

Curriculum Vitae (CV)

Objective: Application for **academic /non-academic** positions related to the detailed qualifications listed in this CV.

Availability: Prior **3 month's** notice after *offer* confirmation and **VISA** approval (if applicable).

1. PERSONAL DETAILS

Name: WAEL A. Y. SALAH

Gender: Male

Date of Birth: 21 August, 1978

Marital status: Married (1 Child)

Passport: **Jordanian** Passport

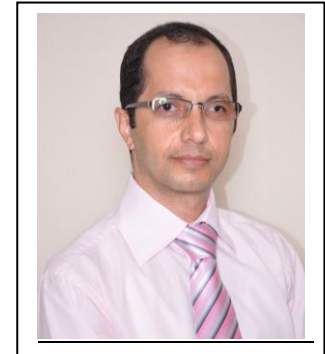
Mother tongue: Arabic

Other Languages: English, Malay

Nationality: **Palestinian**

Web Page: https://www.researchgate.net/profile/Wael_Salah/

<http://www.linkedin.com/in/engwaelsalah>



Contact Details:

Mobile: **+970**-..... (Palestine)

Skype: “ **waelsalah78** ”

E-mail : **waelsalah.dr@gmail.com**

2. ADDRESS

Current Address:

Dr. Wael A. Y. Salah

College of Engineering and Technology, Palestine Technical University - Kadoorie Tulkarm, Palestine.

Home Address:

Madina Munawara Street, Ras-aljura, Dahiyat Al-Ramah, Hebron, West Bank, Palestine.

3. EDUCATION SUMMARY

Year	Degree	University	Country	Major/ Minor/ Period
2012	Doctorate Ph.D	Universiti Sians Malaysia	Malaysia	Electrical and Electronic Engineering Power Electronics and Devices (4 Years)
2007	Masters MSc	Universiti Sians Malaysia	Malaysia	Electrical and Electronic Engineering Power Electronics and Energy (2 Years)
2001	Bachelor B. Eng.	Palestine Polytechnic University	Palestine	Electrical and Computer Engineering Industrial Automation Engineering (5 Years)

4. WORK EXPERIENCE

<i>From - To</i>	<i>Position</i>	<i>Place/Address</i>	<i>Main Responsibilities / Courses</i>
07/2001-08/2003	Technical Engineer [2 Years]	SGE Computer and Electronics Repair <i>Hebron, Palestine</i>	- Electrical and electronic appliances maintenance. - Computers software/hardware troubleshooting.
09/2003-08/2005	Teacher & Technical Support [2 Years]	Palestine Ministry of Education and Higher Education <i>Hebron, Palestine</i>	- Technology - Science Principles - Mathematics - Technical Support for office electronics.
07/2005-08/2007	Research Assistant [2 Years]	Universiti Sains Malaysia (USM), Engineering Campus <i>Pulau Pinang, Malaysia</i>	- Researcher & M.Sc Candidate. - Final Year Project Assistant Supervisor
10/2007-02/2008	Lecturer (Part-time) [0.5 Years]	Alquds Open University (QOU) Doraa Branch/Hebron, <i>Palestine</i>	- Introduction to Computer Principles
03/2008-06/2011	Teaching and Research Assistant [4 Years]	Universiti Sains Malaysia (USM), Engineering Campus <i>Pulau Pinang, Malaysia</i>	Research Fellow & Ph.D Candidate - Electrical Machines and Drives - Digital Electronics Lab. - Analogue Electronics Lab. - Power Electronics Lab. - Electrical Lab. - Final Year Project Assistant Supervisor
10/2012-07/2014	Lecturer [2 Years]	Faculty of Engineering, Multimedia University (MMU), Cyberjaya, <i>Malaysia</i> .	*Teaching:- Electronics I, II & Electronics III - Power Electronics - Final Year Projects *Research *Administrative duties
08/2014-01/2018-	Assistant Professor [3.5 Years]	College of Engineering and Technology, Palestine Technical University– Kadoorie (PTUK). <i>Tulkarm, Palestine</i>	* Teaching: - Circuits Theory I & II, - Measurement Techniques - Electronics, Electronics 1 & 2 * Research * Administrative duties
02/2018- Present	Associate Professor	College of Engineering and Technology, Palestine Technical University– Kadoorie (PTUK). <i>Tulkarm, Palestine</i> .	* Teaching: Electrical and Electronics courses * Research * Administrative duties

5. TEACHING PREFERENCES

Teaching Experiences

- Technology and Math (*High school level*)
- Introduction to Computer and Programming
- Electronics, Electronics I, Electronics II, Electronics III
- Electrical Circuits: I (DC Circuits), Circuits II (AC Circuits)
- Electrical Measurement and Instrumentation Techniques
- Power Electronics
- Electrical Installations and Lighting Technology
- Measurement and Instrumentation Lab
- Electronics Lab
- Electrical Circuits Lab
- Power Electronics Lab

Teaching Interests

- Electrical Drives
- Electrical Machines Principles
- Microcontroller Basics and Applications
- Analogue Electronics
- Programmable Logic Control (PLC)
- Digital Logic Design

6. PROFESSIONAL QUALIFICATIONS

- **IEEE Senior Member**, Member Number: **90870600**.
- **Member** of Jordanian Institute of Engineers (JIE)/Jerusalem Branch: **#19420/04**.
- **Member** of Federation of Arab Engineers, Member Number: **#11/207**.
- **Member** of the International Association of Engineers (**IAENG**), Membership: **#121249**.

7. AWARD AND RECOGNITION

- 1- **USM Fellowship** for pursuing PhD degree at Universiti Sians Malaysia during 2008-2011.
- 2- **Excellent Publication Award “Saggar Sanjun”** awarded for the year **2009** by Universiti Sians Malaysia.
- 3- **Excellent Publication Award “Saggar Sanjun”** awarded for the year **2010** by Universiti Sians Malaysia.
- 4- **IEEE “Senior Member” status** since **2013**.
- 5- **Elsevier Recognized Reviewer Status**, awarded since June **2015**.
- 6- **Elsevier Outstanding reviewer: Energy Conversion and Management**, Achieved: May **2015**.
- 7- **Publon, Sentinels of Science Award**, December **2016**.
- 8- **Publon , 2017 Peer Review Week Award: Top 1% of peer reviewers in Multidisciplinary.**

8. RESEARCH EXPERIENCE AND INTERESTS

1. DC-DC Converters Design and Applications
2. PM Brushless DC Motor Control and Drives
3. Power Quality Improvement.
4. Renewable Energy Application and Design
5. Energy Efficiency and Management
6. Microcontrollers Applications in Power and Drives
7. Contactless Speed Measurement.
8. High precision impedance measurement.

9. LANGUAGES

<i>Language</i>	<i>Reading</i>	<i>Writing</i>	<i>Speaking</i>
Arabic	Excellent	Excellent	Excellent
English	Excellent	Excellent	Very Good
Malay	Very Good	Good	Fair
Others	Fair	Fair	Fair

10. REFERENCES

Soib Taib, Dr. (Associate Professor)

Univeristi Sians Malaysia (USM), School of Electric and Electronic Engineering, Pulau Pinang, Malaysia.
Master Degree Supervisor. **E-mail: soibtaib@usm.my**, Tel: +604-5936012, Fax: +604-5941023.

Dahaman bin Ishak, Dr. (Associate Professor)

Univeristi Sians Malaysia (USM), School of Electric and Electronic Engineering, Pulau Pinang, Malaysia.
Master Degree Examiner. PhD Degree Supervisor. **E-mail: dahaman@usm.my**, Tel: +604-5935810, Fax: +604-5941023.

Abdel Qader Al-Zaro, (Engineer)

Palestine Polytechnic University (PPU), Hebron, West Bank, Palestine.
The academic supervisor during bachelor study [1996-2001]. E-Mail: **zaro@ppu.edu**.

Hin-Yong WONG, Dr. (Professor)

Dean Faculty of Engineering, Multimedia University, 63100 Cyberjaya, Selangor, Malaysia.
E-mail: **enginfo@mmu.edu.my**, Tel: +603 - 8312 5258.

Mutamed Al-KatteeB, Dr. (Associate Professor)

Dean College of Engineering and Technology, Palestine Technical University – Kadoorie, Palestine.
E-mail: **mutamed@yahoo.com**.

PUBLICATIONS LIST

A. BOOKS

[1] **Wael A. Y. Salah**, “PROSPECTIVE AND DESIGN OF THERMO ELECTRIC COOLING APPLICATIONS Thermo Electric Cooling for Outdoor Applications Using Photovoltaic Panels and Multistage DC Converter”, LAP Lambert Academic Publishing, Saarbrücken, Germany (07/2013). [ISBN: 978-3-659-41667-5]

[2] **Wael A. Y. Salah**, “ DEVELOPMENT OF MODIFIED PWM TECHNIQUE TO MINIMIZE TORQUE RIPPLES IN PERMANENT MAGNET BRUSHLESS DC MOTORS”, LAP Lambert Academic Publishing, Saarbrücken, Germany (02/2014). [ISBN: 978-3-659-48259-5].

B. PEAR REVIEWED JOURNALS

2009

[1] Al-Mofleh, Anwar, Taib, Soib, Mujeebu, M. Abdul, & **Salah, Wael**. 2009. Analysis of sectoral energy conservation in Malaysia. *Energy- The International Journal*, Vol. 34(6), pp. 733-739. [ISSN: 0360-5442] [**ISI Indexed**][IF: 2.952] [<http://ees.elsevier.com/egy>]. [<http://dx.doi.org/10.1016/j.energy.2008.10.005>]

[2] **Wael Salah**, Soib Taib, Anwar Al-Mofleh, 2009, Development of TEC System For Commercial Cooling Applications. “Modern Applied Science”, Canadian Center of Science and Education, Vol. 3, No. 4, pp. 203-208, April 2009.

[3] Anwar Al-Mofleh, Soib Taib, **Wael Salah** and Mokhzaini Azizan, 2009, Prospective of Energy Efficiency Practice, Indicator and Power Supplies Efficiency, “Modern Applied Science”, Canadian Center of Science and Education, Vol. 3, No. 5, pp. 158-161, April 2009.

2010

[4] **Wael Salah**, Soib Taib and Anwar Al-Mofleh. 2010, Development of Multistage Converter for Outdoor Thermal Electric Cooling (TEC) Applications, *Jordan Journal of Mechanical and Industrial Engineering (JJMIE)*, Hashemite University, Vol. 4, No. 1, pp. 15-20, Jan. 2010. [ISSN: 1995-6665]

[5] Anwar Al-Mofleh, Soib Taib and **Wael A. Salah**, 2010, Malaysian Energy Demand and Emissions from Transportation Sector, *Journal Transport*, Vol. 25 (4), pp. 448-453. [ISSN: 1648-4142] [**ISI Indexed**] [<http://www.tandf.co.uk/journals/TRAN>]. [DOI:10.3846/transport.2010.55]

[6] **Wael. A. Salah**, Dahaman Ishak, Khaleel J. Hammadi, 2010, "Minimization of torque ripples in BLDC motors due to phase commutation - a review," *Przeglad Elektrotechniczny*, vol. 87 (1), pp. 182-188, 2011. [ISSN: 0033-2097] [**ISI Indexed**] [<http://pe.org.pl>]

2011

[7] **Wael. A. Salah**, Dahaman Ishak, Khaleel J. Hammadi, Soib Taib, 2011, "Development of BLDC Motor Drive with an Improved Output Characteristics" *Przeglad Elektrotechniczny*, vol. 87 (3), pp. 258- 262. [ISSN: 0033-2097] [**ISI Indexed**] [<http://pe.org.pl>]

[8] Khaleel J. Hammadi, Dahaman Ishak, Salem Bin Saadon and **Wael A. Salah**, 2011, “Monitoring and simulation of three-phase squirrel-cage induction motor with broken rotor bars by using virtual instruments (VIs)”. *Optoelectronics and Advanced Materials, Rapid Communications*, Vol. 5, pp. 287-290. [ISSN: 1842-6573] [**ISI Indexed**] [<http://oam-rc.inoe.ro>].

[9] **Wael A. Salah**, Dahaman Ishak and Khaleel J. Hammadi, 2011, “PWM Switching Strategy for Torque Ripples Minimization in BLDC Motor”, *Journal of Electrical Engineering*, Vol. 62, Issue 3. [ISSN 1335-3632] [**ISI Indexed**] [<http://iris.elf.stuba.sk/JEEEC>]. [DOI: 10.2478/v10187-011-0023-1]

2013

[10] **Wael Salah**, Soib Taib, Anwar Al-Mofleh and Hamza A. Ghulman. 2013, "Solar Powered Air Conditioning by Aid of TEC for Mina Tents Application", International Journal of Scientific Research in Knowledge (IJSRK), Vol. 1, Number 2, pp. 25-33, Feb. 2013. [ISSN: 2322-4541] [DOI: <http://dx.doi.org/10.12983/ijrsk-2013-p025-033>]

[11] **Wael A. Salah**, 2013, "Comparison of Performance Characteristics of PM BLDC Motor with PWM and Hysteresis Controller." Advances in Modelling C, vol. 68 (3). [Scopus Indexed].

[12] Khaleel J. Hammadi, Dahaman Ishak and **Wael A. Salah**, 2013. "Analysis and Comparison of the Effect of Different Broken Bars Locations in Three-phase Induction Motor", Modelling, Measurement and Control A, vol. 86 (1). [Scopus Indexed].

2014

[13] **Wael A. Salah**, Dahaman Ishak, Amir Abu_Al_Aish, Basem Abu Zneid and Anees Abu Sneineh, 2014. "Commutation Time Estimator For BLDC Motor Torque Signature Enhancement" Journal of Engineering Science and Technology Vol. 9, Issue 6, pp. 789-799. [ISSN: 1823-4690] [Scopus Indexed]

2015

[14] Al-Mofleh, A., A. Quteishat and **W. Salah**, 2015. "The Malaysian Energy Scenario and the Need for a SCADA System." Energy Sources, Part B: Economics, Planning, and Policy 10(4), pp. 381-387. [ISI Indexed]

[15] **Salah, W. A.**, Ishak, D., Zneid, B. A., Abu_Al_Aish, A., Jadin, M. S. & Abu Sneineh, A., 2015. *Implementation of PWM control strategy for torque ripples reduction in brushless DC motors*. Electrical Engineering, vol. 97(3), pp. 239-250. [ISSN: 0948-7921] [ISI Indexed]

2016

[16] **Wael A. Salah**, Ariff B Musa, Basem Abu Zneid, Anees Abu Sneineh and Mohd Shawal Jadin, 2016. "Implementation of Virtual Instruments as a Power Quality Analysis Tool," Journal of Low Power Electronics, vol. 12(2), pp. 83-90, 2016. [ISSN: 1546-2005] [Scopus Indexed].

[17] **Wael A. Salah**, Soib Taib and Anwar Al-Mofleh, (2016). "Energy Efficiency Practices in power supplies: Scenario and Solution", Energy Sources, Part B: Economics, Planning, and Policy, Vol. 11 (2), pp. 182-190. [ISSN: 1556-7257] [ISI Indexed] [<http://www.tandf.co.uk/journals/uesb>].

[18] Anwar Al-Mofleh, Anas Quteishat and **Wael A. Salah**, Sultan Qoussouse, Mohammad Subhi Al-Batah, (2016). "A Survey of Energy Conservation and Management Options for Malaysia", Energy Sources, Part B: Economics, Planning, and Policy, Vol. 11(7), pp. Page 580-586. [ISSN: 1556-7257] [ISI Indexed] [<http://www.tandf.co.uk/journals/uesb>].

2017

[19] Anees Abu Sneineh and **Wael A. Salah**, "Palestine Automotive License Identity Recognition for Intelligent Parking System" 2017. Journal of Engineering Science and Technology, Volume 12, Issue 5, May 2017. [ISSN: 1823-4690] [Scopus Indexed].

[20] **Salah, W. A.** and A. A. Sneineh (2017). "Exploring the Knowledge and Attitude of Engineering Students in the Imitation of Theoretical Knowledge." Modern Applied Science 11(8): 74-78.

2018

[21] Anees A. Sneineh and Wael A. Salah, 2018, "Modelling of a high-speed precision robot for microelectromechanical systems bonding process application", *Maejo Int. J. Sci. Technol.*, 12(01), 51-69.

C. INTERNATIONAL CONFERENCES

2006

[1] **Wael A Y Salah** and S Taib, Improvement of Transformerless 200W SMPS Using CUK DC-DC Converter. Proceedings of the *IEEE* 2nd International Power and Energy Conference PECon 2006. Putrajaya, Malaysia. 28-29 November, 2006.

[2] S. Taib, A. Anwar, and **W. Salah**, “Energy Efficiency Practice: Concept, Indicator and Benefit”, Proceedings of the JSPS-VCC Group Seminar 2006, National Resources and Energy Environment. Johor Bahru, Malaysia. 11-12 December, 2006.

2007

[3] Al-Mofleh A, S. Taib and **Wael Salah**, “Energy Policy and Energy demand for Malaysian Development Energy Efficiency”, Proceedings of the 1st Power Engineering and Optimization Conference 2007 (PEOCO2007). Shah Alam, Malaysia. 6th June 2007.

[4] **Wael Salah**, Soib Taib and Anwar Al-Mofleh, “TEC System and its Potential for Cooling Applications”, Proceedings of the 6th International Conference on Robotics, Visions, Information and Signal Processing (ROVISP 2007). Park Royal Hotel, Penang Island, Malaysia. 28-30 November, 2007.

[5] Anwar Al-Mofleh, Soib Taib and **Wael Salah**, “Energy Efficiency Improvement and Barriers: USM Practices”, Proceedings of the 6th International Conference on Robotics, Visions, Information and Signal Processing (ROVISP 2007). Park Royal Hotel, Penang Island, Malaysia. 28-30 November, 2007.

[6] A. Al-Mofleh, S. Taib and **W. Salah**, “USM Approaches on Energy Efficiency: Benefits, and Solutions”, Proceedings of the International conference on Engineering & ICT. Equatorial Hotel, Melaka, Malaysia. 27 & 28 Nov. 2007.

[7] **W. Salah**, S. Taib and A. Al-Mofleh, “Development of DC Converter for Low Voltage High Current Applications Using CUK DC Converter”, Proceedings of the 1st Engineering Conference "Energy & Environment" (EnCon2007). Crowne Plaza Riverside Hotel, Kuching, Sarawak, Malaysia. 27-28 Dec. 2007.

2008

[8] Anwar Al-Mofleh, Soib Taib, Hamza. Al-Gulman, and **Wael Salah**, “Improvement of Building Energy Efficiency Performance by Energy 10 Tools”, Proceedings of the 2nd International Power Engineering and Optimization Conference (PEOCO2008), Shah Alam, Selangor, Malaysia, 4-5 June 2008.

[9] **Wael Salah** and Dahaman Ishak. “Development of 5kW Full-Bridge Inverter for Electric Vehicle Motor Control”, Proceedings of the The 1st Postgraduate colloquium (EEPC’08), School of Electrical and Electronic Engineering, Engineering Campus, USM, 18th August 2008, Pulau Penang, Malaysia. (*National*)

[10] A. Al-Mofleh, S. Taib , H. Al-Gulman ,**W. Salah**, "Energy Efficiency Analysis on Malaysian Transportation Sector", International Conference on Energy Security and Climate Change: Issues, Strategies, and Options (**ESCC 2008**) Sofitel Centara Grand, Bangkok, Thailand. 6-8 August 2008.

[11] **Wael Salah**, Soib Taib and Anwar Al-Mofleh, “The Potential for Commercial Applications of TEC Cooling System”, Proceedings of the 2nd International Conference on Science and Technology (ICSTIE2008), Universiti Teknologi MARA Pulau Pinang, Pulau Pinang, Malaysia, 12th – 13th December 2008.

[12] Anwar Al-Mofleh, Soib Taib, **Wael Salah**, and Mokhzaini Azizan, “Importance of Energy Efficiency: From the Perspective of Electrical Equipments”, Proceedings of the 2nd International Conference on Science and Technology (ICSTIE2008), Universiti Teknologi MARA Pulau Pinang, Pulau Pinang, Malaysia, 12th – 13th December 2008.

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[13] Al-Mofleh, Anwar, Taib, Soib, Mujeebu, M. Abdul, Hamza, Al-Gulman and **Salah, Wael**. “Approach to Energy Management: USM Practices”, Proceedings of the Global Conference on Renewables and Energy Efficiency for Dessert Regions 2009 (GCREEDER 2009), Amman-Jordan, 31st March – 2nd April 2009.

[14] **Wael Salah**, Soib Taib and Anwar Al-Mofleh “Development Of Multistage Converter Using Cuk Converter For Thermal Electric Cooling Applications”, Proceedings of the International Conference And Exhibition On

Green Energy & Sustainability For Arid Regions & Mediterranean Countries (ICEGES 2009), Le Royal Hotel Amman, Jordan November, 10-12, 2009.

[15] **Wael Salah** and Dahaman Ishak, “Motor Drive System for PM Brushless DC Motor Using PIC Microcontroller”, The 2nd Postgraduate colloquium (EEPC’09), School of Electrical and Electronic Engineering, Engineering Campus, USM, 2nd November 2009, Bukit Jawi Golf Resort, Pulau Penang, Malaysia. (*National*)

[16] **Wael Salah** and Dahaman Ishak. “Design and Development of BLDC Motor Drive for Underwater Vehicles”, Proceedings of the 1st USM Fellowship Holders Symposium, 14 & 15 November 2009. (Abstract book ISBN: 976-967-5417-483). (*National*)

[17] **Wael Salah**, Dahaman Ishak and Khaleel J. Hammadi. “Development of PM Brushless DC Motor Drive System for Underwater Applications”, Proceedings of the 7th IEEE Student Conference on Research and Development (SCOReD 2009), 16-18 Nov. 2009, UPM Serdang, Malaysia. (IEEE Explore Indexed). http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=5442989.

2010

[18] Khaleel J. Hammadi, Dahaman Ishak and **Wael A. Y. Salah**. “Rotor Fault Diagnosis Based on Current Signatures in Squirrel-Cage Induction Motor”, Proceedings of the 2010 International Conference on Electronic Devices, Systems & Applications (ICEDSA 2010), 11 - 13 April 2010, Kuala Lumpur, Malaysia. IEEE Catalog Number:CFP1057J-ART,(ISBN: 978-1-4244-6632-0). <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5503075>.

2011

[19] **Wael A. Salah**, Dahaman Ishak and Khaleel J. Hammadi, “Modified PWM Switching Strategy to Minimize Torque Ripples in BLDC Motor Drives”. The 7th Jordanian International Electrical and Electronics Engineering Conference (JIEEEEC 2011), from 11 - 14 April 2011 Amman, Jordan.

2017

[20] Dahaman Ishak, Mohd Rezal and **Wael A. Salah**, “*Performance Analysis of Permanent Magnet Synchronous Machines based on Analytical Subdomain Model and Particle Swarm Optimization*”. The 10th AUN/SEED-Net Regional Conferences on Electrical and Electronic Engineering 2017 and 18th International Seminar on Intelligent Technology and Its Application 2017 (AUNRCEEE-ISITIA 2017). Bumi Surabaya Hotel, Surabaya, Indonesia 28th - 29th of August 2017

[21] Mohd Rezal, Dahaman Ishak and **Wael A. Salah**, “*Multiobjective design of permanent magnet synchronous machines based on analytical sub-domain particle swarm optimization*”. 2017 IEEE Conference on Energy Conversion (CENCON 2017), Kuala Lumpur, Malaysia, 30–31 October 2017, pp. 230-235.

[22] Mohd Shawal Jadin, Ng Boon Khai, Norizam Sulaiman, **Wael A. Salah** , “*Hotspot Detection for Wall-Mounted Air-Conditioner System*”, 2017 International Conference on Promising Electronic Technologies (ICPET), Palestine Technical College - Deir El-Balah, College Street, Deir El-Balah, Palestine, 16 Oct - 17 Oct 2017.

[23] Mahmoud A. M. Albreem, Ayman A. El-Saleh, Muzamir Isa, **Wael A. Salah** and Muzammil Jusoh. “*Green Internet of Things: An Overview*”. 2017 IEEE 4th International Conference on Smart Instrumentation, Measurement and Applications (ICSIMA 2017) Putrajaya, 28 – 30 November 2017.