

THI-DIEU-HIEN VO, M.Eng



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Dept. of Marine Environment Engineering
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Research Interest

- Wetland, natural treatment system, biological processes, Membrane separation processes, water and wastewater treatment processes, solid waste treatment and management.

Professional Experience

- 10/2014-present: Researcher, Environmental Engineering and Management Research Group, Ton Duc Thang University
- 2013-present: Research Associate (part time) at Faculty of Environment, HCMC University of Technology. Team leader of “Toward green city through application of a wetland roof system coupling with domestic wastewater treatment” project funded by KECO, Korea.
- 2007- 7/2014: Specialist, TRACODI company, HCMC, Viet Nam
 - Research on the operation of wastewater/water treatment systems for Phuong Nam Kenaf Pulp Mill Project;
 - Design of documents according to ISO 17025 for Center of TRACODI - LOTUS environmental treatment and analysis;
 - Design of waste treatment system for domestic waste treatment mill project.
- 2010-2012: Research Assistant – Master student, Faculty of Environment, HCMC University of Technology (HCMUT), Viet Nam.
 - Thesis title: Development of Wetland roof systems treating septic tank effluent. (Supervisor: Assoc. Prof. Bui Xuan Thanh, Head, Dept. of Water Science & Technology Faculty of Environment and Natural Resources, HCMC University of Technology (HCMUT)).
- 2006-2007: Research Assistant, Dept. of Environmental Engineering, Faculty

of Technology, Can Tho University, Viet Nam.

- Thesis title: Evaluation of treatment efficiency for the leachate of Chau Thanh landfill (Can Tho city, Viet Nam) by Power Activated Carbon Technology. (Supervisor: Ms. Le Hoang Viet, Vice Head of Environment and Natural Resources Department, Can Tho University)

Education

- 2010-2012: ME, Environmental Engineering, Environmental Engineering, Faculty of Environment, HCMC University of Technology (HCMUT), Viet Nam.
 - 2002-2007: BE, Environmental Engineering, Can Tho University, Viet Nam.

Selected Publications

International Journals (ISI):

- 1) Hien V.T.D., **Thanh B.X.**, Thanh C.N.D., Phuc L.V., Tin N.T., Trong D.B., Quan T.M., Duc N.D., Son N.T., Tuc D.Q., Son D.T (2016). Investigation of antibiotics in health care wastewater in Ho Chi Minh city – Vietnam, *Environmental Impact Assessment*, 188 (12), 686. (**SCIE, IF = 1.633**, ISSN: 0167-6369). DOI: 10.1007/s10661-016-5704-6.
- 2) 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**; ISSN: 1383-5866).
- 3) Thanh, C.N.D., Tin, N.T, Thanh, B.X., **Hien, V.T.D.**, Son, T.C.H, Son, N.T., Son, D.T., Duc, P.A., Chi, N.T.L., Huong, N.L., Visvanathan C. (2015). Low Cost Spiral Membrane for Improving Effluent Quality of Septic Tank, *Desalination and Water Treatment*, 1-6, (**SCIE, IF = 0.852**; ISSN: 1944-3994).
- 4) Van, P.T.H., Tin, N.T., **Hien, V.T.D.**, Quan, T.M., Hang, V.T., Tuc, D.Q., Khoa, L.V., Phu, V.L., Kwon, E., Park, C., Jung, J., Yoon, I., Lee, S., Dan, N.P., Thanh, B.X. (2014). Nutrient removal of different plants in wetland roof systems treating domestic wastewater, *Desalination and Water Treatment*, 1-9, (**SCIE, IF = 0.852**; ISSN:1944-3994)
- 5) Thanh, B.X., Tin, N.T., Van, P.T.H., **Hien, V.T.D.**, Dan, N.P., Koottatep,T. (2013). Performance of wetland roof with *Melampodium paludosum* treating septic tank effluent, *Desalination and Water Treatment*, 1-7, (**SCIE, IF = 0.852**; ISSN: 1944-3994).

International Journals (non ISI):

- 1) Quyen, V.T.K., Thanh, C.N.D., Phuc, L.V., Hien, V.T.D., Nhu, N., Sang, T.T.D. and Thanh, B.X., 2016. Enhancement of Antibiotic Removal in Membrane Permeate by Ozonation. *Journal of Water Sustainability*, 6(3), pp.89-98.
- 2) Vo Thi Kim Quyen, Luu Vinh Phuc, Nguyen Thanh Tin, **Vo Thi Dieu Hien**, Cao Ngoc Dan Thanh, Dinh Quoc Tuc & Bui Xuan Thanh (2016). Coupling of membrane bioreactor and ozonation for removal of antibiotics from hospital wastewater, *Waste Technology*, 4(1), 31-35 (ISSN: 2338:6207).
- 3) **Hien, V.T.D.**, Tin, N.T., Ngoc, L.H., Thanh, B.X., Tuc, D.Q., Dan N.P. (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).
- 4) Thanh, B.X., **Hien, V.T.D.**, Dan, N.P., Van, P.T.H., Tin, N.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).

International Conferences:

- 1) **Vo Thi Dieu Hien**, Nguyen Thanh Tin, Bui Xuan Thanh (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.
- 2) Thanh, B.X., **Hien, V.T.D.**, Van, P.T.H., Dan, N.P., Kooattatep, 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.
- 3) **Hien, V.T.D.**, Thu, T.N.T., Mai, T.T.T., Tin, N.T., Van, P.T.H., Thanh, B.X. (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.

National Journals:

- 1) Thai Minh Quan, Pham Tuan Quynh, Bui Xuan Thanh, Pham Huong Truc, Vo Thi Kim Quyen, Nguyen Van Binh, Nguyen Van Tuong, Nguyen Thanh Tin, **Vo Thi**

- Dieu Hien**, Luu Vinh Phuc, Dao Thanh Son, Dinh Quoc Tuc, Pham Minh Tuan (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.
- 2) N.T.M.Hong, D.T.M.Trinh, **Hien V.T.D.**, Thanh B.X, D.T. Son, D.Q.Tuc, D.N.Khoi, N.T.L.Chi, H.T.N.Ha, T.T.Dai, (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.
- 3) Van, P.T.H., Thanh B.X., **Hien V.T.D.**, (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.
- 4) **Hien, V.T.D.** & Thanh, B.X. (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.

Grants and Awards

N o.	Research projects	Code	Time	Budget (USD)	Funding organization
1)	Study on antibiotics removal by sponge MBR combined with ozonation process [data collection and project secretary]	105.99-2015.16	5/2016 - 5/2018	38,850	NAFOSTED, Ministry of Science & Technology – Viet Nam
2)	Reduction of antibiotics in hospital wastewater by sponge membrane bioreactor [report writing]	GIST-2016	1/2016 - 12/2016	9,000	Gwangju Institute of Science & Technology (GIST), Korea
3)	Application of coagulation/absorption microfiltration coupling with advanced oxidation processes for trace organic contaminants in surface water [data collection and report writing]	Tc-	5/2016 - 5/2017		
4)	Nutrient recovery and algae biomass development by Membrane Photobioreactor [report writing]			5,700	Vietnam Brewery Limited grants scholarship
5)	Reduction of Antibiotics in hospital wastewater by Sponge Membrane	GIST-2015	1/2015 -	9,000	Gwangju Institute of

	Bioreactor: Case study in Ho Chi Minh City – Vietnam [data collection and report writing]		12/2015		Science & Technology (GIST), Korea
6)	Assessment of clean drinking water quality and Developing an essential water treatment kit for hospitals in Ho Chi Minh City and Mekong Delta [Research Team Leader - data collection and report writing]	T-MTr-2014-82/University - Care	2014-2015	7,500	University's Research Project - CARE
7)	Study on removal of antibiotic in hospital wastewater by Membrane Bioreactor coupling with advanced oxidation process [data collection and report writing]	B2014-20-03 (B-type research project)	2014-2015	35,000	Vietnam National University-HCM
8)	Toward green city through application of a wetland roof system coupling with domestic wastewater treatment [Research Team Leader - data collection and report writing]	KECO	9/2013 - 8/2014	30,000	Korea Environment Corporation (KECO), Ministry of Environment, South Korea
9)	Application of wetland roof for domestic wastewater treatment: A solution for climate change mitigation [Research Team Leader - data collection and report writing]	105.99-2011.03	11/2011-11/2013	15,000	NAFOSTED, Ministry of Science & Technology – Viet Nam

Conference/Workshop organizer

- 1) The 4th Regional IWA Membrane Technology Conference, International Water Association (2014) (**Secretary**).
- 2) Project kick-off meeting “Toward green city through application of a wetland roof system coupling with domestic wastewater treatment”, August 27th–28th, 2013. Project supported by Korea Environment Corporation (KECO), Ministry of Environment, South Korea (**organizer member**).

Training workshop attendance

- 1) Training in *Faecal Sludge Management Toolbox – Training to Trainer*, Asian Institute of Technology, Thailand (7-10 June, 2016).
- 2) Training in *Educational Skill*, The University of Social Sciences & Humanities, Ho Chi Minh City, (Jan.-Apr., 2013).
- 3) Training course on *Internal Evaluation of Laboratory Management System according to ISO 17025:2005 standards* (01-02 Mar, 2012).

- 4) Training course on *Application of Clean Production into Environmental Management System according to ISO 14001:2004 standards* (20 – 21 Oct, 2011).
- 5) Workshop on *Implementing Science-based Adaptation Strategies to Climate Change*. (18 Nov, 2011). South Environment and Hydrometeorology Sub-Institute, Viet Nam and Brandenburg Cottbus Technology of University, Germany.
- 6) Training course on *Composting – An Introduction*. (12 Oct-13 Nov, 2004). DAAD Short Term Lectureship, University of Can Tho, Viet Nam and Bonn, Germany.

Feb. 10th, 2017

Signature



VO THI DIEU HIEN