

Amin Mahmoudzadeh Andwari

Director of Internal Combustion Engine Laboratory
Vehicle, Fuel and Environment Research Institute (VFERI), 4th floor of Institute of Petroleum Eng. Bld.
College of Engineering (Campus 2), University of Tehran, North Karegar Ave., Tehran, Iran
Mobile: +98 901 531 0892, Tel: +98 880 20 741; Fax: +98 880 20 741
E-mail: amin.mahmoudzadeh@ut.ac.ir

EDUCATION

- **Ph.D.** Mechanical Engineering, Universiti Teknologi Malaysia (UTM), Malaysia, 2014
Thesis: *"Investigation on The Combustion Characteristics of A Controlled Auto-Ignition (CAI) Engine In Conjunction with Internal EGR, External EGR and Fuel Octane Number Variations"*
Experimental & 1-D Simulation study (GT-Power & Fluent-ANSYS)
- **M.Sc.** Mechanical Engineering (Energy Conversion), IAU of Science & Research Tehran Branch, Iran, 2009
Thesis: *"Numerical Investigation on Compressible Flow Across A Micro Nozzle Device"*
2-D Simulation study (Fluent & Gambit)
- **B.Sc.** Mechanical Engineering (Thermo-fluids), IAU of South-Tehran Branch, Iran, 2006
Thesis: *"Compressed Natural Gas (CNG) As an Alternative Fuel For Spark Ignition (SI) Engines; Potentials and Advantages"*

EXPERIENCE

- **Director of Internal Combustion Engine Laboratory:** 2017
Vehicle, Fuel and Environment Research Institute (VFERI), College of Engineering, University of Tehran.
- **Postdoctoral Research Associate:** 2017
Vehicle, Fuel and Environment Research Institute (VFERI), College of Engineering, University of Tehran.
- **Postdoctoral Research Associate:** 2016
Automotive Development Centre (ADC), Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM).
 - Experimental investigation on the Fuel spray formation and visualization of a Gasoline Direct Injector (GDI); Optical study using pulsed laser shadowgraph.
- **Postdoctoral Research Associate:** 2015
Centre for Advanced Powertrain and Fuels Research (CAPF), Department of Mechanical Engineering, Brunel University London, UK (Experimental at Imperial College London).
 - Turbocharger Aero-thermal Design and Heat Transfer Optimization under Realistic Engine Conditions for Low Carbon Vehicles
 - Design of Experiments (DoE), turbocharger instrumentation considering heat transfer and pulsating flow, calibration and data analysis in gas stand/on-engine (Imperial College London).
 - Turbocharger experimental test in cold flow (Gas stand) and On-Engine , steady and unsteady state
 - Numerical modeling of turbine and turbocharger performance map on the engine.

Amin Mahmoudzadeh Andwari

Director of Internal Combustion Engine Laboratory
Vehicle, Fuel and Environment Research Institute (VFERI), 4th floor of Institute of Petroleum Eng. Bld.
College of Engineering (Campus 2), University of Tehran, North Karegar Ave., Tehran, Iran
Mobile: +98 901 531 0892, Tel: +98 880 20 741; Fax: +98 880 20 741
E-mail: amin.mahmoudzadeh@ut.ac.ir

2014

- **Research Associate:**

Automotive Development Centre (ADC), Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM).

Research Topic:

“Design and development of a Gasoline Direct Injector: A numerical investigation”

- **Teaching Assistant:**

2013-2016

- Racing Vehicle Design and Performance, Internal Combustion Engine (ME2604/8, ME3604, ME5541), Lecture and Modeling laboratory (Matlab), College of Engineering, Design and Physical Sciences, Brunel University London.
- Internal Combustion Engines (SKMM 4413), Faculty of Mechanical Engineering, UTM.
- Power Plant Engineering (SKMM 4423), Faculty of Mechanical Engineering, UTM.
- Applied Thermodynamic (SKMM 2423), Faculty of Mechanical Engineering, UTM.
- Combustion Laboratory, Faculty of Mechanical Engineering, UTM.
- Thermodynamic Laboratory, Faculty of Mechanical Engineering, UTM.

- **Research Assistant:**

2011-2014

As a Ph.D. Student in Automotive Development Centre (ADC), Faculty of Mechanical Engineering, Universiti Teknologi Malaysia.

- **Senior Engineer**

2007-2010

TAHVIEH NIA; An exclusive dealership and after sales services of heavy industrial air-conditioning systems (HVAC) such as HITACHI, YAZAKI and KUKEN of Japan, VIESSMANN of Germany, UNIFLAIR of Italy.

Dealing with design and calculation of heavy industrial air-conditioning systems including cooling/heating capacities, HVAC & HPAC requirements for buildings with residential, ministerial, commercial and industrial applications (ASHRAE Standard; Carrier-HAP 4).

INTERESTS

- Internal Combustion Engines Development
- Advanced/Low Temperature Combustion Development (CAI/HCCI/PCCI/RCCI)
- In-cylinder flow field/mixture distribution/liquid fuel measurement (LDA/LDV, PIV, PLIF)
- Turbo/Supercharged boosted engines Development
- Engine Exhaust Waste Heat Recovery Modeling and Development (ORC, TEG, IBC)
- Direct Injection SI Engines (GDI/DISI) Development
- High-Pressure Common Rail diesel engine
- Engine combustion and flame visualization

Amin Mahmoudzadeh Andwari

Director of Internal Combustion Engine Laboratory
Vehicle, Fuel and Environment Research Institute (VFERI), 4th floor of Institute of Petroleum Eng. Bld.
College of Engineering (Campus 2), University of Tehran, North Karegar Ave., Tehran, Iran
Mobile: +98 901 531 0892, Tel: +98 880 20 741; Fax: +98 880 20 741
E-mail: amin.mahmoudzadeh@ut.ac.ir

SKILLS

- Modeling/Simulation/Optimization of combustion engines (GT-Power/Ricardo WAVE/AVL FIRE)
- Design of Experiments (DoE) to build test facilities
- Virtual Instrumentation Experimental Design (LabVIEW)
- Instrumentation calibration, benchmarking test, data acquisition setup, functional testing and data analysis
- Gasoline and Diesel engine performance and exhaust emission evaluation/calibration based on Chassis and Engine-Dyno
- Computer-Aided Design (CAD); 2D/3D (AutoCAD/SolidWorks/ANSYS)
- Computer-Aided Engineering (CAE); Computational Fluid Dynamics (CFD), (ANSYS-Fluent)
- Programming, MATLAB, Simulink
- HVAC & HPAC system (Carrier, HAP4)

RESEARCH & PROFESSIONAL DEVELOPMENT

- Design and implementation of engine test rig based on a multi-cylinder common rail diesel engine at Brunel university engine laboratory 2015
Using VW 2.0 L TDI Common Rail diesel engine (Industrial version; CJDA 475 NE)
Engine instrumentation in corporation with Marshalls Industrial Ltd
Dealing with Ross-Tech LLC for engine diagnostic software (VCDS) Diagnostic via direct CAN (HEX-CAN USB), signal reading, high speed data logging
- Implementation of a comprehensive CAI combustion experimental test rig based on Two-stroke cycle engine; Emission, Performance and combustion characteristics improvement by applying CAI combustion strategy; Experimental study, simulation and optimization by GT-Power and FLUENT. 2010-2014
- Powertrain advisor in UTM FSAE Team. Responsible for engine performance test, Engine mapping (Flex-ECU, MoTeC) and design of engine's intake manifold and intake restrictor. 2012-2013
- Operation and fault diagnosis of a roller chassis dynamometer (AC 70kW, DYNomite) and an engine chassis dynamometer (Eddy Current 370kW, DYNomite) 2013
- Evaluation of Garden Tools Set and Its Performance Characteristics. 2013
- Effects of Maintaining Engine Air Intake Temperature on Its Performance and Emissions. 2013
- Development of a Small Unmanned Aerial Vehicle (SUAV) 2013
- Product Development of e-Tuk 2, Perodua (Small electric vehicle) 2013
- Evaluation and CFD simulation study of compressible flow through the micro scale nozzle; FLUENT and GAMBIT. 2007-2009
- Retrofitting of an In-line four cylinder SI, PFI engine to be used for CNG fuel. 2005-2006

Amin Mahmoudzadeh Andwari

Director of Internal Combustion Engine Laboratory
Vehicle, Fuel and Environment Research Institute (VFERI), 4th floor of Institute of Petroleum Eng. Bld.
College of Engineering (Campus 2), University of Tehran, North Karegar Ave., Tehran, Iran
Mobile: +98 901 531 0892, Tel: +98 880 20 741; Fax: +98 880 20 741
E-mail: amin.mahmoudzadeh@ut.ac.ir

PATENT

- **An Exhaust Gas Recirculation System For A Two Stroke Cycle Engine** (Registered Intellectual Property in connection with Automotive Development Centre, Universiti Teknologi Malaysia, Patent No: PI 2015700505) 2014

AWARDS

- **Best Postgraduate Student Award** 2014
The Best Postgraduate Student Award for 2014/2015 Session. This award has been given in conjunction with UTM 53st Convocation Ceremony 2014.
- **Best Paper Award** 2016
The Best paper presented at International Conference on Automotive Innovation and Green Energy Vehicle (AiGEV 2016), Malaysia Automotive Institute (MAI), Cyberjaya, 2-3 Aug 2016
- **Best Paper Award** 2013
The outstanding paper presented at the 6th International Meeting on Advanced Thermo-fluids (IMAT-2013), National University of Singapore (NUS), 18-19 Nov 2013
- **International Doctoral Fellowship (IDF) award**, University Technology Malaysia (Five times) 2010-2013
- **Ranked 3rd** in Azad University M.Sc. Entrance exam 2006

PUBLICATIONS/PRESENTATIONS

EDITORSHIP

- Guest Editor for Special Issue on “*Mechanical Engineering*”, Journal of Engineering, Hindawi Publishing Corporation. 2015

BOOK

- **Book Chapter:** 2016
Green Technology, Energy Efficiency And Sustainability (ISBN 978-602-73928-5-4); Chapter 5, “Application and Effect of Controlled Auto-Ignition Combustion (CAI) In An Air-Cooled Two-Stroke Spark-Ignition Engine”, UPP Press, Malaysia, 2016.
- **Book Chapter:** 2015
Energy Performance & And Efficiency In Automotive Technology (ISBN 978-983-52-1038-9); Chapter 4, “Pre-Cooled Of Engine Air Intake Temperature On Its Performance And Emissions”, UTM Press, Malaysia, 2015.

JOURNAL PAPERS

- A. K. Kontakiotis, A. Pesiridis, **A. M. Andwari**, S. Russo, R. Tuccillo, and V. Esfahanian. “*Application of Micro Gas Turbine in Range Extender Hybrid Vehicles*”, **Energy (ISSN: 0360-5442)**, **Accepted, In Press**, (ISI, IF=4.52, Q1, Elsevier) 2017
- **A. M. Andwari**, M. F. Muhamad Said, Azhar Abdul Aziz, V. Esfahanian, M. A. Idris, M. R. Mohd Perang, H. M. Jamil. “*Design and Simulation of a High-Pressure Gasoline Direct Injection (GDI) Pump for Engine Applications*”, **Journal of Mechanical Engineering (JMEchE) (ISSN: 1823-5514)**, **Accepted, In Press**. (Indexed in Elsevier Scopus). 2018
- **A. M. Andwari**, M. F. Muhamad Said. Azhar Abdul Aziz, V. Esfahanian, M. R. Ahmad Baker, M. R. Mohd Perang, H. M. Jamil. “*Model-Based Simulation of Fuel Pump Performance of a Gasoline Direct Injection (GDI) System*”, **The Japan Society of Applied Electromagnetics and Mechanics (JSAEM), (ISSN: 0919-4452)**, **Accepted, In Press**. (Indexed in Elsevier Scopus). 2018
- **A. M. Andwari**, A. Pesiridis, V. Esfahanian, A. Salavati-Zadeh, A. K. Kontakiotis and V. Muralidharan “*A Comparative Study of the Effect of Turbocompounding and ORC Waste Heat Recovery Systems on the Performance of a Turbocharged Heavy-Duty Diesel Engine*”, **Energies**, 2017, 10(8), 1087; doi:10.3390/en10081087. (ISI, IF=2.262, Q1, MDPI) 2017
- **A. M. Andwari**, A. Pesiridis, S. Rajoo, R. Martinez-Botas and V. Esfahanian. “*A Review of Battery Electric Vehicle Technology and Readiness Levels*”, **Renewable and Sustainable Energy Reviews, Vol. 78(2017) pp 414-430, DOI: 10.1016/j.rser.2017.03.138**. (ISI, IF=8.050, Q1, Elsevier) 2017
- **A. M. Andwari**, A. Pesiridis, A. K. Kontakiotis and V. Esfahanian “*Hybrid Electric Vehicle Performance with Organic Rankine Cycle Waste Heat Recovery System*”, **Applied Sciences**, 2017, 7(5), 437; doi:10.3390/app7050437. (ISI, IF=1.679, Q2, MDPI) 2017
- **A. M. Andwari**, Azhar Abdul Aziz, M. F. Muhamad Said, Z. A. Latiff, S. N. Mohamad Said. “*The Effect of Internal and External EGR on Cyclic Variability and Emission of a Spark Ignition Two-Stroke Gasoline Engine*”, **JOURNAL OF MECHANICAL ENGINEERING AND SCIENCES (ISSN: 2289-4659)**, **Accepted, In Press**. (Indexed in Elsevier Scopus) 2017
- A. J. Feneley, A. Pesiridis and **A. M. Andwari**. “*Variable Geometry Turbocharger Technologies for Exhaust Energy Recovery and Boosting-A Review*”, **Renewable and Sustainable Energy Reviews, Vol. 71(2017) pp 959-975, DOI: 10.1016/j.rser.2016.12.125**. (ISI, IF=8.050, Q1, Elsevier) 2016
- **A. M. Andwari**, Azhar Abdul Aziz, M. F. Muhamad Said and Z. A. Latiff. “*Experimental Investigation of the Influence of Internal and External EGR on the Combustion Characteristics of a Controlled Auto-Ignition Two-Stroke Cycle Engine*”, **Applied Energy, Vol. 165 (2014), pp 1-10, DOI: 10.1016/j.apenergy.2014.08.006**. (ISI, IF=7.182, Q1, Elsevier) 2014
- **A. M. Andwari**, Azhar Abdul Aziz, M. F. Muhamad Said, Z. A. Latiff, “*An Experimental Study on the Influence of EGR Rate and Fuel Octane Number on the Combustion Characteristics of a CAI Two-Stroke Cycle Engine*”, **Applied Thermal Engineering Vol. 71 (2014), pp 248-258, DOI: 10.1016/j.applthermaleng.2014.06.062**. (ISI, IF=3.356, Q1, Elsevier) 2014

Amin Mahmoudzadeh Andwari

Director of Internal Combustion Engine Laboratory
Vehicle, Fuel and Environment Research Institute (VFERI), 4th floor of Institute of Petroleum Eng. Bld.
College of Engineering (Campus 2), University of Tehran, North Karegar Ave., Tehran, Iran
Mobile: +98 901 531 0892, Tel: +98 880 20 741; Fax: +98 880 20 741
E-mail: amin.mahmoudzadeh@ut.ac.ir

- S. E. Hosseini, **A. M. Andwari**, M. A. Wahid, G. Bagheri. “A review on green energy potentials in Iran”, **Renewable and Sustainable Energy Reviews**, Vol. 27(2013) pp 533-545, DOI: 10.1016/j.rser.2013.07.015. (ISI, IF=8.050, Q1, Elsevier) 2013
- M. F. Muhamad Said, Azhar Abdul Aziz, Z. A. Latiff, **A. M. Andwari** and S. N. Mohamed Soid. “Investigation of Cylinder Deactivation (CDA) Strategies on Part Load Conditions”, SAE Technical Paper, 2014-01-2549. (SAE International) 2014
- **A. M. Andwari**, Azhar Abdul Aziz, M. F. Muhamad Said and Z. A. Latiff, A. Ghanaati. “Influence of Hot Burned Gas Utilization on The Exhaust Emission Characteristics of A Controlled Auto-Ignition Two-Stroke Cycle Engine”, **International Journal of Automotive and Mechanical Engineering**, Vol 11 (2015), pp 2396-2404, DOI: <http://dx.doi.org/10.15282/ijame.11.2015.20.0201>. (Indexed in Elsevier Scopus) 2015
- A. Ghanaati, M. F. Muhamad Said, Intan Z. Mat Darus and **A. M. Andwari**. “A Mean Value Model For Estimation Of Laminar And Turbulent Flame Speed In Spark Ignition Engine”, **International Journal of Automotive and Mechanical Engineering**, Vol 11 (2015), pp 2224-2234, DOI: <http://dx.doi.org/10.15282/ijame.11.2015.20.0201>. (Indexed in Elsevier Scopus) 2015
- A. Ghanaati, M. F. Muhamad Said, Intan Z. Mat Darus and **A. M. Andwari** “A New Approach for Ignition Timing Correction in Spark Ignition Engines Based on Cylinder Tendency to Surface Ignition”, **Applied Mechanics and Materials**, Vol. 819 (2016) pp 272-276, DOI:10.4028, www.scientific.net/AMM.819.272. (Indexed in Elsevier Scopus) 2015
- **A. M. Andwari**, Azhar Abdul Aziz, M. F. Muhamad Said and Z. A. Latiff. “A Converted Two-Stroke Cycle Engine For Compression Ignition Combustion”, **Applied Mechanics and Materials**, Vol. 663 (2014) pp 331-335, DOI:10.4028, www.scientific.net/AMM.663.331. (Indexed in Elsevier Scopus) 2014
- **A. M. Andwari**, Azhar Abdul Aziz, M. F. Muhamad Said and Z. A. Latiff. “Controlled Auto-Ignition (CAI) Combustion In A Two-Stroke Cycle Engine Using Hot Burned Gases”, **Applied Mechanics and Materials**, Vol. 388 (2013) pp 201-205, DOI:10.4028, www.scientific.net/AMM.388.201. (Indexed in Elsevier Scopus) 2013
- **A. M. Andwari**, Azhar Abdul Aziz. “Homogenous Charge Compression Ignition (HCCI) Technique: A Review for Application in Two-Stroke Gasoline Engines”, **Applied Mechanics and Materials**, Vol. 165 (2012) pp 53-57, DOI:10.4028, www.scientific.net/AMM.165.53. (Indexed in Elsevier Scopus) 2012

CONFERENCES

- **A. M. Andwari**, M. F. Muhamad Said, Azhar Abdul Aziz, V. Esfahanian, M. R. Ahmad Baker, M. R. Mohd Perang, H. M. Jamil. “Model-Based Simulation of Fuel Pump Performance of a Gasoline Direct Injection (GDI) System”, 2nd International Conference on Sustainable Mobility, Kuala Lumpur, Malaysia, 12-13 July 2017. 2017
- **A. M. Andwari**, M. F. Muhamad Said, Azhar Abdul Aziz, V. Esfahanian, M. A. Idris, M. R. Mohd Perang, H. M. Jamil. “Design and Simulation of a High-Pressure Gasoline Direct Injection (GDI) Pump for Engine Applications”, 2nd International Conference on Sustainable Mobility, Kuala Lumpur, Malaysia, 12-13 July 2017. 2017
- **A. M. Andwari**, Azhar Abdul Aziz, M. F. Muhamad Said, Z. A. Latiff, S. N. Mohamad Said. “The Effect of Internal and External EGR on Cyclic Variability and Emission of a Spark Ignition Two-Stroke Gasoline Engine”, International Conference on Automotive Innovation and Green Energy Vehicle (AiGEV 2016), Cyberjaya, Malaysia, 2-3 Aug 2014. 2016

Amin Mahmoudzadeh Andwari

Director of Internal Combustion Engine Laboratory
Vehicle, Fuel and Environment Research Institute (VFERI), 4th floor of Institute of Petroleum Eng. Bld.
College of Engineering (Campus 2), University of Tehran, North Karegar Ave., Tehran, Iran
Mobile: +98 901 531 0892, Tel: +98 880 20 741; Fax: +98 880 20 741
E-mail: amin.mahmoudzadeh@ut.ac.ir

- **A. M. Andwari**, Azhar Abdul Aziz, M. F. Muhamad Said, Z. A. Latiff and A. Ghanaati. “*Influence of Hot Burned Gas Utilization on The Exhaust Emission Characteristics of A Controlled Auto-Ignition Two-Stroke Cycle Engine*”, 1st International Conference on Automotive Innovation and Green Energy Vehicle (AiGEV 2014), Kuantan, Pahang, Malaysia, 2014. 2014
- **A. M. Andwari**, Azhar Abdul Aziz, M. F. Muhamad Said and Z. A. Latiff, A. Ghanaati. “*Simulation validation of Hot Burned Gas Influences on the Exhaust Emission Characteristics of A Two-Stroke Cycle Engine*”, 7th International Meeting on Advanced Thermo-fluid-IMAT 2014, Kuala Lumpur, Malaysia, 2014. 2014
- M. F. Muhamad Said, Azhar Abdul Aziz, Z. A. Latiff, **A. M. Andwari** and S. N. Mohamed Soid. “*Investigation of Cylinder Deactivation (CDA) Strategies on Part Load Conditions*”, SAE 2014 International Powertrain, Fuels & Lubricants Meeting, Birmingham, United Kingdom, 2014. 2014
- A. Ghanaati, M. F. Muhamad Said, Intan Z. Mat Darus and **A. M. Andwari**. “*A Mean Value Model For Estimation Of Laminar And Turbulent Flame Speed In Spark Ignition Engine*”, 1st International Conference on Automotive Innovation and Green Energy Vehicle (AiGEV 2014), Malaysia, 2014. 2014
- A. Ghanaati, M. F. Muhamad Said, Intan Z. Mat Darus and **A. M. Andwari** “*A New Approach for Ignition Timing Correction in Spark Ignition Engines Based on Cylinder Tendency to Surface Ignition*”, 7th International Meeting on Advanced Thermo-fluid-IMAT 2014, Kuala Lumpur, Malaysia, 2014. 2014
- **A. M. Andwari**, Azhar Abdul Aziz, M. F. Muhamad Said and Z. A. Latiff. “*A Converted Two-Stroke Cycle Engine For Compression Ignition Combustion*”, 2th International Conference on Recent Advances in Automotive Engineering & Mobility Research, 16th-18th December 2013, Kuala Lumpur, Malaysia. 2013
- **A. M. Andwari**, Azhar Abdul Aziz, M. F. Muhamad Said, Z. A. Latiff and M.R. Mohd Perang. “*A Technique of Minimizing Low-Load Misfiring Occurrence in Two- Stroke Cycle Engine*”, 6th International Meeting on Advanced Thermo-fluid-IMAT 2013, 18th-19th November 2013, National University of Singapore, Singapore. 2013
- M. R. Mohd Perang, Azhar Abdul Aziz, Z. A. Latiff, **A. M. Andwari**, Henry Nasution, H. M. Jamil, M. N. Misseri. “*The Effects of Maintaining Constant Engine Air Intake Temperature on Its performance and Emission*”, 12th International Conference on sustainable energy technologies. Hong Kong, China (26th-29th August), SET-2013. 2013
- **A. M. Andwari**, Azhar Abdul Aziz, M. F. Muhamad Said and Z. A. Latiff. “*Controlled Auto-Ignition (CAI) Combustion In A Two-Stroke Cycle Engine Using Hot Burned Gases*”, 5th International Meeting on Advanced Thermo-fluid, IMAT-2012, November 2012, Indonesia. 2012
- **A. M. Andwari** and Azhar Abdul Aziz. “*Homogenous Charge Compression Ignition (HCCI) Technique: A Review for Application in Two-Stroke Gasoline Engines*”, Regional Conference on Automotive Research (ReCAR), 14th-15th December 2011, Kuala Lumpur, Malaysia. 2011
- Azadnia. A. H, Muhamad Zameri. M.S, Wong. K. Y and **A. M. Andwari**. “*A general framework of a reference information system model for e-flexible supply chains in small and medium enterprises*”, The First Iranian Student Scientific Conference in Malaysia, 9th-10th April 2011, University Putra Malaysia, Kuala Lumpur, Malaysia. 2011

Amin Mahmoudzadeh Andwari

Director of Internal Combustion Engine Laboratory
Vehicle, Fuel and Environment Research Institute (VFERI), 4th floor of Institute of Petroleum Eng. Bld.
College of Engineering (Campus 2), University of Tehran, North Karegar Ave., Tehran, Iran
Mobile: +98 901 531 0892, Tel: +98 880 20 741; Fax: +98 880 20 741
E-mail: amin.mahmoudzadeh@ut.ac.ir

STUDENT SUPERVISIONS

Ph.D. Students

- Adam Feneley, “Turbocharger Aero-thermal Design and Heat Transfer Optimization under Realistic Engine Conditions for Low Carbon Vehicles”; Centre for Advanced Powertrain and Fuels Research (CAPF), Department of Mechanical Engineering, Brunel University London, UK 2015 Ongoing
- Fuhaid Alshammari, “Design of Waste Heat Recovery Turbines for Internal Combustion Engines”; Centre for Advanced Powertrain and Fuels Research (CAPF), Department of Mechanical Engineering, Brunel University London, UK 2015 Ongoing
- Ali Ghanaati, “Adaptive Model Based Spark Advance Control for Anonymous Fuel and Engine Actuators”; Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM) 2015 Ongoing

M.Sc. Students

- Dimitris Pantzopoulos, “Variable Geometry Turbine Design for Advanced Turbocharger Application”; Centre for Advanced Powertrain and Fuels Research (CAPF), Department of Mechanical Engineering, Brunel University London, UK 2015 Completed
- Vinoth Srikumar, “Energy Recovery Systems for High Efficiency Internal Combustion Engines”; Centre for Advanced Powertrain and Fuels Research (CAPF), Department of Mechanical Engineering, Brunel University London, UK 2015 Completed

B.Sc. Students

- Muhammad Rusydi B Ahmad Baker; Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM), “Development of a High Pressure Fuel Pump for Gasoline Direct Injection System for Small Engine Application” 2016 Completed
- Mohamad Asmawi Bin Idris; Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM), “Design of High Pressure Fuel Pump for Gasoline Direct Injection (GDI) System for Use In Small Spark Ignition Engine” 2016 Completed
- Hasbul Hadi Ishak; Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM), “Design of a New Combustion Chamber Geometry for a Single-Cylinder Air Cooled Gasoline Engine Fitted With Direct Injection Fueling System” 2016 Completed
- Adnan AlQadasi; Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM), “A Study on Fuel Flow Spray Visualization In Terms Of Gasoline Direct Injection (GDI) Engine Using Constant Volume Chamber” 2016 Ongoing

Amin Mahmoudzadeh Andwari

Director of Internal Combustion Engine Laboratory
Vehicle, Fuel and Environment Research Institute (VFERI), 4th floor of Institute of Petroleum Eng. Bld.
College of Engineering (Campus 2), University of Tehran, North Karegar Ave., Tehran, Iran
Mobile: +98 901 531 0892, Tel: +98 880 20 741; Fax: +98 880 20 741
E-mail: amin.mahmoudzadeh@ut.ac.ir

AFFILIATIONS/MEMBERSHIPS

- Associate Member of Society of Automotive Engineers (SAE) 2011-Present
Membership No: 6133011261
- Member of American Society of Mechanical Engineers (ASME) 2011-Present
Membership No: 100141914
- Associate Member of Institution of Mechanical Engineers (AMIMEchE) 2013-Present
Membership Number: 80150434

REFERENCES

- Prof. Vahid Esfahanian, Director of Vehicle, Fuel and Environment Research Institute (VFERI), College of Engineering, University of Tehran, E-mail: evahid@ut.ac.ir
- Prof. Hua Zhao, Vice-Dean Research/Theme Leader for Advanced Engines and Biofuels, Centre for Advanced Powertrain and Fuels Research (CAPF), Room: H109, Brunel University London, Uxbridge, UB8 3PH, UK, E-mail: Hua.Zhao@brunel.ac.uk
- Dr. Apostolos Pesiridis, Senior Lecturer-Theme Leader (Turbomachinery), Centre for Advanced Powertrain and Fuels. Course Director, MSc Course in Automotive and Motorsport Engineering & UG Course in Automotive Engineering, Room: H114, Brunel University London, Uxbridge, UB8 3PH, UK, E-mail: Apostolos.Pesiridis@brunel.ac.uk
- Prof. Alasdair Cairns, Director of Teaching & Learning, Chair of the UG BoE, Chair of the UG SSLC, Room: H127, Brunel University London, Uxbridge, UB8 3PH, UK, E-mail: Alasdair.Cairns@brunel.ac.uk
- Dr. Srithar Rajoo, Director at Centre for Low Carbon Transport in cooperation with Imperial College London, Faculty of Mechanical Engineering, Universiti Teknologi Malaysia (UTM), 81310, Skudai, Johor, Malaysia, E-mail: srithar@fkm.utm.my