

Okan Sirin

Qatar University
Department of Civil and Architectural Engineering
P.O. Box 2713
Doha, QATAR

Mobile: [+974 5556-2791] E-mail: [okansirin@qu.edu.qa]

Education

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

Academic Appointments

03/2015-Present **Associate Professor**
Qatar University, Department of Civil and Arch. Engineering
02/2008-03/2015 **Assistant Professor**
Qatar University, Department of Civil and Arch. 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. Pavement Management Challenge Special Recognition Award (for Poster), 9th International Conference on Managing Pavement Assets, Alexandria, VA-USA, May 2015
2. Project entitled "Innovative Use of Recycled Materials in Construction" received the Green Innovation Award from Green Mind, April 2014.

3. Project entitled “Innovative Use of Recycled Materials in Construction” received the Most Innovative Project Award of Year 2013 from Qatar Contractors Forum, October 2013
4. Academic Success Award, Department of Civil Eng., University of Florida, March 1999
5. Academic Success Award for International Students, Office of International Studies and Programs, University of Florida, April 1997
6. Ranked 2nd on the abroad scholarship exam, Turkish Ministry of Education, 1992
7. 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	Toward Designing Quieter Pavements	NPRP 7-110-2-056 Qatar National Research Fund	\$ 737,055	Lead PI	3 years (2015/2018)
2	Comprehensive Evaluation of Aging of Asphalt Mixtures in Qatar	NPRP 6-773-2-320 Qatar National Research Fund	\$ 994,000	Lead PI	3 years (2013/2016)
3	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)
4	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)
5	Innovative Use of Recycled Materials in Construction	NPRP 4-188-2-061 Qatar National Research Fund	\$ 764,000	Co-PI	3 years (2011/2014)
6	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)
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. Highway Engineering
5. Traffic Engineering
6. Structures and Architectural Form 1
7. Engineering Skills and Ethics
8. Engineering Economics

Graduate level

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

MSc. Theses Directed as Chairman

Hasan Erhan Yucel, "The Effect of the Use of Polyfibers on Asphalt Mixture Properties",
June 2007, University of Gaziantep, Turkey.

Professional Service

1. Reviewer for the International Journal of Pavement Engineering

University Service

1. Member of the CRU committee
2. Chair of the departmental courses timetabling committee
3. Member of the college student affairs committee
4. Member of the departmental graduate studies and research committee
5. Member of the college learning resources committee
6. Member of departmental faculty search committee
7. Member of the departmental curriculum committee

Research Publications

Refereed Journal Publications:

1. Sadeq, M., Al-Khalid, H., Masad, E., **Sirin, O.**, “ Comparative Evaluation of Fatigue Resistance of Warm Fine Aggregate Asphalt Mixtures”, Construction and Building Materials, Vol. 109, 2016, pp. 8-16.
2. Sadek, H., Masad, E., **Sirin, O.**, Al-Khalid, H., Hassan, K., “Performance Evaluation of Full-Scale Sections of Asphalt Pavements in the State of Qatar”, Journal of Performance of Constructed Facilities (ASCE), Vol. 29, Issue 5, 2015.
3. Taha, R., **Sirin, O.**, Sadek, H., “Recycling of Local Qatar’s Steel Slag and Gravel Deposits in Road Construction”, International Journal of Waste Resources, Volume 4, Issue 4, 2014.
4. Taha, R., **Sirin, O.**, Sadek, H., “Evaluation of Combined Excavation Waste and Reclaimed Asphalt Pavement Aggregates for Use in Road Bases and Sub-bases”, Journal of Civil and Environmental Engineering, Volume 4, Issue 2, 2014.
5. Sadek, H., Masad, E., **Sirin, O.**, Al-Khalid, H., Sadeq, M., Little, D., “Implementation of Mechanistic-Empirical Pavement Analysis in the State of Qatar”, International Journal of Pavement Engineering, Volume 15, Issue 6, 2014, pp. 495-511.
6. Guarin, A., Roque, R., Kim, S., **Sirin, O.**, “ Disruption Factor of Asphalt Mixtures”, International Journal of Pavement Engineering, Volume 14, Issue 5, 2013, pp. 472-485.
7. **Sirin, O.**, Kim, H. J., Tia, M., Choubane, B., “ Comparison of Rutting Resistance of Unmodified and SBS-Modified Superpave Mixtures by Accelerated Pavement Testing”, Construction and Building Materials, Volume 22, Issue 3, 2008, pp.286-294.

8. **Sirin, O.**, Tia, M., Roque, R., Choubane, B., "Evaluation of performance characteristics of the heavy vehicle simulator in Florida", *Building and Environment*, Volume 42, Issue 3, 2007, pp.1270-1277
9. Canakci, H., Demirboga R., Karakoc M.B., **Sirin O.**, "Thermal conductivity of limestone from Gaziantep (Turkey), *Building and Environment* , Volume 42, Issue 4, 2007, pp. 1777-1782.
10. **Sirin, O.**, Shih, C. T., Tia, M., Ruth B. E., " Development of a Modified Rotavapor Apparatus and Method for Short-Term Aging of Modified Asphalts", *Transportation Research Record 1638*, National Research Council, Washington, DC, 1998, pp 72-81

Conference Publications:

1. Reid, J.M., Hassan, K.E., **Sirin, O.**, Taha, R.A., "Demonstrating the Worth of Recycled Aggregates – a Case Study from Qatar", *Geo-Chicago 2016*, Chicago, IL-USA, 14-18 August 2016.
2. Paul, D.K., **Sirin, O.**, Kassem, E., "Laboratory Investigation of Asphalt Mixture Aging", 6 th Eurasphalt & Eurobitume Congress, Prague, Czech Republic, 1-3 June 2016.
3. Sadeq, M., Masad, E., Al-Khalid, H., **Sirin, O.**, Kassem, E., "Rheological Characterization of Binders Modified by Warm Mix Asphalt Additives", 8 th International RILEM Symposium SIB2015, Ancona, Italy, 7-9 October 2015.
4. Sadek, H., Masad, E., Al-Khalid, H., **Sirin, O.**, "Fatigue Characterisation of Full-Scale Pavement Sections Using Viscoelastic Continuum Damage Theory for the State of Qatar", 6 th International Conference Bituminous Mixtures and Pavements, Thessaloniki, Greece, 10-12 June 2015.
5. Sadeq, M., Masad, E., Al-Khalid, H., **Sirin, O.**, Mehrez, L., "Assessment of Linear Viscoelastic and Nonlinear Plasto-Viscoelastic Responses in Warm-Mix Asphalt Binders Using Multiple Stress Creep Recovery (MSCR) Test", 6 th International Conference Bituminous Mixtures and Pavements, Thessaloniki, Greece, 10-12 June 2015.
6. Sadek, H., Masad, E., Al-Khalid, H., **Sirin, O.**, Hassan, K., "Characterization of Fatigue Resistance of Alternative Pavement Designs for the State of Qatar", 3 rd International Conference on Transportation Infrastructure, Pisa, Italy, 22-25 April 2014, pp.433-439.
7. Taha, R., **Sirin, O.**, Sadek, H., "Beneficial use of Qatar's steel slag and gravel deposits in road construction", 13 th Annual International Conference on Asphalt, Pavement Engineering and Infrastructure, Liverpool, UK, 26-27 February, 2014.

8. **Sirin, O.**, 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.
9. Sadek, H., Masad, E., **Sirin, O.**, Hassan, K., Al-Khalid, H., "Evaluation of Mechanical Properties of Alternative Pavement Designs for the State of Qatar", 2nd MESAT Conference, Sharjah, UAE, 5-7 February, 2013.
10. Sadek, H., Masad, E., **Sirin, O.**, Al-Khalid, H., Little, D., " The Implementation of Mechanistic-Empirical Pavement Design Method to Evaluate Asphalt Pavement Design in Qatar", 5th Eurasphalt & Eurobitume Congress, Istanbul, Turkey, 13-15 June 2012.
11. **Sirin, O.**, Tia, M., "Evaluation of an Improved Rotavapor Aging Apparatus Using a Morton Flask for Simulation of Hot-Mixing on Modified Asphalts", International Balkans Conference on Challenges of Civil Engineering, BCCCE, Tirana, Albania, 19-21 May 2011.
12. **Sirin, O.**, 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," Fifth International Conference on Road and Airfield Pavement Technology, Seoul, Republic of Korea, 10-12 May 2005, pp.416-431.
13. **Sirin, O.**, Tia, M., "Investigation of Problems in Binder Extraction from Crumb Rubber Modified Asphalts", 6th International RILEM Symposium on Performance Testing and Evaluation of Bituminous Materials, Zurich, Switzerland, April 2003, pp.212-219.
14. **Sirin, O.**, Tia, M., "Evaluation of a Modified Rotavapor Aging Apparatus For Simulation of Hot-Mixing on Crumb Rubber-Modified Asphalts, " The 4th International Conference on Road & Airfield Pavement Technology, Volume II, Kunming, Yunnan Province, China, 2002, pp.1226-1234.