

# 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](mailto:giaoph@pvu.edu.vn); [giaoph@vpi.pvn.vn](mailto:giaoph@vpi.pvn.vn); [hgiao@ait.asia](mailto:hgiao@ait.asia)

### Biometrics:

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=6701353367>

Research gate: [https://www.researchgate.net/profile/P\\_Giao](https://www.researchgate.net/profile/P_Giao)

Google Scholar: <https://scholar.google.com/citations?user=2WS7EiAAAAJ&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 Analysts (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 geotechnical 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 Geoenvironmental & Geo-exploration (UG-GTE405)*

#### **H. Development of new study programs/new academic ventures**

1. The new master program in Geosystem Exploration and Petroleum Geoenvironmental Engineering (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 Geoenvironmental Engineering (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 Geoenvironmental Engineering (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-supervisor: 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 of fractured igneous rock reservoirs and PS modelling for petroleum E&P in Wichian Buri sub-basin, Thailand*

### **I.2. 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 proceedings. The full list of publications is given in Appendix 2. Below are shown some selected publications:

### **J.1. Journal research articles**

1. **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.

2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. **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>.
8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. **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.
14. 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,
15. **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.
16. 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).
17. 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
18. 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.
19. 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.
20. 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.
21. **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.

22. **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.
23. **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.
24. Phien-wej N., **P. H. Giao** and P. Nutalaya (2006), Land Subsidence in Bangkok, Thailand, *Engineering Geology*, Vol. 82 (4), p. 187-201
25. 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.
26. **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.
27. 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.
28. **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.
29. **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
30. 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.
31. 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).
32. **Giao P. H.** and E. Ovasainen (2000), Primary Analysis of Hanoi Land Subsidence with reference to Groundwater Development, *Lowland Technology International*, Vol. 2 (2), p. 17-29, IALT.
33. **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
34. 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.
35. 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

## J.2. International conference/symposium papers / extended abstracts

1. **Giao P. H.**, Saowiang K. and N. T. Hai Anh (2020), The Role of Groundwater and Land Subsidence Analysis for Sustainable Development of Infrastructure in Some SE Asian Cities, DOI: 10.1007/978-3-030-61118-7\_7, In book: Critical Thinking in the Sustainable Rehabilitation and Risk Management of the Built Environment, CRIT-RE-BUILT. Proceedings of the International Conference, Iași, Romania, November 7-9, 2019.
2. **Giao P. H.** and R. Ratnayake (2020), Application of Machine Learning in Well Log Analysis to Estimate the Porosity of a Fractured Granite Basement Reservoir, Conference: 3rd Asia Pacific Meeting on Near Surface Geoscience & Engineering, Nov 2020, Chiang Mai, Thailand, DOI: 10.3997/2214-4609.202071097,
3. **Giao P. H.**, J. Mhardsen, Terdkiad Nontapot (2020), Detailed Geotechnical Characterization of Bangkok Clays by Near-Surface Electric Imaging and Passive Seismic Surveys, Conference: 3rd Asia Pacific Meeting on Near Surface Geoscience & Engineering, Nov 2020, Chiang Mai, Thailand, DOI: 10.3997/2214-4609.202071094,
4. **P. H. Giao**, Nguyen Thi Hai Anh and Hoang Ngoc Khai (2019), Geotechnical Characterization and Land Subsidence Analysis for the UMRT Line No.3 in Hanoi, DOI: 10.1007/978-981-15-2184-3\_36, In book: Geotechnics for Sustainable Infrastructure Development, Springer.
5. Chayasart C. and **P. H. Giao** (2019), 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, Proceedings of the 2nd Springer Conference of the Arabian Journal of Geosciences, (CAJG-2), 25-28 Nov., 2019, Tunisia, Nature Springer.

6. **Giao P. H.** and B. X. Hanh (2019), Analysis of post-landslide electric imaging data at a site in Sapa, Vietnam, Proc. of the EAGE-GSM Conference on Near-Surface Geophysics, Kuala Lumpur, Malaysia, April 2019.
7. **P. H. Giao**, Pham Hong Trang, and Mai Thi Huyen Trang (2019), Revisit of Rock Physics Template (RPT) Construction for Petrophysical Characterization of a Gas Sand in the Nam Con Son (NCS) Basin, Vietnam, Proc. the EAGE-VPI conference on Reservoir Geoscience, 2-3 Dec. 2019, Hanoi, Vietnam.
8. **Giao P. H.**, Lahiru Nagasingha, and Pramuditha Theekshana (2018), A new method to monitor and determine permeability of concrete based on resistivity and time-domain chargeability measurements, S09\_07 paper, Proceedings of the 13th SEGJ Intl' Symp., 12-14 November, 2018, Tokyo, Japan.
9. Quan V. T. H. and **Giao P. H.** (2018), Visual Kerogen Typing: A case study of The Northern Song Hong basin, Vietnam, Proceedings of the 1st Springer Conference of the Arabian Journal of Geosciences, (CAJG-1), Tunisia, 2018, DOI: 10.1007/978-3-030-01578-7\_31, In book: Advances in Petroleum Engineering and Petroleum Geochemistry, pp. 131-134, Nature Springer.
10. **Giao P. H.** and K. Sandunil (2018), Development of A Deep Learning Model To Estimate Porosity Of A Fractured Granite Basement Reservoir, 80th EAGE Annual Conference, Copenhagen, Denmark, 11-15 June, 2018.
11. **Giao P. H.** (2016), Geoelectric modeling-based estimation of shale resistivity to enhance water saturation calculation for a low-resistivity shaly sand formation in the Cuu Long basin, Vietnam, Proc. Intl. 87th SEG annual meeting, 24-29 September, 2016, Dallas, USA.
12. **Giao P. H.**, R. Maneejan and D. H. Hien (2016), Possible Applications of a Multi-layered Seismic Refraction Solution in Correction and Analysis of Sonic Log Data, Proc. of The 22nd Formation Evaluation Symposium of Japan (JFES 2016), 29-30 September, 2016, Chiba, Japan
13. **Giao P. H.**, T. N. Anh and D. Duangngern (2015), Assessment of Geopressure in the Upper Oligocene Shale of the Cuu Long Basin by Conventional and Fuzzy Methods, Proc. of the SEGJ12 International Symposium, Society of Exploration Geophysics of Japan, 18-20 November, Tokyo, Japan.
14. **Giao P. H.**, B. D. Trung and D. Q. Doi (2015), Porosity partitioning of a fractured granite basement (FGB) reservoir in the Cuu Long Basin, offshore Southern Vietnam, Proc. of the 15th Asian Regional Conference in Soil Mechanics and Geotechnical Engineering (SSMGE-ARC15), 9-15 Nov., 2015, Fukuoka, Japan.
15. **Giao P. H.**, T. N. Anh (2015), Prediction of Geopressure for a New Exploration Well Site in the Cuu Long Basin, Vietnam, Proc. of the 77th EAGE Conference & Exhibition, Madrid 1-4 June, 2015.
16. **Giao P. H.** (2015), Lithological Zoning Using the Vp/Vs Log Curves, Proc. of The 21st Formation Evaluation Symposium of Japan (JFES 2015), 13-14 October, Chiba, Japan
17. **Giao P. H.**, T. T. Thoang, L. X. Thuyen and N. H. H, Vu (2014), Geotechnical Characterization of the Subsoil profile Underlying the Land Subsidence Monitoring Points in Southern Vietnam Delta, Proc. of the 9th Intl' Symp. on Lowland Technology "Problems and Remedy measures of Lowland", pp.429-436, Sept 29 to Oct. 3, 2014, Saga University, Saga, Japan.
18. Trieu N. V. and **P. H. Giao** (2014), Rose Diagrams for Design of Borehole Orientation in Fractured Granite Basement, Proc. Intl' EAGE/FESM Joint Regional Conference Petrophysics Meets Geoscience "From Nano Pores to Mega Structures", European Association of Geoscientists and Engineers (EAGE), 17-18 February 2014, Kuala Lumpur, Malaysia
19. **Giao P. H.** and N. H. Chuong (2013), Characterization of A Thick Deltaic Clay Depsosit For Port Development At The Cai Mep–Thi Vai Site, Southern Vietnam, pp. 793-800, Proc. 18th Southeast Asian Geotechnical Conference (18SEAGC) & Inaugural AGSSEA Conference (1AGSSEA), Ed. by C. F. Leung, S. H. Goh and R. F. Shen, Research Publishing, Singapore.
20. **Giao P. H.**, T. Pavechana and K. Saowiang (2013), Consolidation Settlement Analysis with reference to groundwater recovery in the Bangkok Multi-aquifer system, p. 567-573, Proc. 1st Southeast Asian Geotechnical Conference cum Inaugural AGSSEA Conference, Advances in Geotechnical Infrastructure, Ed. by C. F. Leung, S. H. Goh and R. F. Shen, Research Publishing, Singapore.
21. **P. H. Giao** (2012), Application of Resistivity Forward and Inverse Analyses to Add geophysical mapping of Buried Utilities in Bangkok Clays, Proc. Intl. Symp. on Sustainable Geosynthetics and Green Technology for Climate Change (SGCC), 157-161 pp., 20 June 2012, Bangkok, Thailand.

22. **Giao P. H.**, B. D. Trung & N. H. Minh (2011), Reservoir in Fractured Granite Basement (FGB), Unconventional or Conventional? IPTC 15465, Presentation at International Petroleum Technology Conference IPTC, 7-9 February, 2012, Bangkok, Thailand
23. Khin M. M. Latt, **P. H. Giao**, Y. Sasaki (2011), Model-based Inversion of MT Responses for a Deep Fractured Granite Reservoir in the Cuu Long Basin, Proc. of the 10th SEGJ Intl'. Symp., Kyoto, Japan, 20-22 Nov. 2011, pp. 191-194, Permalink: <http://dx.doi.org/10.1190/segj102011-001.47>
24. Wiwattanachang N., **P. H. Giao** (2011), Size Effect Correction of the Resistivity Measurements on a Fiber Concrete Beam using 3D Resistivity Modeling, Proc. of the 10th SEGJ Intl'. Symp, Kyoto, Japan, 20-22 Nov. 2011, pp. 227-230, Permalink: <http://dx.doi.org/10.1190/segj102011-001.56>
25. **Giao P. H.** (2011), Electric Imaging (EI) of Soft Clay Deposits in Some East and Southeast Asian Deltas, the 14th Asian Regional Conf. on Soil Mechanics and Geotechnical Engineering, 23-27 May 2011, Hong Kong.
26. **Giao P. H.**, Uma S. & A. Puttiwongrak (2010), Measuring Electric Resistivity of Natural and Petroleum-Contaminated Bangkok Clay Samples, 190-193 pp., Proc. 7th Intl' Symp. on Lowland Technology, 16-18 Sept. 2010, Saga, Japan.
27. Avirut P. and **P. H. Giao** (2009), Integrated analysis of high resolution seismic and geotechnical data using open source software for an offshore drilling rig site, The 9th SEGJ Intl' Symp. on Imaging and Interpretation, Society of Exploration Geophysics of Japan, 12-14 Oct., 2009, Hokkaido, Sapporo, Japan
28. **Giao P. H.** & N. Q. Cuong (2009), An Experimental Study on Applicability of Electrical Resistivity Tomography (ERT) to Monitor the Chemical Grouting in Sandy Soil, the 9th SEGJ Intl' Symp. on Imaging and Interpretation, Society of Exploration Geophysics of Japan, 12-14 October, 2009, Hokkaido, Sapporo, Japan
29. **Giao P. H.** & T. T. Thoang (2008), Characterization of Some Vietnamese Marine Clay Deposits with reference to the Effect of Sea Level Change and Correction of the Sediment Accumulation Curve, Proc. 6th Intl. Conf. Asian Marine Geology, Sept., June 2008, Kochi, Japan.
30. **Giao P. H.**, C. Vichalai and D. H. Hien (2007), A Study on Geotechnical and Geophysical Properties of Styrofoam Material for Construction of a Concrete Pavement Model, Proc. Intl' Symp. Hanoi Geoengineering 2007, Nov. 2007, Hanoi, Vietnam, p. 11-17.
31. **Giao P. H.** and D. H. Hien (2007), Shallow Exploration of Bangkok Clay using Multiple Square Arrays, Proc. of the 11th Intl' Symp. on Recent Advances in Exploration Geophysics , in Kyoto (RAEG2007), p. 99-106, Kyoto, Japan;
32. **Giao P. H.** and C. Vichalai (2006), Construction of a Geophysical Testing Site on Soft Clays, Proc. the 8th SEGJ Intl' Symposium – Geophysical Imaging and Interpretation, p. 277-282, The Society of Exploration Geophysicists of Japan (SEGJ), Nov. 26-28, 2006, Kyoto, Japan.
33. **Giao P.H.**, K. Adisornsupawat, N. Phien-wej (2006), Electric Imaging of the Bangkok Clay at the Site of The New International Bangkok Airport (NBIA), Special Lecture, Proc. Intl' Symp. on Geotechnical Aspects of the 2nd Bangkok Intl'. (Suvarnabhumi) Airport in Thailand, 15 - 16 May, 2006, Bangkok, Thailand, p.1147-156.
34. N. H. Minh and **P. H. Giao** (2005), Well Test Analysis for Fractured Basement of the Rangdong Oil Field, Proc. Intl' Workshop Hanoi Geoengineering 2005, Nov. 2005, Hanoi, Vietnam, p. 322-330.
35. Chung K. L. T. and **P. H. Giao** (2005), Some Geotechnical Characteristics of peat Deposit Underlying the U Minh Thuong Park, Proc. Intl' Workshop Hanoi Geoengineering 2005, Nov. 2005, Hanoi, Vietnam, p. 65-74.
36. **Giao P. H.** (2004), Electric Imaging of Bangkok Clay for Geotechnical Purposes, Proc. of the 7th SEGJ Intl'. Symp. on Imaging Technology, 24-26 Nov. 2004, Sendai, Japan, p. 481-486.
37. **Giao P. H.** and K. Adisornsupawat (2004), Design and Implementation of a Semi-automatic Electric Imaging Procedure to Investigate the Soft Clay Ground at NBIA, p. 223-226, Proc. of the Intl' Symp. on Lowland Technology, Sept. 1-3, 2004, Bangkok, Thailand.
38. **Giao P. H.** (2003), A Comparative Study of Different Electrode Configurations in Investigation of a Fresh-Saline Water Interface, Proc. of the 9th European Meeting of Environmental and Engineering Geophysics, Prague, 2003, paper 079.
39. Chung S. G., **P. H. Giao** and H. Tanaka (2002), Geotechnical Characteristics and Engineering Problems of Pusan Clays, Invited Paper, Proc. International Workshop on Characterization and Engineering Properties of Natural Soils, 2-4 Dec 2002, Singapore, Tan et al. (eds), Swets & Zeitlinger, Lisse, ISBN 90 5809 537, pp. 505-541.

40. **Giao P. H.**, S. G. Chung and S. K. Kim (2002), The Need of Harmonization of Pusan Clay Investigation, Proc. International Workshop on Foundation Design Codes and Soil Investigation in view of International Harmonization and Performance Based Design, IWS Kamamura 2002. Ed. by Honjo et al., pp. 169-174, Tokyo, Balkema.
41. **Giao P. H.**, S. G. Chung, D. D. Yoon and S. H. Baek (2001), CPTU Analysis for Investigation of the Pusan Clays, Proc. Intl' Conference on In Situ Measurement of Soil Properties and Case Histories, pp. 342-348, InSitu 2001, Bali, Indonesia.
42. **Giao P. H.**, S. G. Chung and D. D. Yoon (2000), Settlement Analysis of the Pusan Clays with reference to Reclamation Projects, Proc. Intl'. Symp. on Lowland Technology, pp. 143-152, Saga University, Saga, Oct. 4-6, 2000, Japan.
43. Phien-wej N., **P. H. Giao** (1998), Bangkok Land Subsidence Analysis with reference to Settlement of the Bangna-Bangpakong Highway, Proc. Intl'. Symp. on Lowland Technology, pp. 513-520, Saga University, Saga, Nov. 4-6, 1998, Japan.
44. **Giao P. H.**, N. Phien-wej, and P. Nutalaya (1998), Analysis of a Recharge Well Experiment, Proc. of the 3rd Intl' Symp. on Artificial Recharge of Groundwater - TISAR 98, Ed. by Jos H. Peters et al., pp. 447-450, 21-24 Sept. 1998, Amsterdam, the Netherlands.
45. **Giao P. H.**, N. Phien-wej, and Y. Honjo (1997), FEM Quasi-3D Modelling of Responses to Artificial Recharge in a Multiaquifer System, Proc. International Congress on Modelling and Simulation, MODSIM97, Vol. 2, pp. 591-596, Hobart, Tasmania, 8-11 December 1997. It was selected as one of the best papers to be published in the Intl' Journal of Environmental Modelling and Software 14(1999) 141-151, Elsevier