Amer Al-Oqali, Ph.D.

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PERSONAL INFORMATION:

- Full Name: Amer Dakheel Al-Oqali
- Date of Birth: 10/12/1980.
- Place of Birth: Al-Karak – Jordan.
- Nationality: Jordanian.

EDUCATION:

- Ph.D. Degree, The University of Jordan, Amman, Jordan, 2010

Title of Thesis**: A Comprehensive Microscopic Study of the ^{3}He-HeII Sandwich System Using Monte Carlo Techniques**.

- M.S. Degree**,** Mutah University, Al-Karak, Jordan, 2004

Title of Thesis: **Crystallization Study of Medium Density Polyethylene**

- B.S. in Physics, Mutah University, Al-Karak, Jordan, 2002.

RESEARCH INTERESTS :

Low Temperature Gases, Worm Algorithm Monte Carlo techniques, Polymer, Crystallization of polymer from melt, Fractional Calculus.

PROFEESSIONAL EXPERIENCE:

- Associate Professor in Theoretical physics at Mutah University, Al-Karak-Jordan, form September 2016 – Present.
- Assistant Professor in Theoretical physics at Mutah University, Al-Karak-Jordan, form September 2013 – September 2016.
- Full-Time Lecture in Theoretical physics at Mutah University, Al-Karak-Jordan, form September 2011 – September 2013.
- Teacher in the Laboratory of the University of Jordan During Work on a Doctoral thesis during 2009-2010.
- Secondary Teachers in Ministry of Education during the Period of 2002-2009.

ACADIMIC ADMINISTRATION EXPERIENC :

- Head of Physics Department, Mutah University, Al-Karak-Jordan, form September 2017- September 2019.
- Assistant Dean of the faculty of Science at Mutah University, Al-Karak-Jordan, form September 2014 – September 2016.

COURSES IN PHYSICS I TAUGHT

- General Physics I (Phys 101)
- General Physics II (Phys 102)
- Medical Physics (Phys 100)
- General Physics Laboratory I
- General Physics Laboratory II
- Mathematical Physics I
- Thermodynamics
- Intermediate Physics Laboratory
- Modern Physics (I)

- Physics of Vibrations and waves
- Classical mechanics (I)
- Classical mechanics (II)
- Modern Physics (II)
- Electromagnetic Theory (1)
- Statistical Mechanics
- Advanced Physics Laboratory
- Statistical Mechanics (Graduate Course)
- Mathematical Physics (Graduate Course)

PUBLICATIONS:

Amer Al-Oqali, Asaad R. Sakhel, Humam B. Ghassib, and Roger R. Sakhel, **Worm Algorithm Path Integral Monte Carlo Applied to the ^{3}He – HeII Sandwich System**, **International Journal of Modern Physics B**, 26 (31), 1250173- 1250173, 2012.

Humam B. Ghassib, Asaad R. Sakhel, Omar Obeidat, **Amer Al-Oqali**, and Roger R. Sakhel, **Effectiveness of the statistical potential in the description of fermions in a worm-algorithm path-integral Monte Carlo simulation of ^{3}He atoms placed on a ^{4}He layer adsorbed on graphite**. Physical Review E, 85, 016702-016707,2012.

E. K. Jaradat, **A. D. Al-Oqali**, O. K. Jaradat, and R. S. Hijjawi, **Green's function for a Perturbed Anisotropic Triangular lattice**, European Journal of Scientific Research, 101(1), 53-58,2013

A. D. Al-Oqali, **Lattice Green Functions for the Rectangular Lattice with nearest and Next-Nearest Neighbor Interaction**, **European Journal of Scientific Research**, 113 (2), 145-150,2013

A. D. Al-Oqali, **Fractional Formulation of Higgs Lagrangian Density**, **American Journal of Scientific Research**,105, 41-46,2015.

Amer D. Al-Oqali, Bashar M. Al-Khamiseh, Emad K. Jaradat and Ra'ed S. Hijjawi, **The Linear Sigma Model Lagrangian Density: Fractional Formulation, Canadian Journal of Pure and Applied Sciences,** 10(1), 3803-3807, 2016.

Lama O. AL-Sohimat, **Amer D. Al-Oqali**, Emad K. Jaradat, Marwan Y. Ajoor, Ra'ed S. Hijjawii, **Iductance Calculation of Infinite Networks Using Greens Function: Perfect and Perturbed Triangular Lattices**, **Sci.Int.(Lahore)**,28(2),811-818,,2016.

Amer D. Al-Oqali, and Emad K. Jaradat, Heisenberg Equations for Real Scalar Fields with$\lambda\,\phi^3$ Interactions. **Sci. Int.(Lahore),**28(3),2249-2252,,2016.

Emad. K. Jaradat, **Amer D. Aloqali**, Wajd Alhabashneh**,** Using Laplace Decomposition Method to Solve Nonlinear Klein-Gordon Equation, **U.P.B. Sci. Bull., Series D**, Vol.80, Iss.2, (2018).

REFERENCES:

- Prof. Humam B. Ghassib, Department of Physics, University of Jordan, Amman, Jordan Tel: +962(77) 7872122. E-mail: humamg@ju.edu.jo .
- Prof. Mohammad AL-Share', Dean of the Faculty of Science, Mutah University, AL-Karak, Jordan Tel: +962-32372380. Email : alsharem@mutah.edu.jo.
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