Ahmed Shlash Alawneh

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Personal

Born: July 1, 1962

Marital Status: Married (9 children)

Position: Professor of Civil Engineering (JUST).

Summary of Qualifications

Excellent skills acquired in Civil Engineering supported by a B.Sc. in Civil Engineering, a M.Sc. in Structural Engineering and a Ph.D. in Geotechnical Engineering. Experienced in design, analysis, and teaching in the field of soil mechanics, foundations and related topics. Worked extensively with well-known computer software packages. Research interests include load transfer mechanism along piles, expansive soil, rehabilitation of damaged buildings, engineering properties of soil, soil contamination and compacted clay liners. Published several papers in international peer reviewed journals such as Geotechnical Testing Journal (GTJ) ASTM, Canadian Geotechnical Journal, Transportation Research Record (TRR), Applied Clay Science, and Natural Hazard Journal, Journal of Performance of Constructed Facilities (ASCE), Geotechnical and Geological Engineering Journal, Bulletin of Engineering Geology and Environment.

Education

Ph.D. in Civil Engineering / Geotechnical, University of Wisconsin-Madison (USA), August 1994. (GPA 3.9/4.0, Honor). Dissertation: "Experimental Study of Ultimate Uplift Resistance of Roughened Model Piles in Sand".

M.Sc. in Structural Engineering, Yarmouk University, Irbid-Jordan, February 1987. (GPA 88/100, Honor). My standing was the first among the 10 students who graduated with me in the same year. Thesis: "Shear Strength characteristics of Some Selected Irbid Soil".

B.Sc. in Civil Engineering (Structures), Yarmouk University, Irbid-Jordan, June 1984. (GPA 88.4/100, Honor). My standing was the first among the 68 students who graduated with me in the same year. Graduation Project: "Structural Design of Some Selected Civil Engineering Facilities" including traditional R.C. building, large hall with folded plates, elevated water tank, and prestressed R.C. bridge.

Experience

Sept. 2023 – Present

Vice President/ Al al- Bayt University/Jordan

Sept. 2016 – Sept. 2023

Professor of Civil Engineering / Civil Engineering Department / Jordan University of Science and Technology.

Sept. 2015 – Sept. 2016

Founding Dean of Engineering and Dean of Graduate Studies and Scientific Research / Ajloun National University (Sabbatical Leave).

Sept. 2012 – Sept. 2015

Dean of Students' Affairs / Jordan University of Science and Technology.

Sept. 2011- Sept. 2012

Professor of Civil Engineering / Civil Engineering Department / Jordan University of Science and Technology.

Sept. 2010- Sept. 2011

Professor of Civil Engineering / Applied Science University, Amman-Jordan (Sabbatical Leave)

Sept. 2008- Sept. 2010

Chairperson of Civil Engineering Department, Jordan University of Science annology

May 2006- Sept. 2008

Professor of Civil Engineering / Civil Engineering Department / Jordan University of Science and Technology.

Sept. 2004- Sept. 2006

Chairperson of Civil Engineering Department, Jordan University of Science and Technology.

Sept. 2002- May 2006

Associate professor of Civil Engineering / Civil Engineering Department / Jordan University of Science and Technology.

Sept. 2001-July 2002

A.ssociate professor of Civil Engineering / Civil Engineering Department / Jordan University, Amman, Jordan (Sabbatical Leave).

July 2000- Sept. 2001

Associate Professor of Civil Engineering / Civil Engineering Department / Jordan University of Science and Technology.

Sept. 1994-July 2000

Assistant Professor of Civil Engineering / Civil Engineering Department / Jordan University of Science and Technology.

Jan. 1992-May 1994

Research Assistant, University of Wisconsin-Madison (USA). Working with Prof. Edil B. Tuncer (doctoral advisor). Research activities were concentrated on load transfer mechanism along piles.

March 1990-Jan. 1991

Site Engineer, Al-Shammale C.C., Irbid-Jordan

Sept. 1984-Sept. 1987

Research and Teaching Assistant, Civil Engineering Department, Yarmouk University, Irbid-Jordan. Assisting in classes in Soil Mechanics, Soil Mechanics Laboratory, Structure Analysis, and Long Span Structures. Research Duties included evaluation of engineering properties of Irbid soil, gaining a great experience in soil testing.

June 1984-Sept. 1984

Civil Engineer Trainee, Elector-Mechanical International (EMI) Company, Amman-Jordan.

Teaching Courses

I used to teach Introductory Soil Mechanics, Soil Mechanics Laboratory, Foundation Analysis and Design, Retaining Wall Structures, Advanced Soil Mechanics, Engineering Properties of Soil and their Measurements, Physico-Chemical basis of Soil Behavior, Advanced Foundation Engineering, Special

Topics in Geotechnical Engineering, Pile Foundation and general engineering classes such as Statics. Supervised the thesis work of many master students as main advisor or co-advisor and served on the examination committees of many students. Supervised the graduation projects of many students in the field of soil mechanics and foundation engineering.

Thesis Committee Serving

1) *Effect of Freezing and Thawing Cycles on Performance of Expansive Clay Soil Stabilized by Cement, Lime, Water Treatment Sludge, and Cement Kiln Dust,* by Battol algahdi, Master of Science in Civil Engineering, JUST, 2023 (Advisor).

2) *Estimation of Pullout Capacity of Granular Pile Anchors Based on Cavity Expansion Theory,* by Mohamoud Al-Kateeb, Master of Science in Civil Engineering, JUST, 2023 (Advisor).

3) *Innovative Technique for stabilizing Irbid expansive Soils Using Microbial Induced Calcium Carbonate, by Eman Ismael*, Master of Science in Civil Engineering, JUST, 2023 (Co-Advisor).

4) *The Effect of Soil Plug on Ultimate Bearing Capacity of Rough Open Ended Piles Driven in Sand: Experimental Approach*, by Harith Salman, Master of Science in Civil Engineering, JUST, 2021 (Co-Advisor).

5) *The Effect of Soil Plug on Ultimate Bearing Capacity of Smooth Open-Ended Piles Driven in Sand: Experimental Approach*, by Ahmed Abo Eid, Master of Science in Civil Engineering, JUST, 2021 (Co-Advisor).

6) *The Efficiency Of the Granular Pile Anchor Foundation System in Improving the Pullout Resistance of Irbid Expansive Clayey Soil: An Experimental Investigation*, by Amani Massoad, Master of Science in Civil Engineering, JUST, 2020, (Co-Advisor).

7) *The use of Artificial Neural Networks to Predict the Increase with Time in Ultimate Capacity of Driven Piles in Sandy Soil*, by Feda Saleh, Master of Science in Civil Engineering, JUST, 2020, (Advisor).

8) *The Efficiency of the Granular Pile Anchor Foundation System in Reducing the Heave Of Irbid Expansive Clayey Soil: An Experimental Investigation*, by Ahmad Alzgair, Master of Science in Civil Engineering, JUST, 2020, (Co-Advisor).

9) *Tensile capacity of granular pile anchors in expansive clay: Theoretical Approach*, by Amani Bani Khalaf, Master of Science in Civil Engineering, JUST, 2020 (Advisor).

10) *The effect of using Alkali-resistant glass fibers and portland cement on the geotechnical properties of highly expansive soils*, by Hadeel Al-Zhgool, Master of Science in Civil Engineering, JUST, 2019, (Co-Advisor).

11) *Base Capacity of Open-Ended Pipe Piles Driven in Sand*, by Manar Othman, Master of Science in Civil Engineering, JUST, 2018, (Advisor).

12) *Residual Loads in Piles Driven in Sand*, by Mohamed Tawah, Master of Science in Civil Engineering, JUST, 2019, (Advisor).

13) *Estimation of Friction Capacity of Driven Piles in Sand: Effect of Sand Dilation*, by Bayan Jararha, Master of Science in Civil Engineering, JUST, 2019, (Advisor).

14) *A new Approach for Estimating Capacity of Driven Piles in Sand under Tensile Loading*, by Maiss Atiah, Master of Science in Civil Engineering, JUST, 2018, (Advisor).

15) *Estimation of Shaft Friction Capacity of Open-Ended Driven Piles in Sand*, by Isra Al-Omari, Master of Science in Civil Engineering, JUST, 2018, (Advisor).

16) *Evaluation of Driven Pile setup in Sand: Parametric Study and Similarity with Consolidation*, by Fadi Hadad, Master of Science in Civil Engineering, JUST, 2018, (Advisor).

17) *The Effect of Detergents on the Engineering Properties of Some Selected Soils*, by Barra Daradkah, Master of Science in Civil Engineering, JUST, 2017. (Co-Advisor).

18) *The Shaft Capacity of Rock Sockted Piles: Theoretical Approach*, by Zainab Zregat, Master of Science in Civil Engineering, JUST, 2017. (Co-Advisor).

19) *Estimation and Evaluation of the Coefficient of Permeability of Layered Soil System*, by Areen Ababneh, Master of Science in Civil Engineering, JUST, May. 2017. (Examining Committee member).

20) *Evaluation of Bond Strength between Pavement Overlays*, by Rai'd M. Al-Rahaibeh, Master of Science in Civil Engineering, JUST, 2013 (Co-Advisor).

21) *Pile Load – Displacement Curve in Cohesionless Soil Considering Soil/Pile Set-Up*, by Mysa A. Khassawneh, Master of Science in Civil Engineering, JUST, June 2009 (Advisor).

22) Time Dependent Capacity Increase for driven piles in cohesionless soil, by Murad Awamleh, Master of Science in Civil Engineering, JUST, January 2007 (Advisor).

23) *Factors Affecting Sand-Steel Pile Interface Friction Angle (Experimental Approhc*, by Mohammad Al-Salamat, Master of Science in Civil Engineering, JUST, August 2005 (Advisor).

24) *Scale Effect Study on Shear Strength Using Large Scale Direct Shear Device*, by Kifah Ewisat, Master of Science in Civil Engineering, JUST, January 2004 (Co-Advisor).

25) *Load-displacement Response of Driven Piles in Cohesionless Soils Under Compressive Loading: A Method Accounting for Post-Driven Residual Stresses* by Khaled Noor, Master of Science in Civil Engineering, JUST, January 2004. (Advisor).

26) *Poisson's Ratio Effect on Compressive and Tensile Shaft Capacity of Driven Piles in Sands: Theoretical Formulation*, by Abdulla Sharo', Master of Science in Civil Engineering, JUST, April 2004. (Advisor).

27) *Full scale micropiles to control uplifting of lightweight facilities over Irbid expansive clays, by Rabi J. Rabadei, Master of Science in Civil Engineering, JUST, April 2004. (Co-Advisor).*

28) *Micropiles as a technique to control upward movement of foundation of light structures on the expansive clays of Irbid area: small scale experimental study*, by Baha Ataree, Master of Science in Civil Engineering, JUST, August 2001. (Examining Committee member).

29) *A study on the safety factor of slopes using limiting equilibrium approach*, by Tamara Mobaydeen, Master of Science in Civil Engineering, JUST, Aug. 2000. (Examining Committee member).

30) *Experimental approach for evaluating soil damping for driven piles*, by Iz-Al-deen Ayasreh, Master of Science in Civil Engineering, JUST, Aug. 1998. (*Examining Committee member*).

31) *Seismic analysis of slope stability using Monte-Carlo simulation technique*, by Waleed Faleh Hassan, Master of Science in Civil Engineering, JUST, Aug. 1998. (Examining Committee member).

32) *Stability evaluation of embankment damm during staged construction*, by Najat Tanash, Master of Science in Civil Engineering, JUST, Aug. 1998. (Examining Committee member).

33) *Estimation of axial pile capacity in sand considering post-driving residual stresses*, by Mustafa Al-Saleh, Master of Science in Civil Engineering, JUST, June 1998. (Advisor).

34) *Enhancing leachate retardation by modified soil layers*, by Mohammad Sami Nusier, Master of Science in Civil Engineering, JUST, Aug. 1999. (Co-*Advisor*).

35) *Uplift capacity of smooth model piles in dry sand*, by Mohammad Sobeh, Master of Science in Civil Engineering, JUST, Aug. 1997. (Advisor).

36) *Effect of organic matter on engineering soil properties*, by Osama abu-safagah, Master of Science in Civil Engineering, JUST, Aug. 1997. (Examining Committee member).

37) *Comparison between uplift behaviour of rough and smooth model piles in dry sand*, by Hussein Al-deeky, Master of Science in Civil Engineering, JUST, Aug. 1997. (Advisor).

38) *Eperimantal investigation of various parameters on pullout resistance in reinforced earth*, by Adnan Jayed Zaydan, Master of Science in Civil Engineering, JUST, Aug. 1995. (Examining Committee member).

39) *Undrained shear strength of selected marl from land slide sites along main highways in Jordan*, by Emad Momani, Master of Science in Civil Engineering, JUST, Aug. 1995. (Examining Committee member).

40) *Evaluation of the physical and engineering properties of some selected southern Granite rocks in Jordan*, by Ahmad Al-Jarah, Master of Science in Civil Engineering, JUST, Aug. 1995. (Examining Committee member).

41) *Use of cavity expansion to determine pile capacity: A probabilistic approach*, by Rafy Bobyan, Master of Science in Civil Engineering, JUST, Aug. 1995. (Examining Committee member).

42) *Experimental study on vertical vibration of model footing on sand*, by Omer Ma'ayta, Master of Science in Civil Engineering, JUST, Aug. 1995. (Examining Committee member).

Computer Skills

Familiar with a variety of geotechnical engineering computer software and Microsoft Package (Word, Excel, Power Point). Good command of SPSS.

Honors and Awards

- Jordanian Army Scholarship for outstanding students in high school to pursue my undergraduate study (B.Sc. degree) in the field of Civil Engineering at Yarmouk University, Jordan (Oct. 1980-June 1984).
- Dean's Honor List (Feb. 1981, June 1981, Feb. 1982, June 1982, Feb. 1983, June 1983).
- Yarmouk University's Prize in recognition of academic performance (1984 and 1987).

- His Majesty King Husain's Prize in recognition of academic performance (1984).

- Yarmouk University's Scholarship for outstanding students to pursue graduate study (M.Sc. degree) in the field of Structural Engineering (Oct. 1984-June 1987).
- Jordan University of Science and Technology scholarship for outstanding students to pursue graduate study (Ph.D. degree) in the field of Civil Engineering, Geotechnical (Jan. 1991- August 1994).

Committees

- Served on Library Affairs, Laboratory Affairs, Graduation, and Graduate Studies Committees (Department of Civil Engineering, JUST).
- Served as a Coordinator for the Geotechnical Engineering Group (Department of Civil Engineering, JUST) from September 1998 to August 1999.
- Member in the Faculty of Engineering Council (JUST) for the Academic Years 2004/2005, 2005/2006, 2008/2009, and 2009/2010.
- Member in the University Deans' Council (JUST) for the Academic Years 2012/2013, 2013/2014, 2014/1015.
- Chairman of the Graduation Cermeony Committee (JUST) for the Academic Years 2012/2013 and 2013/1014.
- Coordinator for the Department of Civil Engineering ABET Committee.
- Head of the Interdiciplinary Students Committee (JUST) for the Academic Years 2012/2013 , 2013/1014 and 2014/1015.
- Member in the University Council (JUST) for the Academic Years 2012/2013, 2013/1014 and 2014/1015 .
- Member in the administrative board (Sports Federation Union for Jordanian Universities) for the Academic Years 2012/2013 , 2013/1014, and, 2014/1015 .
- Member in the National Jordanian Building Codes Technical Committee from Sept. 2010 to Sept. 2012.
- Supervisor for NDI (National Democratic Institute) Youth Programs in Political Development (JUST) from Sept. 2012 to Sept. 2015.
- Member in the Excutive Committee in the 3th Basketball Championship for Arab Universities.

Seminars, Lectures, and Communication with Local Community

1. Evaluation of the Allowable Bearing Capacity (Static and Dynamic Analysis) for the Proposed Ajloun Directorate Education Building, January 2000.

2. Design of Axially Loaded Piles in Sand (lecture), Invited by Faculty of Engineering (JUST) in the faculty Day, May 2000.

3. Goelogical and Geotechnical Investigation for the Proposed Ajloun Directorate Education Building Site, December, 1998.

4. Evaluating the causes of distress to a Four Story Building in Irbid City and Determining the Necessary Remedial Constructions, September 1998.

5. "Foundation Design on Expansive Soils", November 1997, (3 days lectures). Prepared by the Consulting Center at Jordan University of Science and Technology, Irbid, Jordan.

6. "Foundation Design on Expansive Soils", September 1997, (3 days lectures). Invited by the Jordan Society for Engineers.

7. "Analysis and Design of Slopes and Earth Dam Embankment", April 1996, (7 days lectures). Invited by Arab Center for Engineering Studies (ACES), Amman, Jordan.

8. "One Day Seminar in Pile Foundation", July 1995. Invited by Ministry of Public Works, Amman, Jordan.

9. “Environmental Management Workshop”, October, 2009. Invited by Qeen Rania Center for Environmental Sciences, Jordan University of Science and Technology.

10. “Evaluation of the Foundation Design for Al-Rashadiah Bridge in Saudi Arabia”. Work prepared for Daralkhalij for Engineering Studies company in Saudi Arabia, October, 2007.

11. “Rdesign of the Foundation for Al-Rashadiah Bridge in Saudi Arabia”. Work prepared for Daralkhalij for Engineering Studies company in Saudi Arabia, October, 2007.

12. "Foundation Design for a poonton Type of Strucyure In Kuwit". Work prepared for e-construct Company, 2013.

13. "Re-Design of a precast Retaining Wall (Quay wall) in Qatar. Work prepared for e-construct Company, 2012.

14. " Evaluating the Causes of Distress to a One Story Building Constructed Over Expansive Soil in Irbid city and Determining the Necessary Remedial Constructions, 2001.

15. Review and Re-Write the Foundation and Retaining Walls Code, Work Prepared for the Ministry of Housing and Public Works, in Cooperation with the Royal Scientific Society (RSS)-Buliding Research Center, Jordan, 2007.

Participation in Conferences

1. Thirty Fifth Scientific Week, Syria, 1995.
2. Geotechnical Engineering Practice Beyond 2000, Madras, India,1996.
3. Transportation Research Board 78th Annual Meeting, Washington, D. C., 1998.
4. Geotechnical Pratice Publication, Conference, Jordan, 2004.
5. 2nd Asian Conference on Civil Engineering and Materials, Tokyo- Japan ,2013.
6. The Annual Geo-Congress of the Geo-Institue of ASCE, Atlanta, 2014.
7. 1st Global Conference for Drug Prevention, Abu Dhabi, 2014.
8. 1st Arab Unversities Students Forum organized by Arab Universities Sports Federation, Abu Dhabi, 2015.
9. Sustainability and Resiliency in Geotechnical Engineering, Geo-Chicago, Chicago, USA 2016.
10. Cordinating Engineering for Sustainability and Resilience, Amman, Jordan, 2022

Associations

1. Jordan Society of Engineers, Member.
2. Jordan Environmental Society, Member.
3. Jordan University of Sciences and Technology Alumni, Member.
4. Member of the administrative board of the Sports Federation of Jordanian Universities from Sept. 2012 to Sept. 2015.

Funded Projects

1. “Physico-Chemical Changes of Clayey Soil Behavior Induced by Addition of Superplastizer and Fly Ash”. Supported by Deanship of Scientific Research (JUST), Grant No. 121/99.
2. “Estimation of Axial Pile Capacity in Sand Considering Post-Driving Residual Stresses”. Supported by Deanship of Scientific Research (JUST), Grant No. 80/97.

3. “Evaluation of Bond Strength between Pavement Overlays”. Supported by Deanship of Scientific Research (JUST), Grant No. 118/2009.
4. “Medmobil-Supportive International Approach to Increase and Improve the Mobility and Exchange”. Funded by European Union, Project Coordinator.
5.

Publications

1. Nusier, O.K., Alawneh, A.S, . Al-Sugair, A. (2023) “The Efficiency of Granular Pile Anchor Foundation System in Reducing Heave of Irbid Expansive Clayey Soil: An experimental investigation.” Case-Studies-in-Construction-Materials, Vol. 18.

2. Sharo A. A., Al-Shorman, B., Bani-Baker, M., Nusier, O.K., Alawneh A. S., Al Omari, E. M. (2022) “New Approach for Predicting the Load-Displacement Curve of Axially Loaded Piles in sand.” Case-Studies-in-Construction-Materials, Vol. 17.

3. Sharo, A. A., Al-Tamneh, M., Alawneh, A. S., Nusair, O. K.., Rababah, S. (2022) "P-Wave Velocity of Limestone influenced by Saturation: Experimental Study." International Review of Civil Engineering (I.RE.C.E.) Vol. 13, No. 2.

4. Alawneh, A.S., Nusier, O.K., Jaraha, B. (2022) "Estimation of Friction Capacity of Driven Piles in Sand: Effect of Sand Dilation. International Conference, Cordinating Engineering for Sustainability and Resilience, Amman, Jordan, May, 2022.

5. Sharo A. A., Alawneh A. S., Al Omari, E. M. (2022) “Friction Capacity of Open-Ended Piles Driven into Sand”, Arabian Journal of Geosciences **15,** 314 (2022). https://doi.org/10.1007/s12517-021-09404-1**.**

6. Sharo A. A., Alawneh A. S., Al Zghool H. N., and Rabab'h S. R. (2022) “Effect of Alkali –Resistance Glass Fibers and Cement on the Geotechnical Properties of Highly Expansive Soil”, Journal of Materials in Civil Engineering, 34 (2), 04021417.
7. Alqeaba'h A., Al Hattamleh O. A., Rabab'h S. R. and Alawneh A. S. (2021) "Verification of unified Effective Stress Theory Based on the Effect of Moisture on Mechanical Properties of Fiber Reinforced Unsaturated soil", Geotextile and Geomembranes Journal.

8. Alawneh A.S., and Sharo A. A. (2020) ""Estimation of Set up of Driven piles in Sand"." Geomechanics and Geoengineering: An International Journal. UK. Vol.4, issue 4, pp.281-296.

9. Sharo A. A., and Alawneh A. S., Al-Tawaha M. S., (2020), "Alternative Solutions for Consolidation Problems in Isotropic Clay Using Laplace Heaviside's Theorem", International Review of Civil Engineering.

10. Alawneh, A.S., Nusier, O.K., and Atiyah, M. (2019), "A New Approach for Estimating Capacity od driven Piles in Sand under Tensile Loading", Jordan Journal of Civil Engineering, Vol. 13, No.3.

11. Sharo A. A., Ashteyat A. M., Alawneh A. S.,and Bashar, A., BK. (2018) " The Use of Oil Fly Ash to improve the properties of Irbid Clay", World Journal of Engineering .

12. Sharo A. A., Alawneh, A. S. (2016) "Enhancement of the Strength and swelling Characteristics of Expansive Clayey Soil Using Nano Clay material", Sustainability and Resiliency in Geotechnical Engineering, ASCE Library, Geo-Chicago 2016: pp. 451-457.

13. Sharo A. A., Alawneh A. S., Alomari A. A.. (2015) "Nano Technology application in Stabilizing Expansive Soil: Irbid Clay", Global advanced material and Surfaces, GAMS, Dubai, pp. 1-5.

14. Sharo, A. A., Alawneh, A. S. (2014) " Investigation of Lateral Resistance Factor (η) of Sand Using Pressuremeter: Numerical Approach", Geo-Characterization and Modeling for Sustainability, the Annual Geo-Congress of the Geo-Institue of ASCE, Atlanta, USA.

15. Gharaybeh, F., Alawneh, A. S., Al-Rhaibah, R. (2013) "Evaluation of Bond Strength Between Old and New Pavement Overlays",2nd Asian Conference on Civil Engineering and Materials, Tokyo, Japan, pp. 15-17.

16. Alawneh, A.S., Nusier, O.K., and Awamleh M. (2009) " *Time Dependent Capacity Increase for driven piles in cohesionless soil*." Jordan Journal of Civil Engineering, Vol. 3, No. 1.

17. Nusier, O.K., Alawneh, A.S. and Al-Rabadi, R.J. (2007) " Micropiles Reinforcement for Expansive Soils: Large-Scale Experimental Investigation." *Ground Improvement Journal, Vol. 11 issue 2, ICE, UK.*

18. Alawneh, A.S., Nusier, O.K. and Al Sharo', A. (2007) " Poisson's Ratio Effect on Compressive and Tensile Shaft Capacity of Driven Piles in Sand: Theoretical Formulation." *Computers and Geotechnics Journal, Vol. 34, issue 3, UK*

19. Alawneh, A.S., Nusier O.K, Royal Scientific Society (RSS)-Buliding Research Center, National Jordanian Buildings Codes (2007): Foundation and Retaining Walls Code, Ministry of Housing and Public Works, Amman, Jordan

20. Nusier, O.K. and Alawneh, A.S. (2006) " Kafrein Earth Dam Probabilistic Seismic Hazard Assessment." *Soil Mechanics and Foundation Engineering, Vol. 43 issue 6, Netherlands.*

21. Alawneh, A.S., Nusier, O.K. and Al-Mufty (2006) " Reliability Based Assessment of Shallow Foundations Using Mathcad." Geotechnical and Geological Engineering Journal, Vol. 24, issue 3, Netherlands.

22. Alawneh, A.S. (2005) "Modelling Load displacement response of driven piles on cohesionless soils under tensile loading." *Computers and Geotechnics Journal, Vol. 32, issue 8, UK.*

23. Alsaleh, M.I., Alawneh, A.S., Ayiasreh, I. and Malkawi, A.H. (2004) " Complementry Design Methodology For Driven Piles In Sand." Geotechnical Pratice Publication,Volume 1, 2004, Pages 250-262**.**

24. Nusier, O.K. and Alawneh, A.S. (2004) "Micropiles Technique to Control Foundations Heave of Lightweight Buildings Over Expansive Soils." *Geotechnical and Geological Engineering Journal, Vol. 22, issue 1, Netherlands.*

25. Alawneh, A.S., Nusier, O.K. and Mustafa Al-Kateeb (2003) "Dependency of Unit Shaft resistance on in-situ Stress: Observations Derived From Collected Field Data." *Geotechnical and Geological Engineering Journal, Vol. 21, issue 1, Netherlands.*

26. Nusier, O.K. and Alawneh, A.S. (2002), " Damage of Reinforced Concrete Structure Due to Severe Soil Expansion," *Journal of Performance of Constructed Facilities, ASCE, Vol. 16, No. 1, USA.*

27. Nusier, O.K., Alawneh, A.S. and Malkawi, A.I. (2002) "Remedial Measures to Control Seepage Problem in Kafrein Dam/ Jordan." *Bulletin of Engineering Geology and the Environment, Vol. 61, Netherlan*

28. Alawneh, A.S., Malkawi, A.I. and Nusier, O.K. (2001), "Distress Caused by Poor Quality Control in the Field Combined with Overloading: A case Study of a Four Story Building in Irbid Area-Jordan," *Journal of Performance of Constructed Facilities, ASCE, Vol. 15, No. 1, USA.*

29. Alawneh, A.S., Nusier O.K., Malkawi, A.I. and Mustafa Al-Kateeb (2001) " Axial Compressive Capacity of Driven Piles in Sand: A method Including Post-Driving Residual Stresses. " *Canadian Geotechnical Journal, Vol. 38.*

30. Alawneh, A.S., and Husein Malkawi, A.I. (2000), "Estimation of Post-Driving Residual Stresses along Driven Piles in Sand", *Geotechnical Testing Journal (GTJODJ), ASTM,* Vol. 23, No. 3, September 2000, pp. 313-326..

31. Husein Malkawi, A.I., Alawneh, A.S. (2000), "Paleoearthquake Features as Indicators of Potential Earthquake Activities in the Karameh Dam Site," *Natural Hazard Journal*, 22, pp. 1-16

32. Alawneh, A.S. (1999), "Tension Piles in Sand: A Method Including Degradation of Shaft Friction During Driving," *Transportation Research Record No. 1663, National Research Council*, Washington, D. C., Paper No. 99-0092, pp. 41-49.

33. Alawneh, A.S., and Husein Malkawi, A.I. (1999), "Tension Tests on Smooth and Rough Model Piles in Dry Sand," *Canadian Geotechnical Journal*, 36, pp. 746-753.

34. Husein Malkawi, A.I., Alawneh, A.S., and Abu-Safagah, T. O. (1999), "Effects of Organic Matter on the Physical and Physico Chemical Properties of an Illitic Soil," Applied Clay Science, 14, pp. 257-278.

35. Husein Malkawi A.I., Alawneh A.S. (1999) "Dynamic Site Response Evakuation for the Chimney Located Near the Fertilzer Plant (Aqaba City), Journal of Civil Engineering Geology, Vol. 3, pp. 75-82

36. Alawneh, A.S., and Husein Malkawi, A.I. (1996), "Residual Load Concept in Pile Foundation," *IGC-96, Geotechnical Engineering Practice Beyond 2001*, Madras, India, pp. 267-274.

37. Husein Malkawi, A.I., Alawneh, A.S., and Liang Robert, Y. (1996), "Dynamic Cone Theory to Predict Pile Bearing Capacity," *IGC-96, Geotechnical Engineering Practice Beyond 2001*, Madras, India, pp. 267-274.

38. Nusier, O.K., Husein Malkawi, A.I., Alawneh, A.S., Hatamleh, H. O., and Ababneh, M. J. (1999), "Seepage Control in Dam Rehabilitation: A case Study, Kafrein Dam/Jordan," *Proceedings of '99 International Conference on dam safety and Monitoring*, China, 19-22 Oct., pp. 337-344.

39. Nusier, O.K., Husein Malkawi, A.I., Liang, Robert, Y., and Alawneh, A.S. (1999), "Probabilistic Analysis of King Talal Dam Slopes," *Proceedings of '99 International Conference on dam safety and Monitoring*, China, 19-22 Oct., pp. 515-521.

40. Alawneh, A.S. (1995), "Ultimate Uplift Resistance of Roughened Model Piles in Sand," 35th Scientific Week, Syria, pp. 83-106.

References

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