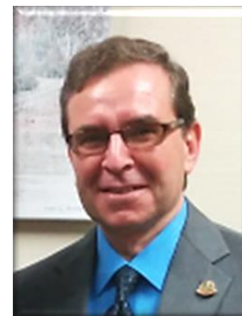


CURRICULUM VITA



Personal Data

Name: Khaled Zakaria Mohamed Ali El-Baghdady
Date of birth: 7 / 5 / 1965
Place of birth: Giza, Egypt
Sex: Male
Marital status: Married
Nationality: Egyptian
Language: Arabic (Mother tongue) "Fluent"
English "Fluent"
Present Occupation: Professor of Microbiology, Department of Microbiology, Faculty of Science, Ain Shams University, Khalifa El-Maamon st, Abbasiya sq., 11566, Cairo, Egypt.
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Academic Qualifications

- 1- **Ph.D. in Microbiology (Molecular Microbiology)**, Department of Biological Science, *The University of Warwick, Coventry, U.K., 2004.*
- 2- **M.Sc. in Microbiology (Physiology of Microorganisms)**, Faculty of Science, *Ain Shams University, Cairo, Egypt, 1995.*
- 3- **B.Sc. in Microbiology / Chemistry** (Excellent with honor degree), **Faculty of Science, Ain Shams University Cairo, Egypt, 1986.**

Employment

2019 - Current: Professor of Microbiology, Department of Microbiology, Faculty of Science, **Ain Shams University, Cairo, Egypt.**

2013 - 2019: Associate Professor of Microbiology, Department of Microbiology, Faculty of Science, **Ain Shams University, Cairo, Egypt.**

2004 – 2013: Lecturer of Microbiology, Department of Microbiology, Faculty of Science, **Ain Shams University, Cairo, Egypt.**

2003 - 2004: Research Assistant of Molecular Microbiology, Department of Biological Science, **The University of Warwick, Coventry, U.K.** (NERC NER/A/S/2000/01253).

1999 - 2004: Ph.D. student at Department of Biological Science, **The University of Warwick, Coventry, U.K.**

1995 - 1999: Assistant Lecturer of Microbiology, Department of Microbiology, Faculty of Science, **Ain Shams University, Cairo, Egypt.**

1986 - 1995: Demonstrator of Microbiology, Faculty of Science, **Ain Shams University, Cairo, Egypt.**

Responsibilities

- Teaching different microbiological courses for under and postgraduate students.
- Supervision of B.Sc. Students' projects.
- Supervisor of M.Sc. and Ph.D. theses.
- Internal and External examiner for M.Sc. and Ph.D. theses.
- Reviewer in **international journals**
 - Journal of Plant Pathology (Springer)
 - European Journal of Plant Pathology (Springer)
 - Journal of Clinical Pharmacy and Therapeutics (Wiley)
- Reviewer in **national journals**
 - The Egyptian Journal of Botany (Academy of Scientific Research and Technology)
 - Egyptian Journal of Experimental Biology (Botany) (Egyptian Society of Experimental Biology).
 - Arab Journal of Nuclear Sciences and Applications.
 - Egyptian Journal of Pure and Applied Science (EJPAS)
- External projects examiner

Other responsibilities

- Departmental Principle of Quality Assurance and Accreditation Project (QAAP and CIQAP).
- Member of Faculty QS team for Ain Shams University QS Stars.

- Member of Faculty team for new undergraduate programs.
- Technical manager of Microbiology Unit, Central lab, Faculty of Science, Ain Shams University.

Membership in Professional Societies

- Member in the *Syndicate of Scientific Professions*, Cairo, Egypt.
- Member in the *Society of General Microbiology* (SGM) 2000-2004.
- Member in the *Society of Experimental Microbiology* (SEB) (2003).
- Member in the *Egyptian Botanical Society* (from 2009).
- Digital subscriber in *The Scientist*.
- Digital subscriber in *Drug Discovery and Development*.

Professional Experiences

- Experience in teaching different microbiological undergraduate and postgraduate courses (theoretical and practical) e.g.: General Microbiology, Bacteriology, Molecular Biology, Biotechnology, Applied Microbiology, Microbial Control, Petroleum Microbiology and Pollution.
- Research experience in:
 - Isolation, purification and identification of microorganisms.
 - Analysis of major cellular components of microorganisms using different analytical and separating techniques.
 - DNA isolation and purification from bacteria.
 - Plasmid extraction.
 - Detection and identification of quorum sensing signals in Gram negative bacteria.
 - Biological synthesis of nanoparticles.
- Computer experience Windows 2008 and 2007 Software (MS word, MS power point, and MS Excel), Adobe Photoshop 7, Paint Shop Pro 6, ISIS Draw 2.4, different programs for comparing and analyzing DNA sequences (Chromas, BioEdit ...).

Scholarships and Awards

- Oct. 1983- Sept. 1986: **Undergraduate distinction award.**

- Sept. 1999 – August 2004, **Ph.D. program, Warwick University, U.K.** Sponsored by the Ministry of Higher Education, Egypt.
- **Visiting Scholars in Bryan School of Business and Economics, The University of North Carolina Greensboro, USA.** (Within the framework of the Cairo Initiative Institutional Capacity Development Program-USAID and The Egyptian Ministry of Higher Education- 1/4/2014 to 29/9/2014).

Projects and Grants:

- Partner in the **U.S.-Egypt Joint Board on Scientific and Technological Cooperation** (Biogas production by Methanogens isolated from River Nile sediments-2007).
- Research team member of environmental project funded by Environmental Projects Unit, Ain Shams University, Cairo, **Egypt.** (Bio-plastics from extremely halophytic Archaea-2008).
- Collaboration work with Chemistry Department, Faculty of Science, Ain Shams University (Anti-fouling) Cairo, **Egypt**, 2011.

Training and workshops

- Attending the 8th course on electron microscope. Faculty of Medicine, **Ain Shams University, Cairo, Egypt**, 1-7 March 1987.
- Integrated training course in computer science. Scientific computing center, **Ain Shams University, Cairo, Egypt**, 6/7/1996-21/12/1996.
- Workshop on modern technology for gene isolation and manipulation. Medical Research Center, **Ain Shams University, Cairo, Egypt**, 14-19 June 1997.
- Workshop on recombinant DNA technology. Faculty of Science, **Ain Shams University, Cairo, Egypt**, 6-11 September 1997.
- Molecular biology and genetic engineering principles. Faculty of Science, **Ain Shams University.** (ASUGEN), **Cairo, Egypt**, 21-26 November 1998.
- English course. **The University of Warwick, U.K.**, 4/7/1999-23/9/1999.
- Imaging analysis. **The University of Warwick, U.K.**, 8 November 1999.
- Microbial counts using cell facts. **The University of Warwick, U.K.**, 11-12 April 2001.

- Workshop on microarray. **UMIST, Manchester, U.K.**, 11 September 2003
- Writing papers for international publication. **Ain Shams University (FLDP), Cairo, Egypt**, 24-26 March 2007.
- Research proposal preparation. **Ain Shams University (FLDP), Cairo, Egypt**, 3-5 April 2007.
- Management of scientific research. **Ain Shams University (FLDP), Cairo, Egypt**, 6-8 May 2007.
- New trends in teaching. **Ain Shams University (FLDP), Cairo, Egypt**, 13-15 May 2007.
- Per reviewers for QAAP. **Ain Shams University, Cairo, Egypt**, 18 February 2008.
- Te use of bioinformatics in the field of sciences for better future. 20-1-2011, **Fayoum University, Egypt**.
- Utility of proteomics techniques for assessing biosaftey and protein expression. 20-1-2011, **Fayoum University, Egypt**.
- Entrepreneurship for Scientist and Engineers at **Bryan School of Business and Economics, The University of North Caroline Greensboro, USA**, April to September 2014.
- Finance and Accounting for Non-Financial Managers Program at **Bryan School of Business and Economics, The University of North Caroline Greensboro, USA**, April 21-23, 2014.
- Program for Management Development at **Bryan School of Business and Economics, The University of North Caroline Greensboro, USA**, April 2014 –June 2014.
- Intern Program at Advanced Biological Marketing, **ABM Company, Van Wert, Ohio, USA** June to August 2014.
- TAIEX Workshop on International Standard Methods for Microbiological Analysis of Drinking Water, 2-3 February 2016, **Cairo, Egypt**.
- Attending Microsoft 365 workshop on 27 Feb 2019, **Cairo, Egypt**.

Conferences and Publications

- Oral presentation in the 7th meeting of Moecular microbiology Group (MMEG)- **The University of York, U.K.** 17-18 April 2001.
- Poster presentation in Biological Sciences, **The University of Warwick, Coventry, U.K.** May 2001.

- Poster presentation in 12th International Symposium on the Biology of Actinomycetes (ISBA). **The University of British Columbia, Vancouver, Canada** August 2001.
- Participate in the 61 Symposium of the SGM. **The University of Warwick, Coventry, U.K.** April 2002.
- Poster presentation in Horticulture Research International, **Wellesbourne, U.K.** May 2002.
- Oral presentation in Horticulture Research International, **Wellesbourne, U.K.** May 2003.
- Oral presentation in the 9th meeting of Molecular microbiology Group (MMEG)- St. Catherine's College, **Oxford, U.K.** 7- 8 April 2003.
- Poster presentation in SGM 153rd meeting 8-11 September 2003, **UMIST, Manchester, U.K.**
- Poster presentation in 13th International Symposium on the Biology of Actinomycetes (ISBA). **Melbourne, Australia**, December 2003.
- Participate in the 5th Arabic conference for Systemic Approach in Teaching and Learning, **Cairo, Egypt**, April 2005.
- Participate in the International Conference on Marine Pollution in the Arab Region, **Alexandria, Egypt**, May 2006.
- Participate in the Mansoura 1st Microbiology Symposium, **Mansoura, Egypt**, July 2006.
- **Khaled Z. El-Baghdady**, Mohammad M. Abooulwafa, Madeha O. Ghobashy and Hassan M. Gebreel 2009. Plasmid mediated virulence factors of some *Proteus* isolates. *Egypt. Acad. J. Biolog. Sci.*, **1**: 7-22.
- Oral presentation in International conference on current trends in medicinal plant research and microbiological applications, 27-29 October 2010, **Alexandria, Egypt**.
- **Khaled Z. El-Baghdady**, Mohammed M. Abooulwafa, Madeha O. Ghobashy and Hassan M. Gebreel 2010. Virulence factors in pathogenic *Klebsiella* isolates and their association to plasmids. *Egypt. J. Bot. Pp* **27**:135-152.
- H.A. AbdelKareem, Nahed, A.A. Ibrahiem, **K.Z. El-Baghdady**, H.M. Gebreel, and D.E. El-Hadedy 2011. Growth factors regulate glutamine synthetase activity in bacteria *Peaenibacillus polymyxa*. The Third International Conference of Genetic Engineering and Its Application.

- Naziha M. Hassanein, **Khaled Z. El-Baghdady**, Atef K. Farid, Tarek A. Tawfik and Ayman Y. Ewida 2012. Microbial communities and water quality of some groundwater systems in Egypt. *Egypt. J. Exp. Biol.* **8**:25-42.
- N.A. Ibrahiem, H.A. Ahmed, **K.Z. El-Baghdady**, H.M. Gebreel, and D.E. Elhadedy 2012. Cloning of P_{II} –like Gene and Purification of P_{II} Protein from Nitrogen–fixing *Paenibacillus polymyxa*. *Blue Biotech. J.* **1**:91-100.
- HM Gebreel, NA Ibrahiem, **KZ El-Baghdady**, HA Ahmed and DE El-Hadedy 2012. Enhancement of glutamine synthetase activity in *Paenibacillus polymyxa* by optimization of different growth conditions. *Afric. J. Biotech.* **11**: 11815-11825.
- Maha S. Mohamed, **Khaled Z. El-Baghdady**, Khaled M. El-Nagar and Mohamed A. Abouzeid 2012. Application of chitosan/cyclodextrin inclusion complex as antibacterial agent in biomaterial. *Egypt. J. Exp. Biol.* **8**: 237-243.
- **El-Baghdady, K.**, Abooulwafa, M., Gebreel, H. and Ghobashy, M. 2013. Studying adhesion, invasion and cytotoxicity of clinical *Acinetobacter* spp. and *Escherichia coli* isolates. *Egypt. J. Bot.* Accepted-in press.
- **El-Baghdady, K.Z.**, Abd El-Ghany, M.G., Abdel-Ghafar, H.A., Abou-Zeid, M.A. and Abd El-Salam, M.M. 2013. Evidence for genotyping similarity between *Helicobacter pylori* strains isolated from dental plaque and peptic ulcer. *Egypt. J. Exp. Biol.* **9**: 153 - 158.
- EL-Nagar, K., **El-Baghdady K.Z.**, Amer, M., Mekawy, M., Mahmoud, E. EL-Din and El-Wakil, A.A. 2013. Characterization of chitosan/gelatin blends as viscosity standards and antimicrobial agent for cotton and wool fabrics. The Second International Conference on Environmental Studies and Research "Natural Resources and Future Challenges" 25-27 February.
- Madeha O.I. Ghobashy, **Khaled Z. El-Baghdady**, Mohamed M. Aboouwafa, Mohamed M.I. Helal and Shalini Saggi 2013. New era in recovery of bacterial pathogenicity. Microbial pathogens and strategies for combating them: science, technology and education, FORMATEX Microbiology Book Series 4, Edited by A. Méndez-Vilas. Vol. 1, 557-561.
- Khalil, M.M.H., Ismail, E.H., **El-Baghdady, K.Z.** and Mohamed, D. 2014. Green synthesis of silver nanoparticles using olive leaf extract and its antibacterial activity. *Arab. J. Chem.* **7**: 1131-1139.

- H.B. Kamal, M.S. Antonious, M.A. Mekewi, A.M. Badawi, A.M. Gabr and **K. El-Baghdady** 2015. Nano ZnO/Amine composites antimicrobial additives to acrylic paints. *Egypt. J. Petrol* **24**: 397-404.
- Hala A. Farrag, Einas H. El-Shatoury, **Khaled Z. El-Baghdady**, Hanady M. Nada and Fawkia M. El-Beih 2015. Prevalence of metallo- β -lactamase genes in multidrug resistant Gram negative bacilli. *Egypt. J. Exp. Biol. (Bot.)* **11**: 63-69.
- Participate in 4th Scientific Conference of Ain Shams University 2015. Towards a National Innovation System “Current Indicators and Future Prospects” 27-29 April, Cairo, Egypt.
- Participate in 5th Scientific Conference of Ain Shams University 2016. Egypt and Shaping the Future “Towards Intellectual and Scientific Vision” 12-14 April, Cairo, Egypt.
- Hala Farrag, **Khaled El-Baghdady**, Reham El-Behery and Fawkia El-Beih 2016. Virulence factor suppression by natural antiquorum sensing compounds. *African J. Biol.Sci.***11**: 61-82.
- Abeer A. El-Hadi, **Khaled Zakaria Elbgbdady**, Eman A. Ghazy, Naiera M. H. Mohamed, Tawfeek H. Abdelhafez, Fawkia M. El-Beeh and Ashraf A. Tabll 2016. Evaluating the antiviral activities of some bacteria against bovine viral diarrhea virus (BVDV). *Curr. Trend. Biotech. Pharm.* **10**: 169-179.
- Magda Ismail Marzouk, Soheir Ahmad Shaker, Aisha Ali Abdel Hafiz and **Khaled Zakaria El-Baghdady** 2016. Design and synthesis of new phthalazinone derivatives containing benzyl moiety with anticipated antitumor activity. *Biol. Pharm. Bull.* **39**: 239-251.
- **K.Z. El-Baghdady**, A.E. Zakaria, H.M. Abd El Fatah, L.A. Mousa and H.N.Sadek 2016. Monitoring growth and lipid production of some Egyptian microalgae. *Arab J. Nucl. Sci. App.* **49**: 279-293.
- Mustafa El-Bakary, **Khaled ElBaghdady** and Amr Ageez 2018. Identification of endoglucanase gene responsible for cellulose degradation using *Aspergillus flavus*. *Egypt. Acad. J. Biolog. Sci.***10**: 47-57.
- **Khaled ElBaghdady**, Einas El-Shatoury, Omnia Abdullah and Mostafa Khalil 2018. Biogenic production of silver nanoparticles by *Enterobacter cloacae* Ism26. *Turk. J. Biol.* **42**: 319-328.

- Fatma, A.A. Shaban, Zeinab, M.H. Kheiralla, Abeer, A. Rushdy and **Khaled, Z. El-Baghdady** 2018. Inhibition of biofilm formation in some pathogenic Gram negative bacteria by anti-quorum sensing compounds. *J. Sci. Res. Sci.* **35**: 330-344.
- Yasmine E. Kassem, **Khaled Z. El-Baghdady**, Nagwa E.M. Saleh and Mahmoud M.I. Wahba 2018. Biological control of the *Culex pipiens* mosquito by local bacterial isolates. *African J. Biol. Sci.*, **14**: 21-40.
- Naiera M. H. Mohamed, Yasmine El Abd, Reem Elshenawy, **Khaled Zakaria ElBaghdady**, Abeer A. El-Hadi, Eman A. Ghazy, Fawkia M. El-Beeh, Robert Smolic, Martina Smolic and Ashraf A. Tabll 2018. An extracted fraction of *Pseudomonas oleovorans* can inhibit viral entry and RNA replication of hepatitis C virus in cell culture. *Coll. Antropol.* **42**: 266-270.
- Noha E. Abdel-Razik, **Khaled Z. El-Baghdady**, Einas H. El-Shatoury and Nahla G. Mohammed 2019. Isolation, optimization, and antitumor activity of L-asparaginase extracted from *Pectobacterium carotovorum* and *Serratia marcescens* on human breast adenocarcinoma and human hepatocellular carcinoma cancer cell lines. *Asian J. Pharm. Clin. Res.* **12**: 332-337.
- Amany El-Sayed Shaheen, **Khaled Zakaria El-Baghdady** and Abeer Emam Zakaria 2019. Isolation and identification of potent probiotic with high lead removal capability. *Egypt. J. Bot.* **59**: 95-105.
- **Khaled Z. ElBaghdady** Sahar T. Tolba and Soha S. Houssien 2019. Biogenic deterioration of Egyptian limestone monuments: treatment and conservation. *J. Cult. Herit.* **38**: 118-125.
- Khaled A. El-Tarabily, Abdulmajeed S. AlKhajeh, Mutamed M. Ayyash, Latifa H. Alnuaimi, Arjun Sham, **Khaled Z. ElBaghdady**, Saeed Tariq and Synan F. AbuQamar 2019. Growth promotion of *Salicornia bigelovii* by *Micromonospora chalcea* UAE1, an endophytic 1-aminocyclopropane-1-carboxylic acid deaminase-producing actinobacterial isolate. *Front. Microbiol.***10**: 1-17.
- Omnia M. Abdallah, **Khaled Z. EL-Baghdady**, Mostafa M.H. Khalil, Mervat I. El Borhamy and Gamal Meligi 2019. Biosynthesis, characterization and cytotoxicity of selenium nanoparticles using *Bacillus tropicus* Ism 2. *Egypt. Acad. J. Biolog. Sci.*, 11: 47-57.

- Rehab Amer, **Khaled El-Baghdady**, Iman Kamel and Hisham El-Shishtawy 2019. Prevalence of Extended Spectrum Beta- Lactamase Genes among *Escherichia coli* and *Klebsiella pneumoniae* Clinical Isolates. *Egypt. J. Microbiol.* 54: 91-101.
- Omnia M. Abdallah, **Khaled Z. EL-Baghdady**, Mostafa M. H. Khalil, Mervat I. El Borhamy and Gamal A. Meligi 2020. Antibacterial, antibiofilm and cytotoxic activities of biogenic polyvinyl alcohol-silver and chitosan-silver nanocomposites. *J. Polym. Res.* 27, (74) 1-9. <https://doi.org/10.1007/s10965-020-02050-3>
- Eman S.H. Ibrahim, **Khaled Z. El-Baghdady**, Said M. Abd El-All, Mohamed A.A. Warda, Abdelbary M. Prince and Mohamed K. Ibrahim 2020. Prevalence of multidrug resistance in the Egyptian methicillin-resistant *Staphylococcus aureus* isolates. *African J. Biol. Sci.* 16: 43-52.
- Hesham M. Abd El Fatah, **Khaled Z. El-Baghdady**, Abeer E. Zakaria, Habiba N. Sadek 2020. Improved lipid productivity of *Chlamydomonas globosa* and *Oscillatoria pseudogeminata* as a biodiesel feedstock in artificial media and wastewater. *Biocatal. Agric. Biotechnol.* 25: 101588 <https://doi.org/10.1016/j.bcab.2020.101588>
- El-Tarabily, K.A., **ElBaghdady, K.Z.**, AlKhajeh, A.S., Ayyash, M.M., Aljneibi, R.S., El-Keblawy, A. and AbuQamar, S.F. 2020. Polyamine-producing actinobacteria enhance biomass production and seed yield in *Salicornia bigelovii*. *Biol Fertil Soils* 56:499-519. <https://doi.org/10.1007/s00374-020-01450-3>
- Khaled Z. El-Baghdady, Mervat I. El-Borhamy and Hisham A. Abd El-Ghafar 2020. Prevalence of resistance and toxin genes in community-acquired and hospital-acquired methicillin-resistant *Staphylococcus aureus* clinical isolates. *Iran. J. Basic Med. Sci.* 23: 1251-1260.

Book/chapter

- A Ph.D. thesis, under my supervision, was published as a book entitled: Molecular and Biochemical studies on PII Protein-Nitrogen fixing bacteria *Paenibacillus polymyxa*. **Lambert Academic Publishing.**

http://www.amazon.co.uk/Molecular-Biochemical-Studies-protein-paenibacillus/dp/3845407174/ref=sr_1_1?s=books&ie=UTF8&qid=1369516864&sr=1-1

- Madeha O.I. Ghobashy, **Khaled Z. El-Baghdady**, Mohamed M. Aboouwafa, Mohamed M.I. Helal and Shalini Saggu 2013. New era in recovery of bacterial pathogenicity. Microbial pathogens and strategies for combating them: science, technology and education, **FORMATEX Microbiology Book Series 4**, Edited by A. Méndez-Vilas. Vol. 1, 557-561.

Published sequences on international web of GenBank

Accessions No: AB599720, AB727983, KC759147, KC759148, KC759149, KC759150, KC759151, KC759152, KP988024, KP988025, KR072528, KR072529, KT364874, KT364875, KT364876, KT364877, KT364878, KT364879, KT364880, KY508300, KY508301, MH370265, MH370266, MH370498, MH370499, MK332444, MK292052, LC385526.1, LC385527.1, LC385525, LC385524, LC385523.1, LC385521, LC385522, MN096660, MN096661, MN096662, MN096663, MN096664 and MN096665.

Current Research Projects and Interests

- Quorum sensing and cell-cell signaling in Gram negative bacteria (a new target for antimicrobial agents).
- Virulence factors inhibition via quenching quorum sensing system in Gm negative bacteria.
- Biological synthesis of nanoparticles.
- Biosensors and their environmental applications.
- Production of new antimicrobial agents from natural plants or from microorganisms.
- New molecular regulatory systems for antibiotic production.
- Identification of new microbial species isolated from stress conditions.
- Bioremediation of petroleum wastes.