# **Curriculum Vitae**



Personal Data:

Name: Nada Fadhil Tawfiq
Date of birth: 25 August 1959
Place of birth: Baghdad Iraq

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Present Address: Al-Nahrain University College of Science Department of

**Physics** 

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### **Certificats & Dates:**

1984 B.Sc. Physics, College of Science, Al-Mustansiriya

University.

1989 M.Sc. Radiation Physics, Ibn Al-Haitham, Baghdad

University.

1997 Ph.D. Nuclear Physics, Al-Mustansiriya University

### **Academic and professional qualifications:**

- 1. Bachelor's degree in 1983 in Physics / College of Science / Mustansiriya University
- 2. Date of appointment 1984 in the Iraqi Atomic Energy Commission with a bachelor's degree in physics and the title of assistant scientific researcher.
- 3. Date of obtaining the Master's degree in 1989 in nuclear physics from the University of Baghdad / College of Education Ibn al-Haytham / University of Baghdad.
- 4. Obtained the title of scientific researcher at the Atomic Energy Commission in 1994.
- 5. Date of obtaining a doctorate in 1997 in nuclear physics/ College of Education / Mustansiriya University.
- 6. My services were transferred to Nahrain University as a lecture in 1999.
- 7. Date of the title of assistant professor in 2003.

- 8. Date of obtaining the title of professor in 2012.
- 9. Participated with the Arab Science and Technology Foundation (ASTF) in 2007 by research: (Concentration of Radionuclides in Water and Sediments in Tigris River: Central Iraq
- 10. I was honored by the ideal woman on Women's Day by the Minister of Higher Education and Scientific Research in 2009.
- 11. Obtained prize in 2012 and 2013 Science Day.
- 12. Participation in regular committees on radioactive contamination of natural radioactive materials in the petroleum industries of the Ministry of Higher Education and Scientific Research.
- 13. Participation in the national project with the International Atomic Energy Agency and the Ministry of Higher Education and Scientific Research.
- 14. Supervising a number of master's and doctoral students in Iraq.
- 15. Supervising a number of doctoral students outside Iraq.
- 16. Discussing a large number of master's and doctoral students in most Iraqi universities in the country.
- 17. Member of Editorial Board of US Detectives.
- 18. Member of the Editorial Board of the Australian Journal of Basic and Applied Sciences.
- 19. Member of Editorial Board of Journal of Radiation and Nuclear Applications

## **Scientific Meeting Attended:**

- 1. Determination of the Alpha-Emitters in Soil Samples, First Symposium on Use of Nuclear Techniques in Environmental Studies, Yarmouk University, Irbid, Jordan, 2001.
- 2. Determination of Radon Concentrations in Baghdad Buildings Using Nuclear Track Detector CR-39, Second Symposium on Use of Nuclear Techniques in Environmental Studies, Yarmulke University, Irbid, Jordan, 2002.
- 3. Concentration of Alpha Emitters in Drinking Water Extracted from Tigris River in Baghdad City, Conference on The Use of Depleted Uranium Weaponry on Human and Environment in Iraq, Iraq, Baghdad, 2002.
- 4. Radon/Thoron Determination in Underground Water Using CR-39 Track Detector, Fourth Symposium on Use of Nuclear Techniques in Environmental Studies, Yarmouk University, Irbid, Jordan, 2004.
- 5. Determination of Radon and Thoron in Different Kinds of Local and Imported Tobaco, Fifth Symposium on Use of Nuclear Techniques in Environmental Studies, Yarmouk University, Irbid, Jordan, 2005.
  - 6. International Conference on Advanced Remote Sensing for Earth Observation Systems, Techniques and Applications, King Abdulaziz City for Science and Technology, Riyadh-kingdom Saudia Arabia, 2005.
  - 7. International Conference "Health and the Environment in Iraq: Status, Needs and Challenges, Amman, Jordan, 2005.
  - 8. First Science Symposium for Physics Department/ College of Science for Women, Techniques of Modern Physics, 2011.

- 9. The 18<sup>th</sup> Science Symposium for College of Education AL-Mustansiriya University, 2011.
- 10. The Forth International Scientific Conference of Salahaddin University-Erbil, 18-20 October, 2011, Erbil Kurdistan, Iraq.
- 11. Radon Exposure and Risk Cancer in AL-NAJAF City IRAQ, the International workshop on" LANDFILLS OF HAZARDOUS WASTE AND ITS IMPLICATIONS ON HEALTH AND ENVIRONMENT" to be held for the period 15-17 November, 2011 in Lulea, Sweden.
- 12. The 19<sup>th</sup> Science Symposium for College of Education AL-Mustansiriya University, 2012.
- 13. National Conference on Physics, Babel, 7-8 Nov., 2012.
- 14. Eleventh Arab Conference on the Peaceful Uses of Atomic Energy, Khartoum, Sudan, 16-20 December 2012.
- 15. Measurements of Uranium Concentration in Human Blood for Selected Regions in Iraq Using CR-39 Track Detector. Joint International Conference on Nanoscience, Engineering and Management (BOND21), 19-21 Aug. 2013 at Bayview Beach Resort, Batu Ferringhi Beach, Penang, Malaysia.
- 16. The 1<sup>st</sup> International Conference on Physics for Sustainable Development, AL-Nahrain University 28-30 Oct. 2014, Baghdad- Iraq.
- 17. The 21<sup>th</sup> Science Symposium for College of Education AL-Mustansiriya University, 22-23 April, 2015.
- 18. The 5th International scientific Conference on Nanotechnology& Advanced Materials Their Applications (ICNAMA 2015)3-4 Nov, 2015.
- 19. Thirteenth Arab Conference on the Peaceful Uses of Atomic Energy, Hammamet, Republic of Tunisia, 18-22 December 2016.

#### **List of Publications**

- Measurements of radionuclides activity in some foods imparted into Iraq during1987, (Post Chernobyl), Intern. J. Environmental Studies, Vol.42, No.1, 1990, pp. 137-143.
- 2. Monitoring of Environmental Radioactivity around Tuwaitha Site, Environmental Management and Health, Vol.3, No.3,1991, pp14-17.
- 3. The transfer of CS-137 from soil to plants, Environmental International, Vol.18, No.2, 1992,211.
- 4. Determination of Alpha –Particle Emitter's Concentrations in the Soil Samples around Tuwaitha Site by using Plastic Track Detector CR-39, J. of college of Education, Al-Mustansiriya University Vol.1 No.3,1999,pp 122-130.
- 5. Study of Nitrogen Ion Emission From DPF 4.6k.J using CR-39, Sci.J.Iraqi Atomic Energy Commission, Vol.2, No.2, 2000,117.

- 6. Determination of Mineral Elements Concentration in Some Grain Using Activation Analysis Technique, J. of Al-Nahrain University, Vol. 4, No. 1, 2000, 9.
- 7. Alpha Emitters in Local Imported Agriculture Product, J. of college of Education, Baghdad University, Vol.6, ,No4, 2001,30.
- 8. Gaseous Discharge in Argon-Hydrogen Gas Mixture, J. of Al-Nahrain University Science, Baghdad University, Vol.6, No.1, 2002, 52.
- 9. Determination the Radiation Exposure and Risk Factor (Weighting) for Iraqi Construction Materials. J. of College of Education for Women, Baghdad University, Vol.13, No1, 2002, 137.
- 10. Determination the Specific Activity for Some Iraqi Construction Material Natural Gamma Ray Spectrometry. J. of College of Education for Women, Baghdad University, Vol.12, No1, 2001, 198.
- 11. Ultrasonic Study of Aqueous Solution of Polyethylene Glycol at Several Temperature, J. of College of Education, Baghdad University, Vol.1,No. 1, 2001,1
- 12. Measurement of Radon Gas in Some Locations with College of Education, ,Al-Mastansiriya University Using Nuclear Track Detector LR-115, Sci .J .Iraqi Atomic Energy Commission, Vol.3,No.1, 2001,99
- 13. Determination of Uranium Concentrations and Alpha–Emitters Concentrations (radon gas) in soil and water in Baghdad city and South Regions of Iraq, M.S.C. Thesis Al-Nahrain University, College of science, 2006.
- 14. Assessment of Depleted Uranium Contamination in Selective Iraqi Soils, J.of Al-Nahrain University-Science, Vol.11, No.1, 2008,112.
- 15. Radionuclide's Investigation in some human tissues Samples, J. of Al-Nahrain University-Science, Vol.11, No.2, 2008, 63.
- 16. Spectrophotometer Study of γ-Irradiated PM-355, Baghdad Science J., Vol.6, No.3, 2009, 46.
- 17. Determination of Uranium Concentration in Teeth Male Samples using Fission Tracks in CR-39 from Different Countries, J. of Al-Nahrain University-Science, Vol.1, No.1, 2010, 76.
- 18. Measurement of Alpha Emitters Concentration in Tomato Fruits Using CR-39 Plastic Track Detector, Baghdad Science J., Vol.7, No.1, 2010, 68.
- 19. Determination of Uranium Concentration in Child Teeth using Track Detector CR-39 in some middle and south regions of Iraq, Baghdad Science J., Vol.8, No.4, 2011,909.
- 20. Determination of Uranium Concentration in Soil and Water Samples in The Middle and South of Iraq Using CR-39 Solid State Nuclear Track Detector, accepted in J. of College of Science for Women, Baghdad University, Vol.2,No.7,2011,86.
- 21. Determination of Uranium Concentration in Sheep Organs for Some Iraqis Cities, Baghdad Science J., Vol.8, No.3, 2011,766.
- 22. Determination of Radon Concentration in Al-Najaf Governorate by Using Nuclear Track Detector CR-39, J. of Al- Nahrain University Science, Vol.15, No.1, 2012, 83.
- 23. Determination of Radon Concentration in Surface and Under Ground Water for Tigris Branch and Al-Therthar Using CR-39 Nuclear Track Detector, J. of Al-Nahrain University Science, Vol.15, No.2, 2012, 6.

- 24. Determination the Effect of Fast Neutrons on CR-39 Track Detector Using FTIR and UV Technique. J. of Al- Nahrain University Science, Vol.15, No.3, (2012), 22.
- 25. Determination of Uranium Concentration in Urine Using Fission Track Etch Technique, International Review of Physics, Vol.6, No.4, (2012),380.
- 26. Analysis of Natural Radionuclides in Soil in the Northern and central Iraq, Elixir Chem. Phys. 53 (2012) 12079-12081.
- 27. Uranium concentration measurements in human blood for some governorates in Iraq using CR-39 track detector, J. Radioanal. Nucl. Chem. (2013) 295:671–674.
- 28. Measurement of Natural Radioactivity in Building Materials used in IRAQ, Australian Journal of Basic and Applied Sciences, (2013), 7(1): 56-66.
  - 29. Determination of uranium concentration in urine of workers in an Iraqi phosphate mine and fertilizer plants, *J. Radioanal Nucl Chem*, (2013) 298:187–193
  - 30. Uranium and radon concentration in ground water in Aucashat city (Iraq) and the associated health effects, Advances in Applied Science Research, 2013, 4(3):167-171.
  - 31. Radon Concentration in Some Building Materials in Iraq Using CR-39 Track Detector, *International Journal of Physics*, 2013, Vol. 1, No. 3, 73-76.
  - 32. Determination of uranium concentrations in some building materials in Iraq, NUKLEONIKA 2013;58(2):329–331
  - 33. Uranium Concentration in Human Blood using Fission Track Etch Technique, Journal of Natural Sciences Research, Vol.3, No.13, 2013
  - 34. Uranium concentration in blood samples of Southern Iraqi leukemia patients using CR-39 track detector, J Radioanal Nucl Chem, J Radioanal Nucl Chem (2014) 299:1267–1272
  - 35. The Relationship between Uranium Contamination and Cancerous Diseases of Southern Iraqi Patients, *Pensee Journal Vol* 76, *No.* 3; *Mar* 2014.
  - 36. Uranium Concentration and its Associated Health Hazards in Drinking Water of Nineveh Province (Iraq), World Applied Sciences Journal 31 (11): 1938-1944, 2014
  - 37. Measurements of Radon- 222 Concentrations in Dwellings of Baghdad Governorate, Volume : 4 | Issue : 2 | Feb 2014 |
  - 38. Indoor radon concentrations measurement in the dwellings of Thi-Qar governorate, Iraqi, (*J.nat.sci*) 2(1): 19-26 (2014)
  - 39. Natural Radioactivity in the Petroleum Waste from Iraqi Refinery, *International Journal of Recent Research and Review, Vol. VII, Issue 3, September, 2014*
  - 40. Concentration of uranium in human cancerous tissues of Southern Iraqi patients using fission track analysis, J. Radioanal Nucl. Chem.303:1703–1709, 2015.
  - 41. Radon emanation from drinking water samples of Nineveh province (IRAQ), American Journal of Modern Physics, 3(6): 257-260, 2014.
  - 42. Uranium Concentration and its Associated Health Hazards in Drinking Water of Nineveh Province (Iraq), World Applied Sciences Journal 31 (11): 1938-1944, 2014
  - 43. Measurement of natural radioactivity in brick samples used in the Construction in Iraq, Archives of Physics Research, 6 (1):13-19, 2015.
  - 44. Estimation of Natural Radioactivity of Some Medicinal or Herbal Plants Used in Iraq, Detection, 2015, 3, 1-7.

- 45. Measuring radioactivity level in various types of rice using NaI (Tl) Detector, American Journal of Engineering Research (AJER), Volume-4, Issue-3, pp-126-132, 2015.
  - 46. A Comparative Study of the Results of Natural Radioactivity and the Associated Radiation Hazards of Na(Tl) and HPGe Detectors, International Journal of Recent Research and Review, Vol. VIII, Issue2, June 2015.
  - 47. Natural Radioactivity in Soil Samples For Selected Regions in Baghdad Governorate, International Journal of Recent Research and Review, Vol. VIII, Issue 1. March 2015
  - 48. Calibration of UV-Radiation Dose with Irradiation Time for CR-39 Track Detector by Using UV-visible Spectrophotometer, American Journal of Modern Energy, 2015; 1(2): 25-29.
  - 49. Measurement of Indoor Radon Concentration in Various Dwellings of Baghdad Iraq, *International Journal of Physics*, 2015, Vol. 3, No. 5, 202-207.
  - 50. Radon Concentration in Soil and Radon Exhalation Rate at Al-Dora Refinery and Surrounding Area in Baghdad, Detection, 2015, 3, 37-44.
  - 51. Measurement of Radon Gas Concentrations in Tap Water for Baghdad Governorate by Using Nuclear Track Detector (CR-39), *International Journal of Physics*, 2015, Vol. 3, No. 6, 233-238.
  - 52. Uranium Concentrations in Surface Soil Samples for Selected Regions in Al-Anbar governorate (Iraq) using CR-39 track detector, 978-1-4673-6531-4/14/\$31.00 ©2014 IEEE.
  - 53. Mathematical Modeling of Determining the Average of Uranium Concentration in the Urine for the Radiation Workers According to the Number of Working Years, J. of University of Anbar for pure science: Vol.9:NO.2: 2015.
  - 52. Indoor Radon Concentration Measurement in Different Iraqi Radiation Locations, *International Journal of Recent Research and Review, Vol. IX, Issue 1, March 2016.*
  - 53. Measurement of Radioactivity in Soil Samples for Selected Regions in Thi-Qar Governorate-Iraq, *J. Rad. Nucl. Appl. 1, No. 1, 25-30 (2016).*
  - 54. Uranium Concentrations in Surface Soil Samples for Selected Regions in Al-Anbar Governorate (Iraq) Using CR-39 Track Detector, Journal of Physical Science and Application, Special Issue for the 1st International Conference on Physics for Sustainable Development, Volume 6, Number 1, January 2016.
  - 55. Indoor radon concentrations measurement in the dwellings of Anbar Governorate, Atti della "Fondazione Giorgio Ronchi" Anno LXXI, N. 6, 2016.
  - 56. Analysis of Uranium Concentration on Maternal and Umbilical Cord Blood Samples after Delivery in Iraq, 2016 6th IEEE International Conference on Control System, Computing and Engineering, 25–27 November 2016, Penang, Malaysia.
  - 57. Effect of (He-Ne) Laser on Etching Parameters of CR-39 Irradiated with Alpha Particles, *Adv. Appl. Sci. Res.*, 8(1):28-35, 2017.

### **Supervising the Master and PhD students**

- 1. Measurement of Alpha Emitters Concentration in Tigris River Water in Baghdad City Using CR-39 Track Detector, M.S.C. Thesis Al-Nahrain University, College of Science, 2002.
- 2. Determination of Uranium Concentration in Human Milk by Track Detector CR-39 For Middle and South of Iraq, M.S.C, Thesis, Baghdad University, College of Science for Women, 2003.
- 3. A Study of Transfer Factor From Soil to Plant, M.S.C. Thesis Al-Nahrain University, College of Science, 2003.
- 4. Determine Uranium and Radon Concentration in Soil Taken from Area Situated in South East of Baghdad by Using the Nuclear Track Detector (CR-39), AL Mustansiriya University, College of Education, 2004.
- 5. Study of InSb Crystal as IR-Detector in The Region of (3-5μm),M.S.C. Thesis Al-Nahrain University, College of Science, 2004.
- 6. Radiation Study of Selected Biological Samples, P.h.D Thesis ALMustansiriya University, College of Science, 2004.
- 7. Study of Environmental Radioactivity in The Soil of Al-Tuwaitha Zone and its Surrounding Sides, P.h.D, Thesis Baghdad University, College of Science, 2005.
- 8. Gamma-rays Detection of Radionuclides in Human Tissues, M.S.C. Thesis Al-Nahrain University, College of science, 2006.
- 9. Determination of Uranium Concentration in Human Blood Samples in some Governorates of Iraq By Using CR-39 Track Detector, M.S.C. Thesis Al-Nahrain University, College of science, 2006.
- 10. Determination of the Radioactivity in Soil and Water in Baghdad, Karbala and Basrah, M.S.C. Thesis Al-Nahrain University, College of Science, 2006.
- 11. Radioactive Detection On the Blood Samples of Cancer Patients Diseases by Using CR-39 Detector and its Effect on Cytogenetic, M.S.C. Thesis Al-Nahrain University, College of science, 2007.
- 12. Uranium Concentration Measurements of Human Blood Samples Using CR-39,M.S.C. Thesis Al-Nahrain University, College of science, 2007.
- 13. Determination the concentrations and the Transfer Factor for uranium in the Phosphorous Fertilizers from soil to plants by using Nuclear Track Detector (CR-39), M.S.C. Thesis Baghdad University, College of Science for Women, 2008.
- 14. Study The Effect of High Voltage Power Lines on Radon Concentrations in Air Using Solid State Nuclear Track Detector CR-39, M.S.C. Thesis Baghdad University, College of Education/ Ibn Al- Haitham, 2009.
- 15. Determination of alpha emitters concentration in human urine via PM-355 SSNT Detector, M.S.C. Thesis Al-Nahrain University, College of science, 2009.
- 16. Determination of Uranium Concentration in Children Teeth by Using Track Detector CR-39 For Middle and South of Iraq, M.S.C, Baghdad University, College of Science for Women,2009.

- 17. A study of the natural radioactivity of the radionuclides of the petroleum waste and their effects on the Iraqi environment, M.S.C. Thesis Al-Nahrain University, College of Science, 2010.
- 18. Determination of Uranium concentration in human urine Using Laser-Induced Kinetic Phosphorimetry, M.S.C. Thesis, Al-Nahrain University, College of science, 2012.
- 19. Radionuclide Activity in High Risk Radiation Workers Using Different Techniques, Ph.D Thesis University Science Malaysia 2013.
- 20. Study of Radionuclide in cancerous Tissue, Blood and Urine, PhD Thesis University Science Malaysia 2014.
- 21. Study of Radioactivity and Radon gas Emanation in Some Iraqi Governorates, Ph.D Thesis, AL-Mustansiriyah University, College of Education, 2015.
- 22. Study of Radioactivity natural and the Rate of Emission of Radon in Some Building Materials, MSC Thesis, University of Tikrit, 2015.
- 23. Determination of Natural Radioactivity and Radiological Risk Assessment of Al-Dora refinery and Surrounding Area, M.S.C. Thesis, Al-Nahrain University, College of science, 2015.
- 24. Study of Radioactivity and Hazard Index in Al-Noor Batteries Factory, M.S.C, Thesis, Al-Anbar University, College of Education for Pure Science, 2016.
- 25. Studying properties of CR-39 detector irradiated with Gamma-rays and (He-Ne) Laser, M.S.C. Thesis, Al-Nahrain University, College of science, 2016.
- 26. Measurements of Radioactivity levels in Water and Sediments near Power Plants in Baghdad City M.S.C. Thesis, Al-Nahrain University, College of science, 2017.