PERSONAL INFORMATION

Hanan Hasan Saleh

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Zarqa, Jordan

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Gender Female | Date of birth 31/05/1977 | Nationality Jordanian

WORK EXPERIENCE

- Professor, Department of Radiography, Al-Hussein bin Talal University, Maán-Jordan, 27/1/2021- now.

- Dean, Princess Aisha Bint Al Hussein College of Nursing and Health Sciences, Al-Hussein bin Talal University, Maán- Jordan, 15/1/2020- 14/1/2024.

- Associate Prof., Department of Radiography, Al-Hussein bin Talal University, Maán-Jordan, 8/10/2015- 26/1/2021.

- Visiting Associate Professor, Medical Imaging Department, The Hashemite University, Zarqa, Jordan, 28/1/2019- 10/1/2020.

- Assistant Prof., Department of Physics, Al-Hussein bin Talal University, Maán-Jordan, 2009-2015.

- Part Time Lecturer, Department of Physics, University of Jordan, Amman- Jordan, 2005-2008.

- Teacher Assistant. Department of Physics, University of Jordan, Amman- Jordan, 2003-2005.

- Physics Teacher for Secondary Stage, Ministry of Education, Zarqa, Jordan, 1998-2008.

TEACHING EXPERIENCE

I thought the bachelor's degree students these courses;

1- **Radiography courses;**
   - Radiation physics for radiographers.
   - Physics of diagnostic Radiology.
   - Radiation Protection.
   - Radiographic imaging and processing.
   - Radiobiology.
   - Digital imaging.
   - Qualitative analysis of medical imaging.

2- **Physics courses;**
   - General physics1 & 2.
   - Modern physics.
   - Quantum physics1 & 2.
   - Electronics.
   - Thermodynamics.
   - Radiation physics.
   - Computational physics.
   - Experimental optics physics.
   - 1st year experimental physics

EDUCATIONAL BACKGROUND

- Erasmus Mendos Post-doc fellowship; low radiation measurements labs, Nuclear department Santiago de Compostela University, 29/12/2014 - 29/7/2015.
- Ph.D in Applied Radiation Physics – University of Jordan, Faculty of science, Amman,
- Jordan (2003-2008). “Characterization of Biological Matrices Using X-ray Compton
- Scattering Technique”
- Master Degree in Physics - University of Jordan, Faculty of science, Amman, Jordan (1999-2002).
- B.Sc. Degree in Physics - Yarmouk University, Faculty of science, Irbid, Jordan (1994-1998).

PERSONAL SKILLS

Mother tongue(s) Arabic

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	C1	C2
Spanish	A1	A1	A1	A1	A1

Recognized Language Certificate

Communication skills

▪ good communication skills gained through my experience as a head of my department.

Organizational / managerial skills

Al-Hussein bin Talal University, Princess Aisha Bint Al-Hussein College of Nursing & Health Sciences.Al-Hussein bin Talal University, Maán- Jordan, **Dean**,15 /1/ 2020-14/1/2024.

Al-Hussein bin Talal University, Princess Aisha Bint Al-Hussein College of Nursing & Health Sciences.Al-Hussein bin Talal University, Maán- Jordan, **Dean**, 10/7/2017-25/8/2017.

Al-Hussein bin Talal University, Department of Radiography, Maán- Jordan, 2016-2017, **Vice Dean for Health Science**, Princess Aisha Bint Al-Hussein College of Nursing & Health Sciences.

Al-Hussein bin Talal University, Department of Radiography, Maán- Jordan, 2015-2018, **Head of Radiography Department.**

Al-Hussein bin Talal University, Department of Physics, Maán- Jordan, 2010-2012, **Head of Physics Department.**

Computer skills

Very good command of Microsoft Office™ tools such as;
Word, Excel & Power Point, Internet
Very good in Linux operating system.
Good in Latex

Driving licence

▪ Type3: Small Private Passenger- National Driving License, Jordan

ADDITIONAL INFORMATION

Research Interest

Radiation and Bio-physics, Medical Physics, Environmental and Health physics, Computational physics.

Publications

1- Hanan. H. Saleh**. "Atomic Form Factor of Some Tissue- Equivalent Materials at 25.2 keV Photon Energy Using Geant4 Toolkit"**, JJP, 2010, 3(1), 25-30.

2- H. Saleh and M. Abu Shayeb. "**Natural Radioactivity Distribution of southern part of Jordan (Ma'an) Soil"**, Annals of Nuclear Energy 65C (2014), pp. 184-189.

3- J.M. Sharaf , H.Saleh. "**Gamma-ray energy buildup factor calculations and shielding effects of some Jordanian building structures",** Radiation Physics and Chemistry110 (2015) , pp. 87–95.

4- M. S. Hamideen, J.M. SHARAF and H. H. SALEH. **"Impact of superficial building materials on indoor radon level"**, JJP, JJP, 2015, 8(3), 165-176.

5- H. Saleh, M. Hamideenb, M. Al-Hwaiti and S. Al-Kharoof **. "Radiological Risk Measurements Due to Natural Radioactivity of Building Stones Used in Jordanian Houses"**, JJP, 2018, 11(3), 193-200.

6- Mohammad S. Al-Hwaiti; Hanan H. Saleh; Ma'mon Makhaleh; Mufid Masadeh. **"Partitioning and health risk dose assessment of polonium-210 in selected brands of cigarettes and types of tobacco consumed in Jordan"**, International Journal of Low Radiation (IJLR),, 2018, 11(1), 66-77. DOI: 10.1504/IJLR.2018.098271.

7- Mohammad Marashdeh and H. Saleh. **"Mass attenuation coefficient of olive peat material for absorbing gamma ray energy"**. Nuclear Science and Techniques 30(7):106. DOI: 10.1007/s41365-019-0637-8.

8- H. Saleh, Jamal Sharaf, S.B. Alkhateeb, Mefleh Salameh Hamideen. **"Studies on equivalent atomic number and photon buildup factors for some tissues and phantom materials".** Radiation Physics and Chemistry. DOI: 10.1016/j.radphyschem.2019.108388.

9- Mefleh S. Hamideen, Omar M. Bdair, A. Chandrasekaran, H. Saleh & Z. M. Elimat. **"Multivariate statistical investigations of natural radioactivity and radiological hazards in building materials mainly used in Amman Province, Jordan".** International Journal of Environmental Analytical Chemistry. DOI: 10.1080/03067319.2019.1635123.

10- H.H.Saleh, J.M.Sharaf, R.S.Abady. **"Gamma-ray buildup factor and radiation absorbed dose enhancement at tissue-bone interfaces".** Applied Radiation and Isotopes. DOI: 10.1016/j.apradiso.2020.109464.

11- Khalid A. Rabaeh, Nagham M. Bany Salman, Feras M. Aldweri, H.H. Saleh, Molham M. Eyadeh, Samer I. Awad, Ammar A. Oglat. **Substantial Influence of Magnesium Chloride Inorganic Salt ($MgCl_2$) on the Polymer Dosimeter Containg N-(Hydroxymethyl)acrylamide for Radiation Therapy"**. Results in Physics. 22 (2021) 103862.

12- Miysoon A. Alothman, M. S. Al-Buriahi, H. H. Saleh, Sultan Alomairy & B. T. Tonguç. **Polarizability, metallization criterion, and radiation attenuation performance of pure and Ag-doped poly (vinyl alcohol) polymers for advanced shielding applications.** October 2021. Journal of Polymer Research 28(10). DOI: 10.1007/s10965-021-02749-x.

13- Jamila S Alzahrani, ZA Alrowaili, HH Saleh, Ateyyah M Al-Baradi, Miysoon A Alothman, MS Al-Buriahi. **A Significant Role of Tb2O3 on the Optical Properties and Radiation Shielding Performance of Ga2O3–B2O3–Al2O3–GeO2 Glasses.** Journal of Inorganic and Organometallic Polymers and Materials. November 2021. DOI: 10.1007/s10904-021-02040-y.

14- Jamila S. Alzahrani, Z.A.Alrowaili H.H.Saleh, Alaa Hammoud, SultanAlomairy, C.Sriwunkum, M.S.Al-Buriahi. **Synthesis, physical and nuclear shielding properties of novel Pb–Al alloys.** Progress in Nuclear Energy, Volume 142, December 2021. DOI: 10.1016/j.pnucene.2021.103992.

15- M.S.Al-Buriahi, Nissren Tamam, H.H.Somaily, Z.A.Alrowaili, H.H.Saleh, I.O.Olarinoye, Norah Alwadai, Chalermpon Mutuwong, B.T.Tonguc. **Estimation of radiation protection ability of borate glass system doped with CdO, PbO, and TeO_2.** Radiation Physics and Chemistry, Volume 193, April 2022. DOI: 10.1016/j.radphyschem.2022.109996.

16- M. S. Al-Buriahi, Jamila S. Alzahrani, H. H. Somaily, Z. A. Alrowaili, I. O. Olarinoye & H. H. Saleh. **Radiation shielding performance of Co_2O_3–TeO_2–Li_2O–ZrO_2 glass–ceramics.** Journal of the Australian Ceramic Society. 58, pages1199–1207 (2022). DOI: 10.1007/s41779-022-00774-7.

17- R. S. Abady, J.M.Sharaf, M.M. Imran, H.H.Saleh,. S.B. Alkhateeb. **"Study of effective atomic number, mass energy absorption coefficient and absorbed dose rate in human organ and tissue substitutes"**. Jordan Journal of Physics. **Volume 16 No 3 (2023).**

18- Mohammad M. Alda'ajeh, J.M. Sharaf a, H.H. Saleh, Mefleh S. Hamideen. **"Determination of buildup factors for some human tissues using both MCNP5 and Phy-X / PSD"**. Online: august.2023. Nuclear Engineering and Technology. DOI: 10.1016/j.net.2023.08.025

19- Norah Alomayrah, Z.A. Alrowaili, Norah Salem Alsaiari, H.H. Saleh, Samdani, S.M. Ibrahim, Izhar Ahmed, Chahkrit Sriwunkum, I.O. Olarinoye, M.S. Al-Buriahi . **"Gamma attenuation properties of Tm2O3 doped tellurite glass for radiation shielding"**. Journal of Radiation Research and Applied Sciences. Volume 17, Issue 3, September 2024, 100983.

Conferences

* H.H. Saleh, J.M. Sharaf and S. O. Dababneh , **"Characterization of Biological Matrices Using X-ray Compton Scattering Technique",** Second International Symposium on Nuclear Energy ISNE-09.

* Hanan H. Saleh. **"Estimation of Uranium concentration in building stones used in Jordanian buildings"**, International Symposium on Uranium Raw Material for the Nuclear Fuel Cycle: Exploration, Mining, Production, Supply and Demand, Economics and Environmental Issues, Vienna, Austria 23-27 June 2014.

* H.H. Saleh, J.M. Sharaf, **"Assessment of energy absorption buildup factors and exposure buildup factors for biological matrices in photon energies 0.05 to 3MeV up to 40 mfp penetration depth",** First Palestinian International Conference on Peaceful Uses of Atomic Energy. Palestine Technical University-Kadoorie. Feb, 19-20, 2017.

* Saleh, H.H. and Sharaf, J.M. **" Exposure build-up factor studies of biological matrices in photon energies 0.05 to 3MeV.",** The 5th International Conference on Environmental Radioactivity - ENVIRA 2019. Prague, Czech Republic. Sep, 8-19, 2019.

* Saleh, H.H. **"Variation of photon absorption and the buildup factors in GSO(Ce)**

Seminars

"Application of Compton scattering densitometry in the characterization of biological samples". Al- Albeit University, Mafraq, Jordan.

Training Courses

* **Spectrum Education Services**, Jordan.
* **SESAME-JSPS School**, Cairo University, Egypt. November 17th to 22nd, 2008.
* **SESAME-JSPS School**, Antalya, Turkey. February 20 to 28nd, 2010.
* **Third LinkSCEEM-2 General User Meeting**, Bibliotheca Alexandrina, Egypt, 25th-27th of June 2013.
* **SESAME- LINKSCEEM summer school**. Salt, Jordan, September 8-10, 2013.
* **La Rábida International Scientific Meeting on Nuclear Physics"**, UNIA, Huelva, Spain, 1st - 5th of June of 2015.
* **XIV School on Synchrotron Radiation: Fundamentals, Methods and Applications** Muggia, Italy / 18-29 September 2017.

Memberships

- **Board Member of the Jordanian Nursing Council** (2020-2022).
- **Board Member of Trustees of Aqaba Technological University** (2022-now).
- **Organization for Women in Science for the Developing World** (OWSD)
- **Local Jordanian Users of SESAME** (Synchrotron-Light for Experimental Science and Applications in the Middle East).

References

* **Prof. Jamal Sharaf** (Medical Physics).
Email: j_sharaf@yahoo.com

* **Prof. khalid rababaeh** (Medical Physics).
Email: khalid6d@yahoo.com

* **Prof. Nabeel Ayoub** (Nuclear Physics).
Email: nayoub@yu.edu.jo

* **Prof. Dolores Cortina Gil** (Nuclear Physics)
Email: d.cortina@usc.es

* **Prof. Hani Abass Nawafleh** (Community Health Nursing)
Email: hnawafleh@hotmail.com