CURRICULUM VITAE

Dr. PHAM HUY GIAO
Associate Professor in Earth Science, PetroVietnam University (PVU), Vietnam
Senior Specialist, Vietnam Petroleum Institute (VPI), Vietnam
Adjunct Faculty, Asian Institute of Technology (AIT), Thailand
Email*:* giaoph@pvu.edu.vn*;* giaoph@vpi.pvn.vn; *hgiao@ait.asia*

Biometrics:
Scopus*: https://www.scopus.com/authid/detail.uri?authorId=6701353367*
Research gate*:* https://www.researchgate.net/profile/P_Giao
Google Scholar*: https://scholar.google.com/citations?user=2WS7EiAAAAAJ&hl=en*
ORCID ID*:* https://orcid.org/0000-0002-2659-3110
Web of Science/Clarivate (ResearcherID: F-5391-2019)*: https://publons.com/dashboard/summary/*

Education:

- Dipl. Ing. (MSc) in Geological-Geophysical Engineering (*Petrophysics*), 1977-82, Bucharest Univ., Romania;
- MEng (1990-92) & DEng (1993-97) in Geotechnical Engineering (*Engineering Geology & Applied Geophysics*), Asian Institute of Technology, AIT, Bangkok, Thailand.

Languages: Vietnamese, English, Romanian, Russian (reading), Thai (speaking)

A. Positions held:

- Sept. 2020-Present: Associate Professor in Earth Science of PetroVietnam University (PVU), Vietnam
- Jan 2020-present: Senior Specialist, Vietnam Petroleum Institute (VPI), Hanoi, Vietnam
- Jan 2020-present: Adjunct Faculty of Asian Institute of Technology (AIT), Bangkok, Thailand;
- Jan 2011 to Dec 2019: Associate Professor & Chair, Geotechnical and Earth Resources (GTE) field of study, School of Engineering and Technology (SET), AIT, Bangkok, Thailand.
- *April 2006-Dec 2019*: Assistant/Associate Professor & Coordinator of Geosystem Exploration & Petroleum Geoengineering (GEPG) program, SET, AIT, Bangkok, Thailand.
- *4/2006 - 6/2008*: Assistant Prof. and Joint-Coordinator of the Offshore Techn. & Management (OTM) Program, School of Engineering and Technology (SET), AIT, Bangkok, Thailand.
- *01/2009-12/2019*: Assistant/Associate Professor and Coordinator of the Professional Master Program in Geotechnical Engineering & Management (PME-GEM), AIT Center in Vietnam (AITCV).
- *08/2008-05/2016*: Assistant/Associate Professor and Coordinator of the Professional Master Program in Geo-Exploration & Petroleum Geoengineering (PME-GEPG), AIT Center in Vietnam (AITCV)
- *9/2001 - 3/2006*: Senior Research Engineer & Affiliated Faculty, Coordinator of the Geosystem Exploration & Petroleum Geoengineering (GEPG) master program, School of Civil Engineering, AIT.
- *12/1999 - 8/2001*: Visiting Faculty, Brain Korea 21 (BK21) Project, School of Civil & Ocean Engg., Dong-A University, Busan, Korea
- *5/1997-12/1999*: Senior Research Associate, Geotechnical Engineering Field, AIT, Bangkok, Thailand.
- *5/1992 – 4/1997*: Research Associate, Geotechnical Engineering Division, AIT, Bangkok, Thailand.
- *9/1982 - 8/1990*: Geophysicist, Hanoi Geophysical Division, Vietnam Dept. of Mineral Resources & Geology (*1982-1987*: Chief of Exploration Team, Regional Geophysics Dept.; *1987-1990*: Geophysicist, Center of Geophysical Researches & Applications)

B. Special honors and awards:

- The Romanian Government Scholarship for a study in oil and gas exploration at Bucharest Univ. (1977-82).
- Outstanding Academic Performance Award for a Vietnamese student studying abroad by Ministry of Education and Training (MOET) of Vietnam (*Ministerial Degree No.117/QD, 1982*).
- The Australian Government Scholarship for a master study at the Asian Institute of Technology, 1990-1992.
- The best paper at Intl' Congress on Modelling & Simulation (MODSIM97), *FEM Quasi-3D Modelling of Responses to Artificial Recharge in a Multiaquifer System*, selected to be published in the Intl' Journal of Env. Modelling & Software, 14 (1999) 141-151, Elsevier

- The Tan Swan Beng Award of the SE Asian Geotechnical Society (2005), Co-winner, for a study on Bangkok land subsidence.
- Honorable Recognition Award, the Invited Speaker for the EAGE Student Lecture Tour in the Asia-Pacific region by European Association of Geoscientists and Engineers (EAGE), 2013-2015.
- Invited Speaker at SPWLA (Society of Petrophysics and Well Log Analysis) meeting in Bangkok, 2016
- Distinguished Teacher Award 2016 by the Asian Institute of Technology, AIT (Small Class Category)
- Award on Outstanding Contribution in Reviewing by Engineering Geology Journal, Elsevier, 2017.
- The Trusted Reviewer Certificate awarded by Institute of Physics (IOP) for exceptionally high quality review work, IOP, 2020.

C. Professional Membership:

- Vice-president, Vietnam Association of Engineering Geology and Environment (VAEGE)
- Member, European Association of Geoscientists and Engineers (EAGE)
- Member, Society of Exploration Geophysics (SEG)
- Member, Society of Petrophysicists and Well Log Analysists (SPWLA)
- Life Member, International Association for Mathematical Geosciences (IAMG)
- Life Member, SE Asia Society of Geotechnical Engineering (SEAGS);
- Life Member, International Association of Low Land Technology (IALT);
- Member, Vietnam Association of Geophysicists (VAG); Vietnam Society of Soil Mechanics & Geotechnical Engineering (VGS), Vietnam Association of Hydrogeologists (VAH)

D. Editorial Board Member and Reviewer:

- Editorial Board Member, Vietnam Journal of Earth Sciences (http://vjs.ac.vn/index.php/jse/index).
- Editorial Board Member, Petroleum and Petrochemical Engineering Journal, Medwin Publishers, USA https://medwinpublishers.com/PPEJ/editorial-board.php.
- Editorial Board Member, Transport and Communications Science Journal (TCSJ), Vietnam, http://tcsj.utc.edu.vn.
- Guest Editor for Geotechnical Journal, Vietnam Geotechnical Society
- ***Reviewer*** for many ISI and international journals of high impact factor such as *Geophysics, Applied Geophysics, Near-surface Geophysics, J. of Geophysics and Engineering, J. of Petroleum Science and Engineering, J. of Natural Gas Science and Engineering, Arabian Journal of Geoscience (AJGS), Engineering Geology, Canadian Geotechnical Engineering, Hydrogeology, Journal of Cleaner Production, Natural Hazards, Cogent Geoscience, J. of Geotechnical Engineering (SEAGS), Soil and Foundations, Journal of Environmental Research Letters (IOP), Bulletin of Engineering Geology and Environment, Hydrology* etc.

E. Research grants and sponsored projects

1. Principal Investigator, *Comprehensive seismic-petrophysical characterization of reservoirs in the Nam Con Son Basin to enhance the results of oil/gas exploration and exploitation with AI and Machine learning assistance*, 2020-2022, funded by the Vietnam National Foundation for Sci. and Techn. Development (NAFOSTED) with a grant of 1,724.000.00 VND.
2. Principal Investigator, *PME-GEPG Projects*, sponsored by Oil and Gas companies in Vietnam (with total grants of 559,000 USD) for 6 batches of professional master in geoexploration and petroleum geoengineering (PME-GEPG), 2008-2016.
3. Principal Investigator, *PME-GEM Projects*, sponsored by geotechncial companies in Vietnam (with total grants of 705,000 USD) for 7 batches in HCM City and Hanoi for the professional master in geotechnical engineering and management (PME-GEM), 2009-2017.
4. Principal Investigator, *A geoenvironmental-geophysical investigation of petroleum-contaminated soil at the Don Muang Airport site using Electrical Imaging Technique*, project funded by the Royal Thai Government (RTG) with a grant of 950,00 THB, 2009 -2010.
5. Mentor for two winner Research Grants for Disaster Risk Reduction awarded by the ProVention Consortium in 2003, by Nhu Nguyen Hong Cuong (Vietnam) and H. Nam (Vietnam), respectively.

6. Principal Investigator, *Near-Surface Geophysical Investigation of the Suvarnabhumi International Airport of Bangkok (SBIA*, project funded by Airport Authority of Thailand (AOT), 2007-2009, with a grant of 1.3 Million THB.
7. Principal Investigator, *Construction of a Concrete Pavement Model and GPR Survey with Data Interpretation*, 2006-2007, project granted by Department of Highways of Thailand with a grant of 183,000. THB
8. Project Coordinator, the training course on "Technology Transfer in Geotechnical and Geophysical Field Testing", 20 - 28 March 2006 at AIT, funded by the Vietnamese Ministry of Education and Training with a grant of 86,000 THB.
9. Project Coordinator for Asia, *Asian-Link project "BRIDGE - Building human Resources In the Development of academic programs in sustainable Geosystem engineering and Exploration" from 2005 to 2008*, with the partnership of ITC (the Netherlands), Stockholm University, AIT, VNU (Vietnam National University) and NUOL (National University of Laos), project funded by European Commission (EC) with a grant of 4.7 million THB.
10. Member, *Collaboration research on characterization of soft soil in Mekong Delta, 2004-2006*, project granted by Japanese Government in collaboration with Tokyo Institute of Technology (TIT).
11. Principal Investigator, *The ITC Refresher Course Project - Imaging the Future - Global Monitoring of the Environment*, 1 - project funded by the Dutch Government, 2003 with a grant of 1.5 million THB.
12. Principal Investigator, *The Asian Horizon 21 Project – A trilateral AIT-KKU-CU collaboration in development of a new application-oriented education and research program on geosystem exploration technology for Thailand*, 2002-2004, project funded by the Royal Thai Government with a grant of 1 million THB,

F. Academic teaching:

Graduate courses at Dong-A University (1999-2001):

1. *Engineering Geology & Applied Geophysics*
2. *Computer-aided analysis in Geotechnical Engineering*
3. *Soft Clay Engineering for Reclamation Works*

Graduate courses at the Asian Institute of Technology AIT (2004-2019):

1. *Fundamentals of Geosystem Exploration (CE80.69/CE71.69)*
2. *Exploration Geophysics (CE80.65/CE71.65)*
3. *Groundwater Exploration & Engineering Geophysics (CE80.67/CE71.67)*
4. *Workflow of Oil and Gas Operations (CE80.62/CE71.62)*
5. *Petrophysics (CE80.70/CE71.70)*
6. *Well Logging Interpretation (CE71.68)*
7. *Engineering Geology (CE71.3)*
8. *Geotechnical Investigation & Exploration (CE71.9012) for professional master programs in Vietnam.*
9. *Institute-wise course - Concepts, Tools, Information and Issues for Modern Engineers (IN009012)*

Undergraduate courses at the Asian Institute of Technology AIT (2013-2018):

1. *Fundamentals of Earth's Physics (UG-GTE401)*
2. *Environmental Geology (UG-GTE402)*
3. *Application of FEM in Geoengineering & Geo-exploration (UG-GTE405)*

H. Development of new study programs/new academic ventures

1. The new master program in Geosystem Exploration and Petroleum Geoengineering (GEPG) at AIT since 2002. One of the first of this kind to be offered in the SE Asia and even Asia.
2. The graduate program in Offshore Technology & Management at AIT since 2006;
3. The joint regular master program in collaboration with ITC (Netherlands) in Geosystem Exploration and Petroleum Geoengineering (GEPG) as funded by EC through the Asian Link (Bridge) project with the first batch of 6 students from Vietnam and Laos in 2006;
4. The Professional Master program in Geoexploration & Petroleum Geoengineering (PME-GEPG) at AIT Center in Vietnam, from 2008-2016.

5. The Professional Master program in Geotechnical Engineering and Management (PME-GEM) at AIT Center in Vietnam, both in HCM City and Hanoi, from 2009 to 2017.
6. Reforming and restructuring the study curriculum of the Geotechnical and Earth Resources Engineering (GTE): as the coordinator of GTE program in AIT since 2011 I have revised and restructured the study program and curriculum together with other colleagues in our field to cope with the reducing enrolment trends.
7. Working with PVU management on initiation of the reform of academic offers in light of digital transformation and energy transition since 2020.

I. Academic Supervision (see the detailed list in Appendix 1)

At AIT I have supervised and graduated successfully 9 doctoral students, 105 regular master students and 71 professional master students. The detailed list of their names and thesis topics can be seen in Appendix 1. For PhD students a brief description is shown below:

I.1 Doctoral Graduates (see the detailed list in Appendix 1)

1. **Narongchai Wiwattanachang** (graduated in May 2013) with the dissertation of *Health assessment of concrete structures by resistivity testing and electric imaging*, AIT Diss. no.ST-12-02
2. **Ta Thi Thoang** (graduated in May 2016) with the dissertation of *Subsurface characterization and land Subsidence analysis for HCM City's infrastructure development under the climate change condition*, AIT Diss. no.GE-15-01.
3. **Khin Moh Moh Latt** (graduated in May 2017) with the dissertation of *Petrophysical studies of cement-admixed Bangkok clays using resistivity and time-domain induced polarization methods*.
4. **Nosheen Ackhter** (graduated in May 2017) with the dissertation of *Petroleum System Modeling for Shale Gas Assessment in Central and Lower Indus Basin, Pakistan.*
5. **Arsit Iyaruk** (graduated in Dec. 2018): with the dissertation of *Landslides and Debris Flows at Khao Phanom Benja in Krabi, Southern Thailand* (Co-superviser: Prof. N. Phien-wej).
6. **Krit Saowang** (graduated in Dec. 2019): with the dissertation of *Analysis of groundwater recovery and consolidation of Bangkok aquifer system and their effects on substructures*.
7. **Vo Thi Hai Quan** (graduated in July 2021)**:** with the dissertation of *Shale resources in the northern Song Hong basin, Vietnam*.
8. **Vijak Khupiwat** (to be graduated in Dec. 2021): with the dissertation of *Petrophysical characterization and flow mechanism of some shale gas formations in Thailand.*
9. **Chaiyaphruk Bunprasert** (to be graduated in Dec. 2021): with the dissertation of *Integrated petrophysical characterization ò fractured igneous rock reservoirs and PS modelling for petroleum E&P in Wichian Buri sub-basin, Thailand*

I2. Master graduates/students (see the detailed list in Appendix 1)

Besides 9 PhD graduates I had supervised and graduated 105 international regular master students and 71 professional master students as seen in Appendix 1.

J. Shortened List of Publications (see the full list in Appendix 2)

I have published about 150 papers in international peer-reviewed journals and international conferences/symposium prcoeedings. The full list of publications is given in Appendix 2. Below are shown some selected publications:

Journal research articles

1. **Giao P. H.**, N. Park (2023), Hydrogeological-geotechnical Characterization and Analysis for Construction of a Subsurface Reservoir at a Coastal Site in the Nakdong Deltaic Plain, Busan, South Korea. *Earth and Planetary Science* DOI: 10.36956/eps.v2i1.810
2. Hien D. H., L. T. Hung1, N. V. Sang, T. X. Quy, N. T. Sang, V. T. Vy, N. Q. Huy, P. T. Giang, N. M. Quy, **P. H. Giao**, P, N Trung (2023), Machine Learning Approach to Optimize Water Flooding white Tiger Oilfield Offshore Vietnam. *SOCAR Proceedings* DOI: 10.5510/OGP2022SI200775

3. **Giao P. H.**, Nguyen Trung Hieu, Noppadol Phien-Wej (2023), Ground movements induced by shield tunnelling in sand layers, Ho Chi Minh City mass rapid transit Line 1. *Geomechanik und Tunnelbau* DOI: 10.1002/geot.202300006
4. Wiwattanachang, N., Vichalai, C. & **Giao, P.H.** (2023), Influence of calcium carbonate sludge on cement-stabilized subgrade quality as investigated by means of electrical resistivity measurements. *Sceintific Reports* DOI: 10.1038/s41598-023-46282-x
5. **Giao, P.H.**, Thoang, T.T., Hiep, H. et al. (2023), Geological-geotechnical correlation of a deltaic subsoil profile and characterization of its uppermost soft marine clay deposit with reference to infrastructure development in the Saigon-Dong Nai delta, Vietnam. *Bull Eng Geol Environ*. DOI: 10.1007/s10064-023-03461-4
6. **Pham Huy Giao**, Namsik Park (2023), Hydrogeological-geotechnical Characterization and Analysis for Construction of a Subsurface Reservoir at a Coastal Site in the Nakdong Deltaic Plain, Busan, South Korea. *Earth and Planetary Science*. DOI: 10.36956/eps.v2il.810.
7. **P.H. Giao**, NT Hieu, N Phien-Wej (2023), Ground movements induced by shield tunnelling in sand layers, Ho Chi Minh City mass rapid transit Line 1. *Geomechanics and Tunnelling*
8. **Giao, P.H.**, Nguyen, P.H. (2022), Porosity. In: Daya Sagar, B.S., Cheng, Q., McKinley, J., Agterberg, F. (eds) Encyclopedia of Mathematical Geosciences. Encyclopedia of Earth Sciences Series. Springer, Cham. Encyclopedia of Mathematical Geosciences. *Encyclopedia of Earth Sciences Series. Springer*
9. Thong Duy Kieu, P. Q. Ngoc, H. Q. Man, **P. H. Giao**, D. H. Hien, B. V. Dung, and P. H. Trang (2022), Porosity prediction using fuzzy clustering and joint inversion of wireline logs: A case study of the Nam Con Son basin, offshore Vietnam. *Petrovietnam Journal* DOI: 10.47800/PVJ.2022.06-01
10. Chaiyaphruk Chaiyasart & **Pham Huy Giao** (2022), Integrated Well Log Analysis and 1D PS Modeling in Assessment of Maturity and HC Generation Potential of the Sources Rocks in Wichian Buri Sub-Basin, Thailand. *Advances in Science, Technology & Innovation book series* (ASTI).
11. **Giao P.H**., Thanh N.D., Hien D.H. , Trang P.H., Ngoc P.Q., Dung B.V., Chien L.V., Minh L.C. (2022), Rock Physics Diagnostic (RPD) as a Value-Added Tool in Site Investigation of the Subsea Characteristics for an Offshore Wind Farm Site in Ca Mau, Vietnam. *Lecture Notes in Civil Engineering* 208, pp. 181-187.
12. **Giao P. H**., P. H. Trang, D. H. Hien, P. Q. Ngoc (2021), Construction and application of an adapted rock physics template (ARPT) for characterizing a deep and strongly cemented gas sand in the Nam Con Son Basin, Vietnam, *J. of Natural Gas Science and Engineering*, 94(2), DOI: 10.1016/j.jngse.2021.104117.
13. Hien D. H., **Giao P. H**., P. Q. Ngoc, N. M. Quy, B. V. Dung, D. D. Huy, P. T. Giang, H. Long (2021), Numerical Simulation of Low Salinity Water Flooding on Core Samples for an Oil Reservoir in the Nam Con Son Basin, Vietnam, *Energies* 14(2658), DOI: 10.3390/en14092658, License CC BY 4.0.\
14. Khupviwat V. & **P. H. Giao** (2021), Solutions of trilinear flow for a fractured horizontal well in shale gas reservoirs, *Arabian Journal of Science and Engineering*, Springer Nature, DOI: 10.1007/s13369-021-05498-7.
15. Bunpreasert B. and **P. H. Giao** (2020), Integrated well log analysis and 1D PS modelling in assessment of maturity and HC generation potential of the sources rocks in Wichian Buri sub-basin, Thailand, Arabian J. of Geosciences 13(22), DOI: 10.1007/s12517-020-06226-5.
16. Avirut Puttiwongrak, **P. H. Giao**, Sakanann Vann (2020), An easily used mathematical model of porosity change with depth and geologic time in deep shale compaction, *International Journal of Geomate*, 19(73):108-115, DOI: 10.21660/2020.73.39179.
17. Krit S. and **P. H. Giao** (2020), Abaqus-based numerical analysis of subsurface deformation due to groundwater level changes in the upper 100-m zone of the Bangkok aquifer system, *Acta Geotechnica, 6(3):1-15, DOI: 10.1007/s11440-020-01075-8.*
18. **Giao P. H.**, V. T. Hue, T. D. Han, N. T. Hai Anh and N. N. Minh (2020), Land Subsidence Prediction for a new UMRT line in Hanoi, *Underground Space*, 5(2), pp. 93-104, https://doi.org/10.1016/j.undsp.2018.11.002.
19. Quan V. T. H. and **P. H. Giao** (2019), Geochemical evaluation of shale formations in the northern Song Hong basin, Vietnam, *J. of Petroleum Exploration & Production Techn.*, 9, p.1839–1853, Springer Nature.
20. Khin M. M. Latt and **P. H. Giao** (2017), Prediction of permeability of cement-admixed soft clay using resistivity and time-domain IP measurements, *J. of Applied Geophysics, 137 (2017) 92–103, Elsevier.*
21. Krit S. and **P. H. Giao** (2019), Sea-level Related Engineering Geology and Intrinsic Compression Behavior of Bangkok Clays, *International Journal of Geomate*, Vol.17, Issue 59, pp.144-153.
22. Nguyen V. T. , S. Hwang, S. Jang, N. D. Hoang and **P. H. Giao** (2018), Well path design by integrating the analysis of wireline logs and the interpretation of seismic data for a fractured basement reservoir in Cuu Long Basin, Viet

Nam, *Marine Geology & Petroleum*, 93 (2018), pp. 315–330.

23. Pham Duc Thang and **P. H. Giao** (2017), Polymer Injection as a Possible EOR Method for a Fractured Granite Basement Reservoir in The Cuu Long Basin, Vietnam, *Petroleum and Petrochemical Engineering Journal*, 1(5), 000129. MedWin Publishers, USA.
24. **P. H. Giao** & N. H. Chung (2017), A Case study on integrated petrophysical characterization of a carbonate reservoir pore system in offshore Red River basin of Vietnam, *Petrophysics*, 58 (3), SPWLA, USA.
25. Nosheen S. & **P. H. Giao** (2017), Evaluation of Shale Gas Potential in the Lower Cretaceous Sembar Formation, the Southern Indus Basin, Pakistan, *J. of Natural Gas Science and Engineering, Vol. 44 (2017)*, p. 162–176,
26. **P. H. Giao** & T. T. Thoang (2016), Soil Characterization and Land Subsidence Prediction for the First MRT Line in HCM City, *Geotechnical Engineering Journal of the SEAGS & AGSSEA* Vol. 47 No. 1 pp. 26-31, ISSN 0046-5828.
27. Thoang T. T. & **P. H. Giao** (2015), Subsurface characterization and prediction of land subsidence for HCM city, Vietnam, *Engineering Geology*, 199 (2015): 107-214, doi:10.1016/j.enggeo.2015.10.009).
28. N. D. Quang. and **P. H. Giao** (2014), Improvement of Soft Clay at a Site in the Mekong Delta by Vacuum Preloading, *Geomechanics and Engineering*, Vol. 6, No. 5, May 2014, Technopress
29. Kazuya Ishitsuka, Yo Fukushima, Takeshi Tsuji, Yasuhiro Yamada, Toshifumi Matsuoka1, and **P. H. Giao** (2014), Natural surface rebound of the Bangkok plain and aquifer characterization by persistent scatterer interferometry, *Geochemistry, Geophysics, Geosystem (G3) Journal*, 10.1002/2013GC005154, AGU.
30. Wiwattanachang N. and **P. H. Giao** (2011), Monitoring crack development on fiber concrete beam by using electrical resistivity imaging, *J. of Applied Geophysics*, 75 (2011) 294–304, Elsevier.
31. Quy N. M., P. G. Ranjith, S.K. Choi, **P. H. Giao,** D. Jasinge (2009), Analytical assessment of horizontal well efficiency with reference to improved oil recovery of the South-East Dragon oil field southern offshore of Vietnam, *J. of Petroleum Science and Engineering*, 66(2009), 75-82.
32. **Giao P. H**., N. T. Dung and P. V. Long (2008) An Integrated Geotechnical-Geophysical Investigation of Soft Clay at a Coastal Site in the Mekong Delta for Oil and Gas Infrastructure Development, *Canadian Geotechnical Journal*, 11, vol. 45, p. 1525-1537.
33. **Giao P. H.**, A. Weller, D. H. Hien, K. Adisornsupawat (2008), An Approach to Construct the Weathering Profile in a Hilly Granitic Terrain Based on Electrical Imaging, *J. of Applied Geophysics*, 65 (2008) 30–38, Elsevier.
34. **Giao P. H.** and D. H. Hien (2007), Geotechnical Characterization of Soft Clay along a highway in the Red River Delta, *Lowland Technology International*, Vol. 9 (1), p. 18-27, IALT.
35. Phien-wej N., **P. H. Giao** and P. Nutalaya (2006), Land Subsidence in Bangkok, Thailand, *Engineering Geology*, Vol. 82 (4), p. 187-201
36. Phien-wej N., **Giao P. H.** and Thepparak S. (2005), "Prediction of Differential Settlement of Buildings Induced by Land Subsidence from Deep Well Pumping", *Geotechnical Engineering Journal*, April, pp. 69-75. – The Tan Seng Bengt Award's winning paper of SEAGS.
37. **Giao P. H.**, N. Phien-wej N. and H. Tanaka (2004), An Assessment on Soil Disturbance of Bangkok Clay Samples in relation with the Intrinsic Compression Behavior, *Lowland Technology International*, Vol. 6 (2), p. 21-31, IALT.
38. Chung S. G., J. M. Kwag, **P. H. Giao,** S. H. Baek and K. N. Prasad (2004), A Study on Soil Disturbance of Pusan Clays with reference to Drilling, Sampling and Extruding, *Geotechnique*, 54(1), 61-65.
39. **Giao P. H**., S. G. Chung, D. Y. Kim and H. Tanaka (2003). Electric Imaging and Laboratory Electric Resistivity Testing for Geotechnical Investigation of Pusan Clays, *Journal of Applied Geophysics*, 52 (4): 157-175, Elsevier.
40. **Giao P. H**. (2003), Revisit of Well Function Approximations and an Easy Graphical Technique of Curve Matching for Theis' Solution, *Groundwater*, Vol. 41(3): 387-390
41. Chung S. G., **P. H. Giao**, T. Nagaraj, G. J. Kim and J. M. Kwag (2002), Characterization of Marine Clays for Coastal Reclamation Projects in Pusan, Korea, *Marine Georesources and Geotechnology*. Vol. 20(4): 237-254.
42. Chung S. G., **P. H. Giao**, G. J. Kim and S. Leroueil (2002), Geotechnical Characteristics of the Pusan Clays, *Canadian Geotechnical Journal*, Vol. 39 (1050-1060).
43. **Giao P. H**. and E. Ovaskainen (2000), Primary Analysis of Hanoi Land Subsidence with reference to Groundwater Development, *Lowland Technology International*, Vol. 2 (2), p. 17-29, IALT.
44. **Giao P. H**., N. Phien-Wej and Y. Honjo (1999), FEM Quasi-3D Modelling of Responses to Artificial recharge in the

Bangkok Aquifer System, *Intl' Journal of Environmental Modelling and Software* 14(1999) 141-151, Elsevier

45. Phien-wej N., **P. H. Giao** and P. Nutalaya (1998), Field Experiment of Artificial Recharge through a Well, International *Engineering Geology*, Vol. 50, pp. 187-201.
46. Honjo Y., **P. H. Giao** (1992), Preliminary Groundwater Modelling of Mae Moh Lignite Mine in Thailand with reference to Floor Heave, *Geotechnical Engineering*, J. of SE Asian Geotechnical Society, Vol. 25, No. 1, p. 56-74

International conference/symposium papers / extended abstracts

1. Son N. K., **P. H. Giao**, D. H. Hien, P. Q. Ngoc and N. H. Minh (2023), Near-surface ion-adsorbed rare earth elements (REE) in the northwestern Vietnam: a brief introduction on potential, exploration and local production. Proc. of National Conference VietGeo2023 on Engineering Geology, Geotechnical Engineering & Environment for Sustaianable Development, Hue University of Science.
2. Elaine Marie Zipagan Peña, **P. H. Giao**, N. Phien-wej (2023), Python-based visualization and characterization of subsurface profile for a long-distance subway alignment in Manila. Proc.of the 5th Intl' Conf. on Geotechnics for Sustainable Infrastructure Development.
3. **Giao P. H.** and D. H. Hien (2023), Calculation of pore pressure dissipated from a clay layer due to groundwater extraction using physics-informed neural network (PINN) with reference to land subsidence analysis. Proc.of the 5th Intl' Conf. on Geotechnics for Sustainable Infrastructure Development.
4. Elaine Marie Zipagan Peña, **Pham Huy Giao** (2023), A Python-based Visualization of Seismic Velocities Distribution along the Metro Manila Subway Alignment with Reference to Geotechnical Characterization. 5th Asia Pacific Meeting on Near Surface Geoscience & Engineering.
5. Ruwantha Ratnayake, **P. H. Giao** (2022), Characterization of a Gas Sand using Random Forest (RF). Conference: Applications of Machine Learning and AI in Geophysics, 10 - 13 May 2022, USA, SEG Virtual Workshop.
6. **P. H. Giao**, Kushan Sadunil, Ruwantha Ratnayake, P. H. Trang, D. H. Huy Hien, P. Q. Ngoc (2022), Effects of Training Data Set Proportioning in ANN and DL Analyses for Petrophysical Characterization of a Fractured Granite Basement (FGB) Reservoir. Conference: Applications of Machine Learning and AI in Geophysics, 10 - 13 May 2022, USA, SEG Virtual Workshop.
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