Dr. Hilal Abdelati Abdelwali Mohamed

Assistant Professor of Automotive and Marine Engineering Technology

Education:

1988, B.Sc., Minia University, Automotive and Tractors Engineering Dept., Egypt.

1992, M.Sc., Minia University, Automotive and Tractors Engineering Dept., Egypt.

1997, Ph.D., Minia University, Automotive and Tractors Engineering Dept., Egypt. Chanel Scheme with University of Nebraska, Lincoln, USA.

Number of years of service on this faculty:

Nineteen Years

2000-2023 Assistant Professor of Automotive and Marine Engineering Technology.

Other related experience:

1988 to 1992, Lecturer, Faculty of Engineering, Minia university, Egypt.

1992 to 1994, Teaching Assistant, Faculty of Engineering, Minia university, Egypt.

1994 to 1996, Research Assistant, Faculty of Engineering, University of Nebraska, Lincoln, USA.

1997 to 2000, Assistant Professor, Faculty of Engineering, Minia university, Egypt.

2000 to 2023, Assistant Professor, College of Technological studies, Kuwait.

Teaching interests:

Transportation Economics, Automotive Engineering, Automotive Maintenance, Engine Electric and Electronic Systems, Chassis Electric and Electronic Systems, Heavy Equipment Technology, Automotive Mechanics, Applied Mechanics, Diesel Engine Technology, Power Transmission Technology, Engine Emission Control, Internal Combustion Engines, Thermodynamics, Fluid Mechanics, Automotive Diagnostics, Mathematics 1, Mathematics 2, Occupational Safety, Automotive Material Technology.

Courses taught at PAAET:

Engine Electric and Electronic Systems, Transportation Economics, Chassis Electric and Electronic Systems, Heavy Equipment Technology, Automotive Mechanics, Applied Mechanics, Diesel Engine Technology, Power Transmission Technology, Automotive Engineering, Automotive Maintenance, Mathematics 1, Mathematics 2, Occupational Safety, Automotive Material Technology.

Research interests:

Vehicle Maintenance and Replacement Strategies, Transportation Problem, Vehicle Routing Problem, Dynamic Programming.

Principal publications:

- 1. Mohsen Alardhi, Hilal A. Abdelwali, Ahmad M. Khalfan, Mohamed H. Abdelati, "Using the Minimize Distance Method to Find the Best Compromise Solution of Multi-objective Transportation Problem with Case Study", International Journal of Traffic and Transportation Engineering 2022, 11(2): 24-30.
- Hasan Mulla Ali, Mukhatar M. Morad, Ahmad E. Morad, Jasem M. Alrajhi, Swilem M. Swilem, Hilal A. Abedlwali, Nawaf A. Alhaifi, Yousef M. Alhouli and Ahmad Khalfan, "Suction Line Heat Exchanger and its Impact on the Performance of the Vehicle Air Conditioning System at High Ambient Temperature", International Journal of Applied Engineering Research ISSN 0973-4562 Volume 17, Number 6 (2022) pp. 61-616.
- 3. Hilal A. Abdelwali, Mohsen Alardhi, Ahmad E. Murad, Jasem M.S. Al-Rajhi, "An Optimal Solution for a Real Transportation Problem with Lingo Code", International Journal of Traffic and Transportation Engineering 2020, 9(2): 37-40.
- 4. Hilal A. Abdelwali, Swilem M. Swilem, Rafik El Shiaty, Mokhtar M. Murad, "Solving A Transportation Problem Actual Problem Using Excel Solver", International Journal of Engineering and Technical Research (IJETR), ISSN: 2321-0869 (O) 2454-4698 (P) Volume-9, Issue-12, December 2019.
- Rafik El Shiatya, Swilem A. M. S, HilalAbdelwali, Yousuf Alhendal, "Evaluation of Energy Saving in a Package Air Conditioner with Optimum Atomized Water Spray Type Evaporative System. (Case Study: A Villa in Kuwait)", American Journal of Engineering Research (AJER)E-ISSN: 2320-0847 p-ISSN: 2320-0936 Volume-7, 2018, Issue-12, pp-277-285.
- 6. Khalid Alkhulaifi, Jasem AlRajhi, Elsayed E. M. Ellaimony, Mohsen AlArdhi & Hilal A. Abdelwali, "An Algorithm for Solving Bi-Criteria Large Scale Transshipment Problems", Global Journal of Researches in Engineering: B Automotive Engineering, Volume 14 Issue 4 Version 1.0 Year 2014.

- 7. Dr. Jasem M.S Al-Rajhi, Dr. Hilal A. Abdelwali, Dr. Elysaed E. m. Ellaimony, Dr. Swilem A. Swilem, "A decomposition Algorithm for Solving A Class of Bi-Criteria Multistage Transportation Problem With Case Study", International Journal of Innovative Research in science, Engineering and Technology, Vol.2, Issue 9, 2013.
- 8. Hilal A. Abdelwali, Elsayed E.M. Ellaimony, Yousef Alhouli, Jasem M.S. Al-Rajhi, Mohsen S. Al-Ardhi, and Ahmad E. Murad "Using Fuzzy Goal Programming Technique to Obtain the Optimum Production of Vehicle Spare Parts, A Case Study", Global Journal of Researches in Engineering: J General Engineering Volume 15 Issue 6 Version 1.0 Year 2015. Publisher: Global Journals Inc. (USA). ISSN: 2249-4596 & Print ISSN: 0975-5861.
- 9. Elsayed E.M. Ellaimony, Hilal A. Abdelwali, Jasem M.S. Al-Rajhi, Mohsen S. Al-Ardhi, and Yousef Alhouli, "Solution of a Class of Bi-Criteria Multistage Transportation Problem Using Dynamic Programming Technique", International Journal of Traffic and Transportation Engineering 2015, 4(4): 115-122 DOI: 10.5923/j.ijtte.20150404.03
- Elsayed E.M. Ellaimony, Hilal A. Abdelwali, Jasem M.S. Al-Rajhi and Mohsen S. Al-Ardhi, "Using Dynamic Programming Technique For Solving A Class of Bi-Criteria Multi-Stage Transportation Problem", International Conference of Materials Science and Engineering, IOP, MOIME 2015, Bali, Indonesia.
- 11. Jasem M.S. Al-Rajhi, Hilal A. Abdelwali, Mohsen Al-Ardhi and Rafik El Shiaty, "On Bicriteria Large Scale Transshipment Problems", Journal of Engineering and Information Technology Vol.2, N 2
- 12. Hilal A. Abdelwali, Elsayed E.M. Ellaimony, Ahmad E. Murad and Jasem M.S. Al-Rajhi, "Optimum Replacement Policies For Kuwait Passenger Transport Company Busses: Case Study", World Academy of Science, Engineering and Technology, Vol. 5, 2011-03-22
- Elsayed E.M. Ellaimony, Hilal A. Abdelwali, Amier Y. Al-Ali and Ahmad E. Murad, "An Algorithm For Solving A Special Class Of Bicriteria Two Stage Transportation Problem With A Case Study", VISNIK, The Scientific Journal of The Volodymyr Dal East Ukrainian National University, Number 10, 152, 4.1, Year 2010, ISSN 1998-7927
- Ali M. Abd-El-Tawwab and Hilal A. Abdelwali, "Power Consumption in Hydraulic Active Suspension System", International Mechanical Engineering Conference, IMEC2004-FM201-CP, December 5-8, 2004, Kuwait
- 15. Hilal A. Abdelwali, "On Parametric Multiobjective Dynamic Programming With Applications To Automotive Problem", Dissertation For Ph.D. Degree, ElMinia University, ElMinia, Egypt, June, 1997
- 16. Said Ali Hassan, and Hilal A. Abdel-Wali, "Finding the optimum vehicle replacement policy: a parametric dynamic programming model", Presented in the 14th IFORS'96 Triennial Conference, the International Federation of Operational Research Societies (IFORS), The Canadian Operational Research Society, Paper Number FB 11.3, Vancouver, B.C., Canada, July 1996
- 17. Said Ali Hassan, and Hilal A. Abdel-Wali, "On parametric dynamic programming applied to replacement problem", Proceedings of the First International Conference on Operations Research and its Applications, Volume I, Higher Technological Institute, Ramadan Tenth City, Egypt, December 1994
- 18. Hilal A. Abdelwali, "Study Of The Parametric Dynamic Programming Applied To Vehicle Replacement Problem", Thesis For M.Sc. Degree, ElMinia University, ElMinia, Egypt, September, 1992

Scientific and professional societies of which a member:

- 1. Member at Society of Automotive Engineers; SAE, USA (2001 up to 2023).
- 2. Chairman of Egyptian Student Association, UNL, USA (1994-1996).
- 3. Member of Egyptian Society of Engineers (1988 up to 2023).

Honors and awards:

- Honored as an active member for the website committee at CTS, PAAET, 2023.
- Awarded as an active member at Society of Automotive Engineers; SAE, USA (2001 up to 2019).
- Honored as the active chairman of student associations at the international banquet. Lincoln, NE, USA, 1996.
- Honored as the active chairman of student associations at the international bazar. Lincoln, NE, USA, 1995.

Institutional service in last five years:

- 1. Member of the website committee at CTS, PAAET, 2023.
- Member of the Academic Accreditation Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, year 2020-2023.
- of the Budget Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, 2021 and 2023.

- 4. Chairman of the Academic Accreditation Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, year 2018-2019.
- 5. Chairman of the Academic Accreditation Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, year 2017-2018.
- Member of the Program and Curriculum Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, year 2019-2020.
- Rapporteur of Academic Accreditation Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, 2016-2017.
- Member of the Committee of study schedules and examinations, Automotive and Marine Department, CTS, PAAET, Kuwait, 2018-2019.
- 9. Rapporteur of the Budget Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, 2019-2020.
- Rapporteur of the Budget Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, 2017-2018.
- 11. Member of the Budget Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, 2016-2017.
- 12. Chairman of the Academic Advising Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, 2015-2016.
- Member of the Academic Accreditation Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, 2015-2016.
- 14. Chairman of the Information Technology and Computers Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, 2014-2015.
- 15. Member of the Program and Curriculum Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, 2014-2015.
- Member of the Equivalent Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, 2014-2015.
- 17. Member of the Academic Advising Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, 2014-2015.
- 18. Member of the Academic Accreditation Committee, Automotive and Marine Department, CTS, PAAET, Kuwait, 2014-2015.

Professional service in last five years:

- 1. Active Member of "MOETC2014 Marine Offshore and Engineering Technology" Conference, The Public Authorities of Applied Science and Training, 4-6 March 2014, in Kuwait.
- 2. Reviewer of "MOETC2014 Marine Offshore and Engineering Technology" Conference, The Public Authorities of Applied Science and Training, 4-6 March 2014, in Kuwait.
- 3. Active member at "Kuwait Occupational Standards Assessment & Certification Org.", (KOSAC), for the "Motor Vehicle Mechanic" program, June 2009.
- 4. Active member at "Kuwait Occupational Standards Assessment & Certification Org.", (KOSAC), for the "Motor Vehicle Mechanic" program, February 2007.

Professional development activities in last five years:

- 1. Attending the "Heading Global" Conference, The Public Authorities of Applied Science and Training, 14-16 of November, 2016.
- 2. Attended the "MOETC2014 Marine Offshore and Engineering Technology" Conference, The Public Authorities of Applied Science and Training, 4-6 March 2014, in Kuwait.
- 3. Attending many conferences in Green Building, Electricity and Water, Energy and Environment and District Cooling in the past few years, Kuwait
- 4. Attended many Workshops and condensed courses conducted by the Center of Evaluation and Development, PAAET, 2011-2018.
- 5. Attending many seminars organized by KEFAS, KISR and PAAET.