

Curriculum Vitae

Khaled Abdu Al-Khaza'leh

Dr. Khaled Abdu Al-Khaza'leh
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Research Interests

- Photodynamic therapy
- Environmental pollution by radiation sources
- Environmental pollution by heavy metal sources
- Magnetic field effect on living beings
- Modeling and simulations

Education

- **PhD, Physics (specializing in Medical Physics)**

Department of Physics, University Sains Malaysia, Penang, Malaysia, 2009

Thesis Title: "Characterization and Effect of Chlorin e6 Dichloride Trisodium Salt in Photodynamic Therapy".

- **MS, major Physics**

Department of Physics, Al-albyt University, Mafraq, Jordan, 2003

Thesis Title: "The effect of Irradiation Temperature and Magnetic Field of the Behavior of the Critical Current Density in $TlBa_2Ca_2Cu_3O_x$ Polycrystals".

- **BS, Physics**

Department of Physics, Yarmouk University, Irbid, Jordan, June 1990

Teaching Experience

- Associated Professor, Al-albait University, Mafraq, Jordan, 2018-present
- Assistant professor, Al-albait University, Mafraq, Jordan, 2012-2018
- Faculty Instructor, Al Albait University, Mafraq, Jordan, 2010-2012

Taught Courses

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|------------------------------|--------------------------------|
| ➤ General Physics 1, 2 and 3 | ➤ Radiation Physics |
| ➤ Physics Labs | ➤ Energy Physics |
| ➤ Modern Physics | ➤ Environmental Physics |
| ➤ Optics | ➤ Introduction to astrophysics |
| ➤ Thermodynamics | |
| ➤ Medical Physics | |

Administrative Work

- Head of Physics Department, Al al-Bayt University, 2014-2016.
- Dean Assistant, Al al-Bayt University, 2018- present

Thesis Supervision

- Investigating the concentration of some radionuclides and Heavy metals in vegetable samples in north of Jordan 2018.
- Evaluation of radionuclides and heavy metals in wheat samples in some areas in north of Jordan 2018.
- The concentration of ^{40}K radionuclide and heavy metals in fish samples consumed in Jordan 2018.

Publications

1. Jamal A.Tallaa, **Khaled Khaza'leh**, Abdelrahman A. Ghozlan. Boron nitride nanotubes as a perfect container for 5-fluorouracil anticancer drug molecules: Molecular dynamics simulation study (**in press**)
2. Jamal A.Tallaa, Mazen Nairat, **Khaled Khaza'leh**, Abdelrahman A. Ghozlan, Saed A. Salman. Optical properties of carbon nanotubes with Haeckelite structure under a transverse electric field: Density functional theory. Computational Condensed Matter, (16) 2018.
3. **Khaled A. Al-Khaza'leh**; ^{226}Ra , ^{228}Ra and ^{40}K Concentrations in Some Plant Seeds Consumed in Jordan. Jordan Journal of Physics, 11(2) 2018.
4. Jamal Talla, Majid Abusini, **Khaled Khazaeleh**, Rami Omari, Mohammed Serhan and Husam El-Nasser; Tuning Electronic Properties and Band Gap Engineering of Defective Carbon Nanotube Bundles: First Principles Calculations. Materials Express, 7(5) 2017.
5. Abdullah Trad Al-fawwaz, **Khaled A. Al-Khaza'leh**; Evaluation of Pb, Cu, Zn, and Cd Levels in some Plants at Roadsides Between Mafraq and Jerash, Jordan. Journal of Environmental Science and Engineering A, 6 2017.
6. **Khaled Abdu Al-Khaza'leh**; The Concentration of Cd, Cu, Pb, and Zn Heavy Metals in Plants along the Highway Between Ramtha and Mafraq. Journal of Natural Sciences Research, 6(22) 2016.
7. Abdullah Al-fawwaz, **Khaled A. Al-Khaza'leh**; Antibacterial and antifungal effect of some natural extracts and their potential use as photosensitizers. European Scientific Journal, 12(6) 2016.
8. **Khaled A. Al-Khaza'leh** and Abdullah T. Al-fawwaz; The Effect of Static Magnetic Field on E. coli, S. aureus and B. subtilis Viability. Journal of Natural Sciences Research, 5(25) 2015.

9. Khalid Omar, **Khaled A. Al-Khazaleh** and Saif A. Saadi; Barium Sulfate Epoxy Mixture Effects on Attenuation of Short Wavelength Radiation. Elixir Nuclear and Radiation Physics, 80 2015.
10. **Khaled A. Al-Khaza'leh** , Mahdi H. Alzo'bi, M. S. Jaafar ; Measurement of Radon in drinking water in Penang Malaysia. International Journal of Integrated Biology, 13(1), 2012.
11. **Khaled A. Al-Khaza'leh**, Khalid Omar, M. S. Jaafar; Photobleaching of Sn(IV) Chlorine e6 Dichloride Trisodium Salt in Different Environments. African Journal of Biotechnology, 10(45), 2011.
12. **Khaled A. Al-Khaza'leh**, Khalid Omar, M. S. Jaafar, Guat-Siew Chew ; The effect of acidification on absorption and fluorescence properties of Sn(IV) chlorin e6 dichloride trisodium salt. Arabian Journal for Science and Engineering, 36(4) 2011 .
13. **Khaled A. Al-Khaza'leh**, Khalid Omar, M. S. Jaafar; pH effect on cellular uptake of Sn(IV) chlorin e6 dichloride trisodium salt by cancer cells. Journal of Biological Physics, 37, (1) 2011.
14. **Khaled A. Al-Khaza'leh**, Khalid Omar, Abbas F. M. Alkarkhi, M. S. Jaafar; Optimization of viability using Response Surface Methodology of the effect of time and concentration on Sn(IV) chlorin e6 dichloride trisodium photosensitizer. Journal of Optoelectronic and Biomedical Materials, 2(4) 2010.
15. **Khaled A. Al-Khaza'leh**, Khalid Omar, M. S. Jaafar; The Effect of Sn(IV) Chlorin e6 on HepG₂ Cancer Cell Lines. Advances in Natural Science, 2(2) 2009.
16. Khalid M. Omar, **Khaled A. Al-Khaza'leh**, M.S. Jaafar, Y.Jidin and N.N. Bidi; Laser Effects on Skin Melanin. Modern Applied Science, 3(1) 2009.
17. Ihab M. Obaidat, Borhan A. Albiss and **Khaled A. Al-Khaza'leh**; Peak Effect and Enhancement of the Critical Current Density by γ - Irradiation in a TlBa₂Ca₂Cu₃O_x Superconductor. International Journal of Pure and Applied Physics, 1 (2) 2005.