DESOUKY ABD-EL-HALEEM

PROFESSOR OF ENVIRONMENTAL BIOTECHNOLOGY

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EDUCATION	Dr. Rer.Med (PhD) in Genetic Engineering and Biotechnology, Humboldt University Berli Berlin, Germany 1999 MSc Agriculture, Cairo University, Cairo, Egypt 1995 BSc Agriculture, Asyut University, Asyut, Egypt 1990	
ACTIVITIES	**Scientific Activities** - Professor of Environmental Biotechnology, GEBRI, SRTA-City, 2010-present - Associate Professor of Environmental Biotechnology, GEBRI, SRTA-City, 2005-2010 - Associate Professor Biotechnology, College of Arts and Sciences, Qatar University, Qata 2006-2009 - Researcher, GEBRI, SRTA-City, 2000-2005 - Assistant Researcher, 1995-2000 - Researcher Assistant, 1991-1995	
	Administrative Activities - Dean of Genetic engineering and Biotechnology Research Institute, SRTA-City 2011- present - Head Protein Research Department, GEBRI, SRTA-City, 2012 - Acting Dean of Environmental and Natural Materials Research Institute, SRTA-City 2009 - Head of Environmental Biotechnology Department, GEBRI, SRTA-City 15/2/2009 30/11/2011	
GRANTS &		

AWARDS	1- CO-PI, A road map of the investment of the Egyptian research outputs in the field of diagnostic kits, which has economic values, Funded by Academy of Scientific Research and Technology (2020) 2- PI- SRTA-City side Biodegradation activity by some microbial community isolate from petroleum polluted sites in Egypt/ immobilized in different types of hydro gel composite prepared by γ-radiation and chemical method funded by STDF (2013- 2019) 3- CO-PI, Disinfection, deodorizing and improvement of water and treated Wastewater quality using biosynthesized Nano sized silver, funded by STDF (2011-2015) 4- CO-PI, Portable biosensor to detect toxicity in liquids (STDF) (2013-2018) 5- PI, Purification of Water and Wastewater by Natural Biodegradable Bioflocculants, STDF, (2009-2015) 6- PI, Genetically modified biosensor to detect nitrite in wastewater, US-Egypt joint fund program (2002-2004) 7- PI, Production of biopolymers from some Egyptian bacterial isolates. Funded by GEBRI, GEBRI-SRTA-City (2003-2005) 8- Member, Biological nitrogen fixation, European Union (2000-2004) 9- PI, Production of biopolymers in transgenic Yeasts , ASRT (2004-2006) 10- PI, Bioplastic from Qatari bacterial isolates, Qatar foundation, 2009 11- PI, Screening for Bioflocculants producers in Qatari Ecosystems, Qatar foundation 2009 12- CO-PI, Biodiversity of polyaromatic hydrocarbons degrading-bacteria in different Qatari soils, CAS, Qatar University, 2007 13- CO-PI, PCR and culture-based tools to detect Trichomoniasis in vaginal specimens, CAS, Qatar University (2007-2009) 14- CO-PI, Qatari plants as bioindicators of air pollution, CAS, Qatar University (2007-2009)
	Awards - Wissam of Science and Arts of the first class, Presidency- Arab republic of Egypt, 2019 - Merit state prize of Egypt in advanced sciences 2017, Academy of Scientific Research and Technology, Egypt, 2018 - Stat's prize of Excellence in advanced technological sciences, Academy of Scientific Research and Technology, Egypt, 2009 - Abdul Hamied Showman Prize for Young Arab Researchers in “Biological and Environmental Sciences" Abdul Hamied Showman Foundation, Kingdom of Jordon, 2004 - Encourage State Prize of Egypt in advanced technological sciences Academy

	of Scientific Research and Technology, Egypt, 2002
LIST OF PUBLICATIONS	1. Eltarahony, M., Zaki, S., & Abd-El-Haleem, D. (2020). Aerobic and anaerobic removal of lead and mercury via calcium carbonate precipitation mediated by statistically optimized nitrate reductases. *Scientific Reports, 10*(1) doi:10.1038/s41598-020-60951-1 2. El-Fakharany, E. M., Abu-Elreesh, G. M., Kamoun, E. A., Zaki, S., & Abd-El-Haleem, D. A. (2020). In vitro assessment of the bioactivities of sericin protein extracted from a bacterial silk-like biopolymer. *RSC Advances, 10*(9), 5098-5107. doi:10.1039/c9ra09419a 3. Eltarahony, M., Zaki, S., Kheiralla, Z., & Abd-El-Haleem, D. (2019). Study on the antagonistic potential of biosynthesized hematite nanoparticles during water and wastewater treatment. *Clean - Soil, Air, Water, 47*(6) doi:10.1002/clen.201800418 4. Kamoun, E. A., Abu-Elreesh, G. M., El-Fakharany, E. M., & Abd-El-Haleem, D. (2019). A novel bacterial polymeric silk-like protein from a petroleum origin bacillus sp. strain NE: Isolation and characterization. *Journal of Polymers and the Environment, 27*(8), 1629-1641. doi:10.1007/s10924-019-01459-2 5. Zaki, S. A., Eltarahony, M. M., & Abd-El-Haleem, D. A. (2019). Disinfection of water and wastewater by biosynthesized magnetite and zerovalent iron nanoparticles via NAP-NAR enzymes of proteus mirabilis 10B. *Environmental Science and Pollution Research, 26*(23), 23661-23678. doi:10.1007/s11356-019-05479-2 6. Eltarahony, M., Zaki, S., & Abd-El-Haleem, D. (2018). Concurrent synthesis of zero- and one-dimensional, spherical, rod-, needle-, and wire-shaped cuo nanoparticles by proteus mirabilis 10B. *Journal of Nanomaterials, 2018* doi:10.1155/2018/1849616 7. Eltarahony, M., Zaki, S., Elkady, M., & Abd-El-Haleem, D. (2018). Biosynthesis,

characterization of some combined nanoparticles, and its biocide potency against a broad spectrum of pathogens. *Journal of Nanomaterials, 2018* doi:10.1155/2018/5263814

8. Eltarahony, M., Zaki, S., Kheiralla, Z., & Abd-El-haleem, D. (2018). NAP enzyme recruitment in simultaneous bioremediation and nanoparticles synthesis. *Biotechnology Reports, 18* doi:10.1016/j.btre.2018.e00257
9. Abd El-Salam, A. E., Abd-El-Haleem, D., Youssef, A. S., Zaki, S., Abu-Elreesh, G., & El-Assar, S. A. (2017). Isolation, characterization, optimization, immobilization and batch fermentation of bioflocculant produced by bacillus aryabhattai strain PSK1. *Journal of Genetic Engineering and Biotechnology, 15*(2), 335-344. doi:10.1016/j.jgeb.2017.07.002
10. Elkady, M., Zaki, S., Farag, S., & Abd-El-Haleemc, D. (2017). Bioflocculation of basic dye onto isolated microbial biopolymers. *Chemical and Biochemical Engineering Quarterly, 31*(3), 209-224. doi:10.15255/CABEQ.2016.1031
11. Kamal, A., Zaki, S., Abu-Elreesh, G., & Abd-EI-Haleem, D. (2016). Biosynthesis and characterization of silver nanoparticles using metschnikowia pulcherrima strain 29a: Their antibacterial, antifungal and bioluminescent toxicity effects against microbial pathogens. *Ecology, Environment and Conservation, 22*(2), 553-566. Retrieved from www.scopus.com
12. Hamouda, S. A., Marzouk, M. A., Abbassy, M. A., Abd-El-Haleem, D. A., & Shamseldin, A. (2015). Isolation and identification of efficient egyptian malathion-degrading bacterial isolates. *Journal of Basic Microbiology, 55*(3), 331-337. doi:10.1002/jobm.201300220
13. Zaki, S., Etarahony, M., Elkady, M., & Abd-El-Haleem, D. (2014). The use of bioflocculant and bioflocculant-producing bacillus mojavensis strain 32A to synthesize silver nanoparticles. *Journal of Nanomaterials, 2014* doi:10.1155/2014/431089

14. Zaki, S. A., Elkady, M. F., Farag, S., & Abd-El-Haleem, D. (2013). Characterization and flocculation properties of a carbohydrate bioflocculant from a newly isolated bacillus velezensis 40B. *Journal of Environmental Biology, 34*(1), 51-58. Retrieved from www.scopus.com
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16. Abu-Elreesh, G., Zaki, S., Farag, S., Elkady, M. F., & Abd-El-Haleem, D. (2011). Exobiopolymer from polyhydroxyalkanoate-producing transgenic yeast gadallah abu-elreesh. *African Journal of Biotechnology, 10*(34), 6558-6563. Retrieved from www.scopus.com
17. Elkady, M. F., Farag, S., Zaki, S., Abu-Elreesh, G., & Abd-El-Haleem, D. (2011). Bacillus mojavensis strain 32A, a bioflocculant-producing bacterium isolated from an egyptian salt production pond. *Bioresource Technology, 102*(17), 8143-8151. doi:10.1016/j.biortech.2011.05.090
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23. Abd-El-haleem, D., Amara, A., Zaki, S., Abulhamd, A., & Abulreesh, G. (2007). Biosynthesis of biodegradable polyhydroxyalkanotes biopolymers in genetically modified yeasts. *International Journal of Environmental Science and Technology, 4*(4), 513-520. doi:10.1007/BF03325988
24. Abd-El-Haleem, D., Ripp, S., Zaki, S., & Sayler, G. S. (2007). Detection of nitrate/nitrite bioavailability in wastewater using a luxCDABE-based klebsiella oxytoca bioluminescent bioreporter. *Journal of Microbiology and Biotechnology, 17*(8), 1254-1261. Retrieved from www.scopus.com
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