

Aslam A. Al-Omari

Contact Information:

Associate Professor
 Department of Civil Engineering,
[Jordan University of Science and Technology](http://www.just.edu.jo), Jordan
 E-mail Addresses: aaalomari3@just.edu.jo

Personal Data:

Nationality : Jordanian
 Marital Status : Married with two children
 Place of Birth : Jordan
 Date of Birth : June 24th, 1972

Academic Qualification:

- Ph.D.** Civil Engineering/Pavement and Construction Materials (Dec. 2004) GPA=4.0
[Texas A&M University](http://www.tamu.edu), College Station, TX, USA
Dissertation Title: “Analysis of HMA Permeability through Microstructure Characterization and Simulation of Fluid Flow in X-Ray CT Images”
- M.Sc.** Civil Engineering/Transportation (Feb. 1998) GPA=87.0
[Jordan University of Science and Technology](http://www.just.edu.jo), Irbid, Jordan
Thesis Title: “Interaction between urban planning, transportation system, and vehicle emissions in urban arterials”
- B.Sc.** Civil Engineering/Transportation and Materials (Jun. 1995) GPA=78.4 (Very Good)
[Jordan University of Science and Technology](http://www.just.edu.jo), Irbid, Jordan

Work Experience:

- [Jordan University of Science and Technology \(JUST\)](http://www.just.edu.jo), Irbid, Jordan.
 - ✓ Associate Professor in the civil engineering department (*Oct. 2022 – Now*)
- [Fahad Bin Sultan University \(FBSU\)](http://www.fbsu.edu.sa), Tabuk, KSA
 - ✓ Associate Professor in the civil engineering department – Unpaid Leave (*Oct. 2021 – Oct. 2022*)
- [Applied Science University \(ASU\)](http://www.asu.edu.jo), Amman, Jordan
 - ✓ Associate Professor in the civil engineering department – Sabbatical Leave (*Oct. 2020 – Oct. 2021*)
- [Jordan University of Science and Technology \(JUST\)](http://www.just.edu.jo), Irbid, Jordan.
 - ✓ Head of Civil Engineering (CE) Department (*Sep. 2019 – Sep. 2020*). Responsibilities:
 - Managing all the regular administrative work for one of the largest departments at JUST. In the CE department, there were 973 students enrolled in the B.Sc. program, 151 students in the M.Sc. program, and 10 students in the Ph.D. program.
 - Supervising all the work needed for the ABET reaccreditation.
 - Working on switching from the classic way of teaching to the distance learning during the coronavirus COVID-19 pandemic for all 58 courses offered in the department.
 - ✓ Associate Professor in the civil engineering department (*Jan. 2019 – Sep. 2019*)
 - ✓ Assistant Professor in the civil engineering department (*Sep. 2013 – Jan. 2019*)

- [The Western Region Municipality \(WRM\)](#) of Abu Dhabi in Zayed City (Madinat Zayed), Abu Dhabi Emirate, United Arab Emirates (UAE).
 - ✓ Head of Earthwork Section (*May 2010 till May 2013*)
 - About the Earthwork Section:

Earthworks section is responsible of performing all the earthworks (cutting, filling, and leveling of lands, and constructing and maintaining of access roads) that are required for the existing and new residential areas, farms, camel manors (EZAB), camel race locations in the western region of Abu Dhabi Emirate. The section carries out these earthworks for either Emirati individuals, or other governmental and private sectors through registered local contractors.
 - ✓ Acting Head of Construction Materials Laboratory (*Aug. 2008 till May 2013*)
 - About the Construction Materials Laboratory:

WRM's construction materials laboratory is a small one that was not upgraded due to some organizational issues in the WRM. Types of testing used to be performed in the laboratory mainly included: field testing of soil, testing of coarse and fine aggregates, testing of bricks, blocks, tiles, and interlocking tiles, and testing of concrete cubes
- [King Saud University \(KSU\)](#), College of Engineering in Al-Kharj, Kingdom of Saudi Arabia (KSA).
 - ✓ Assistant Professor in the civil engineering department (*Sep. 2007-Sep. 2008*)

In addition to teaching, responsibilities included, but not limited to, the followings:

 - Helping in the preparation of the curriculum for the civil engineering department
 - Helping in the preparation and development of different civil engineering laboratories
 - Serving as the college website supervisor at KSU Portal (Al-Bawaba)
 - Working on the establishment of some other different facilities in the college of engineering
- The [Applied Science University](#), Amman, Jordan.
 - ✓ Assistant Professor in the civil engineering department (*Sep. 2005-Sep. 2007*)
- [Texas A&M University](#), Texas, USA.
 - ✓ Research assistant and Ph.D. student, civil engineering department (*Jan. 2003-Dec. 2004*)
- [Washington State University](#), Washington State, USA.
 - ✓ Research assistant and Ph.D. student, civil engineering department (*May 2001-Dec. 2002*)
- Dubai Technical Secondary School under the supervision of the German Agency for Technical Cooperation (GTZ), Dubai, United Arab Emirates.
 - ✓ Civil engineering teacher (*Sep. 1998-Sep. 2000*)
- The [Applied Science University](#), Amman, Jordan.
 - ✓ Teaching assistant, civil engineering department (*Feb. 1998-Aug. 1998*)
- [Jordan University of Science and Technology](#), Irbid, Jordan.
 - ✓ Teaching assistant, civil engineering department (*Sep. 1995-Feb. 1998*)

Teaching Experience:

- | | |
|---|-------------------------|
| • Highway Materials | (M.Sc. Core Course) |
| • Civil Engineering Seminar | (M.Sc. Core Course) |
| • Advanced Transportation Planning | (M.Sc. Elective Course) |
| • Highway Maintenance | (B.Sc. Elective Course) |
| • Highways Geometric Design / Highway Engineering | (B.Sc. Core Course) |
| • Pavement Materials and Design / Pavement Design | (B.Sc. Core Course) |
| • Transportation Engineering | (B.Sc. Core Course) |
| • Land Surveying and its laboratory | (B.Sc. Core Courses) |
| • Materials of Construction and its laboratory | (B.Sc. Core Courses) |
| • Strength of Materials | (B.Sc. Core Course) |
| • Statics | (B.Sc. Core Course) |

Research Interests:

Pavement materials, bituminous mixtures, pavement design, pavement maintenance and rehabilitation, surveying and highway geometric design, highway and traffic safety, traffic analysis and design, transportation planning.

Attended Workshops and Conferences:

- [The 6th Global Nanotechnology Congress and Expo \(GNCE-2019\)](#), Crowne Plaza Dubai-Diera, Dubai, UAE, (Apr. 2019)
- A workshop titled “[Assessment of Some International Practices to Improve Road Safety](#)”, Al-Ahliyya Amman University, Amman, Jordan (Dec. 2018)
- [The 8th International Conference on Engineering, Project, and Production Management - EPPM2017](#), Al-Zaytoonah University, Amman, Jordan (Sep. 2017)
- [The International Advanced Materials & Surfaces Forum](#), Dubai, UAE (Dec. 2015)
- [The 7th Traffic Safety Conference](#), Amman, Jordan (May 2015)
- [The big 5 Exhibition: Building the Middle East](#), The Dubai International Convention and Exhibition Centre, Dubai, United Arab Emirates (Nov. 2008)
- The 3rd Jordanian International Transportation Conference on Decision Making in the Transport Sector at the Holiday Inn Hotel, Amman, Jordan. (Mar. 2007)
- The 13th ACBM/NIST computer modeling workshop at building and fire research laboratory, administration building, National Institute of Standards and Technology (NIST), Gaithersburg, MD 20899 USA. (Jun. 2002)
- [The Association of Asphalt Paving Technologists \(AAPT\)](#) annual business meeting and technical sessions at Doubletree hotel, Colorado Springs, Colorado. (Mar. 2002)

Attended Training Courses and Workshops

- ERODITE Training & Transnational Hybrid Event & Local Case Study 5, Ouargla, Algeria (1st-4th Dec. 2023)
- ERODITE Training and Transitional Event, Jadara University, Irbid, Jordan (16th-18th Sep. 2023)
- Superpave Asphalt Mix Design Workshop, Jordan Engineers Association, Amman, Jordan (6th May, 2023)
- Statistical Data Analysis Using SPSS, Academic Development and Quality Assurance Center, Jordan University of Science and Technology, Irbid, Jordan (1st and 8th Aug. 2019)
- Research Excellence: From Application To Publication, Academic Development and Quality Assurance Center, Jordan University of Science and Technology, Irbid, Jordan (4th and 11th Jul. 2019)
- Advances in Asphaltic Materials, Consultative Center for Science and Technology, Jordan University of Science and Technology, Irbid, Jordan (23rd, 24th, and 25th April 2019) [Organizing and attending]
- Online Learning Design, Academic Development and Quality Assurance Center, Jordan University of Science and Technology, Irbid, Jordan (8th and 9th Jan. 2018)
- Development of Curriculum & Study Plans according to ABET, Academic Development and Quality Assurance Center, Jordan University of Science and Technology, Irbid, Jordan (11th, 13th, and 16th Mar. 2014)
- Leadership, Critical Thinking and Innovation: Igniting Creativity for Workplace Excellence, GLOMACS, Dubai, United Arab Emirates (10 – 14 Jan. 2010)

Affiliations: [Jordanian Engineers Association](#), Jordan

Awards:

- Winner of the 2nd place of the personal website contest/College level, [King Saud University \(KSU\)](#), 2008
- [The Association of Asphalt Paving Technologists \(AAPT\)](#) scholarship for 2002
- [Washington State University \(WSU\)](#) travel grant for 2002

Publications:**Journal Papers (Published & Accepted for Publication):**

1. Shatnawi, N., **Al-Omari, A.**, Alkhateeb, S. (Jan., 2023). “Prediction of Risk Factors Influencing Severity Level of Traffic Accidents Using Artificial Intelligence” *International Review of Civil Engineering (IRECE)*, Vol. 14, No. 1 (<https://doi.org/10.15866/irece.v14i1.20534>)
2. Khasawneh, M., **Al-Omari, A.**, and Al-Jarazi, R. (Jan., 2023). “Effect of On-Street Parking and Pedestrian Crossing on Through Traffic”. *The Open Transportation Journal*, Vol. 17 (<https://doi.org/10.2174/18744478-v17-e230113-2022-42>)
3. **Al-Omari, A.**, Shatnawi, N., and Mashaqbeh, A. (Dec., 2022). “Use of an E2SFCA Method to Assess Healthcare Resources in Jordan during COVID-19 Pandemic”. *The Egyptian Journal of Remote Sensing and Space Science*, Vol. 25, No. 4, pp. 1057-1068 (<https://doi.org/10.1016/j.ejrs.2022.11.007>)
4. Ayasrah, U., Tashman, L., Al-Omari, A., Asi, I. (Nov., 2022). “Development of a Temperature Prediction Model for Flexible Pavement Structures”. *Case Studies in Construction Materials*, Vol. 18, No. 7 (<https://doi.org/10.1016/j.cscm.2022.e01697>)
5. Alomari, A., **Al-Omari, A.**, Aljizawi, W. (Jul., 2022). “Evaluation of Travel Time Reliability in Urban Areas”. *Journal of Applied Engineering Science*, Vol. 20, No. 3, pp. 644-656 (<https://doi.org/10.5937/jaes0-35118>)
6. Shatnawi, N., **Al-Omari, A.**, and Mashaqbeh, A. (Apr., 2022) “Comparative Study of using E2SFCA and 3SFCA Methods for Selected Healthcare Resources in Jordan During COVID-19 Pandemic”. *International Journal of Healthcare Management*, (<https://doi.org/10.1080/20479700.2022.2063597>)
7. **Al-Omari, A.**, Khasawneh, M., and Barakat, M. (Jan., 2022). “Forecasting Flexible Pavement Temperatures by Fourier Series Formulae Using MATLAB”. *Jordan Journal of Civil Engineering*, Vol. 16, No. 1, pp. 71-93 (<https://jice.just.edu.jo/issues/paper.php?p=6103.pdf>)
8. Khasawneh, M., **Al-Omari, A.**, and Ganam, B. (Jan., 2022). “Forecasting Traffic Accidents in Developing Countries Using Time Series Analysis”. *Jordan Journal of Civil Engineering*, Vol. 16, No. 1, pp. 54-70 (<https://jice.just.edu.jo/issues/paper.php?p=6026.pdf>)
9. Al-Rousan, T., Umar, A., **Al-Omari, A.**, Khalaylah, Y., Alkuime, H., and Al-Rousan, A. (Sep., 2021). “A Scoping Study on Driver’s Perspective of Distracting Factors”. *Infrastructures*, Vol. 6, No. 10(139), pp. 1-16 (<https://doi.org/10.3390/infrastructures6100139>)
10. Al-Rousan, T., Umar, A., and **Al-Omari, A.** (Jul., 2021). “Characteristics of Crashes Caused by Distracted Driving on Rural and Suburban Roadways in Jordan”. *Infrastructures*, Vol. 6, No. 8(107), pp. 1-13 (<https://doi.org/10.3390/infrastructures6080107>)
11. **Al-Omari, A.**, Al-Rousan, T., and Al-Facara, E. (Jul., 2021). “Laboratory Characterization of Pozzolan-Modified Asphalt Binder”. *International Journal of Pavement Research and Technology*, Vol. 15, No. 5, pp. 1051-1061 (<https://doi.org/10.1007/s42947-021-00071-9>)
12. Khasawneh, M., **Al-Omari, A.**, Taamneh, M., and Al-Theeb, D. (May, 2021). “Rutting and Resilient Modulus Behavior of Asphalt Concrete Modified with Crump Tire Rubber, Microcrystalline Synthetic Wax and Nano Silica”. *International Review of Civil Engineering (I.R.E.C.E.)*, Vol. 12, No. 3, pp. 176-189 (<https://doi.org/10.15866/irece.v12i3.19609>)
13. Al-Mistarehi, B., **Al-Omari, A.**, Taamneh, M., Imam, R., and Khafaja, D.A-D. (Apr., 2021). “The Effects of Adding Nano Clay and Nano Zinc Oxide on Asphalt Cement Rheology”. *Journal of King Saud University -Engineering Sciences*, Published Online (<https://doi.org/10.1016/j.jksues.2021.03.010>)
14. Taamneh, M., **Al-Omari, A.**, A., and Al-Khreisat, B. (Feb., 2021). “Investigating the Potential of Using Dry Batteries Waste Powders (DBWPs) as Modifiers in Asphalt Binders”. *Journal of Material Cycles and Waste Management*, Vol. 23, No. 2, pp. 676-685 (<https://doi.org/10.1007/s10163-020-01156-6>)
15. Khasawneh, M., Al-Oqaily, D., Abu Alia, A., and **Al-Omari, A.** (Jan., 2021). “Evaluation of Aggregate-Binder Bond Strength using the BBS Device for Different Road Materials and Conditions”. *International Journal of Pavement Engineering*, Vol. 23, No. 1, pp. 1-14 (<https://doi.org/10.1080/10298436.2021.1873332>)

16. Azzam, A., Khasawneh, M., [Al-Omari, A.](#), Masad, E., Kassem, E. (Dec., 2020). "A statistical approach for predicting skid resistance of asphalt pavements". *International Journal of Pavement Research and Technology*, **Vol. 14**, pp. 646-653 (<https://doi.org/10.1007/s42947-020-0250-6>)
17. Khasawneh, M., Taamneh, M., [Al-Omari, A.](#), Harahsheh, T., and Al-Hosainat, A. (Feb., 2020). "Experimental and Statistical Evaluation of Asphalt Binders Produced in Jordan Treated with Different Modifiers". *Journal of Materials in Civil Engineering*, **Vol. 32(2)**: 04019342, pp 1-16 ([https://doi.org/10.1061/\(ASCE\)MT.1943-5533.0003003](https://doi.org/10.1061/(ASCE)MT.1943-5533.0003003))
18. Shatnawi, N., [Al-Omari, A.](#), Al-Qudah, H. (Jan., 2020). "Optimization of Bus Stops Locations Using GIS Techniques and Artificial Intelligence". *Procedia Manufacturing*, **Vol. 44**, pp. 52-59 (<https://doi.org/10.1016/j.promfg.2020.02.204>)
19. [Al-Omari, A.](#), Shatnawi, N., Khedaywi, T., and Miqdady, T. (Dec., 2019). "Prediction of Traffic Accidents Hot Spots Using Fuzzy Logic and GIS". *Applied Geomatics*, **Vol. 12**, pp. 149-161 (<https://doi.org/10.1007/s12518-019-00290-7>)
20. Aljarrah, M., Khasawneh, M., [Al-Omari, A.](#), and Alshorman, M. (Sep., 2019). "Prediction of Bending Beam Rheometer Test Outputs Using Artificial Neural Networks". *Key Engineering Materials*, **Vol. 821**, pp 500-505 (<https://doi.org/10.4028/www.scientific.net/KEM.821.500>)
21. Aljarrah, M., Khasawneh, M., and [Al-Omari, A.](#) (Aug., 2019) "Investigating Key Factors Influencing the Severity of Drivers Injuries in Car Crashes Using Supervised Machine Learning Techniques". *Journal of Engineering Science and Technology Review*, **Vol. 12**, **No. 4**, pp. 15-27 (<http://doi.org/10.25103/jestr.124.03>)
22. [Al-Omari, A.](#), Khasawneh, M., Al-Rousan, T., Al-Theeb, S. (Jul., 2019). "Static Creep of Modified Superpave Asphalt Concrete Mixtures Using Crumb Tire Rubber, Microcrystalline Synthetic Wax, and Nano-Silica". *International Journal of Pavement Engineering*, **Vol. 22**, **No. 6**, pp. 794-805 (<https://doi.org/10.1080/10298436.2019.1646913>)
23. [Al-Omari, A.](#), Al-Omari, B., and Shdifat, M. (Jun., 2019). "Traffic Capacity at Entrances and Exits of Universities, Hospitals, and Shopping Centers in Jordan". *Journal of Engineering Science and Technology Review*, **Vol. 12**, **No. 3**, pp. 13-20 (<http://www.jestr.org/downloads/Volume12Issue3/fulltext31232019.pdf>)
24. Khasawneh, M., [Al-Omari, A.](#), and Oditallah, M. (Jan., 2019). "Assessing Speed of Passenger Cars at Urban Channelized Right-Turn Roadways of Signalized Intersections". *Arabian Journal for Science and Engineering*, **Vol. 44**, **No. 5**, pp. 5057-5073 (<http://doi.org/10.1007/s13369-018-03706-5>)
25. [Al-Omari, A.](#), Khasawneh, M., and Ganam, B. (Dec. 2018). "Evaluation of Traffic Accidents in Jordan Using Accidents Hazard Scale". *Jordan Journal of Civil Engineering*, **Vol. 13**, **No. 1**, pp. 12-20 (<https://jjce.just.edu.jo/issues/paper.php?p=4535.pdf>)
26. [Al-Omari, A.](#), Taamneh, M., Khasawneh, M., and Al-Hosainat, A. (Oct., 2018). "Effect of Crumb Tire Rubber, Microcrystalline Synthetic Wax, and Nano Silica on Asphalt Rheology". *Road Materials and Pavement Design*, **Vol. 21**, **No. 3**, pp. 757-779 (<http://doi.org/10.1080/14680629.2018.1527718>)
27. Khasawneh, M., Shbeeb, N., and [Al-Omari, A.](#) (Sep., 2018) "Analytical Tool to Shorten Polishing Time Based on Mean Texture Depth (MTD) of Flexible Pavements". *Road Materials and Pavement Design*, **Vol. 21**, **No. 3**, pp. 737-756 (<https://doi.org/10.1080/14680629.2018.1527717>)
28. Shbeeb, N., Khasawneh, M., and [Al-Omari, A.](#) (Aug., 2018) "The Development of a Predictive Tool to Reduce Experimentation Time for the Polishing and Frictional Evaluation of Asphalt Pavement Surfaces". *Construction and Building Materials*, **Vol. 186**, pp. 740-750 (<https://doi.org/10.1016/j.conbuildmat.2018.08.010>)
29. Khasawneh, M., [Al-Omari, A.](#), and Ganam, B. (Feb., 2018). "Forecasting Traffic Accidents in Jordan Using Regression Techniques". *Jordan Journal of Civil Engineering*, **Vol. 12**, **No. 4**, pp. 570-579 (<https://jjce.just.edu.jo/issues/paper.php?p=4465.pdf>)
30. [Al-Omari, A.](#), Khedaywi, T., and Khasawneh, M. (Sep., 2017). "Laboratory Characterization of Asphalt Binders Modified with Waste Vegetable Oil Using SuperPave Specifications" *International Journal of Pavement Research and Technology*, **Vol. 11**, **No. 1**, pp. 68-76 (<https://doi.org/10.1016/j.ijprt.2017.09.004>)

31. Bdour, A., Khalayleh, Y., and [Al-Omari, A.](#) (May, 2015). "Assessing Mechanical Properties of Hot Mix Asphalt with Wire Wool Fibers", *Advances in Civil Engineering*, **Vol. 2015** (<https://doi.org/10.1155/2015/795903>)
32. Masad, E., [Al-Omari, A.](#), and Chen H. C. (Oct., 2007). "Computations of Permeability Tensor Coefficients and Anisotropy of Hot Mix Asphalt Based on Microstructure Simulation of Fluid Flow", *Computational Materials Science*, **Vol. 40, No. 4**, pp. 449-459 (<https://doi.org/10.1016/j.commatsci.2007.01.015>)
33. Masad, E., [Al-Omari, A.](#), and Lytton, R. (Jan., 2006). "Simple Method for Predicting Laboratory and Field Permeability of Hot Mix Asphalt", *In Transportation Research Record, Journal of the Transportation Research Board*, Washington, DC, **Vol. 1970**, pp. 55-63 (<https://doi.org/10.3141/1970-07>)
34. [Al-Omari, A.](#) and Masad, E. (Nov., 2004). "Three Dimensional Simulation of Fluid Flow in X-ray CT Images of Porous Media", *International Journal for Numerical and Analytical Methods in Geomechanics*, **Vol. 28, No. 13**, pp. 1327-1360. (<https://doi.org/10.1002/nag.389>)
35. Masad, E., Birgisson, B., [Al-Omari, A.](#), and Cooley, A. (Oct., 2004). "Analytical Derivation and Numerical Simulation of Permeability and Fluid Flow Patterns in Hot Mix Asphalt", *Journal of Materials in Civil Engineering, ASCE*, **Vol. 16, No. 5**, pp. 487-496. ([https://doi.org/10.1061/\(ASCE\)0899-1561\(2004\)16:5\(487\)](https://doi.org/10.1061/(ASCE)0899-1561(2004)16:5(487)))
36. [Al-Omari, A.](#), Tashman, L., Masad, E., Cooley, A., and Harman, T. (Jan., 2002). "Proposed Methodology for Predicting HMA Permeability", *Journal of the Association of Asphalt Paving Technologists*, **Vol. 71**, pp. 30-58.

Conference Papers:

1. Khasawneh, Y., [Al-Omari, A.](#), and Sharo', A. (2017). "Distress of a Large Diameter Underground Reinforced Concrete Shaft", ASCE Proceedings: Congress on Technical Advancement 2017, Duluth, MN, USA, pp. 184-195
2. Sharo', A., Alawneh, A., and [Al-Omari, A.](#) (2015). "Nano Technology Application in Stabilizing Expansive Soil: Irbid Clay", The International Advanced Materials & Surfaces Forum, Dubai, UAE.
3. [Al-Omari, A.](#), and Masad, E., (2005). "Analysis of HMA Permeability through Microstructure Characterization and Simulation of Fluid Flow in X-ray CT Images", *The First Middle East International Conference on Advances in Civil, Mechanical, and Materials Engineering*, May 10-13, Amman, Jordan.
4. Masad, E. and [Al-Omari, A.](#) (2004). "Predictions of HMA Permeability Using 3-D Microstructure Simulation of Fluid Flow", *International Conference on computational & Experimental Engineering & Sciences*, Madeira, Portugal.
5. Masad, E., and [Al-Omari, A.](#) (2004). "Simulation of Fluid Flow in X-Ray CT Images of HMA and Permeability Predictions", *Proceedings of the 17th Engineering Mechanics Conference, ASCE*, University of Delaware June 13-16, Newark, DE
6. [Al-Omari, A.](#) and Masad, E. (2004). "Three Dimensional Simulation of Fluid Flow in Granular Material Microstructure", *GEO2004: Advances in Geotechnical Engineering with Emphasis on Dam Engineering*, Irbid, Jordan, pp. 177-190.
7. Masad, E., Birgisson, B., [Al-Omari, A.](#), and Cooley, A. (2003). "Analysis of Permeability and Fluid Flow in Asphalt Mixes", *The 82nd Annual Meeting of the Transportation Research Board*, Washington, DC.

Master Theses Supervision:**Main advisor of the following Master Theses:**

1. Tawakkol, M. (2021). "Testing the Bond Strength Between Asphalt Binder Composites and Aggregate Substrates at Variable Curing Conditions". *Jordan University of Science and Technology*.
2. Mashaqbeh, A. (2021). "Spatial accessibility of available COVID-19 related healthcare resources". *Jordan University of Science and Technology*.
3. Al-Jezawi, W. (2020). "Evaluation of Travel Time Reliability in Urban Areas in Jordan". *Jordan University of Science and Technology*.
4. Al-Facara, E. (2020). "Properties of Pozzolan-Modified Asphalt Using Superpave Tests". *Jordan University of Science and Technology*.
5. Abu Alia, A. (2020). "Investigation of the Bond Strength at the Asphalt-Aggregate Interface Using the Binder Bond Strength Device". *Jordan University of Science and Technology*.
6. Bishtawi, Sh. (2019). "Critical Capacity Analysis of One Lane Roundabouts in Jordan". *Jordan University of Science and Technology*.
7. Khreizat, B. (2019). "Investigating the potential of using dry batteries waste powders (DBWP) as a modifier for asphalt binders". *Jordan University of Science and Technology*.
8. Al-Khateeb, S. (2019). "Prediction of risk factors influencing severity level of traffic accidents using artificial intelligence". *Jordan University of Science and Technology*.
9. Al-Theeb, D. (2019). "Dynamic Creep of Modified Superpave Asphalt Mixtures Using Crumb Tire Rubber, Microcrystalline Synthetic Wax, and Nano-Silica". *Jordan University of Science and Technology*.
10. Barakat, M. (2019). "Forecasting Flexible Pavement's Temperatures by Fourier Series Formulas Using MATLAB r2016b". *Jordan University of Science and Technology*.
11. Al-Theeb, S. (2018). "Static Creep of Modified Superpave Asphalt Mixtures Using Crumb Tire Rubber, Microcrystalline Synthetic Wax, and Nano-Silica". *Jordan University of Science and Technology*.
12. Al-Qudah, H. (2017). "Optimization of Bus Stops Locations in Amman Using GIS Techniques and Artificial Intelligence". *Jordan University of Science and Technology*.
13. Al-Husainat, A. (2017). "Evaluation of Using Crumb Tire Rubber, Microcrystalline Synthetic Wax, and Nano Silica Modifiers on Asphalt Binder Rheology". *Jordan University of Science and Technology*.
14. Miqdady, T. (2017). "Mapping of Traffic Accidents' Hot Spots in Irbid City-Jordan Using GIS and Analytical Methods". *Jordan University of Science and Technology*.
15. Ganam, B. (2017). "Evaluation of Traffic Accidents in Jordan using Time Series Analysis and Other Analytical Techniques". *Jordan University of Science and Technology*.

Co-Advisor of the following Master Theses:

1. Shareef, Sh. (2021). "Assessment of the impact of the COVID-19 pandemic on daily trips in Salah al-Din Governorate-Iraq". *Jordan University of Science and Technology*.
2. Al-Jarrah, M. (2018). "Investigating Key Factors Influencing the Severity of Car Accident Injury Using Supervised Machine Learning Techniques". *Jordan University of Science and Technology*.
3. Audetallah, M. (2018). "Assessing Speed of Passenger Cars at Urban Channelized Right-Turn Roadways of Signalized Intersections". *Jordan University of Science and Technology*.
4. Al-Jarazi, R. (2017). "Effect of On-Street Parking and Pedestrian Crossing on Through Traffic in Jordan". *Jordan University of Science and Technology*.
5. Al Shdifat, M. (2016). "Traffic Capacity at Parking lots' and Universities' Entrances and Exits in Jordan". *Jordan University of Science and Technology*.

References:

1. [Eyad A. Masad](#), Professor of Civil Engineering, [Texas A&M University](#), College Station, Texas, USA. Office Phone: 001-979-845-8308, E-mail: e.masad@civil.tamu.edu
2. [Taleb M. Al-Rousan](#), Professor of Civil Engineering, [The Hashemite University](#), Zarqa, Jordan. Office Phone: 00962-5-3903-333, Ext.: 4383, E-mail: taleb@hu.edu.jo
3. [Wasim S. Barham](#), Professor of Civil Engineering, [Jordan University of Science and Technology](#), Irbid, Jordan. Office Phone: 00962-2-7201-000, Ext.: 22231, E-mail: wsbarham@just.edu.jo