 2020)
 - Participate in training on job assignment and work supervision methods (2021);
 - Participate in training on patent registration of scientific research results in Vietnam (April 15-16, 2021);
 - Participated in training on designing and using rubric in assessing learning activities to achieve output standards (April 19-20, 2021).
 - Participating in international conferences:
- 1) Nguyen V.T., Bui X.T. *, Sunbeak Bang, Nguyen T.N.K., Nguyen T.K.Y., Nguyen T.T., **Vo T.D.H.**, Nguyen P.D. (2019). Human health risk assessment of arsenic in groundwater. Case Study: Long An and Tien Giang province, Vietnam. The 2nd international Conference on Green Technologies for Sustainable Water 2019 (GTSW 2019), December 1-5, 2019, REX Hotel, Ho Chi Minh City, Vietnam.
 - 2) Nguyen Q.H., Nguyen V.T., **Vo T.D.H.**, Nguyen P.T., Nguyen H.H., Bui X.T.* (2019). Struvite Recovered from Human Urine: Effects Of pH. The 2nd international Conference on Green Technologies for Sustainable Water 2019 (GTSW 2019), December 1-5, 2019, REX Hotel, Ho Chi Minh City, Vietnam.

- 3) Nguyen P.T., Nguyen H.H., Nguyen Q.H., **Vo T.D.H.**, Bui X.T.* (2019). Reciprocation membrane bioreactor (MBBR) system. The 2nd international Conference on Green Technologies for Sustainable Water 2019 (GTSW 2019), December 1-5, 2019, REX Hotel, Ho Chi Minh City, Vietnam.
- 4) **Vo T.D.H.** *, Bui X.T., Nguyen V.T., Nguyen H.H., Lin C. (2019). Shallow-bed constructed wetland: a promising innovative green roof. The 2nd international Conference on Green Technologies for Sustainable Water 2019 (GTSW 2019), December 1-5, 2019, REX Hotel, Ho Chi Minh City, Vietnam.
- 5) **Vo T.D.H.**, Nguyen H.H., Ngo T.T.T, Ngo T.M., Bui X.T.* (2019). Application of membrane photobioreactor for nutrients removal and microalgae biomass production using urine as substrate at various microalgae retention times. The 6th environmental technology and management conference (ETMC) 2019, November 5-7, 2019, Prime Plaza Hotel, Sanur, Bali, Indonesia.
- 6) Bui X.T., Nguyen T.T., Nguyen H.H.* , **Vo T.D.H.**, Ngo T.M. (2019). Evaluating nutrients removal and membrane fouling of membrane photobioreactor using urine as substrate and microalgae-bacteria as co-cultures under two light - dark cycles. The 6th environmental technology and management conference (ETMC) 2019, November 5-7, 2019, Prime Plaza Hotel, Sanur, Bali, Indonesia.
- 7) **Vo T.D.H.**, Lin C.* , Weng C.E., Nguyen-Thi K.O., Bui X.T. (2019). An overview of sampling techniques for vertical profiling of ambient volatile organic compounds. The 33rd Environmental Analytical Chemistry Symposium and Society Annual Meeting (EACS 2018), May 16-17, 2019, Environmental Inspection Institute of the Environmental Protection Administration of the Executive Yuan, Taoyuan, Taiwan.
- 8) Lin C.* , **Vo T.D.H.**, Chen J.Y. (2018). Environmental forensic investigation of volatile organic compound (VOC) emission sources: Nexus of future air quality management. The 2018 Cross Strait Environmental Analysis Exchange Conference, December 16-20, HongKong.
- 9) **Vo T.D.H.**, Lin C.* , Bui X.T., Weng C.E. (2018). An overview of vertical air sampling technologies for ambient volatile organic compound monitoring to resolve air quality concern. The 2018 International Conference on Sustainable Environmental Technologies (ICSET 2018), August 19 – 21, 2018, Mapúa University, Manila City, Philippines.
- 10) **Vo T.D.H.**, Lin C.* , Weng C.E. (2018). An Unmanned Aerial Vehicle: A Realizable Alternative Technology for Ambient Air Volatile Organic Compound Sampling. The International Conference on “Physics and Mechanics of New Materials and Their Applications” and Exhibition (PHENMA 2018), August 9-11, 2018, Korea Maritime and Ocean University, Busan, South Korea.
- 11) **Vo T.D.H.**, Lin C.* , Weng C.E., Lin J.X. (2018). Practical application of an unmanned aerial vehicle for ambient air volatile organic compound sampling: A case study at the industrial city, southern Taiwan. The 32nd Environmental Analytical Chemistry Symposium and Society Annual Meeting (EACS 2018), May 3-4, 2018, Environmental Inspection Institute of the Environmental Protection Administration of the Executive Yuan, Taoyuan, Taiwan.
- 12) **Vo T.D.H.**, Vu C.T., Lin C.* (2017). Water and sedimentary heavy metal ecological risk and source apportionment of Houjing River, Taiwan. International Conference on Green Technologies for Sustainable Water (GTSW 2017), October 13 - 16, 2017, Pan Pacific Hanoi Hotel, Vietnam.

- 13) **Vo T.D.H.**, Lin J.X., Mao W.M., Lin C.*, Weng C.E., Yuan C.S., Lee C.W., Hung C.H. (2017). Investigating the Characteristics of Volatile Organic Compounds at Different Heights in Renwu Industrial District, Southern Taiwan, 2017 T&T International aerosol conference (2017 T&T IAC) Air quality in East Asia, August 7-8, 2017, Siam Oriental Hotel, Hat Yai, Songkhla, Thailand.
- 14) **Vo T.D.H.**, Do T.B.N, Bui X.T.*, Nguyen V.T., Lin C. (2017). Investigation of domestic wastewater treatment capacity and nutrient accumulation by wetland roof with different local plants, The 7th International forum on Industrial Bioprocesses, May 21st -24th, 2017, Jiangnan University, Wuxi, China.
- 15) **Vo T.D.H.**, Mao W.M., Lin C.* (2017). Determination of ambient volatile organic compounds using a cryogenic trapping preconcentration system coupled with gas chromatography–mass spectrometry. 2017 International Conference on Environmental Quality Concern, Control and Conservation, April 28-29, 2017, Kaohsiung, Taiwan.
- 16) Lin J.X., **Vo T.D.H.**, Mao W.M., Lin C.* (2017) “Investigating the Spatial and Time Variation of VOCs Concentration during Highly Polluted Days in Kao-Ping Area”, 2017 International Conference on Environmental Quality Concern, Control and Conservation, April 28-29, 2017, Kaohsiung, Taiwan.
- 17) **Vo T.D.H.**, Mao W.M., Lin C.* (2017). Investigating the characteristics of volatile organic compounds in Kao-ping area, southern Taiwan. The 5th International Symposium on Environmental Analytical Chemistry, May 16th-20th, 2017, pp. 50, REX hotel, Ho Chi Minh city, Vietnam. ISBN: 978-604-73-4968-5.
- 18) Le T.D., Nguyen T.T.T., Phan B.M.S., Nguyen T.H., Le T.H.H., **Vo T.D.H.**, Bui X.T.* (2017). Struvite formation from human urine: Effect of pH and Mg/P ratios, The 5th International Symposium on Environmental Analytical Chemistry, May 16th-20th, 2017, pp. 50, REX hotel, Ho Chi Minh city, Vietnam. ISBN: 978-604-73-4968-5.
- 19) **Vo T.D.H.**, Do T.B.N., Bui X.T.*, Cao N.D.T., Nguyen V.T., Nguyen D.D. (2017). Improvement of Septic Tank Effluent and Green Coverage by Shallow Bed Wetland Roof Systems, The 5th International Symposium on Environmental Analytical Chemistry, May 16th-20th, 2017, pp. 70, REX hotel, Ho Chi Minh city, Vietnam. ISBN: 978-604-73-4968-5.
- 20) Nguyen T.T., Bui X.T.*, **Vo T.D.H.**, Dinh Q.T., Nguyen P.D., Guo W., Ngo H.H. (2016). Removal of antibiotics in sponge membrane bioreactors treating hospital wastewater: comparison between flat sheet and hollow fibre membrane bioreactors, The ninth annual conference on the Challenges in Environmental Science and Engineering 2016 (CESE 2016), p.59, November 6th-10th 2016, 5/12 Kaohsiung, Taiwan. ISBN: 978-0-646-96375-4.
- 21) **Vo T.D.H.**, Nguyen T.T., Cao N.D.T., Bui X.T.* (2016). Potential benefits of Wetland Roof systems for tropical urban cities, 2016 American Geophysical Union (AGU) Fall Meeting, December 12 nd -16th, 2016, Page x.x, San Francisco, USA.
- 22) **Vo T.D.H.**, Nguyen T.T., Bui X.T.* (2015). Effect of bed media on performance of wetland roof treating domestic wastewater. AUN/SEED-net regional conference 2015 on Materials Engineering (RCME 2015) “Materials for sustainable development”, 29th -30th October, Bangkok, Thailand.
- 23) Bui X.T.*, **Vo T.D.H.**, Phan T.H.V., Nguyen P.D., Koottatep, T. (2012). Wetland roof with *Melampodium Paludosum* for domestic wastewater treatment. The fifth annual conference on the Challenges in Environmental Science and Engineering 2012 (CESE 2012), p.46, 9th-13rd September, RACV, Melbourne, Australia. ISBN: 978-0-646-58149-1.

24) **Vo T.D.H.**, Tran N.T.T., Tran T.T.M., Nguyen T.T., Phan T.H.V., Bui X.T.* (2011). Application of Wetland Roof for Domestic Wastewater Treatment: Evaluation of Wastewater Treatment Efficiency of Plants at Different Hydraulic Loading Rates, Minamata International Symposium on Environment and Energy Technology (MISSION 2011) December 6th – 8th, 2011, p. 149-155. Kumamoto, Japan.

- Carrying out/participating in scientific research projects:

- 1) Application of biochar derived from the spent coffee ground for ammonium removal in aqueous solution (Principal Investigator);
- 2) Evaluating of arsenic removal in water by biochar derived from spent coffee ground (Principal Investigator);
- 3) Study on developing Membrane Bioreactor technology coupling with microorganisms to treat saline wastewater (Key project member);
- 4) Application of microalgae-bacteria granular consortia in photobioreactor for wastewater treatment coupling with recovering biomass of microalgae (Principal Investigator);
- 5) Application of membrane photobioreactor for wastewater treatment coupling with algae biomass cultivation for production of biomaterials (Key project member);
- 6) Investigation of the spatiotemporal variation of fine particles (PM_{2.5}) and ozone (O₃) concentrations during the episodes in Kao-Ping Air Quality Zone (PhD student);
- 7) Study on antibiotics removal by sponge MBR combined with ozonation process (Project secretary);
- 8) Reduction of antibiotics in hospital wastewater by sponge membrane bioreactor (Key project member);
- 9) Application of coagulation/ absorption microfiltration coupling with advanced oxidation processes for trace organic contaminants in surface water (Key project member);
- 10) Nutrient recovery and algae biomass development by Membrane Photobioreactor (Project member);
- 11) Reduction of Antibiotics in hospital wastewater by Sponge Membrane Bioreactor: Case study in Ho Chi Minh City – Vietnam (Project member);
- 12) Assessment of clean drinking water quality and Developing an essential water treatment kit for hospitals in Ho Chi Minh City and Mekong Delta (Key project member);
- 13) Study on removal of antibiotic in hospital wastewater by Membrane Bioreactor coupling with advanced oxidation process (Project member);
- 14) Toward green city through application of a wetland roof system coupling with domestic wastewater treatment (Key project member);
- 15) Application of wetland roof for domestic wastewater treatment: A solution for climate change mitigation (Key project member).

12. Teaching competence

- Specialized foundation subjects: Scientific research method, Environmental engineering chemistry.
- Specialized subjects: Water treatment; Industrial and urban wastewater treatment, Soil pollution treatment and degradation.