

# **Kavussi Amir**

Professor, Civil Engineering

**BSc** University of Naples, Italy

MSc University of Naples, Italy

PhD University of Birmingham, UK

https://scholar.google.com/citations?view\_op=list\_works&hl=en&user=EKTeMzIAAAAJ

#### **Research Fields:**

1. Bituminous binders and mixes

2. Pavement Materials and Pavement design

3. Pavement Maintenance and Management

4. Airport Pavement Engineering

#### I. PERSONAL INFORMATION

Name and Family

Amir Kavussi Name:

Status: Married

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#### II. **EDUCATIONAL RECORDS**

<u>Degree</u>	<u>Institution</u>	<b>Field</b>	<b>Date</b>
BSc	University of Naples, Italy	Civil Engineering	1979
MSc	University of Naples, Italy	Highway Engineering	1981
PhD	University of Birmingham,	Highway Engineering	1988

# III. ACADEMIC EXPERIENCES

• Professor: Tarbiat Modares University, Tehran, Iran (1989-Present)

- Visiting Professor:
  - 1) Oregon State University, USA, 1996-1997
  - 2) University of Manitoba, Canada, 2003-2004

### IV. MEMBERSHIP OF SCIENTIFIC ORGANIZATIONS

- Association of Asphalt Paving Technologists (AAPT)
- Institute of Asphalt Technology (IAT)
- Road Engineering Association of Asia and Australia (REAAA)
- Institution of Highways and Transportation (IHT)
- Permanent International Association of Road Congresses (PIARC)
- Middle East Society of Asphalt Technologists (MESAT)

#### V. RESEARCH INTERESTS

- 1) Highway and Airport Pavement Design
- 2) Pavement Materials
- 3) Asphalt Technology
- 4) Road Maintenance, Rehabilitation and Management

### VI. JOURNAL PAPERS

- 1. Kavussi A and Lees G, "An accelerated weathering technique to assess the hardening of bitumen and filler-bitumen mixes", Journal of the Institute of Asphalt Technology, No. 42, 1990, UK, pp 22-29.
- 2. Kavussi A and Hicks R G, "Properties of bituminous mixtures containing different fillers", Journal of the Association of Asphalt Paving Technologists, Vol. 66, USA, pp 153-186, 1997
- 3. Kavussi A and Sandiani S., "Categorization of the bitumens produced in Iran into performance grade SHRP classification", Journal of Faculty of Engineering, University of Tehran, Vol. 35, No.3, November 2001
- 4. Mehrjerdi M R S, Yousefi A A and Kavussi A, "Improving bitumen properties by polymeric materials", Iranian Journal of Polymer Science and Technology, Vol. 15, No. 2, pp 103-120, 2002
- 5. Kavussi A and Afrashteh E, "Evaluation of open graded mixes containing emulsified bitumen", International Journal of Engineering Science, Vol. 13, No.2, Iran University of Science and Technology, 2002
- 6. Shalaby A, Liske T and Kavussi A, "Comparing back-calculated and laboratory resilient moduli of bituminous paving mixtures", Canadian Journal of Civil Engineering, Vol. 31, pp 988-996, 2002
- 7. Kavussi A and SH Zamani, "Structural evaluation of Tehran-Qom Freeway using a falling weight deflectometer, Modares Technical and Engineering Journal, Vol. 1, 2004
- 8. Shalaby A, Law T and Kavussi A, "Evaluation of well graded and fine graded asphalt

- mixes using the indirect tensile test", International Journal of Pavements, Vol. 3, No. 1-2, January, pp 14-25, May 2004
- 9. Kavussi A and Shalaby A, "Analysis of back calculated and laboratory resilient moduli of flexible pavements, International Journal of Pavement Engineering, IJP, 2003
- 10. Kavussi A and Babazadeh A, "The influence of pavement layers behaviour on thickness design using Kenlayer program", The International Journal of Pavement Engineering & Asphalt Technology, PEAT, Vol. 9, Issue 2, ISSN 1464-8164, pp 36-49, December 2008
- 11. Kavussi A and Abdi A, "Evaluation of Stripping in asphalt pavements using abrasion test", Modares Civil Engineering Journal, Vol. 10, No. 2, 2010
- 12. Kavussi A. and Rafie K, "Evaluation of PFWD as potential quality control tool of pavement layers", Journal of Civil Engineering and Management, Vol. 16, No. 1, pp 123–129, 2010
- 13. Kavussi A and Modarres A, "Laboratory fatigue models for recycled mixes with bitumen emulsion and cement", Construction and Building Materials, Vol. 24, No. 10, pp 1920-1927, 2010
- 14. Kavussi A and Modarres A, "A model for resilient modulus determination of recycled mixes with bitumen emulsion and cement from ITS testing results", Construction and Building Materials, Vol. 24, No. 11, pp 2252-2259, 2010
- 15. Kavussi A. and Rafiei K, "Evaluation of PFWD Factors on stiffness modulus determination of unbound materials", Civil Engineering Infrastructures Journal, Vol. 44, No. 4, 537-545, 2010
- 16. Kavussi A, Rafiei K and Yasrobi S, "Evaluation of PFWD as potential quality control tool of pavement layers", Journal of Civil Engineering and Management, Vol. 16, No. 1, pp 123-129, 2010
- 17. Kavussi A and Zahedi TA, "Study of the abrasion resistance of water-borne traffic paints by abrasion test machine, in wet conditions", Journal of Transportation Engineering, Vol 2, No. 15, 2010
- 18. Kavussi A, Moghadas Negad F and Modares A, "Laboratory fatigue models for recycled mixes with pozzolanic cement and bitumen emulsion", Journal of Civil Engineering and Management, Vol. 17, No. 1, pp 98-107, 2011
- 19. Kavussi A and Hashemian L, "Properties of WMA-Foam mixes based on major mechanical tests", Journal of Civil Engineering and Management, Vol. 17, No. 2, pp 207-216, 2011
- 20. Modarres A, Nejad F M, Kavussi A, Hassani A and Shabanzadeh E, "A parametric study on the laboratory fatigue characteristics of recycled mixes", Construction and Building Materials, Vol. 25, No. 4, pp 2085-2093, 2011
- 21. Dibaj S M and Kavussi A, "An optimized mix design method for emulsified bituminous mixtures", Journal of Transportation Engineering, Vol. 4, No. 113, pp 23-34, 2012

- 22. Kavussi A and Hashemian L, "Laboratory evaluation of moisture damage and rutting potential of WMA foam mixes", International Journal of Pavement Engineering, Vol. 13, No. 5, pp 415-423, 2012
- 23. Kavussi A and Tanzadeh R, "Application of slow curing bitumen as a rejuvenating agent in aged bituminous mixes", Advanced Materials Research, Vol. 587, pp 62-66, November 2012
- 24. Rafiei K, Kavussi A and Yasrobi S, "Construction quality control of unbound layers based on stiffness modulus criteria", Journal of Civil Engineering and Management, Vol. 18, No. 1, pp 5-13, 2012
- 25. Khadivar A and Kavussi A, "Rheological characteristics of SBR and NR Polymer Modified Bitumen Emulsions at average pavement Temperatures", Journal of Construction and Building Materials, Vol. 47, pp 1099–1105, 2013
- 26. Hashemian L, Kavussi A and Abdolmaali H H, "Application of foam bitumen in cold recycling and hydrated lime in airport pavement strengthening", Case Studies in Construction Materials, Vol. 1, pp 164-171, 2014
- 27. Kavussi A and Bakhtiari J, "Application of different testing methods for evaluating effects of hydrated lime un bituminous mixes", Procedia Engineering, Vol. 77, pp 148-154, 2014
- 28. Kavussi A and Barghabani P, "The influence of nano materials on moisture resistance of asphalt mixes", Study of Civil Engineering and Architecture, 2014
- 29. Kavussi A and Qazizadeh M J, "Fatigue characterization of asphalt mixes containing electric arc furnace (EAF) steel slag subjected to long term aging", Construction and Building Materials, No. 72, pp 158-166, 2014
- 30. Kavussi A, Qorbani M, Khodaei A and Haghshenas H F, "Moisture susceptibility of warm mix asphalt: a statistical analysis of the laboratory testing results", Construction and Building Materials, No. 52, pp 511-517, 2014
- 31. Kavussi A and Barghabani P, "Investigating Fatigue Behavior of Nanoclay and Nano Hydrated Lime Modified Bitumen Using LAS Test", Journal of Materials in Civil Engineering, Vol. 28, No.3, 04015136, 2015
- 32. Kavussi A, Jalili Qazizadeh M and Hassani A, "Fatigue behavior analysis of asphalt mixes containing electric arc furnace (EAF) steel slag", Journal of Rehabilitation in Civil Engineering, Vol. 3, No. 1, pp 74-86, 2015
- 33. Kavussi A, Mohammadzadeh M A and Ziaee S A, "Experimental evaluation of asphalt mixtures containing basic oxygen furnace (BOF) and Electric Arc Furnace (EAF) slags", Journal of Transportation Infrastructure Engineering (JTIE), Vol. 1, No. 3, pp 15-31, 2015
- 34. Nazirizad M, Kavussi A and Abdi A, "Evaluation of the effects of anti-stripping agents on the performance of asphalt mixtures", Construction and Building Materials, No. 84, pp 348-353, 2015
- 35. Ziaee S A, Kavussi A, Jalili Qazizadeh M and Mohammadzadeh Moghadam A,

- "Evaluation of long term ageing of asphalt mixtures containing EAF and BOF steel slags", International Journal of Transportation Engineering, Vol. 2, No. 3, pp 245-265, 2015
- 36. Jalili Qazizadeh M, Kavussi A, Sheikhi O and Solatifar N, "Comparison of Full Depth Reclamation (FDR) and Reconstruction Alternatives for Rehabilitation of Flexible Pavements: A Case Study", Journal of Civil Engineering and Architecture Research, Vol. 3, No. 2, pp 1286-1292, 2016
- 37. Mirhosseini S A F, Khabiri M M, Kavussi A and Kamali M H J, "Applying surface free energy method for evaluation of moisture damage in asphalt mixtures containing date seed ash", Construction and Building Materials, No. 125, pp 408-416, 2016
- 38. Kavussi A, Solatifar N. and Abbasghorbani M, "Mechnistic-Empirical Analysis of asphalt dynamic modulus for rehabilitation projects in Iran", Journal of Rehabilitation in Civil Engineering, Vol. 4, No. 1, pp 18-29, 2016
- 39. Kavussi A, Abbas G M, Moghadas N F and Bamdad A, "Developing a model to determine effective structural number of flexible pavement at network level using FWD deflection basin", Journal of Transportation Research, Vol. 13, No. 146, pp 53-60, 2016
- 40. Siahi A, Kavussi A and Boroujerdian A, "Performance evaluation of two-component road marking materials by using pull-off machine", Journal of Transportation Infrastructure Engineering (JTIE), Vol. 2, No. 1, pp 85-101, 2016
- 41. Siahi A, Kavussi A and Boroujerdian A M, "Enhancing skid resistance of two-component road marking paint using mineral and recycled materials", International Journal of Transportation Engineering, Vol. 3, No. 3, pp 195-206, 2016
- 42. Foroutan Mirhosseinin A, Kavussi A, Jalal Kamali M H and Khabiri M M, "Evaluating fatigue behavior of asphalt binders and mixes containing Date Seed Ash", Journal of Civil Engineering and Management, Vol. 23, No. 8, pp 1164-1175, 2017
- 43. Kavussi A, Abbasghorbani M, Moghadas Nejad F and Bamdad Ziksari A, "A new method to determine maintenance and repair activities at network-level pavement management using falling weight deflectometer", Journal of Civil Engineering and Management, Vol. 23, No. 3, pp 338-346, 2017
- 44. Kavussi A, Motevalizadeh M, Karimi A and Rahimizadeh A, "Evaluating the moisture resistance of foam warm mix asphalt using Image Processing Method", Computational Research Progress in Applied Science and Engineering (CRPASE), Vol. 3, 2017
- 45. Solatifar A, Kavussi A, Abbasghorbani M and Sivilevicius H, "Application of FWD data in developing dynamic modulus master curves of in service asphalt layers", Journal of Civil Engineering and Management, Vol. 23, No. 5, pp 661-671, 2017
- 46. Solatifar A, Kavussi A, Abbasghorbani M and Katicha S W, "Development of dynamic modulus master curves of in-service asphalt layers using MEPDG models", Journal of Road Materials and Pavement Design, ISSN: 1468-0629 (print), 2164-7402 (online), 2017
- 47. Qazizadeh M J, Farhad H, Kavussi A and Sadeghi A, "Evaluating the fatigue behavior

- of asphalt mixtures containing electric arc furnace and basic oxygen furnace slags using free energy estimation", Journal of Cleaner Production, No. 188, pp 355-361, 2018
- 48. Rasouli A, Jalili Qazizadeh M, Taghikhani A H, "Evaluating the effect of laboratory aging on fatigue behavior of asphalt mixtures containing hydrated lime", Journal of Construction and Building Materials, Vol. 164, 655-662, 2018

### VII. PAPERS PRESENTED IN MAJOR CONGRESSES AND SEMINARS

- 1. Kavussi A and Lees G (1989), "An accelerated weathering technique to access the hardening of bitumen and filler-bitumen mixes", Proceedings, Durability and Performance of Bituminous Highway Materials, Hatfield Polytechnic, 3-4 April, Hatfield, UK.
- 2. Kavussi A and Less G (1989), "The development and automation of Fraass brittle test", Proceedings, 4<sup>th</sup> Eurobitume Symposium, 4-6 Oct., Madrid, Spain.
- 3. Kavussi A (1990), "Physical characteristics of fillers used in bituminous mixtures and the temperature susceptibility of filler-bitumen mixtures, Proceedings, 3<sup>rd</sup> Iranian Congress of civil Engineering, Vol. 4, 14-18 May, Shiraz, Iran, pp 525-545.
- 4. Kavussi A (1991), "The mixing compatibility of some rubber additives with bitumen to be used in bituminous mixes", 2<sup>nd</sup> International Conference on Rubbers, 3-8 Nov., Tehran, Iran.
- 5. Kavussi A and Less G (1992), "Physical characteristics of fillers used in bituminous mixtures and the temperature susceptibility of filler-bitumen mixes, Proceedings, 7<sup>th</sup> Conference of Road Engineering Association of Asia and Australasia, 22-26 June, Singapore, pp 447-485.
- 6. Kavussi A (1993), "An investigation into the application of bituminous layers in rail road pavements", Proceedings, International Railway Seminar, 12-14 April, Tehran, Iran, pp 636-651.
- 7. Kavussi A (1993), "The role of fillers on flexural properties of bituminous mixes at low temperatures", Proceedings, East-West European Road Conference, Vol.1, 22-24 Sept., Warsaw, Poland, pp 195-199.
- 8. Kavussi A and Rafii H (1993), "Evaluation of bitumen emulsion mixes by Marshall testing and the role of fillers", Proceedings, 1<sup>st</sup> World Congress on Emulsions, Vol. 3, Paper 4 -12-61, 19-22 Oct., Paris, France.
- 9. Havaei Torshizi M H, Bazasan M and Kavussi A (1994), "Winter road maintenance operations in Iran", Proceedings, Technical Report, 9<sup>th</sup> PIARC International Winter Road Congress, Vol. 1, 21-25 March, Seefeld, Austria, pp 281-289.
- 10. Kavussi A (1994), "An investigation into road surface defects in various climatological areas of Iran", Proceedings, 9<sup>th</sup> AAPA International Asphalt Conference, 13-17 November, Surfers Paradise, Queensland, Australia.
- 11. Kavussi A (1995), "Climatological zoning of Iran for pavement design purposes", 8th

- Conference of Road Engineering Association of Asia and Australasia, 17-21 April, Taipei, Taiwan, R.O.C.
- 12. Havaei Torshizi M H, Saeidi Kia A and Kavussi A (1995), "Pavement rehabilitation in Iran and the use of locally produced textiles to strengthen them", Proceedings, PIARC XXth World Road Congress, Vol. 20-24.E, Question IV, New Techniques for Pavement Strengthening and Maintenance, National Report, 3-9 Sept., Montreal, Canada.
- 13. Kavussi A (1996), "Hot in place recycling of 29R runway of Mehrabad airport in Iran." Proceedings, 1<sup>st</sup> Euro Asphalt & Eurobitume Congress, Vol. 1, Paper E&E3. 041, 7-10 May, Strasbourg, France.
- 14. Kavussi A and Hicks R G (1997), "The role of fillers on the low temperature properties of bituminous mixes", 76<sup>th</sup> Annual Meeting of TRB, January 12-16, Washington D.C., USA
- 15. Kavussi A (2000), "Hot in place recycling as an environmental friendly approach for road roughness improvement", Proceedings, 24th International Baltic Road Conference, 21-23 August, Riga, Latvia.
- 16. Kavussi A (2000), "Strengthening a heavily trafficked road, using foam bitumen technique", Proceedings, 10th Road Engineering Association of Asia and Australasia Conference, 4-9 September, Tokyo, Japan
- 17. Kavussi A and Atabaki M A (2001), "Road construction in Qeshm Island in Persian Gulf by using locally available materials", Proceedings, 1st International Symposium on Subgrade Stabilization and in Situ Pavement Recycling using Cement, 1-4 October, Salamanca, Spain, pp 471-477
- 18. Kavussi A and Atabaki M A (2001), "Subgrade stabilization with lime and base strengthening with cement-foam bitumen, a case study in Assalouyeh airport in Iran", Proceedings, 1st International Symposium on Subgrade Stabilization and in Situ Pavement Recycling using Cement, 1-4 October, Salamanca, Spain, pp 479-492
- 19. Kavussi A (2001), "The wearing resistance of road aggregates and their impacts on the environment", XIth National S.I.I.V. (Societa Italiana Infrastrutture Viarie) Conference, 28-30 November, Verona, Italy
- 20. Kavussi A and Hashemian L (2002), "Soil stabilization with lime in Pars Airport", Proceedings, 1st Conference on Soil Stabilization Techniques, Amir Kabir University, 4-5 March, Tehran, Iran
- 21. Kavussi A and Hashemian L (2004), "Foam-bitumen as an altenative mix for bituminous surfacing", Proceedings, 5<sup>th</sup> Symposium on Pavement Surface Characteristics of Roads and Airports, 6-10 June, Toronto, Canada
- 22. Kavussi A (2004), "Analysis of rutting and roughness distresses in PCC pavements overlaid with asphalt concrete", Proceedings, 2<sup>nd</sup> Int. Congress, Societa Italiana Infrastrutture Viarie, University of Florence, Florence, Italy
- 23. Kavussi A and Hashemian L (2004), "The effect of lime and cement in foam bitumen mixes", Proceedings, RILEM 2004, Barcelona, Spain

- 24. Kavussi A (2005), "Road construction in Iran", International Seminar: System and Process Optimization as a Challenge for Engineers, 25-29 September, Tehran University
- 25. Kavussi A and Dibaj S M, (2007), "Cold in place recycling mix design: a case study in Tehran- Khavaran Highway", The 6th International Conference on Sustainable Aggregates, Asphalt Technology and Pavement Engineering, 21-21 February, Liverpool, UK
- 26. Kavussi A and Dibaj S M, (2007), "Evaluation of asphalt concrete mix containing different amounts of fillers", The 6th International Conference on Sustainable Aggregates, Asphalt Technology and Pavement Engineering, 21-21 February Liverpool, UK
- 27. Kavussi A and Babazadeh A (2008), "The application of Kenlayer computer program to study the visco-elastic behaviour of pavement layers", The 7th International Conference on Sustainable Aggregates, Asphalt Technology and Pavement Engineering, 20-21 February, Liverpool, UK
- 28. Kavussi A and Dibaj S M, (2008), "The role of lime and cement in cold in place recycling of flexible pavements", The 7th International Conference on Sustainable Aggregates, Asphalt Technology and Pavement Engineering, 20-21 February, Liverpool, UK
- 29. Kavussi A and Hashemian H (2008), "Cold in place recycling using lime in Shahroud-Sabsevar Highway in Iran", Transport Research Arena Europe, 21-24 April, Ljubljana, Slovenia
- 30. Kavussi A and Hashemian H (2008), "Runway construction using lime stabilization in subgrade and foam-cement strengthening of base materials in Ardebil, Iran" Proceedings, 10th International Conference on Application of Advanced Technologies in Transportation, 27-30 May, Athens, Greece
- 31. Kavussi A and Mohsenzadegan H (2008), "Adverse effects of a penetration grade bitumen used as tack coating binder in Tehran\_Qom Freeway geotextile reinforced overlay", 1<sup>st</sup> International Bitumen Conference, 18-19 October, Tehran, Iran
- 32. Kavussi A and Rafie K (2008), "The application of PFWD in determining resilient modulus of pavement layers", 4<sup>th</sup> Conference on Asphalt Mixes, Ministry of Roads and Transportation, 11-12 November, Tehran, Iran
- 33. Kavussi A and Rafiei (2009), "A quality control method of pavement layers based on data obtained from PFWD", Sixth Int. Conf. on Maintenance and Rehabilitation of...
- 34. Kavussi A and Sohrabi E (2009), "Characterization of parameters affecting deformation resistance of bituminous mixes", 8<sup>th</sup> International Conference on Sustainable Aggregates, Asphalt Technology and Pavement Engineering, 18-19 February, Liverpool, UK
- 35. Kavussi A and Nekouee A S (2010), "Investigation of Use of Surface Treatments in Iran Roads", 9<sup>th</sup> International Conference on Sustainable Aggregates, Asphalt

- Technology and Pavement Engineering, 17-18 February, Liverpool, UK
- 36. Kavussi, A, Soudagari J and Mollahosseini Sabbagh H (2010)., "An intelligent drainage system to prevent pavement damage in low laying land A case study in Vavan Bypass near Tehran, 3<sup>rd</sup> International Symposium on Infrastructure Engineering in Developing Countries (IEDC-2010), 1-3 July, Karachi, Pakistan
- 37. Kavussi A, Ahadi M R, Jahanian H P and Nekouee A S (2010), "Economic evaluation of thin HMA overlay, compared with surface treatments in Iran, 1<sup>st</sup> MESAT Technical Conference, In coordination with the American University of Beirut, 5-8 July, Beirut, Lebanon
- 38. Mollahosseini Sabbagh H, Kavussi A and Orugzadeh N (2011)., "Properties of recycled glass bituminous mixes from wastes in Tehran", 5th International Conference: Bituminous Mixtures and Pavements, 1-3 June, Thessaloniki, Greece
- 39. Kavussi A, Hashemian L. and Sattarpour S (2011)., "The effects of anti-stripping agents in reducing moisture susceptibility of foam-warm mixes", 5th International Conference: Bituminous Mixtures and Pavements, 1-3 June, Thessaloniki, Greece
- 40. Kavussi A, Sanij Khani H and Nekuei A S (2012), "The optimum aggregates skeleton to resist rutting in Stone Mastic Asphalt Mixes", LJMU 11th International Conference on Sustainable Construction Materials and Technology in Asphalt Pavement Engineering and Highway Maintenance, 15-16 February, Liverpool, UK
- 41. Kavussi A (2012), "Laboratory investigation of stiffness of hot mix asphalt containing reclaimed asphalt materials", 5th International Congress, SIIV MMXII, 29-31 October Rome, Italy
- 42. Sabbagh Mollahosseini H, Hayati P and Kavussi A (2012), "Evaluation of hydrated lime effects on asphalt mixture durability against moisture: a case study in Iran", Paper A5EE-437, 5th Eurasphalt & Eurobitume Congress, 13-15th June, Istanbul, Turkey
- 43. Tabarestani A Z, Kavussi A and Soha M D (2012), "A study of the role of aggregate properties on wearing resistance of traffic paints", 91st Annual Meeting of Transportation Research Board, Washington DC, USA
- 44. Kavussi A, Jalili Qazizade M, Sheikhi O and Solatifar N (2013), "A Study of Full Depth Reclamation (FDR) Using Foam Bitumen in Mashhad–Shandiz Highway in Iran", 2<sup>nd</sup> MESAT Conference, American University of Sharjah, 5-7 Febraury, Sharjah, UAE
- 45. Kavussi A, Qorbani M, Khodaei A and Haghshenas H F (2013), "Quantification of parameters affecting moisture resistance of warm mix asphalt using response surface methodology", IJPC-International Journal of Pavements Conference, Sao Paulo, Brazil
- 46. Ale Mohammadi M, Aghasoltan A and Kavussi A (2014), "An optimum grading model to improve the rut resistance of stone mastic asphalt", 93<sup>rd</sup> Annual Meeting, Transportation Research Board, Washington DC, USA
- 47. Hashemian L and Kavussi A (2014), "Moisture susceptibility and rutting potential of warm mix asphalt produced using foaming nozzle technology", Transportation

- Research Arena, 5<sup>th</sup> Conference
- 48. Kavussi A and Barghabani P (2014), "The Influence of Nano Materials on Moisture Resistance of Asphalt Mixes", IMS/7 Conference on Advances in Engineering Materials IMS College of Engineering American University of Sharjah, UAE, March 18-20
- 49. Kavussi A and Azarnia M (2015), "Controlling Stiffening Effects of Sulfur in Asphalt Mixes using Polymers and CRM binders", 3<sup>rd</sup> MESAT Conference, American University of Dubai, 6-8 April, Dubai, UAE
- 50. Kavussi A, Solatifar N, and Jalili Qazizade M (2017), "Determination of In-Situ Asphalt Dynamic Modulus Master Curves in Hot Climate Areas", LJMU 16th Annual International Conference on Asphalt Pavement Engineering and Infrastructures, 22-23 Febraury, Liverpool, UK
- 51. Kavussi A., Jahantighi M. and Bakhtiari J (2018)., "Investigation of the Effects of Additives on Moisture Susceptibility of Asphalt Mixes Containing Sulfur-Polymer, LJMU Annual International Conference on: Asphalt, Pavement Engineering and Infrastructure, 22-23 February, Liverpool, UK
- 52. Darash R, Kavussi A and Bideshki M R (2018)., "Road traffic noise as affected by tire traffic and the role of pavement surfacing in reducing that", 2<sup>nd</sup> International Congress on World Contemporary in Civil Engineering, Architecture and Urban Development, 4-6 March, Dubai, UAE

### VIII. PROFESSIONAL EXPERIENCES

- 1. Supervising Engineer, Iranian International Engineering Co. (IRITEC), Iran (1981-1985)
- 2. Professor, Highway Eng. Group, Department of Civil Eng., Tarbiat Modares University (from 1988)
- 3. Part time consultant to Wirtgen GmbH-Wirtgen Qeshm

# IX. TITLES OF RESEARCH PROJECTS COMPLETED

- 1. Climatological zoning of Iran for pavement design purposes (1990)
- 2. A maintenance guide for paved roads (1992)
- 3. Pavement design methods for low volume roads (1993)
- 4. Pavement rehabilitation in rural roads (1995)
- 5. Asphalt surfacing mixes for low volume roads (1998)
- 6. Characterization of bitumens produced in Iran for SHRP specification (2000)
- 7. Methods for restoring surfaces damaged by utility cuts (2002)
- 8. Pavement deterioration analysis in Iran (2004)

- 9. Framework for pavement management system of the main roads in Iran (2005)
- 10. Specification draft for surface treatments suitable for road conditions in Iran (2006)
- 11. An investigation into early deterioration of bituminous pavements in Iran, 2007
- 12. Evaluation of the geotextile reinforced pavements in Tehran province (2008)
- 13. Moisture resistance of asphalt mixes containing aggregates from Tehran provinces (2008)
- 14. Mixing design of large stone asphalt mixes (2009)
- 15. Mixture design of asphalt mixes containing large size aggregates, 2011
- 16. A Proposed QC/QA method for quality control of asphalt pavements (2012)
- 17. Role of hydrated lime in improving stripping resistance of siliceous aggregates, 2013
- 18. Application of foam asphalt in designing WMA mixes (2013)
- 19. Mixing design of sulfur-polymer mixes to be used in Yazd Province (2014)
- 20. Application of sulfur-polymer and CRM into asphalt mixes (2015)
- 21. Road pavement stabilization in Sistan-Baluchestan Province using locally available materials (2017)

### X-POSTGRADUATE THESIS SUPERVISED

- a. Seventy MSc dissertations/ thesis
- b. Six Phd thesis

#### XI. BOOKS WRITTEN

- 1. Advanced pavement design methods, 1st Edition, Published by International University of Iran, Ghazvin, Iran (1993)
- 2. Road engineering and design, Published by Azad University, Tehran, Iran (1999)
- 3. Advanced pavement design methods, 2nd Edition, Published by International University of Iran, Ghazvin, Iran (2006)

#### XII. COURSES TAUGHT

- 1. Pavement Materials
- 2. Pavement Design
- 3. Asphalt Technology
- 4. Pavement Maintenance and Management
- 5. Airport Pavement Engineering

# XIII. AWARDS

- 1. Argent Award for the best paper published in year 1990, Journal of the Institute of Asphalt Technology, UK
- 2. Distinguished researcher in academic years 2005-2006 and 2007-2008,

2015-2016, Tarbiat Modares University