Okan Sirin, Ph.D

Professor

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Education

08/2000:	Ph.D., University of Florida, Civil and Coastal Engineering, USA
01/1996:	MSc., University of Illinois at Urbana-Champaign, Civil Engineering, USA
07/1992:	BS., Dokuz Eylul University , Civil Engineering, Turkey

Academic Appointments

02/2021-Present	Professor
	Qatar University, Department of Civil and Architectural Engineering
03/2015-02/2021	Associate Professor
	Qatar University, Department of Civil and Architectural Engineering
02/2008-03/2015	Assistant Professor
	Qatar University, Department of Civil and Architectural Engineering
08/2002-02/2008	Assistant Professor
	University of Gaziantep, Department of Civil Engineering
07/2000-11/2001	Post-Doctoral Associate
	University of Florida, Department of Civil and Coastal Engineering
08/1996-07/2000	Graduate Research Assistant
	University of Florida, Department of Civil and Coastal Engineering

Awards and Honors

- 1. Special Acknowledgement Award, College of Engineering, Qatar University, May 2020.
- 2. Letter of Appreciation for the Faculty Advisor (supporting Qatar University ASCE Student Chapter), American Society of Civil Engineers (ASCE), October 22, 2019.

- Pavement Management Challenge Special Recognition Award (for Poster), 9 th International Conference on Managing Pavement Assets, Alexandria, VA-USA, May 2015.
- 4. The project entitled "Innovative Use of Recycled Materials in Construction" received the Green Innovation Award from Green Mind, April 2014.
- 5. The project entitled "Innovative Use of Recycled Materials in Construction" received the Most Innovative Project Award of the Year 2013 from Qatar Contractors Forum, October 2013.
- 6. Academic Success Award, Department of Civil Eng., University of Florida, March 1999.
- 7. Academic Success Award for International Students, Office of International Studies and Programs, University of Florida, April 1997.
- 8. Ranked 2nd on the abroad scholarship exam, Turkish Ministry of Education, 1992
- 9. Ranked 3rd among the Civil Engineering Department Graduates, Dokuz Eylul University, Izmir, Turkey, 1992.

Research Grants

No	Title of Research	Granting Body	Grant Amount (US \$)	Role	Project Duration
1	International Conference on Civil Infrastructure and Construction (Conference Sponsorship Grant)	CWSP17-C-0906- 19015 Qatar National Research Fund	\$ 27,000	Event Requestor	4 months (2019-2020)
2	Transforming Locally Available Industry by- products to Innovation in Road Construction Materials	IRCC-2019-011 International Research Collaboration Co- Funds Program Qatar University	\$ 200,000 (\$100,000 QU + \$100,000 TAMUQ)	Lead PI	2 years (2019-2021)
3	Measurement of Tire/Pavement Interaction Noise on Highway Pavements in the State of Qatar	QUST-CENG-SPR- 15/16-12 Student Grant Qatar University	\$ 2,191	Lead PI	6 months (06/2016- 12/2016)
4	Toward Designing Quieter Pavements	NPRP 7-110-2-056 Qatar National Research Fund	\$ 737,055	Lead PI	4 years (2015-2018)
5	Comprehensive Evaluation of Aging of Asphalt Mixtures in Qatar	NPRP 6-773-2-320 Qatar National Research Fund	\$ 994,000	Lead PI	4 years (2013-2017)

6	Construction of Road Bases and Subbases from 100% Waste Materials Generated in Qatar	UREP 12-014-2-003 Qatar National Research Fund	\$ 50,000	PI	1 year (2012-2013)
7	Beneficial Utilization of Steel Slag and Gravel in Construction	QUEX-CENG-SAP- 12/13-1 Slag Aggregate Producer Company	\$ 54,794	PI	6 months (10/2012- 03/2013)
8	Innovative Use of Recycled Materials in Construction	NPRP 4-188-2-061 Qatar National Research Fund	\$ 764,000	Co-PI	3 years (2011-2014)
9	Multi-Scale Computational Models for Predicting Performance of Asphalt Pavements Under Realistic Loading Conditions	NPRP 08-310-2-110 Qatar National Research Fund	\$ 970,000	Co-PI	3 years (2009-2013)

Professional Affiliations

- 1. American Society of Civil Engineers (ASCE), Associate Member
- 2. Turkish Road Association

Teaching Experience

Developed and taught the following courses.

Undergraduate level

- 1. Properties and Testing of Materials
- 2. Pavement Materials and Design
- 3. Surveying for Construction
- 4. Surveying for Architects
- 5. Highway Engineering
- 6. Traffic Engineering
- 7. Structures and Architectural Form 1
- 8. Engineering Skills and Ethics
- 9. Engineering Economics

Graduate level

- 1. Bituminous Materials
- 2. Pavement Analysis and Design
- 3. Superpave Hot-Mix Asphalt Design

4. Pavement Management Systems

Senior Design Project Supervision

- 1. Senior Design Project I
- 2. Senior Design Project II

MSc. Theses Directed as Chairman or Co-Chairman

- 1- Mohammed Alfarra," Dominant Frequency Determination from Vehicular Loading
 Time Pulse and Using the Fast Fourier Transform (FFT)", August 2020-Present, Qatar
 University, Doha, Qatar. (Chairman)
- **2-** Ahmad Altawalbeh," Calculation of Load Damage Factors using Different Prediction Models", August 2020-Present, Qatar University, Doha, Qatar. **(Chairman)**
- 3- Mohammed Eissa Shamiyeh, "Application of Multi Criteria Decision Making Methods on Pavement Performance", January 2019, Qatar University, Doha, Qatar.
 (Chairman)
- **4-** Fahad Abdelati Al Asad, "Evaluation of the Main Factors Affecting Tire-Pavement Interaction Noise", June 2018, Qatar University, Doha, Qatar. **(Chairman)**
- **5-** Abdallah Mousa, "Application of pavement management with tools of QFD and balance scorecard", June 2017, Qatar University, Qatar. (Co-Chairman)
- **6-** Hasan Erhan Yucel, "The Effect of the Use of Polyfibers on Asphalt Mixture Properties", June 2007, University of Gaziantep, Turkey. **(Chairman)**

Ph.D. Theses Directed as Chairman or Co-Chairman

1- Hazem Al Nawaiseh, "Performance Measurement of Pavement Construction Projects
Through Structural Equation Modelling", Spring 2021-present, Qatar University,
Doha, Qatar. (Chairman)

Professional Service

- 1. Editorial Board Member, Advances in Civil Engineering Journal, July 2020-Present
- 2. **Conference Chair**, International Conference on Civil Infrastructure and Construction (CIC 2020), 2-5 February 2020, Doha, Qatar

- 3. **Reviewer** for the Case Studies in Construction Materials Journal
- 4. Reviewer for the International Journal of Pavement Engineering (IJPE)
- 5. Reviewer for the International Journal of Pavement Research and Technology (IJPRT)
- 6. Reviewer for the Construction and Building Materials Journal
- 7. Reviewer for the Advances in Civil Engineering Journal
- 8. Reviewer for the Transportation Research Part D: Transport and Environment Journal

University Service

- 1. Advisor for the ASCE Student Chapter at Qatar University
- 2. Chairperson for the High School Wooden Bridge Competition
- 3. Member of the college requirements unit (CRU) Committee
- 4. Chair of the departmental courses timetabling committee
- 5. Member of the college student affairs committee
- 6. Member of the departmental graduate studies and research committee
- 7. Member of the college learning resources committee
- 8. Member of the departmental faculty search committee
- 9. Member of the departmental curriculum committee
- 10. Coordinator for Civil Engineering Senior Design Projects
- 11. Member of the departmental promotion committee
- 12. Library Liaison for Civil and Architectural Engineering Department.

Publications

Books and Technical Reports:

- <u>Sirin, O.</u>, Ebead, U., Eid, H., Gunduz, M., Hussein, M. (2020), "Proceedings of the International Conference on Civil Infrastructure and Construction (CIC 2020)", Qatar University Press, ISBN: 9789927139109, http://hdl.handle.net/10576/14764.
- Sirin, O., Kassem, E., (2019), "Toward Designing Quieter Pavements", Final Report (NPRP 7-110-2-056) submitted to Qatar National Research Fund (QNRF), Qatar Foundation, Qatar.

- 3. <u>Sirin, O.</u>, Kassem, E., (2017), "Comprehensive Evaluation of Aging of Asphalt Mixtures in Qatar", Final Report (NPRP 6-773-2-320) submitted to **Qatar National Research Fund** (QNRF), Qatar Foundation, Qatar.
- 4. Taha, R., Al-Nuaimi, N., <u>Sirin, O.</u>, Banyahia, F., (2013), "Beneficial Utilization of Steel Slag and Gravel in Construction", Final Report (QUEX-CENG-SAP-12/13-1) submitted to <u>Slag</u>

 Aggregate Producer Company, Doha, Qatar

Refereed Journal Publications:

- Khan, M.S., Kassem, E., McDonald, A., <u>Sirin, O.</u>, Aston, D.E. (2022), "Comparative Characterization of Field and Laboratory-Aged Binders Modified with Antioxidant Additives and Copolymers Using Fourier Transform Infrared Spectroscopy and Gel Permeation Chromatography", <u>ASCE Journal of Transportation Engineering</u>, <u>Part B: Pavements</u>, Vol. 148, Issue 2, https://doi.org/10.1061/JPEODX.0000376.
- Roja, K.L., Aljarrah M. F., <u>Sirin, O.</u>, Al-Nuaimi, N., Masad, E. (2022), "Rheological, Thermal, and Chemical Evaluation of Asphalt Binders Modified Using Crumb Rubber and Warm Mix Additive", <u>ASCE Journal of Materials in Civil Engineering</u>, Vol. 34, Issue 5, https://doi.org/10.1061/(ASCE)MT.1943-5533.0004194.
- Sirin, O., Gunduz, M., Shamiyeh, M.E. (2021), "Application of analytic hierarchy process (AHP) for sustainable pavement performance management in Qatar", <u>Engineering</u>, <u>Construction and Architectural Management</u>, Vol. 28 No. 10, pp. 3106-3122, https://doi.org/10.1108/ECAM-02-2020-0136.
- Sadeq, M., Huang, C-W., Masad, E., Al-Khalid, H., <u>Sirin, O</u>. (2021), "A Framework for the analysis of damage and recovery characteristics of asphalt mixtures", <u>Road Materials and Pavement Design</u>, Vol.22, Issue 9, pp. 1986-1999, https://doi.org/10.1080/14680629.2020.1742192.
- Sirin, O., Ohiduzzaman, M., Kassem, E. (2021), "Influence of temperature on tire-pavement noise in hot climates: Qatar case", <u>Case Studies in Construction Materials</u>, Vol. 15, e00651, https://doi.org/10.1016/j.cscm.2021.e00651.
- Sirin, O., Ohiduzzaman, M., Kassem, E., Hassan, W. (2021), "Acoustic Performance Evaluation of Dense-Graded Asphalt Pavements in Qatar", <u>Advances in Civil Engineering</u>, Vol. 2021, Article ID 5520432, 16 pages, https://doi.org/10.1155/2021/5520432.

- Sirin, O., Gunduz, M., Moussa, A. (2020), "Application of Tools of Quality Function Deployment and Modified Balanced Scorecard for Optimal Allocation of Pavement Management Resources", <u>IEEE Access</u>, Vol. 8, pp. 76399-76410, https://doi.org/10.1109/ACCESS.2020.2989096.
- Sirin, O., Ohiduzzaman, M., Kassem, E., Paul, D.K. (2020), "Comprehensive Evaluation of Long-Term Aging of Asphalt Mixtures in Hot Climatic Condition", <u>Road Materials and Pavement Design</u>, Vol. 21, Issue 4, pp. 927-949, https://doi.org/10.1080/14680629.2018.1531777.
- Sirin, O., Gunduz, M., Shamiyeh, M.E. (2019), "Assessment of Pavement Performance Management Indicators Through Analytic Network Process,", <u>IEEE Transactions on</u> <u>Engineering Management</u>, https://doi.org/10.1109/TEM.2019.2952153.
- Sirin, O., Paul, D.K., Khan, M.S., Kassem, E., Darabi, M.K. (2019), "Effect of Aging on Viscoelastic Properties of Asphalt Mixtures", <u>ASCE Journal of Transportation Engineering</u>, <u>Part B: Pavements</u>, Vol. 145, Issue 4, https://doi.org/10.1061/JPEODX.0000137.
- 11. Kassem, E., Khan, M.S., Katukuri, S., <u>Sirin, O.</u>, Muftah, A., Bayomy, F. (2019), "Retarding aging of asphalt binders using antioxidant additives and copolymers", <u>International Journal of Pavement Engineering</u>, Vol. 20, Issue 10, pp. 1154-1169, https://doi.org/10.1080/10298436.2017.1394098.
- 12. Sadek, H., Sadeq, M., Masad, E., Al-Khalid, H., <u>Sirin, O</u>. (2019), "Probabilistic Viscoelastic Continuum Damage Analysis of Fatigue Life of Warm Mix Asphalt", <u>ASCE Journal of Transportation Engineering</u>, <u>Part B: Pavements</u>, Vol. 145, Issue 3, https://doi.org/10.1061/JPEODX.0000128.
- 13. Arifuzzaman, M., Gazder, U., Alam, M.S., <u>Sirin, O.</u>, Al Mamun, A. (2019), "Modelling of Asphalt's Adhesive Behaviour Using Classification and Regression Tree (CART) Analysis", <u>Computational Intelligence and Neuroscience</u>, Vol 2019, Article ID 3183050, 7 pages, https://doi.org/10.1155/2019/3183050.
- Sirin, O., Paul, D.K., Kassem, E., Ohiduzzaman, M. (2019), "Evaluation of Short-Term Aging Protocol for Asphalt Mixtures", <u>Applied Sciences</u>, Vol. 9, Issue 14, 2783, https://doi.org/10.3390/app9142783.
- 15. Hassan, W., Kassem, E., Al-Assi, M., <u>Sirin, O.</u>, Ohiduzzaman, M. (2019), "Acoustic Absorption Analysis and Modeling of Asphalt Mixtures", <u>Journal of Testing and Evaluation</u>, Vol. 47, Issue 4, pp. 2385-2404, https://doi.org/10.1520/JTE20180496.

- Sadeq, M., Masad, E., Al-Khalid, H., <u>Sirin, O.</u>, Mehrez, L. (2018), "Linear and nonlinear viscoelastic and viscoplastic analysis of asphalt binders with warm mix asphalt additives", <u>International Journal of Pavement Engineering</u>, Vol. 19, Issue 10, pp. 857-864, https://doi.org/10.1080/10298436.2016.1213592.
- 17. <u>Sirin, O.</u>, Paul, D.K., Kassem, E. (2018) "State of the Art Study on Aging of Asphalt Mixtures and Use of Antioxidant Additives", <u>Advances in Civil Engineering</u>, Vol. 2018, Article ID 3428961, 18 pages, https://doi.org/10.1155/2018/3428961.
- 18. <u>Sirin, O.</u>, Paul, D.K., Kassem, E., Ohiduzzaman, M. (2017) "Effect of ageing on asphalt binders in the State of Qatar: a case study", <u>Road Materials and Pavement Design</u>, Volume 18, Issue sup4, pp. 165-184, https://doi.org/10.1080/14680629.2017.1389094.
- 19. Menapace, I., D'Eurydice, M.N., Galvosas, P., Hunter, M.W., <u>Sirin, O.</u>, Masad, E. (2017) "Aging evaluation of asphalt samples with Low Field Nuclear Magnetic Resonance", <u>Materials Characterization</u>, Volume 128, pp. 165-175, https://doi.org/10.1016/j.matchar.2017.01.029.
- 20. Sadek, H., Masad, E., Al-Khalid, H., <u>Sirin, O</u>. (2016) "Probabilistic analysis of fatigue life for asphalt mixtures using the viscoelastic continuum damage approach", <u>Construction and Building Materials</u>, Volume 126, pp. 227-244, https://doi.org/10.1016/j.conbuildmat.2016.09.029.
- 21. Ohiduzzaman, MD., <u>Sirin, O.</u>, Kassem, E., Rochat, J.L. (2016) "State-of-the-Art Review on Sustainable Design and Construction of Quieter Pavements—Part 1: Traffic Noise Measurement and Abatement Techniques", <u>Sustainability</u>, Vol. 8, Issue 8, 742, https://doi.org/10.3390/su8080742.
- 22. <u>Sirin, O.</u> (2016) "State-of-the-Art Review on Sustainable Design and Construction of Quieter Pavements—Part 2: Factors Affecting Tire-Pavement Noise and Prediction Models", <u>Sustainability</u>, Vol 8, Issue 7, 692, https://doi.org/10.3390/su8070692.
- 23. Sadeq, M., Al-Khalid, H., Masad, E., <u>Sirin, O</u>. (2016) "Comparative Evaluation of Fatigue Resistance of Warm Fine Aggregate Asphalt Mixtures", <u>Construction and Building Materials</u>, Vol. 109, pp. 8-16, https://doi.org/10.1016/j.conbuildmat.2016.01.045.
- 24. Sadek, H., Masad, E., <u>Sirin, O.</u>, Al-Khalid, H., Hassan, K. (2015) "Performance Evaluation of Full-Scale Sections of Asphalt Pavements in the State of Qatar", <u>ASCE Journal of Performance of Constructed Facilities</u>, Vol. 29, Issue 5, https://doi.org/10.1061/(ASCE)CF.1943-5509.0000627.

- 25. Taha, R., <u>Sirin, O.</u>, Sadek, H. (2014) "Recycling of Local Qatar's Steel Slag and Gravel Deposits in Road Construction", <u>International Journal of Waste Resources</u>, Volume 4, Issue 4, https://doi.org/10.4172/2252-5211.1000167.
- 26. Taha, R., <u>Sirin, O.</u>, Sadek, H. (2014) "Evaluation of Combined Excavation Waste and Reclaimed Asphalt Pavement Aggregates for Use in Road Bases and Sub-bases", <u>Journal of Civil and Environmental Engineering</u>, Volume 4, Issue 2, http://doi.org/10.4172/2165-784X.1000141.
- 27. Sadek, H., Masad, E., <u>Sirin, O</u>., Al-Khalid, H., Sadeq, M., Little, D. (2014) "Implementation of Mechanistic-Empirical Pavement Analysis in the State of Qatar", <u>International Journal of Pavement Engineering</u>, Volume 15, Issue 6, pp. 495-511, https://doi.org/10.1080/10298436.2013.837164.
- 28. Guarin, A., Roque, R., Kim, S., <u>Sirin, O</u>. (2013) "Disruption Factor of Asphalt Mixtures", <u>International Journal of Pavement Engineering</u>, Volume 14, Issue 5, pp. 472-485, https://doi.org/10.1080/10298436.2012.727992.
- 29. <u>Sirin, O.</u>, Kim, H. J., Tia, M., Choubane, B. (2008) "Comparison of Rutting Resistance of Unmodified and SBS-Modified Superpave Mixtures by Accelerated Pavement Testing", <u>Construction and Building Materials</u>, Volume 22, Issue 3, pp.286-294, https://doi.org/10.1016/j.conbuildmat.2006.08.018.
- 30. <u>Sirin, O.</u>, Tia, M., Roque, R., Choubane, B. **(2007)** "Evaluation of performance characteristics of the heavy vehicle simulator in Florida", <u>Building and Environment</u>, Volume 42, Issue 3, pp.1270-1277, https://doi.org/10.1016/j.buildenv.2005.11.030.
- 31. Canakci, H., Demirboga R., Karakoc M.B., <u>Sirin O</u>. (2007) "Thermal conductivity of limestone from Gaziantep (Turkey)", <u>Building and Environment</u>, Volume 42, Issue 4, pp. 1777-1782, https://doi.org/10.1016/j.buildenv.2006.01.011.
- 32. <u>Sirin, O.</u>, Shih, C. T., Tia, M., Ruth B. E. **(1998)** "Development of a Modified Rotavapor Apparatus and Method for Short-Term Aging of Modified Asphalts", <u>Transportation</u>

 <u>Research Record 1638</u>, National Research Council, Washington, DC, pp 72-81, https://doi.org/10.3141/1638-09.

Refereed Conference Papers:

1. Al Mamun, A., <u>Sirin, O.</u>, Masad, E., "Development of Warm Mix Asphalt with the Aid of Microstructural Characterization", <u>Proceedings of the International Conference on Civil</u>

- <u>Infrastructure and Construction (CIC 2020)</u>, Doha, Qatar, 2-5 February 2020, Qatar University Press, pp. 273-280, https://doi.org/10.29117/cic.2020.0035
- Al Mamun, A., & <u>Sirin, O.</u>, "Nanoscale Evaluation of Multi-Walled Carbon Nanotube's Performance on Resisting Oxidization of Asphalt" <u>Materials Science Forum</u>, 982, 2020, pp. 195–200. https://doi.org/10.4028/www.scientific.net/msf.982.195
- Sirin O., Ohiduzzaman M., Kassem E. "Evaluation of Federal Highway Administration's Traffic Noise Model for Pavements in Qatar". In: Awang M., Meor M Fared M. (eds) ICACE 2019. Lecture Notes in Civil Engineering, vol 59, 2020, pp. 143-150, Springer, Singapore, https://doi.org/10.1007/978-981-15-1193-6 16.
- 4. <u>Sirin, O.</u>, Ohiduzzaman, M., Kassem, E., "Evaluation of Noise Performance of Multi-Lane Highways in the State of Qatar", <u>IOP Conf. Series: Mater. Sci. Eng.</u> Vol. 517, Number 1, 012010, 2019, https://doi.org/10.1088/1757-899X/517/1/012010.
- Sirin, O., Ohiduzzaman, M., Kassem, E., "Effect of Pavement Surface Aging on Tire-Pavement Noise: A Case Study in the State of Qatar", <u>International Conference on Civil,</u>
 Offshore and Environmental Engineering (ICCOEE 2018), <u>MATEC Web of Conferences</u>
 Vol. 203, Kuala Lumpur, Malaysia, 13-15 August 2018, https://doi.org/10.1051/matecconf/201820305002.
- Sadeq, M., Masad, E., Yiming, W., Al-Khalid, H., <u>Sirin, O</u>. "Characterization of Air Voids in W-FAM Samples Using X-Ray CT Imaging", <u>Advances in Materials and Pavement</u> <u>Performance Prediction (AM3P) Conference</u>, Doha, Qatar, 16-18 April 2018.
- Ohiduzzaman, M., <u>Sirin, O</u>., Kassem, E., "Evaluation of Traffic Noise in the State of Qatar", <u>Advances in Materials and Pavement Performance Prediction (AM3P) Conference</u>, Doha, Qatar, 16-18 April 2018.
- 8. Ohiduzzaman, M., <u>Sirin, O.</u>, Kassem, E., "Comprehensive Evaluation of Asphalt Pavement Acoustic Performance by Using Onboard Sound Intensity Method", Paper No. 18-04777 presented at the <u>97 th Transportation Research Board Annual Meeting</u>, Washington, DC., USA, 2018.
- 9. Ohiduzzaman, M., <u>Sirin, O.</u>, Kassem, E., "Evaluation of Dynamic Modulus of Asphalt Concrete Field Cores", <u>International Journal of Civil and Structural Engineering</u>, Vol. 5, Issue 1, 25 June 2018, ISSN: 2372-3971, pp. 194-198.
- 10. Ohiduzzaman, M., <u>Sirin, O</u>., Kassem, E., "Assessment of tire-pavement noise by using on-board sound intensity (OBSI) method in the State of Qatar", <u>10th International Conference</u>

- on the Bearing Capacity of Roads, Railways and Airfields (BCRRA 2017), Athens, Greece, 28-30 June 2017.
- 11. Menapace, I., Masad, E., D'Eurydice, M.N., Galvosas, P., Hunter, M.W., <u>Sirin, O.</u>, "Study on the use of low field Nuclear Magnetic Resonance for detecting asphalt aging", <u>10th</u> <u>International Conference on the Bearing Capacity of Roads, Railways and Airfields</u> (BCRRA 2017), Athens, Greece, 28-30 June 2017.
- 12. Sadeq, A. M., Masad, E., Al-Khalid. H., <u>Sirin, O</u>., Menapace, I., D'Eurydice, M. N., "New Protocol Utilising the Accelerated Weathering Tester to Age Fine Asphalt Mixtures with Warm Mix Asphalt Additives", <u>7th International EATA (European Asphalt Technology Association) Conference</u>, Dubendorf, Switzerland, 12-14 June 2017.
- 13. Reid, J.M., Hassan, K.E., <u>Sirin, O.</u>, Taha, R.A., "Demonstrating the Worth of Recycled Aggregates a Case Study from Qatar", <u>Geo-Chicago 2016 GSP 270 (ASCE)</u>, Chicago, IL-USA, August 2016, pp 534-545, https://doi.org/10.1061/9780784480137.051
- 14. Paul, D.K., <u>Sirin, O.</u>, Kassem, E., "Laboratory Investigation of Asphalt Mixture Aging", <u>6 th Eurasphalt & Eurobitume Congress</u>, Prague, Czech Republic, 1-3 June 2016.
- 15. Sadeq, M., Masad, E., Al-Khalid, H., Sirin, O., Little, D., "Rheological Evaluation of Short and Long-Term Performance for Warm Mix Asphalt (WMA) Binders", In: Canestrari F., Partl M. (eds) 8th RILEM International Symposium on Testing and Characterization of Sustainable and Innovative Bituminous Materials. RILEM Bookseries, vol 11. Springer, Dordrecht, 2016, https://doi.org/10.1007/978-94-017-7342-3_11
- 16. Sadek, H., Masad, E., Al-Khalid, H., <u>Sirin, O.</u>, "Fatigue Characterisation of Full-Scale Pavement Sections Using Viscoelastic Continuum Damage Theory for the State of Qatar", 6th International Conference Bituminous Mixtures and Pavements, Thessaloniki, Greece, 10-12 June 2015.
- 17. Sadeq, M., Masad, E., Al-Khalid, H., <u>Sirin, O.</u>, Mehrez, L., "Assessment of Linear Viscoelastic and Nonlinear Plasto-Viscoelastic Responses in Warm-Mix Asphalt Binders Using Multiple Stress Creep Recovery (MSCR) Test", <u>6 th International Conference Bituminous Mixtures and Pavements</u>, Thessaloniki, Greece, 10-12 June 2015.
- 18. Sadek, H., Masad, E., Al-Khalid, H., <u>Sirin, O.</u>, Hassan, K., "Characterization of Fatigue Resistance of Alternative Pavement Designs for the State of Qatar", <u>3 rd International</u>

 <u>Conference on Transportation Infrastructure</u>, Pisa, Italy, 22-25 April 2014, pp.433-439.

- 19. Taha, R., <u>Sirin, O.</u>, Sadek, H., "Beneficial use of Qatar's steel slag and gravel deposits in road construction", <u>13 th Annual International Conference on Asphalt, Pavement Engineering and Infrastructure</u>, Liverpool, UK, 26-27 February, 2014.
- 20. <u>Sirin, O.</u>, Taha, R., Qunnaby, R., Alkhamis, K., Naser, M., Younis, M., Shihadeh, A., "Evaluation of Demolition Wastes for Use in Road Bases and Sub-Bases Construction in Qatar", **Creative Construction Conference 2013**, Budapest, Hungary, July 6-9, 2013.
- 21. Sadek, H., Masad, E., <u>Sirin, O.</u>, Hassan, K., Al-Khalid, H., "Evaluation of Mechanical Properties of Alternative Pavement Designs for the State of Qatar", <u>2 nd MESAT</u>

 <u>Conference</u>, Sharjah, UAE, 5-7 February, 2013.
- 22. Sadek, H., Masad, E., <u>Sirin, O</u>., Al-Khalid, H., Little, D., "The Implementation of Mechanistic-Empirical Pavement Design Method to Evaluate Asphalt Pavement Design in Qatar", <u>5th</u> <u>Eurasphalt & Eurobitume Congress</u>, Istanbul, Turkey, 13-15 June 2012.
- 23. <u>Sirin, O.</u>, Kim, H.J., Tia, M., Choubane, B., "Evaluation of Rutting Resistance of Superpave Mixtures With and Without Polymer Modification by Means of the Heavy Vehicle Simulator," <u>5th International Conference on Road and Airfield Pavement Technology</u>, Seoul, Republic of Korea, 10-12 May 2005, pp.416-431.
- 24. <u>Sirin, O.</u>, Tia, M., "Investigation of Problems in Binder Extraction from Crumb Rubber Modified Asphalts", <u>6th International RILEM Symposium on Performance Testing and Evaluation of Bituminous Materials</u>, Zurich, Switzerland, April 2003, pp.212-219.
- 25. <u>Sirin, O.</u>, Tia, M., "Evaluation of a Modified Rotavapor Aging Apparatus For Simulation of Hot-Mixing on Crumb Rubber-Modified Asphalts, " <u>The 4th International Conference on Road & Airfield Pavement Technology</u>, Volume II, Kunming, Yunnan Province, China, 2002, pp.1226-1234.