

Curriculum Vitae (CV)

Kurdistan University of Medical Sciences Sanandaj IRAN

Updated September 2019

Personal Details:

Name: Jamal Surname: Amiri Email : <u>Amirijamal123@gmail.com</u>, <u>J.amiri@muk.ac.ir</u>

Address: department of radiotherapy, faculty of paramedical sciences, Kurdistan University of medical sciences, Blvd Pasdaran, Sanandaj.

Marital status: Married

Academic Qualifications:

M.S. Medical Radiation Engineering, Amirkabir University, Tehran, Iran

Positions and work experiences:

- Radiotherapy department director, Paramedical sciences, Kurdistan university of medical sciences
- Faculty member, Paramedical sciences, Kurdistan university of medical sciences
- physics Lab director, Paramedical sciences, Kurdistan university of medical sciences
- Secretary of scientific communities, Paramedical sciences, Kurdistan university of medical sciences
- The expert of research, Ilam university of medical sciences
- The expert of development center, Ilam university of medical sciences

Key Skills:

- Treatment and imaging of tumor cells
- Effect of radiation on cells
- Research on cancerous cells
- Specialized soft wares: MCNP, MATLAB, RT Planning
- Working with devices: Linac, Cobalt-60, CT Simulation, Quality Control Radiotherapy and Radiology Systems, Dosimetric systems

Teaching:

- Radiotherapy devices
- The physics of Radiation
- The physics of Radiation therapy
- CT- scan physics
- Medical physics
- Dosimeters
- Shielding

- Accelerators in medical
- Nuclear medical
- Molding in radiotherapy
- Quality Control radiotherapy and radiology systems
- RT Planning
- Bio physics
- Modern Physics
- Electromagnetism
- Basic physics in radiology
- Basic physics in radiotherapy
- Basic physics in laboratory sciences

Patents

• Clean room with adjustable with applications in medical, research, domestic and industrial **Papers**

- 1. Jamil Abdolmohammadi, Fariborz Faeghi, Alireza Zali, Hamidreza Haghighatkhah, Jamal Amiri*. The Role of Single Voxel MR Spectroscopy, T2 Relaxation Time and Apparent Diffusion Coefficient in Determining the Cellularity of Brain Tumors by MATLAB Software, Asian Pac J Cancer Prev, 2018; 19: 253-7.
- 2. Elahimanesh F, Allaveisi F, Zahedi R, Abdolmohammadi J, Mahmoodi M, Amiri J, et al. Evaluation of Changes in Blood Factors, Liver Functional Tests, and Thyroid Tests in Radiation Workers in Hospitals in Kurdistan Province, Iran. J Isfahan Med Sch 2018; 35(453): 1532-9.
- 3. Jamal Amiri, Seyed Pezhman Shirmardi*, Rohollah Adeli, Mostafa Erfani, ElhamSaniei, 131I-Chlorotoxin dosimetry in liver using MCNP simulation code, *Journal of Paramedical Sciences (JPS)*, 2014;5(1): 58-62.
- 4. Jamal Amiri, Seyed Pezhman Shirmardi*, Measuring natural radioactivity of bricks used in the constructions of Tehran, *Journal of Paramedical Sciences (JPS), 2014; 5(3): 12- 18.*
- 5. Rouhollah Adeli, Seyed Pezhman Shirmardi^{*}, <u>Jamal Amiri</u>, V.P. Singh, M.E. Medhat, Simulation and comparison of radiology X-ray spectra by MCNP and GEANT4 codes, 2015;6(4): 8-14.
- 6. <u>Amiri J</u>, Shamsaei M, Shirmardi S.P, Adeli R, amiri Sh, Designing Light Elements Analysis System with Neutron Activation Analysis(NAA) By Using MCNP Code, *Scientific Journal of Ilam University of Medical Sciences*, 2013; 21(5): 100 -108 7 (In Persian).
- 7. <u>Amiri J</u>, Shahin Amiri, Parvin Tork, Mohmad hasan Abbasi, Seyed Pezhman Shirmardi*, Evaluating the implementation of standards for safety and dosimetry at x-ray imaging centers in hospitals belonging to Ilam University of medical sciences, *Scientific Journal of Ilam University of Medical Sciences*, 2014; 22(2): 24 -31 (In Persian).
- 8. <u>Amiri J</u>, Shirmardi S*, Amiri S, Abbasi M, Abdolmohamadi J, Measurement of Outdoor Background Dose Rate in Ilam Province, *Scientific Journal of Ilam University of Medical Sciences*, 2015; 23(6): 196 -203 (In Persian).
- 9. Jamal Amiri, Siamak derakhshan, Shahin Amiri, investigate effect of neutron energy source for BNCT and digesting applications, Scientific Journal of Nursing, Midwifery and Paramedical Faculty, 2016.

Conferences:

1. Jamal amiri1, Title Design of light element analysis system in BNCT and every NCT, Iranian Journal of Medical Physics, 12th Iranian Congress of Medical Physics, July 2018, Tehran, Iran.

- <u>Amiri jamal</u>, designing breast elements analysis system with Neutron Activation Analysis (NAA) by using MCNP code, 1st International & 8th Annual Tehran Breast Cancer Congress, October 28 – 30, 2015, Tehran, Iran.
- 3. Elham saniee, Sayed Pezhman Shirmardi, <u>Jamal Amiri</u>, Determination of inhomogeneity's in the path of proton beam and its effect on the Bragg peak, 11th Iranian conference of medical physic, November 6-7, 2014, Tehran, Iran (In Persian).
- 4. <u>Jamal Amiri</u>, Investigation observation standards of security and dosimetry at x-ray imaging center hospitals Subsidiary Ilam University of medical sciences, 11th Iranian conference of medical physic, November 6-7, 2014, Tehran, Iran (In Persian).
- 5. <u>Jamal Amiri</u>, Roshank soltani, Sayed Pezhman Shirmardi, Optimizing the parameters affecting the output spectrum of the X-ray tube by MCNP code,11th Iranian conference of medical physic, November 6-7, 2014, Tehran, Iran (In Persian).
- 6. Jamal Amiri, Neutron investigation as nuclear energy beating heart and different cases of its applications, Fifth National Conference of Physics PNU, October 7-8, 2011, Tabriz, Iran (In Persian).
- Amiri J, Light element of tissue analysis system by use of neutron activation analysis (NAA) and study simulation with MCNP code, 1st MEFOMP International Conference Medical Physics, November 2- 4,2011, Shiraz, Iran.

Books:

- 1. Application of MCNP code in nuclear computation (In Persian)
- **2.** Radiations and shielding them (In Persian)

Current Works in Progress:

- Modern treatment methods for thyroid, skin, lung and breast cancers.
- Effect of gadolinium with radiotherapy and iodine therapy on the thyroid cancer cell line in in vitro.
- Effect of nanoparticles on radiotherapy efficiency increasing.
- Various techniques in dosimetry

Current academic positions:

- Radiotherapy department director, Paramedical sciences, Kurdistan university of medical sciences
- University faculty member, Paramedical sciences, Kurdistan university of medical sciences

Research Interests:

- Invent new methods for diagnose cancerous cells
- Invent new methods of treatment and eliminate cancerous cells
- Design and construction of new equipment for cancer treatment

Experimental Skills

- Treatment planning in radiotherapy
- Design and construction of medical systems
- Quality control of radiotherapy devices
- Quality control of radiology devices
- Medical dosimetry

- Applications of radiopharmaceuticals in treatment and diagnosis
- animal and human researches

Interests:

Poetry, reed, documentaries on nature and wildlife, literature and philosophy of science

Language:

Fluent in Farsi, Kurdish, English, and familiar with Arabic