

السيرة الذاتية

زينب احمد عبد الستار احمد القيسي

الجامعة المستنصرية - كلية الهندسة

Mobile: 07712207758

E-mail: dr.zainabalkaissi77@uomustansiriyah.edu.iq

ملخص تعريفي:

اللقب العلمي: أستاذ
اللغات: العربية، الانكليزية.
مجال الاهتمام: هندسة المواصلات، هندسة المرور، محاكاة المرور، هندسة وتخطيط النقل، تصميم ونمذجة التبليط.
الشهادات الدراسية:

دكتوراه فلسفة في هندسة طرق ونقل / اختصاص مواصلات: كلية الهندسة، الجامعة المستنصرية، العراق، (٢٠٠٦).
ماجستير في هندسة مدنية / اختصاص جيوتكنيك: كلية الهندسة، جامعة النهرين، العراق (٢٠٠١).
بكالوريوس هندسة مدنية / كلية الهندسة، جامعة النهرين، العراق (١٩٩٨).

الجوائز والتكريم الاكاديمي:

(60) شكر وتقدير، عميد كلية الهندسة، الجامعة المستنصرية، العراق
(15) شكر وتقدير، وزير التعليم العالي و البحث العلمي، العراق.

الخبرة الاكاديمية والتدريس:

سنوات الخبرة : ٢٠ سنة

المقررات الدراسية التي تم تدريسها:

كورسات طلبية الدكتوراه	كورسات طلبية الماجستير	كورسات طلبية الدبلوم العالي	كورسات طلبية الدراسات الأولية
محاكاة المرور	هندسة المرور المتقدم	أنظمة النقل الذكي	هندسة المرور (3 rd Class)
نمذجة النقل	تخطيط النقل		صيانة الطرق (4 th Class)
	تخطيط النقل المتقدم		تخطيط النقل (4 th Class)
	الإحصاء الهندسي		تكنولوجيا الاسفلت (2 nd Class)
			مواصلات (4 th Class)

الأستاذ المساعد الدكتور
عائدة جبار جبار
معاون العميد للشؤون العلمية

قيس صاحب الموسوي
رئيس قسم الطرق والنقل

1. (2012) The Effect of Styrene Butadiene Styrene on the Properties of Asphalt and Hot Asphalt Mixture with References to Artificial Neural Networks.
2. (2013) Experimental and Numerical Investigation of Stabilized Unbound Granular Pavement Materials.
3. (2013) Modeling Fatigue Life and Fracture Parameters in HMA based on Experimental Work and Analytical Approach.
4. (2013) Evaluation of Tack coat Applications and bond strength at Asphalt concrete Layers Interface.
5. (2015) Effect of Hydraulic Properties of Granular Base Material on Pavement Performance.
6. (2015) Crack Propagation Modeling for Local Rigid Pavement.
7. (2015) Durability of Polymer Modified Open Graded HMA Mixtures Based on Experimental work and Finite Element Modeling.
8. (2017) Assessment of Concrete Pavement Using Steel Fiber.
9. (2015) Experimental Study of Doweled Joints for Plain Concrete Pavement.
10. (2017) Experimental Study of Steel Fiber Reinforced Flexible Pavement.
11. (2018) Investigation the Durability of Granular Base Material using Gyratory Compactor.
12. (2020) Analysis of traffic Operations at A Selected Roundabout in Baghdad City.
13. (2021) The Influence of Side Friction on Traffic Characteristics for selected major Urban Streets in Baghdad City.
14. (2021) Trip Production Characteristics and Modeling for Al-Adhmiyah District at Baghdad City based on Cross-Classification Technique.
15. (2019) Travel Time Modeling for Major Arterial Roads in Baghdad City and Traffic Congestion Management
16. (2020) Enhancement Characterization of Unbound Road bases by using Recycled Materials.
17. (2020) Effect of Travel Time Variability on Streets Accessibility in Baghdad City.
18. (2020) Empirical Study of Operating Speed in urban Streets based on Global Positioning System (GPS).
19. (2021) Evaluation and Improvement of Signalized Intersection in Baghdad City.
20. (2022) Traffic Operation Assessment of Urban Corridor using Performance Measures.

الإشراف على أطاريح الدكتوراه

1. (2015) Urban Growth and Transport Dynamic Modeling for Baqubah City.
2. (2020) Evaluating Rutting Potential of Local Warm Mix Asphalt.

الانتساب المهني والجمعيات:

- رئيس قسم الطرق والنقل ٢٠١٤-٢٠١٥
- مدير عام دائرة الاعمار والمشاريع /وزارة التعليم العالي ٢٠١٧-٢٠١٨
- عضو هيئة تحرير مجلة الهندسة والاستدامة -كلية الهندسة -الجامعة المستنصرية ٢٠١٦-٢٠١٩
- عضو الجمعية العلمية لبحوث الطرق والنقل.
- عضو الجمعية العراقية لمهندسي الجيوتكنيك.
- رئيس قسم هندسة الطرق والنقل ٢٠١٨-٢٠٢٠.

المنشورات العلمية:

بحوث علمية

1. "Finite Element Approach to Evaluate the Resistance to Plastic Flow in Asphalt Mixtures". Engineering and Development Journal, College of engineering, Mustansiriyah University, 2010.
2. "Combined Effect of Wheel and Thermal Conditions on Stress Distribution in Flexible Pavement". Engineering and Technology Journal, University of Technology, Vol. 27, No. 12, 2009.
3. "Propagation Mechanisms for Surface Initiated Cracking in Composite Pavements". Al-Khwarizmi Engineering Journal, College of Engineering, University of Baghdad, Vol.5, No.3, 2009.
4. "Numerical Analysis of Controlled Modulus Column Foundation System Supported Embankments". Journal of Engineering, A Scientific Referred Journal Published by: College of Engineering /University of Baghdad. No.2, Volume 15, 2009.
5. "Analysis of Consolidation Behaviour of Subsoils under Cyclic Trapezoidal Loading". Engineering and Development Journal, Comprehensive Scientific Engineering Conference, Vol. 12, Part I, ISSN1813-7822, 2008.
6. "Analysis of Geotextile Embankment by ANSYS". Journal of Engineering, a College of Engineering/ University of Baghdad, No.1, Vol.17, 2011.

7. **"Deformation Analysis of Road Embankment Foundation Improvement with Fiber Glass"** Engineering and Technology Journal, University of Technology, Vol. 30, No. 19, 2012.
8. **"CBR Prediction Model with GIS Application Technique"** International Journal of Structural and Civil Engineering Research, Vol. 2, No. 2, May 2013.
9. **"The Effect of Styrene Butadiene Styrene on the Properties of Hot Asphalt Mixture."** International Journal for Sciences and Technology, Vol. 7, No. 4, 2012.
10. **"Stress Intensity Parameter and Crack Growth of Iraqi Hot Mix Asphalt Mixtures"**. Asian Journal of Engineering and Technology, Volume 01– Issue 05, 2013.
11. **"Effect of Materials and Stabilizers Type on the Strength of Base Layer."** Journal of Engineering and Development, College of Engineering , Mustansiriyah University, Vol. 18, No. 5, 2014.
12. **"Urban Growth and Transportation Indicators for Sub-Urban Area."** Journal of Engineering and Development, College of Engineering, Mustansiriyah University, Vol. 19, No.5, 2015.
13. **"Cellular Automata -Dynamic Model for Urban Growth Baqubah City."** Diyala Journal of Engineering Science, College of Engineering, University of Diyala, Vol. 09, No.03, 2016.
14. **"Durability of Porous Asphalt Pavement."** Journal of Engineering and Sustainable Development, Al-Mustansiriyah University, Vol.20, No.04, 2016.
15. **"Determination of Fracture Characteristics for Local Rigid Pavement Materials in Iraq"** Journal of Engineering and Sustainable Development, College of Engineering , Al- Mustansiriyah University, Vol. 21, No.2 , 2017.
16. **"Evaluation of the Performance of Treated Base Layers on Critical Responses of Flexible Pavement"** Journal of Engineering and Sustainable Development, College of Engineering , Al-Mustansiriyah University ,Vol. 20,No.5, 2016.
17. **" Travel Time Prediction Models and Reliability Indices for Palestine Urban Road in Baghdad City"**, Al-Khwarizmi Engineering Journal, College of Engineering, University of Baghdad, Vol. 13, No. 3, PP: 120- 130, 2017.
18. **"Finite Element Modeling of Rutting for Flexible Pavement"**, Journal of Engineering and Sustainable Development, Mustansiriyah University, Vol. 22, No. 3, 2018.
19. **"Experimental and Numerical Analysis of Steel Fiber Reinforced Concrete Pavement"**, Journal of Engineering and Sustainable Development, Mustansiriyah University, College of Engineering, Vol. 20, No.6, 2016.
20. **"Assessment of Sustainable Indicators for Road Transportation: A Case Study of Palestine Arterial Street"**, International Journal of Science and Research (IJSR), Vol. 6 Issue 4, 2017.

21. **"Effect of Waste Foundry Sand on Indirect Tensile Strength of Asphaltic Mixture"**. Journal of Engineering and Sustainable Development, Mustansiriyah University, College of Engineering, Vol. 22, No. 4, 2018.
22. **"Effect of High Temperature and Traffic Loading on Rutting Performance of Flexible Pavement"**. Journal of King Saud University-Engineering Sciences, Vol.32, No.1, 2018.
23. **"Experimental Study on Doweled Expansion Joints on Behavior for Plain Concrete Pavement System"**. Al-Khwarizmi Engineering Journal, College of Engineering, University of Baghdad, Vol. 14, No. 3, 2018.
24. **"Capacity Estimation of Urban Road in Baghdad City: A Case Study of Palestine Arterial Road"**. ARPN Journal of Engineering and Applied Sciences, Vol.13, No.21, 2018.
25. **"Assessment of Laboratory Compaction methods for Granular Base Layer Stabilized with Sustainable Materials"**. Global Journal of Engineering Science and Research Management, Vol.5, No. 9, 2018.
26. **"Numerical Study of Doweled Expansion Joints on Plain Concrete Pavement System"** Journal of Engineering and Sustainable Development, Mustansiriyah University , College of Engineering, Vol. 22, No. 6 , 2018.
27. **"Theoretical Analysis on the Effect of Surface Horizontal Traction on Top-Down Cracking of Flexible Pavement "**. Association of Arab Universities Journal of Engineering Science, College of Engineering, University of Baghdad, VOL.26, No.1 (2019).
28. **"Prediction Model of Elastic Modulus for Granular Road Bases"**. Sustainable Development Research Journal, ISSN 2690, Vol. 2, No. 1; 2020.
29. **"Investigating the Rheological Properties of Asphalt Binder Incorporating Different Crumb Rubber Contents Based on a Response Surface Methodology"**. Journal of King Saud University-Engineering Sciences, Elsevier, 24 October 2020.
30. **"Travel Speed Prediction Model for Urban Arterial Road and Traffic Management"**. Journal of Green Engineering, Vol.10, Issue 12, 2020.
31. **"Physical, rheological and morphological characterization of modified asphalt binder with differing crumb rubber contents"**. Materials Today: Proceedings, 2021.
32. **"Travel Time Reliability Indices for urban Routes in Baghdad City"**. Sustainable Development Research Journal, ISSN 2520-0917, Vol. 25, No. 5; 2021.
33. **"Improving the Rutting Resistance of Flexible Pavement Reinforced with Steel Fiber"** Imperial Journal of Interdisciplinary Research (IJIR) Vol-3(Issue-12):2454-1362, 2017.
34. **"Future Predicted Dynamic Model Urban Growth for Baqubah City"** Diyala Journal of Engineering Sciences, Volume 8, Issue 4, Pages 157-171, 2015.

35. **"Traffic simulation of continuous flow intersection with displaced left-turn: a case study"** Journal of Engineering and Applied Science, 69, 39, 2022.
36. **"Traffic Simulation of Urban Street to Estimate Capacity"** Journal of Engineering and Applied Science, Journal of Engineering, Baghdad University, College of Engineering, Vol.28, No.4, 2022.
37. **"Estimation of Traffic Volumes Distribution of Urban Streets in Baghdad City"** Journal of planner and development, Vol. 26 No. 2, 2021.
38. **"Modeling Critical Gap of Al Turkmani Roundabout in Baghdad City"** Engineering and Technology Journal, Vol. 40, Issue 5, Pages 722-731, 2022.

CONFERENCE PROCEEDINGS

1. **"Analytical Modeling of Thermal Cracking of Asphalt Pavement Based on Finite Element Method"**. 10th International Conference on Application of Advanced Technologies in Transportation. AATT 2008, Athens.
2. **Development of Statistical Models for the prediction of Marshal Stability and Flow for Asphaltic Paving Mixtures"**. WCSET 2009: World Congress on Science, Engineering and Technology Conference, Singapore.
3. **"Modeling Fatigue Life and Fracture Parameters in HMA based on Experimental Work and Analytical Approach."** Seventh International Conference on Advances in Engineering Materials (IMS-7), AUS, American University of Sharija, 2014.
4. **"Durability of Stabilized Unbound Granular Pavement Materials."** Seventh International Conference on Advances in Engineering Materials (IMS-7), AUS, American University of Sharija, 2014.
5. **"Simulation of Bond Strength at Asphaltic Layers Interface using Finite Element Application."** Seventh International Conference on Advances in Engineering Materials (IMS-7), AUS, American University of Sharija, 2014.
6. **"Moisture Damage Resistance of Asphalt Mixtures using Polyethylene and Silica Fume Additives"**, Third Women Conference, College of Science for Women, Baghdad University, 2016.
7. **"Impact Load Test on Conventional and Roller Compactor Steel Fiber Reinforced Concrete Pavement"**. International Congress and Exhibition" Sustainable Civil Infrastructures: Innovative Infrastructure Geotechnology, GeoMEast: Materials for Sustainable Infrastructure pp 96-120, 2017.

8. **"Analytical Study of Headway Time Distribution on Congested Arterial: A case Study Palestine Road in Baghdad City"**. Proceedings of the 2nd GeoMEast International Congress and Exhibition on Sustainable Civil Infrastructures, Egypt 2018 – The Official International Congress of the Soil-Structure Interaction Group in Egypt (SSIGE) , pp 85-97, 2018.
9. **Effect of Leaching Behavior on Granular Base layer Stabilized Sustainable Materials**. المؤتمر العلمي الهندسي الرابع والأول في الهندسة الجامعة المستنصرية (٢٠١٨).
10. **"Experimental and Theoretical Investigation on the Effect of Carbon Nanotubes on Flexible Pavement"**. IOP Conference Series: ICEAT 1st International Conference on Engineering and advanced Technology, IOP Conference Series: Materials Science and Engineering, Vol. 870, 2020.
11. **"Discharge Headway Time Distribution Model on Congested Signalized Intersections and their Operation Management: A Case Study in Baghdad City"**. IOP Conference Series: ICEAT 1st International Conference on Engineering and advanced Technology, IOP Conference Series: Materials Science and Engineering, Vol. 870, 2020.
12. **"Delay Time Analysis and Modelling of Signalised Intersections using Global Positioning System (GPS) Receivers"**. IOP Conference Series: Materials Science and Engineering, IOP Conf. Series: Materials Science and Engineering, Vol. 671, 2020.
13. **"Development a capacity model for Al-Turkmani roundabout"**. IOP Conference Series: Materials Science and Engineering, IOP Conf. Series: Materials Science and Engineering, Vol. 888, 2020.
14. **"Effect of Geogrid Reinforcement on Behavior of Unpaved Roads"**. Second International Conference on Geotechnical Engineering-Iraq, 2021.
15. **Influence of Roadside Impedance on Speed and Capacity of Urban Streets IOP Conference Series: Materials Science and Engineering**, IOP Conf. Series: Materials Science and Engineering 1090 (2021) 012121.
16. **Estimation of Trip Production Rates for Al Adhamiyah District in Baghdad city using Cross-Classification Technique**, IOP Conf. Series: Materials Science and Engineering 1090 (2021) 012021.
17. **Travel Time Prediction Models for Major Arterial Road in Baghdad City using Manufactured GPS device**, IOP Conf. Series: Materials Science and Engineering 1090 (2021) 012021.
18. **"Effect of Waste Materials on California Bearing Ratio on Granular Base and Subgrade Layer"** المؤتمر العلمي الافتراضي الثاني لطلبة الدراسات العليا 2021.
19. **"Assessment of travel speeds for urban streets using global positioning system"**. المؤتمر العلمي الافتراضي الثاني لطلبة الدراسات العليا 2021.
20. **"Travel Time Analysis of Selected Urban Streets in Baghdad City"**. المؤتمر العلمي الافتراضي الثاني لطلبة الدراسات العليا 2021.

21. **"Application of GIS to assess the accessibility of urban streets in Baghdad city"**.
2nd International Conference of Al-Esraa University College for Engineering Sciences (ICAUC_ES), Al-Esraa University College, Baghdad, Iraq on 3- 4 November 2022, IOP Conference Series: Earth and Environmental Science, 2022 (Online ISSN: 1755-1315, Print ISSN: 1755-130).
22. **"Modeling of Crack Propagation in Flexible Pavement using X-FEM Method"**.
2nd International Conference of Al-Esraa University College for Engineering Sciences (ICAUC_ES), Al-Esraa University College, Baghdad, Iraq on 3- 4 November 2022, IOP Conference Series: Earth and Environmental Science, 2022 (Online ISSN: 1755-1315, Print ISSN: 1755-130).
23. **"Impact of Vehicle Speed and Loading Time on Permanent Deformations of Asphalt Pavement"**. International Conference on Geotechnical Engineering – IRAQ, ICGECI 2022: Current Trends in Geotechnical Engineering and Construction pp 453–462.

تطوير المهارات:

- 🇬🇧 شهادة مشاركة في دورة تدريبية للقيادات في وزارة التعليم العالي والبحث العلمي IREX بدعم من السفارة الامريكية في العراق, ٢٠١٧.
- 🇬🇧 استاذ زائر في جامعة Ruhr الالمانية لمدة ٦ اشهر ٢٠١٠.

Curriculum Vitae

Zainab Ahmed Abdulsattar Alkaissi

Mustansiriyah University – College of Engineering

Mobile: 07712207758

E-mail: dr.zainabalkaissi77@uomustansiriyah.edu.iq

PERSONAL SUMMARY

DEGREE: PROFESSOR DOCTOR

LANGUAGE: ARABIC MOTHER LANGUAGE, ENGLISH

AREA OF INTEREST: TRANSPORTATION, TRAFFIC ENGINEERING, TRAFFIC SIMULATION, TRANSPORTATION PLANNING, PAVEMENT MODELING, AND ANALYSIS.

WORKED IN: HIGHWAY AND TRANSPORTATION DEPARTMENT / COLLEGE OF ENGINEERING / MUSTANSIRIYAH UNIVERSITY

EDUCATION:

- ✦ Ph.D. in Transportation Engineering / Mustansiriyah University 2006
- ✦ MSc in Geotechnical Engineering / Al-Nahrain University 2001
- ✦ BSc In Civil Engineering / Al-Nahrain University 1998

ACADEMIC HONORS AND AWARDS:

- ✦ (60) Acknowledgment from the Dean of Engineering College, Mustansiriyah University.
- ✦ (15) Acknowledgment from the Ministry of Higher Education and Scientific Research.

ACADEMIC /TEACHING EXPERIENCE:

Expert Years (20)

الأستاذ المساعد الدكتور
عائدة عبد الجبار
معاونة العميد للشؤون العلمية

الم.د.
قيس ضاحي الوائلي
رئيس قسم الطرق والنقل

COURSES TAUGHT:

Under Graduate Courses	Diploma Course	MSc Courses	PhD courses
Traffic Engineering (3rd Class)	Intelligent Transportation System	Advanced Traffic Engineering	Traffic Simulation
Maintenance (4th Class)		Advanced Transportation Planning	Transportation Modeling
Transportation (4th Class)		Data Modeling	
Asphalt Technology (2nd Class)		Advance Statistical Engineering	
Transportation (4th Class)			

PROFESSIONAL AFFILIATIONS:**Supervised MSc students**

1. (2012) The Effect of Styrene Butadiene Styrene on the Properties of Asphalt and Hot Asphalt Mixture with References to Artificial Neural Networks.
2. (2013) Experimental and Numerical Investigation of Stabilized Unbound Granular Pavement Materials.
3. (2013) Modeling Fatigue Life and Fracture Parameters in HMA based on Experimental Work and Analytical Approach.
4. (2013) Evaluation of Tack coat Applications and bond strength at Asphalt concrete Layers Interface.
5. (2015) Effect of Hydraulic Properties of Granular Base Material on Pavement Performance.
6. (2015) Crack Propagation Modeling for Local Rigid Pavement.
7. (2015) Durability of Polymer Modified Open Graded HMA Mixtures Based on Experimental work and Finite Element Modeling.
8. (2017) Assessment of Concrete Pavement Using Steel Fiber.
9. (2015) Experimental Study of Doweled Joints for Plain Concrete Pavement.
10. (2017) Experimental Study of Steel Fiber Reinforced Flexible Pavement.
11. (2018) Investigation the Durability of Granular Base Material using Gyratory Compactor.
12. (2020) Analysis of traffic Operations at A Selected Roundabout in Baghdad City.
13. (2021) The Influence of Side Friction on Traffic Characteristics for selected major Urban Streets in Baghdad City.

- 14.(2021) Trip Production Characteristics and Modeling for Al-Adhmiyah District at Baghdad City based on Cross-Classification Technique.
- 15.(2019) Travel Time Modeling for Major Arterial Roads in Baghdad City and Traffic Congestion Management
- 16.(2020) Enhancement Characterization of Unbound Road bases by using Recycled Materials.
- 17.(2020) Effect of Travel Time Variability on Streets Accessibility in Baghdad City.
- 18.(2020) Empirical Study of Operating Speed in urban Streets based on Global Positioning System (GPS).
19. (2021) Evaluation and Improvement of Signalized Intersection in Baghdad City.
- 20.(2022) Traffic Operation Assessment of Urban Corridor using Performance Measures.

Supervised Ph.D. students

1. (2015) Urban Growth and Transport Dynamic Modeling for Baqubah City.
2. (2020) Evaluating Rutting Potential of Local Warm Mix Asphalt.

PUBLICATIONS:

SCIENTIFIC RESEARCH

1. "Finite Element Approach to Evaluate the Resistance to Plastic Flow in Asphalt Mixtures". Engineering and Development Journal, College of engineering, Mustansiriyah University, 2010.
2. "Combined Effect of Wheel and Thermal Conditions on Stress Distribution in Flexible Pavement". Engineering and Technology Journal, University of Technology, Vol. 27, No. 12, 2009.
3. "Propagation Mechanisms for Surface Initiated Cracking in Composite Pavements". Al-Khwarizmi Engineering Journal, College of Engineering, University of Baghdad, Vol.5, No.3, 2009.
4. "Numerical Analysis of Controlled Modulus Column Foundation System Supported Embankments". Journal of Engineering, A Scientific Referred Journal Published by: College of Engineering /University of Baghdad. No.2, Volume 15, 2009.
5. "Analysis of Consolidation Behaviour of Subsoils under Cyclic Trapezoidal Loading". Engineering and Development Journal, Comprehensive Scientific Engineering Conference, Vol. 12, Part I, ISSN1813-7822, 2008.
6. "Analysis of Geotextile Embankment by ANSYS". Journal of Engineering, a College of Engineering/ University of Baghdad, No.1, Vol.17, 2011.

7. **"Deformation Analysis of Road Embankment Foundation Improvement with Fiber Glass"** Engineering and Technology Journal, University of Technology, Vol. 30, No. 19, 2012.
8. **"CBR Prediction Model with GIS Application Technique"** International Journal of Structural and Civil Engineering Research, Vol. 2, No. 2, May 2013.
9. **"The Effect of Styrene Butadiene Styrene on the Properties of Hot Asphalt Mixture."** International Journal for Sciences and Technology, Vol. 7, No. 4, 2012.
10. **"Stress Intensity Parameter and Crack Growth of Iraqi Hot Mix Asphalt Mixtures".** Asian Journal of Engineering and Technology, Volume 01– Issue 05, 2013.
11. **"Effect of Materials and Stabilizers Type on the Strength of Base Layer."** Journal of Engineering and Development, College of Engineering , Mustansiriyah University, Vol. 18, No. 5, 2014.
12. **"Urban Growth and Transportation Indicators for Sub-Urban Area."** Journal of Engineering and Development, College of Engineering, Mustansiriyah University, Vol. 19, No.5, 2015.
13. **"Cellular Automata -Dynamic Model for Urban Growth Baqubah City."** Diyala Journal of Engineering Science, College of Engineering, University of Diyala, Vol. 09, No.03, 2016.
14. **"Durability of Porous Asphalt Pavement."** Journal of Engineering and Sustainable Development, Al-Mustansiriyah University, Vol.20, No.04, 2016.
15. **"Determination of Fracture Characteristics for Local Rigid Pavement Materials in Iraq"** Journal of Engineering and Sustainable Development, College of Engineering , Al-Mustansiriyah University, Vol. 21, No.2 , 2017.
16. **"Evaluation of the Performance of Treated Base Layers on Critical Responses of Flexible Pavement"** Journal of Engineering and Sustainable Development, College of Engineering , Al-Mustansiriyah University ,Vol. 20,No.5, 2016.
17. **" Travel Time Prediction Models and Reliability Indices for Palestine Urban Road in Baghdad City"**, Al-Khwarizmi Engineering Journal, College of Engineering, University of Baghdad, Vol. 13, No. 3, PP: 120- 130, 2017.
18. **"Finite Element Modeling of Rutting for Flexible Pavement"**, Journal of Engineering and Sustainable Development, Mustansiriyah University, Vol. 22, No. 3, 2018.
19. **"Experimental and Numerical Analysis of Steel Fiber Reinforced Concrete Pavement"**, Journal of Engineering and Sustainable Development, Mustansiriyah University, College of Engineering, Vol. 20, No.6, 2016.
20. **"Assessment of Sustainable Indicators for Road Transportation: A Case Study of Palestine Arterial Street"**, International Journal of Science and Research (IJSR), Vol. 6 Issue 4, 2017.
21. **"Effect of Waste Foundry Sand on Indirect Tensile Strength of Asphaltic Mixture".** Journal of Engineering and Sustainable Development, Mustansiriyah University, College of Engineering, Vol. 22, No. 4, 2018.
22. **"Effect of High Temperature and Traffic Loading on Rutting Performance of Flexible Pavement".** Journal of King Saud University-Engineering Sciences, Vol.32, No.1, 2018.
23. **"Experimental Study on Doweled Expansion Joints on Behavior for Plain Concrete Pavement System".** Al-Khwarizmi Engineering Journal, College of Engineering, University of Baghdad, Vol. 14, No. 3, 2018.

24. **"Capacity Estimation of Urban Road in Baghdad City: A Case Study of Palestine Arterial Road"**. ARPN Journal of Engineering and Applied Sciences, Vol.13, No.21, 2018.
25. **"Assessment of Laboratory Compaction methods for Granular Base Layer Stabilized with Sustainable Materials"**. Global Journal of Engineering Science and Research Management, Vol.5, No. 9, 2018.
26. **"Numerical Study of Doweled Expansion Joints on Plain Concrete Pavement System"** Journal of Engineering and Sustainable Development, Mustansiriyah University , College of Engineering, Vol. 22, No. 6 , 2018.
27. **"Theoretical Analysis on the Effect of Surface Horizontal Traction on Top-Down Cracking of Flexible Pavement "**. Association of Arab Universities Journal of Engineering Science, College of Engineering, University of Baghdad, Vol.26, No.1 (2019).
28. **"Prediction Model of Elastic Modulus for Granular Road Bases"**. Sustainable Development Research Journal, ISSN 2690, Vol. 2, No. 1; 2020.
29. **"Investigating the Rheological Properties of Asphalt Binder Incorporating Different Crumb Rubber Contents Based on a Response Surface Methodology"**. Journal of King Saud University-Engineering Sciences, Elsevier, 24 October 2020.
30. **"Travel Speed Prediction Model for Urban Arterial Road and Traffic Management"**. Journal of Green Engineering, Vol.10, Issue 12, 2020.
31. **"Physical, rheological and morphological characterization of modified asphalt binder with differing crumb rubber contents"**. Materials Today: Proceedings, 2021.
32. **"Travel Time Reliability Indices for urban Routes in Baghdad City"**. Sustainable Development Research Journal, ISSN 2520-0917, Vol. 25, No. 5; 2021.
33. **"Improving the Rutting Resistance of Flexible Pavement Reinforced with Steel Fiber"** Imperial Journal of Interdisciplinary Research (IJIR) Vol-3(Issue-12):2454-1362, 2017.
34. **"Future Predicted Dynamic Model Urban Growth for Baqubah City"** Diyala Journal of Engineering Sciences, Volume 8, Issue 4, Pages 157-171, 2015.
35. **"Traffic simulation of continuous flow intersection with displaced left-turn: a case study"** Journal of Engineering and Applied Science, 69, 39, 2022.
36. **"Traffic Simulation of Urban Street to Estimate Capacity"** Journal of Engineering and Applied Science, Journal of Engineering, Baghdad University, College of Engineering, Vol.28, No.4, 2022.
37. **"Estimation of Traffic Volumes Distribution of Urban Streets in Baghdad City"** Journal of planner and development, Vol. 26 No. 2, 2021.
38. **"Modeling Critical Gap of Al Turkmani Roundabout in Baghdad City"** Engineering and Technology Journal, Vol. 40, Issue 5, Pages 722-731, 2022.

CONFERENCE PROCEEDINGS

1. **"Analytical Modeling of Thermal Cracking of Asphalt Pavement Based on Finite Element Method"**. 10th International Conference on Application of Advanced Technologies in Transportation. AATT 2008, Athens.

2. ***Development of Statistical Models for the prediction of Marshal Stability and Flow for Asphaltic Paving Mixtures***". WCSET 2009: World Congress on Science, Engineering and Technology Conference, Singapore.
3. ***"Modeling Fatigue Life and Fracture Parameters in HMA based on Experimental Work and Analytical Approach."*** Seventh International Conference on Advances in Engineering Materials (IMS-7), AUS, American University of Sharifa, 2014.
4. ***"Durability of Stabilized Unbound Granular Pavement Materials."*** Seventh International Conference on Advances in Engineering Materials (IMS-7), AUS, American University of Sharifa, 2014.
5. ***"Simulation of Bond Strength at Asphaltic Layers Interface using Finite Element Application."*** Seventh International Conference on Advances in Engineering Materials (IMS-7), AUS, American University of Sharifa, 2014.
6. ***"Moisture Damage Resistance of Asphalt Mixtures using Polyethylene and Silica Fume Additives"***, Third Women Conference, College of Science for Women, Baghdad University, 2016.
7. ***"Impact Load Test on Conventional and Roller Compactor Steel Fiber Reinforced Concrete Pavement"***. International Congress and Exhibition" Sustainable Civil Infrastructures: Innovative Infrastructure Geotechnology, GeoMEast: Materials for Sustainable Infrastructure pp 96-120, 2017.
8. ***"Analytical Study of Headway Time Distribution on Congested Arterial: A case Study Palestine Road in Baghdad City"***. Proceedings of the 2nd GeoMEast International Congress and Exhibition on Sustainable Civil Infrastructures, Egypt 2018 – The Official International Congress of the Soil-Structure Interaction Group in Egypt (SSIGE) , pp 85-97, 2018.
9. ***Effect of Leaching Behavior on Granular Base layer Stabilized Sustainable Materials.***
(٢٠١٨) المؤتمر العلمي الهندسي الرابع والأول في الهندسة الجامعة المستنصرية
10. ***"Experimental and Theoretical Investigation on the Effect of Carbon Nanotubes on Flexible Pavement"***. IOP Conference Series: ICEAT 1st International Conference on Engineering and advanced Technology, IOP Conference Series: Materials Science and Engineering, Vol. 870, 2020.
11. ***"Discharge Headway Time Distribution Model on Congested Signalized Intersections and their Operation Management: A Case Study in Baghdad City"***. IOP Conference Series: ICEAT 1st International Conference on Engineering and advanced Technology, IOP Conference Series: Materials Science and Engineering, Vol. 870, 2020.
12. ***"Delay Time Analysis and Modelling of Signalised Intersections using Global Positioning System (GPS) Receivers"***. IOP Conference Series: Materials Science and Engineering, IOP Conf. Series: Materials Science and Engineering, Vol. 671, 2020.
13. ***"Development a capacity model for Al-Turkmani roundabout"***. IOP Conference Series: Materials Science and Engineering, IOP Conf. Series: Materials Science and Engineering, Vol. 888, 2020.
14. ***"Effect of Geogrid Reinforcement on Behavior of Unpaved Roads"***. Second International Conference on Geotechnical Engineering-Iraq, 2021.

15. ***Influence of Roadside Impedance on Speed and Capacity of Urban Streets IOP Conference Series: Materials Science and Engineering***, IOP Conf. Series: Materials Science and Engineering 1090 (2021) 012121.
16. ***Estimation of Trip Production Rates for Al Adhamiyah District in Baghdad city using Cross-Classification Technique***, IOP Conf. Series: Materials Science and Engineering 1090 (2021) 012021.
17. ***Travel Time Prediction Models for Major Arterial Road in Baghdad City using Manufactured GPS device***, IOP Conf. Series: Materials Science and Engineering 1090 (2021) 012021.
18. ***Effect of Waste Materials on California Bearing Ratio on Granular Base and Subgrade Layer*** المؤتمر العلمي الافتراضي الثاني لطلبة الدراسات العليا 2021.
19. ***Assessment of travel speeds for urban streets using global positioning system***. المؤتمر العلمي الافتراضي الثاني لطلبة الدراسات العليا 2021.
20. ***Travel Time Analysis of Selected Urban Streets in Baghdad City***. المؤتمر العلمي الافتراضي الثاني لطلبة الدراسات العليا 2021.
21. ***Application of GIS to assess the accessibility of urban streets in Baghdad city***. 2nd International Conference of Al-Esraa University College for Engineering Sciences (ICAUC_ES), Al-Esraa University College, Baghdad, Iraq on 3- 4 November 2022, IOP Conference Series: Earth and Environmental Science, 2022 (Online ISSN: 1755-1315, Print ISSN: 1755-130).
22. ***Modeling of Crack Propagation in Flexible Pavement using X-FEM Method***. 2nd International Conference of Al-Esraa University College for Engineering Sciences (ICAUC_ES), Al-Esraa University College, Baghdad, Iraq on 3- 4 November 2022, IOP Conference Series: Earth and Environmental Science, 2022 (Online ISSN: 1755-1315, Print ISSN: 1755-130).
23. ***Impact of Vehicle Speed and Loading Time on Permanent Deformations of Asphalt Pavement***. International Conference on Geotechnical Engineering – IRAQ, ICGECI 2022: Current Trends in Geotechnical Engineering and Construction pp 453–462.

PROFESSIONAL DEVELOPMENT

- ✚ Certificate for course training of women leaders in the Ministry of Higher Education Scientific Research (2017).
- ✚ Visitor Professor at Ruhr University / Germany for 6 months (2010).

