## Prof. Dr. Nuri Mohamed Eshoul



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and (n.eshoul@out.edu.ly)

### EDUCATION

- PhD University of Newcastle upon Tyne, 2017 Newcastle upon Tyne, UK
- MSc of Science Salford University, UK, 1999.
- BSc of Marine Engineering Tripoli University, Tripoli, Libya, 1990.

### SUMMARY OF EXPERIENCE

- 10 years of experience as a Mechanical Engineer in oil sector.
- 20 years teaching Mechanical and chemical Engineering in Libyan Universities and Institutes.
- 2013 31/12/2017 Scholarship for four years as a PhD research student.
- 1/2/2018 staff member at The Higher Institute of Industrial technology until 31/08/20121.
- 01/09/2021 staff member at Marine and offshore Engineering, Tripoli University until now.

### WORK EXPERIENCE

### Professor

Tripoli University, Marine Engineering Department from 01/09/2021 until now.

The High Institute of Industrial Technology - Engila – Libya from 25/7/2000 – until 31/08/2021.

- Teaching different engineering courses including:
- Ship construction Thermodynamics Fluid Mechanics Engineering Mechanics Power Plants Rotating Equipment Main marine engines Mechanical Measurements

Ship stability Heat Transfer Strength of Materials Mechanical Vibration Combustion Fuels and Oils Renewable Energy Technical Writing Workshop Technology

• Revised the syllabus to meet accreditation standards.

- Supervise and evaluate final year undergraduate student's projects.
- Organisation of human resources (students and support staff), technical and administration resources.
- Advise students on appropriate research topics and edited and evaluated their work.
- Lab. Demonstrator for different labs.
- Developed homework assignments, tutored students, provided laboratory demonstrations and supervised and evaluated student's lab results.
- Review in number of journals and conferences.

# Positions held at the higher institute of industrial technology and at the higher institutes department

- Director Assistant
- Head of technical and scientific office
- Head of Scientific affair
- Head of Mechanical Engineering department
- Staff member of promotion committee
- Head of a number of exam committees
- Head of scientific office at higher institutes department

#### Engineer specialist

Sirte Oil Company for Production and Manufacturing of Oil & Gas - Brega – Libya 09/6/1992 -24/07/2000.

- Troubleshooting and failure analysis of plant machinery.
- Preventive and predictive maintenance / condition monitoring.
- Vibration analysis and dynamic balancing of equipments.
- Monitoring of area shutdown activities.
- Coordinating activities with support group such as workshop and overseas vendors.
- Filed facilities at Refinery, LNG, Plant Power Station and Petrochemical.
- Excellent exposure to large rotating machine such as gas turbines, steam turbines, centrifugal and reciprocating compressors, multi-stage pumps and gear boxes.
- Rotor repair.
- Supervising Turnaround.

### Mechanical Engineer

National Road Equipment Company - Tripoli - Libya from 25/12/1990 until 01/06/1992

• Involved with maintenance of compressors, vehicles, heavy equipment such as loaders and dumpers.

### TRAINING and workshops

- Effective tools and strategies for time management, tasks management and notes management 03-12-2016 Newcastle upon Tyne UK.
- Advanced Document Management using Word and EndNote 2014, Newcastle University UK.

- Creating Academic Posters 2015, Newcastle University UK.
- Presentation Skills Using PowerPoint 2015, Newcastle University UK.
- Convincing CVs and Covering Letters 2015, Newcastle University UK.
- Time Management 2014, Newcastle University.
- Introduction to learning and teaching in high education 2015, Newcastle University UK.
- Centrifugal Pumps operation & Maintenance International Institute of Energy Tripoli, Libya 2004.
- Technical writing Brega, Libya 2000.
- Projects Evaluation & Feasibility Study Team International –Brega, Libya 1998.
- Alignment Technology Northern Alberta Institute of Technology Brega, Libya 1998.
- Steam Turbine & Governors Dresser Rand Brega, Libya 1995.
- Centrifugal Compressors Engineering Dresser Rand Brega, Libya 1995.
- Gas Turbine Maintenance Abramco Tripoli, Libya 1995.
- Power plant ABB gas Turbine Operation & Maintenance ABB Power generation Ltd. Brega Libya1994.
- Tribology of Machines Neale Consulting Engineers Brega, Libya 1994.
- Centrifugal Pumps, Operation & Maintenance Northern Alberta Institute of Technology Brega, Libya 1998.
- Diesel Engine International Institute of Energy Benghazi, Libya 1993.
- Vibration Analysis & Diagnosis MEAGE Brega 1992.

#### SKILLS

- **Computer**: Highly proficient at Excel, Word and PowerPoint. Extensive experience of IRD Machinery Analysis Software and IPSEpro software.
- **Presentation**: Developed ability to produce reports and presentations to a professional standard.
- Analysis & Evaluation: Proficient in assessing data and formulating solutions.
- **Organisational**: Effective at time management and prioritising tasks to achieve deadlines.
- Interpersonal/Communication: Strong team working, leadership and communication skills.
- Language: Arabic (native), English (fluent).

### **RESEARCH INTEREST**

Energy conversion technology and renewable energy.

### PUBLICATIONS

# The resent publication **Journal papers**

- 1- Nuri Eshoul, Abdulrahman Almutairi, Rasaq Lamidi, Hamad Alhajeri and Abdulrahman Alenezi "Energetic, Exergetic and Economic Analysis of MED-TVC Water Desalination Plant with and without Preheating" Water 2018, 10, 305; doi:10.3390/w10030305.
- 2- Nuri Eshoul, Brian Agnew, Alexander Anderson and Mohanad Atab "Exegetic and economic analysis of two-pass RO desalination proposed plant for Libyan domestic water and irrigation" Energy, Vol. No. 122, 2017, 319-328.
- 3- Nuri Eshoul, Brian Agnew, Mohammed Al-Weshahi and Mohaned Sarari "Exergy analysis of two pass Reverse Osmosis (RO) desalination with and without Energy Recovery Turbine (ERT) and pressure exchanger(PX) "Energies" 2015,8, 6910-6925.
- 4- Nuri Eshoul, Brain Agnew, Mohammed A. Al-Weshahi and Fathi Latrash "Exergy analysis of two-passes Reverse Osmosis (RO) desalination with and without Energy Recovery Turbine (ERT) "International Journal of Exergy",
- 5- Rasaq.O.Lamidia, Yaodong Wanga, Pankaj. B. Pathareab, Marcelo Calispa Aguilara, Nuri Mohamed Eshoul, Abdullah Malika and A.P. Roskillya "Sustainable agriculture: biomass powered combined cooling and power system for post-harvest loss reduction of yam tubers in Sub-Saharan African region" "Energies" 2019, 12, 872.
- 6- Ramadan O. Saied and Nuri Mohamed Eshoul "Experimental Study on the Performance of Built-in Storage Solar Water Heater in Benghazi Climate" 2014.

### **Conference papers**

- 1- Samir Elghriani and Nuri Eshoul "A new Vision For The future Of Sustainable Biodiesel for the EU" 11th International Renewable Energy Congress IRCE, Sousse – Tunisia, October 26-28, 2021. IEEE.
- 2- Hamza khlifa and Nuri Eshoul "Study The Energy Absorption of Empty and Filled Square Tubes Subjected to Axial Static Loads" 11th International Renewable Energy Congress IRCE, Sousse – Tunisia, October 26-28, 2021. IEEE.
- 3- Nuri Mohamed Eshoul, Rasaq. O. Lamidi, Fauzi Abualgasem Mohamed and Mohamed Alkateb "Performance enhancement of the performance of an existing combined cycle power plant using absorption chiller" IRCE, Tunisia, October 29-31, 2020. IEEE.
- 4- Ayman Alsadai, Nuri Eshoul and Mohamed Alkateb, "Nano Diamond: A Zero-Dimensional Nano-material" 11th International Renewable Energy Congress IRCE, Tunisia, October 29-31, 2020. IEEE.
- 5- Mohamed Alkateb, Ayman Alsadai and Nuri Eshoul "Energy Absorption of wool/epoxy Composite Tubes" IRCE, Tunisia, October 29-31, 2020. IEEE.
- 6- Nuri Eshoul "Exergetic and economic analysis for single pass RO with PX poweresd by ORC using brackish water", 10th International Renewable Energy Congress IRCE, Sousse Tunisia, March 26-28, 2019. IEEE.

- 7- Nuri Eshoul and Abdulrahman Almutairi "Exergetic and economic analysis for two different desalination technologies using brackish water" the third Arabic water conference, Kuwait 2018.
- 8- Nuri Eshoul, Brian Agnew and Ratha Mathkor. Thermodynamic analysis of combined cycle power plant standalone and coupled with multi effect desalination with thermal vapor compression, 6th International Renewable Energy Congress IRCE, Sousse Tunisia, March 24-26, 2015. IEEE.
- 9- Nuri Eshoul, Brian Agnew, Mohammed A. Al-Weshahi, Ratha Mathkor. Validation and thermal analysis of combined cycle power plant standalone and with multi effect thermal vapour compression. International Conference on Environment Science and Engineering, (ICESE2015), Istanbul, Turkey, April 24-25.
- 10-Nuri Eshoul, Brian Agnew, Abdalbaset Mnider. Parametric study of multieffect desalination with thermal vapour compression plant. 7<sup>th</sup> International Renewable Energy Congress IRCE, Hammamet–Tunisia March 22-24, 2016. IEEE.
- 11-Nuri Eshoul, Brian Agnew and Alexander Anderson. A comparison between single effect desalination and single reverse osmosis desalination plants using brackish water Waddan city – Libya, Heat Powered Cycles Conference Nottingham University, UK, 27-29 June 2016.
- 12-Nuri Mohamed Eshoul, Ali Salah Aldeeb, and Mohamed Jalal "Modelling of gas separation through membrane using silica layer" first International conference and exhibition of chemical and process engineering 5-7 may 2009 Tripoli University, Tripoli, Libya.
- 13-I.R. Mathkor, B. Agnew, M. Al-Weshahi and N. Eshoul. (2015) "Exergy Modelling of an Organic Rankine Cycle Energized by Heat from Parabolic Trough Collector with Thermal Storage" 14th International conference on clean and green energy (ICCGE), Amsterdam-Netherlands 14-15 Feb. 2015.
- 14-Fathi A. Latrash , Brian Agnew, Mohammed Al-Weshahi, Nuri M. Eshoul(2015) "optimal selection of using fluids (HFC, HCFC, HFC) for an Organic Rankine Cycle utilising a low temperature geothermal energy source" conference environment international on science and engineering" conference on engineering" International environment science and (ICESE2015), Istanbul, Turkey, April 24-25, 2 24-25, 2015.

### REFERENCES

1- Professor Brian Agnew	2- Dr. Sandy Anderson
University of Newcastle upon Tyne	University of Newcastle upon Tyne
Brian.agnew@ncl.ac.uk	Anderson.goldpink@gmail.com
Notes: My PhD Examiner: Professor Pliidisis; Canfield University.	