CURRICLUM VITAE

Personal Data:

Full Name: Ahmad Yousef Ahmad Omar

Date & Place of Birth: April 14, 1963. Faroun, Tulkarm.

Nationality: Palestinian Marital Status: Married No. of Children: 5 Religion: Muslim

Residence Address: Jenin-West Bank-Palestine



Working Address: Department of Physics

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<u>Academic Qualifications:</u>

• "Doctor of Philosophy " (Ph. D. in Physics), Middle East Technical University (METU), Ankara, Turkey, from February 1989 to May 1993.

Field: Plasma Physics, Free Electron Laser.

Thesis Title: "Chaos In An Electromagnetically Pumped Free – Electron Laser With A Guide Magnetic Field"

• "Master of Science "(M. Sc. in Physics), Middle East Technical University (METU), Ankara, Turkey, from October 1986 to January 1989.

Field: Plasma Physics, Free Electron Laser.

Thesis Title: "Small Signal Gain in An Electromagnetically Pumped Free – Electron Laser (FEL) With An Addition Of Small Amplitude Backward Electromagnetic Wave".

 "Bachelor of Science "(B. Sc. In Physics), An – Najah National University, Nablus, West – Bank, Palestine, from October 1981 to November 1985.

Working Experience:

15/3/1989- 1/1/1994:

Research Assistant. Department of Physics, Middle East Technical University, Ankara, Turkey.

1/1/1994 – 30/9/1996:

Assistant Professor, Sana'a University, Yemen Republic.

15/9/1996 – 10/9/2004

Assistant Professor, Department of Physics, Faculty of Science, Zarqa Private University, Zarqa, Jordan.

11/9/2004 – 1/9/2010

Assistant Professor, Department of Physics, College of Sciences, University of Hail, Hail, Saudi Arabia.

- 1/9/2010 –8/5/2018
 - (1) Assistant Professor, Department of Physics, Faculty of Sciences, Arab American University, Jenin, West Bank, Palestine.
- 9/5/2018
 - (2) Associate Professor, Department of Physics, Faculty of Sciences, Arab American University, Jenin, West Bank, Palestine.
- * Date of tenure in Arab American University: 5-6-2017.

Teaching Experience:

1) Courses I taught:

General Physics (I, II, III), General Physics for The Students of Medicine, General Sciences (Class Teacher), Physics for Medical Students, Physics for Medical Sciences, Electricity & Magnetism I, Electricity & Magnetism II, Material Science, Solid State Physics, Modern Physics I, Optics & Waves, Classical Mechanics I, Classical Mechanics II, Vibrations & Waves, Electronics I, General Physics Labs. (I, II&III), Physics for Medical Students Lab, Intermediate Physics Lab. (Optics), Optics & Waves Lab, Advanced Physics Lab. I (Modern Physics), Radiation Physics Lab., Laser Physics & Its Applications, Laser, Design & Technology, Atomic and Nuclear Physics, Mathematical Physics I, Quantum Mechanics I, Practical Training in Medical Physics, Heat & Thermodynamics, Nuclear Physics, Atomic & Molecular Physics, Special Topics (Mathematical Physics III), Physics for Medical Students, Mathematics and Software Packages for Physics, Calculus III (Advanced Calculus), Plane Geometry, Linear Algebra.

2) Other activities:

- An academic supervisor for the students in S. U., Z. P. U & U.O.H& AAUJ.
- Participation in Educational Training Program, Faculty of Education, S. U., Dhamar.
- Participation in Educational Training Program, Department of Science, College of Education, U.O.H, Hail
- An establishment of the Department of Physics and participation in preparing the Medical Physics Study Plan for the Department of Physics at Z. P. U.
- Participation in preparing the Physics Study Plan for the Department of Physics at UOH.
- Participation in preparing the labs' tenders for the Department of Physics-Medical Physics, Z. P.
- Participation in preparing the labs tenders for the Department of Physics- UOH, (2008/2009-2009/2010).
- Participation in the preparation of Phys103 and Phys104 Lab Manuals. This Lab Manual covered part of the General Physics Labs offered by the Physics Branch, Department of Sciences, UOH, (2008/2009-2009/2010).
- Participation in the preparation of a preliminary Phys341 Lab Manual. This Lab Manual covered part of the Modern Physics Lab offered by the Physics Branch, Department of Sciences, UOH, (2008/2009-2009/2010).
- Participation in preparing and updating the Physics curriculum for the Department of Physics at AAUJ.
- Participation in the preparation of General Physics II Lab Manual (Phys106). This Lab Manual covered General Physics II experiments offered by the Department of Physics, AAUJ, 2011/2012.

Preparing Optics & Waves Laboratory Manual. Department of Physics, AAUJ.1st Edition, Feb 2017.

Administration Experience:

- Head, Department of Physics, Z. P. U. (15/9/1997 1/10/1999)
- Representative for the Dep. of Physics in the Faculty of Science Council, Z. P. U. (15/9/1996 - 1/10/1999 & 17/9/2002 – 10/9/2004)
- Member in the Z. P. U. Library Committee. (15/9/1996 15/9/1998)
- Head, The Investigation Committee, Faculty of Science, Academic year 1999/2000.
- Head of The Organizing committee, The First Conference on Medical Physics and Its Applications, Department of physics, Zarka Private University, 24th 26th /4/2000.
- A member in the Social committee, Faculty of Science, Z. P. U., (15/9/2000 – 15/9/2001).
- Member in the schedule committee, Faculty of Science, Z. P. U., (15/9/2001 – 15/9/2002).
- Member in the scientific committee, Faculty of Science, Z. P. U., (15/9/2001 15/9/2002).
- Acting Chair, Department of Physics, Z. P. U. (14/7/2002 5/9/2002)
- Member in the schedule committee, Faculty of Science, Z. P. U., (15/9/2002 15/9/2003).
- Head, Department of Physics, Z. P. U. (17/9/2002 10/9/2004)
- Member in the University Council in ZPU (17/9/2002 15/9/2003)
- Acting Dean (Occasionally during academic years 2002/2003 & 2003/2004).
- Head of the schedule committee, Faculty of Science, Z. P. U., (15/9/2003 – 15/9/2004).
- Member in the quality assurance committee, Faculty of Science, Z. P. U., (2003 /2004).
- Head of Labs Committee, Department of Science, College of Education, UOH, (2008/2009)
- Member in the Physics Study Plan Committee, UOH, (2008/2009-2009/2010).
- Member in the Nano Physics Center Committee, UOH, (2008/2009-2009/2010).
- Member in the Faculty Members Database Committee, College of Education, UOH, (2008/2009).
- Member in the Physics Labs Inventory Committee, UOH, (2008/2009-2009/2010).
- Member in the Summer Semester Schedule Committee, UOH, Summer Semester (2008/2009).
- Member in the Teaching Assistants Interview Committee, College of Education, Department of Sciences UOH, (2008/2009).
- Member in the Teaching Assistants Written Exam Committee, College of Education, Department of Sciences, UOH, (2008/2009).
- Head, Department of Physics, AAUJ. (1/9/2010 31/8/2015)
- Representative for the Dep. of Physics in the Faculty of Arts & Science Council, AAUJ. (1/9/2010 -21-9-2015 & 1/9/2017-31/8/2018).
- Head of Self-Assessment Committee, Department of Physics, AAUJ, (2010/2011).
- Head of Investigations Committee, Department of Physics, AAUJ, (2010/2011).
- Head of Labs Follow Up Committee, Department of Physics, AAUJ, (2011/2012 -2014/2015).
- Head of Purchases Committee, Department of Physics, AAUJ, (2011/2012 -2014/2015).
- Head of ISO committee, Department of Physics, AAUJ, (2012/2013 -2014/2015)
- Member, Department of Physics Council, AAUJ, (2015/2016 -).
- Member in Special Investigation Committee Nominated by the Dean of Sciences, College of Sciences, AAUJ, (Fall, 2015/2016).

- Member in Purchases Committee, Department of Physics, AAUJ, (2015/2016).
- Member in Laboratories Committee, Department of Physics, AAUJ, (2015/2016).
- Member in Scientific Committee, College of Sciences, AAUJ, (2015/2016).
- Member in the University Council, AAUJ, (2015/2016).
- Member in the Scientific Committee, "Fifth Palestinian Conference on Modern Trends in Mathematics and Physics", July, 31st August, 2nd, 2016. Department of Physics, AAUJ.
- Member in Teaching & Research Assistants Interview & Evaluation committees, Department of Physics, AAUJ (2010/2011 – 2016/2017).
- Member in Master Students Interview & Evaluation committees, Department of Physics, AAUJ (2010/2011– 2016/2017).

Research Activity:

a) Research Interest:

- Plasma Physics Free Electron laser (FEL) Photonics
- Semiconductors Physics Nanoscience & Nanotechnology

b) Publications:

- 1) A. Omar, "Effect of Sodium Based Transparent Binders on the Optical Properties of GaSe Thin Films". Journal of the Arab American University (AAUJ). Journal of the Arab American University, Vol (4), No.(1)/2018, p. 48-64.
- 2) A. Omar, A. F. Qasrawi, N. M. Gasanly, "Temperature effects on the structural and optical properties and dielectric dispersion in the TllnSe_{2x}S_{2(1-x)} mixed crystals (x=0.3)". Journal of Alloys and Compounds, Vol 724, P. 98-102,15 Nov. 2017.
 - Link: http://www.sciencedirect.com/science/article/pii/S0925838817323459
- 3) S. E. Algarni, A. Omar and A. F. Qasrawi, "Plasmon Interactions At The (Ag, Al)/InSe Thin Film Interfaces Designed For Dual Terahertz/Gigahertz Applications", Plasmonics, Springer, Vol 12, issue 2, P. 515-521, April 2017.
 - Link: http://link.springer.com/article/10.1007/s11468-016-0292-4
- 4) Atef F. Qasrawi, Ahmad Omar, Ala' M. Azamtta and Nizami M. Gasanly, "p- TlGaSeS/n-BN heterojunction as a microwave filter and as a photovoltaic device", Physica Status Solidi A: Applications and Materials Science, Wiley, Vol. 212, Issue 3, P. 600-606, DOI 10.1002/pssa.201431173. March 2015.
 - Link: http://onlinelibrary.wiley.com/doi/10.1002/pssa.201431173/abstract
- 5) A. Omar, "Electrons Trajectories in Electromagnetically Pumped Free Electron Laser with a Constant Reverse Guide Magnetic Field", Tr. J. Phys., Vol. 35, P. 145-152, March 2011. **Link:** http://journals.tubitak.gov.tr/physics/issues/fiz-11-35-2/fiz-35-2-7-0911-47.pdf
- 6) A. Omar, "Energy and Momentum in Electromagnetic Wiggler Free-Electron Laser with A Guide Magnetic Field ", Arabian Journal for Science and Engineering (AJSE), KFUPM, Vol. 33, No. 2A, P. 389-399, July 2008.
 - Link: http://aise.kfupm.edu.sa/articles/332A P.19.pdf
- 7) S. Bilikmen and A. Omar, "Chaotic Electron Trajectories in Electromagnetic Wiggler Free-Electron Laser with a Guide Magnetic Field", IL Nuovo Cimento, Springer, Vol.16D, N.5, P. 463-480, Maggio 1994.
 - Link: http://link.springer.com/article/10.1007/BF02463735
- 8) A. Omar and S. Bilikmen," Gain Enhancement in Electromagnetically Pumped Free Electron Laser with a Guide Magnetic Field ", Doĝa Tr. J. Physics, 17 (1993), P. (994-957).

c) Researches Proposals:

- 1) A. Omar, "Electron Trajectories in Free Electron Lasers with Helical Wiggler and Reverse Axial Guide Magnetic Field", under investigations.
- 2) A. Omar, A. Qasrawi, "Optical and dielectric properties of the physically deposited Copper Oxide-Indium thin films", under investigations.

d) Participation in conferences, workshops and seminars:

- Workshop on Magnetism Measurements and the Quality of Mediums for Information Storage, Al-Albayt University, Mon. April 20, 1998.
- The First Workshop on Medical and Radiation Physics, Physics Department, Applied Science University, 3 4 /3/1999.
- A series of Workshops on Astronomy, Zarka Private University, 1996 2000.
- A. Omar, Conference Presentation: "Free Electron Lasers (FEL) and its Medical Applications". The First Conference on Medical Physics and its Medical Applications, Department of Physics, Zarqa Private University, 24-26/4/2000. Book of Abstracts, P. 63.
- Fourth Symposium on Magnetics, organized by: Center for Theoretical and Applied Physical Sciences (CTAPS), Yarmouk University, Jordan. 6 –8 Nov. 2000.
- Third Symposium on Use of Nuclear Techniques in Environmental Studies, organized by: Center for Theoretical and Applied Physical Sciences (CTAPS), Yarmouk University, Jordan. 16 – 18 Sept. 2003.
- The Second Meeting of the Colleges of Sciences Association in Arab Universities, Jordan University of Science and Technology, Jordan, 28-29 April, 2004
- Fourth Meeting of the Saudi Physical Society (SPS4), King Abdul Aziz City for Science and Technology, Riyadh, Saudi Arabia. 11-12/11/2008.
- Workshop on the presentation and discussion of general report about the evaluation of sciences programs in Palestinian Universities. Thursday 2/2/2012, National Institute of Educational Training, Ramallah, Palestine.
- Workshop on the "Challenges, Strategies, and Tools for Research Scientists". Monday, 19/11/2012, AAUJ, Jenin, Palestine.
- Workshop on the "Smart Boards". Sat, 16/3/2013, AAUJ, Jenin, Palestine.
- Workshop on "How to limit the actions and behaviors undesirable in university teaching", AAUJ, Jenin, Palestine, Dec 2014.
- Workshop on "Preparing Documents Using Latex", Sat, 18/4/2015, AAUJ, Jenin, Palestine.
- Poetry Symposium, Students Affairs Deanship, AAUJ. Sun, 20-3-2016.
- Fourth Conference on Biotechnology Research Application in Palestine, Arab American University, Jenin. Mon, 21-3-2016.
- The Second Palestinian International Conference on Materials Science and Nanotechnology (PICNM2016), An Najah National University, Nablus. Wed-Thurs. 23-24-3-2016.
- Fifth Palestinian conference on Modern Trends in Mathematics and Physics. A member in the Scientific Committee, July 31 August 2, 2016.
- A. Omar, Conference Presentation: "Effect of Sodium Based Transparent Binders on the Optical Properties of GaSe Thin Films". The Fifth Palestinian conference on Modern Trends in Mathematics and Physics 2016. July 31 - August 2, 2016. Book of Abstracts, p. 32.
- Women Conference, AAUJ. Sat, 26-3-2016.
- First Palestinian International Conference on Peaceful Uses of Atomic Energy. Palestine Technical University-Kadoorie, 19-20 Feb 2017.

e) Postgraduate theses committee's membership:

Internal member in the MSc thesis committee:

Student Name: Hadil D. Aloushi

Thesis Title: Electrical Investigations of Se/Ag/Se Interfaces

Thesis Defense Date: 1-7-2018

Internal member in the MSc thesis committee:

Student Name: Alaa Ayman Ekmail

Thesis Title: Thickness and Post Annealing Effects on the Structural, Optical and Dielectric

Properties of Copper Oxide Thin Films

Theses Defense Date: 30-9-2018

Training Courses:

A Training Course on "Introduction to UNIX", ZPU, Department of Computer Sciences, from June 14, 1997 to June 18, 1997. 10 hours.

- A Training Course on Methods in University Teaching, ZPU, Faculty of Education, Nov. 11, 1998 & Dec. 2, 1998. 12 hours.
- A Power Point Course, ZPU, Continuous Teaching and Community Service Center June 2001, 8 session hours
- A 10 Hour course on MATLAB 6, Department of Computer Science, ZPU, July 2002.

Computer Skills:

Internet: I am familiar with windows and internet applications.

Computer's Languages: Digital Fortran, C++, Matlab.

Softwares: Microsoft Office, Golden Grapher, Origin Grapher, SigmaPlot, Compag Visual FORTRAN.

Web Expression.

Languages: Arabic, English

Hobbies: Reading, Sports (Running, Swimming, Fitting,...)

Referees:

1- Prof. Dr. Mohammed El-Said, Physics Department, An-Najah National University, P.O. Box (7),

Nablus, West Bank, Palestine. Tel: 00-970-9-2325402/Ext. Mobile: 00970-597036348

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2-Prof. Dr. Mohammed El-Haj Hasan, Dean, College of Information Technology, Amman Private

University, P. O. Box (975 - 337) Al-Jbaiha, Amman, Jordan.

Tel: 00-962-6-5335166/Ext.

Fax: 00-962-6-5335169 e-mail: HajHasan@Ammanu.edu.jo

3-Prof. Dr. Emad Abuelrub, Commission for Academic Accreditation, Ministry of Higher Education and Scientific Research, P. O. Box (45133), Abu Dhabi, UAE.

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