



Prof. Pham Van Song

Curriculum Vitae

Education

- 2004–2009 **Dr.-Ing**, Technische Universität Berlin (TU Berlin), Germany, *Specialized in Civil Engineering.*
- 2002–2004 **Master of Science**, University of Stuttgart, Germany, *Specialized in Water Resources Engineering and Management.*
- 1994–1999 **Bachelor of Civil Engineering**, Hanoi Water Resources University, Vietnam, *Specialized in Hydraulic Construction.*

Experience

- 2021–Present **Mien Dong Innovative Technology University (MIT Uni.)**, *President.*
- 2017–2021 **Vietnamese-German University**, *Vice President for Research.*
- 2013–2017 **Thuyloi University**, *Associate Professor, Vice President of Thuyloi University - Southern Campus, Vice - Director of Institute for Water and Environment Research, Head of Department of Civil Engineering.*
- 2009–2013 **Southern Institute of Water Resources Research**, *Deputy Director, Center for Hydraulic Engineering and Hydromechanics.*
- 2005–2009 **Technische Universität Berlin (TU Berlin)**, *Research Associate, Chair of Water Resources Management and Modeling of Hydrosystems.*
- 1999–2001 **Southern Institute of Water Resources Research**, *Research Associate, Center for Hydraulic Engineering and Hydromechanics.*

Awards and Honors

- 2005 Berliner Nachwuchsförderung – NaFöG sponsorship for Researcher (2005-2007)
- 2001 MOET Scholarship – Postgraduate Scholarship in Germany
- 1999 Excellent Honor, Hanoi Water Resources University
- 1999 Loa-Thanh Award for Outstanding Graduation Thesis
- 1999 First Prize Award in Conference of Engineering Student in Hanoi Water Resources University

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- 1998 Gold Medal in University Informatics Olympiad
- 1997 Silver Medal in University Informatics Olympiad
- 1998 Consolidation Prize in National Informatics Olympiad

Computer skills

- Basic C, C++, Adobe Illustrator, Data Sciences
- Intermediate PYTHON, HTML, L^AT_EX, OpenOffice, Linux, Microsoft Windows
- Advanced Mike 11, Mike 21, Mike Flood, Telemac

Research Interests

Hydraulic Engineering, Hydrology, Erosion Control, Climate Change Adaption, Water Resources Management, AI for Water Resources Management

Languages

- Vienamese **Mothertongue**
- English **Advance**
- German **Intermediate**

Hobbies

- Badminton
- Table Tennis
- Cooking
- Chess
- Football
- Guitar

Publication

1. Pham Ngoc, Pham Van Song, Pham Thi Hoa, Angeli Doliente Cabaltica (2023): *A framework for semi-quantitative assessment of riverbank erosion risks due to climate change impacts: application for Ho Chi Minh City*, The 26th Conference on Fluid Mechanics, Tuy Hoa, Phu Yen, Vietnam
2. Pham Van Song, Bui Thi Minh Ha, La Vinh Trung (2023): *Vulnerability and flood risk analysis for urban area – A case study of Ho Chi Minh city*, Urban Transformational Landscapes in the City-Hinterlands of Asia, Challenges and Approaches, Advances in 21st Century Human Settlements, ISBN 978-981-19-8726-7, <https://doi.org/10.1007/978-981-19-8726-7>
3. Song Pham Van, Quang Thanh Dang, Thanh Dang Duc, Duong Tran Anh (2021): *Predicting water quality responses under climate change using coupled one- and two-dimensional models for Dong Nai River Basin*, Journal of Water Resources Science and Technology, ISSN: 1859-4255, Vol 64/02-2021
4. Song Pham Van, Hoang Minh Le, Dat Vi Thanh, Thanh Dang Duc, Ho Huu Loc, Duong Tran Anh (2020): *Deep learning Convolutional Neural Network in rainfall-runoff modeling*, Journal of Hydroinformatics, Vol. 23, <https://doi.org/10.2166/hydro.2020.095>

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5. Song Pham Van, Xuan Bao Le, Ha Nguyen (2020): *Design a Real-time flood early warning system in the Dong Nai - Sai Gon river's lower basin*, Vietnam International Water Week 2020
6. Tu Le Xuan, Thanh Vo, Johan Reyns, Song Pham Van, Duong Tran Anh, Thanh Duc Dang, Dano Roelvink (2019): *Sediment transport and morphodynamical modeling on the estuaries and coastal zone of the Vietnamese Mekong Delta*, Continental Shelf Research, Vol. 186, 64-76, <https://doi.org/10.1016/j.csr.2019.07.015>
7. Duong Tran Anh, Song Pham Van, Thanh Dang Duc, Long Phi Hoang (2019): *Downscaling rainfall using deep learning Long Short-Term Memory and Feedforward Neural Network*, International Journal of Climatology, DOI: 10.1002/joc.6066
8. Duong Tran Anh, Thanh Dang Duc, Song Pham Van (2019): *Improved rainfall prediction using combined pre-processing methods and feed forward neural networks*, J Multidisciplinary Scientific Journal, J2019, Vol. 2, Issue 1, 65 - 83, DOI: 10.3390/j20190006
9. Makoto Tamura, Kazuya Yasuhara, Kiyotake Ajima, Van Trinh Cong, Song Van Pham (2018): *Vulnerability of climate change and its adaptation in the Mekong Delta: Monitoring and residents' perception survey along the coastal area in Soc Trang province, Vietnam*, International Journal of Global Warming, Vol. 16, No. 1, 2018, p. 102 - 117, DOI: 10.1504/IJGW.2018.094312
10. Pham Van Song, Trinh Cong Van (2016): *Identification of water supply adaptation areas for shrimp growing in Mekong delta*, Proceeding of Annual Conference on Water Resources, Thuyloi University, ISBN:978-604-82-0066-4
11. Pham Van Song, Trinh Cong Van (2016): *Water supply techniques for intensive shrimp in Mekong delta*, Journal of Water Resources & Environmental Engineering, ISSN 1859-3941, Vol 55/10-2016
12. Pham Van Song (2014): *Diseases polluted water transport in a aquaculture system with water supply and drainage combined channel - Propose models for adaptation*, Journal of Water Resources & Environmental Engineering, ISSN 1859-3941, Vol 46/9-2014
13. Pham Van Song (2014): *Simulation of flow over piano key weir using numerical and physical model - Case study for Dakmi2 weir*, Journal of Water Resources & Environmental Engineering, ISSN 1859-3941, Vol 45/6-2014
14. Pham Van, S., & Cu, N.T. (2014): *Modelling of flow over piano key weir - Parameter studies using numerical and physical simulation*, 19th IAHR-APD 2014 Congress, September 21 - 24, 2014, WRU, Hanoi, Vietnam
15. Pham Van Song (2014): *Development of V-shape baffles of stilling basin for large tidal barrier - Case study for Thu Bo barrier*, Journal of Water Resources Science and Technology, ISSN: 1859-4255, Vol 22/10-2014
16. Pham Van Song & Dinh Van Duy (2013): *Change of flow regime during construction of*

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Thu Bo barrier, Proceeding of Annual Conference on Water Resources, Thuyloi University, ISBN:978-604-82-0066-4

17. Pham Van Song, Dang Duc Thanh & Le Xuan Bao (2013): *Influence of flooding discharge for Dau Tieng spillway to Sai Gon river downstream*, Journal of Water Resources Science and Technology, ISSN: 1859-4255, Vol 19/12-2013
18. Vu Hoang Thai Duong & Pham Van Song(2012): *Dissipation design in downstream of Thu Bo barrier by numerical and physical model*,Journal of Water Resources & Environmental Engineering, ISSN 1859-3941, Vol 37/6-2012
19. Pham Van Song, Trinh Cong Van (2011): *Urban flooding in Ho Chi Minh city: Problems and solutions*, The 4th SEA-EU-NET Stakeholders Conference, Hanoi
20. Nguyen Thanh Hai, Tang Duc Thang, Pham Van Song (2010): *Results of downstream transition of barrier in Mekong river delta*, Science and Technology Journal of Agriculture and Rural Development, ISSN 0866-7020, Vol.18/2010, pp 51-55
21. Nguyen Thanh Hai, Tang Duc Thang, Dinh Sỹ Quat, Pham Van Song (2010): *Determination of discharge capacity through the piano key weir*, Science and Technology Journal of Agriculture and Rural Development, ISSN 0866-7020, Vol.17/2010, pp 41-44
22. Pham Van, S., Hinkelmann, R., Nehrig, M. & Martinez, I. (2011): *A comparison of numerical and experimental simulations of water-gas flow processes through dikes with fault zones*, Engineering Applications of Computational Fluid Mechanics Vol. 5, No. 1, pp 149-158
23. Pham Van, S. & Hinkelmann, R. (2008): *Development and comparison of different model concepts for two-phase flow in fractured-porous Media*. Progress Reports, Fachgebiet Wasserwirtschaft und Hydrosystemmodellierung, Technische Universität Berlin
24. Stadler, L., Hinkelmann, R., Helmig, R. & Pham Van, S. (2006): *A comparison of model concepts for macropore infiltration*, 6. Workshop - Poröse Medien -, Eberhard Karls Universität Tübingen
25. Pham Van, S., Stadler, L. & Hinkelmann (2006): *Comparison of a micro-scale and a meso-Scale model concept for two-phase flow in fractured-porous media*, XVI International Conference on Computational Methods in Water Resources, Copenhagen, Denmark
26. Rouault, P., Nehrig, M., Pham Van, S. & Hinkelmann, R. (2006): *Zerstörungsfreie experimentelle und numerische Untersuchungen zur Schwachstellenanalyse in Deichen*, Sicherung von Dämmen, Deichen und Stauanlagen - Handbuch für Theorie und Praxis, Vol. II, Eigenverlag des Instituts für Geotechnik und des Forschungsinstituts Wasser und Umwelt, Siegen, pp. 109-115
27. Pham Van, S. & Hinkelmann, R. (2005): *Case Studies on Water Infiltration Processes in the Unsaturated Zone with a Multi-dimensional Multiphase Flow Model*, 5th International

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Symposium on Management of Aquifer Recharge, Berlin, IHP-VI, Series on Groundwater No. 13, Recharge Systems for Protecting and Enhancing Groundwater Resources

28. Pham Van, S. & Hinkelmann, R. (2005): *Development and Comparison of Different Model Concepts for Two-Phase Flow in Fractured-Porous Media - Application to Water Infiltration Processes in Hillslopes*. Progress Reports, Fachgebiet Wasserwirtschaft und Hydroinformatik, Technische Universität Berlin
29. Pham Van, S., Busse, T. & Hinkelmann, R. (2004): *Modeling of Two-Phase Flow in Porous Media - Parameter Studies on Water Infiltration Processes*, 5. Workshop - Poröse Medien -, Eberhard Karls Universität Tübingen
30. Pham Van, S., Kobayashi, K. & Hinkelmann, R. (2004): *Numerical Simulation of Two-Phase Flow in Porous Media - Parameter Studies on Water Infiltration Processes in an Experimental Slope*, Young Water Research Journal, Vol. 1, pp. 58-64, YWAT, The Netherlands

Project Record

1. Application of Remote Sensing Technology to Monitor Ocean Waste and Develop the Offshore Collection System for the Coastal Zone of Côn Đảo District, Bà Rịa - Vũng Tàu Province (2024-2026)
Client: People's Committee of Ba Ria - Vũng Tàu Province
Assigned tasks: Team leader
2. Propose the solutions for erosion and deposition mitigation of Mekong river system in Vietnam (2017-2020)
Client: Ministry of Science and Technology
Assigned tasks: Team leader, flow simulation and writing technical design reports
3. Design and Capacity Development for the Operation of the Real-Time Flood Early Warning System in the Dong Nai -Saigon River's Lower Basin (2016)
Client: Ministry of Agriculture and Rural Development and Danish government
Assigned tasks: Team leader, flow simulation and writing technical design reports
4. Development of Operation Rule Curve Research for Dau Tieng Reservoir in Sai Gon River (2013)
Client: Ministry of Agriculture and Rural Development
Assigned tasks: Team leader, hydrological simulation and writing technical design reports
5. Research on flood protection management for Dong Nai- Sai Gon river basin (2011-2013)
Client: Ministry of Science and Technology
Assigned tasks: Project member, hydrodynamic modelling, hydrological simulation and writing hydrological reports
6. Emergency preparedness plan for the downstream of Dau Tieng reservoir (2012)
Client: World Bank

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Assigned tasks: Project member, hydrodynamic modelling, hydrological simulation

7. Flood damage assesment for Ho Chi Minh city under Dau Tieng dam-break conditions (2013)
Client: WRU
Assigned tasks: Project member, hydrodynamic modelling, hydrological simulation
8. Solution for Winter Wheat Production (2013 - 2015)
Client: Ministry of Science and Technology
Assigned tasks: Team leader, hydrological simulation and writing technical design reports
9. Research for Channel Separating Water Supply and Drainage Channels in the Aquaculture System (2009-2010)
Client: Vietnam Academy of Water Resources - Ministry of Agriculture and Rural Development
Assigned tasks: Team leader of design hydraulic structures, hydrological simulation and writing technical design reports
10. Sustainable Solution for Flooding Areas in Mekong River Delta in Viet nam (2000-2003)
Client: Ministry of Science and Technology
Assigned tasks: Project member, hydrodynamic modelling, hydrological simulation and writing hydrological reports
11. Detailed design of Thu Bo storm surge barrier under Ho Chi Minh city area flood protection project (2009-2011)
Client: ICMB9 - Ministry of Agriculture and Rural Development
Assigned tasks: Team leader of design hydraulic structures and writing technical design reports
12. Detailed design and construction drawings of Muong Chuoi storm surge barrier under Ho Chi Minh city area flood protection project (2011-2013)
Client: ICMB9 - Ministry of Agriculture and Rural Development
Assigned tasks: Team leader of design hydraulic structures, and dyke system for the project area, writing design reports
13. Preliminary design of Kinh Lo storm surge barrier under Ho Chi Minh city area flood protection project (2011)
Client: ICMB9 - Ministry of Agriculture and Rural Development
Assigned tasks: Design hydraulic structures, and dyke system for the project area, writing technical design reports
14. Detailed design of surrounding dyke system for orchards combination with aquacultures in Quoi Thien, Vung Liem district, Vinh Long province (2009)
Client: Vinhlong Department of Agriculture and Rural Development
Assigned tasks: Team leader of hydraulic structure design and hydrological simulation, in charge of calculations for hydraulic system works, writing design reports
15. Survey and consultancy of water resources investment project for aquacultural activities in

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Thanh Binh – Quoi Thien isles, Vinh Long province (2012)

Client: Vinhlong Department of Agriculture and Rural Development

Assigned tasks: Team leader of hydraulic structure design and hydrological simulation, in charge of calculations for hydraulic system works, writing design reports

16. Survey and consultancy of water resources investment project for aquacultural activities in Hieu Thanh, Hieu Nhon and Hieu Nghia communes, Vinh Long province (2012)

Client: Vinhlong Department of Agriculture and Rural Development

Assigned tasks: Team leader of hydraulic structure design and hydrological simulation, in charge of calculations for hydraulic system works, writing design reports

17. Construction infrastructures for large sample field of Tan An Luong commune, Vung Liem district of Vinh Long province (2013)

Client: Vinhlong Department of Agriculture and Rural Development

Assigned tasks: Team leader of hydraulic structure design and hydrological simulation, in charge of calculations for hydraulic system works, writing design reports

18. Member of projects in Physical Hydraulic Modelling:

Client: Vinhlong Department of Agriculture and Rural Development

Assigned tasks: Team leader of hydraulic structure design and hydrological simulation, in charge of calculations for hydraulic system works, writing design reports

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