

Dr. Abdulwahab Ali Alnaqi, Assistant Professor of Automotive and Marine Engineering Technology

Education:

- BS in Mechanical Engineering. Earned in Jan 2005, from Kuwait University.
GPA : 3.51
MPA: 3.69
- MSc in Automotive Engineering with Distinction. Earned in Dec 2008, from University of Bradford
- MSc in Mechanical Engineering. Earned Oct 2010, from Kuwait University.
- PhD in Mechanical Engineering. Earned Nov 2014, from Leeds University Dissertation Title: "Characterisation of coated lightweight brake rotors".

Number of years of service on this faculty:

Eleven Years

2007 – 2011 Assistant teacher of automotive and marine engineering technology department

2014 - Present Assistant Professor of automotive and marine engineering technology department.

Other related experience:

- From 2005-2006: Kuwait Fund for Arabic Economic Development Training programme for 13 months. The first phase of the program concentrates on the theoretical part while the second (Worked with Foster Wheeler Energy Limited) and the third phases focus on the practical one.
- From 2006-2007: Equate "petrochemical company" As a Quality assurance and quality control engineer.
- From 2007-Now: Lecturer (Assistant professor) in the Public Authority for Applied Education and Training.

Teaching interests:

Fluid Mechanics, Heat transfer, statics, dynamics, applied mechanics, technical drawing...etc

Courses taught at PAAET:

1. Chassis Technology
2. Applied mechanics
3. Engineering Mechanics
4. Automotive Mechanics
5. Power transmission technology 2
6. Automotive technical drawing
7. Thermodynamics
8. Material technology
9. Mass Transfer

Research interests:

- Corrosion and material characterisation
- Heat and Mass transfer
- Vibration and control
- Vehicle dynamics
- Brake system
- Optimisation

Principal publications of last five years:

1. **A. A. Alnaqi**, D. C. Barton, and P. C. Brooks, "Reduced scale thermal characterization of automotive disc brake," *Applied thermal engineering*, 75, 658-668, 2015.
2. **A. A. Alnaqi**, S. Shrestha, P. C. Brooks, and D. C. Barton, "Thermal Performance of PEO Coated Lightweight Brake Rotors Compared with Grey Cast Iron," *Eurobrake 2014*, lille, France, 2014.
3. **A. A. Alnaqi**, D. C. Barton, and P. C. Brooks, *Thermal Performance of Monolithic and Coated Disc Brakes Using Abaqus and Matlab Software*, Vienna, Austria, SIMULIA Community Conference, 2013.
4. G. Bozic, **A. A. Alnaqi**, P. C. Brooks, and D. C. Barton, "Thermal Characterisation of Lightweight Brake Rotors for Passenger Car Application Using A small Scale Brake Dynamometer and One Dimensional Model," *Eurobrake 2012*, Germany, 2012.

5. **Abdulwahab A. Alnaqi** and Ahmet S.Yigit, "Dynamic analysis and control of automotive occupant restraint systems", *Jordan Journal of Mechanical and Industrial Engineering*, vol. 5, no. 1, pp. 39–46, 2011.
6. Murad, Ahmad E.; **Alnaqi, Abdulwahab A.**; Mullali, Hassan A.; Alsarraf, Jalal; Alawadhi, Khaled; AlRashed, Abdullah A. A. A.; Morad, Mukhtar M. A., "Thermal performance of disc brakes using genuine and non-genuine brake pads in Kuwait", *International Journal of Applied Engineering Research* ISSN 0973-4562 Volume 11, Number 8 (2016) pp 5806-5810.
7. **Abdulwahab A Alnaqi**, **Shahriar Kosarieh**, **David C Barton**, **Peter C Brooks**, **Suman Shrestha**, "Material characterisation of lightweight disc brake rotors", *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials Design and Applications*. ISSN 1464-4207, 2016.
8. Mukhtar M. A. Morad, Ahmad Murad, **Abdulwahab Ali Alnaqi**, Hasan Mulla Ali, Esam AM Husain, Ahmad Alkandari, The Comparison Cost of EVs Charging via Plug-in Electricity and Gasoline Source, *Journal of Mechanical Engineering and Automation*, Vol. 6 No. 1, 2016, pp. 1-7. doi: 10.5923/j.jmea.20160601.01.
9. **Alnaqi, AA**, Brooks, PC and Prabhu, VS (2015) *The Importance of Pad Aspect Ratio in the Thermal Analysis of a Reduced Scale Brake*. In: EuroBrake 2015 Conference Proceedings. EuroBrake2015, 04-06 May 2015, Dresden, Germany. FISITA . ISBN 978-0-9572076-6-0
10. **Alnaqi, A.**, Shrestha, S., Barton, D., and Brooks, P., "Optimisation of Alumina Coated Lightweight Brake Rotor," *SAE Technical Paper* 2014-01-2501, 2014, doi:10.4271/2014-01-2501.
11. **Abdulwahab A. Alnaqi**, Sarfaraz Kamangar, Abdullah A.A.A. Al-Rashedb, H.M.T. Khaleedc, Abdulgaphur Athani," Double Diffusion due to a Vertical Concentration Gradient", *International Journal of Applied Engineering Research* ISSN 0973-4562 Volume 11, Number 21 (2016) pp. 10380-10384.
12. **Abdulwahab A. Alnaqi**, N.S. Reddy, 1Khaled Alawadhi, Ahmad E. Murad and Hasan A. Mulla Ali," Neural Network Predictive Model for Welded Marine Pipeline Internal Corrosion", *Research Journal of Applied Sciences, Engineering and Technology* 13(7): 585-592, 2016, DOI:10.19026/rjaset.13.3018, ISSN: 2040-7459; e-ISSN: 2040-7467
13. Abdullah A.A.A. Al-Rashed1, Ahmad E. Murad1, **Abdulwahab Ali Alnaqi***, Md. Anwar Hossain2, "The mixed convection flow in a fluid-saturated non-Darcy porous medium through a horizontal channel ", *Research Journal of Applied Sciences, Engineering and Technology* 13(12): 585-592, 2016, DOI:10.19026/rjaset.13.3018, ISSN: 2040-7459; e-ISSN: 2040-7467.
14. J. G. Alotaibi , Abdullah T Alenzi , Ayedh Alajmi , **Abdulwahab A. Alnaqi**, "Vibration Isolation of Bus Engine", *SSRG International Journal of Mechanical Engineering (SSRG-IJME) – volume 3 Issue 5 – May 2016*.
15. Abdullah A.A.A. Al-Rashed, Salman Ahmed N.J, Sarfaraz Kamangar, H.M.T. Khaleed, T.M.Yunus Khan, **Abdulwahab A. Alnaqi**, "Double Diffusive Flow in a Porous Medium Embedded with Vertical Annulus with Power Law Heating", *SSRG International Journal of Mechanical Engineering (SSRG - IJME)*, V3(9),1-4 September 2016. ISSN: 2348 - 8360.
16. Varun S. Prabhu, **Abdulwahab A Alnaqi**, Peter C. Brooks," The thermal characterisation of a disc brake rotor at reduced scale with particular Reference to pad Aspect ratio", *Proceeding of the European Automotive Congress*, 2015, DOI 10.1007/978-3-319-27276-4_5.
17. Hasan A. Mulla Ali, Abdullah A. A. A. Al-Rashed, **Abdulwahab Ali Alnaqi**, "Double Diffusive Convection and the Improvement of Flow in Square Porous Annulus "Vol. 7 - Issue 4 (April - 2017), *International Journal of Engineering Research and Applications (IJERA)* , ISSN: 2248-9622 , www.ijera.com
18. Khaled Alawadhi, **Abdulwahab A. Alnaqi**, Jalal Alsarraf, Hasan A. Mulla ali, Ahmad E. Murad "Numerical Investigation of Turbulent Flow over a Rotating Circular Cylinder under Marine Conditions" Vol. 7 - Issue 2 (February - 2017), *International Journal of Engineering Research and Applications (IJERA)* , ISSN: 2248-9622 , www.ijera.com
19. Mukhtar M. A. Morad, **Abdulwahab A. Alnaqi**, Ahmad E. Murad, Nawaf Alhaifi, J. G. Alotaibi, Ayedh Alajmi "The Measurement of Fuel Consumption under Hot Ambient Temperature in Kuwait City", *SSRG International Journal of Mechanical Engineering (SSRG - IJME)*, V4(3),1-5 March 2017. ISSN: 2348 - 8360. www.internationaljournalssrg.org/IJME/index.html. Published by: Seventh Sense Research Group.
20. Al-Rashed, Abdullah AAA, **Abdulwahab Ali Alnaqi**, and M. A. Hossain. "Numerical Simulation of Biomagnetic Fluid Flow in an Oscillating Lid Driven Cavity." *International Journal of Applied Engineering Research* 11, no. 23 (2016): 11259-11265.
21. Jalal Alsarraf, Khaled Alawadhi, **Abdulwahab Alnaqi**, S.A.M. Swilem, "A new approach using hybrid power series – cuckoo search optimization algorithm to solve electrostatic pull-in instability and deflection of nano cantilever switches subject to van der waals attractions", *International Journal of Engineering & Technology*, 6 (2) (2017) 29-35.

22. Ahmad E. Murad, Abdullah A.A.A. Al-Rashed, **Abdulwahab A. Alnaqi**, "Double Diffusion in Cavity Due to Upper Half Concentration", SSRG International Journal of Mechanical Engineering (SSRG - IJME), V3(12),26-29 December 2016. ISSN: 2348 - 8360. www.internationaljournalssrg.org/IJME/index.html. Published by : Seventh Sense Research Group.
23. Hasan Mulla alia, Abdullah A.A.A. Al-Rasheda, **Abdulwahab A. Alnaqi***, "Double Diffusion in Cavity Due to Lower Half Concentration", Research Journal of Applied Sciences, Engineering and Technology 13(12): 913-917, 2016, DOI:10.19026/rjaset.13.3018, ISSN: 2040-7459; e-ISSN: 2040-7467.
24. Mukhtar M.A. Morad, **Abdulwahab A. Alnaqi**, Ahmad E. Murad, Esam A.M. Husain, Hasan Mulla Ali, Abdullah A.A.A. Al-Rashed "The Effect of Using a Modified A/C System on the Cooling System Temperature of an Internal Combustion Engine" Vol. 7 - Issue 5 (May - 2017), International Journal of Engineering Research and Applications (IJERA) , ISSN: 2248-9622 , www.ijera.com
25. Alshebani, M.E., Alawadhi, K., **Alnaqi, A.A.** and Saker, A.A., 2017. Numerical Investigation of a Liquid-Gas Ejector in Marine Ships. International Journal of Applied Engineering Research ISSN 0973-4562, 12(14), pp.4663-4674.
26. Khaled Alawadhi, ***Abdulwahab A. Alnaqi**, Jalal Alsarraf and Esam AM. Husain, "NUMERICAL INVESTIGATION OF A MARINE PUMP TO ESTIMATE THE EROSION RATE DENSITY WITH CHANGING PARAMETERS", International Journal of Applied Engineering and Technology ISSN: 2277-212X (Online) <http://www.cibtech.org/jet.htm> 2017 Vol. 7 (2) April-June, pp.12-27.
27. Al-Rashed, Abdullah AAA, Sarfaraz Kamangar, H. M. T. Khaleed, TM Yunus Khan, and **Abdulwahab A. Alnaqi**. "Heat and Mass Transfer in Porous Cavity: Opposing Flow." *Global Journal of Research In Engineering* (2017).
28. E. Husain, A. Abdel Nazeer, J. Alsarraf, K. Al-Awadi, M. Murad, **A. Al-Naqui** and A. Shakaban, "Corrosion Behavior of AISI 316 Stainless Steel Coated with Modified Fluoropolymer in Marine Condition", Journal of Coating Technology and Research (25).

Scientific and professional societies of which a member:

- American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)
- American Society of Mechanical Engineers (ASME)
- SAE (Society of Automotive Engineering)

Honors and awards:

- Awards of Dean's Honor List in 2003/2004 (first and second course) and 2004/2005 (first and second courses).
- Awards in Distinguished Student's List all through the study period at Kuwait University.
- One time in the highness the prince of Kuwait honour list
- MSc in Automotive Engineering with Distinction
- MSc in Mechanical Engineering with Distinction

Institutional service in last five years:

- Served on the Budget Committee
- Served as Chairman of Computer Committee
- Served on the schedule Committee
- Served as Chairman of schedual Committee
- Served on the curriculum Develop,emt Committee
- Served on the workshop Committee
- Served as Chairman of workshop Committee
- Served on the Research Committer
- Served on the Scholar Committee

Professional service in last five years:

1. Reviewer in applied thermal engineering Journal

Professional development activities in last five years:

1. Attended a number of Workshops and condensed courses conducted by the Center of Evaluation and Development, PAAET, 2018-2018.
2. Attending the Conference on
3. Two scientific conferences in London
4. One Educational conference in KSA
5. One scientific conference in Kuwait

6. Braking 2009 conference in UK (York)
7. Eurobrake 2012 (Germany)
8. Eurobrake 2014 (France)
9. SAE brake colloquium 2014 (USA)
10. Attending many seminars organized by KEFAS, KISR and PAAET.