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Egyptian Nuclear and Radiological Regulatory Authority (ENRRA),
Nuclear safeguard and physical protection Dept.
Cairo – Egypt.



Date and place of birth:	22 September 1964, Egypt		Nationality:	Egyptian
Educational Record	1981 – 1985	B.Sc. / Biophysics, Cairo University- Egypt.		
	1986 – 1987	Pre-M.Sc. / Medical Biophysics, Cairo University- Egypt.		
	1988–1991	M.Sc./Medical Biophysics), Cairo University- Egypt. (Environmental Radiation Biophysics)		
	1992 – 1998	Ph.D. / Medical Biophysics (Environmental Radiation Biophysics) Cairo University- Egypt, in collaboration with Karlsruhe Research Center (Karlsruhe institute of Technology), Germany.		
Professional Profile	A staff member in the nuclear safeguard and physical protection Dept., and Central Laboratory for Environmental Radiation Measurements (CLERMIT), Egyptian Nuclear and Radiological Regulatory Authority (ENRRA), Cairo – Egypt.			
	1986 – 1991	Demonstrator, Egyptian Atomic Energy Authority.		
	1991 – 1998	Lecturer Assistant, Egyptian Atomic Energy Authority.		
	1998 – 2009	Assistant professor, Egyptian Atomic Energy Authority.		
	2009 – till now	Associate Professor Egyptian Nuclear and Radiological Regulatory Authority (ENRRA)		
	2003-2007	Assistant professor, Physics and astronomy Dept., King Saud University, Saudi Arabia.		
	2007-2013	Associate Professor, Physics and astronomy Dept., King Saud University, Saudi Arabia.		
	2013-till now	Full Professor, Physics and astronomy Dept., King Saud University, Saudi Arabia.		
	1998-till now	Qualified radiation protection expert – Egypt		
		▪ Visitor’s researcher, Karlsruhe research center (now, Karlsruhe institute of technology) Germany, from 1993 to 2002.		

- Attained national and International training courses in radiation protection, nuclear Safety, radiation measurement and detection, radioecology, and radiological risk assessment by IAEA, EU, JAICA and other organizations.
- Attained several international conferences on health physics, radiation protection, radiochemistry, and environmental radioactivity and radioecology.
- Principle investigator (PI) and Co-IP in several national and international research projects mainly in radioecology field.
- Supervise the research work of postgraduate (6 M.Sc. and 3 Ph.D.) students
- Professional instructor, Radiation safety Officer (RSO) courses
- Member of the American Health Physics Society (HPS)
- Member of the International Radiation Protection Association (IRPA)

Summary of qualifications

Experiences in the following fields:

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- ✦ Gamma-ray spectroscopy,
- ✦ Alpha particles spectroscopy,
- ✦ Low level environmental radioactivity measurements,
- ✦ Radiochemical separation and measurement of uranium isotopes, plutonium isotopes, thorium isotopes, Po-210 and Pb-210.
- ✦ In-situ gamma spectrometry,
- ✦ Radio-ecological studies and dose assessment.
- ✦ Teaching physics courses, university levels.

Working Experiences

1986 – 2011	Atomic Energy Authority Cairo – Egypt
2011-till now	Egyptian Nuclear and Radiological Regulatory Authority (ENRRA), Cairo – Egypt.
2003-till now	King Saud University, Riyadh- Saudi Arabia

List of Publications

1. Ibrahim N., El-Ghany A., **Mohamdy A.**, Shawky S., Farouk M., 1993. Measurement of radioactivity levels in the Nile Delta and Middle Egyptl, Health Physics, 65(6), 620-627.
2. M. El-Tahawy and **Khater EM Ashraf**, 1999. Radioactivity levels in Bardawill Lake, Egypt, International Conference on Marine Monitoring, Monaco.
3. **Khater EM Ashraf.**, R. Higgy and M. Pimpl, 2001. Radiological impacts of natural radioactivity in Abu-Tartor phosphate deposits, Egypt. Environmental radioactivity, 55, 255-267.
4. **Khater EM Ashraf**, Abdel-Aziz M. and Sadek, M., 2001. Chemical, Isotopic and Radiological Aspects and Origin of the thermal waters in the North of Egypt. Isotope and Radiation Research , 33(3), 397-418

5. **Khater EM Ashraf**, Ebaid Y., El-Mongy S. and El Tahawy M.,2002. Determination of $^{239+240}\text{Pu}$ AND ^{238}Pu using destructive techniques. IAEA-CN-98/5/06P. International conference on the advances in destructive and non-destructive analysis for environmental monitoring and nuclear forensics, Karlsruhe, Germany, 21-23 Oct. 2002.
6. **Khater EM Ashraf**, 2003. Radiological aspects of some Egyptian thermo-mineral springs, *Journal of Environmental Monitoring* 5, 414-418.
7. El Mamony M. and **Khater EM Ashraf**, 2004. Environmental characterization and radiological impacts of non-nuclear industries on the Red Sea Coast, *Journal of Environmental Radioactivity*, vol. 73, 151-168
8. **Khater EM Ashraf**, M.A. Hussein and M. I. Hussein., 2004. Occupational exposure of Abu-Tartor phosphate mine workers: Airborne radioactivity measurements and dose assessment. *Journal of Environmental Radioactivity*, 75,47-57
9. **Khater EM Ashraf**, 2004. Po-210 budget in cigarettes. *Journal of environmental Radioactivity*, 71, 33-41
10. N. Abd El-Aziz, **Khater EM Ashraf** and H.A. Al-Sewaidan 2005. Natural radioactivity contents in tobacco. *International Congress Series*, Volume 1276, ,407-408
11. **Khater EM Ashraf**, Yasser Y. Ebaid and Sayed A. El-Mongy, 2005. Distribution pattern of natural radionuclides in Lake Nasser bottom sediments. *International Congress Series*, 1276, 405-406, 2005.
12. **Khater EM Ashraf** 2005. Distribution pattern of uranium in lake sediment. 4th international conference on uranium mining and hydrology. Freiberg, Germany- Sep. 2005 [Uranium in the environment: mining impact and consequences, p 841-846, 2006, Springer-Verlag Berlin]
13. **Khater EM Ashraf**, H.A. Al-Sewaidan, 2006. Polonium-210 in cigarettes tobacco. *Int. J. Low Radiation*, 3 (2/3), 224-233.
14. **Khater EM Ashraf**, 2006. Book chapter: Radiation Detection Methods, in: Nollet, L. and Poschl, M., *Concentration of Radionuclides in Food and the environment: Prevention and Human Health*. Marcel Dekker Inc., New York.
15. Yasser Y. Ebaid and **Khater EM Ashraf**, 2006. . Determination of lead-210 in environmental samples using different radio-analytical techniques. *Journal of Radioanalytical and Nuclear Chemistry* 269 (3), 609-619.
16. **Khater EM Ashraf**, Y. Y. Ebaid A., 2008. Simplified Gamma-Ray Self-ttenuation Correction in Bulk Samples. *Appl. Radiat. Isotopes* 66 (3) 407-413
17. **Khater EM Ashraf**, H.A. Al-Sewaidan, 2008. Radiation exposure due to agricultural uses of phosphate fertilizers. *Radiation Measurements* 43 (8) 1402-1407.
18. **Khater EM Ashraf**, Bakr W.F., 2008. Technologically enhanced Pb-210 and Po-210 in iron and steel industry. *International conference on Radioecology & Environmental Radioactivity*, 15-20 Jun, 2008, Bergen-Norway
19. **Khater EM Ashraf**, N. Abd El-Aziz, H.A. Al-Sewaidan, Kamal Chaouachi, 2008. Radiological Assessment of Narghile Smoking. *International conference on Radioecology & Environmental Radioactivity*, 15-20 Jun, 2008, Bergen- Norway
20. **Khater EM Ashraf**, Hamed A.I. Al-Sewaidan, A. Al-Saif, H. Diab., 2008. Effect of soil properties on natural radionuclides concentration in aird environment: A case study. *International conference on Radioecology & Environmental Radioactivity*, 15-20 Jun, 2008, Bergen- Norway
21. **Khater EM Ashraf**, 2008. Uranium and heavy metals in phosphate fertilizers. *International conference on Radioecology & Environmental Radioactivity*, 15-20 Jun, 2008, Bergen- Norway

22. **Khater EM Ashraf**, A. Al-Saif, Hamed A.I. Al-Sewaidan. Uranium accumulation in sandy soil in an arid region due to agricultural activities. 5th international conference on uranium mining and hydrogeology, Freiberg- Germany, 14-18 Sept., 2008.
23. **Khater EM Ashraf**, 2008. Uranium partitioning during water treatment processes. 5th international conference on uranium mining and hydrogeology, Freiberg- Germany, 14-18 Sept., 2008.
24. **Khater EM Ashraf**, Ebaid Y., 2008. Gamma attenuation correction in environmental samples. Applied Radiation and Isotopes, 66 (3), 407-413
25. **Khater EM Ashraf**, N. Abd El-Aziz, H.A. Al-Sewaidan, Kamal Chaouachi, 2008. Radiological Hazards of Narghile (Hookah, Shisha, Goza) Smoking: Specific Activities and Dose Assessment. Journal of Environmental Radioactivity, 99 (12) 1808-1814.
26. **Khater EM Ashraf**, H.A. AL-Sewaidan, 2008 Radiation exposure due to agricultural uses of phosphate fertilizers. Radiation Measurements, 43(8), 1402-1407
27. **Khater EM Ashraf**, Al-Saif A.S., Diab H.M., Al-Sewaidan, 2009. Natural Radionuclides Concentration In Arid Environment: A Case Study. Isotopes and Radiation research, 41
28. Trabulsy H, **Khater EM Ashraf**, Habany F., 2011. Natural radionuclides along the Saudi Coast of Aqaba Culf. Radiation Physics and Chemistry 80 (3):343348.
29. **Khater EM Ashraf**, HA Layia, AA Amany, AM Al-Omran, 2010. NORM in clay deposits. Proceedings of Third European IRPA Congress, 14-18
30. **Khater EM Ashraf**, Bak W, 2011. Technological enhanced ²¹⁰Pb and ²¹⁰Po in iron and steel industry. Environmental radioactivity, 102 (5), 527-530
31. **Khater EM Ashraf**, 2011. Natural radionuclides and heavy metals partitioning during water treatment including reverse osmosis. Health Physics 101 (1)
32. **Khater EM Ashraf**, M. Hussein, 2011. Natural radionuclides and trace metals in thermal spring, Al-Lith region, Saudi Arabia. Health Physics 101 (1)
33. **Khater EM Ashraf**, 2012. Uranium and trace elements in phosphate fertilizers—Saudi Arabia. Health physics 102 (1), 63-70
34. **Khater EM Ashraf**, 2012. Concentration, Distribution Pattern and Enrichment Of Barium And Phosphate In Shore Sediments Along The Red Sea Coast, Egypt. Isotopes and Radiation Research 44(3), 649-658
35. WA Farooq, FN Al-Mutairi, **Khater EM Ashraf**, AS Al-Dwayyan, MS AlSalhi, 2012. Elemental analysis of fertilizer using laser induced breakdown spectroscopy. Optics and Spectroscopy 112 (6), 874-880
36. **Khater EM Ashraf**, LH Al-Mobark, AA Aly, AM Al-Omran Natural radionuclides in clay deposits: concentration and dose assessment. Radiation protection dosimetry, 156 (3), 321-330
37. Trabulsy H, **Khater EM Ashraf**, Habany F., 2013. Heavy elements concentrations, physiochemical characteristics and natural radionuclides levels along the Saudi coastline of the Gulf of Aqaba Arabian Journal of Chemistry 6 (2), 183-189
38. Khaled A. Allam, **Khater EM Ashraf**, 2014. An analytical calculation of gamma ray self- attenuation correction in bulk samples. Isotopes and Radiation Research, accepted.
39. **Khater EM Ashraf**, Al-Jaloud A., El-Taher A., 2014. Quality level bottled drinking water consumed in Saudi Arabia. J. Environmental Science and Technology 7 (2), 90-106.
40. **Khater EM Ashraf**, Ebaid Y.Y., Al-Daihan A, 2015. Radiological and chemical characterization of phosphogypsum: potential hazards and solutions. 10th international conference on methods and applications of radioanalytical chemistry, Kailua-Kona, Hawaii, USA- April 12-17. 2015.

41. **Khater EM Ashraf**, Bakr W.F., 2015. Environmental impacts assessment of iron and steel industries wastes. 10th international conference on methods and applications of radioanalytical chemistry, Kailua-Kona, Hawaii, USA- April 12-17. 2015.
42. **Khater EM Ashraf**, Al-Hor S, Amr M., Chaouchi K, 2015. Shesha Moassel smoking mixtures characterization and comparison with other tobacco products. 10th international conference on methods and applications of radioanalytical chemistry, Kailua-Kona, Hawaii, USA- April 12-17. 2015.
43. **Khater EM Ashraf**, 2015. Pb-210 and Pb in phosphate industrial cycle in Saudi Arabia. Third international conference on Po and radioactive Pb-210 isotopes. 11-14 oct. 2015, Kusadasi- Turkey.
44. El-Taher, A., García-Tenorio, R., **Khater EM Ashraf**, 2016. Ecological impacts of Al-Jalamid phosphate mining, Saudi Arabia: Soil elemental characterization and spatial distribution with INAA. Applied Radiation and Isotopes 107, 382-390.
45. **Khater EM Ashraf**, Mahmoud A. Galmed, Mahmoud M. Nasr, A. El-Taher, 2016. Uranium and Rare Earth Elements in El-Jalamid Phosphate, Saudi Arabia: concentration and geochemical pattern. Environmental Earth Sciences 75 (18), 1261
46. A El-Taher, **Khater EM Ashraf**, 2016. Elemental characterization of Hazm El-Jalamid phosphorite by instrumental neutron activation analysis. Applied Radiation and Isotopes 114, 121-127
47. Yasser Y. Ebaid and **Khater EM Ashraf**. The re-evaluation of the ^{234m}Pa 's 1001.03 keV gamma emission absolute intensity for the precise assessment of ^{238}U . In Press
48. **Khater EM Ashraf** and Yasser Y. Ebaid. The evaluation of the 1001 keV gamma emission absolute intensity using fundamental parameter method. In press
49. Mohamed H.E. Monged, Mohamed T. Hussein, **Khater EM Ashraf**. Elemental and radiological aspects of geothermal springs and nearby soil and sediment of Al-Lith area: Concentration and risk assessment, In Pres.
50. **Khater EM Ashraf**, Mahmoud M. Nasr. Feasibility on Handheld gamma-ray spectrometer for environmental radioactivity monitoring of TENORM industries. In Press.
51. **Khater EM Ashraf**. Handheld BGO gamma-ray spectrometer for environmental radioactivity monitoring of phosphate mining. In press