



Curriculum Vitae (CV)

Mikaeil Molazadeh

Personal Information:

Mikaeil Molazadeh, Ph.D. of Medical Physic

Date of Birth: 11 Nov 1981

Nationality: IRAN

Gender: Male

Marital Status: Married

Office Telephone: +98 41 3336 4660

Mobile: +98 914 346 3457

Address: Department of Medical Physics, School of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran.

E-Mail: molazadeh91@gmail.com

Educational Background:

Degree	Field	Institution	Received Date
B.Sc	Solid state physics	Urmia University	2005
M.Sc	Medical Physics	Tehran Medical Sciences University	2009
Ph.D.	Medical Physics	Tehran Medical Sciences University	2017

Master Thesis: Treatment planning systems verification of ^{60}Co machine and Gamma Knife unit using RadioChromic film and MC simulation in head phantom.

Ph.D. Dissertation: Introduce a new method for three-dimensional dosimetry in IMRT with RadioChromic film and comparison with the results of Monte Carlo simulation and Full Scatter Convolution computational algorithm in the head heterogeneous environment.

Administrative Positions:

Job Title	Place of Work	Date	Name of Institution
Radiotherapy Physicist	Department of Physics	2009- 2013	Radiotherapy Center of Urmia Omid Hospital
University Tuition Teacher	Faculty of Paramedical	2010- 2013	Urmia University of Medical Sciences
University Tuition Teacher	Faculty of Health	2011-2013	Urmia University of Medical Sciences
Radiotherapy Physicist	Department of Physics	2014- 2016	Radiotherapy Center of Urmia Imam Khomeini Hospital
Chief Medical Physicist of Radiotherapy	Department of Physics	2016- 2022	Radiotherapy Center of Ardabil Imam Khomeini Hospital
Assistant Professor of Medical Physics	Department of Radiology	2021- 2022	Ardabil University of Medical Sciences
Medical Physicist of Radiotherapy	Department of Physics	2022- upward	Radiotherapy Center of Tabriz Shahid Madani Hospital
Assistant Professor of Medical Physics	Department of Medical Physics	2022- upward	Tabriz University of Medical Sciences

Publications: (Journal papers)

- 1- Collapsed Cone Superposition Algorithm Validation for Chest Wall Tangential Fields using Virtual Wedge Filters
Journal of Medical Signals & Sensors
2023-07-12 | journal-article
DOI: [10.4103/jmss.jmss_7_22](https://doi.org/10.4103/jmss.jmss_7_22)
- 2- Assessment of the knowledge level of radiographers and CT technologists regarding computed tomography parameters in Iran
Radiation Medicine and Protection
2023-01-13 | journal-article
DOI: [10.1016/j.radmp.2023.01.002](https://doi.org/10.1016/j.radmp.2023.01.002)
- 3- Measuring the leakage dose of TiGRT Dynamic MLC with EDGE diode dosimeter and EBT3 radiochromic film and comparing the results with BEAMnrc code calculations
Iranian Journal of Radiation Safety and Measurement
2022-07-31 | journal-article

- 4- The alleviating effect of herniarin against ionizing radiation-induced genotoxicity and cytotoxicity in human peripheral blood lymphocytes
Current Radiopharmaceuticals
2021-10-21 | journal-article
PMID: [34636317](#)
DOI: [10.2174/1874471014666211012104808](https://doi.org/10.2174/1874471014666211012104808)
- 5- Three-dimensional IMRT QA of Monte Carlo and full scatter convolution algorithms based on 3D film dosimetry
Radiation Physics and Chemistry
2021-04-28 | journal-article
PMID: [32334505](#)
DOI: [10.1016/j.radphyschem.2021.109528](https://doi.org/10.1016/j.radphyschem.2021.109528)
- 6- Synthesis of new thioureas derivatives and evaluation of their efficacy as proliferation inhibitors in MCF-7 breast cancer cells by using ^{99m}Tc-MIBI radiotracer.
Medicinal chemistry (Sharjah (United Arab Emirates))
2020-04-25 | journal-article
PMID: [32334505](#)
DOI: [10.2174/1573406416666200425224921](https://doi.org/10.2174/1573406416666200425224921)
- 7- Evaluation of Three-dimensional Treatment Planning System (TPS) performance in dose calculation of virtual wedged fields using film dosimetry.
Iranian Journal of Medical Physics
2018-12 | Conference-paper
DOI: [10.22038/ijmp.2018.12792](https://doi.org/10.22038/ijmp.2018.12792)
- 8- Dosimetric characteristics of LinaTech DMLC H multi leaf collimator: Monte Carlo simulation and experimental study.
Journal of Applied Clinical Medical Physics
2017 | journal-article
DOI: [10.1002/acm2.12055](https://doi.org/10.1002/acm2.12055)
EID: 2-s2.0-85014729902
Part of ISSN: [15269914](#)
- 9- Investigating the Use of Personal Information Management Strategies by Faculty Members of three Medical Sciences Universities in Iran.
MIER Journal of Educational Studies, Trends and Practices
2017-01 | journal-article
<https://doi.org/10.52634/mier/2017/v7/i1/1450>

- 10- Validation of a prototype optical computed tomography system.
Journal of Medical Signals and Sensors
2015 | journal-article
DOI: [10.4103/2228-7477.157621](https://doi.org/10.4103/2228-7477.157621)
EID: 2-s2.0-85020469434
Part of ISSN: [22287477](https://doi.org/10.4103/2228-7477)
- 11- Influence of the intravenous contrast media on treatment planning dose calculations of lower esophageal and rectal cancers.
Journal of Cancer Research and Therapeutics
2014 | journal-article
DOI: [10.4103/0973-1482.131465](https://doi.org/10.4103/0973-1482.131465)
EID: 2-s2.0-84899704102
Part of ISSN: [19984138 09731482](https://doi.org/10.4103/0973-1482)
- 12- Evaluation the effect of photon beam energies on organ at risk doses in three-dimensional conformal radiation therapy.
Research Journal of Applied Sciences, Engineering and Technology
2013 | journal-article
DOI: [10.19026/rjaset.6.3833](https://doi.org/10.19026/rjaset.6.3833)
EID: 2-s2.0-84880678395
Part of ISSN: [20407467 20407459](https://doi.org/10.19026/rjaset.6.3833)
- 13- Evaluation of the RtDosePlan Treatment Planning System using Radiochromic Film and Monte Carlo Simulation.
Iranian Journal of Medical Physics
2010-06 | journal-article
DOI: [10.22038/ijmp.2010.7264](https://doi.org/10.22038/ijmp.2010.7264)

Congresses and Seminars:

- 1- The 6th conference of ionizing, and non-ionizing radiation measurement, and safety, 2021, Oral Presentation.
- 2- The 12th Iranian Congress of Medical Physics, 2018, Oral Presentation.
- 3- The 11th Iranian Congress of Medical Physics, 2014, Poster Presentation.
- 4- The 1st MEFOMP International Congress of Medical Physics, 2011, Poster Presentation.
- 5- The 9th Iranian Congress of Medical Physics, 2010, Oral Presentation.
- 6- The 16th Iranian Congress on Biomedical Engineering, 2009, Oral Presentation.

Membership to Scientific Associations:

Iranian Association of Medical Physicists (IAMP), 2013 upward. (Membership No: MOL359M)

Courses Taught:

General Physics, Medical Physics and Electricity, Dedicated Physics, Exclusive Theoretical Physics.

Professional Experiences:

- 1- Commissioning of Siemens Magnetron HPD Single/Multi Energy Accelerator (PRIMUS Model).
- 2- Commissioning of Elekta Magnetron Single Energy Accelerator (COMPACT Model).
- 3- Commissioning of CorePLAN, MIRS, ISOgray and RtDosePlan Treatment Planning Systems
- 4- Mastery and work with the tools and equipment in the field of dosimetry and radiation (QA/QC):
 - a. Theratron/Picker ⁶⁰Co/ONCOR/PRIMUS/Elekta/ARTISTE/Tomotherapy Radixact (X7) machines.
 - b. GZP6 HDL Afterloading Intracavitary Treatment Unit.
 - c. DailyQA3/Profiler2/PTW/Quick Check/Detector 1500 (Check Devices).
 - d. Farmer/Roos/Markus/Edge/Diode/Exradin A1SL/Exradin A101 (Field Detectors).
 - e. 1D/3D scanning systems (Water phantom of Sun Nuclear/PTW/Behyarr sanaat Corporations).
 - f. CYRPA HIT/LAP Laser Systems
 - g. MP3 PTW water phantom System
 - h. PTW MEPHYSTO Navigator scanning software
 - i. MOSAIQ/LANTIS Oncology Information System Interface
 - j. ARTISTE Siemens/Elekta Synergy EPID System
 - k. PTW OCATIUS 4D/VeriSoft

Research Interests:

- Radiation Therapy Physics
- Radiation Treatment Planning
- Radiation Dosimetry
- Plan Optimization
- Monte Carlo Simulation (BEAMnrc)
- IMRT/3DCRT/Tomotherapy
- IMRT/Tomotherapy QA
- Film Dosimetry