

ABDULLA ALKHALEDI, Assistant Professor of Marine Engineering

Education:

2002-2004 Diploma in Marine Engineering, Public Authority for Applied Education and Training, Kuwait

2004-2007 B.Sc. in Marine Engineering, Arab Academy for Science, Technology, and Maritime Transport, Alexandria

2008-2009 MSc in Mechanical Engineering for Marine Application, Manchester Metropolitan University, United Kingdom

2019-2022 Ph.D. in Renewable Energy Enhanced Combined Cycle for LH2 Carrier Ship, Cranfield University, United Kingdom

Number of years of service in this faculty:

2022-Present

Assistant Professor

Department of Automotive and Marine Engineering

College of Technological Studies (CTS)

Public Authority for Applied Education and Training, (PAAET), Kuwait

2016-2022

Assistant Lecture

Department of Automotive and Marine Engineering

College of Technological Studies (CTS)

Public Authority for Applied Education and Training, (PAAET), Kuwait

Other related experience:

Teaching interests:

Engineering Drawing, Computer science, Fluid Mechanics, Thermodynamics, Naval Architecture and Ship Building, Engineering Mechanics, Shipyard technology. Marine Pollution, Marine Diesel Engines, Steam Engineering, Ship propulsion, Marine Auxiliary, Ship Systems, Ship Maintenance, Offshore Technology, Automatic Control, Marine Safety, Marine Transportation Management.

Courses taught at PAAET:

Engineering Drawing, Computer science, Fluid Mechanics, Thermodynamics, Naval Architecture and Ship Building, Shipyard technology. Marine Pollution, Marine Diesel Engines, Ship Systems, Ship Maintenance, Automatic Control, Marine Safety, Material Technology, Introduction to Engineering Technology. Heat Engines.

Research interests:

Designing liquefied hydrogen tankers, ships stability analysis, renewable energy evaluation, Nano technology experimental, hydrogen-fuelled combined cycle gas turbine simulation and examination, marine turbo-electric propulsion systems integration, and contributing to the achievement of a global maritime zero-emission target and the climate change mitigation by creating innovative solutions.

Principal publications of last five years:

Journal Papers:

1. **Alkhaledi, Abdullah NFNR**, Suresh Sampath, and Pericles Pilidis. "A hydrogen fueled LH2 tanker ship design." Ships and Offshore Structures 17, no. 7 (2022): 1555-1564.

2. **Alkhaledi, Abdullah NFNR**, Suresh Sampath, and Pericles Pilidis. "Propulsion of a hydrogen-fueled LH2 tanker ship." International Journal of Hydrogen Energy 47, no. 39 (2022): 17407-17422.

3. **Alkhaledi, Abdullah NFNR**, Suresh Sampath, and Pericles Pilidis. "Economic analysis of a zero-carbon liquefied hydrogen tanker ship." international journal of hydrogen energy 47, no. 66 (2022): 28213-28223.

4. **Alkhaledi, Abdullah NFNR**, Amit Batra, Suresh Sampath, and Pericles Pilidis. "Techno-environmental assessment of a hydrogen-fueled combined-cycle gas turbine for a liquid hydrogen tanker." Energy Reports 8 (2022): 10561-10569.

5. **Alkhaledi, Abdullah NFNR**, Suresh Sampath, and Pericles Pilidis. "Techno -environmental assessment of Flettner rotor as assistance propulsion system for LH2 tanker ship fuelled by hydrogen." Sustainable Energy Technologies and Assessments 55 (2023): 102935.

6. Alenezi, Mohammad R., Abdullah M. Almeshal, and **Abdullah NFNR Alkhaledi**. "Hierarchical zinc oxide nanobrushes ultraviolet photodetector." Micro & Nano Letters (2022).

7. Alenezi, Mohammad R., Abdullah M. Almeshal, and **Abdullah NFNR Alkhaledi**. "ZnO nanoleaves with superior photodetection properties." Materials Advances 3, no. 16 (2022): 6577-6583.

8. Alenezi, Mohammad R., Abdullah M. Almeshal, and **Abdullah NFNR Alkhaledi**. "On-substrate fabrication of a self-activated nanostructured ZnO gas sensor." Nanoscale Advances (2022).

9. Alenezi, Mohammad R., Abdullah M. Almeshal, and **Abdullah NFNR Alkhaledi**. "Hierarchical ZnO Nanomaterials with Superior Photocatalytic Properties." In Journal of **Nano** Research, vol. 75, pp. 59-70. Trans Tech Publications Ltd, 2022.

Conference Papers:

Scientific and professional societies of which a member:

2019- Present: Member Royal Institution of Naval Architects (RINA)

2019- Present: Member Institute of Marine Engineering, Science & Technology (IMarEST)

2019- Present: Member Royal Aeronautical Society (RAeS)

2019- Present: Member Institute of Electrical and Electronics Engineers (IEEE)

2015- Present: Member Climbing and Walking Robots Association (CLAWAR) - Kuwait Chapter

2008- Present: Member Kuwait Society of Engineers (KSE)

Honors and awards:

Institutional service in last five years:

- 1- 2022-2023 Conferences and Research Committee Member, Department of Automotive and Marine Engineering, Public Authority for Applied Education and Training (PAAET)
- 2- 2022-2023 Faculty Members Promotions Committee Member, Department of Automotive and Marine Engineering, Public Authority for Applied Education and Training (PAAET)
- 3- 2022-2023 Faculty Members Scholarships Committee Member, Department of Automotive and Marine Engineering, Public Authority for Applied Education and Training (PAAET)
- 4- 2018-2019 Conferences and Research Committee Member, Department of Automotive and Marine Engineering, Public Authority for Applied Education and Training (PAAET)
- 5- 2018-2019 Social and Culture Committee Member, Department of Automotive and Marine Engineering, Public Authority for Applied Education and Training (PAAET)
- 6- 2016-2017 Scientific Meetings Committee Member, College of Technological Studies

Public Authority for Applied Education and Training (PAAET)**Professional service in last five years:**

Professional development activities in last five years:

2022 Invited Speaker – Institute of Marine Engineering, Science & Technology (IMarEST) Annual Conference 2022

2022 Invited Discussion Panel Member– “Industry Outlook and Transitioning Towards Sustainable Shipping” Hydrogen Transport Conference - Exhibition – Networking 2022, London, United Kingdom

2020 Oral presentation - "LH2 tanker for the hydrogen economy design and power", Cranfield University Research Student Conference (CARSC20), Cranfield University, Bedfordshire, United Kingdom.

2019 Combined Cycle Gas Turbine course
Cranfield University, United Kingdom

2019 Thermal and Power course
Cranfield University, United Kingdom

2011 Oil Tanker Familiarization course
AASTMT

2011 Personal safety and Social Responsibilities course
AASTMT

2011 Medical Emergency Basic Training (First Aid) course
AASTMT

2011 Proficiency in Personal Survival Techniques
AASTMT

2011 Fire Prevention and Fire Fighting course
AASTMT