

CURRICULUM VITAE



Name Dr. Jehad Ahmad Yamin
Date of Birth 31-05-1970
Place of Birth Kuwait
Academic Rank Associate Professor
Address Mechanical Engineering Department
School of Engineering
The University of Jordan
Queen Rania Street
Al-Jubeiha
Amman 11942
Jordan
Email: yamin@ju.edu.jo OR jehadyam@yahoo.com
Phone (Mobile): 00962-799-609750

Personal Website: <http://www.ju.edu.jo/sites/Academic/yamin/default.aspx>
<http://scholar.google.com/citations?user=4vf8lrYAAAAJ&hl=en>

Education

Ph.D. Mechanical Engineering, Institute of Technology (Banaras Hindu University), India, 1998.
Dissertation entitled of “*Optimum Design Parameters for an LPG Powered Spark Ignition Engine.*” India, 1998.
M.Sc Mechanical Engineering (Heat Power). Institute of Technology (Banaras Hindu University).
Dissertation entitled “*Relative Performance Of Ambassador Engine Using Gasoline and LPG as Fuels*”. India, 1995
B.Sc. Mechanical Engineering (Heat Power). Institute of Technology (Banaras Hindu University), India, 1993.
High School Abdullah Al-Salem Secondary School, Kuwait, Science, 91.9%

Work Experience

2011- Present Associate Professor at the Mechanical Engineering Department, University of Jordan.
Amman-Jordan
2002 – 2011 Assistant Professor at the Mechanical Engineering Department, University of Jordan.
Amman-Jordan

- 2001 – 2002 Assistant Professor at the Mechanical Engineering Department, Mu'tah University.
Al-Karak - Jordan.
- 1999-2001 Part-Time Lecturer at the Mechanical Engineering Department, University of Jordan.
Amman-Jordan

Courses Taught

- 1- **Graduate** : Advanced Combustion, Energy Sources and Conversion.
- 2- **Undergraduate**: Internal Combustion Engines (Theory and Lab.); Engineering Measurements (Theory and Lab); Power Plant Engineering; Thermodynamics (I and II), Metrology and Engineering Measurements (Theory and Lab., for Industrial Eng Students), Fluid Mechanics, Numerical Methods, Computer Applications for Engineers; Thermodynamics Lab., Heat Transfer Lab., Computer Programming for Engineers (Using MATLAB).

Theses/Dissertations Supervision

Master Thesis

- 1- "Testing A New Refrigerant For Ic Engine Utilizing Of Waste Heat Energy", 2020, Completed, Main Supervisor.
- 2- "Mechanical and thermal stresses on the piston and connecting rod of variable compression ratio engine powered by biodiesel", 2012, Completed, Main Supervisor.
- 3- "Mapping of Direct Injection 4-Stroke Diesel Engine Performance using Biodiesel Fuel", 2010, Completed, Main Supervisor.
- 4- Optimization study for performance of compression ignition engines powered by emulsified fuels", 2009, Completed, Co-Supervisor.
- 5- "Engine performance powered by hydrogen fuel obtained from water electrolyzer", 2010, Completed, Co-Supervisor.
- 6- "The effect of using diesel fuel emulsion on the performance and pollutants emitted from four stroke water cooled diesel engine", 2007, Completed, Co-Supervisor.
- 7- "Environmental Evaluation of Jordanian Diesel Fuel Mixed with Ethanol and Diethyl Ether using Diesel Engine", 2007, Completed, Co-Supervisor.
- 8- "Experimental study to reduce the emission of particulate matter during the combustion of diesel fuel", 2006, Completed, Co-Supervisor.

PhD Thesis

- 1- "Inhibitory effect of some additives on Methane-Air flame", Completed, 2009, Co-Supervisor.
- 2- "Modeling and testing of a fuel cell utilizing local sand for hydrogen storage", Completed, 2007, Co-Supervisor.

Funded Projects

- 1- Study on the effect of magnetic field on the performance and emissions of CI engines powered with alternative fuels. Funded by Deanship of Scientific Research, University of Jordan, 2004.

- 2- Design and testing of Hydrogen-Hybrid electric vehicle Phase (I). Funded by King Abdullah (II) design and Development Bureau and KAFD, 2010.
<http://www.youtube.com/watch?feature=endscreen&v=iOjl2ePgj9I&NR=1>
http://www.youtube.com/watch?v=G7fjm_SMSRg&feature=related
- 3- Design and testing of compressed air vehicle. Funded by Deanship of Scientific Research, University of Jordan, 2008.
- 4- Testing of domestic heating systems (Sobba) using alternative fuels. Funded by Deanship of Scientific Research, University of Jordan, 2011.
- 5- Concept of porous volumetric heating systems. Funded by Deanship of Scientific Research, University of Jordan, 2011.

Practical Experience

- 1- Technical Consultants in Jordanian courts in the automotive areas.
- 2- Worked with the Jordan Petroleum refinery and research center to improve the fuel quality.
- 3- Member of the Combustion team in the Jordan Standards and Metrology Organization for setting the Codes for home appliances that works with combustion.

Published Research

1. Accepted for publication in international journals (Samples only).

1. **Jehad A. A. Yamin**, Zayed Al-Hamamreh and Arwa Sandouqa, "Performance and First-Order Modelling of Biodiesel as Fuel For Domestic Space Heaters In Jordan" Accepted for publication Journal of Engineering Science and Technology to appear in in August 2022, Volume 17 Issue 4
2. Musa O Abdalla, **Jehad A. A. Yamin**, "Multi-Layer Optimization Algorithm" Accepted for publication in Journal of Algorithms and Computational Technology, 2021
3. Ismail I. Hdaib, **Jehad A. A. Yamin**, Eiman Ali Eh Sheet. "Second Law Analysis of Gasoline Powered SI Engines with Hydrogen Injection" Tehnički Vjesnik/Technical Gazette, 28, no. 4 (2021).
4. Jehad A. A. Yamin and Eiman Ali Eh Sheet. "Potential Utilization of Iraqi Associated Petroleum Gas as Fuel for SI Engines". Jordan Journal of Mechanical and Industrial Engineering, 14, no. 3 (2020): 349 - 359
5. Sheet, Eiman Ali Eh, and **Jehad AA Yamin**. "Effect of biodiesel blending with diesel fuel on CI engine performance and energy availability." International Journal of Exergy 32, no. 2 (2020): 213-226.
6. Al-Sheikh, Iyad, and **Jehad AA Yamin**. "Modeling and optimization of jojoba oil extraction yield using Response Surface Methodology." Journal of Pharmacy & Pharmacognosy Research 7, no. 5 (2019): 367-380.
7. Sheet, Eiman A. Eh, **Jehad A. Yamin**, and Wahab K. Ahmed. "Second law analysis of Al-Doura Pool Gasoline." Petroleum Science and Technology 37, no. 9 (2019): 1075-1081.
8. Hafad, Sanaa AA, Eiman Ali Eh Sheet, and **Jehad AA Yamin**. "Comparative Mechanical Behavior of Blended and Hybrid Polymers Composites Under Corrosive Environment Experimental and Analytical Study." (2019).

9. **Yamin, Jehad AA**, Eiman Ali Eh Sheet, and Ahmed A. Al-Amiery. "ANN and DOE Analysis of Corrosion Resistance Inhibitor for Mild Steel Structures in Iraq." *Modern Applied Science* 13, no. 4 (2019).
10. **Yamin, Jehad**, and Ahmad Jehad Abu Mushref. "Performance and mapping of direct injection diesel engine using waste cooking oil biodiesel fuel." *Advances in Mechanical Engineering* 11, no. 5 (2019): 1687814019851679.
11. **Yamin, Jehad**, Ismail I. Hdaib, Eiman Ali Eh Sheet, and Ahmad Jehad Abu Mushref. "RSM analysis of heat balance of direct injection 4-stroke diesel engine using biodiesel fuel." *Biofuels* (2019): 1-11.
12. **Yamin, Jehad AA**, Mohammad SamihHijazi, and Mohammad A. Hamdan. "Effect of Some Oxygenates on the Opacity Level of a DI Diesel Engine with and without DPF." *Modern Applied Science* 13, no. 3 (2019).
13. **JAA Yamin** "Response Surface Modelling of Diesel Engine emissions under Variable Stroke Length and constant Compression Ratio". *Modern Applied Science* 12 (10), 36-42, 2018.
14. **JA Yamin**, EAE Sheet, I Hdaib, "Exergy analysis of biodiesel fueled direct injection CI engines". *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 1-8, 2018.
15. **JAA Yamin** "Performance comparison of a CI engine using diesel and biodiesel fuels and a magnetic fuel conditioner". *Biofuels*, 1-10, 2017.
16. Kapusuz, H Ozcan, **JA Yamin**, "Research of performance on a spark ignition engine fueled by alcohol–gasoline blends using artificial neural networks". *Applied Thermal Engineering* 91, 525-534, 2015.
17. Ala'a M. Al-Falahat, M. A. Hamdan and **Jehad A A Yamin**, "Engine performance powered by a mixture of hydrogen and oxygen fuel obtained from water electrolysis". *International Journal of Automotive Technology*, Vol. 15, No. 1, pp. 97–101, 2014.
18. Zayed Al-Hamamre, **Jehad Yamin** "Parametric study of the alkali catalyzed transesterification of waste frying oil for Biodiesel production". *Energy Conversion and Management*, Volume 79, Pages 246-254, March 2014.
19. Ahmad M. Abu-Jrai, **Jehad A. Yamin**, Khalid A. Ibrahim, Omar A. Al-Khashman, Mouath A. Al-Shaweesh, Muhannad A. Hararah, Umer Rashid, Mohammad Ahmade, Gavin M. Walker, Ala'a H. Al-Muhtaseb, "NO_x removal efficiency and N₂ selectivity during selective catalytic reduction processes over Al₂O₃ supported highly cross-linked polyethylene catalysts" *Journal of Industrial and Engineering Chemistry*. Available online as of 20th August, 2013.
20. Z Al-Hamamre and **J Yamin**, "The effect of hydrogen addition on premixed laminar acetylene–hydrogen–air and ethanol–hydrogen–air flames". *International Journal of Hydrogen Energy*, 2013.
21. **JA Yamin**, N Sakhnini, A Sakhrieh and M A Hamdan, "Environmental and Performance study of a 4-Stroke CI engine powered with waste oil Biodiesel". *Sustainable Cities and Societies*, 2013.
22. Eiman A. Eh. Sheet and **Jehad Yamin** "Improvement of an SI Engine Performance using Modified Al-Doura Pool Gasoline Formulae: Simulation Study". *Arabian Journal for Science and Engineering* 38 (10), 2855-2864, 2013.
23. Eiman A. Eh. Sheet and **Jehad A Yamin** "Performance of a Modified Al-Doura Pool Gasoline". *Petroleum Science and Technology* 31 (20), 2031-2038, 2013.
24. A. Abu-Jrai, **Jehad A. Yamin**, Ala'a H. Al-Muhtaseb, Muhanned A. Hararah, "Combustion characteristics and engine emissions of a diesel engine fueled with diesel and treated waste cooking oil blends". *Chemical Engineering Journal*, Volume 172, Issue 1, 1 August 2011, Pages 129-136.
25. Mohammad A. Hamdan, **Jehad Yamin**, Eman M. Abdel Hafez; "Passive cooling roof design under Jordanian climate". *Sustainable cities and Society* 5, 26-29, 2011.

26. **Jehad A. A. Yamin** and Hakan Ozcan; “Second Law Analysis of an LPG-Powered 4-stroke SI Engine under variable stroke length and compression ratio”. International Journal of Exergy, Vol. 8, No.2 pp. 113 - 127, 2011.

2. Accepted for publication in international conferences.

1. **Jehad A.A. Yamin**, H.N. Gupta and B.B. Bansal, “An Analytical Study on the Effect of Engine Design and Operating Parameters on Heat Loss from Hydrogen Fueled 4-Stroke S.I. Engines”, Proc. of 3rd National Conf. on Thermal Systems, Pub. JBD Book Distributor, New Delhi, pp. 115-124, 2001.
2. Al Abdallat, Y. Al Asfar, J. **J Yamin**, J. and Hamdan, M. A. “Experimental Investigation of Hydrogen Storage in Local Sand”. Engineering Congress on Alternative Energy Application November 2nd – 6th, 2009, KUWAIT
3. A. Sakhrieh; R. H. Fouad and **J. A. Yamin**; “Experimental Study of using emulsified diesel fuel on the performance and pollutants emitted from four stroke water cooled diesel engine”. International Conference on Power Control and Optimization, Bali, Indonesia 1-3, June; 2009.
4. **JA Yamin**, HN Gupta, BB Bansal, ON Srivastava, “Analytical Studies to Optimize The Design and Operating Parameters for A Hydrogen-Fueled 4-Stroke Spark Ignition Engines”. HYDROGEN ENERGY PROGRESS 2, Argentina, 1573-1588, 1998.