

Curriculum Vita



Personal information:

Name: Nima

Surname: Rostampour

Address:

*Department of Medical Physics,
Kermanshah University of Medical Sciences,
Kermanshah, Iran*

nima.rostampour@kums.ac.ir

Education:

1. BSc. Certificate, Solid State Physics, Razi University of Kermanshah, Kermanshah, Iran, Jan. 2006.
2. MSc. Certificate, Medical Physics, Isfahan University of Medical Sciences, Isfahan, Iran, July 2008.

Thesis: “Production and quality control of [^{61}Cu]-diacetyl-bis-(N4-methyl thiosemicarbazone) ([^{61}Cu]-ATSM) for hypoxic tissue detection and determination of its biodistribution in normal and fibrosarcoma bearing mice”

3. PhD Certificate, Medical Physics, Isfahan University of Medical Sciences, Isfahan, Iran, May 2017.

Thesis: “Development of tumor tracking technique for lung tumors using an artificial neural network based approach”

Institutions:

1. Department of Medical Physics, Hamadan University of Medical Sciences, Hamadan, Iran, Dec. 2008 to June 2013. (Faculty member)
2. Mahdiyeh Radiotherapy Center, Hamadan, Iran, Sep. 2009-to Sep 2010. (Physicist)

3. Department of Radiology and Nuclear Medicine, Kermanshah University of Medical Sciences, Kermanshah, Iran, Jan. 2009 to Jan 2010. (Part time colleague)
4. Radiopharmaceutical R&D, Cyclotron and Nuclear Medicine Dept., Nuclear Research Center for Agriculture & Medicine, Karaj, Iran, Dec. 2007 to March 2009.
5. Department of Medical Physics, Kermanshah University of Medical Sciences, Kermanshah, Iran, August 2017 to now. (Faculty member)

Field of interest:

- 1) Radiation therapy
- 2) Dosimetry
- 3) Imaging

Membership:

1. Member of Iranian Association of Medical Physicists (IAMP), since Feb. 2007.
2. Member of Iranian Radiation Protection Society (IRPS), since Mar. 2012.

Honors:

1. Member of National Elites Foundation of Iran, since Aug. 2015.
2. Member of Talented Students Center of Isfahan University of Medical Sciences, Isfahan, Iran, since Feb. 2013 to May 2017.
3. Number 2 on PhD entrance exam for medical physics degree in Iran, Sep. 2012.
4. Winner of the “Young Scientist Award” during 1st MEFOMP International Conference of Medical Physics, Shiraz University of Medical Sciences, Shiraz, Iran. 2011.
5. Top speaker on National Congress on Safety and Health in Medical and Educational Centers. Hamadan University of Medical Sciences, Hamadan, Iran. 2010.

6. Winner of the Wiley awards valued at \$1000 for the three poster presentations judged to be of the highest quality by the 18th international symposium on radiopharmaceutical sciences. Edmonton, Canada. 2009.
7. Top student on Isfahan University MSc. candidacy exam for medical physics degree, Sep. 2006.

Experience:

1. Clinical
2. Experience with 'core plan' treatment planning system
3. Linear accelerator quality assurance tests including: dosimetry, fortnightly and annually checks
4. TLC and RTLC of proteins and simple organic molecules
5. Radiolabeling of simple molecules for research/diagnostic studies
6. Animal handling for research purposes
7. Assistant physicist of general and medical physics laboratories (Mechanics, Electricity, Light, Nuclear Physics), Hamadan University of Medical Sciences, Hamadan, Iran

Computer skill:

1. Microsoft Programs: Word, Excel, PowerPoint, etc
2. Endnote software
3. Familiar with BEAMnrc
4. Familiar with MATLAB software
5. Familiar with SPSS

Educational:

A. Lectures:

Teaching more than 250 credits in:

1. Medical physics (light and its application in medicine, physics of sonography, medical imaging, radiation therapy, radiation biology, etc), for MD students

2. Medical physics, for dentistry students
3. Medical physics, for pharmacy students
4. Medical physics laboratory, for MD, dentistry and pharmacy students
5. Radiation protection management, for MSc public health students
6. Biophysics, for public health students
7. Basic physics, for undergraduate students
8. Radiation physics, for nuclear medicine students
9. Physics of operation room apparatuses, for operation room students
10. Radiation physics, radiation biology and diagnostic X- ray physics, for radiology students
11. Health physics, for environmental health students
12. Nuclear physics, for nuclear medicine students
13. Radiotherapy, for nuclear medicine students
14. Modern physics
15. Ultrasound, for MSc medical physics students
16. Non-ionizing radiation, for MSc medical physics students
17. Laser, for MSc medical physics students
18. Physical principles of laboratory equipment, for MSc medical physics students

B. Journal papers:

1. Salamat Mohammad Reza, ***Rostampour Nima**, Salehi Kahrizsangi Mansour, Salari Amir Hosein, Gookizadeh Abas. A Comparison of DXA Measurement at the Lumbar Spine and Proximal Femur for Premenopausal Women. Iranian Journal of Medical Physics. 2007;3(13):25-30.
2. Salamat Mohamad Reza, ***Rostampour Nima**, Shanehsazzadeh Saeed, Tavakoli Mohamad Bagher, Siavash Mansour, Almasi Tinoush. Assessment of Bone Mineral Density with Dual Energy X-Ray Absorptiometry in Pre- and Post-Menopausal Women. Iranian Journal of Radiation Research. 2008;6(2):103-107. **(Indexed in ISI)**
3. *Jalilian Amir R., **Rostampour Nima**, Rowshanfarzad Pejman, Shafaii Kamaledin, Kamali-Dehghan Mohsen, Akhlaghi Mehdi. Preclinical

- Studies of [⁶¹Cu]ATSM as a PET Radiopharmaceutical for Fibrosarcoma Imaging. *Acta Pharmaceutica*. 2009;59:45-55. **(Indexed in ISI)**
4. *Targholizadeh Hossain, Raisali Gholamreza, Jalilian Amir R., **Rostampour Nima**, Ensaf Mohammadreza, Dehghan Mohsen K. Cyclotron Production of Technetium Radionuclides Using a Natural Metallic Molybdenum Thick Target and Consequent Preparation of [Tc]-BRIDA as a Radio-Labelled Kit Sample. *Nukleonika journal*. 2010;55(1):113-118. **(Indexed in ISI)**
 5. Salamat Mohammad Reza, ***Rostampour Nima**, , Zofaghari Shafe Jafar, Hoseyni-Panah Hasan, Javdan Mohammad. Comparison of Singh Index Accuracy and Dual Energy X-ray Absorptiometry Bone Mineral Density Measurement for Evaluating Osteoporosis. *Iranian Journal of Radiation Research*. 2010;8(2):123-128. **(Indexed in ISI)**
 6. ***Rostampour Nima**, Jalilian Amir R., Tavakoli Mohamad B., Ghazikhanlou Karim, Shafaii Kamaledin, Kamali-Dehghan Mohsen, Akhlaghi Mehdi. Assessment of production possibility of a novel radiopharmaceutical for hypoxic tissues diagnosis. *Pejouhesh dar Pezeshki (Journal of the Faculty of Medicine)*. 2010;34(2):98-106.
 7. Eskandarlou Amir, *Ghazi-khanlou Sani Karim, **Rostampour Nima**. Observance of Radiation Protection Principles in Iranian Dental Schools. *Journal of Research in Medical Sciences*. 2010;15(5):292-293. **(Indexed in ISI)**
 8. Heydari Ali, Ghazi Khanlou Sani Karim, Salehi Iraj, Sharafi Ali A, **Rostampour Nima**. Evaluation of Radiation Dose Received by Operating Room Personnel During Radiological Procedures. *Journal of Zanjan University of Medical Sciences*. 2011;19(74):86-95.
 9. Ghazi Khanlou Sani Karim, Eskandarlou Amir, **Rostampour Nima**, Rahimi Azizolah. Comparison of Adsorbed Skin Dose Received by Patients in Cone Beam Computed Tomography, Spiral and Conventional Computed Tomography Scanning. *Journal of Dental Medicine - Tehran University of Medical Sciences*. 2011;24(3):181-187.
 10. Ghazi Khanlou Sani Karim, Jafari Mahmoodreza, **Rostampour Nima**. A Comparison of the effectiveness of Mammographic Film-Screen and

Standard Film-Screen in the Detection of Small Bone Fractures. Iranian Journal of Medical Sciences. 2011;36(4):306-310. **(Indexed in ISI)**

11. ***Rostampour Nima**, Almasi Tinoosh, Rostampour Masoumeh, Mohammadi Mohamad, Ghazikhanlou Sani Karim, Khosravi Hamid-Reza, Golzari Bahman, Jabari Vesal Naghi. An Investigation of Gamma Background Radiation in Hamadan Province, Iran. Radiation Protection Dosimetry. 2012;152(4):438–443. **(Indexed in ISI)**
12. *Mohammadi Mohammad, **Rostampour Nima**, Rutten Thomas P. Modification of the gamma function for the recognition of over- and under-dose regions in three dimensions. Journal of Medical Physics. 2012;37(4):200-206. **(Indexed in ISI)**
13. ***Rostampour Nima**, Almasi Tinoosh, Rostampour Masoumeh, Arabian Khatereh, Karami Ahmad-Reza. Assessment of Electromagnetic Fields around High Voltage Power Supply in Hamadan Hospital Wards. Iran. J. Health & Environ. 2012;5(3):235-244.
14. ***Rostampour Nima**, Almasi Tinoosh, Rostampour Masoumeh, Bayat Hosna, Karimi Saeedeh. Assessment of Solar Ultraviolet A Radiation in Hamadan City. Sci. J. Hamadan Univ. Med. Sci. 2013;19(4):69-74.
15. ***Rostampour Nima**, Almasi Tinoosh, Arabian Khatereh, Sharifi Mohana, Rashidi Maryam, Bayat Fatemeh. Evaluation of Radioactive Contamination in Hamadan Nuclear Medicine Centers Using Wipe Technique. J. of Health and Safety Work. 2013;3(4):69-76.
16. Samadi Mohamad Taghi, Golzar Khojasteh Bahman, **Rostampour Nima**. Indoor Natural Radiation Level in Hamadan Province, 2012. J Mazand. Univ. Med. Sci. 2013;23(99):53-59.
17. Samadi Mohamad Taghi, Golzar Khojasteh Bahman, **Rostampour Nima**, Ladan Shokery Mirazizi. Evaluation of the natural gamma radiation level in residential zones and determination of annual effective exposure dose in the residents of Hamadan province, Iran. Scientific Journal of Kurdistan University of Medical Sciences. 2014;19(1):30-44.
18. *Jabbari Keyvan, **Rostampour Nima**. Evaluation of Setup Errors in Two Radiotherapy Centers from a Physicist’s Point of View. Frontiers in Biomedical Technologies. 2015;2(3):155-162.

19. ***Rostampour Nima**, Almasi Tinoosh, Rostampour Masoumeh, Sadeghi Hamid Reza, Khodamoradi Ehsan, Razi Reyhaneh, Derakhsh Zahra. Impact of low level radiation on concentrations of some trace elements in radiation workers. *Journal of Experimental Therapeutics & Oncology*. 2017;12(3):187-192. **(Indexed in ISI)**
20. **Rostampour Nima**, *Jabbari Keyvan, Esmaeili Mahdad, Mohammadi Mohammad, Nabavi Shahabedin. Markerless Respiratory Tumor Motion Prediction Using an Adaptive Neuro-fuzzy Approach. *J Med Signals Sens*. 2018;8(1):25-30. **(Indexed in PubMed)**
21. Jabbari Keyvan, ***Almasi Tinoosh**, Tavakoli Mohamad B., Rostampour Nima. Dosimetry of vacuum bag and evaluation of its effect on absorbed dose in different forms of energies, angles and field sizes. *International Journal of Cancer Research and Therapeutics*. 2018;14(6):1245-1250. **(Indexed in ISI)**.
22. **Rostampour Nima**, *Jabbari Keyvan, Nabavi Shahabedin, Mohammadi Mohammad, Esmaeili Mahdad. Dynamic MLC tracking using 4D lung tumor motion modelling and EPID feedback. *J of Biomed Phys and Engin*. 2019;9(4):417-424. **(Indexed in PubMed)**
23. Mahdi Mohammadi, Abbas Haghparast, **Nima Rostampour**, Raziieh Zaghian, Meisam Zarsav. Assessment of polarization and ion recombination correction factors and leakage of small megavoltage photon beams. *International Journal of Radiation Research* **(Indexed in PubMed)** (Accepted).

C. Presentations in congresses and conferences:

1. Presentation in the Congress of Morality in Medicine, June 11-12, 2008, Ilam, Iran. Morality, Nanotechnology, Treatment.
2. Presentation in the 6th Congress of the Iranian Radiographic Sciences Association (6ICRSA), April 24-25, 2008, Shiraz, Iran. Determination of Gamma Background Radiation in Kermanshah City.
3. Presentation in the 6th Congress of the Iranian Radiographic Sciences Association (6ICRSA), April 24-25, 2008, Shiraz, Iran. Comparison of Singh Index and DXA for the Osteoporosis Diagnosis.

4. Presentation in the 18th International Symposium on Radiopharmaceutical Sciences. Edmonton, Alberta Canada. July 12-17, 2009. Preparation and Biological Evaluation of [⁶¹Cu]-Bleomycin Complex as a Possible PET Radiopharmaceutical for Fibrosarcoma Tumor Imaging.
5. Presentation in the 18th International Symposium on Radiopharmaceutical Sciences. Edmonton, Alberta Canada. July 12-17, 2009. Preparation and Biodistribution of [⁶¹Cu]-Diacetyl-bis-(N⁴-Methylthiosemicarbazone) as a Possible PET Radiopharmaceutical.
6. Presentation in the National Congress on Safety and Health in Medical and Educational Centers. Hamadan University of Medical Sciences, Hamadan, Iran. 2010. A Review of the Dose Reduction Strategies in PET.
7. Presentation in the EPSM-ABEC Conference. Darwin, Northern Territory, Australia. 2011. Assessment of Electromagnetic Field Around High Voltage Power Supplies Installed at Hospitals.
8. Presentation in the 1st MEFOMP International Conference of Medical Physics, Shiraz, Iran. November 2-4, 2011. Determination of Bone Mineral Density in Pre- and Post-Menopausal Women with Dual Energy X-ray Absorptiometry.
9. Presentation in the 1st MEFOMP International Conference of Medical Physics, Shiraz, Iran. November 2-4, 2011. A Comparison of DXA Measurement of Lumbar Spine and Femoral Neck for Premenopausal Women.
10. Presentation in the 1st MEFOMP International Conference of Medical Physics, Shiraz, Iran. November 2-4, 2011. Comparison of Singh Index Accuracy and Dual Energy X-ray Absorptiometry Bone Mineral Density Measurement for Evaluating Osteoporosis.
11. Presentation in the 1st MEFOMP International Conference of Medical Physics, Shiraz, Iran. November 2-4, 2011. Annual Background Radiation in the Hamadan Province.
12. Presentation in the 1st MEFOMP International Conference of Medical Physics, Shiraz, Iran. November 2-4, 2011. Assessment of Production Possibility of a Novel Radiopharmaceutical for Hypoxic Tissues Diagnosis.
13. Presentation in the 2nd Annual Conference of Human Medical Physiology

and Biophysics, Karbala College of Medicine, Karbala, Iraq. March 11-12, 2014. Evaluation of setup errors in two radiotherapy centers from physicist point of view.

14. Presentation in the 11th Iranian Conference of Medical Physics, Tehran University of Medical Sciences, Tehran, Iran. November 6-7, 2014. Evaluation of Radioactive Contamination in Hamadan Nuclear Medicine Centers Using Wipe Technique.
15. Presentation in the 11th Iranian Conference of Medical Physics, Tehran University of Medical Sciences, Tehran, Iran. November 6-7, 2014. Evaluation of Effect of Occupational Exposure on Concentration of Some Trace Elements in Radiation Workers in Hamadan niversity of Medical Sciences.
16. Presentation in the 11th Iranian Conference of Medical Physics, Tehran University of Medical Sciences, Tehran, Iran. November 6-7, 2014. Evaluation of Indoor Gamma Radiation in Hamadan Province, IRAN.
17. Presentation in the 11th Iranian Conference of Medical Physics, Tehran University of Medical Sciences, Tehran, Iran. November 6-7, 2014. Dosimetry of vacuum bag and evaluation of its effect on absorbed dose in different forms of energies, angles and filed sizes.
18. Presentation in the 2nd European Congress of Medical Physics, Copenhagen, Denmark. August 23-25, 2018. 4D lung tumor motion modelling using dynamic MLC tracking and EPID feedback.

D. Approved scientific projects:

1. Quality control of [⁶¹Cu]-diacetyl-bis-(N4-methyl thiosemicarbazone) ([⁶¹Cu]-ATSM) for hypoxic tissue detection and determination of its biodistribution in normal and fibrosarcoma bearing mice. 2008. (My Position: Executive). **Reported.**
2. Assessment of solar ultraviolet radiation in Hamadan. 2010. (My Position: Supervisor). **Reported.**
3. Assessment of electromagnetic field around high voltage power supply in Hamadan hospital centers. 2010. (My Position: Supervisor). **Reported.**
4. An investigation of outdoor environmental radiation level in Hamadan province. 2010. (My Position: Executive). **Reported.**

5. Evaluation of the uniformity of radiation dose distribution in target volume and organ at risks in current breast radiotherapy techniques applied in Iran. 2010. (My Position: Executive)
6. Evaluation of effect of occupational exposure on concentration of some trace elements in radiation workers. 2011. (My Position: Executive). **Reported.**
7. An investigation of annual effective dose of background radiation of people who live in Hamadan city. 2011. MSc student thesis (My Position: Advisor). **Reported.**
8. Evaluation of radioactive contamination in Hamadan nuclear medicine centers using wipe technique. 2011. (My Position: Executive). **Reported.**
9. Evaluation of effect of 100 mT magnetic field on blood glucose, cortisol, T₃/T₄ and body weight of rats. 2012. (My Position: Executive)
10. Investigation of effectiveness of contrast enhancement software in delineation of tumoral region recognized by radiologists and radiation oncologists. 2013. (My Position: Executive)
11. Assessment of the most important affecting parameters on dosimetry of small fields in megavoltage photon beams. 2018. (My Position: Advisor)
12. Evaluation of skyshine photon dose rates using direct measurement method and Monte Carlo computational model for 6MV, 10MV, 18 MV Elekta linac at radiotherapy center of Imam Reza hospital. 2019. (My Position: Executive)
13. The Comparative study of brain white matter fiber tracts alterations in patients with insomnia disorders with/without depression symptoms and control group using Diffusion Tensor Imaging. 2019. (My Position: Executive)

E. Book:

1. Radioactivity, Radionuclides, Radiation. Springer Publication, 2005. Joseph Magill and Jean Galy. (Translation, English to Persian).
2. Khan's The Physics of Radiation Therapy. Lippincott Williams & Wilkins, 2014. Khan FM and Gibbons JP. (Translation, English to Persian).

F. Language skill:

TOEFL 500 (PBT)

French (Intermediate)