CURRICULUM VITAE		
PERSONAL DETAILS		
Full Name	DR. ARAFAT ABDALLAH ABDELWADOD SHABANEH	
Address	Natania St.-Tulkarem-Westbank-Palestine	
Telephone	1523	**Mobile** — 00972592330033
E-mail	a.shabaneh@ptuk.edu.ps	**Date of birth** — Augest, 30, 1984
Nationality	Palestinian	**Marital Status** — Married

Education	
	1- B.Sc. of Applied Electronics, Palestine Polytechnic University (PPU), Hebron, Palestine, 2006. 2- MSc in Communication Engineering, International Islamic University (IIUM), Gombak, Malaysia, 2011. 3- PhD in Photonics and Fiber Optic Systems Engineering, Universiti Putra Malaysia (UPM), Serdang, Malaysia, 2015.
Comprehensive Experience	
7/2008-12/2008	Part time Grader for Electronics Instrumentation and Measurements, IIUM.
12/2008- 4/2009	Part time Grader for Linear Algebra and Differential Equations, IIUM.
7/2009- 12/2009	Part time Grader for Computational Methods and Statistics, IIUM.
12/2009- 11/2010	Part time Demonstrator for Electrical Circuits Engineering Lab I, IIUM.
07/2006-09-2007	Al-Eshraqa company for student's application, commercial fields and devices maintenances.
01/2004-01-2005	Al-Tamimi laboratory for electronics- commercial fields and devices maintenances.

4th July 2009	Trainer in MATLAB Workshop, IIUM, Malaysia.
09-11/07/2010	Camp Trainer in Arabic language for Malaysian students, Klang, Malaysia.
12/2010 - 04/2011	Part time Demonstrator for Electrical Circuits Engineering Lab I and Lab II, IIUM.
07/2012 - 05/2015	Research Assistant and Lab Demonstrator, Department of Computer and Communication Systems, Engineering, Faculty of Engineering, Universiti Putra Malaysia.
02/2015 - 04/2015	Research Assistant, Photonics Lab, Faculty of Engineering, University of Malaya.
08/2016-Now	Lecturer (Professor Assistant) at Palestine Technical University – Kadoorie.
Thesis Researches	1- Design and Fabrication of a Radio FM Wave Frequency, Palestine Polytechnic University, Hebron, Palestine, 2006. 2- Design of a Satellite RF Receiver at Ku-Band for Tropical Region, IIUM, Malaysia, 2010. 3- Development of Chemical Sensors Based On Tapered Optical Fiber Tip Coated With Nanostructured Thin Films. Universiti Putra Malaysia, 2015.
Patent	AMMONIA GAS SENSOR USING TAPERED OPTICAL FIBER COATED WITH ZINC OXIDE NANOSTRUCTURES NEED. Inventors **Arafat A. A. Shabaneh**, Hanif Yaacob Publication date 2018/10 Patent number NO. PI 2016700567
Language Skill	Speaking Reading Writing Arabic: Excellent Excellent Excellent English: Very good Very good Very good Hebrew: fair Good Good Malay: fair Good Very good
Areas of Interest	Photonics Nanotechnology Optical Sensors Communications and Optoelectronics (systems and devices) Optical chemicals sensor
Membership	Member, Institute of Electrical and Electronics Engineers (IEEE), USA Member, The Optical Society (OSA), USA

Training Workshops	1- Training on MATLAB Fundamentals Introduction to Simulink, IIUM, 16th, 17th &23th August 2008.
	2- Series of Workshop on CATIA V5 Sketcher and Part Design, IIUM, 28th February-1st March 2009.
	3- Participated in Robocon Workshop, IIUM, 29th June-3rd July 2009.
	4- Participated in MATLAB Workshop, IIUM, 4th July 2009.
	5- Participated in Adobe Photoshop Workshop, IIUM, 6th – 7th July 2009.
	6- Participated in Adobe After Effects Workshop, IIUM, 8th – 9th July 2009.
	7- K-chart Workshop, University Putra Malaysia, 2012
	8- Training Of Trainers (TOT), Cambridge Training College Britain, 40 Hours, 10-16/12/2014, Issued In Britain On 06/01/2015.
	9- Workshop on X-ray Diffraction (XRD), University Putra Malaysia, 2015
	10- Workshop on Computational Photonics with MATLAB, University Putra Malaysia, 2015.
Publications	**A.1 Refereed Journal Articles:**
	1. **A. A. Shabaneh**, S. Girei, P. Arasu, S. Rashid, Z. Yunusa, M. Mahdi, S. Paiman, M. Z. Ahmad, M. H. Yaacob, "Reflectance Response of Optical Fiber Coated with Carbon Nanotubes for Aqueous Ethanol Sensing," *IEEE Photonics Journal*, vol. 6, December 2014. IF= 2.32, (Q1).
	2. **Arafat Shabaneh**, Saad Girei, Punitha Arasu, Mohd Mahdi, Suraya Rashid, Suriati Paiman and Mohd Yaacob, "Dynamic Response Of Tapered Optical Multimode Fiber Coated With Carbon Nanotubes For Ethanol Sensing Application," *Sensors,* 2015. IF= 2.048, (Q1).
	3. **A. A. Shabaneh**, S. Girei, P. Arasu, W. Rahman, A. Bakar, A. Sadek, H.N. Lim, N.M. Huang, M.H. Yaacob, "Reflectance response of tapered optical fiber coated with graphene oxide nanostructured thin film for aqueous ethanol sensing," *Optics Communications*, vol. 331, pp. 320-324, 2014. IF= 1.323, (Q2).
	4. **A. A. Shabaneh**, A. M. Ali, C. K. Ng, N. K. Noordin, A. Sali, and M. H. Yaacob, "Review of Energy Conservation Using Duty Cycling Schemes for IEEE 802.15.4 Wireless Sensor Network (WSN)," *Wireless Personal Communications,* pp. 1-16, 2014. IF= 1.0, (Q3).
	5. **A. A. Shabaneh**, P. T. Arasu, S. H. Girei, S. Paiman, M. A. Mahdi, W. B. Rahman, A. A. Bakar, M. H. Yaacob, "Dynamic Response of Zinc Oxide Nanocrystalline Coated on Tapered Optical Fiber for Ammonia Sensing". Will submitted to *"Sensors and Actuators B: Chemical"* after the patent registration. IF= 3.840, (Q1).
	6. **A. A. Shabaneh**, "Investigative Modeling of Symmetric Fiber Bragg Grating as Dispersion Compensation for Optical Transmission System", Optica pura y aplicada 53 (4), 7, 2020.
	7. S. H. Girei, **A. A. Shabaneh**, P. T. Arasu, H. N. Lim, N. M. Huang, M. A. Mahdi, M. H. Yaacob "Absorbance response of graphene oxide coated on tapered multimode optical fiber towards liquid ethanol" *Journal of the European Optical Society*. 2015. IF= 1.152, (Q3).

8. S.H. Girei, **A. A. Shabaneh**, H.N. Lim, M.N. Hamidon, M.A. Mahdi, M.H. Yaacob. "Tapered optical fiber coated with graphene based nanomaterials for measurement of ethanol concentrations in water" *Optical review*. 2015. IF= 0.69, (Q3).

9. P. Arasu, A. Noor, **A. A Shabaneh**, S. Girei, M. Mahdi, H. N. Lim, H. A. Abdul Rashid, M. H. Yaacob, "Absorbance properties of gold coated fiber Bragg grating sensor for aqueous ethanol," *Journal of the European Optical Society-Rapid publications,* vol. 9, pp. 14018, May 2014. IF= 1.152, (Q3).

10. P. T. Arasu, A.S.M. Noor, **A. A. Shabaneh**, M. H. Yaacob, S. H. Girei, H. N. Lim, Yusser Al-Qazwini, M. A. Mahdi, "Fiber Bragg Grating Assisted Surface Plasmon Resonance Sensor with Graphene Oxide Sensing Layer". Optics Communications, 2016, 380, 260-266 IF= 1.323, (Q2).

11. Zainab Yunusa, Mohd Nizar Hamidon, Alyani Ismail, Maryam Mohd Isa, Mohd Hanif Yaacob, Siti Azlida Ibrahim, Saeed Rahmanian, **Arafat Shabaneh**, "Development of a Hydrogen Gas Sensor Using Double Saw Resonator System at Room Temperature". 2015, *Sensors*. IF= 2.048,(Q1).

12. Wan Baihaqi Wan Ab Rahman, Nur Hidayah Azeman, Nur Hasiba Kamaruddin, P Susthitha Menon, **Arafat A Shabaneh**, Mohd Adzir Mahdi, Mohd Hadri Hafiz Mokhtar, Norhana Arsad, Ahmad Ashrif A Bakar, "Label-free detection of dissolved carbon dioxide utilizing multimode tapered optical fiber coated zinc oxide nanorice", IEEE Access 2018, 7, 4538-4545.

13. F. Erman, A. Ismail, RSAR Abdullah, ARH Alhawari, **A. Shabaneh**, N Mohamed, "UHR RFID ring resonator-based tag antenna with photonic bandgap structure for metallic objects", Journal of Fundamental and Applied Sciences 9 (3S), 630-636, 2017.

A.2 Reviewed Conference Proceedings:

14. **A. A. Shabaneh**, P. Arasu, S. Girei, S. Paiman, M. Mahdi, N. M. Huang, M. Yaacob, "Reflectance response of optical fiber sensor coated with graphene oxide towards ethanol," *4th IEEE International Conference on Photonics (ICP)*, pp. 272-274, 2013, Malaysia.

15. **A. A. Shabaneh**, S. H. Girei, P. T. Arasu, S, Rahmanian, M. H. Yaacob "Reflectance response of tapered optical multimode fiber coated with carbon nanotubes for ethanol sensing application" *7th Asia-pacific conference on transducers and micro/nanotechnologies*, Korea.

16. **A. A. Shabaneh**, S. H. Girei, F. S. Mohamad, S. A. Ibrahim, A. Lateef, N. Abdul Rahman, M. A. Mahdi, S. Paiman and M. H. Yaacob, "Reflectance Response of Tapered Multimode Fiber Coated With Polyaniline for Ammonia Sensing". *The 4th Advanced Lasers and Photon Sources (ALPS'15)*, Yokohama, Japan, Apr. 22 - Apr. 24, 2015.

17. P. T. Arasu, **A. A. Shabaneh**, S. H. Girei, M. H. Yaacob, A. S. M. Noor, "Enhancement of fiber-SPR sensor utilizing graphene oxide."

4th *IEEE International Conference on Photonics (ICP)*, pp.148-150, 2013, Malaysia.

18. S. Girei, **A. Shabaneh**, P. Arasu, S. Painam, and M. Yaacob, "Tapered multimode fiber sensor for ethanol sensing application," 4th *IEEE International Conference on Photonics (ICP)*, pp. 275-277, 2013, Malaysia.

19. Wan Baihaqi Wan Ab Rahman, Nur Hidayah Mohd Zawawi, Ahmad Ashrif A. Bakar, **A. A. Shabaneh**, Mohd Hanif Yaacob, "Fiber Optic Sensor based on Evanescent Wave Technique Coating with Zinc Oxide to Detect Carbon Dioxide in Aqueous". *The Second International Conference on Defence and Security Technology (DSTC)*, Malaysia, 2014.

20. **Arafat A. A. Shabana,** Md Rafiqul Islam, AHMZ Alam, Sheroz Khan, "Design of a Low Noise Amplifier with GaAs MESFET at Ku-Band" International Conference in Communication and Computer Engineering, IIUM, KL, Malaysia, May 2010.

21. Presenting a poster entitled for "Link Budget and Rain Attenuation Calculations for the Transmission from MEASAT_2 and ARABSAT_2B (The differences between Malaysia and Palestine)", Research for a Better Tomorrow, University of Nottingham Malaysia Campus, August 2009.

22. Presenting a poster for IIUM Research, Invention and Innovation Exhibition IRIIE 2011, "Design of Satellite Receiver at Ku-Band for Tropical Region" Poster for Department of Electrical and Computer Engineering, Faculty of Engineering, International Islamic University Malaysia P.O. Box: 10, 50728 Kuala Lumpur, Malaysia.

23. AL Khalaf, FS Mohamad, PT Arasu, **A. A. Shabaneh**, N Abdul Rahman, HN Lim, S Paiman, NA Yusof, MA Mahdi, MH Yaacob, "Modified plastic optical fiber coated graphene/polyaniline nanocompositefor ammonia sensing", 2016 IEEE 6th International Conference on Photonics (ICP), 1-3.

24. FN Erman, A Ismail, RSAR Abudullah, ARH Alhawari, **A. A. Shabaneh**, "UHF RFID split-ring resonator tag antenna inductively coupled feed for metallic object", 2015 IEEE 12th Malaysia International Conference on Communications (MICC), 74-76.

25. **Arafat A. A. Shabaneh, "**Design of a Strain Sensor Based on Cascaded Fiber Bragg Grating for Remote Sensing Monitoring", *Conference Proceedings, Barcelona Spain October 25-26, 2021.*

A.3 Book Chapter:

26. Ahmed Lateef Khalaf, **Arafat Abdallah Abdelwadod Shabaneh**, Mohd Hanif Yaacob, "Carbon Nanotubes and Graphene Oxide Applications in Optochemical Sensors", Synthesis, Technology and Applications of Carbon Nanomaterials, 223-246, 2019.

Computer Skills	1-Experience in Microsoft Applications (Word, Excel, Power Point, Access…..).
	2-Experience in Internet Applications.
	3-Experience in Photoshop and Flash MX.
	4- Experience in AWR (Microwave Office Simulator).
	5- Experience in Google Sketch.
	6- Experience in Microsoft Visio, Professional Diagram & Flow Chart.
	7- Experience in Endnote Reference Manager.
	8- Experience in CST - Computer Simulation Technology.
	9- Experience in Microwave Office - RF/Microwave Circuit Design.
	10- Experience in OptSim™ Circuit – Photonic Circuit Design & Simulation.
	11- Experience in VPI photonics: Simulation Software and Design Services.
Referees	1- Professor Mohd Hanif Yaacob
	Department of Computer & Communication Systems Eng., Faculty of Engineering, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia.
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	2- Professor Mohd Adzir Mahdi
	Department of Computer & Communication Systems Eng., Faculty of Engineering, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia.
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