

Curriculum Vitae

1. Personal Data

i.	Name	: Prof. Dato' Dr. Rosli Bin Abu Bakar
ii.	IC No	: 620630-05-5215
iii.	Date and Place of Birth	: 30.06.1962 and Negeri Sembilan
iv.	Sex	: Male
v.	Nationality	: Malaysian
vi.	Status	: Married
vii.	Name of Current Employer	: Universiti Malaysia Pahang
viii.	Address	: <u>Office</u> Fakulti Kejuruteraan Mekanikal, Universiti Malaysia Pahang, 26600 Pekan, PAHANG, MALAYSIA <u>Home</u> No. 28, Lorong Taman Tanah Putih 2, Taman Tanah Putih, 26600 Pekan, Pahang
ix.	Telephone No	: 09-4242305(Office)
x.	Hand phone No	: 012-983-2631
xi.	E-mail	: rosli@ump.edu.my
xii.	Title of Position Held	: Professor
xiii.	Status	: Permanent
xiv.	Signature	: _____
xv.	Date	: 2015

2. Educational Qualifications

Academic Qualification

i.	Degree	: Doctor of Philosophy
	Field	: Internal Combustion Engine
	Thesis Title	: Computational and Experimental Investigation of the Combustion Performance in a Diesel Engine
	Year	: 1998
	Name and Place of Institution	: Hanyang University, Seoul, KOREA
ii.	Degree	: Master of Science
	Field	: Internal Combustion Engine
	Thesis Title	: A. Study on the Prediction of Combustion Performance In a Diesel Engine
	Year	: 1992
	Name and Place of Institution	: Hanyang University, Seoul, KOREA
iii.	Degree	: B. Sc. in Mechanical Engineering
	Field	: Mechanical Engineering
	Year	: 1990
	Name and Place of Institution	: Hanyang University, Seoul, KOREA.
iv.	Degree	: Diploma in Mechanical Engineering
	Field	: Mechanical Engineering
	Year	: 1988
	Name and Place of Institution	: Seoul National Polytechnic University, Seoul, KOREA.

v. Degree	: Sijil
Field	: Mechanical Engineering
Year	: 1984
Name and Place of Institution	: Politeknik Ungku Omar, Ipoh, MALAYSIA

Courses Completed

1. Attended a short Course in Energy Saving and Environmental Technology Development for Malaysia at the Int. Centre for Environmental Technology Transfer (NEDO), ICETT, Yokaichi City, Nagoya, Japan. 18th –29th Mach 1994.
2. Technical Visit to Lotus Engineering PLC, Norwich and Loughborough University of Technology (LUT), United Kingdom 25th Februari-3rd Mach 2001.
3. A technical visit to Orbital Corp Ltd, Balcutta, Perth, Australia, 19th-25th March 2003.
4. Attended a short course on the handling of the GT-Suite Engine Development software at ADAPCO Japan, Yokohama, Japan, 21st to 25th April 2003.
5. Technical visit to MZ Engineering GmbH in Zhoupau, Germany, in conjunction with the joint collaborative project with MZ Motorrad Sdn. Bhd., 19th. To 20th. August 2003.
6. Technical visit to the Institute for Internal Combustion Engines and Thermodynamics, Graz University of Technology, Austria, 24th. August 2003.
7. Attended a short course on the handling of High Speed Data Acquisition and combustion Analyzer, at Dewetron Ges.m.b.H, Graz, Austria, 24th. To 27th. August 2003.
8. Attended discussion on the Quality at Awana Kijal, Terengganu, Malaysia, 11th to 15th April, 2004
9. Attended discussion on the e-IRPA at KUITTHO, Batu Pahat, Johor 24th April 2004.
10. Technical visit to the Denmark for Automotive NVH Solution B&K, 24th to 28th September,2004
11. Technical visit to the Denmark for Combustion analyzer using laser, Dentac, 28th to 31th September, 2004
12. Technical visit to the University of Technology Sydney in Australia. 17th to 19nd September,2005
13. Technical visit to the University of South Australia, in Australia. 19th to 20nd September, 2005
14. Technical visit to the Royal Melbourne Institute of Technology (RMIT), in Australia. 20th to 22nd September, 2005
15. Technical visit to the Auckland University of Technology in New Zealand, 22nd to 26th September,2005
16. Technical visit to the Asian Institute of Technology (AIT) in Thailand, 29th November, 2005.
17. Technical visit to the King Mongkut Institute of Technology Ladkrabang (KMUTL) in Thailand, 30th November to 1rd December, 2005.
18. Technical visit to the Rajamangala University of Technology, Tanyaburi (RMUTT) in Thailand, 1st to 2nd December, 2005.
19. Technical visit to the Rajamangala University of Technology, Lanna (RMUTL) in Chiang Mai, Thailand, 1st to 2nd December, 2005.
20. Technical visit to the Korea University in South Korea, 17th to 19th December, 2005.

21. Technical visit to the Hanyang University in South Korea, 19th to 20th December, 2005.
22. Technical visit to the Yonsei University in South Korea, 20th to 24th December, 2005.
23. Technical visit to the Chulalongkorn University in Bangkok, Thailand, 23rd to 25th May, 2006.
24. Technical visit to the Institut Teknologi Sepuluh Nopember(ITS), Surabaya, Indonesia, May, 2007
25. Technical visit to the Institut Teknologi Bandung (ITB), Bandung, Indonesia, July, 2010
26. Technical visit to the Institut (LIPI), Bandung, Indonesia, July, 2010
27. Technical visit to the Mercu Buana University, Jakarta, Indonesia, July, 2010
28. Technical visit to the State Polytechnic of Semarang, Semarang, Indonesia, July, 2010
29. Technical visit to the Institut Teknologi Bandung (ITB), Bandung, Indonesia, July, 2011
30. Technical visit to the Universiti Indonesia, Jakarta, Indonesia, July, 2011.

3. Professional Membership

International Committee

- i. Member of Korea Society of Automotive Engineers, (KSAE), 1995~present
- ii. Member of Institute for Liquid Atomization and spray System-Korea, (ILASS-KOREA), 1996~present
- iii. International Advisory Board of The 4th International Conference on Numerical Analysis in Engineering (NAE 2004)
- iv. Member of The International Association of Science and Technology for Development (IASTED) (Member ID 4584), 2004~present.
- v. Member of National Advisory Committee for the International Conference on Energy and Environment 2006 (ICEE2006),Universiti Tenaga Malaysia,2006
- vi. Member of Society Automotive Engineers (SAE) International (Member ID : 6122926503), 2007~present
- vii. Editorial Board Member for Journal of Energy and Power Engineering, USA, 2013

National Committee

- i. Member of Lembaga Akerditasi Malaysia (LAN), 1999~2007
- ii. Chairman of Working Group on Vehicle Lighting and Marking for Malaysia Standard (SIRIM), 2000~2003.
- iii. Chairman of Technical Committee on Lighting and Signaling for Malaysia Standard (SIRIM), 2003~present.
- iv. Member of Lembaga Jurutera Malaysia, (ID Member : 43888A) 2004~present
- v. Member of Malaysia Qualification Agency (MQA) 2007~ 2011.
- vi. Penasihat Kebangsaan Persidangan “ Malaysia Metallurgical Conference 2008”.
- vii. Member of Malaysia Qualification Agency (MQA) 2011~2013.

4. Current Position

Kolej Universiti Kejuruteraan dan Teknologi Malaysia (2004~ 2007)

1. Dean, Fakulti Kejuruteraan Mekanikal KUKTEM, 2005~ 2007
2. Head of Automotive Focus Group KUKTEM, 2004 ~ 2007

Universiti Malaysia Pahang (2007~ present)

1. Felo dan pakar Rujuk, Mekanik Kenderaan Hibrid dan Elektrik, Jabatan Pengajian Kolej Komuniti, Malaysia, 2014~present
2. Fellow of Automotive Engineering Center, UMP, 2010~present
3. Senat Member UMP, 2012~present
4. Dean, Fakulti Kejuruteraan Mekanikal ,UMP, 2007~ 2011
5. Head of Automotive Focus Group UMP, 2004 ~ 2007
6. Director of Automotive Excellence Center, UMP, 2007 ~ 2010

5. Administration Position / Other Responsibilities

Administration Position

1. Member in ISO for KUKTEM/UMP, 2004~ 2011.
2. Member in AQA for KUKTEM/UMP, 2004~ 2011.
3. Committee member PSM project FKM KUKTEM/UMP, 2004 ~ 2011.
4. Student Academic Advisor FKM, KUKTEM, 2004~2007
5. Member of Senate Permanent committee for Penyelidikan & Pengajian Siswazah, 2004~2011.
6. Member of Senate for KUKTEM/UMP 2005~2011.
7. Ahli Jawatankuasa Pengurusan Universiti, 2005~2011.
8. Ahli Jawatankuasa Sebut Harga Universiti, KUKTEM/UMP, 2005~2008
9. Ahli Jawatankuasa Petugas Kualiti & Produktiviti (JPKP) KUKTEM/UMP, 2005~2011.
10. Ahli Jawatankuasa Pengurusan Kewangan dan Akaun Universiti (JPKA), 2005~2011.
11. Panel Pengurusan ICT KUKTEM/UMP, 2005~2011.
12. Hakim Tribunal Tatatertib Pelajar KUKTEM/UMP, 2005~2011.
13. Ahli Jawatankuasa Jemaah Pengurusan Akademik bagi Kolej Universiti Teknikal (KUITTHO, KUTKM, KUKTEM dan KUKUM), 2005~ 2011.
14. Fasilitator Kursus Penyelidikan KUKTEM/UMP,2005~present.
15. Advisor to the Faculty of Mechanical Engineering Club (Mechapro), KUKTEM/UMP, 2005 ~ 2011.
16. Fasilitator Kursus Penilaian Tahap Kecekapan 3 (PTK3),2005~2011
17. Ahli Jawatankuasa Jemaah Dekan-Dekan Kejuruteraan Malaysia, 2005~ 2011.
18. Chairman of Technical Committee on Lighting and Signaling (SIRIM), 2004~ present.
19. Lembaga Akreditasi Negara (LAN) (2004~2006)
 - a) Evaluator for Lembaga Akreditasi Negara (LAN) (Kejuruteraan dan Teknologi), 2004-2006
 - i. Diploma in Modern Automotive Technology , Kolej Otomotif TOC(2004)
 - ii. Certificate in Modern Automotive Technology, Kolej Otomotif TOC (2004)
 - iii. Twinning Degree Programme in Mechanical Engineering, Kolej INTI Malaysia (2004)

- iv. BTEC Higher National Diploma in Mechanical Engineering, Kolej Universiti Teknologi Antarabangsa Twintech, Kuala Lumpur (2004)
 - v. Diploma in Mechanical Engineering, Kolej Universiti Teknologi Antarabangsa Twintech (2004)
 - vi. Bachelor of Engineering (Mechanical), Prime College (2004)
 - vii. Btec HND in Automotive Engineering, Kolej TAFE Seremban (2004)
 - viii. Bachelor of Science (Mechanical Engineering), Akademi Technology Park Malaysia (TPM Academy) (2004)
 - ix. Diploma in Mechanical Engineering, Akademi Technology Park Malaysia (TPM Academy) (2004)
 - x. Certificate in Production Technology (Specialised in Computer Numerical control), Akademi Technology Park Malaysia (TPM Academy) (2004)
 - xi. Diploma in Production Technology (Computer Numerical Control), Akademi Technology Park Malaysia (TPM Academy),(2004)
 - xii. Diploma Teknologi Kejuruteraan (Penyenggaraan dan Automasi), Universiti Kuala Lumpur – Malaysia France Institute (2004)
 - xiii. Diploma Teknologi Kejuruteraan (Penyenggaraan Automotif), Universiti Kuala Lumpur – Malaysia France Institute (2004)
 - xiv. Sarjana Muda Pendidikan (Kejuruteraan Mekanik) Open Universiti Malaysia. (2005)
 - xv. Diploma Teknologi Mekanikal (Automotif), Kolej Negeri, Negeri Sembilan. (2005)
 - xvi. B Eng (Hons) in Automotive Engineering, Kolej TAFE, Seremban (2005)
 - xvii. Master of Engineering in Management, University Tenaga Malaysia. (2005)
 - xviii. Diploma Teknologi Mekanikal (Lukisan Reka bentuk) ,Institut Teknologi Perindustrian YPJ, Johor (2005)
 - xix. Sarjana Muda Pendidikan (Kejuruteraan Mekanik), Universiti Terbuka Malaysia Pusat Pembelajaran Wilayah Sabah (UMS), Sabah, (2006).
 - xx. Diploma Teknologi Kejuruteraan (Penyenggaraan Automotif),Universiti Kuala Lumpur – Malaysia France Institute, Selangor, (2006).
 - xxi. Diploma Teknologi Kejuruteraan (Penyenggaraan dan Automasi),Universiti Kuala Lumpur – Malaysia France Institute, Selangor, (2006).
 - xxii. Diploma in Automotive Engineering , Kolej TAFE Seremban, (2006)
- b) Evaluator for Lembaga Akreditasi Negara (LAN) (Kejuruteraan dan Teknologi), 2006~2007
- i. Diploma in Mechanical Engineering, Kolej Universiti Anatarabangsa Inti, (2007).
 - ii. Certificate in Applied Technology,Kolej Otomotif TOC (2007).
 - iii. Diploma in Modern Automotive Technology, Kolej Otomotif TOC (2007).
 - iv. Bachelor of Technology (Hons) in Applied Automotive, Kuala Lumpur Infrastructure University College (KLIUC) (2007)
 - v. Higher National Diploma In Automotive Engineering , Kolej WIT (WIT) (2007)
20. Malaysia Qualification Agency (MQA) 2007~ 2009

- a) Evaluator for Malaysia Qualification Agency (MQA) (Kejuruteraan dan Teknologi), 2007~2009
 - i. Sarjana Muda Teknologi Kejuruteraan (Kepujian) Mekanikal (Automotif), Universiti Kuala Lumpur Malaysia Spanish Institute, (UniKL), (2007)
 - ii. Diploma of Mechanical Engineering in Technical Japanese, Universiti Industri Selangor (UNISEL) (2007)
 - iii. Doctor of Philosophy Mechanical Engineering, Universiti Teknologi Petronas (UTP) (2007)
 - iv. Diploma Kejuruteraan Mekanikal ,Kolej Nilai Antarabangsa Negeri Sembilan (2007)
 - v. B. Eng. Mechanical Engineering, Kolej SEGI Subang Jaya(2007)
 - vi. Diploma Kejuruteraan Automotif, WIT, Selangor (2007)
 - vii. Higher National Diploma in Automotive Engineering, WIT, Selangor (2007)
 - viii. Diploma in Mechanical Engineering, Kolej Nilai Antarabangsa Inti, Negeri Sembilan (2007)
 - ix. Diploma in Modern Automotive Technology, Kolej Otomotif TOC Selangor (2007)
 - x. Btec Higher National Diploma in Mechanical Engineering, Kolej Linton Negeri Sembilan (2008)
 - xi. UK Degree Transfer Programme - Mechanical Engineering, Kolej Nilai Antarabangsa Inti, Negeri Sembilan (2008)
 - xii. Diploma of Engineering Technology in Automotive Maintenance Technology, Kolej Antarabangsa Teknologi Inovasi Mutiara (2008)
 - xiii. B Eng (Hons) in Mechanical Engineering, Kolej TAFE Seremban, Negeri Sembilan (2008)
 - xiv. B Eng (Hons) in Automotive Engineering, Kolej TAFE Seremban, Negeri Sembilan (2008)
 - xv. Bachelor of Manufacturing Engineering Technology, Kolej Universiti Tati, Terengganu, (2008)
21. Ahli Jawatankuasa Meayuarat Pementauan Pembangunan Kampus Tetap Universiti Malaysia Pahang, 2007~2010
22. Ahli Jawatankuasa kecil Di Bawah Jawatankuasa Kerja (Akademik dan Antarabangsa) Rangkaian Universiti Teknikal Malaysia (MTUN), Program Kejuruteraan Teknologi, 2007~ 2009
23. Pengerusi Panel Penyiasat Kemalangan & Kerosakan kenderaan Rasmi Universiti Malaysia Pahang, 2007~2009
24. Ahli Jawatankuasa Penggubal Dokumen Plan Strategik Universiti Malaysia Pahang (UMP) 2008.
25. Ahli Jawatankuasa Tetap Senat Kurikulum, Pengajaran dan Pembelajaran, Universiti Malaysia Pahang, 2008 2008~2011.
26. Ahli Jawatankuasa Tetap Senat Penyelidikan dan Pengembangan Ilmu, Universiti Malaysia Pahang, 2008~2015.
27. Ahli Mesyuarat Jawatankuasa Pengurusan dan Kewangan dan Akaun Universiti (JKPA) UMP, 2005~2011.
28. Ahli Jawatankuasa Tetap Senat Kemasukan, Peperiksaan dan Pengijazahan, Universiti Malaysia Pahang, 2008~2015.
29. Advisor to the SAE Student Chapter UMP, 2008 - present
30. Ahli Jawatankuasa Tetap Senat Pengajian Siswazah, Universiti Malaysia Pahang, 2008 ~2015.
31. Ahli Jawatankuasa Induk Pemilihan Majlis Perwakilan Pelajar (JIMPP) UMP, 2009
32. Regimen Wataniah 505, Major Kehormat, 2009 – present
33. Malaysia Qualification Agency (MQA) 2009~ 2017.

- a) Evaluator for Malaysia Qualification Agency (MQA) (Kejuruteraan dan Teknologi), 2009~2011
 - i. Diploma in Mechanical Engineering Kolej Antarabangsa Teknologi Lanjutan Serawak, (2009)
 - ii. B Eng (Hons) in Automotive Engineering (A6248), Kolej TAFE Seremban, Negeri Sembilan (2009)
 - iii. Diploma in Mechanical Engineering, Kolej Universiti Teknologi Antarabangsa Twintech, Kuala Lumpur (2009)
 - iv. Diploma Kejuruteraan Mekanikal, KOLEJ WIT, Selangor Darul Ehsan. (2009)
 - v. Diploma Tinggi Kejuruteraan Mekanikal, KOLEJ WIT, Selangor Darul Ehsan. (2009)
 - vi. Sarjana Muda Teknologi Kejuruteraan (Kepujian) Penyelenggaraan dan Pengurusan Automotif, Universiti Kuala Lumpur – Malaysia France Institute, Selangor Darul Ehsan (2009)
 - vii. Master of Mechanical Engineering, Universiti Tenaga Nasional (UNITEN), Selangor, (2009)
 - viii. Diploma in Mechanical Engineering, Kolej Antarabangsa Teknologi Lanjutan Serawak, Serawak, (2010)
 - ix. Advanced Diploma in Automotive Design and Manufacturing Engineering, Politeknik Sultan Azlan Shah (PSAS), Perak (2010)
 - x. Sarjana Muda Teknologi Kejuruteraan Mekanikal (Automotif) Dengan Kepujian, Universiti Tun Hussien Onn Malaysia, Batu Pahat, Johor, (2011)
 - xi. Diploma Teknologi Kejuruteraan Mekanikal, Universiti Tun Hussien Onn Malaysia, Batu Pahat, Johor, (2011)
 - xii. Sarjana Kejuruteraan Mekanikal (Automotif) Secara Mod Campuran, Universiti Teknikal Malaysia Melaka, (2011)
 - xiii. Sarjana Kejuruteraan Mekanikal (Automotif) Secara kerja Kursus, Universiti Teknikal Malaysia Melaka, (2011)
 - xiv. Advanced Diploma in Automotive Design and Manufacturing Engineering, Politeknik Sultan Azlan Shah (PSAS), Perak (2011)
 - xv. Advanced Diploma in Mechanical Engineering, Politeknik Ungku Omar, Perak, (2011)
 - xvi. Advanced Diploma in Mechatronic Engineering, Politeknik Johor Bahru, Johor, (2011).
34. Panel Pengurusan Kerja bagi Kursus Penilaian Tahap Kecekapan (TK 3/TK 5) Gred 45 dan 52. UMP, 2010
35. Penceramah bagi kursus kaedah Penyelidikan, UMP, 2010.
36. Penasihat Badan Pelajar Universiti Malaysia Pahang Kelab Wataniah, UMP, 2010.
37. Penasihat Badan Pelajar Universiti Malaysia Pahang Kelab SAE-UMP Chapter, UMP, 2010~ present.
38. Ahli Jawatankuasa Induk Pemilihan Majlis Perwakilan Pelajar (JIMPP) UMP, 2010
39. Ahli Jawatankuasa Bertindak Kajian Hala Tuju Bidang Automotif, Jabatan Pengajian Tinggi, KPT, 2010~peresent
40. Ahli Jawatankuasa Daya Usaha dan Inovasi, Jabatan Pengajian Tinggi, KPT, 2010~peresent
41. Ahli Jawatankuasa Induk Pemilihan Majlis Perwakilan Pelajar (JIMPP) UMP, 2011
42. Ahli Jawatankuasa Penasihat Kurikulum Program Dipolma Kolej Kemahiran Tinggi MARA Kuantan, Pahang, 2011
43. Ahli Jawatankuasa Akademik Fakulti kejuruteraan Mekanikal, UMP, 2011~present
44. Penasihat Sekretariat Mahasiswa Negeri Sembilan, 2014 ~ present
45. Pakar Rujuk Untuk Nilai Taraf Agensi Kelayakan Malaysia (MQA), 2014~2017.

Other Responsibilities

- i. **Evaluator for Promotion Professor**
 1. Institute of Technology Brunei (ITB), Brunei - Associate Professor Dr. Md. Mustafizur Rahman (2013)

- ii. **Evaluator for Promotion Associate Professor**
 1. UTM – Dr. Kahar bin Osman (2008)
 2. UTEN - Dr. Mohd Hariffin Boosroh (2009)
 3. UTHM - Dr. Badrul bin Omar (2010)
 4. UTHM - Dr. Mohd Amri bin Lajis (2010)
 5. UTM – Dr. Mohd Zarhamdy bin Md. Zain (2010)
 6. UTM – Dr. Nor Azwadi bin Che Sidik (2010)
 7. UTM - Dr. Intan Zaurah Mat Darus (2010)
 8. UTM – Dr. Mohamed Ruslan bin Abdullah (2010)
 9. UTM – Dr. Syahrullail bin Samion (2010)
 10. UNIMAS – Dr. Abu Salleh Ahmad (2011)
 11. UTHM – Dr Mustafa bin Ibrahim (2011)
 12. UTHM – Dr. Ahmad Jais Bin Alimin (2012)
 13. UTeM- Dr. Muhamad Zahir Hassan (2014)

- iii. **Visting Profesor**
 1. Kolej Universiti Kejuruteraan dan Teknologi Malaysia, (KUKTEM), 2003~2004
 2. Universiti Teknikal Malaysia Melaka, (UTEM) , 2011~2013.

6. Work Experience

Administration

- i. **Universiti Teknologi Malaysia (1992~2004)**
 1. Head of Thermodynamics Laboratory UTM, 1992 ~ 1994
 2. Committee (Member) “National Conference on Energy and Environment Toward 2020” , UTM, 1993.
 3. Head of Combustion Laboratory UTM, 1994 ~ 1995
 4. Academic Adviser UTM, 1993~1995
 5. Planning committee member for the Four stroke engine handling and maintenance course, Jabatan Pendidikan Pahang, 1994
 6. Industry Research and Development Scheme (IGS) project technical evaluation board 1999 ~ 2000
 7. Chairman of Outdated Malaysia Standards (SIRIM) Review for Working Group on Vehicle Lighting and Marking, 2000~ 2003
 8. Industry Research and Development Scheme (IGS) project technical evaluation board 2003 ~ present
 9. Head of Thermodynamics Panel UTM, 1998 ~ 2000
 10. Committee (Secretary) “The 6th Small Engines, Their Fuels and the Environment”, UTM, 1999.
 11. Fasilitator Kursus Kaedah Penyelidikan (SLAB) UTM, 1999
 12. Deputy Director Automotive Development Centre UTM, 1999 ~ 2004
 13. Head of Automotive Expert Group UTM, 1999 ~ 2004
 - i. Menyediakan kertas kerja ke Jawatankuasa Tetap Senat untuk menjalankan kursus Sarjana Muda Kejuruteraan (Mekanikal Automotif)

- ii. Menyediakan kertas kerja ke Jawatankuasa Tetap Senat untuk pengambilan pelajar Sarjana Muda Kejuruteraan Mekanikal ke Sarjana Muda Kejuruteraan (Mekanikal Automotif)

14. Curriculum committee member, Faculty of Mechanical Engineering, UTM, 1999~2004
15. Committee member for PSM project FKM UTM, 1999 ~ 2002
16. Academic Adviser UTM, 1999 ~ 2004
17. Advisor to the Faculty of Mechanical Engineering Automotive Club (AUTEK), UTM, 2000~ 2004
18. Committee member for the evaluation of IRPA RMK 7 proposals, under the category of EAR, at the level of focus group & JKPP, UTM,2000.
19. Editor Jurnal Teknologi (A) UTM, 2000~2002
20. Editor Jurnal Mekanikal UTM, 2000~2002
21. Technical Tender committee member for the Automotive laboratory, UTM, 2000.
22. Faculty Academic Publication committee member UTM, 2001~ 2004
23. Assistant head of Automotive, Aeronautic and Marine Focus Group (IRPA) UTM, 2002 ~ 2004
24. Committee (Secretary) "The 6th Asia-Pacific International Symposium on Combustion and Energy Utilization (6th APISCEU)", UTM, 2002.
25. IRPA RMK 8 proposal evaluation committee member, under the category of EAR, at the level of focus group & JKPP, 2002 ~ 2004.
26. Research methodology course (SLAB) evaluator UTM, 2002
27. Editor for Jurnal Teknologi (A) UTM, 2002~2004
28. Editor for Jurnal Mekanikal UTM, 2002~2004
29. Advisor to the SAE Student Chapter UTM, SAE UTM, 2003 ~ 2004

ii. Lembaga Akreditasi Negara (LAN) (1999~2004)

1. Evaluator for Lembaga Akreditasi Negara (LAN) (Kejuruteraan dan Teknologi),1999-2000
 - i. Diploma Kejuruteraan Automotive, Kolej TAFE, Seremban
2. Evaluator for Lembaga Akreditasi Negara (LAN) (Kejuruteraan dan Teknologi),2000-2002
 - i. Diploma Kejuruteraan Automotive, Kolej WIT, Perak
 - ii. Master In Engineering Management, Universiti Tenaga Nasional
 - iii. Diploma Tinggi Nasional (HND) Kejuruteraan Automotif, Kolej WIT, Port Kelang.
3. Evaluator for Lembaga Akreditasi Negara (LAN) (Kejuruteraan dan Teknologi),2002-2004
 - i. Sijil Autobody, Kolej Yayasan Sabah, Kota Kinabalu. (2002)
 - ii. Diploma Kejuruteraan Automotif, Kolej TAFE, Seremban (2002)
 - iii. Bachelor of Engineering in Mechatronic, University of Nottingham In Malaysia (UNiM) (2003)
 - iv. Master of Engineering in Mechatronic, University of Nottingham In Malaysia (UNiM) (2003)
 - v. Diploma in Mechantronic Engineering, Institut Teknologi Butterworth, Pulau Pinang (March, 2003)
 - vi. Master Engineering in in Mechanical Engineering , University of Nottingham In Malaysia (UNiM) (2003)
 - vii. Master Engineering in Mechanical Engineering , University of Nottingham In Malaysia (UNiM) (2003)
 - viii. Diploma Kejuruteraan Automotif, Kolej WIT, Pelabuhan Kelang, Selangor (2003)

- ix. Diploma Tinggi Nasional (HND) Kejuruteraan Automotif, Kolej WIT, Pelabuhan Kelang, Selangor (2003)
- x. Diploma Kejuruteraan Automobile, Kolej WIT, Ipoh, Perak (2003)
- xi. Diploma in Mechantronic Engineering, Institut Teknologi Butterworth, Pulau Pinang (November, 2003)
- xii. Btec HND in Automotive Engineering, Kolej TAFE Seremban Negeri Sembilan (2004)

7. Academic Experience

1. Number of Years of Experience in the Academic and taught Subjects.

Experience in the Academic : 19 Years (Diploma , Degree, Master and Ph. D level)

Engineering Subject taught,

1. Thermodynamics
2. Fluid Mechanics
3. Static and Dynamics
4. Numerical Analysis
5. Finite Elements Analysis
6. Internal Combustion Engine
7. Automotive Technology
8. Combustion Technology
9. Heat Transfer Technology
10. Automotive Electrical and Electronic Systems
11. Power Plant Technology
12. Boiler Technology
13. Energy Managements
14. Refrigeration and Air Conditioning

2. Supervision

i. Ph. D. : 18 student

1. " Development of Advanced Intake System For CNG Fuelled SI Engine", Mardani Ali Sera, UTM, 2003. (Indonesia)
2. "Development of New Injector For Compressed Natural Gas Engine and The Effect on Performance", Semin Sanuri, UMP, 2011. (Indonesia)
3. " Investigation of CNG fuel used Diesel Engine ", Abdul Rahim Ismail, UMP, 2011,
4. "Design and Development of Single Cylinder Two Stroke Linear Engine Spring Mechanism", Aguk Zuhdi Muhammad Fathallah, UMP, 2011.(Indonesia)
5. "Modeling and Optimization Hydrogen Fueled Engine", Mohammed Kamil Mohammed, UMP, 2011. (Iraq)
6. "Design and Development of Control System for Four Stroke Premixed Charge Spark ignition Free Piston Generator Engine", Indra Ranu Kusuma , UMP, 2012, (Indonesia)
7. "Development of Dish Stirling Concentrating Solar Thermal Electric Energy Conversion", Gan Leong Ming, UMP, 2012.

8. "Design and Development of Intelligent Integrated of Environmental Control Systems for Household Comfort with minimum Energy Consumption", Norfadzilah Jusoh, UMP, 2014.
9. "Combined Forced and Natural Convective Heat Transfer From Cylinder Embedded in Saturated Porous Media", Adanan Mohammed Hussien, UMP, 2014, (Iraq). "Investigate Influence Added Fin In intake Manifold to Performance in Engine using Ethanol Fuel", Beny Cahyono, UMP, 2014,(Indonesia).
10. "Mixture Formation and Combustion Characteristics of Diesel-Hydrogen Dual Fuel Engine", Widodo Budi Santoso, UMP , 2014(be completed), (Indonesia)
11. "Enhancement of in Cylinder Airflow Burning Rate for a Four Stroke Spark Ignition Engine Running on Compressed Natural Gas Fuel", Devarajan a/l Ramasamy, USM, 2014
12. "Design and Development of Intelligent Integrated of Environmental Control Systems for Household Comfort with minimum Energy Consumption", Norfadzilah Jusoh, UMP, 2014.
13. "Computational Fluid Dynamics (CFD) Study for Flow Patterns and Heat Transfer in Air Conditioning Systems" , Muhammad Ehtesham UI Haque, UMP, 2014, (Pakistan)
14. "Multi Fatigue Characteristic of Automotive Component Under Variable Amplitude Loading", Thamir Khalil Ibrahim, UMP, 2014.(Bangladesh)
15. "Combined Forced and Natural Convective Heat Transfer From Cylinder Embedded in Saturated Porous Media", Adanan Mohammed Hussien, UMP, 2014, (Iraq).
16. "Effect of Nanofluids as Coolant in The Cooling System", Hizanorhuda Zurgiba, 2014.
17. "Development of Air-Compressed Hybrid Six Stroke Engine by Combined Compressed Exhaust Recovery and Internal Combustion Engine", Faizail Wasberi, UMP, 2014.
18. "Computational Fluid Dynamics Study For Flow Patterns and Heat Transfer in Air Conditioning Systems', Muhammad Ehtesham UI Haque, UMP, 2015, (Pakistan).

ii. Master : 26 student

1. "Simulation and Experimental Investigation of Turbocharged Investigation of Turbocharged Diesel Engine", Roslee Yahya, UTM,1995.
2. "Characteristic Improvement of a Carburetor for a Petrol Internal Combustion Engine", Wong Hong Mun, UTM, 2002.
3. "Development of Intake System For Compressed Natural Gas (CNG) – Fuelled SI Engine", Sin Kwan Leong,UTM, 2003.
4. "The Development of Two-Stroke Engine with an Electronic Engine Management System", Chong Chin Lee,UTM, 2004
5. "The Effect of Engine parameter on Two Stroke Engine Performance", Chin Kok Leong, UTM, 2004
6. "Analysis Engine Performance for New Two Stroke Engine Design ", Chiew Chen Wee, UTM, 2004,
7. "Analysis of Two Stroke Engine Using The Computer Simulation", Mohd Farid bin Muhamad Said, UTM, 2004,
8. " Analysis Engine Performance for New Generation of Two Stroke Engine", Gan Leong Ming, UTM, 2005,
9. "Design And Development of a New Two Stroke Engine Using Gas As Fuel", Devarajan a/l Ramasamy, UTM, 2006
10. "Analysis the performance of Fuel Injection ", Talha Faroz, KUKTEM, 2006, (India)

11. "Numerical Analysis of Scavenging Process for New Two Stroke Diesel Engine. ", Nik Mohd Izual Nik Ibrahim, UMP, 2007
12. "Development of Vehicle Fuel Tank Using Kevlar Honeycomb Material", Mohamad Fatasya Othman, UMP, 2007
13. "Design And Development of a New Two Stroke Engine with air and Fuel Injection ", Mohd Fadzil Abdul Rahim, UMP, 2008.
14. "Design And Development of a New Two Stroke Engine for Agricultures used", Awang Idris,UMP, 2008.
15. "Development of Regenerative Piezoelectric Linear Generator for Alternative Power Generation", Siti Nur Sakinah Jamaludin,UMP, 2011.
16. "Development of Gamma Type Stirling Engine For Moderate Operating Temperature", Mohd Farid Zainudin, UMP, 2014.
17. "Development of Hybrid Solar Thermal Energy Storing System For Modular Concentrating Solar Thermal", Tanti Zanariah Shamsir Ali, UMP, 2014.
18. "Performance Enhancement of Evacuated Solar Tube Collector using Water Based Nanofluids ", Mahendran a/l Moorthy, UMP, 2014.
19. "Development of Plug in Hybrid Air Motorcycle Based On Single Cylinder Small Volumetric Displacement Four Stroke Engine Compressor", Teoh Sun Jie, UMP, 2014
20. "Feasibility Analysis on Small Scale Dish-Type Concentraing Solar Thermal Steam Turbine Prototype", Zarina Amat Jafar, UMP, 2014.
21. "Development of Concentrating Solar Collector System For Renewable Energy Generation", Billy Anak Sup, UMP, 2014
22. "Development of Fine Particles Biomass steam Gasification Process for Syngas Generation", Tan Liang Yit, UMP, 2014.
23. "Analysis of Pre Chamber in Compressed Natural Gas Engine", Muhammad Syahir Ali, UTeM, 2014
24. "Study on the Air Flow Inside the Single Cylinder Engine", Abdul Muhaimin Mohd Shafie", UTeM, 2014.
25. "Development of Solid Briquette Biomass Downdraft Gravity Gasification for Syngas Generation", Tan Kee Voon, UMP, 2014.
26. "Evaluation on the Influence of Driving Behavior Mapping On Human Factor Related Road Accident Prevention", Teo Sir Hiang, UMP, 2014.

iii. First Degree Dissertations :102 Student

1993

1. "A Simulation to Study Engine Performance in a Turbocharged Diesel Engine", Normah Haji Ismail, 1993.
2. "Computer Program for Calculation of Properties of Equilibrium Products with Some application to I. C. Engines", Ng Tiong Hoo, 1993.
3. "The Effect of Cyclic Variation on Combustion Pressure and Heat Release in D. I. Engine", Hapida Ghazali, 1993.

1994

4. "A Simulation Study on the Diesel Engine Fuel Injection System", Norizam Haji Mohd Ishak, 1994.
5. "A Study on The Prediction of Combustion Performance in a Diesel Engine", Shamsul Daud, 1994.
6. "Experimental Investigation of Emission in Diesel Engine", Abdul Kadir Abd. Rahman, 1994.

7. "Film Cooling Effectiveness on the Suction Side of a Turbine Blade in a Two Dimension Laminar Flow", Azwan Teh bin Azman Teh, 1994.
 8. "Petrol Engine Emission Study", Mohd. Noor Azli Isa, 1994.
- 1999
9. "Effect of Water With Emulsion on Engine Vibration", Saravanan a/ Narayanan, 1999.
 10. "Kajian Potensi Alam Sekitar Bagi Penggunaan Gas Asli Termampat (CNG) Sebagai Bahanapi Enjin Pencucuhan Bunga Api", Afzanizar Ahmad, 1999.
 11. "Kajian Prestasi Dan Analisis Enjin Diesel Yang Di Turbocas", Siva Kumar a/ Shanmugam, 1999.
 12. "Kesan-Kesan Suntikan Bahanapi Ke Atas Prestasi Pembakaran Dalam Enjin Diesel", Azhani Asari/Ashaari, 1999.
 13. "Kesan Suhu Air Penyejuk Ke Atas Prestasi Sebuah Enjin", Adli Bahari, 1999.
 14. "Simulation Study on PCU", Chew Huat Chiang, 1999.
 15. "The Effect of Adiabatic Temperature on the Control Combustion Product", Yeoh Sim Teik, 1999.
 16. "The Influence of Compress Natural Gas (CNG) on the Engine Performance by Simulation", Chin Wei Yen, 1999.
 17. "Water Spray Simulation", Amirrudin Ali, 1999.
- 2000
18. "A Study on The Behaviour of Transient Perponse in Turbocharged Diesel Engine", Mohamad Nasir Mat Hussein, 2000.
 19. "A Theoretical Analysis of Noise Reduction of the Automotive Exhaust Muffler System (Insertion Loss)", Chin Yew Sin, 2000.
 20. "Analisa Kaedah Berangka Untuk Aliran Udara Dalam Bahagian Penumpang Kereta Proton", Haslinda Mohammad, 2000.
 21. "Analisis Kaedah Berangka Bagi Aliran Udara Dalam Proses Masukan Untuk Enjin Diesel", Rozie Nani Ahmad, 2000.
 22. "Analysis on the Engine Performance of the Two-Stroke Engine", Ong Kooi Leong/Ong Kean Leong, 2000.
 23. "Design of New Fuel Injector for Compressed Natural Gas Engine", Yeap Hun Meng, 2000.
 24. "Effect of Engine and Fuel Characteristics on the Engine Performance with Turbocharger for Diesel Engine", Wee Chong Seong, 2000.
 25. "Kajian Potensi Bahanapi Yang Sedia Ada Bagi Kegunaan Enjin Diesel", Syahrul Manap, 2000.
 26. "Kajian Terhadap Ciri-ciri Sistem Suntikan Bahanapi Bagi Sebuah Enjin Diesel", Maniram a/ Subramaniam, 2000.
 27. "Kerja-kerja Pembaikan Dan Penyelenggaraan Kenderaan Dan Loji Jentera Di Bengkel, Jabatan Jurutera Mekanikal, Dewan Bandaraya Kuala Lumpur", Mohammad Azmi Saari, 2000.
 28. "Kesan Kelajuan Pergerakan Api Terhadap Prestasi Enjin", Syahmi Farhan Mohamed, 2000.
 29. "Kesan Pengaliran Udara Ke Atas Prestasi Enjin Bagi Enjin Diesel", Munif Bakar, 2000.
 30. "Kesan Suhu Penyejukan Ke Atas Prestasi Enjin CNG", Mohammad Tamizi Mukhtar, 2000.
 31. "Membina Perisian Untuk Aliran Yang Melalui Jasad", Wong Chee Yeen, 2000.
 32. Peningkatan Ciri Dinamik Kereta Melalui Pembaikan Sifat Keselesaan Dan Kestabilan", Abdul Wahab Long, 2000.
 33. "Sistem Kawalan Dynamometer Froude", Muhamad Ridzuan Othman, 2000.
 34. "The Effect of Fuel Type on the Engine Performance of Gasoline Engine", Ho Hock Woo, 2000.

2001

35. "Analisis Berangka Ke Atas Aliran Semasa Proses Pembakaran Dalam Kebuk Pembakaran", Lim Chin Seong, 2001.
36. "Analyzing the Effect of Fin Radiator on Water-Cooled Cooling System for Automotive", Teoh Ka Jin, 2001.
37. "Computational Fluid Dynamics (CFD) Analysis for Intake Process (Combustion Chamber Design) in Four-Stroke Diesel Engine", Ho Shuang Tien, 2001.
38. "Design and Develop New Mixer for Compressed Natural Gas Engine", Phuah Cheng Peng, 2001.
39. "Design of an Electronic Control System for CNG Fuelled SI Engine", Sew Wey Ping, 2001.
40. "Development of a Dedicated Agro-Based Dryer Equipped with Temperature Controller", Navaraj s/o C. Sree Dharan, 2001.
41. "Mangkaji Prestasi Enjin Diesel Yang Dilengkapi Pengecas Turbo", Mohd. Rizal Jailan, 2001.
42. "Modification of Air-Cooling System for Low Power Engine", Tee Fuh Min, 2001.
43. "New Design of Compressed Natural Gas Mixer", Ngo Jian Yee, 2001.
44. "New Design of Valve Train for Low Power Diesel Engine", Loh Choo Koo, 2001.

2002

45. "Analysis of Heat Transfer Characteristic in Compressed Natural Gas (CNG) Engine", Low Kean Aun, 2002.
46. "Fuel Atomization Technology of Fuel", Ooi Teik Hua, 2002.
47. "Kajian Simulasi Terhadap Kesan Bentuk Panca Rongga Masukkan Udara Bagi Enjin Diesel", Mohd. Faiz Ishak, 2002.
48. "Kajian Terhadap Kesan aliran Udara Dalam Ruang Penumpang Kereta Nasional", Tan Chin Kee, 2002.
49. "Numerical Analysis of Scavenging Process for Two-Stroke Engine", Yip Lay Huat, 2002.
50. "Numerical Analysis on the Effect of Intake Flow in Intake Manifold", Ng Chee Onn, 2002.
51. "Numerical Analysis (CFD) for Two-Stroke Engine (Crankcase Flow)", Nithianada Vennayagam, 2002.
52. "Pembangunan Rekabentuk Sistem Rangkaian Injap Untuk Enjin Diesel Berkuasa Rendah", Muhammad Imran Mohamad Sairaji, 2002.
53. "Simulation Analysis on Engine Performance for Spark Ignition Engine", Low Cheng Yee, 2002.
54. "The Effect of Piston Surface on Intake Process Using Computational Fluid Dynamics (CFD)", Lim Chin Ling, 2002.
55. "Electronic Control System For CNG Engine", Surenthan Ramasamy, 2002.

2003

56. "Analysis on The Intake Flow of Hydrogen Fueled Engine by CFD Approach" Goh Boon Keat, 2003.
57. " Design and Development of Two Stroke Engine With Blower", Gan Leong Ming, 2003.
58. "Effect of Variable Valve Timing VVT on Engine Performance", Tan Ching Siong, 2003.
59. "Analysis of Combustion Process in Two Stroke Engine by Using Computational Fluid Dynamics", Ong Chee Wei, 2003.
60. " Intake Generated Swirl and Tumble Flow Motion", Lee Wai Nun, 2003
61. "The Effect of Piston Surface on Intake Process", Muhammad Zahari Sukimi Mat Zaid, 2003.
62. "Analysis of Fuel Injection System For CNG", Low Tze Jin, 2003.
63. "Improving Cooling System in ICE Using CFD", Khor Thuan Khim, 2003.

64. "A Numerical Study on the Level of CO and CO₂ Produced From the Combustion Process in CNG DI and GDI by Using Fluent", Khaw Hoe Soon, 2003.
 65. " Analysis Exhaust Manifold (Four in One) for Turbocharged Engine", Ong Kok Hon, 2003.
 66. "Development of Two-Stroke Engine Without Valve Using Blower Mechanics", Chiew Chen Wee, 2003
 67. "CFD Analysis on Spoiler for Automotive Application", Paul Chung Jing Kiat, 2003.
 68. "Flow Analysis of CNG Turbocharger Intake and Exhaust Manifold Process" , Harris Abd Rahman Sabri, 2003.
 69. " Design of V Type Engine For Two Stroke Engine", Nik Mohd Izual Nik Ibrahim, 2003.
 70. " Effect of Air Flow in New Two Stroke Engine" , Mohd Izwan Ishak, 2003.
 71. "Design of Two Stroke Diesel Engine" , Mohd Yassin Ali, 2003.
- 2006
72. "Design an Development of engine Testing Apparatus and Methodology on KUKTEM Hydraulic Dynamometer", Tuan Mohd Imran Tuan Zakaria, 2006.
- 2007
73. "Design and Development of Intake Measurement System for Gasoline Compress Natural Gas Hydraulic Engine Test Rig", Mohd Zulikram Mohamed Mustafa, 2007.
 74. "In Cylinder Flow Modeling of 4 Stroke Gasoline Engine Using Computational Fluid Dynamics (CFD)", Anis Amilah Ab Rahman, 2007
 75. "Analysis of Cooling Effect on New Customized Cooling System for 4 Cylinder Gasoline Engine Using Modelling Aooroach", Mohd Syafiq Hj Mohd Ayob, 2007.
 76. "Numerical analysis of In Cylinder Flow Two Stroke Spark Ignition Engine", Mohd Hafiz Bin Mohd Yunus, 2007.
 77. "Effect of Exhaust Gas Flow in Exhaust System Using Computational Fluid Dynamics (CFD)", Wang Pok Leong, 2007.
 78. "Simulation of Air Flow in Intake System Using Computational Fluid Dynamics (CFD)", Kwan Tech Heng, 2007.
- 2008
79. "Prediction Studies for The Performance of a Single Cylinder High Speed SI Linear Engine", Mohd Nordin Zazalli, 2008.
 80. "Simulation of Four Stroke Free Piston Diesel Engine", Hafnizar Muhamad Shaharuddin, 2008.
 81. "Simulation of Electromechanical Valve Drive on Single Cylinder Four Stroke Free Piston Diesel Engine", Fyroz Ziffa Mohd Mustafa Kamal, 2008.
 82. "Design and Development of Exhaust Gas Calorimeter for Gasoline/ Compressed Natural Gas Hydraulic Dynamometer Engine (Gacohyde) Test-Rig", Tengku Mohd Hairil Azwan Bin Tengku Abdullah, 2008.
- 2009
83. "Influence of Ethanol Fuel In Engine Emission", Harisuddin Idris, 2009
 84. "Simulation of Gaseous Fuel Injector Geometric of Multi Holes Nozzles by Using CNG Engine", Muhamad Akbar Osman Md Hashim, 2009
 85. "Experimental Study of Heat Tranfer Natural Convection In Internally Finned Tube", Mohd Waquiuddin Nordin, 2009
 86. "Influence of Ethanol Fue El In Spark Ignition Engine Fuel Consumption", Mohd Waspi Kassim Krismaran, 2009
 87. "Modeling the performance Characteristics of Hydrogen Engine with Fuel Injection System Using GT-Power", Mohd Adzahari Adnan, 2009
 88. "Small Two Stroke Engine Test Rig Design and Its Performance Analysis", Rosman Razali, 2009

89. "Engine Performance and Combustion Characteristics of Hydrogen in a Direct Injection Engine", Muhamad Adlan Abdullah, 2009
- 2010
90. "Deceleration Performance Comparison for Passenger Car Under On-Road and Off-Road Driving Condition". Mohd Khairul Asri bin Kamaluddin, 2010
91. "Vibration Investigation for Passenger Car Front Suspension System Under Various Road Condition and Driving Maneuvers". Tanti Zanariah binti Shamsir Ali, 2010.
92. "Reverse Modeling of Car Door Using Laser Scanning Methodology". Nur Fasehah binti Ma'arop, 2010.
93. "Performance Analysis on Percentage of Wheel Slip for A Passenger Car Using GPS and Wheel Speed Sensor". Lawrence Blasius, 2010.
94. "Vibration Investigation of Passenger Car Gear Suspension System Under Various Road Condition and Driving Maneuver". Mohd Farid bin Zainudin, 2010.
95. "Understeer Performance Analysis for Front Wheel Drive (FF) Sedan Vehicle Under Steady and Ride Road Driving Condition". Muhammad Faizul Izreen bin Othman, 2010.
- 2011
96. "Manufacturing of 10 cc Volumetric Displacement Four Stroke Petrol Model Engine Cylinder Block Using Casting Process", Norazlin Md. Kalil, 2011.
- 2012
97. "One Dimensional Simulation Of Diesel Hydrogen Dual Fuel", Benedict Maurice Lojkip, 2012.
98. "Design and Development of Cross Flow Delta Wing Water Turbine For Pahang River", Mohd Izzat Kamaulzaman, 2012.
99. Design, Analysis and Fabricate Small Cross Flow Turbine For Sungai Pahang", Mohamad Normazuan Mustafa, 2012.
100. "Performance of Diesel Engine Using Hydrogen As a Fuel", Nur Izzati Khairuddin, 2012.
101. Analysis on The Behaviour of The transient Response in Turbocharger Diesel Engine by Using Simulation", Ahmad Nasrullah Norazaman, 2012.
102. "Study of Effect of Fuel Injection Pressure on The Performance For Diesel Engine", Ahmad Muiz Ishak, 2012.
- 2013
103. "Development of Rough Grinding Equipment For Raw Biomass Resource", Muhammad Haikal Abdullah, 2013
104. "Fabrication of Aquaponic Gravity Flow Plantation System For Lettuce Plant", Amierul Amin Abdul Razak, 2013
- 2014
105. "Evaluation on the Influent of New to Aged Road Roughness to Car Body Translational Vibration", Ahmad Bazli Abd Malek, 2014.
106. "Development of Pelton Whell Powered Mechanical Water Pumping System", Tan Hong Boon, 2014.
107. "Comparatve Analysis For Electric Vehicle Battery Heat Management Using Liquid Based Air Based Cooling", Shin Yee, 2014.
108. "Computational Analysis on Stirling Engine Performance using Single Dimensional Approach", Teo Sir Hiang, 2014.
109. "Driving Behavior Analysis: Influent of Driver's Gender and Age Factor in Normal Road Meneuver", Nur Naqaie Yuddin Nor Adzhar, 2014.
110. "Experimental Evaluation of The Performance of Suspension System to Car Body Rotational Vibration Responses", Teoh Ing Hooi, 2014.
111. "Experimental Analysis on The Performance of Waste Biomass Solid Fuel Combustion Characteristics", Law Hoon Chit, 2014.

112. "Experimental Analysis on the Performance of Waste Biomass Grinding Process", Gan Hui Leng, 2014.
113. "Experimental Analysis on the Tire Slips Performance on The Straight Road Maneuver", Tan Thang Wu, 2014.
114. "Driving Behavior Analysis: Influent of Driver's Activities in Normal Road Maneuver", Siti Farahin Ismail, 2014.
115. "Experimental Analysis on the Influent of Road Roughness To Steering Vibration", Vincent Tiong Kung Yin, 2014.
- 116.

3. Examiner Thesis

Master Tesis

1. " New Throttle Body Injection Systems Using Natural Gas for Small Engine ", Chin Vie Dee, Universiti Teknologi Malaysia (UTM), 2006.
2. " Engine Performance and Combustion Characteristics of Hydrogen in a Direct Injection Spark Ignition Engine", Muhamad Adlan Abdullah, Universiti Teknologi Petronas (UTP), 2008.
3. "Kesan Bahan Tambah Asid Oleik Dalam Bahan Api Diesel Keatas Prestasi Enjin dan Emisi Ekzos", Yos Nofendri, Universiti Kebangsaan Malaysia (UKM), 2009
4. "Development of a Spark Plug Fuel Injector for Compressed Natural Gas Direct Injection in Spark Ignition Engine", How Heoy Geok, Universiti Kebangsaan Malaysia (UKM), 2010
5. "Sonochemistry Approach for a New Process of Biodiesel Production From Jatropha Curcas Oil", Achmad Praptijanto, Universiti Tun Hussein Onn Malaysia (UTHM), 2011.
6. "Electro Mechanical Single Acting Pulley Rubber V-Belt Continuously Variable Transmission (EMSAP RVB-CVT) For Scooter", Nur Cholis, Universiti Malaysia Pahang (UMP), 2012.
7. "CHARACTERISTICS OF BIODIESEL DERIVED LIQUID FUELS", Rafidah Binte Rahim, Universiti Malaysia Pahang (UMP), 2012.
8. "Numerical Investigation of the Aerodynamic Induced Velocity Duo to Vortex Generated by Vehicles on Highway", Ab. Malik Awang Hamat @ Mohamaed, Universiti Teknologi Malaysia (UTM), 2013.
9. "The Effect of Carbon Dioxide Content-Natural Gas on The Performance Characteristics of a Direct Injection Compressed Natural Gas Engine", Ayandotun Masiu Babatunde, Universiti Teknologi Petronas (UTP), 2013.
10. "Angkatan dan Pemasaan injap Adaptif Berpandukan Tekanan Untuk peningkatan Prestasi Enjin", Ahmad Fuad Bin Abdul Rasid, Universiti Kebangsaan Malaysia (UKM), 2013.
11. "Feasibility Studies of the Application of Crank Rocker Mechanism in an Internal Combustion Engine", Safwan Hanis Mohd Murad, Universiti Teknologi Petronas (UTP), 2013.
12. "A STUDY ON DIESEL ENGINE PERFORMANCE USING BIODIESEL FROM WASTE COOKING OIL ", Nur Atiqah Ramlan, Universiti Malaysia Pahang (UMP), 2014.
13. " Exhaust Waste Energy Recovery Using Electric Turbo Compound in a Turbocharged Gasoline Engine", Rosnizam Che Putih, Universiti Teknologi Malaysia (UTM), 2014.

Ph D Tesis

1. " Analisis Termodinamik dan Pemindahan Haba Untuk Enjin Penjana Linear ", Tulus, Universiti Kebangsaan Malaysia (UKM), 2007,
2. "Experimental Investigation on the Performance of Variable Compression Ratio Direct Injection Diesel Engine Using Preheated

- Cottonseed Methyl Ester”, Velamala Rambabu, Andhra University, India, 2011.
3. "Early Flame Characteristic Study In A Lean CNG DI Combustion", Yohannes T Anbese, Universiti Teknologi Petronas (UTP), 2011.
 4. "Study of Heat Transfer in Hydrogen Fueled Internal Combustion Engine", Khalaf Ibrahim Hamada, Universiti Malaysia Pahang (UMP), 2011.
 5. "Sonochemistry Approach for A New Process of Biodiesel Production From Jatropha Curcas Oil", Achmad Praptijanto, Universiti Tun Hussein Onn Malaysia (UTHM), 2011.
 6. "Modeling and Performance Enhancements of Gas Turbine Combined Cycle Power Plant", Thamir Khalil Ibrahim, Universiti Malaysia Pahang (UMP), 2012.
 7. "An Experimental and Analytical Investigation of Free Piston Linear Generator Engine", Abdulwehad Adem Ibrahim, Universiti Teknologi Petronas (UTP), 2012
 8. "Potential of Liquefied Petroleum Gas as Sustainable Refrigerant in Adiabatic Capillary Tube Used in Split Type Air Conditioner", Shodiya Suliamon, Universiti Teknologi Malaysia (UTM), 2013.
 9. "Experimental Investigation on Combustion Characteristic of One Controlled Auto-Ignition Two-Stroke Cycle Engine", Amin Mahmoudzadeh Andwari, Universiti Teknologi Malaysia (UTM), 2013.
 10. "Modeling and Experimental Analysis of Exhaust Gas Temperature and Misfire in a Converted Diesel HCCI Engine Fuelled with Ethanol", Bahram Bahri, Universiti Teknologi Malaysia (UTM), 2013.
 11. "A Theoretical Analysis on Film Condensation of Vapor in Cross Flow Over a Horizontal Circular Tube", B. Vijaya Lakshmi, Andhra University, India, 2013.
 12. "Experimental Investigation on Combustion Characteristic of a Controlled Auto-Ignition Two-Stroke Cycle Engine", Amin Mahmoudzadeh Andwari, Universiti Teknologi Malaysia (UTM), 2014.
 13. " Numerical and Experimental Study of Nanofluid Flow and Heat Transfer Characteristics in a Triangular Duct with Vortex Generators", Hamdi Emaduldeen Ahmed, Universiti Tenaga Malaysia (UNITEN), 2014.
 14. "CHARACTERISTICS OF A MEDIUM DUTY CI ENGINE OPERATED USING RETROFIT MONGAS FUELLING CONCEPT", Shahrul Azmir Osman, Universiti Tun Hussein Onn Malaysia (UTHM), 2014.
 15. "1 D Gas Dynamic Modelling of Twin Entry and Variable Geometry Turbine for Automotive Turbochargers", Chiong Meng Soo, Universiti Teknologi Malaysia (UTM), 2014.
 16. "Experimental Investigation on Combustion Characteristic of a Controlled Auto-Ignition Two-Stroke Cycle Engine", Amin Mahmoudzadeh Andwari, Universiti Teknologi Malaysia (UTM), 2014.
 17. "A Modified Turbocharger Centrifugal Compressor For Improved Performance Map", Layth Hasan Jawad, Universiti Kebangsaan Malaysia (UKM), 2014.
 18. " Exhaust Waste Energy Recovery Using Electric Turbo Compound in a Turbocharged Gasoline Engine", Rosnizam Che Putih, Universiti Teknologi Malaysia (UTM), 2014.

8. Research Experience

- i. Number of Years of Experience in the Field Related to the Fields of Specialization

Years of Experience : 19 Years

Specialization :

- i. Internal Combustion Engine
- ii. Automotive Technology
- iii. Combustion Technology
- iv. Thermodynamics
- v. Alternative Fuel
- vi. Automotive Electronic and Electric Systems
- vii. Power Plant Technology
- viii. Boiler Technology
- ix. Numerical Analysis
- x. Heat Transfer Technology
- xi. Energy Management

ii. Major Research Programmes/Projects Completed

1. Title : Pyrolysis of Biomass
 From : 1993~1995
 Position Held : Researcher (EC) (RM 500,000.00)
 Major Output : Publication several papers in journals
These project won medal
i. UTM Research Award 1995, UTM

2. Title : Super Chilled Water Storage System
 From : 1994~1995
 Position Held : Researcher (IRPA) (RM 20,000.00)
 Major Output : Publication several papers in journals

3. Title : Ph. D
 From : 1995~1998
 Position Held : Ph. D Research Student
 Major Output : Thesis and Publication several papers in Journal or proceedings

4. Title : Engine Performance Test Using CNG as Fuel the 4 Stroke Engine
 From : 1998~2000
 Position Held : Head of Project (RMC UTM) (RM20,000.00)
 Major Output : Publication several papers in Journal or proceedings

5. Title : Design and Development of pumps use in Power Plants and Cars
 From : 1998~2001
 Position Held : Researcher (IRPA) (RM 341,000.00)
 Major Output : i. New Design of pumps (prototype)
 ii. Publication several papers in Journal or proceedings
These project won medal
i. EXPO S&T 2002
ii. I-TEX 2003
iii. INTAX 2002/2003

6. Title : Development of Indigenous Incinerator System
1999~2001
From : Researcher (IRPA) (RM 321,000.00)
Position Held : i. New Design of Incinerator (prototype)
Major Output : ii. Publication several papers in Journal or proceedings
7. Title : Design and Development of New CNG Compress
Natural Gas Engine
From : 2000~2002
Position Held : Head of Project (RMC UTM) (RM20,000.00)
Major Output : i. New Design of CNG Engine
ii. Publication several papers in Journal or proceedings
These project won medal
i. **Anugerah Penerbitan Naib Canselor 2001, UTM**
8. Title : Design and Development of New CNG Compress
Natural Gas Engine
From : 2000~2002
Position Held : Head of Project (IRPA) (RM350,000.00)
Major Output : i. New Design of CNG Engine
ii. Publication several papers in Journal
These project won medal
i. **Anugerah Penerbitan Naib Canselor 2001, UTM**
ii. **Anugerah Penerbitan Naib Canselor 2002, UTM**
9. Title : Continuously Variable Transmission (CVT) for
Automotive Application
From : 2000~2003
Position Held : Researcher (IRPA) (RM550,000.00)
Major Output : i. New Design of Continuously Variable Transmission
(CVT)
10. Title : Utilisation of Noise Suppression Techniques In the
Development of Two- Stroke Stratified Charge, Lean-
Burn Gasoline Engines
From :
Position Held : 2002~2005
Major Output : Researcher (IRPA)(RM1,700,000.00)
i. New Design Two Engine
11. Title : Design and Development of Auxilliary Components of
From : Two- Stroke Stratified Charge, Lean-Burn Gasoline
Engines
Position Held :
Major Output : 2002~2005
Head of Project (IRPA)(RM2,006,000.00)
i. New Design of CNG Engine
ii. Publication several papers in Journal or proceedings
These project won medal
i. **Anugerah Penerbitan Naib Canselor 2002, UTM**
ii. **Anugerah Penerbitan Naib Canselor 2003, UTM**
iii. **Anugerah Inovasi FKM, 2003, UTM**

12. Title : Design and Development of New Two- Stroke (80 to 125 cc) Stratified Charge, Lean-Burn Gasoline Engines
From : 2002~2005
Position Held : Researcher (IRPA)(RM3,900,000.00)
Major Output : i. New Design Two Engine
13. Title : Design and Development of New Modular Engine
From : 200~2008
Position Held : Head of Project (ORGS KUKTEM) (RM90,000.00)
Major Output : i. New Design Two Engine
ii. Publication several papers in Journal or proceedings
These project won medal
i. **Anugerah Projek Penyelidikan ke Dua Terbaik 2004, KUKTEM, 2004**
ii. **Anugerah Projek Penyelidikan Terbaik 2005, KUKTEM**
iii. **Bronze at the 16th International Invention Innovation Industrial Design & Technology Exhibition (ITEX) 2005.**
iv. **Silver at the IPTA R&D EXPO 2005.**
v. **Bronze Medal “New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability “ at Salon International Des Inventions, Geneva 2006**
14. Title : Design of ZUMP Chair
From : 2005~2007
Position Held : Head of Project (ORGS KUKTEM) (RM20,000.00)
Major Output : i. New Desing of ZUMP
ii. Publication several papers in News paper or proceedings
These project won medal
i. **Bronze Medal , MTE KLCC, Kuala Lumpur, 2007.**
15. Title : Hybrid Electric Vehicle Development Programmer
From : 2006~2009
Position Held : Head of Project (UMP) (RM 300,000,00)
Major Output : i. New Desing of Hybrid Electric Vehicle
ii. Publication several papers in Journal or proceedings
These project won medal
i. **Silver Medal, Anugerah Projek Penyelidikan Terbaik UMP, 2007.**
16. Title : Machining of Nickel Superalloy Material Using Nanofluids as Coolant for Light Alloy Piston
From : 2010~2011
Position Held : Head of Project (UMP) (RM 50,000,00)
Major Output : i. New Desing of New Nanofluids
ii. Publication several papers in Journal or proceedings
17. Title : Development of WaterTechnology Thermo Explosive Energy

- Injector for Alternative Fuel Application
- From : 2009~2010
- Position Held : Head of Project (UMP) (RM 50,000.00)
- Major Output : i. New Design of Injector using Water as Fuel
ii. Publication several papers in Journal or proceedings
18. Title : Development of Solar Concentrating Dish Collector and Stirling Engine For Integrated Green Electric Power Generation
- From : 2010~present
- Position Held : Head of Project (Industry) (RM 800,000.00)
- Major Output : i. New Design of Stirling Engine
ii. Master and Ph.D
19. Title : Characterization of Heat Transfer Process For Hydrogen Fueled Internal Combustion Engine
- From : 2010~present
- Position Held : Researcher (UMP)(RM7,000.00)
- Major Output : i. Publication several papers in Journal or proceedings
20. Title : Hybrid optimization Model to Enhanced the Machinability of Titanium Alloys
- From : 2010~Present
- Position Held : Researcher (UMP)(RM50,000.00)
- Major Output : i. Publication several papers in Journal or proceedings
21. Title : Design and Efficient Performance Appraisal of Hydrogen Fueled Automobile Engines Combustion Chamber and Port Injector
- From : 2009~2010
- Position Held : Researcher (UMP)(RM40,000.00)
- Major Output : i. Publication several papers in Journal or proceedings
22. Title : Design Of mixer System For Diesel-Water Emulsion As New Renewable Fuel
- From : 2009~2010
- Position Held : Researcher (UMP)(RM40,000.00)
- Major Output : i. Publication several papers in Journal or proceedings
23. Title : Heat Transfer Augmentation With Aluminium Oxide Nanofluid in a Plain Tube and with Inserts
- From : 2009~2010
- Position Held : Researcher (UMP)(RM40,000.00)
- Major Output : i. Publication several papers in Journal or proceedings
24. Title : Development of Heat Transfer Techniques for Hydrogen Fuelled Internal Combustion Engine
- From : 2009~2010
- Position Held : Researcher (UMP)(RM40,000.00)

- Major Output : i. Publication several papers in Journal or proceedings
25. Title : An Investigation of Wind Power Potential at Kuala Pahang, Pekan.
 From : 2009~2011
 Position Held : Researcher (UMP)(RM40,000.00)
 Major Output : i. Publication several papers in Journal or proceedings
26. Title : Experimental Study of an Energy Performance of Hybrid Electrical Vehicle System
 From : 2009~2011
 Position Held : Researcher (UMP)(RM27,000.00)
 Major Output : i. Publication several papers in Journal or proceedings
27. Title : Development of a New Algorithm to Characterize the Heat Transfer of Fin in Automotive Applications
 From : 2011~2012
 Position Held : Researcher (UMP)(RM38,500.00)
 Major Output : i. Publication several papers in Journal or proceedings
28. Title : Development of a New Lubricant Dispersed with Nanoparticles
 From : 2011~2012
 Position Held : Researcher (UMP)(RM35,000.00)
 Major Output : i. Publication several papers in Journal or proceedings

9. Consultancy Work

1. Laboratory evaluation and development work on fuel enhancer, voltage booster, additives and fuel preheaters for:
 - *Edaran Otomobil Nasional*, EON,
 - AR² Ltd (Singapore),
 - N.V Nivon Sdn. Bhd
 - Air Care International (Malaysia) Sdn. Bhd
 - Marvel Zone (Malaysia) Sdn. Bhd

The work are being undertaken since November 2001 at the Automotive Development Centre (ADC), UTM, 2001~present
2. A member of the technical committee for the procurement of automotive teaching equipment for 8 *Institusi Kemahiran Belia Negara* (IKBN), 2002~ present
3. Consulting committee member for Faculty of Mechanical Engineering laboratory technical specification, Kolej Universiti Kejuruteraan & Teknologi Malaysia (KUKTEM), Pahang, 2002~present
4. Design and Development of two unit of Tramcar for Taman Botani in Putrajaya for Champino Sdn Bhd/Perbadanan Putrajaya Bhd., 17th. February – 30th. May, 2003
5. Vibration investigation problem of the 1st. unit of 4-stroke 125cc of the millennium model produced by *MZ Mottorad* Sdn. Bhd. 2nd. April – 2nd. July 2003.

6. Implementation of computational fluid dynamic (CFD) work for *Modu-Logic Sdn. Bhd.* for the exhaust system dedicated to the *Proton Campro* engine 1.6 litre model, June-July 2003.
7. Invited Associate Professor (Profesor Madya Tamu) for Kolej Universiti Kejuruteraan & Teknologi Malaysia (KUKTEM), Pahang, 1 November 2003. ~ 31 Oktober 2004.
8. Official discussion with Proton, Shah Alam, 2005,(Pihak proton memberi sebanyak 4 buah kereta dan 4 buah engine yang anggaran nilainya RM 300,000.00).
9. Official discussion with Dynalec, India, 2005.Syarikat ini telah bersetuju memberi dua buah dynamometer dengan nilai RM 400,000.00.
10. Official discussion with Proton, Shah Alam, 2007,(Pihak proton memberi sebanyak 3 buah kereta yang anggaran nilainya RM 180,000.00).
11. External Consultant VTC Solition Sdn Bhd.

10. Major Publications

Books

- i. "Pembakaran Turbine Gas" UTM and Renong, 1997
- i. "Enjin Diesel dan Sistem Bahan Api", UTM, 2002.
- ii. "Dinamik Gas", UTM-ITNMB, 2005
- iii. "Automotive Technology", OUM, 2005
- iv. "Alternative for Tomorrow: Core Development In the Near Future", Professorial Lecture, UMP, 2010.

Chapter in Book

2009

1. M.M.Noor, K.Kadrigama, M.M.Rahman, M.R.M.Rejab, **Rosli A. Bakar**, S.M.Sapuan, A.G.Olabi, "Laser Machining Of Acrylic Sheet for Industrial Jigs Application", 11th International Conference on Optimum Design of Structures and Materials in Engineering (OPTI09), 8-10 June, Algarve, Portugal, 2009.
2. K.Kadrigama, M.M.Noor, M.M.Rahman, M.S.M.Sani, **Rosli A.Bakar**, K. A. Abou-El-Hossein, "Prediction Modelling of Power and Torque in End-Milling", 11th International Conference on Optimum Design of Structures and Materials in Engineering (OPTI09), 8-10 June, Algarve, Portugal, 2009.
3. M.M.Noor, K.Kadrigama, M.M.Rahman, **Rosli A. Bakar**, C.H.C.Haron, "Response Surface Method and Neural Network to Determine Surface Roughness for Laser Cutting on Acrylic Sheets", 12th CIRP International Conference On Modelling Of Machining Operations, (CIRP CMMO'09), 7-8 May, Donostia-San Sebastian, Spain, Vol. 2, 851-858, ISBN: 978-84-608-0866-4, 2009.
4. K.Kadrigama, M.M.Noor, M.M.Rahman, **Rosli A.Bakar**, B.Mohammad, "Experimental and Numerical Study of Cutting Force in End-Milling Operation Using Statistical Method", 12th CIRP International Conference On Modelling Of Machining Operations, (CIRP CMMO'09), 7-8 May, Donostia-San Sebastian, Spain, Vol. 2, 843-850, ISBN: 978-84-608-0866-4, 2009.
5. M.M.Noor, K.Kadrigama, M.M.Rahman, M.R.M.Rejab, **Rosli A.Bakar**, Abdullah Ibrahim "The Implementation of OBE at Faculty of Mechanical Engineering, Universiti Malaysia Pahang", 'Selected Papers in University Teaching and Learning', UiTM Shah Alam, Selangor, 2009.

6. K.Kadrigama, M.M.Noor, M.M.Rahman, M.S.M.Sani, **Rosli A.Bakar**, Abdullah Ibrahim, "Development of Artificial Intelligent and Statistical Model to Study the Importance of Pre-Requisite for Heat Transfer", 'Selected Papers in University Teaching and Learning', UiTM Shah Alam, Selangor, 2009.

2010

7. M.M. Rahman, Md. Ashikur Rahman Khan, K. Kadrigama and **Rosli A. Bakar**, "Prediction of Material Removal Rate for Ti-5Al-2.5Sn in EDM using MultiLayered Perceptron Neural Network Technique. Recent Researches in Neural Networks, Fuzzy Systems", Evolutionary Computing and Automation, pp. 17-23 (ISI/SCI indexed), 2010.
8. M.M. Rahman, Md. Ashikur Rahman Khan, K. Kadrigama, M.M. Noor and **Rosli A. Bakar**, "Mathematical Modeling of material Removal Rate for Ti-5Al-2.5Sn through EMD Process: A Response Surface Method", Advances in Control, Chemical Engineering, Civil Engineering and Mechanical Engineering, pp. 34- 37, 2010.
9. M.M. Noor, K. Kadrigama, M.M. Rahman, M.R.M. Rejab, M.S.M. Sani, T.T. Mon, **Rosli A. Bakar**, "Laser Machining Of Acrylic Sheet for Industrial Jigs Application", WIT Transactions on The Built Environment, 112: 401-408, 2010.
10. K. Kadrigama, M.M. Noor, M.M. Rahman, M.S.M. Sani, M.R.M. Rejab, **Rosli A. Bakar**, K.A. Abou-El-Hosseini, "Prediction Modelling of Power and Torque in End-Milling", WIT Transactions on the Built Environment, 112: 409-418, 2010.

2011

11. M.M. Rahman, Md. Ashikur Rahman Khan, K. Kadrigama, M.A. Maleque and **Rosli A. Bakar**, "Parametric Optimization in EDM of Ti-6Al-4V using Copper-Tungsten electrode and positive polarity: A Response surface method", Computers and Simulation in Modern Science, Volume V, pp. 107~113, 2011.
12. M.M. Rahman, Md. Ashikur Rahman Khan, K. Kadrigama and **Rosli A. Bakar**, "Prediction of Material Removal Rate for Ti-5Al-2.5Sn in EDM using MultiLayered Perceptron Neural Network Technique. Recent Researches in Neural Networks, Fuzzy Systems", Evolutionary Computing and Automation, pp. 17-23, 2011 (ISI/SCI indexed).
13. M.M. Rahman, K. I. Hamada, K. Kadrigama, M.A. Maleque and **Rosli A. Bakar**, "Overall cycle analysis of in-cylinder heat transfer for hydrogen fueled engine", Computers and Simulation in Modern Science, Volume V., 2011.
14. M.M. Rahman, Md. Ashikur Rahman Khan, K. Kadrigama, M.M. Noor and **Rosli A. Bakar**, "Optimization of Machining Parameters on Tool Wear Rate of Ti-6Al-4V through EDM using Copper Tungsten Electrode: A Statistical Approach", New Materials and Advanced Materials, pp. 1595-1602, 2011 (Scopus, ISI indexed).
15. M.M. Rahman, Md. Ashikur Rahman Khan, M.M. Noor, K. Kadrigama and **Rosli A. Bakar**, "Optimization of machining parameters on surface roughness in EDM of Ti-6Al-4V using Response surface method", Advanced Materials Research, pp. 402-408, 2011. (Scopus, ISI indexed).

Master and PhD

1. **Rosli Abu Bakar**, "A. Study on the Prediction of Combustion Performance In a Diesel Engine", Master Thesis, Hanyang University, Seoul Korea. 1991
2. **Rosli Abu Bakar**, "Computational and Experimental Investigation of the Combustion Performance in a Diesel Engine", Ph. D Thesis, Hanyang University, Seoul, Korea, 1997.

Research report

1. **Rosli Abu Bakar**, "Engine Performance Test Using CNG as Fuel in the 4 Stroke Engine", A 82 page technical report presented to the Research Management Centre (RMC) upon the completion to the RMC funded project (Vot No. 71276), 2000

2. **Rosli Abu Bakar**, "Design and Development of a New CNG (Compressed Natural Gas) Engine", A 157 page technical report presented to the Research Management Centre (RMC) upon the completion to the RMC funded project (Vot No. 71426), 2000.
3. **Rosli Abu Bakar**, "Design and Development of a New CNG (Compressed Natural Gas) Engine", A 76 page technical report presented to the Research Management Centre (RMC) upon the completion to the IRPA funded project (Vot No. 72351), 2002.
4. **Rosli Abu Bakar**, Gan Leong Ming, Wong Hong Mun, & Mohd Shahrin Mohd Sani "New design of A Two Stroke Modular Engine, for Multipurpose Useage with Lean Burn Capabilty", A 92 page technical report presented to the Research Management Centre (RMC) upon the completion to the UMP funded project (RDU No. 030209), 2008.
5. **Rosli Abu Bakar**, Gan Leong Ming, Wong Hong Mun, & Mohd Shahrin Mohd Sani "Merekabentuk dan MemfabrikasiKerusi Khas Pacuan Motor", A 92 page technical report presented to the Research Management Centre (RMC) upon the completion to the UMP funded project (RDU No. 070333), 2008.

Journal (International and National)

1992

1. **Rosli Abu Bakar** "A Study on the Performance Factors of Combustion In Swirl Combustion Chamber Type Diesel Engine", Buletin Jentera Jil. 12, Bil.2, Universiti Teknologi Malaysia, 1992.

1996

2. **Rosli Abu Bakar**, Lee Chang Sik & Chon Mun Soo, " An Experimental Study on The Effect of Air-Assist and Wall-Flow Distribution in the Spark Ignition Engine Performance", Jurnal Mekanikal, UTM, 1996.

1997

3. **Rosli Abu Bakar** & Chang Sik Lee, "The Effect of Combustion Parameter on the Nitric Oxide Emission in Direct Injection Type Diesel Engine", Korean Society of Mechanical Engineers (KSME) International Journal Vol. 11, No. 6, 1997.
4. **Rosli Abu Bakar**& Lee Chang Sik, "The Influence of Fuel Spray Characteristics on the Engine Performance and Emission in the Direct Injection Type Diesel Engine", Journal of Institute for Liquid Atomization and Spray Systems-Korea, ILASS-KOREA, Vol. 2, No. 2., pp.43~50, 1997.

1998

5. **Rosli Abu Bakar** & Lee Chang Sik, "Influence of the Cyclic Parameter on the Nitric Oxide Formation in the Diesel Engine", Korea Society Automotive Engineers (KSAE) Journal, Vol. 6, No. 1, pp. 27~35, SAE 98370003, 1998.

2000

6. **Rosli Abu Bakar**, & Wong Chee Yeen, " Membina Perisian Untuk Aliran Yang Melalui Jasad", Jurnal Mekanikal, UTM, 2000.
7. **Rosli Abu Bakar**, & Wong Hong Mun, "The Simulation Study On The Various Location Air Funnel in A Carburator", Journal Technology UTM, 2000.

2003

8. **Rosli Abu Bakar**, Mardani Ali Sera & Sin Kwan Leong, " CNG Engine Performance Improvement Strategy Through Advanced Intake System" JSAE 200330229 SAE 2003-01-1937, 2003 JSAE/SAE International Spring Fuels & Lubricant Meeting, 2003.

2005

9. **Rosli Abu Bakar**, & T Firoz, " Numerical Analysis of Pressure Pulses in the Jerk Fuel Injection Systems", American Journal of Applied Science 2(5):1003~1007,2005.

10. **Rosli Abu Bakar**, & T Firoz, " Analysis of Injection Systems", American Journal of Applied Science, 2005,
11. **Rosli Abu Bakar**, & T Firoz, " Numerical Analysis of Pressure Pulses in the Jerk Fuel Injection Systems", Jurnal Kejuruteraan, Universiti Kebangsaan Malaysia (UKM), 2005.

2006

12. **Rosli Abu Bakar**, Abdul Rahim Ismail, Semin, 2006. Simulation Development of Diesel Engine Fuelled Using Compressed Natural Gas, *MARINE-Journal of Marine Machinerics Technology*, Vol.3, No.2, pp: 112 – 115, November 2006. ISSN: 0216-9886.

2007

13. **Rosli Abu Bakar**, Semin, "Investigation of Fuel Nozzle Performance on Direct Injection Diesel Engines Using Computational Simulation", *MARINE-Journal of Marine Machinerics Technology*, Institute of Technology Surabaya (ITS), Vol.3, No.2, November, 2007.
14. **Rosli Abu Bakar**, Abdul Rahim Ismail, Semin, "Simulation Development of Diesel Engine Fuelled Using Compressed Natural Gas", *MARINE-Journal of Marine Machinerics Technology*, Institute of Technology Surabaya (ITS), Vol.3, No.3, March, 2007.
15. **Rosli Abu Bakar**, Nik M.I.N. Ibrahim, Semin, Abdul Rahim Ismail, M.F.A.Rahim and Ismail Ali "In Cylinder Pressure Analysis of Two-Stroke Spark Ignition Engine", *MARINE-Journal of Marine Machinerics Technology*, Institute of Technology Surabaya (ITS), Vol.4, No.1, July, 2007.
16. **Rosli Abu Bakar**, Semin, "A Technical Review of the Future Internal Combustion Engines", *MARINE-Journal of Marine Machinerics Technology*, Institute of Technology Surabaya (ITS), Vol.4, No.1, July, 2007.
17. **Rosli Abu Bakar**, Mohamad F. Othman, Semin, Abdul Rahim Ismail, "The Compressed Natural Gas (CNG) Cylinder Pressure Storage Technology in Natural Gas Vehicles (NGV) Research Trends", *MARINE-Journal of Marine Machinerics Technology*, Institute of Technology Surabaya (ITS), Vol.4, No.1, July, 2007.
18. **Rosli Abu Bakar**, Nik M.I.N. Ibrahim, Semin, Abdul Rahim Ismail, M.F.A.Rahim and Ismail Ali, "In Cylinder Pressure Analysis of Two-Stroke Spark Ignition Engine", *MARINE-Journal of Marine Machinerics Technology*, Vol.4, No.1, pp: 9 – 17, July 2007. ISSN: 0216-9886, 2007.
19. **Rosli Abu Bakar**, Awang Idris, Semin, "An Overview of Compressed Natural Gas as Alternative Fuel for Internal Combustion Engines", *Journal Marine Vol.4 (2)*, Nov., 2007.
20. Semin, **Rosli Abu Bakar**, "Unburned Fuel In-Cylinder Diesel Engines Investigation using Simulation", *Journal Marine Vol.4 (2)*, Nov., 2007.
21. Semin, **Rosli Abu Bakar** and Abdul Rahim Ismail, " Air Flow Analysis of Four Stroke Direct Injection Diesel Engines Based on Air Pressure Input and L/D Ratio", *Research Journal of Applied Sciences 2 (11)*: 1135-1142, ISSN: 1815-932X, 2007.
22. Semin and **Rosli Abu Bakar**, " Nozzle Holes Effect on Unburned Fuel in Injected and In-Cylinder Fuel of Four Stroke Direct Injection Diesel Engine", *Research Journal of Applied Sciences 2 (11)*: 1165-1169, 2007. ISSN: 1815-932X, 2007.
23. N.M.I.N. Ibrahim, **Rosli Abu Bakar**, Semin, Abdul Rahim Ismail and Ismail Ali, "In-Cylinder Mass Flow Rate and Gas Species Concentration Simulation of Spark Ignition Engine", *Journal of Engineering and Applied Sciences 2 (12)*, pp: 1795-1806, 2007. ISSN: 1816-949X, 2007.
24. Abdul Rahim Ismail, **Rosli Abu Bakar** and Semin, "Valve Flow Discharge Coefficient Investigation for Intake and Exhaust Port of Four Stroke Diesel Engines", *Journal of Engineering and Applied Sciences 2 (12)*, pp: 1807-1811, ISSN: 1816-949X, 2007.

25. Semin, **Rosli Abu Bakar**, and Abdul Rahim Ismail, " Engine Power Calculation using Air Flow through Engine from Flowbench Test Flow of Four Stroke DI Diesel Engines", *Journal of Engineering and Applied Sciences* 2 (12), pp: 1812-1817, ISSN: 1816-949X, 2007.

2008

26. **Rosli Abu Bakar**, Semin, Abdul Rahim Ismail and Ismail Ali, "Computational Simulation of Fuel Nozzle Multi Holes Geometries Effect on Direct Injection Diesel Engine Performance Using GT-POWER", *American Journal of Applied Sciences* 5 (2), pp: 110-116, ISSN: 1546-9239, 2008.
27. **Rosli Abu Bakar**, Semin and Abdul Rahim Ismail, "Fuel Injection Pressure Effect on Performance of Direct Injection Diesel Engines Based on Experiment", *American Journal of Applied Sciences* 5 (3), pp: 197-202, ISSN: 1546-9239, 2008.
28. Semin, **Rosli Abu Bakar** and Abdul Rahim Ismail, "Computational Visualization and Simulation of Diesel Engines Valve Lift Performance Using CFD", *American Journal of Applied Sciences* 5 (5), pp: 532-539, ISSN: 1546-9239, 2008.
29. Semin, Abdul Rahim Ismail and **Rosli Abu Bakar**, "Comparative Performance of Direct Injection Diesel Engines Fueled Using CNG Based on GT-POWER Simulation", *American Journal of Applied Sciences* 5 (5), pp: 540-547, 2008. ISSN: 1546-9239, 2008.
30. **Rosli Abu Bakar**, Semin and Abdul Rahim Ismail, "Investigation of Diesel Engine Performance Based on Simulation", *American Journal of Applied Sciences* 5 (6), pp: 610-617, ISSN: 1546-9239, 2008.
31. Abdul Rahim Ismail, **Rosli Abu Bakar** and Semin, "An Investigation of Valve Lift Effect on Air Flow and CD of Four Stroke Engines Based on Experiment", *American Journal of Applied Sciences* 5 (8), pp: 963-971, 2008. ISSN: 1546-9239, 2008.
32. Semin, N. M. I. N. Ibrahim, **Rosli Abu Bakar** and Abdul R. Ismail, "In-Cylinder Flow through Piston-Port Engines Modeling using Dynamic Mesh", *Journal of Applied Sciences Research* Vol. 3, No. 1, pp: 58-64, ISSN: 1816-157X, 2008.
33. N. M. I. N. Ibrahim, **Rosli Abu Bakar**, Semin, and Abdul R. Ismail, "Analysis of Engine Speed Effect on Temperature and Pressure of Engine Based on Experiment and Computational Simulation", *Journal of Applied Sciences Research* Vol. 4, No. 1, pp: 76-83, ISSN: 1816-157X, 2008.
34. Semin, **Rosli Abu Bakar** and Abdul Rahim Ismail, "Steady-state and Transient Simulation of Gas Flow Pressure in Intake Port Engine", *Journal of Engineering and Applied Sciences*, pp: 47-54, ISSN: 1816-949X, 2008.
35. **Rosli Abu Bakar**, M. Fatasya Othman, Semin, Abdul R. Ismail and Asnul H. Ahmad, "An Overview of Pressure Vessel Technology for Compressed Natural Gas Fuel Storage of Natural Gas Vehicles", *American Journal of Applied Sciences* Vol. 5, No. xx, 2008. pp: xx-xx (Received paper # 870-AJAS).
36. Abdul Rahim Ismail, **Rosli A. Bakar**, Semin and Ismail Ali. "Computer Modelling For 4 Stroke Direct Injection Diesel Engine", *Advanced Materials Research*, Vol. 33~37, pp. 801~806, 2008, (Scopus Indexed).
37. Semin, **Rosli Abu Bakar** and Abdul Rahim Ismail, "Liquid Fuel Injected of Diesel Engine Fuel Nozzle Injector Variation Holes Number", *Australian Journal of Basic and Applied Sciences* Vol. 2(3), pp: 388-396, ISSN: 1991-8178, 2008.
38. Semin, **Rosli Abu Bakar**, Abdul Rahim Ismail, "Simulation of Fuel Nozzle Injector Multi Holes Effect for In Engine Cylinder Liquid Fuel and Performance of Direct Injection Diesel Engine", *World Journal of Applied Sciences* Vol. 2, No. xx, 2008. pp: xx-xx (Received paper).
39. **Rosli Abu Bakar**, Mohamad Fatasha Othman and Asnul Hadi Ahmad, " The Trends of Research in Compressed Natural Gas (CNG)

- Pressure Vessel Technology : An Overview”, Jurnal UMP, Vol. 1, No. 1, pp : 23-36, 2008.
40. **Rosli Abu Bakar**, Gan Leong Ming, Wong Hong Mun, Devaraja and Fazli Zainal, ” Intelligent Heigh and Reach Adjustable Electronic Chair for Children with Dwarfism (ZUMP)”, Jurnal UMP, Vol. 1, No. 1, pp : 47-58, 2008.
 41. **Rosli Abu Bakar**, and Kwan Teck Heng, ”Analysis of Air Flow in Intaka System Using Computational Fluid Dynamics”, Jurnal UMP, Vol. 1, No. 1, pp : 75-92, 2008.
 42. M.M. Rahman and **Rosli Abu Bakar**, “Assessment of fatigue life behavior of cylinder block for free piston engine using frequency response approach”, *Research Journal of Applied Sciences*, 3(1): 32-43, 2008.
 43. Semin, Abdul Rahim Ismail, **Rosli Abu Bakar** and I. Ali, “Effect of Direct Injection Diesel Engine Convert to Sequential Injection CNG Engine in Intake Port Gas Flow Pressure Profile”, *International Journal of Engineering*, Vol. 21, No. 3, pp: 291-302, 2008.
 44. Semin and **Rosli Abu Bakar**, “Study of Fuel Injection Pressure Effect on Performance and Fuel Consumption of Diesel Engine Based on Load and Engine Speed”, *International Journal of Applied Engineering Research* 3 (2): 229-240, ISSN: 0973-4562, 2008.
 45. Semin, Abdul Rahim Ismail, **Rosli Abu Bakar** and Ismail Ali, 2008. Steady-state and Transient Simulation of Gas Flow Temperature of Intake Port Engine, *Journal of Applied Sciences Research* 4(7), pp: 767-777, ISSN: 1816-157X, 2008.
 46. Semin and **Rosli Abu Bakar**, “Study of Correlating an Engine Model to Plotted Characterization of In-Cylinder Pressure and Temperature Profile”, *Journal of Applied Sciences Research* 4(6), pp: 658-668, ISSN: 1816-157X, 2008.
 47. Semin, **Rosli Abu Bakar**, Abdul Rahim Ismail and Ismail Ali, ”Intake Port Gas Flow Pressure Profile Investigation of Port Injection CNG Engine Based on Engine Speed”, *International Journal of Natural and Engineering Sciences* 2(2), pp: 97-103, ISSN: 1307-1149, 2008.
 48. M.M.Rahman, **Rosli Abu Bakar**., M.M.Noor, M. S. M. Sani, Julie J. Mohamed, “An Investigation into the Effects of Spot Diameter And Sheets Thickness On Fatigue Life Of Spot Welded Structure Based On FEA”, *Research Journal of Applied Sciences*, 3(1): 10-15, 2008
 49. Semin, Abdul Rahim Ismail and **Rosli Abu Bakar**, 2008. Effect of Four Stroke Direct Injection Diesel Engine Convert to Multi Point Injection Dedicated Compressed Natural Gas (CNG) Engine on the Power Performance, *American J. of Engineering and Applied Sciences* x (x), pp: xx-xx, 2008. ISSN: 1941-7020. (Under review # AJEAS).
 50. Semin and **Rosli Abu Bakar**, “A Technical Review of Compressed Natural Gas as an Alternative Fuel for Internal Combustion Engines”, *American J. of Engineering and Applied Sciences* 1 (4), pp. 302-311, ISSN: 1941-7020, 2008.
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 52. Semin, Abdul Rahim Ismail and **Rosli Abu Bakar**, “Engine Cylinder P-V Diagram of Diesel Engine Converted to CNG Engine”, *Journal of Engineering and Applied Sciences* 3 (9), pp: 718-724, ISSN: 1816-949X , 2008.
 53. Semin, Abdul R. Ismail and **Rosli Abu Bakar**, “Simulation Investigation of Intake Static Pressure of CNG Engine”, *International Review of Modelling and Simulations* x (1), ISSN:1974-9821,2008.
 54. Semin, Abdul Rahim Ismail and **Rosli Abu Bakar**, 2008. Investigation of CNG Engine Intake Port Gas Flow Temperature Based on Steady-State and Transient Simulation, *European Journal of Scientific Research* 22 (3), pp:361-372, October, 2008. (**Scopus Indexing**).

55. M.M. Rahman, **Rosli Abu Bakar**, M.M. Noor, M.S.M. Sani and M.R.M. Rejab, "Fatigue analysis of spot welded joints using finite element analysis approach" , European Journal of Scientific Research 22 (3), pp:444~456, 2008.UK, **(Scopus Indexing)**
56. M.M. Rahman, A.K. Ariffin, S. Abdullah and **Rosli Abu Bakar**, "Fatigue Life Prediction of Cylinder Head for Two-Stroke Linear Engine using Stress-life Approach" Journal of Applied Sciences , 2008.
57. M.M. Rahman, A. K. Ariffin, S. Abdullah, M. M. Noor and **Rosli Abu Bakar**, "Finite element based fatigue life prediction of cylinder head for two-stroke linear engine using stress-life approach" *Journal of Applied Sciences*, 8(19), 3316~3327,2008,**(ISI Thomson Indexing/Scopus Indexing)**
58. M.M. Rahman, A.K. Ariffin, N. Jamaludin, C.H.C. Haron and **Rosli Abu Bakar**, "Fatigue Life Prediction of Two-Stroke Free Piston Engine Mounting using Frequency Response Approach" European Journal of Scientific Research, Vol. 22(3) No. 4, pp. 480~493. 2008, UK.**(Scopus Indexing)**
59. M.M. Rahman and Rosli A. Bakar, "Assessment of fatigue life behavior of cylinder block for free piston engine using frequency response approach", Research Journal of Applied Sciences, 3(1): 32-43, 2008. **(Scopus Indexing)**
60. M.M. Rahman, A. K. Ariffin, S. Abdullah, M. M. Noor,**R. A. Bakar** and M. A. Maleque, "Finite element based fatigue life prediction of cylinder head for two-stroke linear engine using stress-life approach" *Journal of Applied Sciences*, 8(19):3316-3327, 2008. **(ISI indexing)**

2009

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5. Advisor, "Proceeding of 2nd National Conference In Mechanical Engineering for Research & Post Graduates Studies (NCMER 2)", UMP, December, 2010
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7. Steering committee of an International Conference on Sustainable Energy, Research Center for Electrical Power and Mechatronics, Indonesian Institute of Sciences , 2012.
8. Member Journal of Energy and Power Engineering, 2013~present

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128. "Evaluation of the Efficiency Energy of Wood Stove from Irati Brazilian City", International Journal of Agriculture and Forestry from Scientific & Academic Publishing, USA, 2013.
129. "Predicting Braking Distance based on the Polished Stone Value of Aggregates in the Wear Layer ", CIVIL ENGINEERING (ECCIE '13) Conference, Antalya, 2013.
130. "Monitoring the Conflict Situations Using the Video Analysis in the Czech Republic", CIVIL ENGINEERING (ECCIE '13) Conference, Antalya, 2013.
131. "Laminar and Turbulent Simulations of Several TVD Schemes in Two-Dimensions – Part III ", WSEAS Transactions on Computers Journal, 2013.
132. "An Efficient Layered FFT Approach for Reduction of PAPR, Spectral Re-growth and CFO on the Performance of an OFDM System", WSEAS Transactions on Communications Journal, 2013.
133. "An maximal clique mining algorithm for highway network optimization problem", WSEAS Transactions on Communications Journal, 2013.
134. "Combustion simulation for the marine engines", MECHANICAL ENGINEERING (ECME' 13) Conference, Paris, 2013
135. "Impact Damage Response of Osteoporosis Hip Bone", MECHANICAL ENGINEERING (ECME' 13) Conference, Paris, 2013
136. "Convenience yields and arbitrage revenues of emission allowances between spot and futures", WSEAS Transactions on Systems Journal, 2013.
137. "Removal of Copper Using Groundwater Treatment Plant Sludge (GWTPS) Adsorbent in Continuous Flow Activated Sludge System", SUSTAINABLE URBAN TRANSPORT and ENVIRONMENT (SUTREN '13) Conference, Budapest, 2013
138. "The utilization of electrical cutting signal for the quality control of the metallic carbide plates, of the edge of the drill, and for the appreciation of the temperature in the cutting zone" CIRCUITS, SYSTEMS, ELECTRONICS, CONTROL & SIGNAL PROCESSING (CSECS '13) Conference, Budapest , 2013
139. "Simulation of Coverage of WiMAX ", CIRCUITS, SYSTEMS, ELECTRONICS, CONTROL & SIGNAL PROCESSING (CSECS '13) Conference, Budapest , 2013
140. "Testing method of materials for enthalpy wheels", DEVELOPMENT, ENERGY, ENVIRONMENT, ECONOMICS (DEEE '13) Conference, Paris, 2013
141. "Numerical and experimental models of the load of an object due to the effects of a flow field", APPLIED MATHEMATICS (AMATH '13) Conference, Budapest, 2013
142. "Numerical algorithm for solving the elasto-plastic problem with isotropic hardening and the plane stress state", APPLIED MATHEMATICS (AMATH '13) Conference, Budapest, 2013
143. "Additive and Multiplicative Heat Load Models Comparison", CIRCUITS, SYSTEMS, ELECTRONICS, CONTROL & SIGNAL PROCESSING (CSECS '13) Conference, Budapest , 2013
144. "Additive and Multiplicative Heat Load Models Comparison", WSEAS Transactions on Heat and Mass Transfer Journal, 2013
145. " Choosing the optimal fuel cell technology for application in the field of passive houses", URBAN SUSTAINABILITY, CULTURAL SUSTAINABILITY, GREEN DEVELOPMENT, GREEN STRUCTURES and CLEAN CARS (USCUDAR '13) Conference, Budapes, 2013

146. "Monitoring of Photovoltaic Wind-Turbine Battery Hybrid System", WSEAS Transactions on Power Systems Journal, 2013
147. "Comparative advantages using solar and wind energy in hybrid systems at the same site", WSEAS Transactions on Power Systems Journal, 2013
148. " Selected issues connected with urban transport systems operation", SUSTAINABLE CITIES, URBAN SUSTAINABILITY and TRANSPORTATION (SCUST '13) Conference, Baltimore, 2013

2014

149. "Analysis of Steel Made Leaf spring using FEA tool Ansys ", International Conference on Automotive Technology, ICAT 2014
150. "Mathematical Modeling of Electromagnetic Levitation Based Active Suspension using Bond Graph ", International Conference on Automotive Technology, ICAT 2014
151. "Experimental Analysis of Automotive Microchannel Condenser with HFC 134a and Hydrocarbon Mixture of R290 and R600a", International Conference on Automotive Technology, ICAT 2014
152. "FLUID DYNAMIC SIMULATION STUDIES OF FLOW CHARACTERISTICS FOR PREPARATION OF MIXTURE TOWARDS BETTER COMBUSTION AND PERFORMANCE BY USING STAR CD SOFTWARE", International Conference on Automotive Technology, ICAT 2014.
153. "Single Zone Modeling of Homogeneous Charge Combustion Ignition Engine", International Conference on Automotive Technology, ICAT 2014.
154. "Vision Based Smart "Door Open Alert System" ", International Conference on Automotive Technology, ICAT 2014.
155. "Anthropomorphism in Political Cartoon: Case Study of the 1965 Malaysia- Indonesia Confrontation", International Colloquium of Art and Design Education Research 2014 - Cultural Studies and Social Implication of Art (i-CADER2014) - Cultural Studies and Social Implication of Art (Cultural Studies and Social Implication of Art), Kuala Lumpur, 2014.
156. "Preservation Characteristics of Malay Garden: A Catalyst for Sustainable Cultural Landscape in Malaysia", International Colloquium of Art and Design Education Research 2014 - Cultural Studies and Social Implication of Art (i-CADER2014) (Cultural Studies and Social Implication of Art), Kuala Lumpur, 2014.
157. "Preliminary consideration on GPS signal reconstruction in real driving cycle analysis", URBAN PLANNING and TRANSPORTATION (UPT '14) Conference , Salerno, 2014.
158. "Imminent Smart DC Nano-Grid for Green Buildings — A Contemplative View", ENERGY, ENVIRONMENT, ECOSYSTEMS and SUSTAINABLE DEVELOPMENT (EEESD '14) Conference, Tenerife, 2014.
159. "Analysis of the Power Quality using Intelligent Techniques", INTELLIGENT CONTROL, MODELLING and SYSTEMS ENGINEERING (ICMS '14) Conference, Cambridge , 2014.
160. "Observer-Based Fault Detection and Isolation of MZSH System Sensors", CIRCUITS, SYSTEMS, SIGNAL and TELECOMMUNICATIONS (CSST '14) Conference, Tenerife, 2014.
161. "A new approach to problem solving construction crew rotations", URBAN PLANNING and TRANSPORTATION (UPT '14) Conference, Salerno , 2014.
162. "Comparative study regarding the global influence of energy storage medium on autonomous hybrid systems for a building

- with economical energy consumption”, RENEWABLE ENERGY SOURCES (RES '14) Conference, Kuala Lumpur, 2014.
163. “Thermochemical Non-Equilibrium Entry Flows in Mars in Two-Dimensions – Some Results”, WSEAS Transactions on Computers Journal, 2014.
 164. “Relation of Surface Roughness and Photo-induced Charge Trapping of Porous Si Nanowires”, RENEWABLE ENERGY SOURCES (RES '14) Conference, Kuala Lumpur , 2014.
 165. “Renewable Energy Generation and Deployment Model by Wind and Vehicular Mobility with Discharge Stations”, RENEWABLE ENERGY SOURCES (RES '14) Conference, Kuala Lumpur , 2014.
 166. “Thermo-magnetic Innovative Technology for Green Automotive Applications”, ENERGY, ENVIRONMENT, ECOSYSTEMS and SUSTAINABLE DEVELOPMENT (EEESD '14) Conference, Tenerife , 2014.
 167. “Performance of Variable Design Configurations for Wind Driven Rain (WDR) Shading Device in Tropical Climate”, RENEWABLE ENERGY SOURCES (RES '14) Conference, Kuala Lumpur , 2014.
 168. “An Initial Study on Wind Speed in Mersing, Malaysia”, RENEWABLE ENERGY SOURCES (RES '14) Conference, Kuala Lumpur , 2014.
 169. “Thermochemical Non-Equilibrium Reentry Flows in Two-Dimensions: Eleven Species Model – Part II”,WSEAS Transactions on Computers Journal, 2014.
 170. “A clique-based and degree-based clustering algorithm for expressway network simplification problem”,WSEAS Transactions on Computers Journal, 2014.
 171. “Energy Harvesting Bridge”,WSEAS Transactions on Power Systems, 2014.
 172. “Load Flow Solution for Unbalanced Radial Power Distribution using Monte-Carlo Simulation”,WSEAS Transactions on Power Systems Journal, 2014.
 173. “Optimization of Non Reheat Steam Cycles for CHPP”, ENERGY, ENVIRONMENT, ECOSYSTEMS and SUSTAINABLE DEVELOPMENT (EEESD '14) Conference, Tenerife , 2014.
 174. “Throughfall deposition of N and S to mangrove ecosystems in the Southeast of Mexico”, ENVIRONMENTAL and GEOLOGICAL SCIENCE and ENGINEERING (EG '14) Conference, Salerno, 2014.
 175. “The Numerical Simulation of Double-Diffusive Laminar Mixed Convection Flow in a Lid-Driven Porous Cavity”, WSEAS Transactions on Heat and Mass Transfer Journal, 2014.
 176. “Convenience yields and arbitrage revenues of emission allowances between spot and futures”, WSEAS Transactions on Systems Journal, 2014.
 177. “Monitoring of Photovoltaic Wind-Turbine Battery Hybrid System”, WSEAS Transactions on Power Systems, 2014.
 178. CONGESTION MANAGEMENT IN DEREGULATED POWER SYSTEM BY FUZZY BASED OPTIMAL LOCATION AND SIZING OF UPFC “”,WSEAS Transactions on Power Systems Journal, 2014.
 179. “Laminar and Turbulent Simulations of Several TVD Schemes in Two-Dimensions – Part III”,WSEAS Transactions on Computers Journal, 2014.

180. "Comparative advantages using solar and wind energy in hybrid systems at the same site", WSEAS Transactions on Power Systems Journal, 2014.
181. "Mathematical models of the system of management of technical maintenance of water pipeline networks", EUROPMENT Journal, 2014.
182. "EXPERIMENTAL STUDIES ON THE PERFORMANCE OF C.I ENGINE USING FISH OIL METHYL ESTER (FME) AS A FUEL FOR VARIOUS BLENDS OF LPG ", International Journal of Automotive and Mechanical Engineering (IJAME), 2014.
183. "FUTURE PROSPECTS OF LOW COMPRESSION IGNITION ENGINE", International Journal of Automotive and Mechanical Engineering (IJAME), 2014.
184. "FORCES SPEEDS IN INTERNAL COMBUSTION HEAT ENGINES", International Journal of Engineering (IJE), 2014.
185. "Simulation of boiling heat transfer within water jacket of 4 cylinder gasoline", International Journal of Engineering (IJE), 2014.
186. "Evaluation of continuous convection and radiation ovens in automobile cure industry", International Journal of Engineering (IJE), 2014.
187. "Numerical simulation of double-diffusive natural convection in n-shaped enclosures", International Journal of Engineering (IJE), 2014.
188. "Social Indicators in Preliminary Studies for the Installation of Solar Panels. Province of Salta, Argentina", Journal of Energy and Power Engineering, JEPE, 2014.
189. "STRESS ANALYSIS OF RADIAL AND NON-RADIAL NOZZLE CONNECTIONS IN ELLIPSOIDAL HEAD PRESSURE VESSEL", MAKALAH JURNAL TERBAIK ANUGERAH MAPIM-KPM 2013.
190. "Analytical solution for investigating of thermal analysis and efficiency of convective-radiative a moving fin with various cross-sectional profiles with temperature-dependent thermal conductivity", International Journal of Engineering (IJE), 2014.
191. "Effect of hydroxy gas addition to air inlet of a SI engine, to investigate Power, torque and exhaust gas emission variation", International Journal of Engineering (IJE), 2014.
192. "Preliminary consideration on GPS signal reconstruction in real driving cycle analysis", URBAN PLANNING and TRANSPORTATION (UPT '14) Conference, Salerno , 2014.
193. "Photovoltaic Panel Modelling Using a Stochastic Approach in MATLAB®&Simulink®", AUTOMATIC CONTROL, MODELLING & SIMULATION (ACMOS '14) Conference, Brasov, 2014.
194. "Bioremediation of Ni²⁺ polluted soils by plant-associated bacteria in heavy metal phytoremediation process ", ENVIRONMENTAL and GEOLOGICAL SCIENCE and ENGINEERING (EG '14) Conference, Salerno, 2014.
195. "Non-Stationary Dynamics in Reliability Analysis of Adaptive Multi-Agent Systems", AUTOMATIC CONTROL, MODELLING & SIMULATION (ACMOS '14) Conference, Brasov, 2014.
196. "Un-used arable land evaluation in Romania for low indirect impact biofuel production", ENVIRONMENT, ECOSYSTEMS and DEVELOPMENT (EED '14) Conference, Brasov, 2014.
197. "Finite Element Analysis for Estimating the Effect of Various Working Conditions on the Temperature Gradients Created Inside a Rolling Tire", International Journal of Engineering (IJE), 2014.

198. "State Space Based Modeling and Control of Jet Impingement Cooling of Steel Plate", International Journal of Engineering (IJE), 2014.
199. "Construction of 3-D model and its visualization of Road based on terrain", WSEAS Transactions on Computers Journal, 2014.
200. "Researches on the Thermal Stress Influences over the Brakes Performances", AUTOMATIC CONTROL, MODELLING & SIMULATION (ACMOS '14) Conference, Brasov, 2014.
201. "Evaluation method and modelling of electro magnetic processes in the power stage of closed loop DC drive system in condition of periodic speed reverse with current limitation", AUTOMATIC CONTROL, MODELLING & SIMULATION (ACMOS '14) Conference, Brasov, 2014.
202. "Aerospace Hybrid Lightweight Metallic Structures. Case Study – Design of a Turboprop Engine Support", MANUFACTURING ENGINEERING, QUALITY and PRODUCTION SYSTEMS (MEQAPS '14) Conference, Brasov, 2014.
203. "THERMODYNAMIC ANALYSIS OF THE ATKINSON CYCLE", International Workshop on Model Engineering (conference) (IWME), 2014.
204. "Squeal Noise of an Automotive Wiper Blade", International Workshop on Model Engineering (conference) (IWME), 2014.
205. "Reducing Speed and Fuel Transfer of the Green Flag Program in Kaohsiung Port Taiwan ", Transportation Research Part D: Transport and Environment. 2014.
206. "Matlab/Simulink Based Dynamic Modeling of Microturbine Generator for Grid and Islanding Modes of Operation", WSEAS Transactions on Power Systems Journal, 2014
207. "BRAKING SYSTEM MODELING AND BRAKE TEMPERATURE MONITORING", Mechatronics, Electrical Power, and Vehicular Technology (MEV), 2014.
208. "Electrostatic Precipitator Device for Reduce of Diesel Engine Particulate Matter", 2nd International Conference on Sustainable Energy and Application (ICSEEA 2014), Research Center for Electrical Power and Mechatronics, Indonesian Institute of Sciences, 2014.
209. "Sonochemistry Approach to Reducing Biodiesel Reaction Time from Jatropa Curcas Oil by Clamp on Tubular Reactor", 2nd International Conference on Sustainable Energy and Application (ICSEEA 2014), Research Center for Electrical Power and Mechatronics, Indonesian Institute of Sciences, 2014.
210. "A NUMERICAL INVESTIGATION ABOUT THE EGR EFFECT UNDER THE CONDITION OF BOOST PRESSURE ON HCCI AUTOIGNITION", 2nd International Conference on Sustainable Energy and Application (ICSEEA 2014), Research Center for Electrical Power and Mechatronics, Indonesian Institute of Sciences, 2014.
211. "Performance Characteristic of Indirect Diesel Engine Fuelled with Diesel-Bioethanol using Uniplot Software", 2nd International Conference on Sustainable Energy and Application (ICSEEA 2014), Research Center for Electrical Power and Mechatronics, Indonesian Institute of Sciences, 2014.
212. "Effect of Ethanol Percentage for Diesel Engine Performance using Virtual Engine Simulation Tool", 2nd International Conference on Sustainable Energy and Application (ICSEEA 2014), Research Center for Electrical Power and Mechatronics, Indonesian Institute of Sciences, 2014.

213. "POME (Palm Oil Mill Effluent) – as an Alternative Energy Model to Increase Electrification Ratio in Remote Area in East Kalimantan", 2nd International Conference on Sustainable Energy and Application (ICSEEA 2014), Research Center for Electrical Power and Mechatronics, Indonesian Institute of Sciences, 2014.
214. "Guidance and Control Laws for Quadrotor UAV", WSEAS Transactions on Systems and Control Journal, 2014.
215. "THE ENVIRONMENT- A FACTOR OF SUSTAINABLE DEVELOPMENT AND OF TOURISM'S COMPETITIVENESS IN ROMANIA", SUSTAINABLE TOURISM and CULTURAL HERITAGE (STACH '14) Conference, WSEAS, 2014.
216. "EFFECTS ON TOURISM AND SUSTAINABLE DEVELOPMENT OF ECONOMIC EVOLUTION IN SOUTH EAST ROMANIA", SUSTAINABLE TOURISM and CULTURAL HERITAGE (STACH '14) Conference, WSEAS, 2014.
217. "Effect of CaO, Al₂O₃, MnO and Fe₂O₃ in coal ash on the retention of acid-forming elements during coal combustion", WSEAS Transactions on Power Systems Journal, 2014.
218. "Towards an Accurate Modeling of Frequency-Dependent Wind Farm Components under transient conditions", WSEAS Transactions on Power Systems Journal, 2014.
219. "ON SOME PARACOMPACTNESS-TYPE PROPERTIES OF FUZZY TOPOLOGICAL SPACES", MATHEMATICAL METHODS, COMPUTATIONAL TECHNIQUES and INTELLIGENT SYSTEMS (MAMECTIS '14) Conference, 2014.
220. "Characterization of Hydraulic Oil Based Ferrofluid with Various Concentration of γ -Fe₂O₃ Particles and Surfactant in "Off-State" Condition", Journal Teknologi UTM, 2014.
221. "Calibration of Speed-Density Relationships for Freeways in Aimsun", CIVIL ENGINEERING (ECCIE '14) Conference, Florence, 2014.
222. "Influence of the test procedure for setting the external air movement on the thermal performance of open multideck display case", FLUID MECHANICS and HEAT & MASS TRANSFER (FLUIDSHEAT '14) Conference. Lisbon, 2014.
223. "Existence and Exponential Stability of Anti-periodic Solutions for A Cellular Neural Networks with Impulsive Effects", WSEAS Transactions on Signal Processing Journal, 2014.
224. "A Grünwald-Letnikov scheme for fractional operators of Havriliak-Negami type", APPLIED MATHEMATICS, SIMULATION, MODELLING (ASM '14) Conference, Florence , 2014.
225. "BRICS Mosaic Model for IoT Feasibility Barriers", CIRCUITS, SYSTEMS, ELECTRONICS, CONTROL & SIGNAL PROCESSING (CSECS '14) Conference , Lisbon, 2014.
226. "Penning ionization of simple molecules and their possible role in planetary atmospheres", DEVELOPMENT, ENERGY, ENVIRONMENT, ECONOMICS (DEEE '14) Conference, Florence , 2014.
227. "Performance of indexes used for model validation", CIRCUITS, SYSTEMS, ELECTRONICS, CONTROL & SIGNAL PROCESSING (CSECS '14) ,Conference, Lisbon, 2014
228. "Distance Laboratory to Explore Electrical Drive", ENERGY & ENVIRONMENT (EE '14) Conference, Geneva , 2014.
229. "Comparison of High Resolution Spectral Methods for Spectrum Estimation of Synthetic Power Signals", WSEAS Transactions on Signal Processing Journal, 2014.

230. "Gap acceptance analysis in an urban intersection through a video acquired by an UAV", Florence - CIVIL ENGINEERING (ECCIE '14) Conference, Florence , 2014.
231. "Thermal remote sensing of urban climate change in a post earthquake depopulation: the case study of L'Aquila (Italy)", DEVELOPMENT, ENERGY, ENVIRONMENT, ECONOMICS (DEEE '14) Conference, Florence , 2014.
232. "A Multi-Objective Sequencing Problem in a Mixed-Model Assembly Line using Metaheuristic Algorithms in JIT manufacturing", ROBOTICS, CONTROL and MANUFACTURING TECHNOLOGY (ROCOM '15) Conference, Kuala Lumpur ,2014.
233. "Equilibrium-based simulation of lignocellulosic biomass pyrolysis via Aspen Plus®", APPLIED MATHEMATICS, SIMULATION, MODELLING (ASM '14) Conference, Florence ,2014.
234. "Energy saving through Building Envelope Innovation: Smart Skin Design", URBAN SUSTAINABILITY, CULTURAL SUSTAINABILITY, GREEN DEVELOPMENT, GREEN STRUCTURES and CLEAN CARS (USCUDAR '14) Conference, Florence , 2014.
235. "Biomechanics Parameters in the Vehicle-Cyclist Crash with Accident Analysis in Palermo", MECHANICAL ENGINEERING (ECME' 14) Conference, Florence , 2014.
236. "A Comparison of the Performance of a Composite Pattern and a Mathematic Expression Parser and Interpreter", APPLIED MATHEMATICS, SIMULATION, MODELLING (ASM '14) Conference , Florence , 2014.
237. "Blast loading of inelastic conical shells with stiffeners", MECHANICAL ENGINEERING (ECME' 14) Conference, Florence, 2014.
238. "A Comparison of a dynamic compilation and mathematic parser libraries in .NET for expression evaluation", APPLIED MATHEMATICS, SIMULATION, MODELLING (ASM '14) Conference, Florence , 2014.
239. "Stochastic models for ordinal panel data with individual and time-varying latent effects", APPLIED MATHEMATICS, SIMULATION, MODELLING (ASM '14) Conference, Florence , 2014.
240. "Research on Properties of Fluid Pressure Drop for Electric Vehicle IGPT Pin fin heat sink", International Journal of Engineering (IJE), 2014
- 241.

11. Co-Curriculum

Society

- i. Vice President for the Parents and Teacher Association (PIBG) 2000~2001
- ii. President for the Parents and Teacher Association (PIBG) 2001~2002
- iii. President for the Parents and Teacher Association (PIBG) 2002~2003
- iv. President for the Parents and Teacher Association (PIBG) 2003~2004
- v. President for the Welfare Board of Religious School 2002~2003
- vi. President for the Welfare Board of Religious School 2003~2004
- vii. Committee member of Lembaga Akreditasi Negara (LAN) 1999~2007
- viii. Committee member of Malaysia Qualification Agency (MQA) 2007~present

- ix. Major Kehormat Rejimen Askar Wataniah 505 Batalion Pertama, 2009~present

Games

- i. Badminton representing the university faculty sports 1993.
- ii. Volleyball representing the university faculty sports 1993.
- iii. Badminton representing the university faculty sports 1994.
- iv. Volleyball representing the university faculty sports 1994.
- v. Badminton representing the university faculty sports 1998.
- vi. Volleyball representing the university faculty sports 1998.
- vii. Badminton representing the university faculty sports 1999.
- viii. Volleyball representing the university faculty sports 1999.
- ix. Badminton representing the university faculty sports 2000.
- x. Volleyball representing the university faculty sports 2000.
- xi. Badminton representing the university faculty sports 2001.
- xii. Volleyball representing the university faculty sports 2001.
- xiii. Badminton representing the university faculty sports 2002.
- xiv. Volleyball representing the university faculty sports 2002.
- xv. Volleyball representing the university faculty sports 2003.
- xvi. Chief de-mission for the KUKTEM sports team to the Inter IPTA/IPTS sports 2005.
- xvii. Chief de-mission for the KUKTEM sports team to the Inter IPTA/IPTS sports 2006.
- xviii. Chief de-mission for the UMP sports team to the Inter IPTA/IPTS sports 2007.

12. Significant Achievements

Honors and Awards

1. The Eighth International Pacific Conference (IPC - 8) Papers Award for Efforts in Contribution. Yokohama, JAPAN, 1995.
2. UTM Research Award 1995. UTM, MALAYSIA
3. The Vice Chancellor Publication Award, UTM, Appreciation certificate, 2001
4. The Vice Chancellor Publication Award, UTM, Appreciation certificate, 2002
5. Excellent Service Award, UTM, 2002
6. Innovation Award, FKM, UTM, 2002
7. Bronze Medal for the Invention/Innovation of “ New Pump Impeller Design for Engine Cooling System” at EXPO S&T 2002, Kuala Lumpur, Ministry of Science Technology and Environment of Malaysia.
8. The Vice Chancellor Publication Award, UTM, Appreciation certificate, 2003
9. Silver Medal for “ New Pump Impeller Designs for Engine Cooling System”, at International Invention Innovation Industrial Design and Technology Exhibition, I-TEX 2003, 14~16, May 2003.
10. Bronze Medal for “ New Pump Impeller Designs For Engine Cooling System”, at Industrial Art and Technology Exhibition, INATEX 2002/2003, UTM, 2003
11. Best Research Project Award 2003 for “New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability” project, KUKTEM, 2004
12. Brown Medal “New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability “ at 16th International Invention Innovation Industrial Design & Technology Exhibition (ITEX) 2005, 2005

13. Silver Medal "New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability " at IPTA R&D EXPO2005, 2005
14. Best Research Project Award 2004 for "New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability" project, KUKTEM, 2005
15. Bronze Medal "New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability" Salon International Des Inventions, Geneva 2006.
16. Excellent Service Award, UMP, 2006
17. Bronze Medal "ZUMP Chair", MTE 2007, KLCC, Kuala Lumpur, 2007
18. Bronze Medal "Design and development for interchangeable Shock Absorber.", ITEX 2007 KLCC, Kuala Lumpur, 2007
19. Bronze Medal " Development of In Campus Vehicle (IV) For UMP Application",Anugerah Projek Penyelidikan Terbaik UMP, 2007
20. Silver Medal " Hybrid Electric Vehicle Development Programme",Anugerah Projek Penyelidikan Terbaik UMP, 2007
21. Brozen Medal " Intelligent Height and Reach Adjustable Electronic Chair For Dwarfism Application (ZUMP) , ITEX 2007, Kuala Lumpur, 2007.
22. Silver Medal "Hybrid Electric Vehicle Development Programme", ITEX 2008 KLCC, Kuala Lumpur, 2008
23. Hadiah Sanjungan," Kategori Penerbitan (Jurnal)", Malam Anugerah Cendekia Bitara 2008, UMP, 2008
24. Hadiah Sanjungan," Kategori Patent ", Malam Anugerah Cendekia Bitara 2010, UMP, 2010
25. Excellent Service Award, UMP, 2012

Major Commercial Achievement

- i. Commercialisation of the pyrolyser (Portable Combustor) by UTM.
- ii. Commercialisation of the Indigenous Incinerator System by UTM .

Number of Patents

Patent pending for the following projects:

1. Biomass Pyrolyser, Vote No. 68003.
2. 15 tonne capacity Modular Incinerator System, Vote No. 72224.
3. New Mixture Formation Unit for Liquid and Gas Fuel in Internal Combustion Engine, Vote No. 72351.
4. Design and Development of New Water-Cooled Two Stroke Engine, Vote No. 74516
5. New Optimization Technique "Response Ant Colony Algorithm (RACA)", (Status: Application), 2009.
6. Method and System for Enhancing Moulding Machining Performance. PI20093258, 2009
7. Car Jack Assembly and Method, PI20093259, 2009
8. Method and System for Determining End of Life Strategy for Products, PI20095013, 2009
9. Heat Transfer Nanofluids, PI 20110022027, 2011

13. Other Achievements

Keynote Speaker/Professorial Lecture

1. Keynote Speaker on "Automobile Industry : Now and Future", Society of Manufacturing Engineers, Student Chapter, UTM, 1999

2. Keynote Speaker on “Perkembangan Automotif di Alaf Baru”, Fakulti Pendidikan, UTM, 2002
3. Keynote Speaker on “ Managing the Challenge of the coming AFTA and Beyond (New Technologies & Practices for Automotive Industry)”, Virtual Tech Consulating Sdn. Bhd & SIRIM Bhd, 2003.
4. Keynote Speaker on “ Design and Development of Hybrid Vehicle”, Proton, Shah Alam, 2004.
5. Keynote Speaker on “Linear 2 Stroke Engine for Electric Power Generation”, Proton , Shah Alam 2004
6. Keynote Speaker on “A Briefing on Malaysian Automotive Industry and R&D Scene”, Hanyang University, Seoul, Korea, 2005.
7. Keynote Speaker on “ Halatuju Latihan Kemahiran Automotif Negara”, CIAST and Jabatan Tenaga Malaysia, 2006.
8. Keynote Speaker on “Measurement of Alternative Fuel Combustion”, Chulalongkorn University, Thailand, 2006.
9. Keynote Speaker on “A Briefing on Malaysian Automotive Industry”, Institut Teknologi Sepuluh Nopember (ITS), Surabaya, Indonesia, 2007.
10. Keynote Speaker on “A Briefing on Malaysian Automotive Industry”, Muhammadiyah University of Surakarta, Central Java, Indonesia, 2008.
11. Keynote Speaker on “The Role of Alternative Energy Exploting to Reduce Global Warming Effect”, International Seminary of Technology Perspecty, State Polytechnic of Semarang, Semarang, Indonesia, 2010.
12. Keynote Speaker on “Alternative for Tomorrow: Core Development In The Near Future”, 2nd International Conference on Environmental Management (ICEM 2010), Hyderabad, India, 2010.
13. Professorial Lecture “Alternative for Tomorrow: Core Development In The Near Future”, Universiti Malaysia Pahang, Malaysia, 2010.
14. Keynote Speaker on “Digging all About Teaching Field in Industrial Society World”, Universitas Negeri Malang (UM), Malang, Indonesia, 2011.
15. Keynote Speaker on “Alternative Energy for Small Island”, Institut Teknologi Sepuluh Nopember (ITS), Surabaya, Indonesia, 2011.

Exhibition

1. “New Pump Impeller Design for Engine Cooling System” at EXPO S&T 2002, Kuala Lumpur, Ministry of Science Technology and Environment of Malaysia.
2. “New Pump Impeller Designs for Engine Cooling System”, at International Invention Innovation Industrial Design and Technology Exhibition, I-TEX 2003, Johor, Malaysia, 14~16, May 2003
3. “New Pump Impeller Designs For Engine Cooling System”, at Industrial Art and Technology Exhibition, INATEX 2002/2003, UTM, Malaysia, 2003
4. “Design and Development of an Air Cooled Two Stroke Engine” , Industrial Art and Technology Exhibition , INATEX 2002/2003, UTM, Malaysia, 2003.
5. “Design and Development of Optimum Compressed Natural Gas (CNG) Engine Mixer”, Industrial Art and Technology Exhibition , INATEX 2002/2003, UTM, Malaysia 2003.
6. “Design and Development of an Water Cooled Two Stroke Engine”, Virtual Tech Consulting Sdn. Bhd & SIRIM Bhd, Exhibition 2003, SIRIM, Shah Alam, Malaysia, 2003.
7. “New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability “ at The Anugerah Projek Penyelidikan Terbaik 2004 Exhibition, KUKTEM, Pahang, Malaysia, 2004.
8. “New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability “ at The Anugerah Projek Penyelidikan Terbaik 2005 Exhibition, KUKTEM, Pahang, Malaysia, 2005
9. “New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability “, Pameran Sains dan Teknologi Peringkat Negeri Pahang, 2005, Kuantan, Pahang, Malaysia, 2005.

10. "New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability", The 16th International Invention Innovation Industrial Design & Technology Exhibition (ITEX) 2005, PWTC, Kuala Lumpur, Malaysia, 2005.
11. "New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability " , The IPTA R&D EXPO 2005, Kuala Lumpur, Malaysia, 2005.
12. "New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability " , The Automotive Fiesta Carnival Exhibition, Sepang, Kuala Lumpur, Malaysia, 2005.
13. "New Design of a 2-Stroke Modular Engine for Multipurpose Usage with Lean Burn Capability " , The Salon International Des Inventions Exhibitions, Geneva 2006.
14. "Intelligent Height and Reach Adjustable Electronic Chair For Downstream Application (ZUMP)", 18th International Invention, Innovation & Technology Exhibition (ITEX 2007) Kuala Lumpur, Malaysia, 2007.
15. "LITTLE MANTIS : Short Mobility Electric Scooter Development"", Malaysia Technology Expo 2009, Kuala Lumpur 2009.