

*Curriculum Vitae*

**Potpreecha Pondthai**

Ph.D. Geophysics

Department of Geotechnology

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**Education**

- 2015—  
2020
- Doctor of Philosophy in Geophysics  
*Texas A&M University, College Station, TX – USA*  
GPA: 3.785 of 4.0  
Dissertation title: “*Time-Domain Electromagnetic Imaging of Coastal Aquifers at Malta and New Zealand with Implications for their Onshore-Offshore Connectivity*”
- 2011—  
2014
- Master of Science in Applied Geophysics  
*Chiang Mai University, Chiang Mai, Thailand*  
GPA: 3.92 of 4.0  
Thesis title: “*Monitoring of Soil-Gas Radon in Potentially Active Faults, San Sai District, Chiang Mai Province*”
- 2006—  
2010
- Bachelor of Science in Physics  
*Khon Kaen University, Khon Kaen, Thailand*  
GPA: 3.69 of 4.0  
*Graduated First Honors.*

**Work Experience**

- March 2021—  
current
- Lecturer at Department Geotechnology  
*Faculty of Technology, Khon Kaen University, Thailand.*

**Honors and awards**

- Development and Promotion of Science and Technology Talents Project (DPST). Full Scholarship (2003-2020)
- Department of Geology and Geophysics Scholarship, TAMU (2018)
- Academic Excellent Award, Faculty of Science, Chiang Mai University (2014).

## Publications

### *Published after Graduation*

- Arjwech, R., Everett, M. E., Saengchomphu, S., Somchat, K. & **Pondthai, P.** (2021). Geophysical mapping of gypsum for exploration of reserves in the Nong Bua area of Thailand. *Quarterly Journal of Engineering Geology and Hydrogeology*, 54(1). doi:10.1144/qjegh2020-182.

### *Published – Related to Dissertation/Graduation*

- Micallef, A., Marchis, R., Saadatkhah, N., **Pondthai, P.**, Everett, M. E., Avram, A., Timar-Gabor, A., Cohen, D., Trapani, R. P., Weymer, B. A. & Wernette, P. (2021). Groundwater erosion of coastal gullies along the Canterbury coast (New Zealand): A rapid and episodic process controlled by rainfall intensity and substrate variability. *Earth Surface Dynamics*. 9(1), 1–18. doi:10.5194/esurf-9-1-2021.
- Weymer, B. A., Wernette, P. A., Everett, M. E., **Pondthai, P.**, Jegen, M. & Micallef, A. (2020). Multi-layered high permeability conduits connecting onshore and offshore coastal aquifers. *Frontiers in Marine Science*. 7, 903. doi:10.3389/fmars.2020.531293.
- **Pondthai, P.**, Everett, M. E., Micallef, A., Weymer, B. A., Faghieh, Z. Haroon, A. & Jegen, M. (2020). 3D Characterization of a Coastal Freshwater Aquifer in SE Malta (Mediterranean Sea) by Time-Domain Electromagnetics. *Water*. 12(6), 1566. doi:10.3390/w12061566.

### *Published – Not related to Dissertation/Graduation*

- Arjwech, R., Somchat, K., **Pondthai, P.**, Everett, M. E., Schulmeister, M. & Saengchomphu, S. (2020). Assessment of Geological, Hydrogeological and Geotechnical Characteristics of a Proposed Waste Disposal Site: A Case Study in Khon Kaen, Thailand. *Geoscience*, 10(3), 109. doi:10.3390/geosciences10030109.
- Arjwech, R., Sriwangpon, P., Somchat, K., **Pondthai, P.** & Everett, M. (2020). Electrical resistivity tomography (ERT) data for clay mineral mapping. *Data in brief*, 30, 105494. doi:10.1016/j.dib.2020.105494.
- Arjwech, R., Boonsungnern, W., Sriwangpon, P., Somchat, K. & **Pondthai, P.** (2020). Using integrated geophysics data set to delineate Phetchabun active fault in Thailand. *Data in brief*, 30, 105608. doi: 10.1016/j.dib.2020.105608.

## Research Role

May 2014—

**Position:** Learning Assistant

May 2015

**Where:** Department of Geology, Chiang Mai University

I worked as an undergraduate research assistant on “Soil Gas Radon Concentration Measurements in Chiang Mai- Lamphun Basin” using active radiation technique to delineate potential faults in the high-seismicity area.

## Field Experiences

- September 2019*      **Project:** Invincible–shipwreck project  
**Where:** *Galveston Island, TX*  
**Position:** Teaching Assistant – GEOP481 Special Seminar
- August 2019*      **Project:** Geophysical ERT–based testing along Texas IH-45  
**Where:** *Huntsville, TX*  
**Position:** Field Assistant – TxDOT
- July 2019*      **Project:** Onshore-offshore groundwater aquifer connectivity Investigation  
**Where:** *SE Malta*  
**Position:** Field Leader
- May 2019*      **Project:** Geophysical ERT-based testing along Texas FM696  
**Where:** *Bastrop, TX*  
**Position:** Field Assistant – TxDOT
- February 2018*      **Project:** GPR, EMI and Magnetics surveys  
**Where:** *Washington-on-the-Brazos State Historic Site, TX*  
**Position:** Teaching Assistant – Investigation of associated historical objects
- June 2017—  
January 2018*      **Project:** TDEM Imaging of Faults at Llano Uplift  
**Where:** *Mason, TX*  
**Position:** Field Leader
- November 2017*      **Project:** Detection of anomalies using geophysical methods  
**Where:** *Along median of I-64 in Lexington, VA*  
**Position:** Field Assistant – VirginiaDOT
- August 2017*      **Project:** Evaluation of freshwater resource under Rock Glacier  
**Where:** *Upper Camp Bird III in San Juan Mountains, CO*  
**Position:** Geophysics Field Leader – using geophysical EM instruments.

## Affiliations

- 2019 – current*  
Reviewer, Journal of Applied Geophysics
- 2016 – current*  
Member of International Association of Geomagnetism and Aeronomy Division VI –  
EM Induction in Earth and Planetary Bodies
- 2016 – current*  
Member of the American Geophysical Union.

## Colloquia

- July 2019*  
Guest Lecturer: SMART summer school “Understanding marine hydrogeology through the lens of geophysics: Bridging the gap across the coastal zone” at University of Malta –  
*Investigation of Mean-Sea-Level Aquifer along SE Malta Coastline using Time-Domain Electromagnetics.*

## Presentations

- **Pondthai, P.** et al. “3D Characterization of a Coastal Freshwater Aquifer in SE Malta (Mediterranean Sea) by Time-Domain Electromagnetics”. In: *AGU Fall Meeting*. Session H054: Advances in Subsurface Characterization and Monitoring Using Ground-Based and Remote Geophysical and Hydrogeological Methods I. *Oral*: H054-08. Dec. 2020
- **Pondthai, P.** & Everett, M. E. “Time Domain Electromagnetic Imaging of Mesoproterozoic Faults at Llano Uplift, Texas”. In: *the 24th EM induction Workshop*, Helsingør, Denmark. *Poster*: S2.3-P283. Aug. 2018
- Ramsey, C. E. **et al.** “Application of Electromagnetic Induction at the Upper Camp Bird III Rock Glacier in the San Juan Mountains, Colorado”. In: *GSA Annual Meeting in Seattle*, Washington, USA. *Poster*: 372-228. Oct. 2017.

## Workshop Attendances

*December 2019*

TAMU Offshore Groundwater Workshop – College Station, TX

*August 2018*

The 24th EM Induction Workshop – Helsingør, Denmark

*June 2017*

TAMU High Performance Research Computing Week – College Station, TX

*August 2016*

The 23rd EM Induction Workshop – Chiang Mai, Thailand.