

CURRICULUM VITÆ



PERSONAL DATA

Name: Desouky A. M. Abd-El-Haleem

Marital status: Married

Date of birth: 17. 5. 1969

Nationality: Egyptian

Address: Mubarak City for Scientific Research and Technology Applications, New BurgelArab City, Alexandria, Egypt, Post Code 21934

EDUCATION

1. **(1999)** Ph.D. Molecular Microbial Ecology, Microbiology and Hygiene institute, Faculty of Medicine, Humboldt University Berlin, Germany.
2. **(1995)** M.Sc. at Faculty of Agriculture, Cairo University.
3. **1990**, B.Sc. at Faculty of Agriculture (**Very good with Honor**), Assiut. University.

LINGUISTIC & COMPUTER SKILL

Linguistic: English, German and Arabic

Computer skill: Work with basic computer programs (MS Office, Word, Excel, Power Point, *etc.*), many statistical analysis and graphic programs *etc.*

EMPLOYMENT

1. Feb 2009 – present, Head of the Environmental Biotechnology Department, Genetic engineering and biotechnology Research Institute, Mubarak City for Scientific Research, New Burg Al – Arab, Alexandria, Egypt.
2. Feb 2009 – July 2009: Acting Dean of the environmental Research Institute, Mubarak City for Scientific Research, New Burg Al – Arab, Alexandria, Egypt.
3. 2006 – 2009, Associate Professor at Biological Sciences Department, Faculty of Arts and Sciences, Qatar University, Doha, Qatar.
4. 2005 – Present, Associate Prof., Environmental Biotechnology Dept., Genetic Engineering and Biotechnology Institute, Mubarak City for Scientific Research, New Burg Al – Arab, Alexandria, Egypt.
5. April 2000 – 2005, Senior Researcher, Environmental Biotechnology Dept., Genetic Engineering and Biotechnology Research Inst., Mubarak City for Scientific Research, New Burg Al – Arab, Alexandria, Egypt
6. December 1991 – August 1995, Researcher assistant in Botany Dept., National Research Centre, Dokki, Cairo, Egypt.
7. June 1996 - October 1999, Ph.D. student in Microbiology and Hygiene Institute., Faculty of Medicine, Humboldt University, Berlin, Germany.
8. October 2000 – March 2001, Post – doc. In Centre for Environmental biotechnology, University of Tennessee Knoxville, USA, (Construction of genetically modified biosensors to detect environmental pollutants).

HONOR AWARDS AND PRIZES

1. Selection of my biographical profile for inclusion in the special 10th anniversary edition (2007) of **Marquis Who's Who** in Science and Engineering
2. **Abdul Hamied Shoman Prize** for Young Arab Researchers in “Biological and Environmental Sciences 2004”.
3. **Encourage State Prize of Egypt** in Advanced Technology 2002.
4. **Distinguished scientific achievement** award for the year 2001 – 2002 from Mubarak City for Scientific Research and Technology Applications.
5. **Medal of Mubarak City** for Scientific Research and Technology Applications 2002 and 2003.
6. **Honor shield of Mubarak City** for Scientific Research & Technology Applications 2002.
7. **Visitor Scientist grant** from US – Egypt joint fund program at Center for Environmental Biotechnology, University of Tennessee Knoxville, 2000.
8. **Ph.D. grant** from (Channel System) DAAD 1996.

EDITORIAL BOARDS

- 1) **African Journal of biotechnology** from 2003 – present.
- 2) **Research Journal of Biological Sciences** from 2005 – present.

- 3) **International Journal of Engineering Management and Sciences** from 2005 – present.
- 4) **World Journal of Agricultural Sciences** from 2005 – present.
- 5) **African Journal for biochemistry Research** 2007 – present.
- 6) **International Journal of Emerging Technologies and Applications in Engineering Technology and Sciences**, 2007 – present.
- 7) **International Journal of computer Applications in Engineering Technology and Sciences**, 2007 – present.

TEACHING EXPERIENCE

- ✓ Associate Prof. at Biological and Environmental Sciences Department, CAS, Qatar University to teach the following courses: Biotechnology, Environmental biotechnology, Plant Pathology, Modern microbiology and Food Microbiology.
- ✓ Central lecturer at the Egyptian Ministry of Culture from 2001 to present.
- ✓ Conducting (teaching) several biotechnology, molecular Biology and Environmental Microbiology and Biotechnology training courses at national and international levels.

SCIENTIFIC ASSOCIATIONS

1. Arab association of biotechnology from 2003 – present.
2. Association of Environmental Arab experts 2004 – present.

CONFERENCES ORGANIZATION

1. Associated member in the organization committee of US-Egypt Genetic engineering and Genome workshop in the period between 5 – 8 December 2003 at Mubarak City for Scientific Research and Technology Applications, Alexandria, Egypt.
2. Associated contributor in preparing for the first National Conferences on Scientific Research plane till the Year 2017 in the period 28 – 29 May 2005.
3. The first Environmental Biotechnology workshop, Biological Sciences Department, College of Arts and Sciences, Qatar University, 2 – 5 July 2007.
4. The second Environmental Biotechnology workshop, Biological Sciences Department, College of Arts and Sciences, Qatar University, 1st July 2008.
5. Workshop under title of "YOUR FACTORY AND THE ENVIRONMENTAL LAWS" Mubarak City for Scientific Research, Alexandria, Egypt, 6 – 7 July 2009.

INNOVATIVE BIO -PRODUCTS

1. **BIO – FRIEND:** a bacterial consortium to treat sewage wastewater.
2. **AMSHAGE:** DNA extraction kit from bacteria, fungi, water, parasites and whole blood.
3. **PathoTrack:** PCR detection kit of *Salmonella*, *E. coli* and *P. aeruginosa* in biological samples.
4. **NEBRAS:** Genomic DNA, PCR and Plasmid purification kit

PATENTS

- 1) **Desouky Abd-El-Haleem**, Sahar Zaki and Zeinab Kheirallah (2003) Multiplex PCR to monitor water quality against pathogenic bacteria [Egyptian patent office ASRT (Issued Patent. No. 23454)].
- 2) **Desouky Abd-El-Haleem**, Elsayed Hafez (2003) Production of bioplastic from a novel Egyptian bacterial strain [Egyptian patent office ASRT (Issued Patent. No. 23526)].
- 3) **Desouky Abd-El-Haleem**, Sahar Zaki and Hassan Moawad (2003) Bacterial consortium to treat sewage wastewaters [Egyptian patent office ASRT ((issued patent no. 024011)]
- 4) **Desouky Abd-El-Haleem**, (2004) DNA extraction from bacteria, fungi, waters and whole blood [Egyptian patent office ASRT (Issued Patent. No. 23525)].
- 5) **Desouky Abd-El-Haleem**, et al. (2005) genetically modified biosensor to monitor general toxicity in liquids [Egyptian patent office ASRT (Regist. Patent. No. 167)].
- 6) **Desouky Abd-El-Haleem et al.** (2006) Growth medium and extraction methods to isolate PHAs from wild type yeasts [Egyptian patent office ASRT (Regist. Patent. No. 289)].

BOOKS

1. **Desouky Abd-El-Haleem**, (in Arabic) Environmental Biotechnology (2003) (Egyptian Academy of Science and Technology).
2. **Desouky Abd-El-Haleem**, (in Arabic): Friendly plastics (2004) (Egyptian Academy of Science and Technology).
3. **Desouky Abd-El-Haleem** (in Arabic): Water Miracle: view of point between religion and science (2009) (Dar El-Sahab)
4. **Desouky Abd-El-Haleem**, (in Arabic) Environmental Biotechnology II (2009) (Dar El – Sahab).

SERVICES FOR THE WORK PLACE AND OTHERS

1. Prepare a study to determine, structure and human resources requirements of the "Institute for the environmental Research" at Mubarak City for Scientific Research, July 2008 – June 2009, three workshops were conducted, the Final Report submitted to Mucsat director.
2. Set – up, ordering and purchasing of instruments required to establish a standardized air pollution measuring lab at Environmental biotechnology Department, Mucsat, 2009.
3. Responsible for production and founder of the products AMSAGE, BIOFRIEND and NEBRAS at Mubarak City for Scientific Research and Technology Applications 2002 – present.
4. Design and consult of several biological wastewater treatment units in the region of Alexandria and Matroh, Egypt.
5. Consultation of the Qatari Supreme Council for the Environment (2007 – 2008).
6. Responsible for ordering and purchasing general and fine chemicals for the Genetic Engineering and Biotechnology Research Institute, Mubarak City from 2002 – 2006, and Biological and Environmental Sciences Department, Qatar University (2007 – 2008).
7. Member of the technical office in Mubarak City for Scientific Research during the period 2001 – 2002.
8. Member in the following committees at Biological and Environmental Sciences Department, Qatar University: Budget committee, General activity committee, Scientific Research committee and chair of the workshops and training committee (2006 – 2009).

RESEARCH PROJECTS

1. **PI:** Purification of Water and Wastewater by Natural Biodegradable Biofloculants (STDF) (2009) (run)
2. **PI:** Genetically modified biosensor to detect nitrite in wastewater (US – Egypt joint fund program) (2002) (Finished)
3. **PI:** Production of biopolymers from some Egyptian bacterial isolates. Funded by GEBRI (Finished)
4. **Member:** Biological nitrogen fixation (member of the teamwork) funded by European community (Finished)
5. **PI:** Production of biopolymers in transgenic Yeasts Funded by Egyptian Academy of science and technology (finished 2006).
6. **PI:** Bioplastic from Qatari bacterial isolates, **Funded by Qatar foundation** (2007 – 2008 run).
7. **PI:** Screening for biofloculant producers in Qatari Ecosystems **Funded by Qatar foundation** (2007 – 2008 finished).
8. **Co-PI** (2007) Biodiversity of polyaromatic hydrocarbons degrading-bacteria in different Qatari soils (**Funded by CAS Research Committee 2006 – 2008 Run**).
9. **Co-PI** (2007) *PCR* and culture-based tools to detect trichomoniasis in vaginal specimens (**Funded by CAS Research Committee 2006 – 2008 Run**).
10. **Co-PI** (2007) Qatari plants as bioindicators of air pollution (**Funded by CAS Research Committee 2006 – 2008 Run**).

SUPERVISIONS

Doctoral Degrees

1. Elsayed Hafez (***Production of biopolymer from some Egyptian bacterial isolates***), College of Science, Mansoura University (Finished 2003)
2. Maha Gaffer (***Genotyping of microsporida isolated from stool of immunocompromised patient***), College of Medicine, Alexandria University (Finished 2003)
3. Gadallah Abu-Elreash (***Genetically Modified biosensor to detect nitrogen in nature***), Faculty of Science, Alazhar University (2005 – 2008).

Master Degrees

1. Sally Ahmed "*Biodegradation of pesticides*" College of Agriculture, Alexandria University (Run 2009).
2. Walaa Salaheldin (*Multiplex-PCR to detect some pathogenic bacteria in water*) College of Girls, Ain Shams University (Finished 2005).
3. Gadallah Abou-Elreash (*Genetically modified biosensor to monitor toxicants in wastewater*) Faculty of Science, Alazhar University (Finished 2005).
4. Marwa Elfaham (*Detection of Schistosoma by PCR*), Faculty of medicine, Alexandria University (Finished 2005).
5. Marwa Mustafa (*Detection of bacterial pathogens in water and wastewaters by PCR*), faculty of Science Alexandria University. (Finished 2007).

B.Sc. Degrees (Student research projects)

1. **Mona K. Alshemrri** (*Molecular characterization of chlorophenol degrading bacteria isolated from Qatari soils*) (Fall 2006)
2. **Fatima Jameh** (*Bacillus bacterium as biofertilizer of Barely*). (Fall 2006)
3. **Raniah Salah** (*Molecular Detection of Microbial Pathogens on Surfaces of doors, phones and cars handles*) (Spring 2007)
4. **Dalia Mostafa** (*Bioassay method and kit for detecting hazardous biological agents in their natural habitats*) (Spring 2007).
5. **Khoulood Elkhyat and Rasha** (*Detection of the water parasites Gardia and cryptosporidium by molecular tools*) (Spring 2007).
6. **Thourya Al-Mokemy, Sidra Al-Marii, Fatima Hassan** (*Biofloculants from Qatari microbial Straits*) (Fall 2007)
7. **Eman Abuazab, Hadiel Usama, Maryam Alfadallah** (*Bioplastic from Qatari microbial strains*) (Spring 2008).
8. **Lubna Ibrahiem, Fatima Jassem and Noura Essa** (*Screening for biosurfactents producing microorganisms from different Qatari Ecosystems*) (Fall 2008).

PRACTICAL EXPERIENCE

1. Direct microbial DNA extraction from soil/roots or water.
2. PCR amplification using universal or specific primers, cloning, Gene libraries, Screening of the gene libraries, sequencing, sequence analysis,
3. Fluorescent In situ hybridization (FISH).
4. The use of RFLP, REP – PCR and others PCR – based approaches to recognize between bacterial species at the strain level.
5. Probes and primers design.
6. Screening and constructing of genetically modified biopolymers microbial – producers and analysis.
7. Phylogenetic analysis of ribosomal RNA genes either for cultured or yet uncultured microbial species from different environmental Ecosystems.
8. Construction of genetically modified biosensors (Bioluminescent reporter)
9. Gene Expression through the use of differential display technique.
10. Phytoremediation and biodegradation as tools for bioremediation of organic and inorganic pollutants.

MAIN RESEARCH TOPICS

1. Production of monitoring and diagnostic kits.
2. Biodiversity and Phylogenetic analysis of bacterial isolates using ribosomal RNA as a genetic marker.
3. Construction of genetically modified biosensors to monitor pollutants in soil and water at molecular level.
4. Production of biodegradable biopolymers from microbial isolates.
5. Microbial biodegradation of aliphatic, mono and poly aromatic hydrocarbons.
6. Production of biodegradable biofloculants and biosurfactants and some other raw materials as biotech environmentally friendly bioproducts.

Attending of professional workshops

1. How to lead science parks, Mubarak City for scientific research, Alexandria Egypt, Feb 2009. Given by Korean professional team.
2. Active learning strategy, Office of Faculty and Instructional Development (4 – 6 Feb 2007) given by Professor Eman Zaki
3. Assess the needs of Biological Sciences Department staff for professional development, Lecture by Dr. Amal Bouzeineddine, AUB University, 30 January 2007.
4. Faculty beyond the Classroom workshop, given by Dr. Lotfi Gaafar (from American University in Cairo) 6 March 2007.
5. Qatar Symposium on Science Teaching and Learning, At Qatar University, 7 March 2007
6. Course Management workshop, given by Dr. Lotfi Gaafar (from American University in Cairo) 8 March 2007.
7. Qatar Symposium on Science Teaching and Learning, At Qatar University, 7 March 2007
8. Techniques for interdisciplinary teaching/learning, given by Professor Malcolm Potts, 18 – 19 Feb 2008.
9. Developing Course Learning Outcomes and Syllabus Design " Dr. Amal Bouzeineddine, 2 – 4 December 2008.

SCIENTIFIC PUBLICATIONS

Conferences, Oral and Poster presentation

1. **Desouky Abd-El-Haleem**, v. Wintzingerode F., Hegemann W. and Goebel U. (1997): Phylogenetic analysis of ammonia oxidizing bacteria occurring in the nitrifying sections of two root-zone method based wastewater treatment plants. Kongress der Deutschen Gesellschaft fuer Hygiene und Mikrobiologie (DGHM), 5 – 9. 10. 1997, Jena, (Poster 483).
2. v. Wintzingerode F., Schloetelburg C., **Desouky Abd El-Haleem** and Goebel U. (1998): A new rapid screening method for environmental 16S rDNA clone libraries. Methodische Entwicklungen in der mikrobiologischen Nukeinsaere-Diagnostik, Berlin, 24 – 25 April/1998.
3. **Desouky Abd El-Haleem** (2001) Molecular analysis of root-associated nitrifying bacteria in a wastewater treatment plant based rhizoremediation technology. First US – Egypt workshop in microbial ecology, National Research Centre, Cairo, Egypt 6 – 10 May 2001.
4. **Desouky Abd El-Haleem**, Steve Ripp, and Gary Saylor (2002): A Bioluminescent Bioreporter for the Detection of Phenol. 9th ASM Microbiology Education Conference, May 17 – 19, (2002). Salt Lake City, Utah, Topic Q04 Biodegradation Heterocyclics and Aromatic Compounds.
5. **Desouky Abd-El-Haleem** and Sahar Zaki. (2002): Production of Poly (γ – Glutamic Acid) in a novel *Bacillus* sp. strain S – 5. International symposium on biological polyesters. P. 77, September 22 – 26, 2002. Muenster, Germany.
6. **Desouky Abd-El-Haleem**, Elsayed Hafez, Mohamed Nagieb, and Ahmed Eldewany (2002). Production of biopolymer from Egyptian wild type and mutants bacterial strains. The Alexandria Conference on Biotechnology and Sustainable Development: Voices of the South and North, March 16 – 20, 2002, at the Library of Alexandria, Egypt.
7. **Desouky Abd-El-Haleem** (2003): Genetically modified organisms (GMOs). New era of biotechnology in pharmaceutical industries, Mubarak City for Scientific Research and Technology Applications, Alexandria, 22 – 23 September 2003 (Lecture 45 min) .
8. **Desouky Abd-El-Haleem**, Mohamed Nagieb, Salah Eldehlob, Ahmed Eldewany and Elsayed Hafez (2003): Isolation, Characterization and Expression of Phb Synthase Gene (*Phac1*) From *Pseudomonas Reactans* Strain DS-4 US-Egypt Workshop on Genetic Engineering and Genomics, 5-8 December, 2003, Poster, at Mubarak City for Scientific Research and Technology Applications, New Borg El-Arab, Alexandria, Egypt.

9. **Desouky Abd-El-Haleem**, Sahar Zaki, Gadallah Abu-Elreesh and Mona Elsayed (2003): An Universal Bioluminescent Bioreporter to Monitor Toxicants In Wastewater. US – Egypt Workshop on Genetic Engineering and Genomics, 5-8 December, 2003, Lecture, at Mubarak City for Scientific Research and Technology Applications, New Borg El-Arab, Alexandria, Egypt (Lecture 20 min).
10. **Desouky Abd-El-Haleem**, Sahar Zaki, Hany Hussein, Hassan Moawad and Mona Elsayed (2003): Acceleration of Sewage Wastewater Treatment Process Using Efficient Bacterial Inoculants. US-Egypt Workshop on Genetic Engineering and Genomics, 5 – 8 December, 2003, Poster, at Mubarak City for Scientific Research and Technology Applications, New Borg El-Arab, Alexandria, Egypt.
11. Sahar A. Zaki, **Desouky Abd-El-Haleem**, Hassan Moawad and Mona Elsayed (2003): Application of PCR-RFLP, Rep-PCR and enzyme assays to determine heterogeneity among phenol degraders. US-Egypt Workshop on Genetic Engineering and Genomics, 5 – 8 December, 2003, Poster, at Mubarak City for Scientific Research and Technology Applications, New Borg El-Arab, Alexandria, Egypt
12. **Desouky Abd-El-Haleem**, Sahar Zaki and Gadallah Abu Elreesh (2004): Toxicity Assessment of Pollutants Using Genetically Modified Bioluminescent Bioreporter. Envi – Workshop On Liquid – Solid Wastes From Agricultural and Industrial Sources, Alexandria University 14 – 20 March 2004 (Lecture 20 min).
13. **Desouky Abd-El-Haleem**, Sahar Zaki, Steven Ripp and Gary Saylor (2004): Genetically modified bioluminescent reporter to monitor nitrite toxicity. The Eighth world congress on biosensors, Gernada, Spain, 24 – 26 May 2004.
14. **Desouky Abd-El-Haleem** and Hassan Moawad (2004): Molecular Monitoring of Released Genetically Modified Microorganisms into the Environments. The third forum on the cooperation between Arab countries in scientific research, Alryhad, Saudi Arabia, 11 – 17 April 2004 (Lecture 20 min).
15. **Desouky Abd-El-Haleem** and Hassan Moawad (2004): Molecular Monitoring of Released Genetically Modified Microorganisms into The Environments. The third forum on the cooperation between Arab countries in scientific research, Alryhad, Saudi Arabia, 11 – 17 April 2004.
16. **Desouky Abd-El-Haleem**, (2006): Test methods for detecting GMMs in nature, Fourm of the national society of biochemistry and Molecular Biology, Cairo, 18 January 2005.
17. Abeer A. Rushdy, **Desouky Abd-El-Haleem**, Zeinab H. Kheirallah (2006): Effect of seasonal variations, microbial, physical and chemical factors on the quality of irrigation water cultivated areas at east delta in Egypt. *Fifth International Symposium on Environment, Catalysis and Process Engineering*, 24 – 26 April 2006, Fès, Morocco.
18. **Desouky Abd-El-Haleem** (2006): The role of biotechnology to solve environmental problems, general lecture given at Environmental studies Research center, Qatar University, Doha, State of Qatar, 21 December 2006.
19. **Desouky Abd-El-Haleem** (2006): Environmental Biotechnology History of my research, A seminar given at the biological sciences department, Wednesday 8 November 2006 (Oral lecture, 1 hour).
20. **Desouky Abd-El-Haleem** (2007): Molecular tools used to detect genetically modified microorganisms, Biotechnology and therapeutic protein Workshop, college of Arts and Sciences, Qatar University, Doha, State of Qatar 4 – 5 Feb 2007. (Oral Lecture, 1 hour)
21. **Desouky A.M. Abd-El-Haleem** (2007): The Miracle of Water and Rokya, The first Healing with Quran Conference, Abou-Dhabi, United Arab Emirates, April 10 – 12, 2007.
22. M. Al-Maadeed, N.J. Al-Thani and **Desouky A.M. Abd-El-Haleem** (2007) How does the gamma irradiation change the microstructure and morphology of polymers?, The first symposium on polymer sciences, Department of chemistry and earth sciences, college of Arts and Sciences, Qatar University, April 18, 2007.
23. Wafaa M. Abd El-Rahim, Desouky A.M. Abd-El-Haleem, Hassan Moawad (2007): Application of Bioluminescence biosensor for tracing and management of environmental pollution by textile dye residues 2007. On The National Conference for Environment protection and pollution, Qassim University, Saudi Arabia. March 18 – 20, 2007.
24. **Desouky Abd-el-Haleem** (2008): Interdisciplinary teaching of biotechnology. The third Qatar Symposium on Science Teaching and Learning, At Qatar University, 28 Feb 2008.
25. **Desouky A.M. Abd-El-Haleem**, Roda F. Al-Thani, Sidra Al-Marii, Fatima Hassan and Thourya Al-Mokemy (2008): Screening and flocculating properties of Bioflocculant-Producing Microorganisms in Different Qatari ecosystems. Kuwait waste management conference & exhibition 7 – 9 April, Kuwait.
26. **Desouky A.M. Abd-El-Haleem**, (2009): Institute of Environmental Research and Natural Resources: Past, Present and future (Oral Presentation), Workshop of YOUR FACTORY AND ENVIRONMENTAL LAWS, Mubarak City for Scientific Research and Technology Applications, Alexandria, Egypt, 6 – 7 July 2009.
27. **Desouky A.M. Abd-El-Haleem**, (2009): Environmental biotechnology: In house contributions (Oral presentation 40 min), Hilton Green Plaza, Alexandria, The second international conference of ecology, 15 November 2009.
28. **Desouky A.M. Abd-El-Haleem**, (2009): Employment of Molecular and Biochemical approaches to detect genetically engineered microorganisms in their natural habitats. Italy – Egypt science and technology year, the international conference of biotechnology, workshop on: Genetics and genomics for crops development in the Mediterranean area, agriculture research center, Egypt, 16 November 2009.

Published Scientific Research Papers

- 1) El-Shaer M, El-Noemani A, El-Zeiny H and **Desouky Abd El-Haleem** (1995). Effect of drip irrigation intervals, time and plant distribution system on cotton plant in the Nile valley. I-Effect on growth. *E. J. Appl. Sci.* 10: 289 – 306.
- 2) El-Shaer M, El-Noemani A, El-Zeiny H and **Desouky Abd El-Haleem** (1995). Effect of drip irrigation intervals, time and plant distribution system on cotton plant in the Nile valley. II-Effect on leaf characters and growth analysis. *E. J. Appl. Sci.* 10: 234 – 250.
- 3) El-Shaer M, El-Noemani A, El-Zeiny H and **Desouky Abd El-Haleem** (1995). Effect of drip irrigation intervals, time and plant distribution system on cotton plant in the Nile valley. I-Effect on plant phenology, yield and its components, fibre properties and consuptive use. *E. J. Appl. Sci.* 10: 312 – 333.
- 4) **Desouky Abd-El-Haleem**, v. Wintzingerode F., Moter A., Moawad H. and Goebel U. (2000): Phylogenetic analysis of rhizosphere-associated Beta-subclass ammonia oxidizers in a municipal wastewater treatment plant based on the rhizoremediation technology. *Letters in Applied Microbiology* 30: 34 – 40.

- 5) **Desouky Abd El-Haleem**, v. Wintzingerode F., Moter A., Moawad H. and Goebel U. (2000): Molecular analysis of root-associated *Nitrobacter*-like bacteria in a wastewater treatment plant-based rhizoremediation technology. The second congress of genetic science at Faculty of agriculture, El-Menia University, Menia, Egypt, October 2000 (Lecture 20 min) {**Full Paper**}
- 6) **Desouky Abd El-Haleem**, Steven Ripp, C Scott and Gary Saylor (2002): A *luxCDABE* – Based Bioluminescent Bioreporter for the Detection of Phenol. *Journal of Industrial Microbiology and Biotechnology*. 29: 233 – 237.
- 7) **Desouky Abd El-Haleem**, Usama Beshey, Abdou Abdelhamid, Hassan Moawad and Sahar Zaki (2002): Effects of mixed nitrogen sources on biodegradation of phenol by immobilized *Acinetobacter* sp. strain W – 17. *African Journal of Biotechnology* 2: 8 – 12.
- 8) **Desouky Abd El-Haleem**, Alice Layton and Gary Saylor (2002): Long – PCR amplified rDNA apply for PCR – RFLP and REP-PCR based approaches to recognize closely related microbial species, *Journal of Microbiological Methods* 49: 315 – 318.
- 9) **Desouky Abd El-Haleem**, Hassan Moawad, Essam A. Zaki and Sahar Zaki (2002): Molecular characterization of phenol-degrading bacteria isolated from different Egyptian ecosystems. *Microbial Ecology* 43: 217 – 224
- 10) Usama Beshey, **Desouky Abd El-Haleem**, Hassan Moawad and Sahar Zaki (2002): Phenol biodegradation by free and immobilized *Acinetobacter*. *Biotechnology letters* 24: 1295 – 1297.
- 11) **Desouky Abd El-Haleem** (2003): *Acinetobacter*: Environmental and biotechnology applications. *African Journal of Biotechnology* 2: 71 – 74.
- 12) **Desouky Abd El-Haleem**, Zeinab Kheirallah, Sahar Zaki and Walla Abdelrahiem (2003): Multiplex-PCR & PCR-RFLP assays to monitor water quality against pathogenic bacteria. *Journal of Environmental Monitoring* 5: 865 – 870.
- 13) Eman El-Kerdany, **Desouky Abd El-Haleem** (2003): Genotypic discrimination between a *Leishmania* isolate and two *Leishmania major* reference strains using PCR-RFLP technique. *Journal of the Egyptian society of Parasitology* 33: 261 – 273.
- 14) Azza Y Negm and **Desouky Abd El-Haleem** (2004): detection of Trichomoniasis in vaginal specimens by both conventional and modern molecular tools. *Journal of the Egyptian society of Parasitology* 34: 589 – 600.
- 15) **Desouky Abd El-Haleem** (2004): Microbial Biosensors: Principles and Applications. *Arab Journal of Science and Information* 3: 12 – 19.
- 16) Hassan Moawad, Wafaa M. Abd El-Rahim and **Desouky Abd El-Haleem** (2004): Performance of phaseous bean rhizobia in soils from major production sites in the Nile Delta. *Comptes Rendus Biologies*, 327: 445 – 453.
- 17) Kashyout A.B., Soliman M., and **Desouky Abd El-Haleem** (2004) Effect of Photocatalytic Oxidation with TiO₂ and Ultraviolet Light on the Bioluminescence of Bacterial Suspensions. World conference on energy for sustainable development: technology advances & environmental issues. 6 – 9 December 2004 (**Full paper**).
- 18) Elrashdy Redwan and **Desouky Abd El-Haleem** (2005): Molecular analysis of cross-bacterial contamination detected during diagnosis HCV infection. *J. Appl. Sci. Environ. Mgt.* 9: 5 – 10.
- 19) Hassan Moawad, Wafaa M. Abd El-Rahim, **Desouky Abd El-Haleem** and S. A. Abo – Sedera (2005): Persistence of two *Rhizobium etli* inoculant strains in clay and silty loam soils. *Basic Journal of Microbiology* 45: 438 – 446.
- 20) Reyed M Reyed, Sahar A. Zaki, **Desouky A.M. Abd El-Haleem** and Mona Elsayed (2006): Biochemical Characterization of Spent Culture Supernatant-associated Polysaccharides in *Bacillus* Isolate BS14. Conference of Role of Biochemistry in Environment and Agriculture (Third Cycle), Faculty of Agriculture, Cairo University, 3 – 4 May 2006 (**Full Paper**).
- 21) **Desouky Abd El-Haleem** and Sahar Zaki (2006): Use of Bioluminescent Indicator *Acinetobacter* Bacterium for Screening and Characterization of Active Antimicrobial Agents, *J of Microbiology and Biotechnology* 16: 1706 – 1712.
- 22) **Desouky Abd El-Haleem**, Sahar Zaki, Ashraf Abulhamd1, Hassan Elbery and Gadallah Abu – Elreesh (2006): *Acinetobacter* bioreporter assessing heavy metals toxicity. *J. Basic Microbiol.* 46: 339 – 347.
- 23) Kashyout A. B., Soliman M. and **Desouky Abd El-Haleem** (2006) Disinfection of bacterial suspensions by photocatalytic oxidation using TiO₂ nanoparticles under ultraviolet illumination. *Alexandria Engineering, Journal* 45: 367 – 371.
- 24) **Desouky Abd El-Haleem**, Steven Ripp, Sahar Zaki and Gary Saylor (2007): Detection of Nitrate/Nitrite Bioavailability in Wastewater Using a *luxCDABE* Based *Klebsiella oxytoca* Bioluminescent Bioreporter. *Journal of Microbiology and Biotechnology* 17: 1254 – 1261.
- 25) Ashraf T. Abuelhamd; **Desouky A.M. Abd El-Haleem**; Sahar A. Zaki; Amro Amara; Gadallah M.S. Aboelreesh (2007): Genetic engineering of *Schizosaccharomyces pombe* to produce Bacterial Polyhydroxyalkanoates. *J. Appl. Sci. Environ. Manage* 11: 83 – 90.
- 26) **Desouky A.M. Abd El-Haleem** and M. A. AlMa'adeed, N. Al – Thani (2007) physical and chemical properties of polyhydroxyalkanoates biodegradable polymers produced in transgenic yeasts. *Global Journal of Environmental Research* 1: 69 – 73.
- 27) **Desouky A.M. Abd El-Haleem**, Amro Amara, Sahar A. Zaki, Ashraf T. Abuelhamd, and Gadallah M.S. Aboelreesh (2007): Biosynthesis of biodegradable polyhydroxyalkanoate biopolymers in genetically modified yeasts. *International Journal of Environmental Sciences and Technology* 4: 513 – 520.
- 28) Roda F. Al-Thani, **Desouky A.M. Abd El-Haleem** and Mona Al-Shammri (2007) Isolation, biochemical and molecular characterization of 2-chlorophenol-degrading *Bacillus* isolates. *African Journal of Biotechnology* 6: 2675 – 2681.
- 29) Sahar Zaki, **Desouky Abd El-Haleem**, Ashraf Abuelhamd, Hassan Elbery, Gadallah AbuElreesh (2008), Influence of phenolics on the sensitivity of free and immobilized bioluminescent *Acinetobacter* bacterium. *Microbiological Research* 163: 277 – 285.
- 30) **Desouky Abd El-Haleem**, Roda althani et al. (2008) Isolation and characterization of extracellular biofloculants produced by bacteria isolated from Qatari ecosystems. *Polish Journal of Microbiology*, 57: 231 – 239.
- 31) Wafaa M. Abd El-Rahim, **D. Abd El-Haleem**, H. Moawad. 2008. Application of Bioluminescence for Appraisal of Fungal Bioremoval and Detoxification of a Textile Dye. Eg. Journal Applied Agricultural Research, Vol. 1, No. 2, 183 – 198.
- 32) **Desouky Abd El-Haleem** (2009): Biosynthesis of Polyhydroxyalkanoates in Wild type Yeasts. Polish Journal of Microbiology Vol. 58, No 1, 37 – 41.
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