



## **HUYNH THI MINH THU, Ph.D.**

**Year of birth:** 1983

**Nationality:** Vietnamese

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### **Professional Summary**

- Over 10 years of experience in renewable energy both in academic and industry.
- Research interest: renewable energy, energy efficiency, energy conversion, energy Storage.
- Extensive knowledge of sustainable energy sources and passion for sustainable life;
- Proactive, Creative, Critical thinking, Problem-solving, Result-oriented, Teamwork, Project management, Leadership.
- Responsible for teaching subjects across a variety of modules in the Renewable Energy and Thermal Engineering departments, i.e. Thermodynamics, Energy sources and Energy management, Energy Audit and Energy Saving, Heat exchanger, Special Topics in Renewable Energy...

### **EDUCATION**

<b>Names of institutions</b>	<b>Degree obtained</b>	<b>Dates of obtainment</b>
Keio University, Japan	Ph.D. Degree in System Design Department (Energy Lab.), Center for Space & Environment Design Engineering	2014
Institute Teknologi Bandung (ITB), Bandung, Indonesia	Master's Degree in Mechanical Engineering (Major in: Thermo- Fluid_Solar Lab.)	2008
Ho Chi Minh City University of Technology, Vietnam	Bachelor Degree in Aeronautical Engineering	2006

## EMPLOYMENT RECORD

<b>Dates of employment</b>	<b>Name of employing organization</b>	<b>Positions held</b>
01/2022-Present	Ho Chi Minh City University of Technology and Education, Vietnam	Lecturer
10/2020-11/2021	Van Lang University, Vietnam	Lecturer
08/2014 – 09/2020	Bach Khoa Investment & Development of Solar Energy Corporation (SolarBK), Vietnam	Director of Research & Development
11/2012 – 08/2014	Energy Development Center, Vietnam	Director of Research & Development
01/2012-02/2012	Clean Energy Research Center, University of South Florida, USA	Visiting Researcher
03/2009 – 03/2012	Keio University, Japan	Research Assistant

## LANGUAGES

<b>Language</b>	<b>Speaking</b>	<b>Reading</b>	<b>Writing</b>
Japanese	Fair	Fair	Fair
Indonesian	Fair	Fair	Fair
English	IELTS 6.5		
Vietnamese	Native	Native	Native

## PROFESSIONAL PROJECTS

<b>No.</b>	<b>Name of the projects</b>	<b>Duration</b>	<b>Position</b>	<b>Activities Performed</b>
1	Developing a mobile desalination system using solar and wind energy	2013-2015	Member	<ul style="list-style-type: none"> <li>- Project management</li> <li>- Developing control algorithm</li> </ul>
2	Development of a remote monitoring platform for solar energy application	2014-2019	Member	<ul style="list-style-type: none"> <li>- Remotely monitor solar system and quick response to incidents &amp; services for O&amp;M business</li> <li>- System Performance analysis</li> </ul>

3	Solar-power system EPC optimization	2014-2019	Member	- Implementation of industrial standard for Solar Photovoltaic System.
3	Developing Operation & Maintenance platform of Solar System	2015-2019	Project Manager	- Develop O & M dept. - Building facility and technical team - Perform O&M Services for PV solar system and solar water heating system.
4	Study of the effects of solar chimney's inlet configuration to the building ventilation performance using CFD	2021	Project Manager	- Optimize the configuration of solar chimney for natural ventilation purposes.

## PUBLICATIONS

1. Hung Thanh Nguyen, Eirik Gjerløw and Minh-Thu T. Huynh, Evaluating of melting-ice process in a vertical pipe with consideration of net sensible heat, *Applied Thermal Engineering*. Status: *Accepted*.
2. Y Q. Nguyen, Viet T. Nguyen and Minh-Thu T. Huynh, An experimental study on evaporation rate of indoor plants. The 15th Regional Conference on Energy Engineering (RCEnE 2022) and The 13th International Conference on Thermofluids 2022, Indonesia, Oct 2022. Status: *Accepted and in progress for publishing in American Institute of Physics (AIP) Conference Proceedings indexed by Scopus (2023)*.
3. Huỳnh Thị Minh Thu, Nguyễn Anh Vũ, and Bùi Văn Mỹ. "Solutions towards a Net-Zero Energy House in Vietnam by Solar Energy". *The University of Danang - Journal of Science and Technology*, vol. 20, no. 11.2, Nov. 2022, pp. 56-60, <https://jst-ud.vn/jst-ud/article/view/8077> (2022).
4. Minh-Thu T Huynh and Y Q Nguyen. Effects of inlet area on heat transfer performance of a solar chimney. *AIP Conference Proceedings* 2420, 020024 (2021).
5. Y Q Nguyen and Minh-Thu T Huynh. A Numerical Study on the Performance of a Solar Chimney with Expanded Inlet. *AIP Conference Proceedings* 2420, 020023 (2021).
6. Y Q Nguyen and Minh-Thu T Huynh. Effects of inlet area on performance of a solar chimney for natural ventilation and heating of buildings. *AIP Conference Proceedings* 2406, 020024 (2021).
7. Ngoc Thinh Doan, Minh-Thu T Huynh and Y Q Nguyen. Prediction of flow field and mass flow rate in a solar chimney at different heights using ANFIS technique. *AIP Conference Proceedings* 2406, 020030 (2021).
8. Y Q Nguyen, Ngoc Thinh Doan and Minh-Thu T Huynh. Using ANFIS technique for prediction of heat transfer in vertical solar chimney. *AIP Conference Proceedings* 2406, 020032 (2021).
9. Y Q Nguyen, Minh-Thu T Huynh and Tung V. Nguyen. Effects of the forced air temperature on the induced flow rate through a combined natural–forced flow in a solar chimney. *AIP Conference Proceedings* 2406, 060013 (2021).

10. Minh-Thu T Huynh, Tri Q Truong, Thinh N Doan, Trieu N Huynh, Tung V Nguyen, Viet T Nguyen and Y Q Nguyen. Prediction of flow field in a solar chimney using ANFIS technique. *IOP Conf. Ser.: Mater. Sci. Eng.* **1109** 012067.
11. Minh-Thu T Huynh, Thinh N Doan and Y Q Nguyen. Using ANFIS technique in prediction of reverse flow in a solar chimney. *IOP Conf. Ser.: Mater. Sci. Eng.* **1109** 012036.
12. Doan Anh Tuan and Huynh T. M. Thu. Experiment on a desalination system integrated with renewable energy with capacity of 200-300 liters/hour. *The University of Da Nang - Journal of Science and Technology*, pp. 97-100, Da Nang, Vietnam, May 2015.
13. Huynh T. M. Thu and H. Sato. Proposal of an eco-friendly high-performance air-conditioning system. Part 2. Application of evapo-transpiration condenser to residential air-conditioning system. *International Journal of Refrigeration*, Vol. 36, No. 6, pp. 1596-1601, September 2013.
14. Huynh T. M. Thu and H. Sato. Proposal of an eco-friendly high-performance air-conditioning system. Part 1. Possibility of improving existing air-conditioning system by an evapo-transpiration condenser. *International Journal of Refrigeration*, Vol. 36, No. 6, pp. 1589-1595, September 2013.
15. Huynh T. M. Thu and H. Sato. A non-waste-heat air conditioning system using water evaporation and decompressed solar panel. *ISES Solar World Congress 2011*, pp. 1015-1020, Kassel, Germany, Aug 28<sup>th</sup>-Sep 2<sup>nd</sup> 2011.
16. Huynh T. M. Thu and H. Sato. Proposal of a small exhaust heat air conditioning system. *National Environment Symposium 2011 of Japan Society of Mechanical Engineering (JSME)*, pp. 325-328, Tokyo, Japan, Jun 30<sup>th</sup>-Jul 1<sup>st</sup> 2011.
17. Huynh T. M. Thu, T. Hasegawa and H. Sato. Development of high COP cooling system using transpiration. *Renewable Energy 2010*, O-He-5-1, Pacifico Yokohama, Yokohama, Japan, Jun 28<sup>th</sup> – Jul 3<sup>rd</sup> 2010.
18. T. Hasegawa, T. Sakabe, Huynh T. M. Thu and H. Sato. Fundamental study on air-conditioning technology using transpiration for energy saving. *47th National Heat transfer Symposium 2010*, pp. 221-222, Hokkaido, Japan, May 26<sup>th</sup>-28<sup>th</sup>, 2010.
19. Huynh T. M. Thu, T. Hasegawa and H. Sato. A new concept of cooling system using transpiration. *The 2nd AUN/SEED-Net Regional Conference on New/Renewable Energy*, D\_004, Thailand, Jan 21<sup>st</sup>-22<sup>nd</sup> 2010.
20. Huynh T. M. Thu, H. Abdurrachim and H. Sato. Simulation of multi-effect decompressed boiling solar water distillation system. *International Journal of Energy Machinery*, Vol. 2, No. 1, pp. 53-60, August 2009.