Dr. Mahmoud Mohammed Ahmed Farout

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## **Personal information:**

• Nationality: Palestinian

• Date of birth: 10-12-1969

Nablus-Palestine

Marital status: Married

• Sex: Male

# **Academic Qualifications:**

Ph. D. of Physics

- University: Lancaster University -UK

- Date of Graduation: Oct. 2019

- Specialization: Nano-Biomedical Physics

- *Thesis Title:* The interaction between metabolism and the plasma membrane potential, and intracellular pH

M. Sc. Of Physics

- University: An-Najah N. University

- Date of Graduation: 2011

**Specialization**: Computational physics of condensed matter

- *Thesis Title:* Structural, Electronic and Magnetic properties of Ga1-xFexN (x= 0, 0.25, 0.5, 0.75, 1) Alloys in Zincblende Structure: First-Principles Study



- University: An-Najah N. University- Date of Graduation: May. 1995

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|---|---|-------|-------|------|-------|-----|
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| ☐ Chairman of Physics department at An-Najah University (Sep. 2020 – until now).                              |
|---|
| ☐ Assistant Professor at An-Najah N. University (Sep. 2019- until now).                                       |
| □ Lecturer at An-Najah N. University (Jan. 20 2019 -Sep. 25 2019)   |
| $\ \square$ Teaching assistance and lecturer at Arab American University / (2009 $-$ 2013) teaching different |
| courses and different laps at the physics department (General and Medical Physics).                           |
| ☐ Works at Palestinian Curriculum Development Center (Worked with a team in preparing the                     |
| Physics book for Tawjehi/ (2005 – 2007)   |
| ☐ Teaching Tawjehi (Physics) 1996-2015.   |

## **Teaching expertise:**

- Advanced quantum mechanics Ph.D. 422932
- Advanced atomic and molecular physics master 422540
- General Physics 1 10221101
- General Physics2 10221102
- Mathematical Physics 1 10221313
- Atomic and molecular physics 10221361
- Modern Physics 1 10221242
- Geometrical Optics 7107102
- Acoustics 7241207
- Biomedical Physics 7108101
- Remedial Physics 7001002
- Advanced Physics lab 2-10221313
- Geometrical Optics Lab 7107112
- General physics lab for engineers 10221115
- General physics lab2 10221108
- التدريب العملي 10221490 •

#### **Publications:**

- 1. Approximate solution to the time-dependent Kratzer plus screened Coulomb potential in the Feinberg-Horodecki equation, Chinese physics b, 2020, 29(6): 060303 (IOP)
- 2. Momentum eigensolutions of Feinberg-Horodecki equation with time-dependent screened Kratzer-Hellmann potential, JAMP, 2020, 8(7):1207-1221
- 3. Exact quantized momentum eigenvalues and eigenstates of a general potential mode, JAMP, 2020, 8(7), 1434-1447
- 4. Feinberg-Horodecki exact momentum states of improved deformed exponential-type potential, JAMP, 2020, 8(8): 1496-1506
- 5. Approximate non-relativistic bound state solutions for certain molecular potentials, JAMP, 2021, 9(4), 1-13.

**6.** Approximate Low-Lying Energies of the Quantum Gaussian Well: A Four Parameters Potential Fitting, Jordan Journal of physics, April 2021, accepted

## Thesis Supervision and examination:

- 1) The Effects of Rashba Spin-orbit Interaction and Magnetic Field on the Thermo-magnetic Properties of an Electron Confined in a Cylindrical Semiconductor Quantum Dot (2021) Internal examiner.
- 2) Structural, electronic, magnetic and elastic properties in the Full-Heusler Compounds: Co 2 CrAl, Cr 2 MnSb using FP-LAPW Method (2021) **Internal examiner.**