

Full Name: Dima. A Husein Malkawi

Date of Birth: April 23, 1992

Place of Birth: United States of America Nationality: Jordanian/American

Present Position: Assistant Professor, Department of Civil and Environmental Engineering,

German Jordanian University, Amman, JO

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EDUCATION

Bachelor of Civil Engineering, GPA: very good, August 2015

Jordan University of Science and Technology

M.A., Civil Engineering Specializing in Geotechnical, GPA: 4.0

The University of Akron, Akron, Ohio

Thesis Title: Reliability-based analysis of energy piles

Doctor of Philosophy in Geotechnical Engineering, GPA: 3.93

Dissertation Title: Soil-Pile Interaction of Geothermal Foundation Subjected To

Temperature Cycling.

EXPERIENCE

Jordan University of Science and Technology, June-August, 2015.

construction trainee.

Jordan University of Science and Technology in corporation with The University of Washington, Seattle, August 2014

Engineering water cycle program

Ph.D. Research at Lehigh University, 2018-2019

The University of Akron, Teaching Assistant, 2016-2019

Fahad Bin Sultan University, Adjunct Professor (2020 - 2021)

PUBLICATIONS

Published

- **Husein Malkawi, D. A.**, & Husein Malkawi, A. I. (2022). Stability Analysis of the New Section in Raising the Existing Composite Wala Dam Using Finite Element Methods. *Advances in Civil Engineering*.
- **Husein Malkawi, D. A.**, Husein Malkawi, A. I., Bani-Hani, K (2022). Slope Stability Analysis for the Phosphogypsum Stockpiles: A Case study for the Sustainable Management of the Phosphogypsum stacks in Aqaba Jordan. *Sustainability*.
- **Husein Malkawi, D. A,** Suleiman, M. T., Elzeiny, R. (2021). Investigation of Soilstructure Interface Properties under Temperature Cycles and Different Operation Times of a Ground Source Heat Pump. In *IFCEE 202*
- Albatayneh, O., **Husein Malkawi, D. A,**., Farid, A., & Ksaibati, K. (2022). A Developed Methodology for Determining Gravel Roads' Level of Service: A Case Study of Wyoming. *International Journal of Pavement Research and Technology*, 15(4), 779-788..
- Albatayneh, O., **Malkawi, D. A. H.**, Yue, E., Fosu-Saah, B., & Ksaibati, K. (2023). Integrating a Multi-criteria Route Optimization with ArcGIS for Gravel Road Data Collection. *Jordan Journal of Civil Engineering*, 17(1).
- Fayez Abdulla, **Husein Malkawi**, **D. A** (2020) Potential impact of climate change on the drought conditions in Jordan, Jordan Journal of Civil Engineering, Volume 14, No. 1, 2020,108-116.
- Elzeiny, R., **Husein Malkawi, D. A,** Suleiman, M. T. (2021). Investigation of Thermal Loading Effects on Behavior of Energy Piles Subjected to Lateral Loading. In *IFCEE* 2021.
- Malkawi, A. I. H., Shatnawi, E., & Husein Malkawi, D. A. (2017). A comparative study of physical and chemical properties of different pozzolanic materials used for roller compacted concrete RCC dams. In MATEC Web of Conferences (Vol. 120, p. 02025). EDP Sciences.
- Almasri, A. H., **Husein Malkawi, D. A.**., & Malkawi, A. I. H. (2023). Numerical analysis to determine the optimum distance of reaction piles in a static pile load test. *Arabian Journal of Geosciences*, 16(1), 7.
- Bani-Hani, M. A., **Husein Malkawi, D. A.**, Bani-Hani, K. A., & Kouritem, S. A. (2023). Genetic Algorithm Optimization of Rainfall Impact Force Piezoelectric Sensing Device, Analytical and Finite Element Investigation. *Materials*, *16*(3), 911.

Under Review

- Effects Of Daily Operation Cycles Of Ground Source Heat Pumps On Soil-Pile Interaction Of Energy Piles. (2021)
- Cawley, L., Albatayneh, Omar., **Husein Malkawi, D. A.** & Ksaibati, K. "Best Practices in Asset Management and Trade-off Analysis: A Survey of State Department of Transportation Experiences". *International Review of Civil Engineering*.

Projects

- Stability Analysis of the above Ground Slopes for the Stacking of Phosphogypsum in Aqaba. (2020)
- Stability Analysis of the New section in Raising the Existing Composite Wala Dam (2021).
- Seepage Failure Mechanism of Shaitham Concrete Face Rockfill Dam During Reservoir Water Infiltration (2022)

Supervised Master Thesis's

- The Efficiency of Granular Pile Anchor (Gpa) Foundation System in Improving the Pullout Resistance of Irbid Expansive Clayey Soil: An Experimental Investigation, Amani Mousa Mohammad Al-Masoud (2020)
- The Efficiency of the Granular Pile Anchor Foundation System In Reducing The Heave Of Irbid Expansive Clayey Soil: An Experimental Investigation, Ahmad Odeh Ahmad Alsuqaier (2020)
- The Effect of Using Alkali-Resistant Glass Fibers and Portland Cement On the Geotechnical Properties of Highly Expansive Soil, Hadeel Nayef Al Zghool (2020).
- Expansive Soil Treated with Phosphogypsum and Lime and The Possibility of Utilizing It as Sub-Base Layer. Malak Mohammed AlSyouf (2022).
- Estimation of Pullout Capacity of Granular Pile Anchors Based on Cavity Expansion Theory. Mohammad Nader Al-Khateeb (2023)

COMPUTER SKILLS

Microsoft Office Software (Word, Excel, Access, PowerPoint, etc.)

Proficient with Microsoft Windows 98, XP Home/Professional, and Vista

AutoCad program,

Etabs program,

Ensoft Shaft software,

Ensoft LPile software,

Ensoft Group software,

Thermo Pile software,

Plaxis 2D

INTERPERSONAL SKILLS

Languages: Arabic, English

RESEARCH INTEREST

Soil-Structure Interaction Geothermal Foundations Slope Stability

TECHNICAL JOURNAL REVIEWER

Journal of Geotech. and Geoenvironmental Eng Jordan Journal of Civil Engineering