

CURRICULUM VITA

ISSAM M. ODEH

1. Address: Department of Mathematics and Natural Science -
Al-Zaytoonah University
Amman – Jordan
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2. Personal Data:

Date of Birth : 1st January 1952.
Place of Birth: Jordan
Nationality: Jordanian
Marital status: Married with Four Children
Home Tel: Amman – 009626-5338591.
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3. Education:

Ph.D.(Physics), Purdue University, U.S.A. 1986.
M.Sc. (Material Engineering), Salford University, England, 1975.
B.Sc. (Physics), Mosul University, Iraq, 1974.

• **Languages:** I speak, read and write Arabic and English.

4. Title of theses:

1. Ph.D. thesis is in theoretical plasma physics with title of “Numerical Study of the sustainment of the Axial Magnetic Field in a Reversed Filed Pinch using Square Cross Section.
2. M.Sc. thesis title: “Recoil Implantation of Gold into Glass”

5. Teaching Experience:

1. Currently an Associate Professor in Physics at Al-Zaytoonah University Since 2002
2. An assistance Professor in physics at Al-Zaytoonah University (2000-2001).
3. Assistant Professor in Physics at Yarmouk University (Feb.1986-Sept.1997)
4. Teaching Assistant in Physics at Purdue University (1979 to 1985)

5. Assistant Professor in Physics at Al-Balqa University Jordan Sept.1997-Feb.1998.
6. Assistant Professor in Physics at Zaytoonah University June. 1993-Sept. 1994.(Sabbatical Year).

• I have taught the following courses:

A. Yarmouk University:

1. Introduction to Electricity and Magnetism (freshman).
2. Introduction to Mathematical Physics (sophomore).
3. Introduction to Special Theory of Relativity (sophomore).
4. General Physics Laboratories Mechanics, Electricity, Magnetism, Waves and Heat (Freshman & Sophomore).
5. Waves and Optics (sophomore).
6. Thermodynamics and Statistical Physics (Sophomore)
7. Waves and Vibrations (sophomore).
8. Mathematical Physics (Senior).
9. Electromagnetic Theory I (Junior).
10. Electromagnetic Theory II (Senior).
11. Plasma Physics (Senior).
12. Special Topics in Plasma Physics (Graduate).

B. Zaytoonah University:

1. Introduction to Mechanics (freshman).
2. Introduction to General Physics for Biomedical Physics.
3. Electricity and Magnetism.

C. Rustaq College Oman:

1. Classical Mechanics (Senior).
2. Modern Physics (Junior).
3. Optics.

6. Graduate Committees:

A: A member on the examining committees of the following M.Sc. theses:

1. **Title :** Effect Of Magnetic Field on the Ramman Scattering
Author: Ali - AL-Nasser (1996), Yarmouk University
2. **Title :** Spatial Excitation of Ion-Acoustic waves in plasmas
Author: Essa mayass , Yarmouk University ,2002
3. **Title:** Magnetic Field Effect on the Two-Stream Instability.
Author: Essam Yasin, Yarmouk University, 2002.

4. **Title** : Propagation of Electromagnetic Waves in Inhomogeneous Plasmas,

Author: Tayseer, Abu Alrub, Yarmouk University, 2003.

B: Papers Evaluated In Scientific Journal:

1. **Title** : Electrodynamics Of Helical Wigglers for Free Electron Lasers
Journal: Al-Basair Scientific Journal, University of Petra-Jordan 2002.
2. **Title:** Hydrogen Plasma effects on the Equilibrium between Bonded Hydrogen and Silicon Matrix in Hydrogenated Amorphous Silicon Prepared by Cathodic Sputtering.
Journal: International Conference on Information Technology and Natural Sciences, AL-Zaytoonah University of Jordan, October 19-21, 2003.
3. **Title:** Plasma Parameters in air DC Discharge post Cathode Tungston Langmuir probe characteristics usin Data Acquisition system
Journal: Jordan Journal of Physics May 2010

C: Scientific Committee:

1. A member of the Scientific Committee of the International Conference on Information Technology and Natural Sciences. October 19-21, 2003. AL-Zaytoonah University of Jordan.
2. A member of the Jordanian Renewable society 2009
3. A member in the transfer renewable energy & efficiency Tree in Berlin, Germany since 2009.

7. Work Experience:

1. Electronic Design Engineer at the Royal Scientific Society in Jordan (Jan. 1976 to Jan. 1977).
2. Researcher in experimental high field Superconductors, at Francis Bitter National Magnet Laboratory, M.I.T, U.S.A. June 1977 to June 1979.
3. Research Assistant in experimental Solid State Physics at Purdue University Sept. 1979 to Dec. 1980.
4. Research Assistant in cooperation with Los Alamos at New Mexico USA for my Ph.D Thesis on Reversed Pinch Reactor, 1980-1986.
5. An Assistant Professor in Physics with the Ministry of Higher Education in Oman (feb1998-June2000).
6. An Assistant Professor in Physics at Al-Zaytoonah University since Sept 2000.

7. Currently an Associate Professor since Sept 2002 at Al-Zaytoonah University.
8. Attend an Advanced seminar on Large-scale solar thermal systems for hot water and space heating at Berlin Academy, Germany in October 2009.

8. Grants:

Two research Projects in high temperature Superconductivity and fine particle magnetism supported by the higher Council for Science and Technology in Jordan.

9. Research Interests:

My Interests are in Fine Particle Magnetism both theory and experiment, Thermal with statistical physics in Plasma Physics for Nuclear reactors.

10. Conferences and Boards:

1. Participant in the Electrochemistry workshop held in Trieste, Italy (International Center for Theoretical Physics) Aug. 27 - Sept. 7 (1989).
2. A member of the Board of the Trustees of Philadelphia University (Private One) of Jordan for two years (1988-1990).
3. A member of the Trustees of Al - Zaytoonah University (1993-1996) where I participate in the establishment of the college of Science.
4. An Acting Dean for the College Of Education for the summer of 1998 in Oman with the Ministry of Higher Education.

11. Computer skills:

I am familiar with FORTRAN and ICDL.

12. Publications:

- *1. **Title:** Pressure dependence of the Electrical Resistivity and the Ionization Energy of CrIn-type Inp.
Authors: D.N.Nichols, I.Odeh and R.J.Sladek.
Published in: Solid State Comm., Vol. 34,1980.

2. **Title:** The Effects of Concentration of Some Superconducting Properties of Small Grain Systems of $(\text{Gd Ba}_2 \text{Cu}_3 \text{O}_{(7-\delta)})$ Embedded in Solid Epoxy.
Authors: N.Y. Ayoub, I. Khalil, M.S. Dababneh, A.K Abdallah, I. M. Odeh and M. B. Maple.
Published in: J. of Phys. Condensed Matter 3 (1991) 4967.
3. **Title:** Comparison between the Magnetization Obtained From Faraday Balance and VSM or SQUID.
Authors: M. Dababneh, I. Odeh, A. El Ail, N. Y. Ayoub.
Published in: IEEE Trans. on Mag. 28 (1992) 2453.
4. **Title:** Viscosity, Resistivity and Surface Tension Measurements of $\text{Fe}_3 \text{O}_4$ Ferrofluid.
Authors: M. S. Dababneh, N. Y. Ayoub, I. Odeh and N. M. Laham.
Published in: Journal of Magnetism and Magnetic Materials 125 (1993) 34.
5. **Title:** The Magnetic Properties of a Uniform - Size Fine particle Ferrofluid in the Dimer Model in Three Dimensions.
Authors: N. Y. Ayoub, A. Shamoun, A. K. Abdallah, I. M. Odeh and N.M. Laham.
Published in: Journal of Magnetism and Magnetic Materials 127 (1993) 75.
6. **Title:** Stability of $\text{Fe}_3 \text{O}_4$ Ferrofluid in Gravitational and Uniform Magnetic Fields.
Authors: M. S. Dababneh, H. A. Saleh, N. Y. Ayoub, A. K. Abdallah, and I. Odeh.
Published in: Dirasat, Jordan. Vol. 21B, No. 4, (1994) 181.
7. **Title:** The Effects of the Magnetic Field on the Curie temperature of A Dilute Ferrofluid.
Authors: I. Odeh, A. K. Abdallah, M. Dababneh, N. M. Laham and N. Y. Ayoub.
Published in: The Arabian Journal of Science and Engineering Saudi-Arabia, Vol. 19, No 4A, (1994) 697.
8. **Title:** The Effect of Magnetostatic Dipole-Dipole Interaction of the Initial Susceptibility of Two Dimensional of Fine Particle Assembly.

Authors: A. K. Abdallah, I. Odeh, M. Dababneh, N. M. Laham and N. Y. Ayoub.

Published in: Mu'tah Lil - Bahooth Wa Al - Dirasat, Jordan, Vol. 9, No. 1, May (1994) 255.

9. **Title:** Finite Bandwidth Effects on Raman Back Scattering in Inhomogenous Plasma.

Authors: Nabile M. Laham, Ahmed M. Khateeb, Nabil Y. Ayoub, Asad K. Abdallah, Isam M. Odeh and Munir S. Dababneh.

Published in: Jap. Journal of App. Phys., Vol 3, No. 1, Jan. (1995) 297.

10. **Title:** Magnetic Method for the Determination of the Exact Concentration for a Fine Particle System.

Author: I. M. Odeh.

Published in : Mu'tah Lil - Bohooth Wa Al - Dirasat, Vol 11, No. 3, P.169, Jordan (1996).

11. **Title:** Effect of Finite Bandwidth on the Two - Plasmon Decay.

Authors: N. M. Laham, A. M. Khatteb and I. M. Odeh.

Published in: Arabian Journal for Science and Engineering, Saudi - Arabia, Vol.22, No.2A, P165.

****The followings have been published after Promotion:**

12. **Title:** The two-Plasmon decay of an extraordinary electromagnetic wave in a magnetized homogeneous plasma.

Authors: N.M. Laham , A.M. Al-khateeb, A,S, Al Nasser, and I.M. Odeh

Published in: Physics of plasma. Vol.7, No.10 Oct.2000. P (3993- 3997).

(ISI) Journal

13: **Title:** Quality Assurance and Quality Improvements “the case of the Arab Open University (Aou)

Authors: Ahmad Mashal, Issam Odeh and Mofeed Abu-Mosa

Published in: Journal of Emerging Trends in Educational Research and Policy studies (JETERAPS). June Edition, Volume3, Number 3, 2012.

14: Title: Longitudinal Coupling impedance for particle beams with Gaussian change distribution in the longitudinal and transverse directions.

Published in: Canadian Journal of Physics pp 597-605 volume 88, Number 8, 2010. (ISI) Journal

Authors: Sondos Okoor, A.M. AL-Khateeb, I. M. Odeh.

15: Title: Chemical Investigation and Quality of Urban Dew Collections with Dust precepts

Author: Isam Odeh ¹, Sharif Arar ², Afnan Al-Hunaiti ³, Hiyam Sa'aideh ⁴, Ghadah Hamad ⁴, Jonathan Duplissy ^{5,6}, Henri Vuollekoski ⁶, Antti Korpela ⁷, Tareq Hussein ⁷

Accepted for: Publication in Environmental Science and Pollution Research. (ISI) Journal

16: Title: The Use of Plastic Waste Materials in Construction Applications

Author: Fawzi Gharagheer, Issam Odeh, Subhi Bazlamit\

Published in: International conference Environmental Design and Innovation Held at Alzaytoonah University of Jordan May 16-18 2016

17: Title: Paper 16 has been submitted for the Journal of Civil Engineering (Scopus) Journal

18: Title: Activity Pattern of Urban Adult students in an Eastern Mediterranean Society

Author: Issam Odeh and Tareq Hussein

Published in: International Journal Environ. Res. Public Health **2016**, 13, 960; doi: 10.3390/ijerph13100960 (ISI) Journal

- 19: Title: Ph.D has been published by NASA under**
<http://adsabs.harvard.edu/abs/1986PhDT>
- 20: Title: CHANGES IN CONCRETE PAVEMENT SKID RESISTANCE WITH TEMPERATURE**
Authors: Issam Odeh, Subhi M. Bazlamit, Farhad Reza and Nabil Al-Hazim
Submitted for publication to (**ISI**) Journal
- 21: Title: Study of Vehicular Emissions in an Urban Area**
Authors: Zaydoun Abu Salem, Nabil Al-Hazim, Issam Odeh, Subhi M. Bazlamit
Submitted for publication to (**ISI**) Journal
- 22: Title: Determinations of Critical Gap and Follow-Up Time at Roundabouts**
Authors: Nabil Hazim^a, Zaydoun Abu Salem^a, Subhi M Bazlamit^a, Walaa Mhairat^a and Issam Odeh^b
Submitted for publication to (**ISI**) Journal
- 23: Title: Affordable Self Sufficient Green Housing Units in Semi-Arid Climates**
Authors: Zaydoun Abu Salem¹, Ayoub Abu Diyah ², Issam Odeh^{3*}, Moshrik Hamdi¹, Subhi M. Bazlamit¹, Loay Dabour¹, and Alla Kheder¹
Accepted for publication in:
“International Conference on Engineering, Project, and Production Management (EPPM2017) “ (Scopus)

13. References:

- 1– Professor: Awad Klaifat ,Former Minister of Higher Education, Amman, Jordan.
Email: mohe@nic.net.jo

2– Professor: Abdelraheem Al-Hunaiti , Former President of Mutah University. Now he is at Jordan University.

Email: hunaiti@muah.edu.edu.jo (0777228880)

3– Professor Ali Al- Zoubie, Dean of College of Science and Information Technology at Al-Zaytoonah University of Jordan

4– Professor N.Y. Ayoub, Physics Department Yarmouk University, Irbid, Jordan.

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