



## **CURRICULUM VITAE**

### **A. PERSONAL DETAILS**

1. Name : Ahmad Kamil Bin Arshad (Assoc. Prof. Ir. Dr.)
2. Date of Birth : 11.11.1964
3. Sex : Male
4. Office Address : Faculty of Civil Engineering, University Teknologi Mara,  
40450 Shah Alam, Selangor, Malaysia
5. Tel: : (6) 03 – 5543 5254  
(6) 018-3724310
6. E-mail : [drahmadkamil@salam.uitm.edu.my](mailto:drahmadkamil@salam.uitm.edu.my)

### **B. ACADEMIC QUALIFICATION**

No.	Name of Institution	Degree/Qualification	Date awarded
1.	UNIVERSITI TEKNOLOGI MARA, MALAYSIA	Doctor of Philosophy (Civil Engineering)	2009
2.	UNIVERSITI PUTRA MALAYSIA	Master of Science (Highway and Transportation Engineering)	2003
3.	UNIVERSITI TEKNOLOGI MARA, MALAYSIA	Bachelor of Law	2000
4.	DEAKIN UNIVERSITY – APESMA, AUSTRALIA	Master of Business Administration (Technology Management)	1994
5.	WESTERN AUSTRALIAN COLLEGE OF ADVANCED EDUCATION (EDITH COWAN UNIVERSITY)	Graduate Diploma in Business Finance (Distinction)	1989
6.	CURTIN UNIVERSITY OF TECHNOLOGY, WESTERN AUSTRALIA	Bachelor of Engineering (Civil)	1987

### C. ARTICLES/ PUBLICATION

<i>Journal</i>	
1.	Arshad, A.K., Bahari , N.I. & Yahya, Z. & Abdul Halim, A.G. (2015). <b>Gender Differences in Pedestrian Perception and Satisfaction on the Walkability of Kuala Lumpur City Center, MATEC Web of Conferences.</b>
2.	Arshad, A.K., Haron, H.A. & Abd. Rahman, Z. & Abdul Halim, A.G. (2015). <b>Pavement Response to Variable Tyre Pressure of Heavy Vehicles, MATEC Web of Conferences.</b>
3.	Shaffie, E., Ahmad, J., Arshad, A.K., Kamarun, D., Shafii, M.A. (2015). <b><u>Empirical and rheological properties evaluation of modified asphalt binder containing nanopolyacrylate polymer modifier</u></b> , Jurnal Teknologi, Vol. 76, No.9, pp 85-89.
4.	Hashim, W., Arshad, A.K., Mustafa, M. & Kamaluddin, N.A. (2015). <b>Time Gap Evaluation due to the Existence of Heavy Vehicles on Urban Expressways.</b> Applied Mechanics and Materials.Vol. 802 (2015), pp 375-380.
5.	Shaffie, E., Ahmad, J., Arshad, A.K., Kamarun, D., Shafii, M.A. (2015). <b>Using Nanopolyacrylate and Nanocomposite as Binder Modifiers for Stone Mastic Asphalt (SMA)</b> , Applied Mechanics and Materials.Vol. 802 (2015), pp 381-386.
6.	Arshad, A.K., Kamaluddin, N.A., Hashim, W. & Ahmad Roslan, S.Y. (2015). <b>Physical and Rheological Properties of Aged Bitumen Rejuvenated with Waste Engine Oil.</b> Applied Mechanics and Materials.Vol. 802 (2015), pp 363-368.
7.	Arshad, A.K. Ma Kridan, F.A. , Kamaluddin, N.A. (2015). <b>Performance of Warm Mix Asphalt with High RAP Content.</b> Jurnal Teknologi. Vol. 73, No.4, pp 51-54.
8.	Shaffie, E., Ahmad, J., Arshad, A.K., Kamarun, D., Shafii, M.A. (2015). <b>Evaluation of Volumetric Properties and Resilient Modulus Performance of Nanopolyacrylate Modified Asphalt Mixes</b> , Jurnal Teknologi, Vol. 73, No.4, pp 21-25.
9.	Hashim, W., Arshad, A.K., Mustafa, M. & Kamaluddin, N.A. (2014). <b>Heavy Vehicles-Cars Interaction Behavior for Urban Expressways.</b> Australian Journal of Basic and Applied Sciences. ISSN: 1991-8178. Vol. 8 No.5, pp 484-491.
10.	Bahari, N.I., Arshad, A.K. & Yahya, Z. (2014). <b>Assessing Pedestrians Profile According to Age and Gender in Central Business District, Kuala Lumpur, Malaysia.</b> Advanced Materials Research. Vol. 905(2014), pp.768-772.
11.	Arshad, A.K., Md. Diah, J. & M. K., Salah (2013). <b>Modeling Workability of Asphalt Concrete Performance at Different Temperatures Using a Statistical Model.</b> International Journal of Engineering and Technology (ISSN 2227-524X).Vol. 2 No.1, pp.77-87

#### **D. PROFESSIONAL REGISTRATION**

Registered Professional Engineer with Board of Engineers, Malaysia (1996-PE.No: 8630)

#### **E. PROFESSIONAL MEMBERSHIP**

- Fellow, Institution of Engineers, Malaysia (2015)
- Corporate Member, Institution of Engineers, Malaysia (1995)
- Corporate Member, Road Engineering Association of Malaysia (1997)
- Corporate Member, Malaysian Structural Steel Association (1997)
- Corporate Member, Concrete Society of Malaysia (1996)

#### **F. WORK EXPERIENCE**

**2009 – Present  
Transportation)**

**Associate Professor (Highway and**

**Faculty of Civil Engineering  
Universiti Teknologi MARA, Shah Alam**

##### **a) LECTURING**

Lectured in the following subjects:

<b>Semester</b>	<b>Subjects</b>
Jul 2009 - Nov 2009	<ul style="list-style-type: none"><li>• Pavement Engineering (ECG 524)</li><li>• Traffic Impact Assessment (ECG 554)</li></ul>
Jan 2010 - Jun 2010	<ul style="list-style-type: none"><li>• Highway &amp; Traffic Engineering (ECG504)</li><li>• Traffic Impact Assessment (ECG 554)</li><li>• Road Safety Engineering (ECG 534)</li></ul>
Jul 2010 - Nov 2010	<ul style="list-style-type: none"><li>• Highway &amp; Traffic Engineering (ECG504)</li><li>• Traffic Impact Assessment (ECG 554)</li></ul>
Jan 2011 - Jun 2011	<ul style="list-style-type: none"><li>• Traffic Impact Assessment (ECG 554)</li><li>• Integrated Design Project (ECM 506)</li></ul>
Sep 2011 - Jan 2012	<ul style="list-style-type: none"><li>• Traffic Impact Assessment (ECG 554)</li><li>• Integrated Design Project (ECM 506)</li></ul>
Mar 2012 - Jul 2012	<ul style="list-style-type: none"><li>• Traffic Impact Assessment (ECG 554)</li><li>• Integrated Design Project (ECM 506)</li></ul>
Sep 2012 - Jan 2013	<ul style="list-style-type: none"><li>• Highway &amp; Traffic Engineering (ECG 504)</li><li>• Integrated Design Project (ECM 506)</li></ul>
Mar 2013 - Jul 2013	<ul style="list-style-type: none"><li>• Pavement Rehabilitation &amp; Management System (ECH 712 – Masters)</li><li>• Law &amp; Engineering Practices (ECM 517)</li></ul>
Sep 2013 - Jan 2014	<ul style="list-style-type: none"><li>• Pavement Analysis &amp; Design (ECH 722-Masters)</li><li>• Highway &amp; Traffic Engineering (ECG 564)</li></ul>
Mar 2014 - Jun 2014	<ul style="list-style-type: none"><li>• Highway &amp; Traffic Engineering (ECG564)</li></ul>
Sep 2014 - Jan 2015	<ul style="list-style-type: none"><li>• Pavement Analysis &amp; Design (ECH 722-Masters)</li><li>• Business for Engineers (ECM 582)</li></ul>
Mar 2015 - Jun 2015	<ul style="list-style-type: none"><li>• Pavement Analysis &amp; Design (ECH 722-</li></ul>

	Masters) <ul style="list-style-type: none"> <li>● Business for Engineers (ECM 582)</li> </ul>
Sep 2015 - Jan 2015	<ul style="list-style-type: none"> <li>● Pavement Analysis &amp; Design (ECH 722-Masters)</li> <li>● Integrated Design Project (ECC 584)</li> </ul>
Mar 2016 – Jun 2016	<ul style="list-style-type: none"> <li>● Integrated Design Project (ECC 584)</li> <li>● Pavement Engineering (ECG 524)</li> </ul>

## b) CURRICULUM DEVELOPMENT

Chairman, for the development of MSc Highway Engineering course.  
Member, for the development of MSc Railway Engineering course.

## c) EXAMINER FOR POSTGRADUATE STUDENTS:

### PhD

1. Suleiman Arafat Yero (Universiti Teknologi Malaysia, Skudai)  
*Performance of Warm Stone Mastic Asphalt Mixtures*
2. Merhdad Moradi (Universiti Kebangsaan Malaysia)  
*Evaluation of Personal Rapid Transit Versus Conventional Urban Transport Systems*
3. Rizati Hamidun (MITRANS, Universiti Teknologi MARA)  
*The Development of The Pedestrian Crossing Risk Assessment (PedCRA) Model at Signalised Intersections Using Petri Nets Approach.*
4. Ramez Al-Ezzi AbdulJalil Al-Mansob (Universiti Kebangsaan Malaysia)  
*Characteristics Performance of Epoxidized Natural Rubber as a Modifier for Asphalt Binders and Mixtures.*

### Masters (Research)

5. Mohamed Hadi Nahi (Universiti Kebangsaan Malaysia)  
*Finite Element Method for Rutting Prediction in Asphalt Mixtures*
6. Mohd Yazip Matori (Universiti Teknologi Malaysia, Skudai)  
*Factors Influencing Strength of Foamed Bitumen Stabilised Mix*
7. Nazaruddin Jamion (Universiti Teknologi Malaysia, Skudai)  
*Performance of Microsurfacing in Expressways*
8. Nor Izzah Zainuddin (Universiti Teknologi MARA, Shah Alam)  
*Improvised Engineering Specification Design for Road Hump: A Case Study on Residential Streets in Shah Alam*
9. Nadiah Mohamed (Universiti Teknologi MARA, Shah Alam)  
*Development of Operating Speed Model Based on Urban Arterial Design Standard Traffic Condition*

10. Nurul Qastalani Radzuan (Universiti Teknologi MARA, Shah Alam)  
*An In-Depth Investigation of Expressway Merging and Diverging Traffic Operation on the Effect of Acceleration and Deceleration Lanes*
11. Razi Aziz Hasan (Universiti Teknologi Petronas)  
*The Assessment of Pedestrian Footbridge Usage in Malaysia*

d) **SUPERVISION OF POSTGRADUATE STUDENTS :**

**PhD**

1. Salah Mohamed Khalil AbdelGalil (Completed)  
*A Study on Workability Measurement and Correlation with Performance of Hot Mix Asphalt*
2. Frag Ahmed Ma Kridan (Completed)  
*Development and Performance Determination of Warm Mix Asphalt Using RAP for Malaysian Conditions*
3. Wardati bt. Hahim (on-going)  
*Heavy Vehicles-Car Following Behaviour*
4. Khairil Azman Masri (on-going)  
*Performance of Nano-silica Modified Porous Asphalt*
5. Mohd Izzat Samsuddin (on-going)  
*Performance of Cold Mix Recycling Using Various Rubber Types*
6. Ekarizan bt. Shafie (on-going, Co-Supervisor)  
*Development of Nanopolyacrylate/Natural Rubber Asphalt Emulsion for Use in Cold Mix Asphalt Application*
7. Mokhtar bin Samad (on-going, Co-Supervisor)  
*Performance of Warm Mix Porous Asphalt*

**Masters (Research)**

1. Norasmah Laili bt. Mat Daud (Completed)  
*Evaluation of Subgrade Soils Using Selected In-Situ Devices*
2. Noraziyan bt. Abd. Aziz (Completed)  
*An Investigation of the Performance Measures on Effectiveness and Efficiency of Rapid BET Bus Service*
3. Hairol Anuar Haron (Completed)  
*Effect of Heavy Vehicles' Tyre Inflation Pressure on Flexible Pavements*
4. Fairus Azwan bin Azizan (Completed)  
*Subgrade Stabilisation of Clay Soil Using Fly Ash*

5. Mohd Azli bin Ayob (Completed)  
*Performance Evaluation of Reclaimed Asphalt Pavement Proportions in Recycled Mix*

### **Masters (Research)**

6. Nor Iza bt. Bahari (on-going)  
*Sustainable Pedestrian Infrastructure Facilities Based on Pedestrian Behaviour and Profile*
7. Nornikmah Mohd Noor (on-going)  
*Customer Satisfaction of Public Transport Terminals*
8. Mohd Saifullah Samsuddin (on-going)  
*Evaluation of Microstructure Changes of Nanosilica-Modified Asphalt Binder*

### **e) RESEARCH INTEREST GROUP**

Chairman - Transportation Systems, Infrastructure and Intelligent Transport (TransIIT) Research Interest Group.

### **f) REVIEWER FOR CONFERENCES AND JOURNALS**

#### **Conferences**

InCIEC 2013

Colloquium on Humanities, Science and Engineering Research (CHUSER) 2014

InCIEC 2014

InCIEC 2015

ACEE 2015

ICASET 2015

#### **Journals**

Journal of The Institution of Engineers, Malaysia

International Journal of Pavement Engineering

Construction and Building Materials

Jurnal Teknologi

**G. RESEARCH GRANTS**

	<b>Research Project</b>	<b>Role</b>	<b>Source</b>	<b>Total Funds (RM)</b>	<b>Begin Year</b>	<b>End Year</b>	<b>Research Progress</b>
1	Investigation of Assessment on the Implementation of Rules and Regulations Related to Tender and Quotation of Works for UiTM Projects	Co-Researcher	Dana Kecemerlangan RMI	13,000	15 Oct 2009	14 Oct 2010	Completed
2	Improvement on Road Subgrade Using High Impact Energy Dynamic Compaction for Pavement Design Development for Malaysian Roads	Co-Researcher	Dana Kecemerlangan RMI	6,000	01 Oct 2010	30 Sep 2012	Completed
3	Resilient Modulus Characterisation of Typical Malaysian Subgrade Soils Using In-Situ and Laboratory Tests	<b>Main Researcher</b>	Dana Kecemerlangan RMI	6,000	15 Jan 2011	14 Jan 2013	Completed
4	Performance of Warm Mix Asphalt (WMA) Using Reclaimed Asphalt Pavement (RAP)	<b>Main Researcher</b>	Dana Kecemerlangan RMI	9,000	15 Jan 2011	14 Jan 2013	Completed
5	Effect of Temperature Variation on the Performance of Warm Mix Asphalt (WMA)	<b>Main Researcher</b>	Dana Kecemerlangan RMI	8,000	01 Jun 2011	31 Mei 2013	Completed
6	Properties Evaluation and Striping Potential of Stone Mastic Asphalt (SMA 14) Using Bottom Ash as Filler	Co-Researcher	Dana Kecemerlangan RMI	7,000	01 Jun 2011	31 Mei 2012	Completed
7	Effect of Heavy Vehicles' Tire Inflation Pressure on Flexible Pavements	Co-Researcher	Dana Kecemerlangan RMI	9,000	01 Nov 2011	31 Oct 2013	Completed
8	Performance Evaluation of Hot-In-Place Recycling Using Shell RJO-500 as Rejuvenating Agent	<b>Main Researcher</b>	Dana Kecemerlangan RMI	10,000	01 Dis 2011	30 Nov 2013	Completed

## RESEARCH GRANTS

RESEARCH FUNDINGS							
	Research Project	Role	Source	Total Funds (RM)	Begin Year	End Year	Research Progress
9	Heavy Vehicles Ergonomic Safety Model	Co-Resear cher	FRGS	61,500	15 Apr 2012	14 Apr 2014	Completed
10	Axle Load and Road Condition Relationship Model	Co-Resear cher	FRGS	80,000	15 Apr 2012	14 Apr 2014	Completed
11	Customer Satisfaction on Public Transport Terminals	Co-Resear cher	Dana Kecemer langan RIF	32,000	01 Jun 2012	30 Mei 2014	Completed
12	Sustainable Facilities-Pedestrian Behaviour Model	Co-Resear cher	Dana Kecemer langan RIF	32,000	01 Jun 2012	30 Mei 2014	Completed
13	A Geo-Environmental Study for the Sustainable Development: A Case Study in Malaysia Rural Area for Highway Route Selection	Co-Resear cher	Dana Kecemer langan RIF	32,000	01 Jun 2012	30 Mei 2014	Completed
14	Sustainable Facilities-Pedestrian Behaviour Model	<b>Main Resear cher</b>	e-Science	151,500	01 Okt 2012	30 June 2015	In progress
15	Microstructural modeling and physical properties of nanosilica modified asphalt binder	<b>Main Resear cher</b>	Dana Zamalah UiTM	22,000	1 Febru ary 2014	30 Janua ry 2016	In progress
16	The Effect of Moisture Damage on the Water Sensitivity due to Moisture Damage of Warm Porous Asphalt Mix	Co-Resear cher	FRGS	61,500	01 Jul 2014	30 Jun 2017	In progress
17	The Effect of Nanosilica Concentrations on the Microstructural Changes of Nanosilica Modified Asphalt Binder	<b>Main Resear cher</b>	FRGS	74,000	01 Jan 2016	31 Dec 2018	In progress



**Workability Using Power as a Parameter.** International Journal of Science and Advanced Technology (ISSN 2221-8386), Vol.1 No.9, pp. 10-22.

1. Salah, M. K., Abdul Rahman, M.Y. & Arshad, A.K. (2011). **Development of Workability Measuring Device for Asphalt Mixture Using Electronic Transducer and Temperature Regulator.** Journal of Basic and Applied Scientific Research (ISSN 2090-4304), Vol.1 No.7, pp. 721-726.

## **PUBLICATIONS**

---

### **Journal Articles**

2. Salah, M. K., Abdul Rahman, M.Y. & Arshad, A.K. (2011). **Development of Workability Measuring Device for Asphalt Mixture using Transducer by means of Energy and Temperature Regulator.** European Journal of Scientific Research (ISSN 1450-216X), Vol.51 No.3, pp. 396-405.
3. Salah, M. K., Abdul Rahman, M.Y. & Arshad, A.K. (2011). **Towards Improving the Device for Measurement of Workability and Compactibility of Asphalt Mixture Using Electronic Transducer and Temperature Regulator.** International Journal of Organisational Innovation (ISSN 1943-1813), Vol.3 No.4, pp. 217-234.
4. Arshad, A.K., Ma Kridan, F.A. & Abdul Rahman, M.Y. (2011). **The Effect of Warm Mix Asphalt Additive (Sasobit) on the Determination of Optimum Binder Content.** International Journal of Research and Reviews in Applied Sciences (ISSN 2076-734X), Vol.6 No.4, pp. 400 – 406.
5. Ma Kridan, Frag Ahmed, Ahmad Kamil Arshad & Mohd Yusof Abd Rahman (2010), **Development of Warm Mix Asphalt and Compliance with the Requirements Set by Specifications,** European Journal of Scientific Research (ISSN 1450-216X ), Vol.48 No.1, pp. 118-128.
6. Arshad, A.K. (2009). **SUSTAINABLE HIGHWAY PAVEMENT STRATEGIES: Design, Construction and Maintenance/Rehabilitation Aspects.** Jurutera (ISSN 0126-9909), June 2009, pp.14-19.
7. Arshad, A.K. & Abdul Rahman, M.Y. (2008). **Resilient Modulus of Malaysian Asphalt Mixes.** Journal of the Road Engineering Association of Asia and Australasia (ISSN 1394-1054), Vol.15, Nos.1&2, pp.66-75.
8. Arshad, A.K. & Abdul Rahman, M.Y. (2008). **Resilient Modulus of Malaysian Base and Subbase Pavement Materials.** Journal of the Institution of Engineers Malaysia (ISSN 0126-513X), Vol. 69, No.2, pp.54-61.

9. Arshad, A.K. (2007). **Flexible Pavement Design: Transitioning from Empirical to Mechanistic-Based Design Methods. Cover Story** in Jurutera (ISSN 0126-9909), July 2007, pp.14-19.
10. Arshad, A.K. (2006). **Cold In-Place Recycling: An Introduction**. Jurutera (ISSN 0126-9909) November 2006, pp.14-19.
11. Arshad, A.K. (2005). **Hot In-Place Recycling: An Introduction**. Jurutera (ISSN 0126-9909), February 2005, pp.10-14.
12. Arshad, A.K. (2004). **Pavement Recycling: An Introduction**. Jurutera (ISSN 0126-9909), February 2004, pp.14-17.

## **PUBLICATIONS**

---

### **Conference Proceedings/Seminar Papers**

1. Arshad, A.K., Ismail, Y. & Mansor, S. (2015). **Soil- Cement Stabilisation for Low Volume Roads**. Proceedings of International Conference on Advances in Civil and Environmental Engineering 2015 (ACEE 2015), Penang.
2. Arshad, A.K., Samsudin, M.S. & Ahmad, J. (2015). **Characterisation of Nanosilica Modified Asphalt Binder**. Proceedings of International Conference on Advances in Civil and Environmental Engineering 2015 (ACEE 2015), Penang.
3. Hashim, W. & Arshad, A.K. (2014). **Predicting the time headway and speed relationship for heavy vehicles and cars interaction on Urban Expressways**, in *Proceedings of the 2014 Global Civil Engineering & Applied Science Conference*, Seoul, Korea, pp.127-134.
4. Arshad, A.K., Ma Kridan, F.A. & Kamaluddin, N.A.F. (2013). **Performance of Warm Mix Asphalt with High RAP Content**. Proceedings of Geotechnical and Transportation Engineering (GEOTROPIKA 2013), Johor Bahru, Malaysia.
5. Shaffie, E., Ahmad, J., Arshad, A.K., Kamarun, D., Shafii, M.A. (2013). **Evaluation of Volumetric Properties and Resilient Modulus Performance of Nanopolyacrylate Modified Asphalt Mixes**, Proceedings of Geotechnical and Transportation Engineering (GEOTROPIKA 2013), Johor Bahru, Malaysia.
6. Hashim, W., Arshad, A.K., Mustafa, M. & Kamaluddin, N.A. (2013). **Empirical Study of Heavy Vehicles and Cars Interaction Using Video Based Traffic Analyzer for Malaysian Urban Expressways**, Proceedings of 2013 IEEE Symposium on Business, Engineering and Industrial Application (ISBEIA 2013), 22-25 September 2013, Pullman Hotel, Kuching, Malaysia.
7. Shaffie, E., Ahmad, J., Arshad, A.K., Kamarun, D., Kamaruddin, F., Shafii, M.A. (2013). **Physical Properties of Modified Asphalt Binder with Nanopolyacrylate**, Proceedings of International Civil and Infrastructure

Engineering Conference (InCIEC 2013), 22-24 September 2013, Kuching, Malaysia.

8. Bahari, N.I., Arshad, A.K. & Yahya, Z. (2013). **Assessing Pedestrians' Perspective on the Walkability of Pedestrian Environment Under Mixed-Use Development**, Proceedings of International Civil and Infrastructure Engineering Conference (InCIEC 2013), 22-24 September 2013, Kuching, Malaysia.
9. Mohammad Noor, N., Arshad, A.K., Mohd Jais, I.B., & Mustafa, M. (2013). **An Analysis of User Satisfaction on Public Transport Terminal based on Users Survey**, Proceedings of International Civil and Infrastructure Engineering Conference (InCIEC 2013), 22-24 September 2013, Kuching, Malaysia.

## **PUBLICATIONS**

---

### **Conference Proceedings/Seminar Papers**

10. Haron, H.A., Arshad, A.K., Abd. Rahman, Zanariah (2013). **Interaction between Heavy Vehicles' Tyre Inflation Pressure and Contact Area on Flexible Pavement**, Proceedings of 2013 IEEE Symposium on Humanities, Science and Engineering Research, Hard Rock Hotel (SCHUSER 2013), 23-25 June 2013, Penang, Malaysia.
11. Ayob, M.A., Arshad, A.K. (2013). **The Effect of Different Reclaimed Asphalt Pavement Proportions on the Performance of Hot-In-Place Recycling**, Proceedings of 2013 IEEE Symposium on Humanities, Science and Engineering Research (SCHUSER 2013), 23-25 June 2013, Penang, Malaysia.
12. Bahari, N.I., Arshad, A.K. & Yahya, Z. (2013). **Walkability of the Pedestrian Environment in Kuala Lumpur City from User's Viewpoint**, Proceedings of 2013 IEEE Symposium on Humanities, Science and Engineering Research (SCHUSER 2013), Hard Rock Hotel, 23-25 June 2013, Penang, Malaysia.
13. Haron, H.A., Arshad, A.K., Abd. Rahman, Zanariah (2013). Effects of Heavy Vehicles Tyre Inflation Pressure on Flexible Pavement for Malaysian Conditions. Proceedings of 14<sup>th</sup> REAAA Conference 2013, 26-28 March 2013, Kuala Lumpur Convention Centre, Malaysia.
14. Bahari, N.I., Arshad, A.K. & Yahya, Z. (2013). **Assessing the Pedestrians' Perception of the Sidewalk Facilities based on Pedestrian Travel Purpose**. Proceedings of 2013 IEEE Colloquium on Signal Processing & Its Applications (CAPSA 2013), March 8-10, 2013, Berjaya Times Square Hotel, Kuala Lumpur, Malaysia.

15. Arshad, A.K. & Mat Daud, N.L. (2013). ***Evaluation of Pavement Subgrade Strength Using In-Situ Devices***. Paper presented at AWAM International Conference on Civil Engineering 2012, Penang, Malaysia.
16. Azizan, F.A., Ashaari, Y. & Arshad A.K. (2012). ***Correlation of CBR and Resilient Modulus in Subgrade Stabilisation Using Fly Ash.***, Paper presented at AWAM International Conference on Civil Engineering 2012, Penang, Malaysia.
17. Arshad, A.K. & Hashim, W. (2012). ***Vehicle Detection Technologies Used by Malaysian Expressway Operators***, Paper presented at 12th Asia Pacific ITS Forum & Exhibition 2012, Kuala Lumpur, Malaysia.
18. Arshad, A.K. (2011). ***Green Pavement - Implementing Sustainability Concepts in Pavement Engineering***, Paper presented at Seminar on Green Approaches in Sustainable Development, Persatuan Professional JKR Malaysia, Kuala Lumpur, Malaysia.

## **PUBLICATIONS**

---

### **Conference Proceedings/Seminar Papers**

19. Abd. Rahman, Z., Arshad, A.K. & W.Y. Wan Mohd Fuad (2011). ***Evaluation of Hot Mix Asphalt (HMA) Performance by Comparing Different Compactive Efforts***, Paper presented at 29th Conference of ASEAN Federation of Engineering Organisations (CAFEO 2011), Bandar Sri Begawan, Brunei.
20. Abd. Rahman, Z., Arshad, A.K. & Mansor, S. (2011). ***Evaluation of Stone Mastic Asphalt (SMA) Using Performance Grade PG76 and Penetration Grade 80/100***, Paper presented at 29th Conference of ASEAN Federation of Engineering Organisations (CAFEO 2011), Bandar Sri Begawan, Brunei.
21. Arshad, A.K. and Abdul Rahman, M.Y. (2007). ***Characterisation of Malaysian Asphaltic Concrete Mixes for Use in Mechanistic Pavement Design***. Paper presented and abstract published in Abstrak Awam 2007, ISBN 978-983-42190-1-7, Persidangan Kebangsaan AWAM 2007, 29-31 May 2007, Universiti Sains Malaysia, p.114.
22. Arshad, A.K. and Abdul Rahman, M.Y. (2006). ***Effects of Temperature on the Stiffness of Malaysian Asphaltic Concrete Mixes***. Paper presented and abstract published in Book of Abstracts, International Seminar on Civil and Infrastructure Engineering (ISCIE 2006), ISBN 983-9414-74-7, 15-18 August, 2005, Universiti Teknologi Mara, Shah Alam, p.23.
23. Arshad, A.K. and Abdul Rahman, M.Y. (2006). ***Resilient Characteristics of Malaysian Base and Subbase Pavement Materials***. Paper abstract published in Book of Abstracts,

International Seminar on Civil and Infrastructure Engineering (ISCIE 2006), ISBN 983-9414-74-7, 15-18 August, 2005, Universiti Teknologi Mara, Shah Alam, p.34.

24. Arshad, A.K. and Abdul Rahman, M.Y. (2005). *Resilient Modulus of Malaysian Flexible Pavement Materials for Use in Pavement Design*. Proceedings of Brunei International Conference on Engineering and Technology 2005(BICET 2005), 15-18 August, 2005, Institut Teknologi Brunei, Brunei Darussalam, vol.2, pp.313-324.

### **INVITED SPEAKER, SPEAKER & LECTURER**

---

1. Invited Lecturer, **Kursus Trafik** Perbadanan Putrajaya (20/04/2015).
2. Invited Lecturer, **Pavement Maintenance**, UiTM Pasir Gudang (19/03/2015).
3. Invited Lecturer, **Asphaltic Concrete Mix Design Course**, CSL Sdn Bhd. (Sep 2014).
4. Invited Lecturer, **Kursus Pembinaan Jalanraya**, RISDA (18-20 Mac 2014).
5. Invited Speaker, **Sustainable Transportation Strategies for Malaysia** - IEM Talk (11/02/2012).
6. Invited Speaker, **Green Pavement: Implementing Sustainability Concepts in Pavement Engineering**, SEMINAR ON GREEN APPROACHES IN SUSTAINABLE DEVELOPMENT, The Association of JKR Professionals (12/12/2011).
7. Invited Speaker, **Sustainable Highway Pavement Engineering Strategies for Malaysia: An Overview**, A Workshop on Issues and Challenges in Sustainable Roads and Highways in Malaysia, MITRANS, (25/01/2011).
8. Invited Speaker, IEM Highways and Transportation Technical Division, **"Mechanistic Design of Flexible Pavements: An Introduction"**, IEM HQ, Petaling Jaya (15 March 2008).
9. Invited speaker, 2<sup>nd</sup> National Seminar on Transport and Environment, **"Environmental Friendly In-Situ Pavement Rehabilitation Techniques"**, Institution of Engineers, Malaysia, Hotel Armada, Petaling Jaya (25 July 2007).
10. Speaker (for Pavement Design and Pavement Recycling topics), **"Professional Training Programme in Highway Engineering"** course for participants from Govt.of the State of Gujarat, India, Malaysian Institute of Transport (2007).
11. Speaker, **Characterisation of Malaysian Asphaltic Concrete Mixes for Use in Mechanistic Pavement Design**. Persidangan Kebangsaan AWAM 2007, 29-31 May 2007, Universiti Sains Malaysia.
12. Speaker, **Effects of Temperature on the Stiffness of Malaysian Asphaltic Concrete Mixes**. International Seminar on Civil and Infrastructure Engineering (ISCIE 2006)
13. Speaker (for Pavement Design, Pavement Rehabilitation & Pavement Recycling topics), **"Quality Control in Highway Projects"** course for participants from Govt.of Sudan (2005/2006), Universiti Teknologi MARA, Shah Alam.
14. Speaker, **Resilient Modulus of Malaysian Flexible Pavement Materials for Use in Pavement Design**. Brunei International Conference on Engineering and Technology 2005(BICET 2005), 18 August, 2005, Institut Teknologi Brunei, Brunei Darussalam.
15. Guest Lecturer, Fakulti Rekabentuk & Senibina – **"Civil & Structural Engineers in the Building Industry"** (2001), Universiti Putra Mal

## **EXTRA-CURRICULAR ACTIVITIES**

---

1. Council Member, Institution of Engineers, Malaysia (2014-2015), (2016-2019)
2. Committee Member, IEM Standing Committee on Admissions and Practical Training (2014-2015, 2015-2016).
3. Committee Member, IEM Standing Committee on Welfare and Service Matters (2014-2015, 2015-2016).
4. Committee Member, IEM Standing Committee on Corporate Affairs (2016-2017).
5. Committee Member, IEM Standing Committee on Professional Practice (2016-2017).
6. Chairman, IEM Sub-Committee on Corporate Social Responsibility (2014-2015).
7. Chairman, IEM Sub-Committee on Benevolent Fund Management (2015-2016).
8. Committee Member, REAM Pavement Technology Committee (2011 – 2013)
9. Committee Member, REAM Library Committee (2009 – 2011)
10. Committee Member, **Workshop on Asphalt Specialty Mixes**, Road Engineering Association of Malaysia (REAM) (21 November 2007).
11. Committee Member, **Workshop on Hot In-Place Recycling**, Road Engineering Association of Malaysia (REAM) (2006).
12. Organising Committee (Signages), **World Road Congress**, Kuala Lumpur (1999).

## **WORK EXPERIENCE**

---

**2007 – 2009**

**Technical Director  
HLA Associates Sdn Bhd  
(Civil Engineering Consultants)**

In-charge of technical coordination of engineering design of projects (structural and infrastructure design), liaison with clients and authorities, follow-up on progress claims and managing staff for a medium-sized engineering consultancy with about 20 full-time engineers).

### **IN CHARGE OF THE FOLLOWING PROJECTS:**

#### **UPGRADING OF JALAN KOLAM AIR IN ISKANDAR MALAYSIA, JOHOR (RM 30 million).**

Planning and coordination of all civil and structural design works for the upgrading of existing dual-one road to dual-two road including 2 nos. of pedestrian bridges.

#### **UPGRADING OF EXISTING FOUR-LEGGED INTERSECTION AT ULU TIRAM TO ELEVATED INTERCHANGE ISKANDAR MALAYSIA, JOHOR (RM 60 million).**

Planning and coordination of all civil and structural design works for the upgrading of existing at-grade intersection to elevated interchange.

#### **UPGRADING OF JALAN SEGAMBUT LINK 1 AND LINK 2 (RM 70 million) FOR DBKL.**

Planning and coordination of all civil and structural design works for the upgrading of existing road, new road link connection and bridge structures.

#### **CADANGAN PEMBANGUNAN SEMULA KOMPLEKS JABATAN LOGISTIK IBU PEJABAT KONTINJEN NEGERI SEMBILAN (RM 60 million)**

Planning and coordination of all civil and structural design works for the redevelopment of RM 60 million Negeri Sembilan State police headquarters under Pembinaan BLT Sdn Bhd (a wholly-owned company of MOF). Works include 5 units of 'D' class quarters, 40 units of Class 'E' quarters, 100 units of class 'F' quarters and other facilities.

#### **CADANGAN MEMBINA DAN MEYIAPKAN BANGUNAN PUSAT OPERASI JABATAN BEKALAN AIR PAHANG, KUANTAN, PAHANG (RM 8 million)**

Planning and coordination of all civil and structural design works for the construction of a 6 storey Operations Centre building to accommodate a staff of 200 personnel, surau, bus garage, refuse chamber and guard house.

## **WORK EXPERIENCE**

---

### **CADANGAN MEROBOH DAN MEMBINA SEMULA SEBUAH GUDANG BERAS DENGAN BERKELUASAN 150,000 KAKI PERSEGI DENGAN KAPASITI 20,000 MT BERSERTA FASILITI PEMROSESAN, MUKIM BUKIT RAYA, DAERAH PENDANG, KEDAH DARUL AMAN (RM 10.5 million)**

Planning and coordination of all civil and structural design works and administration of contracts for the construction of a rice storage and processing facility.

### **CADANGAN MEMBINA DAN MENYIAPKAN PROJEK BEKALAN AIR KUANTAN FASA III.**

Planning and coordination of all structural design works including administration building, chlorination building, chemical building, treated water pumphouse, TNB building and class 'D' quarters.

### **CADANGAN ASRAMA UNIVERSITI MALAYSIA PAHANG, PEKAN, (RM 25 million)**

Planning and coordination of all structural and infrastructural design works for hostel for 600 students.

### **CADANGAN MEREKABENTUK, MEMBINA, MELENGKAP, MENYIAPKAN DAN MENTAULIAH KERJA-KERJA FASA 1A UNTUK PEMBANGUNAN KAMPUS TETAP UNIVERSITI MALAYSIA PAHANG, MUKIM KUALA PAHANG, DAERAH PEKAN, PAHANG DARUL MAKMUR (RM 162 million)**

Team member of the project management company (HLA Project Management) to manage the planning and coordination of the first phase of the construction works.

### **MALAYSIAN VIRTUAL TRADING CORPORATION (MAVTRAC)**

Team member of the project management company (HLA Project Management) to provide supply chain consultancy services to the corporation.



## **WORK EXPERIENCE**

---

**2004 - 2007**

**PhD Student in Civil Engineering  
UNIVERSITI TEKNOLOGI MARA, SHAH ALAM**

Research on the development of mechanistic design of highway flexible pavements, includes laboratory and fieldwork investigation. Viva completed, amending thesis for final submission.

**1997 - 2003**

**Director  
JURUTERA PERUNDING KAMIL SDN BHD  
(Civil Engineering Consultants)**

Involved in the setting-up of the company, management of the office, marketing of services, coordination of engineering design of projects, structural and infrastructure design.

**IN CHARGE OF THE FOLLOWING PROJECTS:**

**MALAYSIAN INSTITUTE OF MARINE ENGINEERING TECHNOLOGY, LUMUT,  
PERAK DARUL RIDZUAN**

Planning and coordination of all civil and structural design works for the RM 80 million institute for MARA. Works include 20 building blocks comprising of students hostel, educational facilities, laboratories, multi-purpose hall, sports complex, workshops for shipbuilding and fabrication, shipyard facilities including pier fingers for straddle carrier. Preparation and evaluation of tender documents for site investigation works, liaison with local authorities (Lembaga Air Perak, Indah Water, Jabatan Pengairan dan Saliran, Jabatan Kerja Raya, Majlis Perbandaran Manjung) for approval of drainage, sewerage, water supply and roads works.

**KUALA LUMPUR INTERNATIONAL AIRPORT, SEPANG  
External Landside Road Signages (Package PR07)**

Involved with the study of overall road layout and traffic movements of the Airport (Entrance, Central Terminal Area, Southern Support Zone and Perimeter Roads). Developing the Signage Strategy and Guidelines, Conceptual and Detailed Design of the Road Signages (Directional, Warning and Regulatory) to guide public vehicles to the primary areas of the Airport, Conceptual Design of Information Lay-By and Performance Specification of Variable Message Sign. Coordinate the production of tender drawings and documents, evaluation of tender, contract documents and working drawings, site representative of consultant for liaison with the contractor.

## **WORK EXPERIENCE**

---

### **CADANGAN MEMBINA DAN MENYIAPKAN JAMBATAN JERANGAU FELDA SEC 123, LALUAN 14, DUNGUN TERENGGANU SECARA REKA DAN BINA SERTA RUNDING TERUS.**

Works include coordination, design of civil and structural works and liaison with authorities.

### **CADANGAN MENAIKTARAF PERSIMPANGAN TAMAN PERINDUSTRIAN NILAI, NILAI, NEGERI SEMIBILAN**

Works include coordination, intersection design and liaison with authorities.

### **ROAD SAFETY AUDIT – CADANGAN JALAN MASUK KE PELABUHAN TANJUNG PELEPAS**

Carried out Stages 3 & 4 road audit for R6 road linking the port to the North-South Expressway

### **ROAD SAFETY AUDIT-CADANGAN MENAIKTARAF JALAN PERSEKUTUAN 73 (BRUAS –BATU HAMPAR)**

Carried out Stages 2 & 3 road audit for R5 standard road.

### **CADANGAN MEMBINA DAN MENYIAPKAN BANGUNAN TAMBAHAN FAKULTI REKABENTUK, PERANCANGAN DAN UKUR DI UNIVERSITI TEKNOLOGI MARA, SHAH ALAM, SELANGOR.**

Works include coordination, design of civil and structural works and liaison with authorities.

### **CADANGAN MEMBINA DAN MENYIAPKAN MAKMAL KOMPUTER DI UNIVERSITI PENDIDIKAN SULTAN IDRIS, TANJUNG MALIM, PERAK.**

Works include coordination, design of civil and structural works and liaison with authorities.

### **CADANGAN MEMBINA DAN MENYIAPKAN BANGUNAN FAKULTI REKABENTUK DAN SENIBINA DI UNIVERSITI PUTRA MALAYSIA, SERDANG, SELANGOR.**

Works include coordination, design of civil and structural works and liaison with authorities.

### **CADANGAN MENGUBAHSUAI BANGUNAN FAKULTI PENDIDIKAN DI UNIVERSITI MALAYA, KUALA LUMPUR.**

Works include coordination, design of civil and structural works and liaison with authorities.

## **WORK EXPERIENCE**

---

**1995 – 1997**

**Senior Technical Coordinator  
PENGURUSAN LANTAS BERHAD  
(Project Management Company assisting KLIAB**

**Bhd)**

### **INVOLVED IN THE FOLLOWING PROJECT:**

#### **KUALA LUMPUR INTERNATIONAL AIRPORT, SEPANG (RM 10 BILLION PROJECT)**

Involved with privatised packages of the airport including air cargo complex, ground handling services, aircraft maintenance facilities, flight catering facilities, airmail and courier services building.

Coordination with the concessionaires (MAS, KLAS, Pos Malaysia), reviewing technical proposals, reviewing plans submitted, coordination of utilities interfaces, drafting Cabinet Committee discussion papers to KLIAB Board (e.g. MAS Application for Additional Land , Aircraft Maintenance Hangar). Monitoring progress and liaising with consultants and concessionaires involved with the privatized projects.

Coordination of the KLIA Southern Support Zone Development including airport's spine road, accesses into facilities and junction improvements, underpasses and landside cargo traffic, external landside road signages, main drainage, airside/landside control posts and security fencing, issues pertaining to customs complex and the setting up of airport's free commercial zone.

Member of **Privatization Secretariat** which examines the issues (technical, financial and legal) concerning the overall implementation of privatised projects and the contents of Construction Agreements, Concession Agreements, Lease Agreement and License for Airport Operator.

Member of the **Public Transport Steering Committee** which coordinates the traffic and public transport studies (including reviewing consultants' terms of reference and financial proposal) and the implementation of the public transport system (public buses, airport buses, taxis and ERL) to KLIA.

## **WORK EXPERIENCE**

---

**1992 – 1995**

**Civil/Structural Engineer  
KUMPULAN JURUTERA MAJU SDN BHD  
(Consulting Civil Engineers)**

### **DESIGN ENGINEER FOR THE FOLLOWING PROJECTS:**

#### **LIGHT RAIL TRANSIT (LRT) SYSTEM TWO FOR KUALA LUMPUR**

Design of deck drainage for LRT System Two from Lembah Subang to Paramount Gardens. Preparing estimates for bore pile foundations and piers, Coordination of utilities relocation along the LRT corridor.

Civil works (setting out, earthworks, retaining wall, internal roads including road markings and signage, water supply, sewerage) for LRT Stations at People's Park, Taman Bahagia and Paramount Gardens. Prepared general arrangement layout of Pedestrian Footbridges linking to the LRT Stations. Junction improvements for the access into the public roads, design of road linking Jalan SS1/25 to Jalan 1/36 from LRT Station in Paramount Gardens to nearby housing area.

#### **PROPOSED WIDENING OF KUALA LUMPUR - KARAK HIGHWAY**

Design of surface drainage for the 60 km highway including two interchanges at Genting Sempah and Bentong East.

#### **PROPOSED EXTENSION TO SUNGAI BULOH TOLL PLAZA(NORTH-SOUTH EXPRESSWAY)**

Design of civil & structural works (drainage, earthworks, piling arrangement, structures, road marking and signage) and overall coordination of the works including architectural, mechanical and electrical and preparation of contract documents. Carry out studies on staggered toll layout to increase capacity of toll.

#### **ROAD UPGRADING AND REHABILITATION FROM TELOK INTAN TO SABAK BERNAM**

Traffic Analysis of T-Junction using 2 weeks traffic survey counts to assess junction capacity and improvements required.

#### **COMMONWEALTH GAMES VILLAGE, BUKIT JALIL**

Structural design of twin cell box culvert measuring 5m height x 10m width

#### **PROPOSED SUNGAI BULOH LOW-COST FLATS FOR PKNS**

Preliminary structural design (6-storeys)

#### **PROPOSED SEBERANG PERAI POLYTECHNIC**

Structural design of sports complex (1 storey)

#### **PROPOSED PUSAT PERKHIDMATAN RAKYAT FOR DUN GOMBAK**

Structural design (1 storey)

## **WORK EXPERIENCE**

---

### **RESIDENT ENGINEER FOR THE FOLLOWING PROJECTS:**

#### **NORTH-SOUTH EXPRESSWAY - RAWANG SECTION OFFICE**

Client: PLUS

Contractor: Syarikat Pembinaan Limbongan Setia

Project Cost: RM 2.78 million

Project involved construction of section office complex, ancillary building, maintenance depot and open storage area used for the operations and maintenance of the North-South Expressway.

Tasks include Supervision of construction works, Liasing with TNB, JBA and Bomba, Measurement of Works, Drafting Inventory List and As-Built Drawings, Monthly Defects Inspection.

#### **COMMONWEALTH GAMES VILLAGE**

Client: Vistajati Holdings (JEM Owned Company)

Contractor: Syarikat Pembinaan Usaha Bersatu

Project Cost: RM 16 million

Project involved earthworks and internal roads, main drain, retaining wall and temporary drainage package for a development area of about 40 acres.

Tasks include joint survey, trial compaction, supervision of earthworks, testing of earthworks, monthly joint measurement.

#### **ABOVE GRADE CROSSINGS OVER RAILWAY LINE FOR THE KUALA LUMPUR-SEREMBAN (PACKAGE V)**

Client: Roads Branch, PWD Malaysia

Contractor: Trans Resources Corporation

Project Cost: RM 19 million

Project involved the construction of six bridges (prestressed concrete and composite steel/concrete ) in Bangi Lama, Bukit Tunggu, Labu, Ladang Cairo, Ladang Kirby and Ladang Pasla including associated earthworks, roads, culverts (cmp, rc pipe and box), surface drains and piling (drive timber , rc and bored piles).

## **WORK EXPERIENCE**

---

**1990 – 1992**

**Civil Engineer  
CAWANGAN KERJA PENDIDIKAN  
JABATAN KERJA RAYA MALAYSIA**

Involved in setting of guidelines for school layout, reviewing school layouts plans prepared by State and District JKR Offices, preparing cost estimates for school and monthly financial reports, preparation of tender documents, coordination and monitoring of progress of education building projects (primary and secondary schools, boarding schools, student hostels, teachers' quarters, examination strongrooms, resource centres) including liaising with the education ministry and other government agencies and utility companies involved (TNB, TELEKOM). Attended monthly coordination meetings with State JKR Offices and prepared monthly progress reports for the projects.

Supervised the Branch computer network system which also includes a Project Management Information System which keep the data for all the projects handled by the Branch. Involve in the drafting quotations and tenders for buying of necessary hardware and software for the Branch.

Part-time lecturing and tutoring at **INSTITUT KERJA RAYA MALAYSIA** on dBASE IV (sorting, reports, screen) as a tool for project management information system.

Design engineer for the following projects:

**SEKOLAH MENENGAH AGAMA BATANG PADANG, PERAK**

Structural design of 13m x 13m pad footing for 60,000 gallons water tower

**PROPOSED RENOVATION FOR RECSAM , PENANG**

Structural design for reception and guardhouse ( 1 storey)

## **WORK EXPERIENCE (OVERSEAS)**

---

**1988 – 1989**

**Lecturer and Tutor  
SCHOOL OF ARCHITECTURE AND PLANNING  
CURTIN UNIVERSITY OF TECHNOLOGY  
WESTERN AUSTRALIA**

Part-time lecturing and tutoring to architecture and quantity surveying students (years 1-3) for the following engineering subjects:

Building Construction 141(Materials) - Soil, Bricks, Concrete

Building Construction 241(Materials) - Steel, Aluminium, Zinc, Lead

Building Construction 341(Materials) - Concrete: Durability and Non Destructive Test

Building Technology 101 (Structures) - Statics

Building Technology 201 (Structures) - Structural analysis

---

**1987**

**Materials Testing Engineer  
SOILS, ROCK & CONCRETE LABORATORIES  
WESTERN AUSTRALIA**

Laboratory testing of construction materials; involved in the following tests on soil, brick, mortar and concrete materials in accordance to Australian Standards:

Particle Size Distribution

Atterberg Limits and Linear Shrinkage Test

Calcium Carbonate Content Test on Soils

Permeability Test on Soils

Modified and Standard Compaction

Flakiness Index for Aggregates

Los Angeles Test

Perth Sand Penetrometer

Concrete Compressive Strength Test

Mortar Compressive Strength Test

Brick Compressive Strength Test

Water Absorption Test on Bricks