



CURRICULUM VITAE

Name : AHMED ISMAIL RAMADAN KHALIL

Position : Professor of Agricultural and Environmental Microbiology,
Department of Environmental Studies, Institute of Graduate
Studies and Research, Alexandria University.

Work Address: 163-Horreya Avenue, Chatby 21526, P.O. Box 832, Alexandria,
Egypt.

Specialization:

***Major:** Agricultural and Environmental Microbiology

***Minor:** Biological Treatment of Organic Wastes

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A. Academic Degrees and Position Held

1- Academic Degrees:

- **B.Sc.** In Agricultural Industries (Dairy Science Branch), Faculty of Agriculture, Alexandria University, Alexandria, Egypt (June, 1982).
- **M.Sc.** In Environmental Studies (Environmental Biology Branch), Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt (16/12/1989).

Thesis Title: Production of glucose and ethanol from plant wastes

- **Ph.D.** In Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt (2/11/1996).

Thesis Title: Composting and the utilization of organic wastes: an environmental study

2- Position Held:

- **Demonstrator**, Department of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt (13/2/1983-16/3/1990).
- **Assistant lecturer**, Department of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt (17/3/1990- 27/1/1997).
- **Assistant professor**, Department of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt (28/1/1997- 27/9/2004).
- **Associate professor**, Department of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt (28/9/2004- 26/9/2016).
- **Professor**, Department of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt (27/9/2016).

B- Scientific and Applied Activities

1- Teaching Courses:

A- In Egypt:

- Technology of urban environment
- Solid wastes management
- Bioconversion of organic wastes
- Composting of organic wastes
- Applied microbiology
- Environmental biotechnology
- Environmental microbiology
- Biomass and energy
- Industrial, social and health environment
- Biological treatment of wastes
- Fermentation technology
- Recent trends in dealing with solid wastes
- Microbiology of extreme environments

B- In Libya:

- Basics of environmental sciences
- General environment
- Technology of wastes recycling
- Solid wastes management
- Bioconversion of organic wastes

C- In Kingdom of Saudi Arabia:

- Engineering of agricultural wastes treatment

2- Scientific Supervision:

A- Ph.D:

- 1- Ph.D.** In Environmental Studies (2018/2019-2021). Environmental and molecular studies on alginate producing bacteria from Egyptian soils. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 2- Ph.D.** In Environmental Studies (2019/2020-Now). Biological treatment of nitrogenous compounds in aquaculture systems by bacteria. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 3- Ph.D.** In Environmental Studies (2019/2020-Now). Environmental and biotechnological studies on production of some cold active industrial enzymes by bacteria. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 4- Ph.D.** In Pesticide Chemistry and Technology (2019/2020-Now). Isolation, identification and insecticidal activity of soil microorganisms and their secondary metabolites. Dept. of Pesticide Chemistry and Technology, Faculty of Agriculture, Alexandria University, Alexandria, Egypt.
- 5- Ph.D.** In Environmental Studies (2020/2021-Now). New trends in valorization of peanut organic wastes for bioethanol production. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.

B- Master:

- 1- M.Sc.** In Environmental Studies (1997-2000). Environmental and health studies on composting. Case study: Damietta compost plant. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 2- M.Sc.** In Bioscience and Technology (1997-2000). Studies on using compost extracts in the biocontrol of some soil-borne fungal pathogens. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 3- M.Sc.** In Bioscience and Technology (1997-2003). Enhancement of single cell protein production from organic wastes. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 4- M.Sc.** In Environmental Studies (2000-2005). Environmental studies on composting of sewage sludge and its co-composting with municipal solid wastes. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 5- M.Sc.** In Environmental Studies (2001-2005). Molecular biodiversity and symbiosis of common bean-rhizobia in Egyptian soils. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 6- M.Sc.** In Bioscience and Technology (2001-2006). Microbiological and biochemical studies on some bacterial isolates that produce extracellular extremophilic lipase. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 7- M.Sc.** In Environmental Studies (2003-2007). Environmental studies on composting of municipal solid wastes. Case study: compost plants in Alexandria city. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.

- 8- M.Sc.** In Environmental Sciences (2006-2008). Microbiological and enzymatical changes during the composting of municipal solid wastes in Al-Bayda city: an environmental study. Dept. of Environmental Sciences, Faculty of Natural Resources and Environmental Sciences, Omar El-Mokhtar University, Al-Bayda, Libya.
- 9- M.Sc.** In Environmental Sciences (2006-2008). Physical and chemical changes during the composting of municipal solid wastes in Al-Bayda city: an environmental study. Dept. of Environmental Sciences, Faculty of Natural Resources and Environmental Sciences, Omar El-Mokhtar University, Al-Bayda, Libya.
- 10-M.Sc.** In Environmental Studies (2015/2016-2019). Environmental and biotechnological studies on composting of agricultural wastes. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 11-M.Sc.** In Environmental Studies (2015/2016-2018). Environmental and biotechnological studies on treatment of dairy industry wastewater. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 12-M.Sc.** In Environmental Studies (2015/2016-2019). A study on production of ethanol from sugarcane bagasse via bioconversion. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 13-M.Sc.** In Environmental Studies (2015/2016-2018). Utilization of lignocellulosic wastes in production of cellulase and xylanase enzymes by fungi. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 14-M.Sc.** In Environmental Studies (2015/2016-2019). An environmental study on production of compost from garden wastes. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.

- 15-M.Sc.** In Environmental Studies (2015/2016-Now). A study on the utilization of pharmaceutical industry wastes in production of an antibiotic by actinomycetes. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 16-M.Sc.** In Environmental Studies (2015/2016-2019). Utilization of rice straw in cultivation of mushroom and use of spent substrate for production of lignocellulosic enzymes and bioethanol. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 17-M.Sc.** In Environmental Studies (2016/2017-2021). Utilization of organic wastes in the production of pectinase by fungi. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 18-M.Sc.** In Environmental Studies (2016/2017-2019). Fermentation of vegetable and fruit wastes for production of a multipurpose enzymatic solution. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 19-M.Sc.** In Environmental Studies (Green Innovation and Entrepreneurship Program) (2016/2017-2021). Utilization of rice straw in the production of biohydrogen. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 20-M.Sc.** In Environmental Studies (Green Innovation and Entrepreneurship Program) (2016/2017-2021). Biohydrogen production via water splitting energized by biomass sugars catalyzed by immobilized enzymes. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 21-M.Sc.** In Environmental Studies (2016/2017-2021). Utilization of starchy food wastes in the production of alpha-amylase by bacteria. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.

- 22-M.Sc.** In Environmental Studies (2017/2018-Now). A new approach for bioethanol production from rice straw. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 23-M.Sc.** In Environmental Studies (2017/2018-2020). Utilization of protein-rich wastes in production of protease by bacteria. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 24-M.Sc.** In Material Science (2017/2018-2019). Mechanical, physical and biodegradation properties of polystyrene, polybutylene succinate, nano calcium carbonate blend. Dept. of Material Science, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 25-M.Sc.** In Environmental Studies (2018/2019-2021). Utilization of solid organic wastes in production of some microbial enzymes by fungi. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 26-M.Sc.** In Environmental Studies (2018/2019-Now). Improvement of soil quality and crop productivity through applying various types of compost. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 27-M.Sc.** In Environmental Studies (2018/2019-Now). Bioconversion of rice straw into glucose by bacterial cellulase. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 28-M.Sc.** In Environmental Studies (2019/2020-Now). Utilization of cotton stalk for production of bioethanol. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 29-M.Sc.** In Environmental Studies (2019/2020-Now). Production of compost from household organic wastes using a small-scale system. Dept. of

Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.

30-M.Sc. In Environmental Studies (2019/2020-Now). Utilization of lignocellulosic wastes in cultivation of the oyster mushroom and use of spent substrate for production of bioethanol. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.

C- Diploma:

- 1- Diploma** In Bioscience and Technology (1997). Biotechnological study on some bacterial isolates that exhibit biodegradable activity on agricultural cellulosic wastes. Dept. of Bioscience and Technology, Institute of Graduate Studies & Research, Alexandria University, Alexandria, Egypt.
- 2- Diploma** In Bioscience and Technology (1997). Biotechnological study on some fungal isolates that exhibit biodegradable activity on agricultural cellulosic wastes. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 3- Diploma** In Environmental Studies (Energy Conservation Branch) (1997). Utilization of the heat generated during the composting of mobile housing wastes. Dept. of Environmental Studies, Institute of Graduate Studies & Research, Alexandria University, Alexandria, Egypt.
- 4- Diploma** In Bioscience and Technology (1998). Study of salinity tolerance of nitrogen fixing bacteria. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 5- Diploma** In Environmental Studies (1998). Survey of solid wastes and their environmental problems in Alexandria. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 6- Diploma** In Bioscience and Technology (1999). Production of single cell protein with reduced nucleic acids content. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.

- 7- Diploma** In Environmental Studies (1999). Optimization of compost production from sewage sludge for field application. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 8- Diploma** In Bioscience and Technology (2000). Isolation and purification of extracellular protease and lipase from extremophiles microorganisms. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 9- Diploma** In Bioscience and Technology (2000). Biotechnological studies on enzymes and proteins from extremophiles microorganisms. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 10- Diploma** In Bioscience and Technology (2000). Biocontrol of plant diseases using compost extracts as a suppressive agent. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 11-Diploma** In Environmental Studies (2000). Molecular diversity of French bean-fixing-rhizobia strains in Egypt. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 12-Diploma** In Environmental Studies (2000). Biological treatment methods of organic wastes. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 13-Diploma** In Environmental Studies (2002). Environmental study on the composting process in Alexandria. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 14-Diploma** In Environmental Studies (2002). Investigation on possible means and benefits from sorting municipal solid waste at the source. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.

- 15-Diploma** In Bioscience and Technology (2003). Biotechnological study on xylanolytic enzymes from some microorganisms. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 16-Diploma** In Bioscience and Technology (2003). Biotechnological study on cellulolytic enzymes from some microorganisms. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 17-Diploma** In Bioscience and Technology (2003-2004). Isolation of cellulose- and xylan- decomposing microorganisms from different organic wastes-containing locations. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 18-Diploma** In Environmental Studies (2003-2004). Utilization of food processing wastes in Alexandria city. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 19-Diploma** In Bioscience and Technology (2003-2004). Biotechnological study on the utilization of agricultural wastes. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 20-Diploma** In Environmental Studies (2004). Design of a website for solid waste information in Alexandria. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 21-Diploma** In Environmental Studies (2005). Microbial and enzymatic changes during the composting of agricultural wastes. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.
- 22-Diploma** In Bioscience and Technology (2005). Isolation and characterization of xylan- degrading microorganisms from different organic

wastes locations. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.

23-Diploma In Bioscience and Technology (2005). Antibacterial activity of phenazine. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.

24-Diploma In Bioscience and Technology (2005). Isolation and characterization of starch- degrading microorganisms from organic wastes. Dept. of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.

25-Diploma In Environmental Studies (2005). Use of the pyrolysis process to produce charcoal from some wastes. Dept. of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt.

26-Diploma In Environmental Studies (Energy Conservation Branch) (2016/2017). A survey study on production of biogas from agricultural and animal wastes in rural Egypt. A case study: El-Beheira governorate. Dept. of Environmental Studies, Institute of Graduate Studies & Research, Alexandria University, Alexandria, Egypt.

3- Fellowship:

- Postdoctoral Fellowship, Agricultural Microbiology, Faculty of Agriculture, Warsaw Agricultural University (SGGW), Warsaw, Poland (22/2-22/9/2001).

4- Training Courses and Workshops:

- Training Course on “Preparation of the University Teacher”, Faculty of Education, Alexandria University, Alexandria, Egypt (Sept.- Oct., 1984).
- Training Course on “Environmental Management in Food Industries”, High Institute of Public Health, Alexandria University, Alexandria, Egypt (15-27/9/1990).
- Training Course on “Biotechnology”, Roma, Italy (23/10/1992-12/1/1993).

- Training Course on “Methodology”, Faculty of Literature, Alexandria University, Alexandria, Egypt (26/10-4/12/1996).
- Participated in Workshop on “Sea Water Microbiology”, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt (22-28/2/1998).
- Participated in Workshop on “Effluent Management”, Water Environment Federation and Egyptian Society for Water Environment Affairs, Alexandria, Egypt (29/3-2/4/1998).
- Participated in Workshop on “Quality System and Quality Control in Sea Water Microbiology”, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt (11-12/10/1998).
- Participated in Workshop on “Proficiency Testing in Sea Water Microbiology”, Institute of Graduate Studies and Research, Alexandria, Egypt (26, 27-30/4/1999).
- Organized a Training Course on “Advanced Biotechnological Methods in Organic Wastes Treatment (New Trends in Fermentation Technology)”, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt (16-20/4/2000).
- Participated in the Envi-Workshop on “Liquid-Solid Wastes from Agricultural and Industrial Sources”. Organized by Faculty of Science, Alexandria University Egyptian - DAAD Alumni, Alexandria Group in cooperation with German Academic Exchange Service (DAAD), Alexandria, Egypt (14-20/3/2004).
- Organized a Training Course on “Advanced Biotechnological Methods in Organic Wastes Treatment (New Trends in Fermentation Technology)”, Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt (11-15/7/2004).
- Organized a Training Course on "Production of Compost from Organic Wastes" University of Omar El-Mokhtar, Libya (24/6-5/7/ 2007).
- Participated in Workshop on "Software Interfaces for Postgraduate Studies: Global and Local Expertise", Vice President for Graduate Studies and

Scientific Research, King Saud University, Kingdom of Saudi Arabia (20/4/2015).

- Participated in Workshop on "Arbitration Translated Books: the Development of Mechanisms ", Atorgomh- Center Vice President for Knowledge Exchange and Technology Transfer, King Saud University, Kingdom of Saudi Arabia (20/4/2015).

5- Conferences, Symposiums and Scientific Meetings:

- One of the members of the organizing committee of “The First Symposium on Environmental Science” organized by Institute of Graduate Studies and Research, Alexandria University. In cooperation with UNESCO Regional Office for Science and Technology for the Arab States and Goethe Institute of Alexandria, Alexandria, Egypt (15-17/5/1990).
- One of the members of the organizing committee of the “First Anglo-Egyptian Conference on Bioscience and Technology” organized by Institute of Graduate Studies and Research, Alexandria University, Alexandria, Egypt (10-15/11/1990).
- Participated in the Environmental Symposium on “Solid wastes in Dagahlia Governorate: Problems and Utilization”, Faculty of Science, Mansoura University, Dagahlia, Egypt (8/12/1997).
- Participated in the “International Conference on Environmental Management, Health and Sustainable Development”, Alexandria, Egypt (22-25/3/1999).
- Participated in the “ASM Conference on Microbial Biodiversity”, Chicago, Illinois, USA (5-9/8/1999).
- Participated in the “3rd International Conference of Ph.D. Students”, University of Miskolc, Hungary (13-19/8/2001).
- Participated in the “Alexandria Conference on Biotechnology and Sustainable Development: Voices of the South and North”, The Library of Alexandria, Alexandria, Egypt (16-20/3/2002).
- Participated in the “7th Arab International Conference on Materials Science (Recycling and Reuse of Materials)”, Alexandria, Egypt (17-20/3/2002).

- Participated in the “Waste Management and Pest Control Conference”, Muscat, Oman (6-9/9/2003).
- Participated in the International Conference “Mie Bioforum 2003” on Biotechnology of Lignocellulose Degradation and Biomass Utilization, Japan (10-14/11/2003).
- Participated in the BioVision Alexandria 2004. The New Life Sciences: Ethics, Patents and the Poor. Bibliotheca Alexandria Conference Center. Organized in Partnership with The World Life Sciences Forum BioVision, Alexandria, Egypt (3-6/4/2004).
- Participated in the 15th Annual National Composting Conference, The Composting Council of Canada, Lake Louise, Canada (12-14/ 10/ 2005).
- Participated in the Environmental Symposium (Environment Day), Faculty of Natural Resources and Environmental Sciences, Omar El-Mokhtar University, Al-Bayda, Libya (5/6/ 2006).
- Participated in a Scientific Meeting on “Biofuels: the Pros and Cons”, King Abdul Aziz City for Science and Technology, Kingdom of Saudi Arabia (15/4/2012).
- Participated in a Scientific Meeting on “Organic Agriculture: Fertilizers and Biological Control of Pests”, King Abdul Aziz City for Science and Technology, Kingdom of Saudi Arabia (3/12/2013).

6- Research Project:

- Participated in the Coastal Water Monitoring Program of the Mediterranean Sea (Microbiology Branch), Egypt (1998-2000).
- Participated in the Preparation of Environmental Impact Assessment of the General Waste Landfill for the Governorate of Alexandria, Egypt (2000).
- Participated as **Co-PI** in Project on Design and Feasibility Study of Farm Scale Composting Unit for the Sustainable Utilization of Horticultural Wastes in the Production of Alternative Growth Substrates for Vegetables in Greenhouses, National Science, Technology and Innovation Plan, Kingdom of Saudi Arabia (2013-2015).

7- Experience and Fields of Research Interest:

- Solid wastes management.
- Bioconversion of organic wastes into useful products (value-added products) such as:
 - *Production of compost and its applications.
 - *Production of biofuels (bioethanol - biohydrogen - biogas).
 - *Production of microbial enzymes (cellulase, xylanase, ligninase, amylase, protease, lipase, pectinase, etc.).
 - *Production of single cell protein and cultivation of mushroom.
 - *Production of antibiotics.
- Isolation, screening and identification of high enzymatic activity microorganisms (bacteria, actinomycetes, fungi) from the environment.
- Production of microbial enzymes and their applications in agriculture, industry and environment.
- Microbial fermentation (Liquid state fermentation & Solid state fermentation).
- Induction of microbial mutations.

8- Arbitration Research Projects and Scientific Theses:

- Arbitration Research Project on the Role of Microbial Fermentation in Increased Utilization of Agricultural Residues in Ruminant Feed, Faculty of Agriculture, Alexandria University, Egypt.
- Participation in the Jury of 25 Projects of Public Diploma Projects in Environmental Studies and Biotechnology, Institute of Graduate Studies and Research, Alexandria University, Egypt.
- Arbitration 10 M.Sc. Theses in Environmental Studies, Institute of Graduate Studies and Research, Alexandria University, Egypt.
- Arbitration 1 M.Sc. Thesis in Material Science, Institute of Graduate Studies and Research, Alexandria University, Egypt.
- Arbitration 1 M.Sc. Thesis in Soil and Water Sciences, Faculty of Agriculture, Alexandria University, Egypt.

- Arbitration 1 M.Sc. Thesis in Plant and Microbiology, Faculty of Science, Alexandria University, Egypt.
- Arbitration 12 B.Sc. Project, Faculty of Natural Resources and Environmental Sciences, Omar Al-Mukhtar University, Libya.
- Arbitration 2 M.Sc. Theses in Environment Sciences, Faculty of Natural Resources and Environmental Sciences, Omar Al-Mukhtar University, Libya.
- Arbitration 1 M.Sc. Thesis in Agricultural Engineering, Faculty of Food Science and Agriculture, King Saud University, Kingdom of Saudi Arabia.
- Arbitration 1 Ph.D. Thesis in Environmental Studies in one of the Indian Universities (External Arbitrator).
- Arbitration 1 Ph.D. Thesis in Soil and Water Sciences, Faculty of Agriculture, Alexandria University, Egypt.
- Reviewer for the following papers:
 - Physico-chemical, microbial and enzymatic analysis of mycostraw incorporated with *Eudrilus eugeniae*. Journal of Microbiology and Antimicrobials.
 - Induction of novel cellulolytic enzymes from the newly isolated *Aspergillus fumigatus* ABK9. Journal of Basic Microbiology.
 - Optimization of process parameters for kitchen waste composting by response surface methodology. No: JEST-D-13-00850. International Journal of Environmental Science and Technology.
 - Improvement of sewage sludge quality through a composting process with green waste from tree pruning. No: SA-2014-0341. Scientia Agricola.

9- Academic Supervision:

- Supervisor on Master Students (Second year), Department of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University (1998-1999).
- Supervisor of Seminar, Department of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University (2004-2005).

- Supervisor on 15 Master Students, Department of Environmental Studies, Institute of Graduate Studies and Research, Alexandria University (2015/2016, 2016/2017).

10- Awards:

- Special Award for Project Approval for Application on " Utilization of Municipal Solid Wastes", Social Development Fund, Council of Ministers, Egypt (1994).
- Award of Prof. Dr. Osama El-Kholy for Environmental Research and Studies for year 2002 (one of the country prizes), Academy of Scientific Research and Technology, Ministry of Higher Education and Scientific Research, Egypt (2003).

11- Other Activities:

- Member in the Syndicate of Agricultural Workers, Alexandria, Egypt (1983-Now).
- Member in the Club of Alexandria University, Alexandria, Egypt (1983-Now).
- Member in the Egyptian Society for Promotion of Scientific Research (1998-Now).
- Member in the Instruments and Tests Committee, Institute of Graduate Studies and Research, Alexandria University (1998-1999, 2005-2006, 2019-2020).
- Member in the Cultural Committee, Institute of Graduate Studies and Research, Alexandria University (1999-2003).
- Member in the Library Committee, Institute of Graduate Studies and Research, Alexandria University (2003-2005, 2015-2019).
- Member in the Composting Council of Canada (2005-Now).
- Coordinator of the Social Committee, Institute of Graduate Studies and Research, Alexandria University (2000-2004).
- Member in Quality Assurance Committee, Institute of Graduate Studies and Research, Alexandria University (2015-2016).

12- List of Publications:

A. Publications from M.Sc. Thesis:

- 1- Tahoun, M.K., **Khalil, A.I.**, Helmi, S. and Khairy, A.H. (1991). Induction of mutation in *Trichoderma viride* for conversion of natural cellulose into glucose. Applied Biochemistry and Biotechnology, 28/29: 197- 202.
- 2- Helmi, S., **Khalil, A.I.**, Tahoun, M.K. and Khairy, A.H. (1991). Induction of mutation in *Aspergillus niger* for conversion of cellulose into glucose. Applied Biochemistry and Biotechnology, 28/29: 203- 210.

B. Publications from Ph.D. Thesis:

- 1- **Khalil, A.I.**, Hassouna, M.S. and El-Sayed, S.H. (1999). Suppression of plant pathogenic fungi by compost application. International Conference on Environmental Management, Health and Sustainable Development, Alexandria, Egypt, Vol.1: 492- 503.

C. Publications after Assistant Professor:

- 1- **Khalil, A.I.**, Beheary, M.S. and Salem, E.M. (1999). Changes in microbial populations and their enzymatic activities during the composting of municipal solid wastes: a comparative study. International Conference on Environmental Management, Health and Sustainable Development, Alexandria, Egypt, Vol.1: 69- 81.
- 2- **Khalil, A.I.**, Attia, A.M. and El-Aswad, A.F. (1999). Effects of two selected pesticides on microbial populations and their cellulolytic activities during the composting process. International Conference on Environmental Management, Health and Sustainable Development, Alexandria, Egypt, Vol. 1: 181- 192.
- 3- El-Aswad, A.F. Attia, A.M. and **Khalil, A.I.** (2001). Influence of malathion and metribuzin on microbial populations and their cellulolytic activities during the composting of vegetable residues. Alexandria Journal of Agricultural Research, 46(1): 253- 268.

- 4- **Khalil, A.I.**, Beheary, M.S. and Salem, E.M. (2001). Monitoring of microbial populations and their cellulolytic activities during the composting of municipal solid wastes. *World Journal of Microbiology and Biotechnology*, 17: 155- 161.
- 5- EL-Masry, M.H., **Khalil, A.I.**, Hassouna, M.S. and Ibrahim, H.A.H. (2002). *In situ* and *in vitro* suppressive effect of agricultural composts and their water extracts on some phytopathogenic fungi. *World Journal of Microbiology and Biotechnology*, 18: 551- 558.
- 6- **Khalil, A.I.** (2002). Production and characterization of cellulolytic and xylanolytic enzymes from the ligninolytic white-rot fungus *Phanerochaete chrysosporium* grown on sugarcane bagasse. *World Journal of Microbiology and Biotechnology*, 18: 753- 759.
- 7- **Khalil, A.I.**, Krakowiak, A. and Russel, S. (2002). Production of extracellular cellulase and xylanase by the ligninolytic white-rot fungus *Trametes versicolor* grown on agricultural wastes. *Annals of Agricultural Science, Ain Shams University, Cairo*, 47(1): 161- 173.
- 8- **Khalil, A.I.** (2002). Production and characterization of amylase from some white-rot fungi grown on agricultural wastes. *Zagazig Journal of Agricultural Research*, 29(6): 1889- 1905.
- 9- **Khalil, A. I.**, Zaki, E. A., Moawad, H. and Atta, A. M. (2003). Diversity of common bean rhizobia isolated from Egyptian beans. *Alexandria Journal of Agricultural Research*, 48(3): 173- 185.
- 10- **Khalil, A.I.**, Krakowiak, A. and Russel, S. (2003). Production of cellulase and xylanase by the ligninolytic fungus *Trametes versicolor* grown on agricultural wastes. *Proceedings of MIE BIOFORUM 2003 "Biotechnology of Lignocellulose Degradation and Biomass Utilization"* on November 10-14, 2003, Ise-Shima, Japan, pp: 550-559.

C. Publications after Associate Professor:

- 1- Saeed, H. M., Zaghloul, T. I., **Khalil, A. I.** and Abdelbaeth, M. T. (2005). Purification and characterization of two extracellular lipases from *Pseudomonas aeruginosa* Ps-x. *Polish Journal of Microbiology*, 54(3): 233- 240.

- 2- Saeed, H. M., Zaghloul, T. I., **Khalil, A. I.** and Abdelbaeth, M. T. (2006). Molecular cloning and expression in *Escherchia coli* of *Pseudomonas aeruginosa* lipase gene. *Biotechnology*, 5(1): 62- 68.
- 3- **Khalil, A. I.**, Hassouna M. S. and Zanon, R.H. (2008). Utilization of food industries wastes for the production of single cell protein by yeasts. *Alexandria Science Exchange Journal*, 29(4): 315- 324.
- 4- Alkoaik, F. N., **Khalil, A. I.** and Alqumajan, T. (2011). Performance evaluation of a static composting system using date palm residues. *Middle- East Journal of Scientific Research*, 7(6): 972-983.
- 5- **Khalil, A. I.**, Hassouna, M. S., Elashqar, H. M. A. and Fawzi, M. (2011). Changes in physical, chemical and microbial parameters during the composting of municipal sewage sludge. *World Journal of Microbiology and Biotechnology*, 27(10): 2359-2369.
- 6- **Khalil, A. I.**, Bin Ali, A. R. and Yaqub, M. M. (2012). Microbial populations and enzymatic activities as parameters for the characterization of the composting process. *Alexandria Science Exchange Journal*, 33(4): 314-325.
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