

CURRICULUM VITAE

Name : Issa Abdel-Rahman Al-Shakhrah



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Faculty of Science
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Date and Place of Birth : May 8th, 1956- Hebron

Nationality : Jordanian

Marital Status : Married.

Languages : Arabic, English and French.

Speciality : Medical Physics (Medical Imaging (Nuclear Medicine)).

I. Qualifications :

- 1. Ph.D in Biomedical Engineering**
(Medical Imaging in Nuclear Medicine) - 1987.
Paris Nord University
Paris-France
Dissertation title " " A radionuclide method for absolute determination of the volume, the orientation , and the spatial position of the left ventricle ".
Dissertation supervisor : Professor B.Mensch.
- 2. D.E.A (Diplome D'etudes Approfondies), M.Sc.**
Biomedical Engineering (Medical Imaging in Nuclear Medicine) - 1984
Paris Nord University
Paris-France.
Thesis title " An in-vitro radionuclide study on phantoms to estimate the volume of organs ".
Thesis supervisor : Professor B.Bok.
- 3. B.Sc. Physics, 1979, College of Science**
Basrah University
Basrah-Iraq

II. Professional Experience :

September 2014 – Present
Professor, Physics Department
University of Jordan

September, 2013 – September, 2014, Physics Department, Yarmouk University,
Irbid-Jordan
Sabbatical leave from University of Jordan.

September 2012 – September, 2013
Professor, Physics Department
University of Jordan

September, 2011 _ September 2012
Vice Dean for Scientific Faculties,
Faculty of Graduate Studies
University of Jordan

April, 2011 – September 2011
Professor, Physics Department
University of Jordan

September, 2010 – April 2011
Associate Professor, Physics Department
University of Jordan

September, 2009 – September, 2010, Physics Department, Yarmouk University,
Irbid-Jordan
Sabbatical leave from University of Jordan.

September, 2007 – September, 2009
Associate Professor, Physics Department
University of Jordan

September, 2003 – September 2007 (Sultanate of Oman)
(Unpaid and sabbatical leave from the University of Jordan)
Associate Professor, Basic Sciences Department, Physics Division
College of Education
Ibri, Sultanate of Oman

June, 2002 – September 2003
Associate Professor, Physics Department
University of Jordan

January, 1990- June 2002
Assistant Professor, Physics Department,
University of Jordan.

January, 1989-29th January, 1990
Medical Physicist, Radiology Department,
King Hussein Medical Center, Amman-Jordan.

November, 1987 - 14th January, 1989

Medical Physicist, Radiation and Nuclear Medicine Center.
Al-Bashir Hospital
Ministry of Health, Amman-Jordan.

III. Teaching Experience :

1. I teach now and I taught a variety of medical physics courses.
 - A. For graduate students, Diploma and M.Sc levels in medical physics programs (Physics department – University of Jordan) .
 - Introduction to medical physics, physics of medical imaging (Conventional and Computerized x-ray imaging, Ultrasound and Magnetic resonance imaging), physics of nuclear medicine, physics of radiotherapy, radiation protection and safety, radiation biology and environmental pollution (Air pollution and hazards).
 - B. For undergraduate students.
 - Physics for medical sciences students and physics for nursing students (General physics 5 and general physics 7).
2. I taught a variety of general physics courses
 - General physics 1 and general physics 2.
3. I taught and I teach now several courses in physics of diagnostic radiology (Conventional x-ray radiology, Coputerized tomogapy (CT), Digital radiology, Nuclear medicine, Ultrasound, Magnetic resonance imaging, Radiation biology and Radiation protection) to physicians, for postgraduate level at the following Jordanian medical institutions :
 - Jordan University Hospital (Two courses each year, each course 3 credit hours)
 - King Hussein Medical Center
 - Islamic Hospital.
4. I taught students of dentistry (4th year) oral radiology at the University of Jordan.
5. I gave several lectures at the Center of Educational Developement for Health Personnel, University of Jordan. These lectures were designed for candidate physicians to the Fellowship of thr Royal College of Obstetricians and Gynaecologists (MRCOG1).
6. I supervised (at least 12 students each year) medical physics diploma students in medical physics at the University of Jordan (1990-1993, 1997-1998).

Note : The teaching language for all the above courses and lectures Is English.

IV. M.Sc students and Ph.D discussion committees:

- I participated in 12 committees, 7 M. Sc and 5 Ph.D.

V. Field of research :

- 1. Medical imaging;**
- 2. Radiation protection.**

VI. Workshops:

I effectively participated in the preparation of the scientific materials and in the presentation of lectures in more than sixteen workshops of medical imaging and radiation protection designed for physicians, physicists, biomedical engineers and technicians from 1992-2000. These workshops were organized by the University of Jordan (Center for Consultations, Technical Services and Studies) and Ministry of Energy and Mineral Resources in Jordan.

VII. Clinical Experience :

- 1. From October 1983 – October 1984, Nuclear Medicine Department, Hospital Beaujon (University Paris VII Teaching Hospital), Paris.**
- 2. From November 1984 – April 1987, Nuclear Medicine Department, Hospital Tenon (University Paris VI Teaching Hospital), Paris.**
- 3. I supervised students of medical physics at diploma and M. Sc levels (At least 12 students each year) during their practical training at Al-Bashir Hospital and at the University of Jordan Hospital (1990-1993, 1997-present).**

VIII. Computer Experience and Skills :

Fortran, Borland C++ , Mirosoft Excel, Microsoft Word. I employ these programs in teaching and research.

IX. Publications :

- 1. Issa. A. Al-Shakhrah. An indirect high iodine (^{131}I) effective dose used for thyroid ablation in patients with thyroid cancer. Is the method of measurement important? Journal of Applied Clinical Medical Physics, J Appl Clin Med Phys 2020;21:7:173-180.**
- 2. Issa. A. Al-Shakhrah . Determination and Comparison of Radiation Absorbed dose to the Blood, by Applying Different Techniques, for Patients, Suffering from Differentiated Thyroid Cancer. Indian Journal of Nuclear Medicine, 2020, Volume 35: Issue 1, pp. 28-35, January-March. Official publication of the Society of Nuclear Medicine, India. Medknow (Part of Wolters Kluwer health) Publisher.**
- 3. Issa.A.Al-Shakhrah. Digital Low-Pass Filters with Milder Low-Pass Effect on Digital Images. International Journal of Applied and Natural Sciences (IJANS).Vol. 5, Issue 2, Feb - Mar 2016; 35-56. International Academy of Science, Engineering and Technology (IASET).**

4. Issa. A. Al-Shakhrah. Digital High-Pass Filters with Milder High-Pass Effect on Digital Images. American Journal of Engineering and Applied Sciences, 2015, 8(3) : 360-370. Science Publications.

5. Issa. A. Al-Shakhrah .A Comparison of Deconvolution and the Rutland-Patlak Plot in Parenchymal Renal Uptake Rate. Indian Journal of Nuclear Medicine, 2013, Volume 27: Issue 3, pp. 176-180. Official publication of the Society of Nuclear Medicine, India. Medknow (Part of Wolters Kluwer health) Publisher.

6. Issa. A. Al-Shakhrah. A Comparison Between the Values of Renal Parenchymal Mean Transit Time by Applying Two Methods, Matrix Inversion Deconvolution And, Rutland-Patlak Plot. World applied Sciences Journal, 2010, Volume 8, No. , pp. 1211-1219. (International Digital Organization for Scientific Information (IDOSI) – Pakistan).

7. Issa. A. Al-Shakhrah, Abdelatif AlSharif, and Awni Taleb Abu sneineh. Comparison Between the Values of the Hepatic Uptake Rate Obtained by 2 Methods, Using Hepatobiliary Scintigraphy in Patients with Nonalcoholic Steatohepatitis. Journal of Nuclear Medicine Technology, 2010, Volume 38, No. 1, pp.25-29. (American Society of Nuclear Medicine – USA)

8. Issa Abdel-Rahman Al-Shakhrah. Qualitative values of radioactivity, area and volumetric: Application on phantoms (target and background). Applied Radiation and Isotopes, 2009, Volume 76. No. 4, pp.565-569. (Elsevier – UK)

9. Issa A. Al-Shakhrah. Treatment of thyroid cancer and hyperthyroidism patients by ¹³¹I ; practical considerations in radiation protection concerning the attending nursing staff, patients and members of the general public: A review. Clinical Journal of Oncology Nursing, 2008, Volume 12, No. 5., pp. 905-912. (American Oncology Nursing Society – USA)

10. I.A. Al-Shakhrah. Measurement of Radiation Doses to Young Infants from Different Sides and Different Distances of Parents Undergoing Nuclear Medicine Investigations. Canadian Journal of Pure and Applied Sciences, 2008, Vol. 2, No. 1, pp. 309-315. (SENRA Academic Publishers – Canada)

11. I.A. Al-Shakhrah. “Radiation Dose Measurements with Direction and Distance from Patients Undergoing Nuclear Medicine Investigations”. Dirasat , Basic Sciences, 2003, Volume 30, No. 2, pp. 251-261. (The Deanship of Academic Research, University of Jordan – Jordan)

12. Y.S. Abu-Khaled and I.A. Al-Shakhrah. The Effective Dose for Radiographers in Non-Destructive Testing “ Proposed Conservative Method Validated by Phantom’s Measurements”. Materials Evaluation, 2003, Volume 61, No. 4, pp. 498-501. (Americal Society for Nondestructive Testing –USA).

13. I.A. Al-Shakhrah and T. Al-Obaidi. “Common artifacts in computerized tomography : A review”. Applied Radiology, 2003, Volume 32, No. 6, pp. 23-28. (University of Virginia (Anderson Publishing Ltd. USA)

14. Y.S. Abu-Khaled and I.A. Al-Shakhrah. Estimation of radiation effective dose for radiographers in non-destructive testing “proposed conservative method”. *Materials Evaluation*, 2002, Volume 60, No. 3, pp. 404-408.
15. I.A. Al-Shakhrah and Y. S. Abu-Khaled. “Estimation of effective radiation dose for physicians and staff members in contrast angiocardiology”. *HEART & LUNG*, 2000, Volume 29, No 6, pp. 417-423.
16. I.A. Al-Shakhrah. “Renogram deconvolution using fast fourier transform : A comparison by simulation” . *Dirasat , Natural and Engineering Sciences*, 1999, Volume 26, No. 2, pp. 184-194.
Deanship of Scientific Research of the University of Jordan, Jordan.
17. I.A. Al-Shakhrah and H.M. Hilow. “Occupational exposure to ionising radiation in Jordanian medical institutions”. *Dirasat , Natural and Engineering Sciences*, 1999, Volume 26, No. 1, pp. 11-21.
18. Z.A. Suwan and I.A. Al-Shakhrah. “Film repeats in radiology department”. *Dirasat, Medical and Biological Sciences*, 1997, Volume 24, No. 2, pp. 146-160.
19. I.A. Al-Shakhrah and M.K Yousef. “Quantitative measurement of internal mean transit time with deconvolution analysis using the matrix algorithm”. *Dirasat, Natural and Engineering Sciences*, 1996, Volume 23, No. 1, pp. 85-90.
20. I.A. Al-Shakhrah and Y.S. Abu-Khaled. “Thermoluminescence dosimeters for personnel and environmental absorbed assessment”. *J. Biomed. Engng*, 1995, Vol.11, No. 1, pp. 47-65. (Academy of scientific Research and Technology – Egypt)
- 21 . I.A. Al-Shakhrah. “An analytical study comparing perirenal and semilunar background correction on relative renal function of human kidney using ^{99m}Tc-DTPA” . *J. Biomed. Engng*, 1995, Vol.11, No.1, pp. 31-45. (Academy of scientific Research and Technology – Egypt)