CURRICULUM VITAE

A. PERSONAL DETAILS

1. Name: Dr. Siti Zaharah Ishak

2. Sex: Female

3. Date of Birth: 1st March 1976

4. Title & Address: Office of the Director-General

Malaysian Institute of Road Safety Research (MIROS)

No. 125 - 135, Jalan TKS 1,

Taman Kajang Sentral, 43000 Kajang, Selangor.

5. Tel: +60(3) 8924 9202 Fax: +60(3) 8733 2005

6. Mobile: +60(19) 288 4558

7. E-mail: sitizaharah@miros.gov.my

B. BIOGRAPHICAL SUMMARY

Dr Siti Zaharah Ishak is currently the Director General of the Malaysian Institute of Road Safety Research (MIROS), Ministry of Transport (MOT), Malaysia She graduated in BEng (Hons) Civil from UiTM Shah Alam, followed by MSc. in Highway and Transportation Engineering from the Universiti Putra Malaysia (UPM) and a PhD in Transport Systems Engineering from the University of South Australia. Dr Siti Zaharah is also a member of Board of Engineers Malaysia (BEM), Highway and Transportation Engineering Technical Division, Institute Engineering Malaysia (IEM) and EASTS Australian Chapter. Her professional activities including consulting with industry, teaching, academic research and student supervision. Her interests span all aspects of road and rail safety engineering, public transport and transportation systems engineering.

C. ACADEMIC QUALIFICATION

- 1. **Doctor of Philosophy in Transport System Engineering**, University of South Australia (UniSA), Adelaide, AUSTRALIA, 2006 to 2010
- 2. **MSc. Highway & Transportation Engineering**, Universiti Putra Malaysia (UPM), Serdang, Selangor, Malaysia, 2002 to 2002
- 3. **B. Eng. (Hons) Civil**, Universiti Teknologi MARA (UiTM), Shah Alam, Selangor, Malaysia, 1997 to 1999
- 4. **Diploma in Civil Engineering**, Universiti Teknologi MARA (UiTM), Shah Alam, Selangor, MALAYSIA, 1994 to 1997



D. PROFESSIONAL AFFILIATIONS

- 1. Graduate Member, Board of Engineers Malaysia (BEM) since 2004
- 2. Graduate Member, Institute Engineering Malaysia (IEM) since 2004
- 3. (Eastern Asia Society for Transportation Studies (EASTS) Member, (Australian Chapter) since 2006
- 4. Road Engineering Asia and Australasian (REAAA) since 2004
 - Co-opted Member of REAAA since 2015
 - Technical Committee 16th Council Term (2017-2020)
- 5. **Life Member,** Intelligent Transport System Association of Malaysia (ITSM) since 2016
- 6. **Committee Member,** Highway & Transportation Engineering Technical Division (HTETD, IEM)

E. PROFESSIONAL EXPERTISE AND RESEARCH INTEREST

- 1. Road and Rail Safety Engineering
- 2. Public Transport and Transportation Systems Engineering

F. WORKING EXPERIENCES

2011 - Apr

Company : Seconded to Malaysia Institute of Transport (MITRANS)

from

Faculty of Civil Engineering, Universiti Teknologi MARA (UiTM) Shah

Alam, Selangor, MALAYSIA

Position : **Head**

Public Transport & Sustainable Development Centre, Malaysia

Institute of Transport (MITRANS)

and

Senior Lecturer,

Faculty of Civil Engineering, UiTM Shah Alam

Responsibility: Managing MITRANS's activities including research, training

and consultancy work related to Public Transport, Highway & Traffic Engineering and Transportation Systems Engineering

related field

Research supervision, delivering lecture to undergraduate and postgraduate: Msc. Highway & Transportation Engineering & B. Eng. (Hons) Civil Engineering students. Involved directly with OBE

committee and development of a new Msc. Programme.

2006 - 2010

Company : University of South Australia, Adelaide, AUSTRALIA

Position : PhD Student/ Researcher

Responsibility: Research Thesis Title: Level Crossing Safety Assessment using Petri

nets (LXsafe Pnets) Model for Assessing Risk at Level Crossing

Locations: South.

2002-2005

Company : Faculty of Civil Engineering, Universiti Teknologi MARA, Shah

Alam, Selangor, MALAYSIA

Position : Lecturer

Responsibility: Research supervision, delivering lecture to undergrad students,

involved with various committees.

2000 - 2002

Company : Universiti Putra Malaysia

Position : Msc. in Highway & Transportation Engineering

Responsibility : Attended scheduled programme for MSc. Student & Title of

Dissertation: The development of motorcycle and heavy

vehicle accident model in Malaysia

1999- 2000

Company : Linton Engineering College, Ipoh, Perak

Position : Lecturer

Responsibility : Delivering lecture to undergrad students.

1994 - 1999

Company : Universiti Teknologi MARA, Shah Alam

Position : Diploma/ Bachelor Student

Responsibility : Attended scheduled programme

1996

Company : Zaaba Perunding Sdn Bhd, Kuala Lumpur

Position : Practical Trainee

Responsibility : Participate in various projects in Highway & Traffic,

Structure & Water Divisions.

G. <u>ADMINISTRATIVE & PROFESSIONAL EXPERIENCES AT NATIONAL</u> LEVEL

- 1. iRAP Steering Committee Malaysia Programme Director, iRAP Programme Malaysia
- 2. Technical Committee:
 - Re-Evaluation of RSA manual for Malaysia hosted by KKR Malaysia,
 - Penilaian Pemasangan Weigh in Motion (WIM) di Malaysia' hosted by KKR Malaysia
 - Implementation of AWAS in Malaysia
- 3. iRAP Malaysia Transformation Plan for Ministry of Transport Malaysia (MOT)
- 4. iRAP Malaysia NBOS for Ministry of Transport Malaysia (MOT)

H. <u>ADMINISTRATIVE</u> & <u>PROFESSIONAL</u> EXPERIENCES AT INTERNATIONAL LEVEL

- 1. Co-opted Member, Road Engineering Asia and Australasian (REAAA)
- 2. Technical Committee, Road Engineering Asia and Australasian (REAAA)

I. RESEARCH & DEVELOPMENT GRANTS

- 1. Study of cargo flow projection for main road in Malaysia, MARCEL (RM278,452.00) (Co-researcher)
- 2. Development of risk assessment tool for logistics supply chain, MARCEL (RM174,052.00) (Co-researcher)
- 3. Petri Nets Programme Application in the Assessment of Heavy Rail Based Public Transportation Performances under National Key Results Area (NKRA) 2011-2013; the case of KTM Komuter, FRGS (RM130,000.00) (Coresearcher) collaborative research with UIAM, Malaysia
- 4. The Development of Port-Hinterland Performance Model for Rail Freight Movement, MARCEL (RM60,000.00) (Co-researcher)
- 5. Axial Load and Road Condition Relationship Model, FRGS 2012-1, 01/07/2012 30/06/2014 (RM80,000.00) (Co-researcher)
- 6. Stochastic Dynamic Petri nets Model at Signalised Intersection, FRGS 2012-1, Effective Dates 02/06/2012 31/05/2015 (RM61,500.00) (Coresearcher)

- 7. RFID Adoption and Keys Drivers in Malaysia's Fast Moving Consumer Goods (FMCG) Retail Companies, MARCEL (RM50,000.00) (Co-researcher)
- 8. Finite Element technique for Modelling of Road Infrastructure Deterioration Caused by Heavy Loading, FRGS/2/2013/TK07/UITM/03/2, Effective dates 15/11/2013-14/11/2016 (RM128,300)

J. PRINCIPLE RESEARCHER

- 9. Finite Element technique for Modelling of Road Infrastructure Deterioration Caused by Heavy Loading Part 2, (PSI-RMI) (RM60,000), (Principle Researcher)
- 10. Pedestrian Risk Assessment Model at Urban signalised Intersection, FRGS (RM57,000) (Co-researcher)
- 11. Dynamic User Equilibrium with Macroscopic Fundamental Diagram for Disaster management and emergency evacuation, FRGS 2015-1, Effective Dates 02/11/2015- 01/11/2018 (RM141900) (Co-researcher) collaborative research UiTM with MONASH UNI, Malaysia
- 12. The Development of Fatigue Assessment Instrument for Heavy Vehicle Drivers in Oil and Gas Sector in Malaysia, University Teknologi Petronas Malaysia (UTP) grant. Effective dates: 18 Sept 2016 17 Sept 2017) (Co-Researcher) collaborative research MIROS with UTP, Malaysia
- 13. Increased Ridership in Bus Operation through Mixed Method Design in Performance Index Development towards Sustainable Cities, FRGS/1/2016/TK08/UITM/02/1 (RM102 000) Effective Dates: August 2016 July 2019 (Co- researcher)
- 14. The Evaluation of Motorcycle Facilities: Utilisation and User Satisfaction on EMCL and NEMCL in Malaysia, MIROS Internal Grant (RE103103) (RM 47396) Effective dates: May2016 Dis 2016 (Principle Researcher)
- 15. Vehicle Kilometer Travelled (VKT) validation Study for Malaysia, MIROS Internal Grant (RE103101) (RM 26000) Effective dates: May2016 Dis 2016 (Research Supervisor)
- 16. Evaluation of Pedestrian Crossing Facilities in Kuala Lumpur, MIROS Internal Grant (RE103104) (RM 28 641) Effective dates: May2016 Dis 2016 (Research Supervisor)
- 17. Effect of Enhanced Road Marking in Speed and Lateral Position, MIROS Internal Grant in collaborative research MIROS 3M, Malaysia (RE103107) (RM 59050) Effective dates: Jun 2016 Dis 2017 (Research Supervisor)

- 18. The Development of Systematic Analysis of Centralized Road Safety Data System for Motorcycle, MIROS Internal Grant (RE103104) (RM 1012) Effective dates: May2016 Dis 2016 (Co- researcher)
- 21. Identification Determinants Involving Student at School- MIROS Internal Grant (Research Supervisor)
- 22. Evaluation of Safety Risk at School in Selangor (Research Supervisor)
- 23. The Safer 2 School App- Development of A Road Safety Daya Repository and Analysis at Vicinity of School (Research Supervisor)
- 24. Development of Malaysian Road Assessment Programme for School- A pilotn study in Selangor- MIROS internal Grant (RM21,400) Effective dates: April 2017 December 2017, Lead Researcher
- 25. Development of Road Surface Condition and Monitoring System Utilisizing Motorcycle (ROCOM) Research Supervisor

K. CONSULTANCY PROJECTS

Project Coordinator/leader

- Revenue Leakages Study KTM Commuter Services for Keretapi Tanah Melayu Berhad
- 2. Social Impact Study For KTM Commuter: Seputeh Station for Keretapi Tanah Melayu Berhad
- 3. Kajian Penggunaan Laluan Pejalan Kaki Berbumbung Di Kuala Lumpur for Dewan Bandaraya Kuala Lumpur (DBKL)
- 4. Bus Commuter Improvement Project for Peninsula Malaysia (Eastern Region)- Sub Consultant with MZK Consulting for Suruhanjaya Perkhidmatan Awam Darat (SPAD).
- 5. Guest Satisfaction Index-GSI for PRASARANA Transit Services: Sep 2014 For Syarikat Prasarana Negara Berhad
- 6. Guest Satisfaction Index-GSI for PRASARANA Transit Services: Mei 2013 For Syarikat Prasarana Negara Berhad
- 7. Guest Satisfaction Index-GSI for PRASARANA Transit Services : September 2013 For Syarikat Prasarana Negara Berhad
- 8. Pelan Pembanggunan Berorientasikan Transit Di Negeri Selangor for JPBD Selangor
- 9. Traffic Impact Assessment Study (TIA) Puncak Alam for Universiti Teknologi MARA, Shah Alam.
- 10. The Establishment of `LAND PUBLIC TRANSPORT FORUM' Launching of LPT Forum for Suruhanjaya Perkhidmatan Awam Darat (SPAD).
- 11. Guest Satisfaction Index-GSI for PRASARANA Transit Services: 2012 for Syarikat Prasarana Negara Berhad
- 12. Land Public Transport Survey for Major Cities in Malaysia Georgetown for Suruhanjaya Perkhidmatan Awam Darat (SPAD).

- 13. Land Public Transport Survey for Major Cities in Malaysia Johor Bahru for Suruhanjaya Perkhidmatan Awam Darat (SPAD).
- 14. Kajian Kesesuaian Program Penenangan Trafik dan Penilaian Keselamatan jalan Raya di Petaling jaya, MBPJ 2016
- 15. Cadangan kerjasama Penilaian Pelan Pembanggunan Infrastrucktur Jalan Kampung Bharu; Straits Consult & Perbadanan Pembanggunan Kampung Bharu (PKB) 2017 (On going)
- 16. Penilaian Keselamatan Jalan Raya Kampus Kolej Universiti Insaniah, Kuala Ketil Kedah 2017(on going)
- 17. MHROAD enhancement project for PLUS Malaysia (on going)
- 18. Road safety Assessment & IRAP for Malaysia Airport (Sepang)
- 19. Road safety assessment in Sunway Iskandar Johor
- 20. A Road Safety Review on The Billboard Installation Locations Along Coastal Highway Southern Link

****System Pembangunan Data Trafik Dan Kemalangan Jalan Raya Bersepadu Untuk UiTM (U-ROADS) – TOR submitted to Pejabat Pembanggunan, Infrastruktur & Infostruktur, UiTM

L. MEMBER

- 21. Full Integration of Airport Pavement Management System (APMS) Stage 2 At Sultan Abdul Halim Airport, Alor Setar, Kedah for Malaysia Airport Holding Berhad (MAHB).
- 22. Training Course for Maintenance and Rehabilitation of Roads and Bridges Using Road Asset Management System for Lea International Ltd, New Delhi, India.
- 23. Kajian Naiktaraf Jalan Balung Lama, Tawau, Sabah for Tangkas Bintang Sdn Bhd.
- 24. Full Integration of Airport Pavement Management System (APMS) Stage 2 at Penang International Airport (PIA) For Malaysia Airport Holding Berhad (MAHB).

- 25. Analysis of fatal Crash Data for Denso International Asia; By DENSO International Asia 2015
- 26. Pembanggunan Malaysian Highway Road Accident Analysis and Database system (MHROADS) bagi kegunaan Lembaga Lebuhraya Malaysia (LLM) – 2016

M. PUBLICATION AND INTELLECTUAL PROPERTIES

Scientific Books & Proceedings

- Siti Zaharah, I. & Yue, W. L. (2008), 'Methodological Framework for Developing Railway Level Crossing Safety Assessment Model using Petri Nets', Proceeding of the 10th International Conference On the Application of Advanced Technologies in Transportation (AATT'08), Athens, Greece, 27-31 May 2008.
- 2. Siti Zaharah, I. & Yue, W. L. (2008), 'An Improved Methodology Development in Assessing the Level of Risk at Railway Level Crossing Locations', Proceedings of the 23rd ARRB Conference Research Partnering with Practitioners, Adelaide, South Australia, 30 July-1 August 2008.
- 3. Siti Zaharah, I., Yue, W. L. & Somenahalli, S. V. C. (2008), 'The Methodology Development of Railway Level Crossing Safety Systems; South Australia Case Study, Proceedings of the 11th International Conference on Computer Systems Design and Operation in the Railway and Other Transit Systems (COMPRAIL), Toledo, Spain, 15-17 September 2008.
- 4. Siti Zaharah, I., Yue, W. L. & Somenahalli, S. V. C. (2009), 'Petri nets Approach in Assessing the Safety Level at Level Crossing—the Effect of Traffic and Train Characteristics to Safety Performance, Proceedings of 32nd Australasian Transport Research Forum (ATRF), Auckland, New Zealand, 29 September-1 October 2009.
- 5. Siti Zaharah, I., Yue, W. L. & Somenahalli, S. V. C. (2010), 'Petri Nets in Assessing Risk at Level Crossing: The Effect of Heavy Vehicles', Proceedings of the 24rd ARRB Conference—Building on 50 years of Road and Transport Research, Melbourne, Australia, 13-15 October 2010.
- 6. Siti Zaharah, I. (2006), 'The Development of Highway Rail Level Crossing Safety Systems: A Research Framework', The 28th Conference of Australian Institutes of Transport Research (CAITR), Sydney, New South Wales, 8-6 December 2008.

- 7. Siti Zaharah, I. (2007), 'The Development of Railway Level Crossing Safety Assessment Model: A Research Framework', The 29th Conference of Australian Institutes of Transport Research (CAITR), Adelaide, South Australia, 5-7 December 2006
- 8. Amin, M. F. F. M., & Ishak, S. Z. (2013). Petri nets Approach in Optimising Container Loading and Loading process in ITT Operation: A research Framework, IJCSIA 2013
- 9. Rizati, H., Ishak, S. Z., & Endut, I. R. (2013). The Utilization Rates of Pedestrian Bridges in Malaysia. In Business Engineering and Industrial Applications Colloquium (BEIAC), 2013 IEEE (pp.646-650)
- 10. Mohd Nusa, F. N., Endut, R. I., & Ishak, S.Z. (2014) Challenges of Green Highway Concept towards Implementation of Green Highway. International Conference on Science, Engineering and Built Environments (ICSEBS 2014) at Sanur Paradise Hotel, Bali, Indonesia, 24th – 27th November 2014
- 11. Ismail, W. A., Endut, R. I., & Ishak, S.Z. (2014). Polyacrylate Modified Binder for Sustainable Asphalt Pavement Performances using Superpave Mix Design. International Conference on Science, Engineering and Built Environments (ICSEBS 2014) at Sanur Paradise Hotel, Bali, Indonesia, 24th 27th November 2014
- 12. Saadiah Yahya and Siti Zaharah Ishak (2014). Securing Halal Product Information: A Discussion. International Halal Conference, Istanbul Turkey. 17-18 November 2014.
- 13. O. M. Yassenn, I. R. Endut, M. A. Hafez, and S. Z. Ishak, "Rutting Load Equivalency Factors of Heavy Vehicles Operating in the Sothern Part of Malaysian Peninsula," presented at the International Conference on Industrial Engineering, Management Science and Applications 2015, Tokyo, 2015.
- 14. O. M. Yassenn, I. R. Endut, M. A. Hafez, S. Z. Ishak, and N. E. Kordi, "Fatigue Damage Ratios for Heavy Vehicles Operating in the Southern Part of Malaysian Peninsula" presented at the International Conference on Industrial Engineering, Management Science and Applications 2015, Tokyo, 2015.
- 15. P. Alvin Wai Hoong, M.K. Norfaizah & I. Siti Zaharah "A Safety Review of Motorcycle Lane in Malaysia" presented at the 25th World Road Congress (PIARC 2015), Seoul, South Korea, 02 06 November 2015

- 16. M.G. Muhammad Ruhaizat, I. Siti Zaharah,' The Development of Systematic Analysis of Centralized Road Safety Data System for Motorcycle, ITS Seminar & Exhibition 2017, Kuala Lumpur, 21 23 February 2017.
- 17. Hizal Hanis, I. Siti Zaharah,' Development of Malaysian Highway Road Accident Database System, ITS Seminar & Exhibition 2017, Kuala Lumpur, 21-23 February 2017.
- 18. I. Siti Zaharah, P. Alvin Wai Hoong, M.K. Norfaizah & M. Ruhaizat, "An Evaluation Study on Motorcycle Lane in Malaysia", The 1st IRF Global Summit & 15th REAAA Conference, Nusa Dua, Bali, Indonesia, 21 25 Mac 2017.
- 19. "Speed Characteristics On Rural Expressways in Malaysia", The 1st IRF Global Summit & 15th REAAA Conference, Nusa Dua, Bali, Indonesia, 21 25 Mac 2017.
- 20. Fifth Global Meeting of Non-Governmental Organizations Advocating for Road Safety and Road, Sama Sama Hotel, Kuala Lumpur, 5 -7 April 2017.
- 21. Alvin Poi Wai Hoong, Nusayba Megat Johari, Hizal Hanis Hashim & Siti Zaharah Ishak, 'International Road Assessment Programme in Malaysia: Towards Safer Roads, THE INGENIEUR, magazine of Board of Engineers Malaysia, Vol 70, April June 2017, pp 8-14
- 22. Alvin Poi Wai Hoong, Lawrence Cheng Kah Loon, Hoo Jean Ea, Nusayba Megat Johari, Dr Soo Yew Guan, Dr Lim Kim Chuan, Dr Siti Zaharah Ishak, 'Development of Road Attribute Data Logger and Inspection System for Road Safety Assessment, THE INGENIEUR, magazine of Board of Engineers Malaysia, Vol 70, April June 2017, pp 26-30
- 23. Isha, Ahmad Shahrul Nizam, Sabir, Asrar Ahmed, Ghazali, Zulkipli, Sharif, Md Akhir Bin Mohd, Ishak, Siti Zaharah, Proposing A Quick Assessment Tool For Heavy Vehicle Commercial Drivers' Fatigue In Oil And Gas Industry Of Malaysia, Advanced Science Letters, Volume 23, No. 8, August 2017, Pp. 7742-7745(4)
- 24. P. Alvin Wai Hoong, I. Siti Zaharah, "The Development of Safety Risk Star Rating at Schools in Malaysia" presented at the 28th ARRB International Conference, Brisbane, Queensland, Australia, 29 Apr 2nd May 2018
- 25. A Shabadin, H. Rizati, R. Azzuhana, J. Nurulhuda, H. Nurzarifah, Sharifah Allyana S.M.R, I. Siti Zaharah, "Evaluation of School Children Crsing and Their Conflicts at School Vicinity in Malaysia" presented at the 28th ARRB International Conference, Brisbane, Queensland, Australia, 29 Apr 2nd May 2018

26. Susilawati Susilawati, Michael The, Siti Zaharah Ishak, Multilevel Hierarchical Bayesian for Traffic Accident Prediction, World Conference on Transport Research WCTR 2019, 31 May 2019

National/ Regional/ Other International Journal

- 1. Siti Zaharah, I., Yue, W. L. & Somenahalli, S. V. C. (2010), 'Level Crossing Modeling using Petri nets Approach and Π–Tools', Journal of Asian Transportation Studies, vol.1, no. 2, pp. 107
- 2. Siti Zaharah, I., Yue, W. L. & Somenahalli, S. V. C. (2011), 'Heavy Vehicle Safety Assessment at Level Crossing using Petri Nets Approach: Australia Case Study', Journal of Eastern Asia Society for Transportation Studies "Conference, Jeju Korea, 2011
- 3. Hamidun, R., Ishak, S. Z., & Endut, I. R. (2013). Assessing Pedestrian Crossing Risk at Signalised Intersection. The International Journal of Emerging Technology and Advanced Engineering, 3(1), 31-35.
- 4. Amin, M. F. F. M., & Ishak, S. Z. (2013). Petri nets Approach in Optimising Container Loading and Loading process in ITT Operation: A research Framework, IJCSIA 2013
- 5. Rizati, H., Ishak, S. Z., & Endut, I. R. (2013). Pedestrian Crossing Scenario Model using Petri nets. Procedia-social and behavioural sciences 129. Pp 406-413.
- 6. Rizati, H., Ishak, S. Z., & Endut, I. R. (2013). The Effect of Speed on Pedestrian Crossing. Australian Journal of Basic and Applied Sciences 8(19), pp. 138-142.
- 7. O. M. Yassenn, I. R. Endut, M. A. Hafez, and S. Z. Ishak, "Development of Rutting Damage Ratios of Heavy Vehicles Operating in the Northern Part of Peninsular Malaysia," Modern Applied Science, vol. 9, September 2015.
- 8. O. M. Yassenn, I. R. Endut, M. A. Hafez, and S. Z. Ishak, "Contribution to Rutting Damage of Different Heavy Vehicles Operating Along the Northern Part of Malaysian Peninsula," European Journal of Scientific Research, 2015.
- 9. O. M. Yassenn, I. R. Endut, M. A. Hafez, S. Z. Ishak, and O. M. Yaseen, "Finite Element Modelling of Flexible Pavement," Journal of Multidisciplinary Engineering Science and Technology, vol. 2, pp. 115-120, January 2015.
- O. M. Yassenn, I. R. Endut, M. A. Hafez, S. Z. Ishak, and O. M. Yaseen, "Overloading of heavy vehicles around the world," International Journal of Engineering & Scientific Research, vol. Vol. 5, pp. 34-45, March - 2015.11.

- Hamidun, R., Kordi, N.E., Endut, I. R., Ishak, S. Z., & Mohd Yusoff, M.F. (2015), Estimation of illegal crossing accident risk using Stochastic Petri Nets, Journal of Engineering Science and Technology, Special Issue on ACEE 81-93
- 12. Hamidun, R., Ishak, S. Z., Kordi, N.E., & Endut, I. R. (2016), Prediction of pedestrian risk at signalized intersections, Jurnal Teknologi 78: 69-74
- 13. Hamidun, R., Kordi, N.E., Endut, I. R., & Ishak, S. Z. (2016), Pedestrian potential risk while crossing at signalised intersections, Jurnal Teknologi 78: 15-21
- 14. Hamidun, R., Kordi, N.E., Endut, I. R., & Ishak, S. Z. (2016), Behavioral observation of crossing pedestrians at signalised intersections, Jurnal Teknologi 78: 9-14.
- Rahmat, A., Endut, I.R., Ahmad, Z., Ishak, S.Z. and Ibrahim, C. K. I. (2016). Development of Transit Oriented Development (TOD) Model for Malaysia. Journal of Built Environment, Technology and Engineering, Vol. 1 (Sept.) ISSN 0128-1003.
- 16. Darus, N. S., Borhan, M. N., Ishak, S. Z., Ismail, R., & Razali, S. F. M. (2018). Pattern of Child Pedestrian Collisions and Injuries in Malaysia. *Jurnal Teknologi*, 80 (4), 23-31.
- 17. NAM Yunin, NSM Zulkiffli, A Shabadin, SZ Ishak (2018). Effect of Enhanced Road Marking in Road Safety Speed and Lateral Position, Journal of Built Environment, Technology and Engineering, Vol. 4 (May) ISSN 0128-1003.
- 18. NSM Zulkiffli, R Hamidun, SZ Ishak (2018). Examining The Level-of-Service and Speed of traffic Contraflow Strategy in Malaysia, Journal of Built Environment, Technology and Engineering, Vol. 4 (May) ISSN 0128-1003.
- 19. A. E. Jehad, A. ismail, M. N. Borhan & S. Z. Ishak (2018). Modelling and optimizing of Electronic Toll Collection (ETC) at Malaysian Toll Plazas Using Microsimulation Models. International Journal of Engineering & Technology, 7 (4), 2304-2308.

Scientific & Technical Reports (Requested / Initiated by MIROS)

Published Work – MIROS Road Safety Assesstment Report (MRSA)

1. MRSA: Sekolah Sri GOMBAK 2

- 2. 2016, MRSA 203: Road Safety Assessment and in Depth Investigation on Lebuhraya Pantai Timur (LPT2)
- 3. 2016, MRSA 200: Road Safety Assessment Lebuhraya Pantai Timur (LPT2)
- 4. MRSA: LPT2 Road Network Assessment
- 5. MRSA: KM 137.3, Lebuhraya Utara Selatan Arah Utara Pagoh (in-press) *
- 6. MRSA: Lorong Motosikal Lebuhraya Shah Alam (KESAS)
- 7. MRSA: Persiaran Jengka Subang

Published Work - MIROS Reasearch Report (MRR)

- Exclusive motorcycle lane (EMCL) and Non Exclusive Motorcycle Lane (NEMCL) (in-press)
- The Development of Systematic Analysis of Centralised Road Safety Data System for Motorcycle (in-press)
- 2016, MRR 199: Safety Evaluation of Egress and Ingress of Exclusive Motorcycle Lane at Federal Road 2
- 4. Speed Study and Motorcyclist Behaviour Observation Along Malaysia Road
- 5. 2017, MRR 207: Vulnerability of Pedestrian at Traffic Junction
- 6. 2017, MRR 211: Understanding the Use of Motorcycles among Secondary School Students Based on Protection Motivation Theory
- 7. 2017, Effectiveness of OPS Selamat 7/2015: An Evaluation Study
- 8. 2017, MRR 218: Motorcycles Gap Acceptance at Merging Point of Egress and Ingress of Exclusive Motorcycle
- 9. Lane in Malaysia
- 10. 2017, MRR 219: Identifying the contributing road engineering factors of crashes at curved roads sections in Negeri Sembilan.
- 11. 2017, MRR 221: Risk of Fatal Motorcyclist Road Crash in Federal Road
- 12. 2017, MRR 222: Vehicle Kilometer Travelled Validation Study
- 13. 2017, MRR 223: Vehicle Speed Approaching Zebra Crossing on Federal Roads.pdf
- 14. 2017, MRR 227: Surrogate Measure of Estimating Real-Time Traffic Volume
- 15. 2017, MRR 228: Evaluation of Midblock Crossing: Effect On Pedestrian and Vehicular Traffic

- 2017, MRR 229: Vehicles Speed Characteristics Approaching Road Work
 Zones in Urban Expressway
- 2017, MRR 232: An Evaluation of Motorcycle Facilities: Utilisation and User Satisfaction on EMCL and NEMCL in Malaysia
- 18. 2018, MRR 255: Awareness Automated Safety System (AwAS) for Red Light Running: After Four Years of Its Implementation
- 2018, MRR 254: Measuring Road Surface Deciencies Utilizing Motorcycle-Mounted App – System Development and Tests
- 20. 2018, MRR 248: Vehicle Age and Crash Severity
- 21. 2018, MRR 246: Speed Study and Behaviour Observation of Motorcyclists along Malaysian Roads
- 22. 2018, MRR 244: The Impact of Waiting Time Towards Pedestrian at Signalised Intersection
- 23. 2018, MRR 243: A Study on Commercial Vehicle Speed and its Operational Charasteristics

N. AWARDS & RECOGNITIONS

MIROS Awards

- 1. 2017, Excellent Service Award, Malaysian Institute of Road Safety Research (MIROS)
- 2. 2016, Excellent Service Award, Malaysian Institute of Road Safety Research (MIROS)
- 3. 2015, Excellent Service Award, Malaysian Institute of Road Safety Research (MIROS)

National & International Awards

- 1. 2017, KATAHIRA AWARD for best paper REAAA Conference 2017, Bali Indonesia (3rd Prize)
- 2. 2015, Anugerah Konsultan Cemerlang, UiTM, 2015
- 3. 2014, Invention, Innovation & Design Exposition 2014 (IIDEX 2014), Silver
- 4. 2013, Research, Invention & Innovation design (RIID 2013), Silver
- 5. 2012, Anugerah Pekerja Cemerlang, MITRANS
- 6. 2011, Vice Chancellor Special Project for Sustainable Campus- Sustainable Transportation

- 7. 2010, Completion Scholarship, University of South Australia
- 8. 2009, Award for the best paper for new methodology

 Siti Zaharah, I., Yue, W. L. & Somenahalli, S. V. C. (2010), 'Level

 Crossing Modeling using Petri nets Approach and Π-Tools', Paper
 presented at the Eastern Asia Society for Transportation Studies
- 9. 2008, International Mobility Travelling Grant; University of South Australia, Australia & Technical University of Braunsweigh

Conference, Surabaya, Indonesia, 16-19 November 2009 (2009)

O. RESEARCH & PROJECT SUPERVISION

(i) PhD by Research (Completed)

- 1. Salah Mohamed Khalil Abdel Galil, Development of Workability Device and Correlation Workability with Compatibility of HMA.
 - PhD in Civil Engineering (UiTM) (Co-Supervisor), Completed 2013
- 2. Rizati Binti Hamidun, Pedestrian Safety Risk Assessment Model at Pedestrian Crossing Area.
 - PhD in Transport & Logistics (UiTM) (Main Supervisor) Completed 2014

(ii) PhD by Research (On-Going)

- 1. Noraini Baser, Phd in civil engineering UiTM Shah Alam, 2015
- 2. Alvin Poi Wai Hong, Phd in civil engineering UPM Serdang, 2016
- 3. Ali Emad Jihad, PhD in civil Engineering, UKM, 2016
- 4. Nur Shaeza, Phd in Civil Engineering, UKM, 2016
- 5. Nur Syahidatul Idany binti Abdul Ghani, PhD in Communication and Media Studies UiTM, 2016
- Nik Sarah Nik Zamri, PhD in Mathematics and Computer Science, UKM,
 2017 penyelia bersama

(iii) Master of Science Candidates (by research)

- 1. Fatin Najwa Binti Mohd Nusa, Implementation of Green Highway Construction in Malaysia
 - Master in Transport & Logistics (LT780) by Research
- 2. Wan Adilah Ismail, Intersection study using Petri nets, Master in Civil Engineering

(iv) Master by Research (On Going)

- 1. Mohd Nor Fakurazy Bin Abu Bakar, Relationship Between Repeated Damage for Train Parts and Effects to the Consumer, Master in Transport & Logistics (LT780) by Research, 2014
- 2. Mohd Taufek bin Ishak, Effectiveness of urban Public Transport _ NKRA initiatives in increasing PT Modal share in KL Master in Transport & Logistics (LT780) by research, 2014
- 3. Nadia, Master in Civil Enginering (just registered 2017)
- Komala Devi D/O Sundararajan, Intervention for safe criossing among pedestrian based on extended theory of planned behaviour GF170064, FKAAS

P. INVITED SPEAKER, KEYNOTE SPEAKER, SESSION CHAIRMAN (EXTERNAL EVENTS)

- 2018, Moderator, Sesi Kupasan Ilmiah 2 (Forum) bertajuk "Inovasi dan Paradigma Baharu Keselamatan Jalan Raya: Konvensyen Keselamatan Jalan Raya bersempena Mesyuarat Agung Tahunan (MAT) Majlis Keselamatan Jalan Raya (MKJR), Sunway Putra Hotel, Kuala Lumpur, 29 Oktober 2018
- 2. 2018, Session Chairman, 10th Malaysian Road Conference and Exhibition 2018 and PIARC International Seminar, Sunway Pyramid Convention Centre, Petaling Jaya, 29-31 Oktober 2018
- 3. 2018, Moderator, Sesi Kupasan Ilmiah bertajuk "Teknologi Automotif Masa Hadapan & Kenderaan Tanpa Pemandu": Isu dan Cabaran Pengawalseliaannya, Konvensyen JPJ 2018, MITC, Melaka 26 April 2018
- 2018, Invited Speaker for Plenary-Two Session, "Devising a National Road Safety Strategy to Address the Challenge of Road Safety in Developing Asian Countries", 4th Annual Road and Highways Conference, Singapore, 9-11 April 2018
- 5. 2017, UNCDB Meetings, Geneva, 12-19 November 2017.
- 6. 2016, Invited Speaker, ASLI: Urban Transportation Summit 2016, Sunway Putra Hotel, KL 3rd November 2016.
- 7. 2016, Invited Speaker, Medical Research SYMPOSIUM (MRS) and PACIFIC PARTNERSHIP in conjunction with Kuantan Research Day 2016, IIUM Kuantan, 3rd August 2016.

- 8. Invited Speaker, 2nd IRF Asia Regional Congress International Road Federation, 17-20 Oktober, Putra World Trade Centre
- 9. 2016, Panellist, PHD Untold Story, University Malaysia, 30th April 2016.

Q. SCIENTIFIC & TECHNICAL EVALUATION.

Article review of citation indexed journal

- Manuscript Review, ICSIE 2018: 023-017: International Journal of Integrated Engineering, Identification of Potential Risks and Controlling Factors Associated with Helicopter Operation: A Mix-Method Investigation from Oil and Gas Industries, October 2018
- 2. Manuscript Review, JESTEC (OT18078): Journal of Engineering Science & Technology, Expert System in Transportation Engineering: A Review Article, July 2018
- Technical Paper Reviewer, 10th Malaysian Road Conference and Exhibition 2018 and PIARC International Seminar on Asset Management, Music and Al-Quran Sounds Effects on Driver Behaviour due to Road Safety Purposes, 30 July 2018
- Technical Paper Reviewer, 10th Malaysian Road Conference and Exhibition 2018 and PIARC International Seminar on Asset Management, Pragmatic Approach to Road Hazard Assessment with the Aid of New Technology, 30 July 2018

R. OTHER RESPONSIBILITIES - EXTERNAL APPOINTMENT

Editorial Board Committee/ Reviewer

- 1. International Symposium of Civil and End Environmental Engineering (ISCEE 2016), 4th 5th December 2016, Melaka, MALAYSIA
- 2. Reviewer for Journal of Engineering Science and Technology
- 3. Technical Committee of 15th REAAA Conference 2017, 22rd-24rd March 2017, Bali Indonesia.
- 4. Technical Committee of Road Engineering Association of Asia and Australasia (REAAA)
- 5. Reviewer for technical paper Conference in Transportation in Beijing China

Technical Committee

- 1. iRAP steering Committee Malaysia
 - Programme Director iRAP Programme Malaysia Technical Committee for Re-Evaluation of RSA manual for Malaysia hosted by KKR
 - Malaysia Technical Committee for 'Penilaian Pemasangan Weigh in Motion (WIM) di Malaysia' hosted by KKR Malaysia
- 2. Technical Committee for Implementation of AWAS in MALAYSIA.
- 3. iRAP Malaysia Transformation Plan for Ministry of Transport, Malaysia
- 4. iRAP Malaysia NBOS for Ministry of Transport, Malaysia

Special Task in International & National Level (Association/Committees)

- 1. Co-opted Member for Road Engineering Association of Asia and Australasia (REAAA)
 - a) 104th REAAA Council Meeting Dubai 2016
 - b) 11th Head of Road Authority Meeting Dubai 2016
 - c) 105th REAAA council Meeting Nusa 2, BALI 2017
 - d) 12th Head of Road Authority Meeting Nusa 2, Bali 2017
- 2. Associate Fellow of ITS Malaysia
 - a) AGM ITSM 2016, Kuala Lumpur
 - b) ITS World Congress 2016, Melbourne Australia

- 3. World Road Association (PIARC)
 - Representing the Director-General of MIROS in XXVth World Road Congress, COEX Convention Center, Seoul, South Korea, 2 – 6 November 2015.
- 4. 9th Multisector Road Safety Special Working Group (MRSSWG)
 - Member of delegations of Ministry of Transport Malaysia (MOT) and Road Safety Department of Malaysia (JKJR), Bangkok, Thailand, 26 – 28 August 2018