Curriculum Vitae

Name: **Salem Abdulsalam Farhat**
Date of Birth: **15th of March 1962**
Nationality: **Libyan**
Address : **Ben-Ghashir, Tripoli, Libya**
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Education & Qualifications

1981 - 1985
University of Tripoli, Tripoli
B. Sc from the Faculty of Engineering

1986 - 1993
Demonstrator in Tripoli University, Faculty of Engineering

1993 - 1996
University of Warsaw, Poland
M. Sc in Mechanical Engineering. Internal combustion engines

1996 - 2000
Lecturer in Tripoli University – faculty of Engineering- Mechanical Department, (subjects; Thermodynamics, Fluid mechanics, Internal combustion engines, Heat Engines, and B. Sc Projects)

2001 - 2005
University of Manchester (UMIST)
Ph. D from the faculty of Mechanical, Aerospace and Civil Engineering

2005 - 2008
Lecturer in Tripoli University, Faculty of Engineering, Mechanical Department.
(subjects; Thermodynamics, Fluid mechanics, Internal combustion engines, Heat Engines, and B. Sc Projects)

2008-2013
Assistance professor in Tripoli University, Faculty of Engineering, Mechanical Department. (subjects; Thermodynamics, Fluid mechanics, Internal combustion engines, Heat transfer, B. Sc Projects, M. Sc subject (theory of combustion , M. Sc projects)

2013-2015
Associate professor in Tripoli University, Faculty of Engineering, Mechanical Department. (subjects; Thermodynamics, Fluid mechanics, Internal combustion engines, Heat transfer, B. Sc Projects, M. Sc subject (theory of combustion , M. Sc projects)

2012-2015
Head of Graduate Office of the Faculty of Engineering at University of Tripoli.
2015 – 2017
Head of Course Description Program Office of the Faculty of Engineering at University of Tripoli.

2017
Full professor at Tripoli University, Faculty of Engineering, Mechanical Department. (subjects; Thermodynamics, Fluid mechanics, Internal combustion engines, Heat transfer, B. Sc Projects, M. Sc subject (theory of combustion , M. Sc projects)

2017 – 2020
Head of Mechanical and Industrial Engineering Department, Faculty of Engineering at University of Tripoli.

Additional Information

Languages :
Arabic - Mother tongue
English

Computer Knowledge :
LabVIEW programming
Tech-plot software
A/D data acquisition system and signal processing

Researches:

Journal Papers

1. Farhat, S., Przastek, J., and Teodorczyk, A. (1996) "Conversion of Diesel Engine for Gaseous Fuel Operation with Lean-Burn and High Compression Ratio" *Journal of Kones*, kones'96 22th, Warsaw

2. Ng, W.B., Salem, A.F. and Zhang Y. (2003) "Three-dimensional Visualization of Diffusion Flame Dynamics under Acoustic Excitation," *Journal of Visualization*, Vol. 6, No. 4, 329-336. Japan

3. Farhat, A. S., Ng, W. B. and Zhang Y. (2005) "Chemiluminescent Emission Measurements of Diffusion Flame Jet in a Loudspeaker Induced Standing Wave" *fuel. Vol. 84, pp. 1760-1767 UK*

4. Farhat, A. S., Kleiner D. and Y. Zhang. (2005). "Jet Diffusion Flame Characteristics in a Loudspeaker Induced Standing Wave," *combustion and flam. Vol. 142. pp. 317-323 France.*

5. Farhat, A. S. and Zhang, Y. (2008) "Laminar jet characteristics in a loudspeaker induced standing wave" Journal of engineering research. pp 25-37 Libya

6. Farhat, A. S, Oun S. M and Zhang, Y. (2008) "Chemiluminescence emission and acoustic correlation measurements stable – transition – unstable swirl propane/Air flames in an industrial combustor" Journal of engineering research. pp 39-54 Libya

7. Asgyer A. A., Farhat A. S, Zhang, Y (2008)"Turbulence characteristics of turbulent pre-mixed impinging flames" Journal of Sabha university.

8. Asgyer A. A., Farhat A. S, Zhang, Y (2008) "Measurements of instantaneous global and local Chemiluminescence emission CH* and C_2*, 2-D velocity field and acoustic

signal of turbulent impinging pre-mixed flames on flat plate" Journal of industrial search. 14-No.23. pp. 86-99. Libya

9. Yang Zhang, Saad Hajim, Jason Bassi and S Farhat (2008) "Flow field and acoustic characteristics of an acoustically forced burner impinging jet" Acoustical Society of America , The Journal of the Acoustical Society of America , Volume 123, Issue 5
10. Salem A. Farhat, Mohamed S. Oun and Y. Zhang (2009) "Optical and Acoustic signals Processing of Flame Blow-out in an Industrial Gas Turbine combustor" Journal of engineering research, Tripoli university, Issue 11, pp 27-37. Libya
11. Salem A. Farhat, Mohamed K. Taleb, (2010) "Combustion Oscillation Diagnostics in a Gas turbine Using an Acoustic Emissions" Jordan journal of mechanical and industrial engineering, JJMIE, volume 4 no 3 pp352-357, Jordan
12. Algannay M., Farhat S. , and Elhsnawi M.(2012) "Numerical Simulation of Ignition of High Pressure Hydrogen-Oxygen Mixture Jet into Atmosphere" Journal of engineering research, university of Tripoli,
13. Salem A. Farhat1, Entesar H Betelmala and Y Zhang (2013) "Local mean and RMS Velocity Measurements of The excited Air Jet at Three Regimes in a Rijke Tube" Int. J. Mech. Eng. & Rob. Res. (IJMERR), Vol. 2, No. 4, pp 119-126
14. Fatiam M Elafi , Abdurrauf Mohamed Naas and Salem Farhat (2020) "Improving the Performance of CI Engine by Using Turbo-charger with an Inter-cooler" THE INTERNATIONAL JOURNAL OF ENGINEERING AND INFORMATION TECHNOLOGY (IJEIT), VOL.6, NO.2,2020 – pp 188- 192, Paper ID: EN122.
15. Entesar H. Betelmal, Fatiam M. Elafi, Salem A. Farhat and Mohamed K. Taleb (March 2018) "AUTOMOTIVE ENGINE MUFFLER PERFORMANCE MEASUREMENTS" journal of Engineering Research (University of Tripoli, Libya) Issue (25) – pp 29-40
16. Fatima M. Elafi, Salem A. Farhat, and Mohamed K. Al-Taleb (2017). "CHEMILUMINESCENT EMISSION AND ACOUSTIC PRESSURE DYNAMICS MEASUREMENTS OF IMPINGING PROPANE DIFFUSION FLAME ON UN-COOLED CIRCULAR PLATE". journal of Engineering Research (University of Tripoli, Libya) Issue (23) – pp 79-92
17. Betelmal EH*, Farhat S and Agnew B (2017) "Exergy Analysis for Brayton and Inverse Brayton Cycles with Steam Injection" *Journal of Applied Mechanical Engineering,* Volume 6 • Issue 6
18. Mohamed S. Oun, Salem A . F a rhat and Mohamm ed A . lrabeei. (2017) "THE EFFECT OF TURBOCHARGER PRESSURE AND INTERCOOLER TEMPERATURE ON ENGINE PERFORMANCE" Journal of Engineering Research (University of Tripoli, Libya) Issue (23) March 2017 .
19. Abdul-Hafid El-Majani, Mohamed S. Oun and Salem A. Farhat (2019) "AN EXPERIMENTAL STUDY OF THE HERSCHEL-QUINCLE (HQ) TUBE NOISE ATTENUATION PERFORMANCE" Journal of Applied Science Issue (2) April (2019).

20. E. H. Betelmal1 & S. A. Farhat (2018) "Energy and Exergy Analysis of a Simple Gas Turbine Cycle with Wet Compression" Mechanical Engineering Research; Vol. 8 No. 1; 2018, Canadian Center of Science and Education

21. Mohamed K. Al-Taleb, Salem A. Farhat, Radwan N. Sharif (2017) "An Experimental Study of the Influence of the Herschel-QuincleTube Length on Noise Attenuation" *University Bulletin – ISSUE No.19- Vol. (2)*

22. Salem A. Farhat, and Abdul-Hafid El-Majani (2017) "FLICKERING PPROPANE/AIR DIFFUSION FLAME MEASURMENTS USING LIGHT CELL AND HIGH SPEED CAMERA IMAGE PROCESSING TECHNIQUES" ournal of Engineering Research (University of Tripoli, Libya) Issue (23) March 2017

23. Salem A. Farhat, Samah Alghoul, Amira A. Ben Ghwaila, and Mariam A. Turkman (2016) "HEMILUMINESCENCE DYNAMICS MEASUREMENTS OF DIFFUSION FLAME USING LIGHT CELL AND HIGH SPEED CAMERA" Journal of Engineering Research (University of Tripoli, Libya) Issue (22) September 2016

Conference Papers

1. Farhat, A. S. and Zhang, Y. (2007) "Experimental study of Chemiluminescence emission of OH*, CH* and C_2* of the flame at different operating conditions in an industrial gas turbine combustor" International conference on aeronautical science and air transportation pp 355-366.
2. Farhat S. and Yang Zhang. (2006) "Jet Diffusion Flame Properties in Acoustic standing wave 13th international Congress on Sound Viberation(ICEV), Vienna.
3. Salem A. Farhat, and Mohamed k. Al-Taleb (2010) "An alternative Technique for Optical Analysis of Laminar diffusion flame dynamics"10C 2010 42th International October Conference, Kladovo, Serbia.
4. S. Farhat and M. Al-Taleb (2010) "Optical Investigation of Combustion Instability Mechanisms of Non-Premixed Flame in an Optically Vertical Tube by Using Light Cell" *5th International Conference on Advances in Mechanical Engineering and Mechanics,* ICAMEM2010 , 18-20 December, 2010, Hammamet, Tunisia.
5. Mohamed K. Al-Taleb, Salem A. Farhat, and Abraheem F. Al-Zwai. (2012) "An experimental study of the Influence of the Neck Types and Dimensions on the Helmholtz resonator" WASET 2012 PHUKET, THAILAND INTERNATIONAL CONFERENCE

Books

1- محركات الاحتراق الداخلي, (2001), محمد صالح عون و سالم عبدالسلام فرحات, منشورات ELGA فاليتا, مالطا.