

CURRICULUM VITAE

PERSONAL RECORD

Name : Dr. Meor Othman bin Hamzah
 Employer : Universiti Sains Malaysia
 Citizenship : Malaysia
 Present Position : Professor
 Field of Specialisation : Asphalt Technology

EDUCATION

<u>College/University</u>	<u>Qualification</u>	<u>Date</u>
Hastings College, UK	GCE 'A' Levels	1979
Aston University, UK	Bachelor of Science (Civil Engineering)	1982
Strathclyde University, UK	Masters of Science (Highway & Traffic Engineering)	1984
Leeds University, UK	Doctor of Philosophy	1995

WORKING EXPERIENCE

<u>Post</u>	<u>Organisation/Department</u>	<u>Date</u>
Lecturer	School of Housing, Building and Planning, USM	1984 - 1990
Lecturer	School of Civil Engineering, USM	1990 - 1995
Deputy Dean II Program Chairman/Assoc. Professor	School of Civil Engineering, USM	1996 – 2000
Assoc. Professor	School of Civil Engineering, USM	2000 – 2005
Professor	School of Civil Engineering, USM	2005 – 2008
Professor	School of Civil Engineering, USM	2008 to date

RECENT SUPERVISION OF POSTGRADUATE STUDENTS

NO	STUDENT	STATU S	TITLE	GRADUATIO N
1	Ratnasamy Muniandy	PhD	Enhancing Fatigue Failure Mechanism of Stone Matrix Asphalt by Using A Newly Developed Cellulose Oil Palm Fiber	2005
2	Mohd. Mohktar Samad	MSc	Engineering Properties and Performance of Porous Asphalt Incorporating DAMA	2006
3	Muhammad Akram bin Adnan	PhD	Development Of Entrance Ramp Merging Density Model Based On Malaysian Urban Expressway Traffic Condition	2007

4	Abdullahi Mohamad	Ali	PhD	Physical and Mechanical Properties of Asphaltic Concrete Mixes	2007
5	Hardiman M. Yatim		PhD	Characterisation and Clogging Behaviour of Double Layer Porous Asphalt	2007
6	Ramadansyahputra Jaya		MSc	Effect of Aggregate Shape on the Engineering Properties of Asphaltic Concrete	2008
7	Teoh Cherh Yi		MSc	Performance Evaluation of Steel Slag as Substitute for Natural Aggregates in Dense and Porous Mixtures	2008
8	Che Norazman Wan	Che	MSc	Short Term and Long Term Ageing Behaviour of Porous Mixtures	2009

RESEARCH PROJECTS

<u>Topic</u>	<u>Sponsorship</u>	<u>Date</u>
Technology Transfer: Problems and Desirable Future Directions	Honda Motor Company, Japan	1988
Traffic Noise Prediction of Urban Roads	USM Short Term Grant	1990
The Performance of Asphaltic Concrete Wearing Course Using a Mixture of Limestone and Granite Aggregates for High Skid Resistance Pavement	IRPA Short Term Grant	1999
Malaysian Highway Capacity Study – Phase II	Research Contract from HPU Malaysian Ministry of Works	1999 – 2005
Application of Theory of Dry Aggregate Packing to Produce Durable Bituminous Mixes	USM Short Term Research Grant	2001 – 2002
Steel Slag Properties and Mix Design	RST Teknologi Sdn. Bhd.	2002
Performance of Porous Asphalt Incorporating the Drain Asphalt Modified Additive (DAMA)	Ecophalt (M) Sdn. Bhd.	2001 – 2003
High Performance Porous Mixtures as Alternative Materials for Road Pavement Wearing Course	Intensified Research in Priority Areas (IRPA) Long Term Research Grant	2002 – 2006
Evaluation of New Binders in Porous Asphalt	Shell Hong Kong Ltd	2003
Research on Semi-Flexible Pavement with Al-Fateh University, Tripoli, Libya	Department of Civil Engineering, al-Fateh University, Tripoli, Libya	2005
Effect of Aggregate Shape on Asphalt Materials Properties	University Sains Malaysia	2006 – 2008
Conformity of Asphalt Mixtures Incorporating Sasobit to Malaysian Public Works Department Specifications	Universiti Sains Malaysia	2008-2010
Rehabilitation of AlGarabolli-Misuratah Coastal Road, Libya	Nurol Insaat Ve Ticaret A.S., Turkey	2008-2009
Characterisation of Abrasion Loss, Clogging Behaviour and Binder Creep to Enhance Properties of Porous Asphalt	eScience Fund, MOSTI	2008-2010
Fundamental Properties And Evaluation Of Asphalt Mixes Incorporating Reclaimed Asphalt Pavement (RAP)	USM Research University Grant	2009-2012

SELECTED PUBLICATIONS

(a) Selected Journal/Articles/Books/Translation

- i. Cabrera J.G. and Hamzah M.O., (1996), "Aggregate Grading Design for Porous Asphalt", In *Performance and Durability of Bituminous Materials*, E&FN Spon (An Imprint of Chapman and Hall), London, pp. 10-22
- ii. Cabrera and M.O Hamzah, (1997), "Properties of Porous Asphalt", AEDIFICATIO Publishers, Zurich, Switzerland, pp. 501 to 515.
- iii. Meor Othman Hamzah, (1997), "Bitumen Content Determination for Porous Asphalt", Journal of the Road Engineering Association of Asia and Australasia, pp. 2 to 7
- iv. M.O. Hamzah and J.G. Cabrera (1999), "Fatigue Behaviour of Porous Asphalt Mixes", AEDIFICATIO Publishers, Zurich, Switzerland, pp. 255 to 268.
- v. Meor Othman Hamzah and Hardiman, (2005), 'Characterization of the Clogging Behaviour of Double Layer Porous Asphalt', Journal of the Eastern Asia Society for Transportation Science (EASTS), September 2005
- vi. Meor Othman Hamzah and Hardiman M. Yatim, (2007), Resistance to Overcompaction of Single Layer and Double Layer Porous Asphalt, Journal of the Eastern Asia Society for Transportation Science (EASTS), Japan, Volume 7, September 2007, online ISSN 1881-1124
- vii. Abdulahi, Meor Othman Hamzah and Hanafi Ismail, (2009), Rheological Properties of Crumb Rubber-Modified Bitumen Containing Antioxidant, Arabian Journal for Science and Engineering
- viii. Meor Othman Hamzah, 'Jarak Penglihatan (*Sight Distance*)', Ensiklopedia Sains dan Teknologi, Dewan Bahasa dan Pustaka, September 2000
- ix. Meor Othman Hamzah, 'Bahu Jalan (*Road Shoulder*)', Ensiklopedia Sains dan Teknologi, Dewan Bahasa dan Pustaka, September 2000
- x. Ismail, H., Azahari, B., Ab. Ghani A.N., Ahmad, F. and Meor Othman Hamzah, (2004), Recycling of Rubber Waste, Research at Universiti Sains Malaysia, Vol. 3: Environmental Management and Engineering, Special Publications Series, Penerbit USM, Pulau Pinang
- xi. Hamzah, M.O., Mohamed, A.A. and Ismail, I., (2006), Laboratory Investigation of the Properties of a Newly Developed Crumb Rubber Modified (CRII) Asphalt Mixtures, Emirates Journal for Engineering Research 11(2) 67-72 (2006)
- xii. Meor Othman Hamzah, (1989), 'Rekabentuk Geometri Jalan dan Lebuhraya (*Geometric Design of Roads and Highways*)' Universiti Sains Malaysia Publisher, Third Imprint, 275 pages.
- xiii. Mohd. Rehan, Meor Othman and Asri, (1991), 'Pengenalan Pembinaan Jalan Raya Berbitumen (*Introduction to Bituminous Road Construction*)', Dewan Bahasa dan Pustaka, 1st Edition, Kuala Lumpur, 260 pages.
- xiv. Meor Othman, Asri and Mohd. Rehan, (1992), 'Reka Bentuk Jalan untuk Jurutera (*Road Design for Engineers*)', Dewan Bahasa dan Pustaka, 1st Edition, Kuala Lumpur, 303 pages.
- xv. Asri, Mohd. Rehan and Meor Othman, (1990), 'Pengenalan Sistem Kawalan Lalu Lintas Berlampu Isyarat (*Introduction to Signalised Traffic Control*)', Dewan Bahasa dan Pustaka, 1st Edition, Kuala Lumpur, 121 pages.
- xvi. Meor Othman Hamzah and Mahyuddin Ramli, (1992), 'Asas Mekanik Tanah (*Fundamentals of Soil Mechanics*)', Universiti Sains Malaysia Publisher, 254 pages.
- xvii. Meor Othman Hamzah, (1989) 'Pencapaian Sarjana Islam dalam Bidang Kejuruteraan' in Chapter 10 Beberapa Aspek Tamadun Islam (*Achievements of Islamic Scholars in Engineering in Chapter 10 of book entitled Aspects of Islamic Civilisation*), Pustaka Aman Press, 1st Edition, page 176 – 203.
- xviii. R.J. Salter, 'Reka Bentuk dan Pembinaan Lebuhraya (*Highway Design and Construction*)', Universiti Sains Malaysia Publisher, 1994. Translated by Meor Othman Hamzah, Majdi Mohamad and Mohd. Hashim Daud, 300 pages.

- xix. B.H.C. Sutton, 'Penyelesaian Masalah dalam Mekanik Tanah (*Solution to Problems in Soil Mechanics*)', Universiti Sains Malaysia Publisher, 1995. Translated by Mahyuddin Ramli and Meor Othman Hamzah.
- xx. Meor Othman Hamzah, Sanusi S. Ahamad, Marliana Azura Ahmad Puzi and Sharifah Rosfashida Syed Abdul Latif, (2006), 'Highway and Traffic Engineering' Modul for Open University Malaysia, Kuala Lumpur

(b) Selected Consultancy and Technical Reports

- i. Meor Othman and Madzlan Napiiah, 'Asphaltic Concrete Overlay for Resurfacing Roads in Ipoh City Centre', Highway Materials Consultant to V.Chelliah & Sons Construction and Ipoh City Council, 1998
- ii. Meor Othman Hamzah, Madzlan Napiiah, Ahmad Farhan dan Wan Hashim, 'Interchange Capacity Assessment and Traffic Impact Study for Bandar Meru Raya', Highway and Traffic Engineering Consultant to PCB Development Sdn. Bhd., Ipoh, Perak, August 2000
- iii. School of Civil Engineering, 'Civil Engineering Laboratory Development at Universiti Teknologi Petronas – Final Report', Laboratory and Academic Consultant to Universiti Teknologi Petronas, April 1999
- iv. School of Civil Engineering USM, 'University of Technology Petronas A Proposal for the Syllabus of the Civil Engineering Program at Universiti Teknologi Petronas', Academic Consultant to Universiti Teknologi Petronas, November 2000
- v. Meor Othman and Wan Hashim, 'Accessibility and Traffic Safety Studies for the Proposed Residential Development on Lots 696, 700 and 801, Mukim 11, Seberang Perai Tengah, Highway and Traffic Consultant for Ocean Mix Sdn. Bhd., August 2001
- vi. Meor Othman Hamzah, Ahmad Farhan, Wan Hashim, 'Internal Traffic Impact Assessment for the Proposed Residential and Commercial Development at Menglembu', Perak, Highway and Traffic Engineering Consultant for Realstate Group Sdn. Bhd.
- vii. Wan Hashim, Meor Othman and Ahmad Farhan, 'Traffic Study for Medan Kidd, Ipoh, Perak', Highway and Traffic Engineering Consultant for Majlis Bandaraya Ipoh
- viii. Meor Othman Hamzah, Wan Hashim Wan Ibrahim, 'Junction Configuration and Safety for the Proposed Sri Awona Development Adjacent to the Sungai Petani Eastern Bypass, Sungai Petani, Kedah', Highway and Traffic Engineering Consultant for Sri Awona Sdn. Bhd
- ix. Meor Othman Hamzah, 'Bituminous Mixture Properties and Quality Assurance for the IMC Asphalt Premix Plant at Batu Gajah, Perak Darul Ridzuan', Highway Materials Consultant to IMC Asphalt Premix Sdn. Bhd., 2003
- x. Meor Othman Hamzah, Wan Hashim Wan Ibrahim, Ahmad Farhan Sadullah, Shafida Azwina, Leong Lee Wen, "Kajian Lalu Lintas untuk Cadangan Projek Pemajuan Bandar Baru Sungai Dua di atas Lot PT28 dan 29, Mukim 16, Seberang Perai Utara, Pulau Pinang", Highway and Traffic Engineering Consultant for Penang Rural Development Authority (PERDA), 2003
- xi. Meor Othman Hamzah, Wan Hashim Wan Ibrahim, Shafida Azwina, "Kajian Impak Lalu Lintas untuk Cadangan Memajukan Skim Perniagaan di Jalan Kamunting-Selama, Kamunting, Perak Darul Ridzuan", Highway and Traffic Engineering Consultant for Kamalbina United Corporation Sdn. Bhd., August 2003
- xii. Highway and Traffic Engineering Group, Universiti Sains Malaysia "Planning of Bus Terminal Location for Bukit Mertajam", Highway and Traffic Engineering Consultant for Majlis Perbandaran Seberang Perai, December 2003
- xiii. Meor Othman Hamzah, (2006), Traffic Study For The Proposed Development On Lots 218, 219, 228 And 1697, Mukim Pekula, Kuala Muda District, Highway and Traffic Engineering Consultant for Rich Harvest Development Sdn. Bhd, April 2006
- xiv. Meor Othman Hamzah, (2005), Rehabilitation Of Runway at Penang Interational Airport, (Plant Trial) Laboratory Test Results, Asphalt Consultant for SM Pelangi Sdn. Bhd. March 2005

- xv. Meor Othman Hamzah et. al. (2006) North-South Expressway (PLUS) Proposed Kuala Lumpur- Penang Through Traffic Study, Highway and Traffic Engineering Consultant for PLUS/HMS Perunding Sdn. Bhd., May 2006
- xvi. Meor Othman Hamzah, Jamil Jusoh, Shafida Azwina, Leong Lee Vien, Wan Hashim, Ahmad Farhan, (2006), Laporan Akhir (Kajian Semula) Kajian Sirkulasi Dalaman dan Laluan Masuk ke Bandar Perda, Bukit Mertajam, Seberang Perai, Highway and Traffic Engineering Consultant for Aseania Development Sdn. Bhd. Ogos 2006.
- xvii. Meor Othman Hamzah And Shafida Azwina Mohd Shafie, Kajian Impak Lalu Lintas Untuk Cadangan Memajukan Skim Perumahan Di Atas Lot 542, 591 Dan 1867, Mukim 7 Bukit Panchor, Nibong Tebal, Seberang Perai Selatan, Highway and Traffic Engineering Consultant to Langkah Mesra Sdn. Bhd., September 2006.
- xviii. Meor Othman Hamzah and Shafida Azwina, (2006), Traffic Volume Fluctuation Along Jalan Pasir Puteh In The Vicinity Of Station 18 Development, Ipoh, Perak Darul Ridzuan, Highway and Traffic Engineering Consultant to Keris Properties Sdn. Bhd., October 2006
- xix. Meor Othman Hamzah and Shafida Azwina, (2006), Traffic Volume Fluctuation Along Jalan Sungai Siput In The Vicinity Of Sungai Sipt Town, Sungai Siput, Perak Darul Ridzuan, Highway and Traffic Engineering Consultant to Keris Properties Sdn. Bhd., November 2006
- xx. Hassim Mat, Meor Othman Hamzah, Shafida Azwina, Traffic Study For The Proposed Re-Development Of Swettenham Jetty, Report prepared for submission to MPPP, January 2007
- xxi. Meor Othman Hamzah, Hassim Mat, Shafida Azwina, Leng Lee Vien, Traffic Impact Assesment For The Proposed Remaining Development At Bandar Tasek Mutiara Simpang Ampat, Seberang Perai Selatan, Highway and Traffic Engineering Consultant to Bandar Tasek Mutiara Development Sdn. Bhd., Simpang Ampat, Penang, February 2007

(c) Malaysian National Standards and Guidelines

- i. Highway Planning Unit, Malaysia, (2002) Reports and manuals related to Malaysian Trip Generation Manual 2002, Highway Planning Unit
- ii. Road Engineering Association of Malaysia Technical Committee 7, (2002) 'Guidelines on Traffic Control and Management Devices Part 4: Pavement Marking and Delineation', Road Engineering Association of Malaysia
- iii. SIRIM, (2004), Malaysian Standard 00D003R0 Specification for Raised Pavement Markers (RPM)
- iv. Highway Planning Unit (2005) Reports and manuals related to Malaysian Trip Generation Manual 2005, Highway Planning Unit
- v. Highway Planning Unit, Malaysia, (2006), Reports and manuals related to the Highway Capacity Manual, Malaysia, Highway Planning Unit

(d) Research Reports

- i. Highway Capacity Manual – Malaysia, A national manual submitted to the Highway Planning Unit, Malaysian Ministry of Works, 2006
- ii. Malaysian Highway Capacity Study Stage I (Urban and Suburban), Final report submitted to the Highway Planning unit, Malaysian Ministry of Works, January 2006
- iii. Meor Othman Hamzah, (2005), Application of the Theory of Dry Aggregate Packing to Produce More Durable Bituminous Mixes, Research Report submitted to the Universiti Sains Malaysia.
- iv. Various research reports submitted to the Malaysian Ministry of Science, Technology and Innovation for the IRPA Research Project High Performance Porous Mixtures as Alternative Materials for Road Pavement Wearing Course
- v. Meor Othman Hamzah (2004), "Fuelsafe Mix Evaluation for Bangkok International Airport", Research Report prepared for Shell Singapore Ltd.
- vi. Meor Othman Hamzah, 'Evaluation of New Binders in Porous Asphalt', Research report prepared for Shell Hong Kong Ltd., August 2003.

- vii. Meor Othman Hamzah, 'Steel Slag Properties and Mix Design', Research report prepared for RST Teknologi Sdn. Bhd.
- viii. Meor Othman Hamzah, Ahmad Kamil, Abuhan dan Ahmad Zainal Abidin, (1988), 'Technology Transfer - Problems and Desirable Future Directions', 10th International Association of Traffic and Safety Sciences Forum, Tokyo, Japan.

SELECTED PAPERS PRESENTED AT CONFERENCES/SEMINARS/WORKSHOPS

(a) Conference

- i. Cabrera J.G. and Hamzah M.O. (1996), 'Overcompaction Behaviour of Porous Asphalt', Proceedings 1st Eurasphalt and Eurobitume Congress, Strasbourg, France
- ii. Meor Othman Hamzah and Madzlan Napiah (1996), 'Mix Design for Porous Asphalt', Proceedings of the Second Malaysian Road Conference, Kuala Lumpur, pp. 263 - 271
- iii. Meor Othman Hamzah dan Madzlan Napiah, "Resistance to Permanent Deformation of Porous Asphalt", 4th Malaysian Road Conference, Kuala Lumpur, November 2000
- iv. Ahmad Farhan, Wan Hashim, Meor Othman and Tai Tuck Leong, "Draft Manual for Traffic Impact Assessment", Workshop 4th Malaysian Road Conference, Kuala Lumpur, November 2000
- v. Meor Othman Hamzah and Justin Baba, "Liputan Penggredan Agregat dan Ciri Asfalt Berliang", Persidangan Kebangsaan AWAM2001, 2002
- vi. Meor Othman Hamzah and Abu Harith Shamsuddin, "Development of a Malaysian Standard on Raised Pavement Markers, 5th Malaysian Road Conference, Kuala Lumpur, October 2002
- vii. See Soo Loi and Meor Othman Hamzah, "Processed Steel Slag for the Road Construction Industry", 5th Malaysian Road Conference, Kuala Lumpur, October 2002
- viii. REAM TC7, 'Pavement Marking and Delineation: A Compilation of Current Practice in Malaysia", 5th Malaysian Road Conference, Kuala Lumpur, October 2002
- ix. Meor Othman Hamzah, Mohd. Mohhtar Samat and Kim Hion-Joon, "Application of Binder Drainage Test for a Porous Mixture", Malaysian Universities Transport Research Forum Conference 2002, University Malaya, October 2002
- x. Meor Othman Hamzah and Abu Harith Shamsuddin, "Product Quality, Field Application and Enhancement of the Proposed Malaysian Standard on Raised Pavement Markers, 1st International Conference on Bridge and Road Pavements, Tripoli, Libya, June 2003.
- xi. Muniandy, R., Selim, A. and Hamzah, M.O. (2003), "Development of Fatigue Prediction Model for Stone Mastic Asphalt", MAIREPAV03, Third International Symposium on Maintenance and Rehabilitation of Pavements and Technological Control, July 7-10, 2003, Minho University, Guimarães, Portugal.
- xii. Meor Othman Hamzah, (2003), "Principles of Junction Design", Paper presented to a two-day workshop organised by the Institution of Engineers Malaysia, IEM Building Petaling Jaya, 25-26 September 2003.
- xiii. Meor Othman Hamzah, Samat, M.M., Joon, K.H. and Muniandy, R. (2004), "Modification of Aggregate Grading for Porous Asphalt", 3rd Eurasphalt and Eurobitume Congress, Vienna, Austria
- xiv. Mohamed, A.A., Muniandy, R. and Meor Othman Hamzah, (2004), "Texture Depth for Stone Mastic Asphalt", 3rd Eurasphalt and Eurobitume Congress, Vienna, Austria
- xv. Meor Othman Hamzah, Tee Chin Alk, Abdullahi Ali Mohammed, Ibrahim Kamarudin, (2004), "Prestasi Konkrit Campuran Getah Dengan Bahan Tambah", Persidangan Kebangsaan AWAM2004, Pulau Pinang
- xvi. Meor Othman Hamzah dan Hardiman (2004), "Effects of Maximum Aggregate Size on Porous Asphalt Properties and a Proposal for Double Layer Porous Asphalt to Resist Clogging", 6th Malaysian Road Conference, Kuala Lumpur

- xvii. Meor Othman Hamzah and A.A. Mohamed, (2005), 'Evaluation of Short and Long Term Ageing of Bituminous Mixtures Incorporating a New Bitumen Modifier', International Road Federation World Meeting and Conference, Bangkok, Thailand.
- xviii. Mohamed, A.A., Hamzah, M.O. and Ismail, H. (2005), Physical and Mechanical Properties of Crumb Rubber Modified Bitumen, Proceedings of Brunei International Conference on Engineering and Technology 2005 (BICET 2005), Brunei Darus Salam, August 2005, pp. 289-297
- xix. Hamzah, M.O. (2006) Research Undertakings In Double Layer Porous Asphalt At The Universiti Sains Malaysia, Presentation to the Japan International Cooperation Agency (JICA) 6th Fieldwise Seminar, AUN/SEED-Net, Bangkok, October 2006
- xx. Hamzah, M.O., Ramadhansyah P.J, Khairun Azizi M.A., (2006), Effects of Temperature and Binder Types on Resilient Modulus of Asphaltic Concrete, National Seminar on Civil Engineering Research (SEPKA), Universiti Teknologi Malaysia, Johor, Disember 2006
- xxi. Meor Othman Hamzah, Abdullah Ali Mohamed, Mohamed Khalifah Ali, (2006), A Proposed Quality Control Procedure For Producing Hot Mix Asphalt, Malaysian Universities Transport Research Forum Conference 2006, Universiti Kebangsaan Malaysia, Bangi, Disember 2006
- xxii. Akram, Wan Hashim Wan Ibrahim, Meor Othman hamzah, (2006), Operational Performance Measures at Urban Expressway Entrance Ramp: A Case Study on Federal Highway, Malaysian Universities Transport Research Forum Conference 2006, Universiti Kebangsaan Malaysia, Bangi, Disember 2006
- xxiii. Hamzah M.O, Ramadhansyah P.J, Khairun Azizi M.A, Mahathir A, Raphuel Saravana Parakash Babu F. X (2007). Effects of Aggregate Shape and Binder Types on the Marshall Properties of Asphaltic Concrete. National Seminar on Materials, Mineral Resources and Polymers (MAMIP 2007), Universiti Sains Malaysia, April 2007
- xxiv. Meor Othman Hamzah and Norlia Ab Hamid, (2007), 'Ductility Behaviour of Rubberised and Polymer Modified Bitumen' (In Malay), Civil Engineering AWAM'07 Conference, Langkawi, Kedah, Mei 2007
- xxv. Meor Othman Hamzah (2007), Double Layer Porous Asphalt In the Netherlands and Field Monitoring In Belgium, Proceedings Eastern Asia Society for Transportation Science (EASTS), Volume 6, September 2007
- xxvi. Hamzah M.O, Ramadhansyah P.J., and Khairun Azizi M.A., (2007), Improving Asphaltic Concrete For Pavement Wearing Courses By Incorporating Geometrically Cubical Aggregate Shape, Proceedings of the Malaysian Infrastructure Technology Conference INFRATECH2007, pp. 43-50
- xxvii. Ramadhansyah P.J., Hamzah M.O., Khairun Azizi M.A. (2007), Effects Of Geometrically Cubical Aggregate on the Indirect Tensile Strength Properties of Asphaltic Concrete, National Civil Engineering Conference (SEPKA2007), Johor Bahru.
- xxviii. Ramadhansyah P.J1, Hamzah M.O 2, Khairun Azizi M.A, (2008), Effects of Temperature and Binder Type on the Resilient Modulus of Asphaltic Concrete Incorporating Geometrically Cubical Aggregates Subjected to Ageing, International Seminar on Civil & Infrastructure Engineering 2008 (ISCIE '08), UiTM
- xxix. Meor O. Hamzah and Teoh C. Yi, (2008), Effects of Temperature on Resilient Modulus of Dense Asphalt Mixtures Incorporating Steel Slag Subjected to Short Term Oven Ageing, Proceedings SUTE 2008: "International Conference on Sustainable Urban Transport and Environment", Bangkok, Thailand (December 2008)

(b) Selected Papers Presented to National Short Course

- i. Meor Othman Hamzah, 'Strength, Durability and Surface Texture of Rigid Pavements', A Short Course on Concrete Durability, Assessment, Maintenance and Repair Techniques, School of Civil Engineering, USM Perak Branch Campus, 8-10 January 1996.

- ii. Meor Othman Hamzah, 'An Overview of Porous Asphalt' A Short Course on Asphalt Technology: Materials, Design and Innovations, School of Civil Engineering, USM Perak Branch Campus, 21-23 May 1996
- iii. Meor Othman Hamzah, 'Engineering Properties of Bituminous Mixes' A Short Course on Asphalt Technology: Materials, Design and Innovations, School of Civil Engineering, USM Perak Branch Campus, 21-23 May 1996
- iv. Meor Othman Hamzah (1996), 'Kaedah Binaan dan Penyelenggaraan Turapan Konkrit (*Method of Construction and Maintenance of Concrete Pavement*)', Kursus Pendek Penghasilan Konkrit Bermutu, School of Civil Engineering, USM Perak Branch Campus, 16-18 December 1996.
- v. Meor Othman Hamzah, "Case Example of Traffic Impact Assessment", Workshop for Traffic Impact Assessment Short Course, School of Civil Engineering , 1997
- vi. Meor Othman Hamzah, "Strength, Durability, Surface Texture and Porous Asphalt Application on Rigid Pavement" A Short Course on Concrete Durability, Assessment, Maintenance and Repair Techniques, School of Civil Engineering , 1997
- vii. Meor Othman Hamzah, Aggregates and Binders for Bituminous Mixtures, One-Day Course on Pavement Materials, Maintenance and Quality Control, Conducted for Belati Wangsa, 2002
- viii. Meor Othman Hamzah, "Engineering Properties, Construction, Performance and Maintenance of Concrete Pavements, 4th Short Course on Concrete Durability, Assessment, Maintenance and Repair Techniques, School of Civil Engineering USM, September 2003
- ix. Meor Othman Hamzah, "Fundamental Properties of Bitumen, Aggregates, Asphalt Mixtures and Quality Control, A Short Course Conducted for Aman Premix Plant Sdn. Bhd., Simpang Pulai, Perak, July 2004

ACADEMIC RECOGNITION AND LEADERSHIP

(a) Awards

1. Recipient of Tarmac Construction Award, United Kingdom for excellent academic achievements in civil engineering at the University of Aston in Birmingham, UK
2. Recipient of Academic Book Literary Award from the Persatuan Linguistik Malaysia (Malaysian Literary Society) for national contribution to an academic book entitled Geometric Design of Roads and Highways ((In Malay),, published by USM Publishers, 1991
3. Recipient of Excellent Service Award from Universiti Sains Malaysia 1997
4. Recipient of Best Paper Award, 5th Malaysian Road Conference, Kuala Lumpur, October 2002
5. Recipient of University Sains Malaysia Hall of Fame 2002, Publications Category, January 2003
6. Recipient of Excellent Service Award, Universiti Sains Malaysia 2004
7. Recipient of the Ministry of Science, Technology and Innovation award for a research attachment at the Section of Road and Railway Enngineering, Delft Technological University, the Netherlands under the supervision of Professor A.A.A. Molenaar, 2005
8. Selected to participate in the the Japan International Coperation Agency (JICA) 6th Fieldwise Seminar, AUN/SEED-Net, Bangkok, October 2006
9. Visiting Scholar, National Center for Asphalt Technology, Auburn University, Alabama, USA, March-July 2007
10. Recipient of Excellent Lecturer Award, USM Hall of Fame, 2009

(b) Assessor / Examiner

(i) Academic Assessor/External Examiner/ Member of Board of Studies

1. Moderator for final examination question semester January 2008 paper EBVT4104 Highway and Traffic Engineering, Open University Malaysia
2. Moderator for final examination question semester January 2007 paper EBVT4104 Highway and Traffic Engineering, Open University Malaysia
3. Moderator for final examination question semester September 2006 paper EBVT4104 Highway and Traffic Engineering, Open University Malaysia
4. Obtained accreditation for the following civil engineering distance education programs:
 - University Educational System (SPU) – 150 units
 - 3-Year Educational System (SPTT) – 126 units
 - 3-Year Educational System (SPTT)– 134 units

(ii) External Examiner for Thesis:

1. External Examiner to a Doctoral Degree Thesis entitled 'The Influence of Glass Fiber on Some of the Main Properties of Bituminous Mixes', Department of Civil Engineering, Universiti Malaya, August 2000.
2. External Examiner to a Master of Science Thesis entitled 'A Study on Joint Fillers and Interlocking of Concrete Block Pavements', (In Malay), Faculty of Civil Engineering, Universiti Teknologi Malaysia, August 2001.
3. External Examiner to a Master of Science Thesis entitled 'Effects of Moist and Dusty Aggregates on Surface Dressing Roads' (In Malay), Faculty of Civil Engineering, Universiti Teknologi Malaysia, January 2003
4. External examiner to a MSc Thesis Entitled: 'Application of Digital Image Processing Techniques to Evaluate Pavement Distress' (In Malay), Faculty of Civil Engineering, Universiti Teknologi Malaysia, August 2004
5. External Examiner to a Master of Science Thesis entitled: 'Effects of Rubberised Bitumen on Properties of Porous Mixes', Department of Civil Engineering, Engineering Faculty, University Malaya, November 2005
6. External examiner to a Doctoral Degree Thesis entitled 'Performance of Concrete Block Pavement on Sloped Road Section', Faculty of Civil Engineering, Universiti Teknologi Malaysia, 2006
7. External Examiner to a Master of Science Thesis entitled: 'Stripping Performance Of Hot Mix Asphalt (HMA) Using Polymers And Lime As Additives', Faculty of Civil Engineering, Universiti Teknologi MARA, January 2008
8. External examiner to a PhD Thesis Entitled: 'Engineering Properties and Structural Performnce of Rubberised Concrete Paving Blocks, Faculty of Civil Engineering, Universiti Teknologi Malaysia, 2008
9. External Examiner to a MSc thesis entitled Evaluation of a Newly Developed Rotary Compactor as a Laboratory Asphalt Compacting Device, Department of Civil Engineering, Faculty of Engineering, Universiti Putra Malaysia, January 2009

(iii) Internal Examiner for Thesis:

1. Internal Examiner to a Master of Science Thesis entitled 'Determining the Traffic Engineering Parameter for NETSIM Based on Malaysian Road Conditions', (In Malay), School of Civil Engineering, Universiti Sains Malaysia, 2002
2. Internal Examiner to a Master of Science Thesis entitled: 'Determination of the Relationship Between Speed and Flow for Arterial Roads in malaysia', (In Malay), School of Civil Engineering, Universiti Sains Malaysia, September 2003

3. Internal Examiner to a PhD Thesis Entitled: 'A Study on Saturation Flow Rates of Through Vehicles at Signalised Intersections Based on Malaysian Road Conditions' School of Civil Engineering, Universiti Sains Malaysia, June 2004
4. Internal Examiner to a Master of Science Thesis entitled: 'A Study on Speed-Flow Characteristics of an Arterial: Case Study of Butterworth, Penang, Malaysia', (In Malay), School of Civil Engineering, Universiti Sains Malaysia, August 2005
5. Internal examiner to a Master of Science Thesis entitled: 'Evaluating Signalised Intersection Capacity Based on Malaysian Road Conditions', School of Civil Engineering, Universiti Sains Malaysia, November 2006

(iv) External Assessor for Promotion:

1. External assessor to the proposed appointment of a Universiti Teknologi Malaysia academic staff to the post of Associate Professor, August 2007
2. External assessor to the proposed appointment of a Universiti Tun Hussein Onn academic staff, to the post of Associate Professor, October 2007

(v) Visiting Lecturer / Visiting Scientist / Visiting Professor

1. Visiting Researcher for a Malaysian Government Ministry of Science, Technology and Innovation Financial Award Research Attachment at Delft Technical University (Professor A.A.A. Molenaar) focussing on porous asphalt practices in the Netherlands, April – May 2005
2. Visiting Professor/Scholar, National Center for Asphalt Technology (Emeritus Professor Dr. Ray Brown), Auburn University, Alabama, USA, March-July 2007

(vi) Reviewing Articles in Academic Journals / Assessor of Working Papers / Reviewing Books

1. Appointed by School of Distance Learning USM to evaluate and comment on Civil Engineering Modul 2 Lessons 1 to 4 - Road Junction Capacity, School of Distance Learning, University Sains Malaysia, 1996
2. Appointed by School of Distance Learning USM to evaluate and comment on Civil Engineering Modul 3 Lessons 1 to 4 – Public Transport Operations and Traffic Management, School of Distance Learning, University Sains Malaysia, 1996
3. Appointed by the Encyclopedia Secretariat at Universiti Teknologi Malaysia to referee articles written based on the following keywords (In Malays) for the Malaysian Science and Technology Encyclopaedia to be published by Dewan Bahasa dan Pustaka:
 - ◆ Origin and Destination (25/8/97)
 - ◆ Public Transport (1/7/98)
 - ◆ Traffic Signals (24/3/99)
 - ◆ Speed Limit (24/3/99)
 - ◆ Road Capacity (14/4/99)
4. Refereed the following papers presented to the 2nd Conference of the Eastern Asia Society for Transportation Studies (EASTS) held at Seoul, Korea in October 1997:
 - ◆ Highway Safety Planning, Design and Operation – Problem and Possible Solutions in Developing Countries
 - ◆ Optimal Technologies of Road and Bridge Construction for Developing Rural Road Network of the Mekong Delta
 - ◆ Evaluation of Special Sign Boards on Expressways Based on Drivers Visual Behaviour Questionnaire Survey
 - ◆ Assessing Driveway Impact Using Microscopic Simulation Models

5. Refereed the following papers for the International Scientific Committee, Eastern Asia Society for Transportation Studies (EASTS) in March 1999:
 - ◆ The Application of GIS in CBD Parking Management
 - ◆ Repairing and Upgrading Project of Nguyen Van Troi-Bridge in Danag City, Vietnam
 - ◆ Predicting the Probability of Parking Vehicle Based on Dynamic Simulation
6. Refereed the following papers for the International Scientific Committee, Eastern Asia Society for Transportation Studies (EASTS) in April 2001:
 - ◆ Study of Road Rehabilitation Priority by Using SEPM and IRMS Modules and Provincial Proposal
 - ◆ Development of Testers for Measuring Skid Resistance and Texture of Paved Surfaces, and Their Application for Determination of the International Friction Index (IFI).
 - ◆ Joint Movement and Load Transfer Characteristics of Concrete Overlay.
7. Reviewed and commented the proposed Malaysian Draft Guide on Geometric Design of Roads which was presented to a workshop during the 4th Malaysian Road Conference, 2000. Comments submitted to the Chairman, Ir. Han Joke Kwang
8. Reviewed the following SIRIM Malaysian Standards (November 2001):
 - ◆ MS 124 (1996) Specification for Penetration Grade of Bitumen for Use in Pavement Construction (First Revision)
 - ◆ MS 572 (1996) Method of Test for Ductility of Bituminous Materials (First Revision)
 - ◆ MS 685 (1996) Method of Test for Specific Gravity and Density of Semi-Solid Bituminous Materials (First Revision)
9. Reviewed the following SIRIM Malaysian Standards (January 2003):
 - ◆ MS 782 (1997) Method of Test for Kinematic Viscosity of Bitumens (First Revision)
 - ◆ MS 783 (1997) Method of Test of Viscosity of Bitumens by Vacuum Capillary Viscometers (First Revision)
10. Refereed the following papers for EASTS Conference held at Fukuoka, Japan in October 2003:
 - ◆ Development of a Cyclic Water Vapour Test for Durability Assessment of Bituminous Mixtures for Pavement Material
 - ◆ Statistical Determination of Aggregate Distribution on Pavement Surface
 - ◆ Improved Sampling Method for Pavement Roughness Evaluation
 - ◆ Network-level Maintenance Planning Using Pavement Evaluation
11. Editing and finalising the proposed Malaysian Standards on Raised Pavement Markers taking into consideration the public comments, July 2003
12. Editing and finalising on REAM Manual on Traffic Control Devices – Part 4: Road Marking and Delineation, September 2003
13. Appointed by the Malaysian Open University to be the lead author to write the Module for undergraduate course EBVT4103 Highway and Traffic Engineering, February 2004
14. Refereed the following papers for EASTS Conference held at Bangkok, Thailand in September 2005:
 - ◆ Influence of Coarse Aggregate on the Strength of Asphalt Concrete
 - ◆ Road Cross Section Design in North Western China Grassland
 - ◆ Minimum Retroreflectivity for Pavement Markings by Drivers Static Response Test
 - ◆ Development of Integrated Highway Management System in Korea
 - ◆ Study on Bi-Level Planning Model & Algorithm Optimising Highway Network Layout
 - ◆ A Combined Algorithm Research and Application in Road Intersection Design
15. Reviewed and commented on the proposed Malaysian Specifications for Porous Asphalt, Detailed comments submitted to Cawangan Pakar, Malaysian Public Works Department, June 2005
16. External Assessor to a journal article entitled: 'Minyak Silinder Terpakai Sebagai Bahan Pengubahsuai Bagi Konkrit Asfalt Campuran Sejuk' (*Used Cylinder Oil as Modifier for Cold Asphaltic Concrete Mix*), Universiti Kebangsaan Malaysia Engineering Journal, February 2006
17. External assessor to a journal article entitled: 'Determination of Maximum In-Place Air Void for Impermeable Hot Mix Asphalt Pavements', Malaysian Journal of Civil Engineering, Universiti Teknologi Malaysia, June 2006

18. External Assessor to a journal article entitled: 'Kitar Semula Sejuk Setempat Turapan Jalan Raya' (*Cold-In-Place Recycling of Road Pavement*), Universiti Kebangsaan Malaysia Engineering Journal, November 2006
19. External assessor to a journal article entitled: 'Automated Pavement Imaging Program (APIP) for Pavement Cracks Classification and Quantification', Malaysian Journal of Civil Engineering, Universiti Teknologi Malaysia, January 2007
20. Internal assessor to the underneath conference papers to be presented to AWAM2007 Conference, Langkawi, May 2007:
 - ◆ The Suitability of Metamorphic Rock in Selangor and Perak as Unbound Aggregate Pavement Base
 - ◆ Properties of Crumb Rubber Concrete Paver With and Without Facing Layer
 - ◆ Characterisation of Malaysian Asphaltic Concrete Mixes for Use in Mechanistic Pavement Design
21. External assessor to a journal article entitled: 'Evaluation of Stone Mastic Asphalt (SMA) Slab Dimensions', Universiti Putra Malaysia Journal PERTANIK, August 2007
22. Appointed by University Publication Center, Universiti Teknologi MARA to edit academic book 'Basic Highway and Traffic Engineering', September 2007, 277 pages
23. External assessor to an international journal article entitled 'Determining Recommended IRI Limits for various Roadway Types in Iran', International Journal of Engineering, Web Site: <http://www.ije.ir>
24. External assessor to five papers for the International Journal of Pavement, USA (January 2008)
25. External assessor to an international journal article entitled 'Review of advances in grading systems for asphalt binders in hot-mix asphalt pavements', Maejo International Journal of Science and Technology, Thailand, (January 2008)
26. External assessor to an international journal article entitled 'Evaluating the Semi-Circular Bend Test for HMA Mixtures', International Journal of Engineering, Web Site: <http://www.ije.ir>, March 2008
27. External assessor to an international journal article entitled 'Simulation of the Composite Pavement Interface by Discrete Elements Method', International Journal of Engineering, Web Site: <http://www.ije.ir>, March 2008
28. External assessor to three papers for the International Journal of Pavement, USA (January 2009)

(vii) Technical Assessor

1. Appointed by Seberang Perai City Council (MPSP) to evaluate traffic impact assessment reports submitted to MPSP by private consultants and to draft traffic impact assessment guidelines for the city council., 1997
2. Appointed by PB-TRSS Consultancy Firm to evaluate the suitability of a drainage and skid resistant asphalt for the Assam Jawa-Taman Rimba Templer Expressway, December 1997
3. Appointed by the Malaysian Ministry of Education to assess and advise the ministry on acquisition and costing of a highway engineering laboratory equipment, SS Speed JSS-ENO-01, to the Shah Alam and Kota Kinabalu Polytechnic, August 1999
4. External Technical Advisor to Ecophalt (M) Sdn. Bhd. for Porous Asphalt from Korea, August 2001
5. External Technical Advisor to Applied Agricultural Sdn. Bhd. on Agricultural Road Trial Project in Sabah, Malaysia, April 2001
6. Appointed as a member of an Independent Assessor by USM to review the geometric design of the proposed diamond interchange linking USM main campus and students' residential block, 2001
7. Appointed by the Rubber Research Institute of Malaysia – Consult Corporation for presentations/briefings on porous asphalt and road quality control, 2004 to the road industries including:
 - ◆ PLUS Expressways

- ◆ Economic Planning Unit
 - ◆ PROPEL
 - ◆ Duta-Ulu Kelang Toll Expressway Highway Concessionaire
8. Appointed as materials quality control evaluator for the Proposed Widening of the Existing Penang Bridge Low Level Viaduct from East Abutment to Pier 24E and from Pier 24W to Pier 69W by UEM Construction Sdn. Bhd., April 2006

(c) Member of a Panel Discussion / Forum

1. Appointed as a member to a Civil Engineering Program Expert Panel Workshop to develop elective course syllabus in Urban Engineering for Universiti Teknologi Petronas held at Putrajaya, 24-25 February 2000.
2. Appointed by the Road Engineering Association of Malaysia to prepare and submit a paper/guide on reducing road accidents to the National Safety Council, January 2004
3. Appointed by Seberang Perai City Council to deliver a presentation and discussion on the siting of a bus terminal for Bukit Mertajam to numerous interested parties including community representatives, January 2004
4. Member of the Scientific Committee, International Conference On Rehabilitation And Maintenance In Civil Engineering, Civil Engineering Dept. UNS Surakarta, Co-Organised by Ministry of Public Works Indonesia, Karlsruhe Institute of Technology, Indonesia Society of Building Maintenance and Chulalongkorn University

(d) Editorial Board

1. Member, Board of Reviewers, International Journal of Engineering
2. Member International Editorial Board , International Journal of Pavements, USA

(e) Keynote Speaker (Conference / Seminar / Symposium and other similar academic forums)

1. Invited to lecture on 'Noise Mitigation Asphalt Technology in the Netherlands' by Malaysian Infrastructure Technology Conference INFRATECH2007 Conference organized by the Malaysian Institution of Engineers and School of Housing, Building and Planning, Universiti Sains Malaysia, November 2007
2. Invited speaker to a Special Lecture delivered at the 'One Day Course on Asphalt Materials and Pavement Design' organized by the Malaysian Institution of Engineers, 19 December 2006
3. Presentation and dicussion on 'Porous Asphalt Research at the USM' to the Section of Road and Railway Engineering, Civil Engineering Faculty, TU Delft, the Netherlands on 19 May 2005.
4. Invited by the Japanese International Co-Operation Agency (JICA) to the JICA 6th Fieldwise Seminar, AUN/SEED-Net, held at Bangkok and delivered a presentation on 'Research Undertakings In Double Layer Porous Asphalt at The Universiti Sains Malaysia', on 6th October 2006.
5. Invited to deliver a lecture entitled: 'Historical Development, Mix Design and Clogging Behaviour of Double Layer Porous Asphalt' at the Center for Advanced Infrastructure Technology (CAIT), Civil Engineering Department, The University of Mississippi, USA, 15th May, 2007
6. Invited by the National Center for Asphalt Technology (NCAT) to deliver a presentation on 'Development of Double Layer Porous Asphalt to Resist Clogging and Mitigate Traffic Noise', NCAT, Auburn University, 25th July 2007.
7. Invited by the Transportation Engineering Program, School of Engineering and Technology, Asian Institute of Technology, Bangkok to deliver a lecture on The Developments of Silent Road and Quiet Pavements, 17th December 2007

8. Invited by Malaysian Institute of Transport, Universiti Teknologi MARA to deliver a lecture entitled 'Advanced Pavement Materials I and II' to a Professional Training Programme in Highway Engineering for Officers of the Ministry of Public Works, Afghanistan, held at Quality Hotel, Shah Alam, April 2008
9. Invited by the Road Engineering Association of Malaysia (REAM) to lecture on Porous Asphalt – Mix Design and Future Development to the Road Asset Management Seminar held at Cititel Hotel, Penang, 10th November 2008

SELECTED PROFESSIONAL INVOLVEMENT

<u>No.</u>	<u>Type of Service</u>	<u>Date</u>
i.	Member, Malaysian SIRIM Working Group to develop Malaysian Standards on Light Emitting Diode (LED) Enhanced Roadstuds	2003 – Now
ii.	Co-ordinator and presenter to A Short Course on Aggregates, Binders, Asphalt Mix Design, Production and Quality Control for Aman Premix Plant Sdn. Bhd.	2004
iii.	Co-ordinator and presenter to A One-Day Course on Pavement Materials, Maintenance and Quality Control for Belati Wangsa	2002
iv.	Member, Road Engineering Association of Malaysia Technical Committee Number 7 on Traffic Control and Management to setup Guidelines on Pavement Markings and Delineation	2001 – 2004
v.	Member, Malaysian SIRIM Working Group to develop Malaysian Standards on Raised Pavement Markers.	2000 – 2003
vi.	Member, Malaysian SIRIM Technical Committee to develop and review Malaysian Standards on Bitumen and Bituminous Products	2000 – Now
vii.	Delivering a talk entitled: "Porous Asphalt as Alternative Materials for Safe Roads" at the Malaysian Highway Authority (LLM) Headquarters	November 2001
viii.	Delivering a lecture entitled 'Distance Learning – USM Experience' organised by the Institution of Engineers Malaysia at IEM Building, Kuala Lumpur	1999
ix.	Member, Protem Committee of the Malaysian Association of Distance Education (MADE)	1999 - 2001
x.	Member Working Committee on Mix Design, Road Engineering Association of Malaysia (REAM)	1998 - 2000
xi.	Member Transportation Science Society of Malaysia	1998 - Now
xii.	Delivering a lecturer entitled 'Getting a Degree in Engineering Through Distance Education', in conjunction with Northern Branch Federation Malaysian Manufacturers Training Workshop, Seberang Prai, Penang	1996
xiii.	Editor, Newsletter of the International Association of Traffic and Safety Sciences, Suzuka, Japan	1988

SERVICES TO THE UNIVERSITY

Had served the university in numerous committees at program, departmental and university levels.