

CURRICULUM VITAE

PERSONAL DATA

Name	Basma Ali Elbadry Abd Elazeem
Nationality	Egyptian
Position	Assistant Prof.
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EDUCATION

Year	Academic Degree	Institution
2010	Ph.D. in Radiation Physics, Title of the Ph.D. Thesis is "Study of the Effect of Low and High Linear Energy Transfer Radiation on Some Polymeric Materials".	Faculty of Science, Ain Shams University, Egypt.
2007	M.Sc. in Radiation Physics; Title of the M. Sc. Thesis is "The Application of Nuclear Track Detectors for Neutron Dosimetry".	Faculty of Science, Ain Shams University, Egypt.
2004	B.Sc. in physics and computers,	Faculty of science, Ain Shams University, Egypt.

WORK EXPERIENCE

Period	Position	Address
October 2013 – until now.	Assistant Prof.	Al Imam Mohammad Ibn Saud Islamic University (IMSIU), Riyadh, Saudi Arabia.

November 2010 - until now.	Lecturer	Ain Shams University, Egypt.
January 2008- November 2010.	Assistant Lecturer	Ain Shams University, Egypt
June 2005-January 2008.	Demonstrator	Ain Shams University, Egypt

RESEARCH INTERESTS

- Solid State Nuclear Track Detectors: CR-39, LR-115, CN-85, Makrofol and Lexan.
- Radon Measurement.
- Neutron Dosimetry.
- Chemical Etching Device.
- Low and high LET radiation.
- Polymer Materials.
- Nanoparticles.
- Nanocomposite Materials
- Optical, Electrical, Wettability, Hardness, Chemical, Structure analysis.
- UV-Vis Spectrophotometer.
- Micro Hardness Tester.
- RCL METER BRIDGE.
- RF-1501 Spectrofluorophotometer.
- XRD.
- Several Water Baths.

PUBLICATIONS

- 1- **B. A. El-Badry**, M. F. Zaki, T. M. Hegazy, and A. A. Morsy, "Neutron response study using poly allyl diglycol carbonate," *Pramana - J. Phys.*, vol. 69, no. 4, pp. 669–674, 2007, doi: 10.1007/s12043-007-0165-7.
- 2- **B. A. El-Badry**, M. F. Zaki, T. M. Hegazy, and A. A. Morsy, "An optical method for fast neutron dosimetry using CR-39," *Radiat. Eff. Defects Solids*, vol. 163, no. 10, pp. 821–825, 2008, doi: 10.1080/10420150701552717.
- 3- **B. A. El-Badry**, M. F. Zaki, T. M. Hegazy, A. A. Morsy "The Effect of Radiator on CR-39 registration of fast neutrons. The second all african irpa regional radiation protection congress. Ismailia, Egypt, 22-26 April 2007.

- 4- **B. A. El-Badry**, M. F. Zaki, T. M. Hegazy, A. A. Morsy, "A novel approach for counting recoil tracks for neutron dosimeter application". Arab journal of nuclear sciences and applications, 42, p. 141-147, 2009.
- 5- **B. A. El-Badry**, M. F. Zaki, A. M. Abdul-Kader, T. M. Hegazy, and A. A. Morsy, "Ion bombardment of Poly-Allyl-Diglycol-Carbonate (CR-39)," *Vacuum*, vol. 83, no. 8, pp. 1138–1142, 2009, doi: 10.1016/j.vacuum.2009.02.010.
- 6- A. M. Abdul-Kader, **B. A. El-Badry**, M. F. Zaki, T. M. Hegazy, and H. M. Hashem, "Ion beam modification of surface properties of CR-39," *Philos. Mag.*, vol. 90, no. 19, pp. 2543–2555, 2010, doi: 10.1080/14786431003630728.
- 7- M. F. Zaki, A. M. Abdul-Kader, A. Nada, and **B. A. El-Badry**, "Surface modification of Makrofol-DE induced by α -particles," *Philos. Mag.*, vol. 93, no. 34, pp. 4276–4285, 2013, doi: 10.1080/14786435.2013.827339.
- 8- A. M. Abdul-Kader, M. F. Zaki, and **B. A. El-Badry**, "Modified the optical and electrical properties of CR-39 by gamma ray irradiation," *J. Radiat. Res. Appl. Sci.*, vol. 7, no. 3, pp. 286–291, 2014, doi: 10.1016/j.jrras.2014.05.002.
- 9- **B. A. El-Badry** and T. I. Al-Naggar, "Estimation of indoor radon levels using etched track detector," *J. Radiat. Res. Appl. Sci.*, vol. 11, no. 4, pp. 355–360, 2018, doi: 10.1016/j.jrras.2018.07.002.
- 10- T. I. Al-Naggar, **B. A. El-Badry**, and N. F. Abdel All, "Study the modifications induced by alpha particles in cellulose nitrate NTD," *Vacuum*, vol. 160, no. October 2018, pp. 31–36, 2019, doi: 10.1016/j.vacuum.2018.11.003.
- 11- **B. A. El-Badry**, T. I. Al-Naggar, and G. A. Khouqeer, "Monitoring the levels of radon and toxic elements pollutants in bottled drinking water," *Int. J. Radiat. Res.*, vol. 18, no. 3, pp. 427–435, 2020, doi: 10.18869/acadpub.ijrr.18.3.427.
- 12- T. I. Al-Naggar and **B. A. El-Badry**, "Structural, optical and electrical properties of Poly(Methyl Methacrylate) polymer under alpha radiation," *Nucl. Instruments Methods Phys. Res. Sect. B Beam Interact. with Mater. Atoms*, vol. 508, no. October, pp. 24–28, 2021, doi: 10.1016/j.nimb.2021.10.005.
- 13- **B. A. El-Badry**, N. Madkhali, and A. M. Deghady, "Influence of eumelanin and gamma irradiation on ZnO nanocomposite properties," *Radiat. Phys. Chem.*, vol. 191, no. April 2021, p. 109845, 2022, doi: 10.1016/j.radphyschem.2021.109845.

- 14- M. F. Zaki, T. I. Al-Nagaar, and **B. A. Elbadry**, "Improve the surface structural and optical properties of PM-355 polymer by alpha particles," *Polym. Bull.*, no. 0123456789, 2022, doi: 10.1007/s00289-021-04042-9.
- 15- O. A. Aldaghri, **B. A. El-Badry**, M. K. M. Ali, and K. H. Ibnaouf, "Effect of Gamma Irradiation on the Optical Properties of the Conjugated Copolymer B-co-MP," *Appl. Sci.*, vol. 12, no. 3, 2022, doi: 10.3390/app12031606.
- 16- **B. A. El-Badry**, "Determination of Radionuclides and Their Radiological Risks in Different Brands of Cooking Oil Samples" *Arab J. Nucl. Sci. Appl.*, Vol. 55, 3, 102-107, 2022, doi: 10.21608/ajnsa.2022.114377.1538.
- 17- M. R. Almamari, N. M. Ahmed, A. M. Holi, F.K. Yam, M. Z. Al-Abri, M.A. Almessiere, **B. A. El-Badry**, M.A. Ibrahim, O. A. Aldaghri, K. H. Ibnaouf, "Photoconversion efficiency of In₂S₃/ZnO core-shell heterostructures nanorod arrays deposited via controlled SILAR cycles," *Heliyon*, vol. 8, no. July, p. e09959, 2022, doi: 10.1016/j.heliyon.2022.e09959.
- 18- **B. A. Elbadry**, G. A. Khouqeer, and M. F. Zaki, "Gamma rays induced modifications on the structural, optical and photoemission properties in PVA/TiO₂ nanocomposite films" *Physica Scripta*, Vol.98, no.2 pp 025821, 2023, DOI 10.1088/1402-4896/acb32c.