# **CURRICULUM VITAE (CV)**

#### (Professor: Mohammed M. Gharieb)

Professor of Microbiology, and Vice dean for post graduate studies and research, Faculty of Science, Menoufia University, Egypt

أ.د/ محمد مدحت محمد غريب البسيوني أستاذ الميكروبيولوجي و وكيل كلية العلوم للدراسات العليا و البحوث - جامعة المنوفية – ج.م.ع

#### **A- PERSONAL INFORMATION**

Name: Mohammed Medhat Mohammed Gharieb El-Bassuony

**Position**: Professor of Microbiology, Botany Department, Faculty of

Science, Menoufia University, Egypt

Field of specialization Mycology

**Date of Birth**: 13/9/1959

*Nationality*: Egypt

Marital status: Married, two sons and two girls

Millitary service: Performed [from Juli,1982 to October,1983]

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# **B- QUALIFICATION**

PhD. (Microbiology): Dundee University, Scotland, The United Kingdom

(1993).

MSc. (Microbiology): Botany Department, Faculty of Science, Menoufia

University, Egypt (1987).

**BSc.** (Botany): Excellent (Honour) -Botany Department, Faculty of

Science, Menoufia University, Egypt (1981).

## **C- EXPERIENCES AND PROMOTIONS**

From: May 2005: Professor of Microbiology - Botany Department,

Faculty of Science, Menoufia University

2000- 2005: Assistant Professor of Microbiology- Botany

Department, Faculty of Science, Menoufia University

1994 – 2000: Lecturer in Microbiology - Botany Department, Faculty

of Science, Menoufia University.

1987- 1994: Assistant Lecturer - Botany Department, Faculty of

Science, Menoufia University, Egypt

1981-1987: Demonstrator in Botany Department, Faculty of

Science, Menoufia University, Egypt.

## D- AWARDED FELLOWSHIPS AND CONFERENCES ATTENDENCE

1- Attended a **training period** for 3 months (30/7/1995 - 30/10/1995) in Biological Sciences Department, Dundee University, U.K for training in recent facilities being used for studying the interactions of microorganisms with the environmental toxicants.

2- Attended **the meeting of Society for General Microbiology with**American Society for Microbiology in University of Aberdeen,
Scotland UK (10-13/9/1995).

3- Awarded a **fellowship from the Royal Society of London** (1996) for the Third World Scientists, and spent 12 months (from January 1997)

- to January 1998) in the UK to carry out researches concerning interaction of metals with fungi and yeasts.
- 4- Attended **the First Conference of the African Society for Mycology and Biotechnology**, held in Al-Azhar University, Cairo, Egypt (6-8/9/1996)
- 5- Attended **the 6<sup>th</sup> International Conference of Arab Biologists**, held in Suez Canal University, Ismailia, Egypt (8-11/11/1998).
- 6- Attended **the 7<sup>th</sup> International Conference of Arab Biologists**, Cairo University, Cairo, Egypt (8-10/11/1999).
- 7- Attended a training course in "Biotechnology and Molecular Biology of Industrial Fungi and Higher Plants", Alexandria University (6-15/3/1999)
- 8- Attended **the first US-Egypt Workshop in Microbial Ecology** "held in National Research Center, Cairo, Egypt" (6-10/5/2001).
- 9- Attended a **training coarse in (ELECTRON MOICROSCOPY AND ITS APPLICATION IN BIOLOGY)**, held in JEOL Ltd (Tokyo-Japan) in December 2003
- 10- Attended the workshop for HIGHER EDUCATION
  ENHANCEMENT PROGRAMM FUND (HEEPF), held in
  Menoufia University on 17-18/2/2004.
- 11- Attended the workshop for "PROGESSIVE METHODS IN HIGHER EDUCATION TEACHING" held in Menoufia University on 25-27/9/2004.
- 12- Due to the achievements and significant contributions to scientific progress at a global level, the biography has been selected and earned a honor place in "Marquis Who's Who in the World", in its 23rd Edition (2006).
- 13- The principal investigator (PI) of QUALITY ASSURANCE AND ACCREDIATION PROJECT (QAAP) in the faculty of science. Menoufia university
- 14- Supervised and examined a number of M.Sc. and Ph.D. thesis for students in my as well as other Egyptian universities.

## E. COMPUTER AND ENGLISH LANGUAGE SKILLS:

Good commands in computer "Microsoft office" (Word, Excell, Power point) and electronic communications (internet). Very good in spoken and written English.

# F. SCIENTIFIC RESEARCH ACTIVITIES

<u>Interesting Research Field</u> is microbial ecology including metal-microbe interactions; transformation, solubilization, mobilization, tolerance and detoxification of metals and metalloids by filamentous fungi and yeasts. Production of microbial toxins and controlling the pathogenic microorganisms are also concerned in some researches. Generally the research trend have a potentiality in biotechnological, environmental and agricultural applications.

### G- MEMBERSHIP OF ORGANIZATION AND SOCIETIES

- 1- African Society of Mycology and Biotechnology
- 2- Egyptian Society of Botany

# **H- TEACHING EXPERIENCES**

- 1- MYCOLOGY
- 2- PHYSIOLOGY OF FUNGI
- 3- APPLIED MICROBIOLOGY
- 4-YEASTS
- 5- PLANT PATHOLOGY
- 6- BACTERIOLOGY
- 7- GENERAL MICROBIOLOGY
- 8- MICROBIAL ECOLOGY
- 9- PLANT ANATOMY
- 10- PLANT MORPHOLOGY
- 11- COMPARATIVE MORPHOLOGY
- 12- SYSTEMATIC BOTANY
- 13- PLANT PHYSIOLOGY

#### **I- LIST OF PUBLICATIONS**

(1) El-Abyad, M. S. & Gharieb, M. M. (1991). Changes of tomato rhizosphere microflora following application of the herbicide diphenamide to soil

- infested with Fusarium oxysporum f. sp. lycopersici. Mycopathologia 113, 89-94.
- (2) Razak, A. A., El-Tantawy, H., El-Sheikh, H. & Gharieb, M. M. (1991). Influence of selenium on the efficiency of fungicide action against certain
- (3) El-Abyad, M. S., Abu-Taleb, A. M. & Gharieb, M. M. (1992). The effects of *Fusarium oxysporum* f. sp. *lycopersici* (Sacc.) Snyder & Hansen on tomato in diphenamid-treated soil. *Mycopathologia* **119**, 35-41.
- (4) **Gharieb, M. M.**, Wilkinson, S. C. & Gadd, G. M. (1995). Reduction of selenium oxyanions by unicellular, polymorphic, and filamentous fungi: cellular location of reduced selenium and implications for tolerance. *Journal of Industerial Microbiology* **14**, 300-311.
- (5) Morley, G. F., Sayer, J. A., Wilkinson, S. C., Gharieb, M. M. & Gadd, G. M. (1995). Fungal sequestration, mobilization and transformation of metals and metalloids. pp 235-256. In *Fungal and Environmental Changes*, eds J. C. Frankland, N. Magan & G. M. Gadd. Cambridge University Press, Cambridge.
- (6) **Gharieb, M. M.**, & Gadd, G. M. (1998). Evidence for the involvement of vacuolar activity in metal(loid) tolerance: vacuolar-lacking and defective mutants of *Saccharomyces cerevisiae* display higher sensitivity to chromate, tellurite and selenite. *Biometals* **11**, 101-106.
- (7) **Gharieb, M. M.**, Sayer, J. A. & Gadd, G. M. (1998). Solubilization of natural gypsum (CaSO<sub>4</sub>. 2H<sub>2</sub>O) and the formation of calcium oxalate by *Aspergillus niger* and *Serpula himantioides*. *Mycological Research* **102**, 825-830.
- (8) Gadd, G. M., Gharieb, M. M., Ramsay, L. M., Sayer, J. A. Whatley, A. R. & White, C. (1998). Fungal processes for bioremediation of toxic metal and radionuclide pollution. In: Biochemistry of Bioremediation by Fungi. *Journal of Chemical Technology and Biotechnology* 71, 356-367.
- (9) **Gharieb, M. M.**, Kierans, M. & Gadd, G. M. (1999). Transformation and tolerance of tellurite by filamentous fungi: accumulation, reduction, and volatilization. *Mycological Research* **103**, 299-305.

- (10) Tait, K., Sayer, J. A., Gharieb, M. M. & Gadd, G. M. (1999). Fungal production of calcium oxalate in leaf litter microcosms. *Soil Biology and Biochemistry* **31**, 1189-1192.
- (11) **Gharieb, G. M.,** & Gadd, G. M. (1999). Influence of nitrogen source on the solubilization of natural gypsum and the formation of calcium oxalate by different oxalic acid and citric acid producing fungal strains. *Mycological Research* **103**, 473-481.
- (12) **Gharieb**, **M. M.** (1999). Interaction of gypsum with the tolerance of *Aspergillus niger* to certain heavy metals. 6<sup>th</sup> International Conference of Union of Arab Biologists, *Journal of Union of Arab biologists* Vol. **8(B)**, 417-436.
- (13) **Gharieb, M. M.** (2000). Nutritional effects on oxalic acid production and the solubilization of natural gypsum by *Aspergillus niger*. *Mycological Research* **104**, 550-556.
- (14) **Gharieb, M. M.** (2002). Biosorption and solubilization of the fungicide copper oxychloride by *Aspergillus niger* and the influence of calcium. *Biodegradation* **13**, 191-199.
- (15) **Gharieb, M. M.** (2001). Pattern of cadmium accumulation and essential cations during growth of cadmium-tolerant fungi. *Biometals* **14**, 143-151.
- (16) **Gharieb, M. M.**, Ali, M. I. & El-Shoora, A. A. (2004). Transformation of copper oxychloride fungicide into copper oxalate by tolerant fungi and the influence of nitrogen on tolerance. *Biodegradation* **15**, 49-57.
- (17) **Gharieb, M. M.** & Gadd, G. M. (2004). The kinetics of <sup>75</sup>[Se]-selenite uptake by *Saccharomyces cerevisiae* and the vacuolization response to high concentrations. *Mycological Research* **108** (12), 1415-1422.
- (18) **Gharieb**, M. M. & Gadd, G. M. (2004). Role of glutathione in detoxification of metal(loid)s by *Saccharomyces cerevisiae*. *Biometals* **17**, 183-188.
- (19) **Gharieb M. M.,** Hefnawy M. A. & El-Hussieny G. M. (2004). Cellular free amino acids and ultrastructural changes of *Fusarium oxysporum* f. sp. *lycopersici* adapted to copper and selenium. *The African Journal of Mycology and Biotechnology* **12** (2), 61-77.

- (20) **Gharieb M. M.,** Hefnawy M. A. & Soliman A. M. (2004). Alteration of the fungicidal effect of copper oxychloride against *Fusarium oxysporum* f. sp. *lycopersici* and *Alternaria solani* by heavy metals and salinity. *The African Journal of Mycology and Biotechnology* **12** (1), 11-33.
- (21) Ali, M. M., Gharieb, M. M & El-Shoura, A. A. (2002). The Effect of Copper Oxychloride Fungicide and Glyphosate Herbicide on Gypsum Solubilization Activity of Certain Soil Fungi. *Proceeding of theTthird International Conference on Fungi: Hopes and Challenges* (Soil Microbiology), Cairo, Oct. 2002 (1) 207-224.
- (22) Hefnawy, M. A., **Gharieb, M. M**. & Mahmoud, N. (2002). Effecacy of certain medical drugs, heavy metals and their combination against *Candida albicans* and *Trichophyton mentagrophytes*. The African Journal of Mycology and Biotechnology **10**, 29-47.
- (23) Hefnawy, M. A., Gharieb, M. M. & Abu-Seida, A. (2001). Mitochondrial response to high osmotic stress in *Aspergillus candidus*. Online Journal of Biological Sciences 1 (11), 1098-1100.
- (24) Gadd, G. M., Bridge, T. A. M., Gharieb, M. M., Sayer, J. A. & White, C. (2001). Microbial processes for solubilization or immobilization of metals and metalloids and their potential for environmental bioremediation. Pp 55-80. In: *Industrial and Environmental Biotechnology*, eds A. Nzhat, M. Qureshi & O. Khan. Horizon Scientific Press.
- (25) El-Sheekh M. M., **Gharieb, M. M**. & Abou-El-Souod G. W. (2008). Biodegradation of phenolic and polycyclic aromatic compounds by algae and cyanobacteria. *Biodegradation* (In press)
- (26) El-Sheekh M. M., **Gharieb, M. M**. & Abou-ElSoud, G.W. (2009). Biodegradation of dyes by some green algae and cyanobacteria, *International J. Biodeterioration and Biodegradation*. (In press).
- (27) **Ghaieb M. M.**, AL-Fakih, A. A. & Ali, M. I. (2009) Interaction of soil fungi with the iron containing minerals hematite and limonite; Biosorption, solubiliation and tolerance. *Proceeding of the 5<sup>th</sup> conference of Egyptian Society of Experimental Biology, Faculty of Science, Tanta University, Egypt.*

- (28) Hefnawy, M. A., **Gharieb, M. M.** and Ammar A. M. (2009). Optimization of phosphate solubilization by soil fungi. *Proceeding of the 5<sup>th</sup> conference of Egyptian Society of Experimental Biology, Faculty of Science, Tanta University, Egypt.*
- (29) **Gharieb, M. M.**, Ali, M. I, & AL-Fakih, A. A. (2009). Biosorption of Fe(III) ions from aqueous solution using *Aspergillus niger* and *Eupenicillium ludwigii*. *Biometals* (In press).
- (30) Gharieb, M. M., Hefnawy M. A., Besheer, S. M. (2010). Cadmium metabolism and transformation by some tolerant fungi. (In press)

