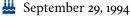
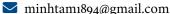
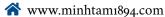
Tam Minh Phan

(Ph.D., FE)







Kunsan National University, Rep. of Korea



I am an energetic, ambitious person who has developed a mature and responsible approach to any task that I undertake, or situation that I am presented with. I am excellent in working with others to achieve a certain objective on time with excellence.

Education

♦ **[B.S.] Ho Chi Minh City University of Technology**, Build. and Const. Materials. 2012 - 2017Thesis title: Designing and Optimizing of Geopolymer Concrete Using Fly Ash.

♦ **[M.S.] Kunsan National University**, Roads and Pavement. 2017 - 2019

Thesis title: A Study on the Healing Performance of Hot Mix Asphalt with Microwave Heating. 2019 - 2023 ♦ **[Ph.D.] Kunsan National University**, Roads and Pavement.

> Thesis title: Evaluation on Delaying Black Ice and Improving Low-Temperature Properties of Asphalt Mixture Using Micro Encapsulated Phase Change Materials.

Skills

Languages Strong reading, writing and speaking for English, beginner level for Korean

♦ Python, MATLAB, LaTeX Coding

Software ♦ ANSYS, ABAQUS, Autocad, Sketchup, SolidWorks

> Academic research, technical training, development of technical computer program, problem-solving, working under pressure, teamwork

Projects

Misc.

♦ Evaluation on healing performance of steel slag modified asphalt concrete 2017-2019

♦ Synthesis of micro-encapsulated phase change materials to delay black ice and improve prop-2019-2021 erties of asphalt concrete

 Prediction of black ice using weather data and geographic information system data 2021-now

♦ Development on automatic crack and pothole repair using 3D printing technology 2022-now

 Utilization of rubber tire powder in asphalt mixture 2023-now

Miscellaneous Experience

Awards and Achievements

2019 Poster Presentation, Transportation Research Board (TRB-98), Washington-DC, USA

2021 ♦ **Best Poster Award**, Korea Society Road Engineers Conference (KSRE-2021)

♦ **Oral Presentation**, Transportation Research Board (TRB-101), Washington-DC, USA 2022

♦ **Best Poster Award**, Korea Society Road Engineers Conference (KSRE-2022)

Miscellaneous Experience (continued)

- ♦ **Best Paper Award**, International Conference for Road Engineers (ICRE-2022)
- 2023 Oral Presentation, European Asphalt Technology Association (EATA2023), Gdansk, Portland
 - ♦ **Best Paper Award**, Korea Society Road Engineers Conference (KCRE-2023)

Certification

- 2021 Scientific Computing with Python. Awarded by freeCodeCamp.org
 - ♦ **Data Analysis with Python**. Awarded by freeCodeCamp.org
- 2022 AMATLAB Programming Techniques. Awarded by MathWorks Training Service
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Research Publications

Journal Articles

- Phan, T. M., Jang, M.-S., Seo, J.-W., Yoon, J.-H., Park, D.-W., & Le, T. H. M. (2023). Impact of air voids and environmental temperature of asphalt concrete on black ice. *Road Materials and Pavement Design*, 1–16.
- Kim, Y.-T., Nguyen, T. A., **Phan**, **T. M.**, & Park, D.-W. (2022). Stripping resistance evaluation of bead coating via hamburg wheel tracking test and image analysis. *International Journal of Highway Engineering*, 24, 47–52.
- Lee, S.-H., **Phan**, **T. M.**, Lam, M. P., & Park, D.-W. (2022). Effect of volumetric properties on indirect tensile strength and cracking tolerance index of cored asphalt pavement. *International Journal of Highway Engineering*, 24, 39–45.
- Lee, S.-Y., **Phan**, **T. M.**, & Park, D.-W. (2022). Evaluation of carbon grid reinforcement in asphalt pavement. *Construction and Building Materials*, 351, 128954.
- Phan, T. M., Jang, M.-S., & Park, D.-W. (2022). Black ice prediction model for road pavement using weather forecast data and gis database. *The Baltic Journal of Road and Bridge Engineering*, 14, 63–79.
- **Phan**, **T. M.**, Le, T. H. M., & Park, D.-W. (2022). Evaluation of cracking resistance of healed warm mix asphalt based on air-void and binder content. *Road Materials and Pavement Design*, *23*(1), 47–61.
- **Phan**, **T. M.**, Park, D.-W., & Kim, H.-S. (2022). Utilization of micro encapsulated phase change material in asphalt concrete for improving low-temperature properties and delaying black ice. *Construction and Building Materials*, 330, 127262.
- **Phan**, **T. M.**, Nguyen, S. N., Seo, C.-B., & Park, D.-W. (2021). Effect of treated fibers on performance of asphalt mixture. *Construction and Building Materials*, 274, 122051.
- **Phan**, **T. M.**, Park, D.-W., & Le, T. H. M. (2021). Improvement on rheological property of asphalt binder using synthesized micro-encapsulation phase change material. *Construction and Building Materials*, 287, 123021.
- Le, T. H. M., Park, D.-W., Seo, J.-W., & **Phan**, **T. M.** (2020). Anti-chemical resistance and mock-up test performance of cement asphalt mortar modified with polymer for ballast stabilizing. *Construction and Building Materials*, 232, 117260.
- Park, D.-W., **Phan**, **T. M.**, & Kim, Y.-M. (2020). Influence of antistripping additives and rejuvenators on healing performance of moisture-damaged hma. *Advances in Materials Science and Engineering*, 2020.

- Phan, T. M., Park, D.-W., & Kim, H.-S. (2020). Simulation on heat transfer of phase change material modified asphalt concrete for delaying black ice formation. *International Journal of Highway Engineering*, 35–43.
- Le, T. H., Park, D.-W., Park, J.-Y., & **Phan**, **T. M.** (2019). Evaluation of the effect of fly ash and slag on the properties of cement asphalt mortar. *Advances in Materials Science and Engineering*, 2019.
- Dinh, B. H., Park, D.-W., & **Phan**, **T. M.** (2018). Healing performance of granite and steel slag asphalt mixtures modified with steel wool fibers. *KSCE Journal of Civil Engineering*, 22(6), 2064–2072.
- Phan, T. M., Park, D.-W., & Le, T. H. M. (2018). Crack healing performance of hot mix asphalt containing steel slag by microwaves heating. *Construction and Building Materials*, 180, 503–511.

Books and Chapters

Phan, **T. M.**, Park, D.-W., Le, T. H. M., & Park, J.-S. (2020). Evaluate healing performance of asphalt mixture containing steel slag by using induction and microwave heating. In *Icscea 2019* (pp. 485–491). Springer, Singapore.

References

Prof. Dae-Wook Park

Professor Kunsan National University 558 Daehak-ro, Gunsan-si, Jeollabuk-do, Republic of Korea

(+82) 10-9586-0302

✓ dpark@kunsan.ac.kr

Assoc. Prof. Anh Tuan Le

Associate Professor Ho Chi Minh City University of Technology 268 Ly Thuong Kiet street, District 10, Ho Chi Minh city, Viet Nam

(+84) 93-746-4284

✓ latuan@hcmut.edu.vn