

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., Przystek, 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 C₂*, 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 . Irabeei. (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 HERSHEL-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-Quincke Tube Length on Noise Attenuation” *University Bulletin – ISSUE No.19- Vol. (2)*
22. Salem A. Farhat, and Abdul-Hafid El-Majani (2017) “FLICKERING PROPANE/AIR DIFFUSION FLAME MEASUREMENTS USING LIGHT CELL AND HIGH SPEED CAMERA IMAGE PROCESSING TECHNIQUES” *Journal 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 C₂* 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 Vibration(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.