

CURRICULM VITAE

Personal Data

Family Name: Azab

Given Name: Khaled Shaaban Mahmoud Azab

Date of Birth: 16/12/1965

Nationality at Birth: *Egyptian*

Present Nationality: *Egyptian*

Highest Degree Obtained: Ph.D. of Science in Biochemistry

Present or Most Recent position held

Title: *Professor Dr.* (*Biochemistry*)

Head of Radiation Biology department (From 2/2016 till Now)

Department: Radiation Biology

Institution: National Center for Radiation Research and

Technology, Atomic Energy Authority

Country: Egypt

Correspondence Address

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Scopus ID: 6508388616, Scopus h-Index: 5, Citations 186 http://oricd.Org/0000-0003-4840-6870

Employment:

- Demonstrator in Radiation Biology Department, National Center for Radiation, Research and Technology, Atomic Energy Authority (7/6/1987-29/12/1992).
- Ass. Lecturer in Radiation Biology Department, National Center for Radiation, Research and Technology, Atomic Energy Authority (29/12/1992-12/3/1997).
- Lecturer in Radiation Biology Department, National Center for Radiation Research And Technology, Atomic Energy Authority (12/3/1997-23/4/2002).
- Ass. Professor of Biochemistry in Radiation Biology Department, NationalCenter for Radiation Research and Technology, Atomic Energy Authority (since 23/4/2002-Till 27/6-2007).
- Professor of Biochemistry in Radiation Biology Department, NationalCenter for Radiation Research and Technology, Atomic Energy Authority (since /6/2007-Till now).

Academic Degrees:

- B.Sc. In Biochemistry, Biochemistry Department, Faculty of Science, Alexandria University, May 1986 (very good with honor).
- M.Sc. In Biochemistry, Biochemistry Department, Faculty of Science Alexandria University, August 1992.
- Ph.D. in Biochemistry, Biochemistry Department, Faculty of Science Alexandria University, October 1996.

Language: Arabic (Fluent), English (Very Good) and

French (Fair)

Computer Skills: Windows, Power Point, Excel, Win Word, Isis

for Drawing Chemical Formula, Statistical

analysis program; SPSS and internet)

Qualifying Experience:

I am a broadly trained Biochemist with research interests and expertise in radiation biology with researches focused on experimental cancer treatments and management of cancer development through controlling certain biochemical pathways of tumor transformation. I am exceptionally well-organized, strong work ethics and willingness to work hard to contribute to the goals.

Teaching Experience:

One year of experience in Medical education through teaching Biochemistry courses for Dentistry and nursing students in Al Farabi College, Jeddah, Saudi Arabia. The system of credit hour is the teaching system followed in Al Farabi College for Dentistry and Nursing. This acquired teaching experience is supported by involvement in teacher training program (Teaching on the Run) organized by the University of Western Australia during this period.

Research Experiences:

- 1. Evaluation of Biochemical and physiological changes in experimental animals exposed to ionizing radiation via conducting different fluids and tissues analysis.
- 2. Evaluation of Sub cellular changes (Ex. Effect of oxidative stress on the membrane of mitochondria, lysosomes and microcosms in addition to cytosolic changes).
- 3. Separation, purification and identification of biological compounds using chromatographic techniques (GLC, HPLC, Electrophoresis).
- 4. Investigation of endocrine activity by using Enzyme linked immune sorbent assay (ELISA) technology.
- 5. Evaluation of biochemical changes in animals exposed to environment pollution, suffering from cancer, cardiovascular, immunodisorders, and diabetes upon exposure to ionizing radiation.
- 6. Studying the biochemistry of resistance mechanisms to hydrogen peroxide in textile waste water Bacillus sp.
- 7. Studying the Enzyme kinetics behaviors in and outside the living organism (in vivo-in vitro).
- 8. Uses of molecular biology techniques (Western plot, PCR, Southern techniques) to realize the changes induced at the DNA level and correlate with the biochemical changes.

- 9. Dealing with the immune system and antioxidant defense system through boosting the immunity and stabilizing the antioxidant capacity using natural compounds prepared by biotechnological procedures.
- 10. Computer skills (Windows, Excel, PowerPoint, Microsoft word, Isis, Internet).
- 11. Writing technical reports for scientific thesis and scientific papers in addition to writing scientific papers.
- 12. Delivering lectures and attending workshops and conferences in the scientific fields related to my scientific specification.
- 13. Suggesting the scientific research plans through supervising M. Sc. and Ph.D. thesis as well as supervision on one of the scientific laboratories and as the head of radiation Biology Department at the National Center for Radiation Research and Technology.
- 14. Preparation and accomplishment of Training programs Ex: Supervising successful training course for peaceful use of nuclear techniques in the field of radiation therapy of cancer in the period from 11/12/2011 to 17/12/2011 in cooperation with the Arab Atomic Energy Agency.

<u>List membership in professional societies and activities in civic, public or international affairs:</u>

- 1- Member of Egyptian Society of Biochemistry and Molecular Biology.
- 2- Member of Egyptian Society of Nuclear Science and Applications.
- 3- Member of Egyptian German Society of Zoology.
- 4- Member of Egyptian Society of Biophysics and Applications
- 5- Member of Egyptian British Society of Biological Science.
- 6- Member of radiation emergency committee.
- 7-Member of Egyptian Society of Radiation science and Applications.
- 8- Co-editor in the Elsevier board of JRRAS (Journal of Radiation Research and Applied Science).

Scientific Supervision:

Finished thesis

M.Sc. Thesis

- 1. Changes In Some Biochemical Parameters In Whole Body Gamma Irradiated Albino Rats Treated With A Pharmacological Agent **Thesis was discussed at** /4/1999 and The student awards the Degree from faculty of Science, Helwan University. (Student name: Dalia El-Malah)
- 2. "Radio protective Effect Of Certain Antioxidant Enabled Agents In Rat Tissues"
 - The student registered to obtain the Degree (2001) from faculty of Science, Al Azher University. (Student name: Hesham El-Shora)**Thesis was discussed at** /3/2009 and the student awards the M.Sc. Degree.
- 3. Role of Immunostimulating compounds in the Modulation of Radiation hazards in Albino Rats''
 - The student registered to obtain the Degree (2005) from faculty of Science, Helwan University(Student name: Noura Magdey

Thabet) **Thesis was discussed at** //2009 and the student award the M.Sc. Degree.

4. Influence of synergistic administration of mistletoe water extract and lipoic acid on oxidative pathways and certain biochemical aspects in irradiated rats.

The student registered to obtain the Degree (2004) from Women's College for Arts, Science and Education Zoology Department, Ain Shams University. (Student name: Abeer Fathy Abdel Aal). **Thesis was discussed at** //2009 and the student awards the M.Sc. Degree.

- 5. Modulatory effects of Royal Jelly on some biochemical parameters in whole body gamma irradiated albino rats"

 Student name: Hamed Abdel Aazeim Helal

 Place of Registration: Faculty of Science –Al Azher University 10/2008) Thesis was discussed at /10/2010 and the student award the M.Sc. Degree.
- 6. "Modulatory Effect of Cinnamon Extract against Inflammatory and Oxidative Disorders in γ-Irradiated"
 Student name: Mohamed Saad Abdel Aziz
 Place of Registration: Faculty of Science -Tanta University 11/2009) Thesis was discussed at /7/2011 and the student award the M.Sc. Degree.
- 7. "Antiangiogenic Agents Might Upgrades Cell Sensitivity to Ionizing Radiation"
 Student name: Nermeen Mohamed Sayed Ahmed
 Place of Registration: Al Saddat Institute for Genetic Engineering
 -Al Monofia University -10/2009) the thesis was discussed in 7/2013 and the student awarded the M.Sc. Degree

Ph.D. Thesis

- 1. Effect of Antioxidants Treatments to Control Hazard of Radiation Exposure and Food Aflatoxin contamination.
 - The student registered for obtaining the Degree (2004) from Institute of Studies and Environmental Researches, Ain Shams University (Student name: Nehad Abdel Rahman) **Thesis was discussed at** //2010 and the student awarded the Ph.D. Degree.
- 2. Boosting of immune system mediated cytotoxicity of tumor cells" Student name: Asmaa Abu Baker Al Sedeek (Place of Registration: Place of Registration: Faculty of Science –Ain Shams University -7/2005). **Thesis was discussed at 4/8/2010** and the student awarded the Ph.D. Degree.
- 3. "Modulation of Immune Disorders Induced-Arthritis in y-Irradiated Rats'
 Student name: Nora Magdey Thabet (Place of Registration: Place of Registration: Faculty of Science –Ain Shams University 1/2010). The thesis has been discussed in 4/2013 and the student awarded the Ph.D. Degree.
- 4. "The influence of vitamin D deficiency on Rheumatoid arthritis diseases in urban and rural areas".

Student name: Dina Fathy Abdel Aziz Elessawi M.B., B.Ch. Faculty of Medicine, Cairo University

Place of Registration: Department of Medical Science Institute of Environmental Studies and Research Ain Shams University (2011). The thesis has been discussed at 1/2014.

Current supervision

M.Sc. Thesis

1. "Role of Cranberry Extract in Modulation of Inflammatory Response of Irradiated Rats"

Student name: Student Name :Amir Magdy Micheal(B.Sc. in Biochemistry)

Place of Registration: Biochemistry Department, Faculty of Science, Tanta University- 2011

Ph.D. Thesis

- 1. "Role of Brown seaweed extract in modulation of COX-2 mediated inflammatory cascade in gamma irradiated rats" Student Name: Ghada Azoz (M.Sc. in Zoology, Physiology) Place of Registration: Zoology Department, Faculty of Science, Ain Shams University (2011). Thesis is in process.
- 2. Evaluation of the potential of antiangiogenic and antilymphangiogenic compounds on radio-sensitivity of tumor cells

Nermeen Mohamed Sayed Ahmed Badr (M.Sc. Cancer Molecular Biology)

Place of Registration: Biochemistry Department, Faculty of Science, Ain Shams University (2013). Thesis is in process.

Reviewer: for many scientific papers submitted to certain local and international journals (Ex. Journal of Radiation Research and Applied Sciences Human and Experimental Toxicology (>20 research paper), tumor biology (>1), Pakistan journal of zoology (1), chemo biological interaction (1) in addition to reviewing a number of scientific thesis submitted to various Egyptian Universities.

<u>List of publications during the last 17 years</u>

- 1. El-Habit, O.H.M; Saada, H.N; <u>Azab, Kh.Sh.</u>; Abdel-Rahman, M. and Malah: The Modifying Effect of β-carotene on Gamma Radiation Induced Elevation of Oxidative Reactions and Genotoxicity in Male Rats. Mutation Research. 466, 179-186(2000).
- 2. Nahed, M. El-Abiad and <u>Khaled, Sh. Azab</u>: The Modulator role Melatonin Against Changes In Brain Monoamines of Rats Exposed To Magnetic Field. Al-Azher Med. J.Vol.29 (3&4), 289:294(2000).
- 3. <u>Kh. Sh. Azab</u>, H. N. Saada and U.Z. Said: The Action of Long Term Treatment with Coenzyme Q10 in Minimizing Radiation Induced Damage. Arab Journal of Nuclear Sciences and Applications, 34(1) 283-289(2001).
- 4. Helen, N. Saada and <u>Khaled, Sh. Azab</u>: Role of lycopene in Recovery of Radiation Induced Injury to Mammalian Cellular Organelles. Pharmazie 56(3) 239:241(2001).
- 5. <u>Khaled Sh. Azab</u>: Regulatory Effects of Thiamine Pyrophosphate on The Activities of Krebs Cycle Dehydrogenases in Irradiated Rat. Journal of Medical Research Institute, Vol. 22(3) 1-7(2001).
- 6. H. N. Saada; <u>Kh. Sh. Azab</u> and A. M. Zahran: Post Irradiation Effect of Broncho Vaxom, OM-85 BV, and Its Relationship to Antioxidant Activities. Pharmazie 56(8) 654-656 (2001).
- 7. <u>Azab, Kh. Sh.</u>; Zahran, A.M. and Eman Noaman: Role of Zinc Cysteine in the Regulation of Metallothionein Induction in

- Whole Body γ Irradiated Rats. Egypt J. Rad. Sci. Applic. 17 (2): 213-227 (2004).
- 8. <u>Azab, Kh. Sh.</u>; El- Tahawy, N. A. and Aneas, L. A.: Role of Taurine in Attenuation of Oxidative Damages in Irradiated Rats. The Egyptian Journal of Biochemisty & Molecular Biology. 21(1) 173-184 (2003).
- 9. Hedayat I.S. and <u>Khaled Sh. Azab</u>: Effect of Vitamin E and/or Nicotine on the activities of Lactate Dehydrogenase Isoenzyme in Serum of Gamma Irradiated Rats. Biologia, Bratisalva, 59/35, 345-351(2004).
- 10. <u>Kh. Sh. Azab</u> and A. Sh. Nada. Restitution of Energy Metabolism in Irradiated Rats Considering Curcumin Antioxidant Capacity and Metal Biotransformation. Arab Journal of Nuclear Sciences and Applications, 37(2) 169-176 (2004).
- 11. Khale<u>d Sh. Azab</u> and Hassen A. El-Dawi: The Modifying Effect of Beta 1,3D- Glucan on Gamma Radiation Induced Oxidative Stress and Genotoxicity in Male Mice. Egypt. J.Rad. Sci. Applic. 18(1):39-52 (2005).
- 12. <u>Azab, Kh. Sh.</u> Assessment of Changes in Plasma Total Antioxidant Status in Irradiated Rats Treated With Eugenol. Isotope and Radiation Research. 35(2),353-362 (2003).
- 13. Said, U. Z., Soliman, S. M., <u>Azab, Kh. Sh.</u>, and El-Tahawy, N. A. :Oligomeric Proanthocyanidins (OPCs) Modulating Radiation-Induced Oxidative Stress on Functional and Structural Performance of Eye in Male Rats Isotope & Rad. Res. 37(2) 395-412(2005).
- 14. Nada, A. Sh. and <u>Azab, Kh. Sh</u>.: Induction of Cellular Metallothionein in Irradiated Rats Supplemented with Egyptian

- Propolis Extract 'Egypt J. Rad. Sci. Applic. Egypt J. Rad. Sci. Applic. 18 (2) 351-365(2005).
- 15. Said, U. Z., <u>Azab, Kh. Sh.</u> and Soliman, S. M.: Cress Oil Modulates Radiation-Induced Hormonal, Histological, Genetic Disorders and Sperm Head Abnormalities in Albino Rat Isotope & Rad. Res. 37(2)345-360(2005).
- 16. <u>Azab, Kh. Sh.</u>: Modulation Of Radiation Injuries In Rats Receiving Multiple Doses Of Aloe Vera Egypt J. Rad. Sci. Applic. 20(1):17-28 (2007).
- 17. Ahmed M. Zahran, <u>Khaled Sh. Azab</u> and Medhat I. Abbady: Modulatory role of allopurinol on xanthine oxidoreductase system and antioxidant status in irradiated rats. Egypt J. Rad. Sci. Applic. Egypt J. Rad. Sci. Applic. 19(2):373-388(2006).
- 18. Said, U. Z. and <u>Azab, Kh. Sh.:</u> Efficacy of wheat germ oil in modulating radiation-induced heart damage in rats. Egypt J. Rad. Sci. Applic. 19(2):433-452 (2006).
- 19. Ola M. Gomma and <u>khaled Sh. Azab</u>: Resistance to hydrogen peroxide in textile waste water Bacillus sp. Int. J. Agri. Biol. 9(2) 347-351 (2007).
- 20. Ola M. Gomma and <u>khaled Sh. Azab</u>: Role of calcium carbonate in protecting the colony forming ability of Bacillus simplex TWW-04 exposed to oxidative stress. Adv. Biol. Res.1 (1-2): 49-55, (2007).
- 21. A.I. EL-Batal, <u>Kh.Sh. Azab</u>, H.N. Saada, R.G. Rezek AND N.A. EL-Tahawy. Ameliorating Effects of Yeast Glucan with Zinc Bisglycinate on Histological and Biochemical Changes in y-Irradiated Rats Int. J. Agri. Biol., 10, 4, (2008).

- 22. <u>Khaled, Sh. Azab</u>, Rokaya, M. A. Saeed and Abear, F. A. Aal. Mistletoe (Viscum album) Extract Supported by α-lipoic acid Modulate Hyperglycemia in γ-Irradiated Rats. Published in the bulletin of 1st International Conference on Radiation Sciences and Applications, 1-4 Dec., (2008).
- 23. Helen N. Saada, <u>Khaled Sh. Azab</u>, El Sayed M. E. Mahdy, Wafaa Gh. Shousha, Noura M. Thabet: The Impact of 1,3-β-D-glucan Supplemented with Zinc Bisglycinate on γ-radiation-Induced Damage in Rats' Lymphoid Tissues. Egypt J. Rad. Sci. Applic, 22(2)477-497(2009).
- 24. <u>Khaled Sh. Azab</u>, Soheir A. Osman and Neama El-Fatih. Implication of caspase-3 and granzyme b expression in spleenocytes of EAC mice subjected to immunotherapy. North American Journal of Medical Sciences. 3(8)371-377 (2011).
- 25. Heba El Bialy, Ola M. Gomaa, <u>Khaled Shaaban Azab</u>. Conversion of oil waste to valuable fatty acids using Oleaginous yeast. World J Microbiol Biotechnol, 27 (12), 2791-2798 (2011).
- 26. <u>Khaled Shaaban Azab</u>, Mohamed Bashandy, Mahmoud Salem, Osama Ahme, Zaki Tawfik, Hamed Helal. Royal jelly modulates oxidative stress and tissue injury in gamma irradiated male Wister Albino rats. North American Journal of Medical Sciences. 3 (6)268-276 (2011).
- 27. <u>Khaled Sh.Azab</u>, Abdel-Halem A.Mostafa, Ehab .M. Ali, Mohamed A. S. Abdel-Aziz .a Cinnamon extract ameliorates ionizing radiation-induced cellular injury in rats. Ecotoxicology and Environmental Safety. 74(11) 2324-2329 (2011).

- 28. Ahmed I. El-Batal, NouraM. Thabet, Ahmed Osman, Abdel Rahman B. Abdel Ghaffar and Khaled Sh. Azab. Amelioration of Oxidative Damage Induced in Gamma Irradiated Rats by Nano Selenium and Lovastatin Mixture. World Applied Sciences. World Applied Sciences. 19(7):962-971, (2012).
- 29.
 Biological indicators, genetic polymorphism and expression in Aspergillus flavus under copper mediated stress. Ola M. Gamma and <u>Khaled Shaaban Azab</u>. Journal of Radiation Research and Applied Sciences 6(2013)49-55.
- 30. <u>Khaled Sh. Azab</u>, Shaden M Hanafy, Neama M. El Fatih, Nermeen M. Badr Antiangiogenic effects of the Apigenin and/or Selenium on Ehrlish Bearing Mice. Bulletin of 11th sesame users Meeting November 20-22, 2013 Amman, Jordan
- 31. Khaled Shaaban Azab, Afrah Fatthi Salama, Amir Magdy Micheal Rizk Allah. Cranberry Extract Modulate inflammation In Irradiated Rats. Sci-Afric Journal of Scientific Issues, Research and Essays Vol. 2 (9), Pp. 392-398, September, 2014.
- 32. <u>Khaled Sh. Azab</u>, NouraM. Thabet, Abdel Rahman B. Abdel Ghaffar Ahmed Osman and Ahmed I. El-Batal. Nano Selenium-Lovastatin Modulate Inflammatory Cascade in Arthritic Irradiated Model. International Journal of Radiation Research. 13,4,201(2014)
- 33. Mohamed Khairy Abdel-Rafei, Hesham Farouk Hasan, Enas Mahmoud Moustafa and <u>Khaled Shaaban Azab.</u> Moringa oleifera extract hinders the cascades of amiodarone mediated thyrotoxicosis in albino rats. Ijpbs |volume 5| issue 2|apr-jun|2015/192-200.
- 34. Enas Mahmoud Moustafa, Noura Magdy Thabet, <u>Khaled</u> Shaaban Azab. Boswellic acid disables signal transduction of

IL-6-STAT-3 in Ehrlich ascites tumor bearing irradiated mice. Biochemistry and Cell Biology, 2016, 94(4): 307-313, 10.1139/bcb-2015-0169

Conferences and workshops

- Attendance of 3rd annual meeting of SESAME users- Antalya, Turkey 2004
- Attendance of (participation by a research paper oral presentation) the 1st international conference for Ionizing Radiation Technology and Application which held at the period from 1-4 December 2008 under supervision of Egyptian Society for Radiation Science and Applications.
- Preparation and accomplishment of Training program Ex: Supervising successful training course for peaceful use of nuclear techniques in the field of radiation therapy of cancer in the period from 11/12/2011 to 17/12/2011 in cooperation with the Arab Atomic Energy Agency.
- Attendance of the 13th Arabic Conference for peaceful use of Atomic Energy which held in Tunisia (18-22/12/2016) through participation by a research paper "Statin Alter Expression of STAT-3 and β-Catenin Signal Molecules in Gamma Irradiated Model of Carcinoma" Oral presentation.
- Attendance of work shop in (The Research Connect Course) at the period from 20/9 to 22/9/2016 which held in the atomic energy authority with the corporation of British Council.
- Attendance of the workshop" Nuclear Analytical Techniques in Egyptian Archeological Studies" in the period from 24/2/2017 to 26/2/2017 which held in hurghada- Red Sea Egypt.
- Attendance of the National workshop on strategic Planning and Medium Term Strategy Development (26/2-2/3/2017) at Egyptian Atomic Energy Authority (Start attending at 27/2/2017).

Interests:

Activities: Reading, Traveling, Playing football and, Squash Countries Visited: Qatar, Turkey, Italy, Switzerland, and Saudi Arabia and, Tunisia.

References:

Available upon request