Aslam A. Al-Omari

Contact Information:

Associate Professor Department of Civil Engineering, <u>Fahad Bin Sultan University</u>, Tabuk, KSA Unpaid leave from Jordan University of Science and Technology, Jordan

E-mail Addresses: (aalomari@fbsu.edu.sa) or (aaalomari3@just.edu.jo)

Personal Data:

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

Academic Qualification:

- Ph.D. Civil Engineering/Pavement and Construction Materials (Dec. 2004) GPA=4.0 <u>Texas A&M University</u>, 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, 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, Irbid, Jordan

Work Experience:

- Fahad Bin Sultan University (FBSU), Tabuk, KSA
 - ✓ Associate Professor in the civil engineering department Unpaid Leave (Sep. 2021 Now)
- Applied Science University (ASU), Amman, Jordan
 ✓ Associate Professor in the civil engineering department Sabbatical Leave (Oct. 2020 Sep. 2021)
- Jordan University of Science and Technology (JUST), 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 Now*)
 - ✓ Assistant Professor in the civil engineering department (Sep. 2013 Jan. 2019)

- <u>The Western Region Municipality (WRM)</u> of Abu Dhabi in Zayed City (Madinat Zayed), Abu Dhabi Emirate, United Arab Emirates (UAE).
 - ✓ Head of Earthworks Section (May 2010 till May 2013)
 - ✓ Acting Head of Construction Materials Laboratory (Aug. 2008 till May 2013) <u>About the Earthwork Section:</u>

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.

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

Responsibilities:

- Achieving effective use of all section resources
- Aligning the employees' individual objectives with the objectives of the <u>WRM</u> in order to achieve long term success for the Municipality
- Communicating the WRM vision to all section employees
- Finding a suitable solution for any work-related problem that faces anyone of the section employees
- Resolving conflicts among the employees and try to reach at an acceptable solution which will improve employees work quality and performance
- ➢ Following up carrying out the work to make sure that the contractors are working professionally and as required
- Directing and regulating the work of all section employees (more than eighty employees) including engineers, land surveyors, quantity surveyors, inspectors, and administrative assistants
- Managing the laboratory team inside the laboratory as well as on site.
- Supervising all delivery operations, making sure that the product exceeds specifications at all time.
- Communicating laboratory test results to the project specifications
- Handling all technical reports and related issues
- > Monitoring finished product compliance, Laboratory & production equipment for calibration
- Generating non-conformities, Audit reports, and Quality management reviews
- Directing and regulating the work of the Laboratory employees

Achievements:

- Developed a work policy for the Earthworks section after which the work system became well-organized
- Developed a policy for distributing the section's work orders among the registered local contractors in an organized way. Distribution of work orders now covers all the registered local contractors while in the past it covered just few of them
- Developed a mathematical method using which all the registered local contractors are to be classified into several categories based on the contractor's abilities and their owned cars and equipment

Started a study on the identification of good-quality Gatch (a local limestone material that is mostly used in the Gulf countries in constructing improved access roads). This study needs to be further investigated and completed

Committees:

- Regulatory committee for the Distribution of the Work Orders in the Earthwork Section (Committee Head, Feb. 2010 till May 2013)
- Prequalification Committee of all Consultants and Contractors who would like to work for the Infrastructure Sector at WRM (*Committee First Vice Head, Sep. 2010 till Mar. 2011*)
- Material Receiving and Approval Committee (Committee Head, Dec. 2010 till May 2013)
- Registration, Prequalification, and Reclassification Committee of Earthwork section's Contractors (*Committee Head, Jan. 2011 till May 2013*)
- WRM Inspection Committee (Committee Head, Nov. 2011 till May 2013)
- The Integration and Consolidation of Abu Dhabi Testing Laboratories into a Central Testing Laboratory belongs to <u>Abu Dhabi Quality and Conformity Council (QCC)</u> (Committee Member, Feb. 2011 till May 2013)
- Management of Abu Dhabi Quarries (Committee Member, Mar. 2011 till May 2013)
- The <u>QCC</u> Standing Technical Committee (Energy, Water, Waste, Built Environment) (Committee Member, Mar. 2012 till Sep. 2013)
- <u>King Saud University (KSU)</u>, 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 preparing the curriculum for the Civil Engineering Department
- > Helping in preparing and developing different Civil Engineering Laboratories
- Serving as the College Website Supervisor at KSU Portal (Al-Bawaba)
- Establishing some other different facilities in the College
- The <u>Applied Science University</u>, Amman, Jordan.
 - ✓ Assistant Professor in the civil engineering department (*Sep. 2005-Sep. 2007*)
- <u>Texas A&M University</u>, 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 <u>Applied Science University</u>, 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:

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

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:

- <u>The 6th Global Nanotechnology Congress and Expo (GNCE-2019)</u>, Crowne Plaza Dubai-Diera, Dubai, UAE, (Apr. 2019)
- A workshop titled "<u>Assessment of Some International Practices to Improve Road Safety</u>", Al-Ahliyya Amman University, Amman, Jordan (Dec. 2018)
- <u>The 8th International Conference on Engineering</u>, Project, and Production Management EPPM2017, Al-Zaytoonah University, Amman, Jordan (Sep. 2017)
- <u>The International Advanced Materials & Surfaces Forum</u>, Dubai, UAE (Dec. 2015)
- <u>The 7th Traffic Safety Conference</u>, Amman, Jordan (May 2015)
- <u>The big 5 Exhibition</u>: 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)
- <u>The Association of Asphalt Paving Technologists (AAPT)</u> annual business meeting and technical sessions at Doubletree hotel, Colorado Springs, Colorado. (Mar. 2002)

Attended Training Courses

- 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, <u>King Saud University (KSU)</u>, 2008
- The Association of Asphalt Paving Technologists (AAPT) scholarship for 2002
- <u>Washington State University (WSU)</u> travel grant for 2002

Publications:

Journal Papers (Published & Accepted for Publication):

- <u>Al-Omari, A.</u>, Khasawneh, M., and Barakat, M. (2022). "Evaluation of Traffic Accidents in Jordan Using Accidents Hazard Scale". Accepted for publication in *Jordan Journal of Civil Engineering*, Vol. 16, No. 1, pp.
- 2. Khasawneh, M., <u>Al-Omari, A.</u>, and Barakat, M. (2022). "Forecasting Traffic Accidents in Developing Countries Using Time Series Analysis". Accepted for publication in *Jordan Journal of Civil Engineering*, Vol. 16, No. 1, pp.
- Al-Rousan, T., Umar, A., and <u>Al-Omari, A.</u>, Khalaylah, Y., Alkuime, H., and Al-Rousan, A. (2021). "A Scoping Study on Driver's Perspective of Distracting Factors". *Infrastructures*, Vol. 6, No. 10(139), pp. 1-16 (<u>https://doi.org/10.3390/infrastructures6080107</u>)
- Al-Rousan, T., Umar, A., and <u>Al-Omari, A.</u> (2021). "Characteristics of Crashes Caused by Distracted Driving on Rural and Suburban Roadways in Jordan". *Infrastructures*, Vol. 6, No. 8(107), pp. 1-13 (<u>https://doi.org/10.3390/infrastructures6080107</u>)
- <u>Al-Omari, A.</u>, Al-Rousan, T., and Al-Facara, E. (2021). "Laboratory Characterization of Pozzolan-Modified Asphalt Binder". *International Journal of Pavement Research and Technology*, Published online (<u>https://doi.org/10.1007/s42947-021-00071-9</u>)
- Khasawneh, M., <u>Al-Omari, A.</u>, Taamneh, M., and Al-Theeb, D. (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.RE.C.E.)*, Vol. 12, No. 3, pp. 176-189 (https://doi.org/10.15866/irece.v12i3.19609)
- Al-Mistarehi, B., <u>Al-Omari, A.</u>, Taamneh, M., Imam, R., and Khafaja, D.A-D. (2021). "The Effects of Adding Nano Clay and Nano Zinc Oxide on Asphalt Cement Rheology". *Journal of King Saud University -Engineering Sciences*, Published Online (<u>https://doi.org/10.1016/j.jksues.2021.03.010</u>)
- Taamneh, M., <u>Al-Omari, A.</u>, A., and Al-Khreisat, B. (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 (<u>https://doi.org/10.1007/s10163-020-01156-6</u>)
- Khasawneh, M., Al-Oqaily, D., Abu Alia, A., and <u>Al-Omari, A.</u> (2021) "Evaluation of Aggregate-Binder Bond Strength using the BBS Device for Different Road Materials and Conditions". *International Journal of Pavement Engineering*, Published Online (https://doi.org/10.1080/10298436.2021.1873332)
- Azzam, A., Khasawneh, M., <u>Al-Omari, A.</u>, Masad, E., Kassem, E. (2020). "A statistical approach for predicting skid resistance of asphalt pavements". *International Journal of Pavement Research and Technology*, Vol. 14, pp. 646-653 (<u>https://doi.org/10.1007/s42947-020-0250-6</u>)
- Shatnawi, N., <u>Al-Omari, A.</u>, Al-Qudah, H. (2020). "Optimization of Bus Stops Locations Using GIS Techniques and Artificial Intelligence". *Procedia Manufacturing*, Vol. 44, pp. 52-59 (<u>https://doi.org/10.1016/j.promfg.2020.02.204</u>)

- <u>Al-Omari, A.</u>, Shatnawi, N., Khedaywi, T., and Miqdady, T. (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)
- Aljarrah, M., Khasawneh, M., and <u>Al-Omari, A.</u> (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://www.jestr.org/downloads/Volume12Issue4/fulltext31242019.pdf)
- Aljarrah, M., Khasawneh, M., <u>Al-Omari, A.</u>, and Alshorman, M. (2019). "Prediction of Bending Beam Rheometer Test Outputs Using Artificial Neural Networks". *Key Engineering Materials*, Vol. 821, pp 500-505 (<u>https://doi.org/10.4028/www.scientific.net/KEM.821.500</u>)
- Al-Omari, A., Khasawneh, M., Al-Rousan, T., Al-Theeb, S. (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)
- Al-Omari, A., Al-Omari, B., and Shdifat, M. (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)
- Khasawneh, M., Taamneh, M., <u>Al-Omari, A.</u>, Harahsheh, T., and Al-Hosainat, A. (2019). "Experimental and Statistical Evaluation of Asphalt Binders Produced in Jordan Treated with Different Modifiers". *Journal of Materials in Civil Engineering*, Vol. 32(2), pp 1-16 (https://doi.org/10.1061/(ASCE)MT.1943-5533.0003003)
- Al-Omari, A., Khasawneh, M., and Ganam, B. (2019). "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)
- Khasawneh, M., <u>Al-Omari, A.</u>, and Oditallah, M. (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 (<u>http://doi.org/10.1007/s13369-018-03706-5</u>)
- 20. Khasawneh, M., <u>Al-Omari, A.</u>, and Ganam, B. (2018). "Forecasting Traffic Accidents in Jordan Using Regression Techniques". *Jordan Journal of Civil Engineering*, Vol. 12, No. 4, pp. 570-579 (<u>https://jjce.just.edu.jo/issues/paper.php?p=4465.pdf</u>)
- Al-Omari, A., Taamneh, M., Khasawneh, M., and Al-Hosainat, A. (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)
- Khasawneh, M., Shbeeb, N., and <u>Al-Omari, A.</u> (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 (<u>https://doi.org/10.1080/14680629.2018.1527717</u>)
- 23. Shbeeb, N., Khasawneh, M., and <u>Al-Omari, A.</u> (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)
- 24. Al-Omari, A., Khedaywi, T., and Khasawneh, M. (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)
- 25. Bdour, A., Khalayleh, Y., and <u>Al-Omari, A.</u> (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)

- 26. Masad, E., <u>Al-Omari, A.</u>, and Chen H. C. (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 (<u>https://doi.org/10.1016/j.commatsci.2007.01.015</u>)
- 27. Masad, E., <u>Al-Omari, A.</u>, and Lytton, R. (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 (<u>https://doi.org/10.3141/1970-07</u>)
- Al-Omari, A. and Masad, E. (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)
- Masad, E., Birgisson, B., <u>Al-Omari, A.</u>, and Cooley, A. (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. (<u>https://doi.org/10.1061/(ASCE)0899-1561(2004)16:5(487)</u>)
- Al-Omari, A., Tashman, L., Masad, E., Cooley, A., and Harman, T. (2002). "Proposed Methodology for Predicting HMA Permeability", *Journal of the Association of Asphalt Paving Technologists*, Vol. 71, pp. 30-58.

Conference Papers:

- Khasawneh, Y., <u>Al-Omari, A.</u>, 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 <u>Al-Omari, A.</u> (2015). "Nano Technology Application in Stabilizing Expansive Soil: Irbid Clay", The International Advanced Materials & Surfaces Forum, Dubai, UAE.
- 3. <u>Al-Omari, A.</u>, 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 <u>Al-Omari, A.</u> (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 <u>Al-Omari, A.</u> (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. <u>Al-Omari, A.</u>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.**
- Masad, E., Birgisson, B., <u>Al-Omari, A.</u>, and Cooley, A. (2003). "Analysis of Permeability and Fluid Flow in Asphalt Mixes", *The 82nd Annual Meeting of the Transportation Research Board*, Washington, DC.

Journal Papers (Submitted for publication):

- 1. Al-Omari, A., Shatnawi, N., and Mashaqbeh, A. "Use of an E2SFCA Method to Assess Healthcare Resources in Jordan during COVID-19 Pandemic"
- 2. Shatnawi, N., Al-Omari, A., and Mashaqbeh, A. "Comparative Study of using E2SFCA and 3SFCA Methods for Selected Healthcare Resources in Jordan During COVID-19 Pandemic"
- 3. Alomari, A., <u>Al-Omari, A.</u>, Aljizawi, W. "Evaluation of Travel Time Reliability in Urban Areas During COVID-19 Pandemic"
- 4. Shatnawi, N., <u>Al-Omari, A.</u>, Alkhateeb, S. "Optimization of Bus Stops Locations Using GIS Techniques and Artificial Intelligence".
- 5. Khasawneh, M., <u>Al-Omari, A.</u>, and Al-Jarazi, R. "Effect of On-Street Parking and Pedestrian Crossing on Through Traffic".

Master Theses Supervision:

Advisor of the following Master Theses:

- 1. Mashaqbeh, A. (2021). "Spatial accessibility of available COVID-19 related healthcare resources". *Jordan University of Science and Technology.*
- 2. Al-Jezawi, W. (2020). "Evaluation of Travel Time Reliability in Urban Areas in Jordan". *Jordan University of Science and Technology*.
- 3. Al-Facara, E. (2020). "Properties of Pozzolan-Modified Asphalt Using Superpave Tests". *Jordan University of Science and Technology.*
- 4. 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*.
- 5. Bishtawi, Sh. (2019). "Critical Capacity Analysis of One Lane Roundabouts in Jordan". Jordan University of Science and Technology.
- 6. Khreisat, B. (2019). "Investigating the potential of using dry batteries waste powders (DBWP) as a modifier for asphalt binders". *Jordan University of Science and Technology*.
- 7. Al-Khateeb, S. (2019). "Prediction of risk factors influencing severity level of traffic accidents using artificial intelligence". *Jordan University of Science and Technology*.
- 8. 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*.
- 9. Barakat, M. (2019). "Forecasting Flexible Pavement's Temperatures by Fourier Series Formulas Using MATLAB r2016b". *Jordan University of Science and Technology*.
- 10. 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*.
- 11. Al-Qudah, H. (2017). "Optimization of Bus Stops Locations in Amman Using GIS Techniques and Artificial Intelligence". *Jordan University of Science and Technology*.
- 12. 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*.
- 13. Miqdady, T. (2017). "Mapping of Traffic Accidents' Hot Spots in Irbid City-Jordan Using GIS and Analytical Methods". *Jordan University of Science and Technology*.
- 14. 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. 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*.
- 2. Audetallah, M. (2018). "Assessing Speed of Passenger Cars at Urban Channelized Right-Turn Roadways of Signalized Intersections". *Jordan University of Science and Technology*.
- 3. Al-Jarazi, R. (2017). "Effect of On-Street Parking and Pedestrian Crossing on Through Traffic in Jordan". *Jordan University of Science and Technology*.
- 4. Al Shdifat, M. (2016). "Traffic Capacity at Parking lots' and Universities' Entrances and Exits in Jordan". *Jordan University of Science and Technology*.

References:

- 1. <u>Eyad A. Masad</u>, Professor of Civil Engineering, <u>Texas A&M University</u>, College Station, Texas, USA. Office Phone: 001-979-845-8308, E-mail: <u>e.masad@civil.tamu.edu</u>
- 2. <u>Ahmed M. Ashteyat</u>, Professor of Civil Engineering, <u>The University of Jordan</u>, Irbid, Jordan. Office Phone: 00962-6-5355-000, Ext.: 22750, E-mail: <u>a.ashteyat@ju.edu.jo</u>
- 3. <u>Wasim S. Barham</u>, Associate Professor of Civil Engineering and Director of the Consultative Center at Jordan University of Science and Technology, Jordan University of Science and Technology, Irbid, Jordan. Office Phone: 00962-2-7201-000, Ext.: 22231, E-mail: <u>wsbarham@just.edu.jo</u>