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**KEMENTERIAN  
PENDIDIKAN  
MALAYSIA**

### Academic Qualifications

1. Master of Engineering (Mechanical), Universiti Malaysia Pahang, 2013
2. Bachelor of Engineering (Mechanical), Universiti Tun Hussein Onn Malaysia, 2008.
3. Diploma of Mechanical Engineering with Education, Universiti Teknologi Malaysia, 2002

### Brief Profile

Currently, **Mohd Hafizil Bin Mat Yasin** worked as a senior lecturer at Department of Mechanical Engineering in Politeknik Kota Kinabalu, Sabah. His experiences in teaching at polytechnic are almost 12 years when he started his first teaching at Politeknik Sultan Mizan Zainal Abidin in Dungun, Terengganu in year 2002. Then, in year 2005, he pursued his first degree at Universiti Tun Hussein Onn Malaysia and finished with Second Class Upper in 2008. Then, he has been transferred back to Politeknik Sultan Mizan Zainal Abidin Dungun in 2008. While he doing his teaching at current polytechnic, he pursued his master in research mode by part time in 2010 and graduated his master of engineering from Universiti Malaysia Pahang in 2013. With long services and countless achievements, he has been promoted to DH 44 in 2013 and been transferred to his current institution, Politeknik Kota Kinabalu Sabah.

### Working Experiences / Appointment

1. November 2013 ~ Present Lecturer (Manufacturing Unit) JKM, Politeknik Kota Kinabalu Sabah
2. June 2008 ~ November 2013 Lecturer (Manufacturing Unit) JKM, Politeknik Sultan Mizan Zainal Abidin.
3. Feb 2002 ~ Jun 2005 Lecturer (Manufacturing Unit) JKM, Politeknik Sultan Mizan Zainal Abidin.

### Teaching Subjects

Engineering Design, Manufacturing, Thermodynamics, Heat Transfer, Machine Elements, Automotive, Material Sciences, Statics and Dynamics, Fluid Mechanics

### Research Area / Research Interest

Biofuel, Internal Combustion Engine, Renewable Energy, Thermal and Heat Transfer, Computational Fluid Dynamics, Bioenergy, Biomass, Biogas, Manufacturing,

### Professional Qualification / Membership / Affiliation / Experience

#### A) Membership of Professional Body & Professional Experience

- i. Member, Malaysian Tribology Society (MYTRIBOS No. 00214)
- ii. Graduate Engineer, Board of Engineers Malaysia (BEM) (BEM No. 68271A)
- iii. Student Member, Society of Automotive Engineer (SAE No. 6130779580)
- iv. Student Member, American Society of Testing & Material (ASTM No. 1333183)
- v. Member, International Association of Engineers (IAENG No. 108449)

## Competences & Skills

Microsoft Office, Microsoft Visio, Statistical Packages for Social Science (SPSS), Siemens PLM UG NX8, CATIA V5R20, Autodesk AUTOCAD 2014, Solidwork 2012, Origin 8.0, Matlab R2010

## Diploma Final Year Project Supervision

### 1. June 2013/2014

- a. Khairul Fazli Bin Kamzon, Zainal Akmal Bin Abdul Hamid, Khairul Afifi Bin Bahrulazmi, ***Design and Fabrication of a Small Scale ESP for PM Reduction in Diesel Engine***
- b. Norfaeezi Bin Nordin, Mohammad Nur Ilmi Bin Mohammed Zailani, ***Design and Development of a Load Cell operating with a Diesel Engine***

### 2. December 2012/2013

- a. Mohamad Elyas Bin Abu Bakar, Mohamad Nor Amin Bin Ismail, Mohd Idris Rafizudin Bin Sameli, ***Design and Development of Biodiesel Blend Tank System for Engine Test Rig***
- b. Mohd Azam Bin Mohamed, Muhd Zulhilmi Bin Muhd Khairul Anuar, Syed Munir Wafa Bin Syed Mohd Azmi, ***Kajian Eksperimental terhadap Resirkulasi Gas Ekzos dan Suntikan LPG menggunakan Enjin Diesel Satu Silinder***

### 3. June 2012/2013

- a. Muhammad Taufiq Bin Ahmad, Muhammad Faiz Bin Paing, ***Rekabentuk dan Fabrikasi Sistem Pengukuran Aliran Udara bagi Enjin Diesel Satu Silinder***
- b. Shazili Bin Aluwi, Mohd Asraf Haiqal Bin Kamarzaman, Nor Hadi Bin Md Hasbulah, Anuarul Hakim Bin Alias, Muhammad Arif Bin Yusup, Muhizzan Bin Mohamad, ***Rekabentuk dan Pembangunan Dinamometer Hidraulik bagi Enjin Diesel Satu Silinder***

### 4. December 2011/2013

- a. Mohd Faizal Bin Kamaruzaman, Mohd Syahmi Bin Shahidan, Nik Mohd Hairi Bin Nik Dir, Mohd Hosni Hakim Bin Aluwi Shakir, Asmawi Bin Abdullah, Ahmad Firdaus Bin Mishan, 2011, ***Rekabentuk dan Penghasilan Platform bagi Enjin Diesel Satu Silinder***

### 5. Januari 2010/2011

- a. Mohd Haniff Bin Embong, Zubaidah Binti Abdul Hamid, Wan Rozieyana Binti Wan Mohd Zaki, Fakhrudin Bin Yunus, Mohd Alias Bin A. Rahman, 2010, ***Vertical Wind Turbine***

### 6. Julai 2009/2010

- a. Aliff Arafat Bin Abu Bakar, Mohd Nur Zahid Bin Razak, Mohd Syahidan Bin Mohd Mizi, 2009, ***Spray Painting Cartesian System***
- b. Mohd Azmi Bin Ismail, Syazwan Bin Zainol, Vijendaran A/L Kunaseharan, 2009, ***Pneumatic Gear Oil Filler***

## Journal Reviewer Appointment

### 1. Energy Conversion and Management (ECM) (2014)

Paper Title: Combustion and Emission Characteristics of Multiple Premixed Compression Ignition (MPCI) fuelled with naphtha and gasoline in wide load range

Impact factor: 2.775 (JCR 2013)

ISSN: 0196-8904

Publisher: Elsevier

### 2. Advances in Automotive Engineering (2014)

Paper Title: Optimizations of Vane Height of Guide Vane Swirl and Tumble Device to Improve In-Cylinder Airflow Characteristics of a Diesel Engine running with Vegetable Oil

ISSN: 2167-7670

Publisher: OMICS Publishing Group

### 3. International Energy Journal (IEJ) (2013)

Paper Title: Combustion and Emission Characteristics of CI Engine fueled with the Rapeseed Biodiesel, Diesel and Ethanol Blend

ISSN: 1513-718X

Publisher: Regional Energy Resources Information Center (RERIC) Asian Institute of Technology

### 4. Indian Journal of Engineering and Material Sciences (IJEMS) (2013)

Paper Title: Comparative Vibration Analysis in DI Diesel Engine Using Diesel and Biodiesel

Impact Factor of IJEMS - 0.362 (JCR 2012)

ISSN: 0975-1017 (Online); 0971-4588 (Print)

Publisher: National Institute of Science Communication and Information Resources (NISCAIR)

### 5. Global Journal of Technology and Optimization (GJTO) (2013)

Paper Title: Combustion of Diesel Fuels with Additives

ISSN: 2229-8711

Publisher: Power Control and Optimization

## Research Grant Involvement

1. Type of Grant: Fundamental Research Grant Scheme (FRGS) 2014 (Approval to date)  
Funder: Ministry of Higher Education  
Project Title: Fundamental Study of Exhaust Gas Recirculation (EGR) with Bi-fuel operating with a Diesel Engine  
Research Code: -  
Date: June 2014 – May 2016  
Project Leader: Mohd Hafizil Bin Mat Yasin  
Role: Project Leader
2. Type of Grant: Fundamental Research Grant Scheme (FRGS) 2014 (Approval to date)  
Funder: Ministry of Higher Education  
Project Title: Fundamental investigation on the repeated collapsible resistance and dissipated energy properties of thin-walled hybrid hollow structures with various size and cross sectional shapes for automotive applications  
Research Code:-  
Date: July 2014 – June 2016  
Project Leader: Perowansa Bin Paruka  
Role: Research Project Member
3. Type of Grant: UMP Short Term Research Grant 2012  
Funder: Universiti Malaysia Pahang  
Project Title: Electrostatic Charging of Diesel Particulate Matter from Automobile Exhaust Gas  
Research Code: RDU110112  
Date: 08/07/2011-08/07/2013  
Project Leader: Assoc. Prof. Dr. Rizalman Mamat  
Role: Research Project Member

## List of Publications

### A) International and National Journal & Proceedings

1. **Mohd Hafizil Mat Yasin**, Rizalman Mamat, Abdul Mutalib Leman, Amir Khalid, Noreffendy Tamaldin, 2014, Experimental Investigation on Biodiesel-Ethanol-Diesel Blends Operating with a Diesel Engine, Applied Mechanics and Materials  
Vols. 465 – 466 (2014) Pages 221-225  
(ISSN: 1660-9336)  
DOI:10.4028/www.scientific.net/AMM.465-466.221
2. Ahmad Fitri Yusop, Rizalman Mamat, **Mohd.Hafizil Mat Yasin**, Abdul Adam Abdullah, Amir Aziz, 2014, Comparative Study of Particulate Matter (PM) Emissions in Diesel Engine Using Diesel-Methanol Blends, Applied Mechanics and Materials  
Vols. 465-466 (2014) pp 1255-1261  
(ISSN: 1660-9336)  
DOI:10.4028/www.scientific.net/AMM.465-466.1255

3. Ahmad Fitri Yusop, Rizalman Mamat, **Mohd Hafizil Mat Yasin**, and Syafiq Suhaimi, 2014, Effects of the Inlet Velocity Profiles on the Prediction of Velocity Distribution inside an Electrostatic Precipitator (ESP), *IJCEE* 2014 Vol.6 (1): 64-66  
(ISSN: 1793-8163)  
DOI: 10.7763/IJCEE.2014.V6.795
4. **Mohd Hafizil Mat Yasin**, Talal Yusaf, Rizalman Mamat, K.V.Sharma, Ahmad Fitri Yusop, 2013 Characterization of a Diesel Engine operating with a Small Proportion of Methanol as a Fuel Additive in Biodiesel Blend  
*Applied Energy* Volume 114, February 2014, Pages 865 - 873  
(ISSN: 0306-2619)  
<http://dx.doi.org/10.1016/j.apenergy.2013.06.012>
5. **Mohd Hafizil Mat Yasin**, Rizalman Mamat, Abdul Adam Abdullah, Nik Rosli Abdullah, M.L. Wyszynski, 2013, Cycle-to-Cycle Variations of a Diesel Engine Operating with Palm Biodiesel, *Journal of KONES Powertrain and Transport*, Vol. 20, No. 3 2013  
(ISSN: 1231-4005)
6. Akasyah Mohd Kathri, **Mohd Hafizil Mat Yasin**, 2013, Experimental Investigation of Exhaust Gas Recirculation (EGR) on a Diesel Engine operating with Diesel, *Proceeding of Conference in Education-Technical Vocational Education & Training (CiE-TVET 2013) UTHM*  
(ISBN: 978-967-0468-48-8)
7. **Mohd Hafizil Mat Yasin**, Rizalman Mamat, K V Sharma, 2013, Characterization of Biodiesel as a Fuel in Compression Ignition Engine with Additives, Master Thesis, Universiti Malaysia Pahang
8. Ahmad Fitri Yusop, Rizalman Mamat, **Mohd Hafizil Mat Yasin**, 2013, PM Emission of Diesel Engines using Ester-ethanol-diesel Blended Fuel  
*Procedia Engineering* 53 (2013) 530 – 535  
(ISSN: S1877-7058)  
DOI: 10.1016/j.proeng.2013.02.068
9. **Mohd Hafizil Mat Yasin**, Rizalman Mamat, K.V.Sharma, Ahmad Fitri Yusop, 2013, Fuel Physical Characteristics of Biodiesel Blend Fuels with Alcohol as Additives  
*Procedia Engineering* 53 (2013) 701 – 706  
(ISSN: S1877-7058)  
DOI:<http://dx.doi.org/10.1016/j.proeng.2013.02.091>
10. **Mohd Hafizil Mat Yasin**, Rizalman Mamat, K.V.Sharma, Ahmad Fitri Yusop, 2012, Influence of Palm Methyl Ester (PME) as an Alternative Fuel In The Multicylinder Diesel Engine,  
*Journal of Mechanical Engineering and Sciences*  
Volume 3, No. 1, December 2012, Pages 331 to 339.  
ISSN (Print): 2289-4659  
(e-ISSN: 2231-8380)
11. Ahmad Fitri Yusop, Rizalman Mamat, Agung Sudrajad and **Mohd Hafizil Mat Yasin**, 2013, Characteristic of particulate matter (PM) of diesel engine using Palm Oil Methyl Ester (PME) fuel,  
*Journal of Biobased Material & Bioenergy*  
Volume 7, Number 4, August 2013, pp. 464-467(4)  
(ISSN: 1556-6560)  
DOI:<http://dx.doi.org/10.1166/jbmb.2013.1347>
12. **Mohd Hafizil Mat Yasin**, Rizalman Mamat, K.V.Sharma, Ahmad Fitri Yusop  
Fuel Physical Characteristics of Biodiesel Blend Fuels with Alcohol as Additives  
Malaysian Technical Universities International Conference on Engineering and Technology (*MUCET* 2012), 20<sup>th</sup> -21<sup>st</sup> November 2012, Hotel Seri Malaysia, Kangar Perlis organized by UNIMAP  
(ISBN: 978-967-5415-48-7)
13. **Mohd Hafizil Mat Yasin**, Bukhari Manshoor, 2007, A Study of Boundary Layer and Air Flow Quality in UTHM's Wind Tunnel, Undergraduate Thesis, Universiti Tun Hussein Onn Malaysia (UTHM)

## B) International and National Conference Papers

1. **Mohd Hafizil Mat Yasin**, Rizalman Mamat, Abdul Mutalib Leman, Amir Khalid, Noreffendy Tamaldin, 2013, Experimental Investigation on Biodiesel-Ethanol-Diesel Blends Operating with a Diesel Engine, 4<sup>th</sup> International Conference of Mechanical Engineering 2013 (ICME2013), 17<sup>th</sup> – 18<sup>th</sup> December 2013, Equatorial Hotel Bangi Malaysia
2. Ahmad Fitri Yusop, Rizalman Mamat, **Mohd.Hafizil Mat Yasin**, Abdul Adam Abdullah, Amir Aziz, 2013, Comparative Study of Particulate Matter (PM) Emissions in Diesel Engine Using Diesel-Methanol Blends, 4<sup>th</sup> International Conference of Mechanical Engineering 2013 (ICME2013), 17<sup>th</sup> – 18<sup>th</sup> December 2013, Equatorial Hotel Bangi Malaysia
3. **Mohd Hafizil Mat Yasin**, Rizalman Mamat, Abdul Adam Abdullah, Nik Rosli Abdullah, M.L. Wyszynski, 2013, Cycle-to-Cycle Variations of a Diesel Engine Operating with Palm Biodiesel, 39th International Scientific Congress on Powertrain and Transport Means European (KONES2013), 8<sup>th</sup> – 11<sup>th</sup> September 2013, Jurata Poland
4. Akasyah Mohd Kathri, **Mohd Hafizil Mat Yasin**, 2013, Experimental Investigation of Exhaust Gas Recirculation (EGR) on a Diesel Engine operating with Diesel, Conference in Education- Technical Vocational Education & Training (CiE-TVET 2013), 2<sup>nd</sup>-3<sup>rd</sup> September 2013, Permai Hotel Kuala Terengganu organized by UTHM and Polytechnic Management Division
5. **Mohd Hafizil Mat Yasin**, Ahmad Fitri Yusop, Rizalman Mamat, and Amir Aziz, 2012, Cyclic Variations of Combustion Characteristics in Diesel Engine operating with B20 Blends with Alcohol Additives International Conference of Mechanical Engineering Research (ICMER 2013), 1<sup>st</sup> -3<sup>th</sup> July 2013, Bukit Gambang Resort Kuantan Pahang organized by UMP
6. Ahmad Fitri Yusop, Rizalman Mamat, **Mohd Hafizil Mat Yasin** and Obed Majeed Ali, 2012, Effects of Particulate Matter (PM) Emissions of Diesel Engine using Diesel-Methanol Blends, International Conference of Mechanical Engineering Research (ICMER 2013), 1<sup>st</sup> -3<sup>th</sup> July 2013, Bukit Gambang Resort Kuantan Pahang organized by UMP.
7. **Mohd Hafizil Mat Yasin**, Mohd Nasir Omar  
Performance and Smoke Density of Palm-Diesel operating with a Single Cylinder Diesel Engine  
PSMZA Research Seminar, 16<sup>th</sup> December 2012 CISEC, PSMZA
8. **Mohd Hafizil Mat Yasin**  
Ciri-ciri Bahan Api Biodiesel (Metil Ester) Minyak Kelapa Sawit dan Peratusan Berbeza campuran Biodiesel bersama Diesel Konvensional, National Level (East Zone) Polytechnic Research Seminar, 17 -18 July 2012, Hotel Permai organized by PKKT.
9. **Mohd Hafizil Mat Yasin**, Ahmad Fitri Yusop, Rizalman Mamat, Abdul Adam Abdullah, and Amir Aziz, 2012, Fuel Physical Characteristics of Biodiesel Blend Fuels with Alcohol as Additives Malaysian Technical Universities International Conference on Engineering and Technology (MUCET 2012), 20<sup>th</sup> -21<sup>st</sup> November 2012, Hotel Seri Malaysia, Kangar Perlis organized by UNIMAP
10. Ahmad Fitri Yusop, Rizalman Mamat, **Mohd Hafizil Mat Yasin** and Obed Majeed Ali, 2012, The influence of particulate matter (PM) of diesel engine using Palm Oil Methyl Ester (PME), International Conference on Biomass for Biofuels and Value Added Product (ICBBVAP 2012), Kuala Lumpur, Malaysia.
11. Ahmad Fitri Yusop, Rizalman Mamat, Abdul Adam Abdullah, **Mohd Hafizil Mat Yasin** and Obed Majeed Ali, 2012, Characteristic of particulate matter (PM) and soluble organic fraction (SOF) of diesel engine using Palm Oil Methyl Ester (PME) fuel, National Conference for Postgraduate Research (NCON-PGR 2012), Kuantan, Pahang.
12. Ahmad Fitri Yusop, Rizalman Mamat, Abdul Adam Abdullah, Amir Aziz and **Mohd Hafizil Mat Yasin**, 2012, PM emission of diesel engines using ester-ethanol-diesel blended fuel, Malaysian Technical Universities International Conference on Engineering and Technology (MUCET 2012), 20<sup>th</sup> -21<sup>st</sup> November 2012, Hotel Seri Malaysia, Kangar Perlis organized by UNIMAP
13. **Mohd Hafizil Mat Yasin**  
Effects of Palm-diesel on Smoke Density and Soot Emission operating with a Single Cylinder Diesel Engine, PSMZA Research Seminar 2012, May, 24-25 2012, organized by Research, Innovation and Entrepreneurship Unit, PSMZA

14. **Mohd Hafizil Mat Yasin**, Rizalman Mamat, K.V.Sharma, Abdul Adam Abdullah, Ahmad Fitri Yusop, Performance and Emission Characteristics of a IDI Diesel Engine operating with Palm Methyl Ester (PME) 4<sup>th</sup> Engineering Conference 2011 (EnCON 2011), 29<sup>th</sup> November – 1<sup>st</sup> December 2011, Riverside Majestic Hotel Kuching, Sarawak organized by Faculty of Engineering, UNIMAS
15. **Mohd Hafizil Mat Yasin**, Rizalman Mamat, K.V.Sharma, Abdul Adam Abdullah, Ahmad Fitri Yusop, Effects of Exhaust Gas Recirculation (EGR) on a DI Diesel Engine operating with Palm Methyl Ester (PME), Malaysian Universities International Conference On Engineering And Technology 2011 (Muicet 2011), Malaysia, 13-15 Nov 2011, Batu Pahat, Johor organized by UTHM
16. **Mohd Hafizil Mat Yasin**, Idura Arniza Mohd Maidin  
Effect of EGR on Direct Injection Diesel Engine operating with PME 5, PSMZA Research Seminar 2011, June, 29-30 2011, organized by Research and Innovation Unit, PSMZA
17. **Mohd Hafizil Mat Yasin**, Masrul Nizam Mahmood, Idura Arniza Mohd Maidin  
Performance and Exhaust Emission of Diesel Engine Fuelled by PME 5, PSMZA Research Seminar 2011, June, 29-30 2011, organized by Research and Innovation Unit, PSMZA
18. **Mohd Hafizil Mat Yasin**, Rizalman Mamat, K.V.Sharma  
The Development of UMP Biodiesel Engine Testing Facility  
International Conference on Mechanical and Manufacturing Engineering 2011 (ICME2011), 6 -8 June 2011, PICC, Putrajaya organized by UTHM
19. **Mohd Hafizil Mat Yasin**, Rizalman Mamat, K.V.Sharma, 2010, Characterization of Biodiesel as a Fuel in Compression Ignition Engine, 1<sup>st</sup> National Conference in Mechanical Engineering for Research & Postgraduate Studies (NCMER 2010), 26<sup>th</sup> May – 1<sup>st</sup> June 2010, Universiti Malaysia Pahang

### Award / Academic Achievement

1. Cendekia Bitara Award (Journal Publication) Universiti Malaysia Pahang 2014
2. Cendekia Bitara Award (Journal Publication) Universiti Malaysia Pahang 2012
3. Excellent Service Award (APC) Ministry of Higher Education (MOHE) 2010
4. Dean List Award FKM UTHM 2008
5. Dean List Award FKM UTHM 2006
6. Dean List Award FKM ITTHO (UTM) 2000
7. Malaysia Ministry of Education Diploma Scholarship 1998