

## *Curriculum Vitae*

**Name** : Prof. Dr. Ahmad Mahmoud Hassan  
**SHABAN**

**orcid.org/0000-0003-4084-6521**

**Position** : Vice President for Technical Affairs from 9 April, 2011.

Head of Environmental Research Division (from 2005- 2011)

Professor of water and wastewater Microbiology.

Date of Birth : 12-9-1958

Place of Birth : Cairo, EGYPT.

Sex :Male

Marital Status : Married and have four children.

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### *Education*

B.Sc. : In Biochemistry from Faculty of Agriculture, Cairo University 1980.

M.Sc. : In Environmental Microbiology from Faculty Of Agriculture, Cairo University 1987,

**Titled : Bacteriological Studies on Underground Water Used For Domestic Purposes.**

Ph.D. : In Environmental Microbiology from Faculty Of Agriculture, Cairo University 1993,

**Titled : Evaluation of Some Bacterial Groups Used as an Indicator of Water Pollution.**

### *Employment's*

1982-1989 : Assistant Researcher in Water pollution Research Department, National Research Center, Dokki, Cairo, Egypt.

1989-1993 : Research Assistant in Water Pollution Research Department, National Research Center, Dokki, Cairo, Egypt.

1993-1998 : Research in Environmental Microbiology Laboratory, Water Pollution Department, National Research Center, Dokki, Cairo, Egypt.



- 1998-2003 : Associate professor in Environmental Microbiology Laboratory, Water Pollution Research Department, National Research Center, Dokki, Cairo, Egypt.
- 2003-till now : Research Professor in Environmental Microbiology Laboratory, Water Pollution Research Department, National Research Center, Dokki, Cairo, Egypt.
- 2005- till 2011 : Head of Environmental Research Division.
- 2011- till Now : Vice president for technical affairs, National Research Center.

### ***Training courses***

#### ***Teaching :***

- 1- Water and Wastewater Microbiology, annual training Course, held at National Research center form 1983 till now.
- 2- Coliphage as simple, easy and economic technique for Detection of water pollution, annual training course, held at National Research Center, from 1988 till now.
- 3- Especial course in detection of pathogenic Microorganisms in water samples, annual training course, held at National Research Center form, 1995 till now.
- 4- In addition to participate in teach many courses at universities and institutes

#### ***Attendance:***

- 1- Aquatic environment problems and drinking water in Egypt. In period extended form 15/1/1989 to 15/2/1989.
- 2- Environmental Monitoring. In the period extended from 17to 24/10/1994, and held in Tunisia under supervision of Arabic UNICO.

### ***Projects***

#### ***Participation in projects teams:***

- 1- Determination of water quality at Damietta peoving, sponsored by National Research Center, 1982-1983,
- 2- Drinking water treatment technologies evaluation at Great Cairo, sponsored by National Research center, 1983-1984.
- 3- Evaluation of water treatment technologies at Great Cairo, sponsored by Academy of Science and Technology and cooperation with National Research center, water pollution Research Department, 1984-1986.
- 4- Evaluation of coliphage and presence/absence tests as simple, rapid and economic methods for screening potable water sources and water supplies in Egypt. Sponsored by International Development research center Canada, and cooperation with water pollution Research Department, National Research center, 1987-1989.

- 5- Evaluation of technologies used for wastewater treatment in Egypt. Contract between Academy of Science and Technology and water pollution Research Department, National Research center, 1994-1996.
- 6- Evaluation of wastewater treatment technologies. Sponsored by UNISF, 1994-1995.
- 7- Treatment and disposal of sludge produced from wastewater treatment plants. Contract between Academy of Science and technology (STC) and pilot plant Department, Department, National research center, 1994-1996.
- 8- Monitoring and evaluation of Nile River water quality at Cairo district. Sponsored by National Research Center, form 1993-1995.
- 9- Monitoring and evaluation of drinking water sources at Greater Cairo and Canal cities. Sponsored by National Research Center, form 1995 till now.
- 10 - Evaluation of performance for water treatment plants for removing organic and inorganic pollutants and parasites.
- 11 – Water treatment plant at Bani-Suif Governorate. Sponsored by Academy of Science and Technology, form 1997-1998.
- 12 - Monitoring and evaluation of Nile River water quality at Cairo district and Ismailia Canal. Sponsored by National Research Center, form 1998-2001.
- 13 -Use low cost technologies for removing the pollutants from water treatment plants. Sponsored by National Research Center, form 2003.
- 14 -New trends to detect the toxicity in aquatic environments. Sponsored by National Research Center, form 2003.
- 15 –Nile Water Treatment in Sinai, Sponsored by Academy of Science and Technology, from October, 2003-2005.
- 16 – Environmental assessment for new cities "Sadat City". Water, Air, sewage treatment, Health risk, Indoor and Outdoor assessment. 2005-2008.
- 17 Biological Iron and Manganese Removal from Ground water, Sponsored by STDF, from 2009 till now.

### ***Conferences***

- 1- The first conference of Arab Biologists Union, which was held at Mesrata, Libya, in the period of 9 - 16/7/ 1994.
- 2- The second Meddle East conference on Wastewater Treatments, which was held at Cairo, Egypt, in the period of 19-21/3/1995.
- 3- The 11<sup>th</sup> Annual Conference on “ Environmental Economy” which was held at Cairo, Egypt, in the period of 17-19/4/1994.
- 4- IAWQ Conference On “ Health Related Water Microbiology” 6<sup>th</sup>-10<sup>th</sup> October, 1996, Mallorca, Spain.
- 5- The third Middle East Conference on “ Marine pollution and Effluent Management” November 23-25,1998 State of Kuwait.
- 6- The International Conference on “ Environmental Management, Health and Sustainable Development” 22-25 March, 1999, Alexandria, Egypt.

- 7- International Conference on "Sustainable Development Environmental Challenges Facing Egypt" 5-7 June, Cairo, Egypt.
- 8- Chairman of the second international conference on "Environmental Science and Technology, EGYPT 2006" Which was held at National Research Centre, Dokki, Cairo, Egypt.
- 9- Chairman of the third international conference on "Environmental Science and Technology, EGYPT 2008" Which was held at National Research Centre, Dokki, Cairo, Egypt.

### ***List of publication***

1. EL-Zanfaly, H.T. and **SHABAN, A.M. (1988)**  
Applying bacteriological parameters for evaluation Underground Water Quality. Water Science and Technology, 20(11/12).
2. El-Zanfaly, H.T.; Hosny, M. and **SHABAN, A.M. (1989)** Incidence of Antibiotic Resistant Bacteria in Underground water. Environmental International, 19(5) 391-394.
3. El-Zanfaly, H.T.; Hosny, I.; Fayz, M. and **SHABAN, A.M. (1989)** Sanitary Significance of Faecal Streptococci in Underground water. Zentralabl. Mikrobiol. 199(5) 229-304.
4. Hosny, I.; El-Zanfaly, H.T.; Fayz, M. and **SHABAN, A.M. (1990)** Bacteriological evaluation of underground water in Egypt. Egyptian journal of Microbiology, 25 (2) 272-290.
5. Hosny, I.; Fazy, M.; El-Zanfaly, H.T. and **SHABAN, A.M. (1990)** Chemical and bacteriological Quality of underground water in Cairo. Egyptian journal of Microbiology, 25 (2) 291-304.
6. El-Abagy, M.M.; Kamel, M.M. and **SHABAN, A.M. (1994)** The effect of sludge treatment systems on removal of bacterial indicators and salmonellae. Journal Union Arab Biologist, 1, 101-112.
7. El-Abagy, M.M. **SHABAN, A.M.** and Hazaa, M.M. (1994) Removal of bacterial indicators and salmonellae during anaerobic fermentation (composting) of sewage sludge. Journal Union Arab Biologist, 1, 225-264.
8. **SHABAN, A.M.** and Ali, M.A.A. (1994)

Relationship between Aeromonas, bacterial indicators and enteroviruses in river Nile water. 6<sup>th</sup> international conference of environmental contamination 10-12 October, Delphi, Greece.

9. El-Abagy, M.M. and **SHABAN, A.M. (1996)**  
Bacterial removal in the treatment of sewage sludge by composting fixed bed and stirred anaerobic digesters. International journal of Environmental health research, 6(3) 245-250.
10. El-Hawary, S.; El-Taweel, G.E.; **SHABAN, A.M.** and El-Gohary, F.A. **(1997)**  
Microbiological characteristics of wastewater in Egypt, I- Raw wastewater. Egyptian journal of Microbiology, 32(2) 201-216.
11. **SHABAN, A.M.**; El-Taweel, G.E. and Ali, G.H. **(1997)**  
UV ability to inactivate microorganisms combined with factors affecting radiation. Water Science Technology, 35 (11/12) 107-112.
12. **SHABAN, A.M.** and Ali, G.H. **(1998)**  
Removal of yeasts, *Candida albicans*, bacterial indicators and algae by roughing filters. Egyptian Journal of Applied Science, 13(3) 312-324.
13. **SHABAN, A.M.** and El-Taweel, G.E. **(1999)**  
Prevalence of listerias and *Listeria monocytogenes* in certain aquatic environments in Egypt. Egyptian journal of Microbiology, 34(1) 67-78.
14. **SHABAN, A.M. (1999)**  
Bacteriological evaluation of composting systems in sludge treatment. Water Science Technology, 40(7) 165-170.
15. El-Abagy, A.M. and **SHABAN, A.M.** and El-Taweel Gamila E. **(1999)** Efficiency of water treatment plant. Egypt, J. Appl. Sci.; 14(8)23-33
16. El-Taweel, Gamila E.; **SHABAN, A.M.** El-Hawaary, S. and El-Gohary Fatma A. **(2000)** Microbiological Characteristics of wastewater in EGYPT, II-Treated Effluent. Egyptian Journal of Microbiology, 35, No.2, 239-256.
17. El-Abagy, M.M.; **SHABAN, A.M.** and Gamila E. El-Taweel **(2000)** Microbiological Evaluation of water Treatment plant at EL-Fayoum. Egypt. J. Appl. Sci. 17 (12) 779-791.
18. Gamila E. El-Taweel and **Ahmad M. SHABAN (2001)**

Microbiological Quality of Drinking water at Eight Water Treatment Plants. International Journal of Environmental Health Research. Vol. 11, (4), 285-290.

19. Gamila E. El-Taweel and **Ahmad, M. SHABAN (2001)**. Efficiency of water treatment plant Steps in Removing pathogenic and indicators Bacteria. Published in the Berlin Congress 15-19 October, 2001 Under Supervision of IWA.
20. **Ahmad M. SHABAN** and Gamila E. El-Taweel **(2002)** Fate of New Indicators and Pathogenic Bacteria During water Treatment Systems. Egyptian journal of Microbiological. 37, 57-69.
21. **Ahmad M. SHABAN** and Gamila E. El-Taweel **(2003)** Reduction of indicators and pathogenic bacteria through wastewater treatment plant. Egyptian journal of Microbiological.38, 157-172.
22. **SHABAN, A.M. (2003)**. Intrinsic antibiotic resistance of *Listeria monocytogenes* isolated from different aquatic environments. Egypt. J. Appl. Sci., 18 (3) 23-34.
23. Ali, G.H.; **SHABAN, A.M.** and El-Taweel, G. E. **(2003)**. Microbiological and Chemical Evaluation of Natural Springs Water. Egypt.J. Appl. Sci., 18(5B) 532-548.
24. El-Ghetany, H.H.; Hussein, H.M.S.; **SHABAN, A.M.**; El-Taweel, G E. and El-Zanfaly, H.T. **(2003)**. Experimental Investigation of Batch-Type Solar Water Disinfecting Unite. Egypt. J. Appl. Sci.; 18(6B), 2003.
25. Gamila E. El-Taweel and **Ahmad M. SHABAN (2004)** Microbiological monitoring and evaluation of River Nile water at Cairo segment and Ismailia Canal. Egyptian journal of Microbiological. 38, 169-182.
26. Kamel, M.M. and **SHABAN, A.M. (2005)**. Evaluation of Various Selective and Modified Media for Recovery of *Staphylococcus aureus* from Aquatic Environments. Egypt. J. Appl. Sci., 20(8A) 11-20.
27. M.M.Kamel, Gamila E.El-Taweel and **A.M. Shaban (2006)** Microbiological Monitoring of EL-Salam Canal. Egypt. J. Environ. Sci. Vol. 31, 109-127.
28. **Shaban, A. M.**; Kamel, M. M.; Hegazy, B. E. and Ali, G. H. **(2006)**. Evaluation of *Moringa oliefera* in a semi-pilot for the removal of bacteria and algae from water. Egypt. J. Microbiol.

29. El Manakhly, Hala; Kenawy, N.; **Shaban,A.M.** and Kamel M.M. (2007) Non Agro-fiber Material using as Filter for Industrial Wastewater Reclamation and Reuse. *Egypt. J. Appl. Sci.*, 22(10A) 290-300.
30. El Manakhly, Hala; Kenawy,N.; **Shaban, A.M.** and Kamel, M.M. (2007). The Performance of Agro-Fiber Materials Using as Filter for Industrial Wastewater Treatment. *Scientific Bulletin, Faculty of Engineering -Ain Shams Univ.* 42(3): 1299-1307.
31. **Shaban A. M.**, Haroun B. M., Ali M. A. and Elras M. A.(2008) Comparison between conventional membrane filter and PCR methods for detection of coliform, *E.coli* and Salmonella in drinking water. Accepted for publication in: *Journal of Applied Science Research* 4(12): 1769-1776, 2008
32. **Shaban, A.M.**; M.M. Kamal and N. Kenawy and Hala El Manakhly (2009). "Role of Interior Structure of Agro and Non-Agro Materials for Industrial Wastewater Treatment" has been accepted for publication in *Journal of Applied Sciences Researc*, 5(8): 978-985, 2009
33. Mahassen M. El-Deeb Ghazy, Gamila H. Ali, Waled Morsy El-Senousy And **Ahmad M. Shaban.** (2009) Quality Assessment of Drinking Water from Wells in the Water Plant of El-sadat City, Egypt. *Journal of Applied Sciences Research*, 5(11): 1832-1843.
34. Salwa, S.M., **Shaban ,A.M.**, Kamel, M.M., Huda H. Hendawy , Abada, E.A.(2010). New Definite- Substrate Media for Enterococci Detection in Nile Water Egypt. *Journal of Applied Sciences Research*, 6(11), 1801-1806.
35. Fagr Kh.Abdel-Gawad, Zeinat K.Mohamed , **Ahmed M.Shaban** , Noha M. Sabry (2012). Molecular Characterization of Aeromonas Species Isolated from Water and Fish. *Academic Journal of Science*, 1(2), 459-470.
36. **Osman ,G.A. A.M.Shaban** , Ahmed A. Melegy , M.M.Hassaan ,S.A. Salman ( 2012). A baseline study on microbiological and inorganic chemicals contaminants of health importance in groundwater and surface water of Sohag Governate, Egypt. *Journal of Applied Sciences Research*, 8(12), 5765-5773.
37. Nasr, S.A.S, A.M.Shatta, **A.M.Shaban**, M.B.O.El-Kotkat (2013). Evaluation of the Microbial and Physicochemical of River Water Quality at Roseatta Branch, Egypt. *Research Bulletin , Ain Shams*, 1-4.
38. S.A. Salman , Ahmed A. Melegy, **A.M.Shaban** , M.M.Hassaan ( 2013)

Hydrogeochemical characteristics and classification of ground water in Sohag Governate, Egypt. Journal of Applied Sciences Research, 9(1), 758-769.

39. Ahmed A. Melegy, **A.M. Shaban** , M.M.Hassaan ,S.A. Salman ( 2014). Geochemical Mobilization of some heavy metals in water resources and their impact on human health in sohag Governate, Egypt . The Arabian Journal for Geosciences, Springer DOI 10.1007/s12517-013-1095-y3

40 . Hanan Elhaes, Nahla M.Elkashef, Fagr Kh.Abdel-Gawad, **Ahmed Shabaan**, Medhat Ibrahim (2014),Effect of Divalent Metals on the Molecular Structure of protein : Modeling and Spectroscopic Approaches. Journal of Computational and Theoretical Nanoscience, 11(4), 1-5.

**41. Ahmad M. Shaban**, Gamila E. El-Taweel, Mohamed M. Kamel, Ahmad Essa and Ahmad El-Fatih, Gamila H. Ali, Tarek S. Gamil , Biological Iron and Manganese Removal from Groundwater (**in press**).

42. Haggag, Wafaa, M, **Shabaan AM**, Malaka A. E. Saleh (2014), Biological Management of Mango Malformation Using Antifungal Compound from *Streptomyces aureofaciens*. International Journal of Pharmaceutical Sciences Review and Research, volume 29, Issue 2, 283-291.

43. A.M.E. Haggag, Wafaa. M. **Shabaan A.M.** , A.K. Nasr , Abd El-Salam (2014), Integrated Pest Management for Sustainable Mango Production. International Journal of Pharmaceutical Sciences Review and Research, volume 29, Issue 2, 276-282

44. H. Abdallah, M. S. Shalaby, **A. M. H. Shaban( 2015)**, Performance and Characterization for Blend Membrane of PES with Manganese (III) Acetylacetonate as Metalorganic Nanoparticles. International Journal of Chemical Engineering , Volume 2015, 1-9 , [http://dx.doi.org/ 10.1155/2015/896486](http://dx.doi.org/10.1155/2015/896486).

45. NS El-Mougy, **AMH Shaban**, MM Abdel-Kader(2015), Evaluation of Seed Coating with Some Essential oils and Bio-agents against Root Rot Disease of Faba Bean. International Journal of Engineering and Innovative Technology (IJEIT) Volume 4, Issue 11, 244-248

46. N.S. Abdel-Kader, M.M., **Shaban, A.M.H.**, El-Mougy ( 2015). Biological and Chemical Resistance Inducers as Seed priming for Controlling Faba Bean



Root rot Disease under Field Conditions. International Journal of Engineering and Innovative Technology (IJEIT), Volume 4, Issue 11,300-305.

47. M.F. Waly, A. El-Karamany, **A. M Shaaban**, T.A. Bakry, A.B and Elewa (2015). Utilization of hydrogel for reducing water irrigation under sandy soil condition 2- Preliminary study: yield and yield components of rice and barley in sandy soil as affected by hydrogel. Research Journal of Pharmaceutical, Biological and Chemical Sciences, Volume 6, Issue 2, 1018-1024.

48. M.F. Waly, A. El-Karamany, **A.M Shaban**, T.A. Bakry, A.B and Elewa (2015). Utilization of hydrogel for reducing water irrigation under sandy soil condition 1- Preliminary study on the effect of hydrogel on yield and yield components of sunflower and wheat under newly reclaimed sandy soil. Research Journal of Pharmaceutical, Biological and Chemical Sciences , Volume 6, Issue 2, 1033-1039.

49. M.F. El-Karamany, A. Waly, **A.M Shaaban**, A.B Alhady, O.A Bakry (2015). Utilization of hydrogel for reducing water irrigation under sandy soil condition 3- Effect of hydrogel on yield and yield components of sugar beet under sandy soil conditions. Research Journal of Pharmaceutical, Biological and Chemical Sciences .Volume 6, Issue 2, 1025-1032.

50. Shaalan AH and El Sayed MA Al-Ashkar EA, Shabaka A, Kandil OM, Eisa WH, **Shaban AM**, Khaled HM, El Ashkar MR, El Shaer M (2015). Normal Pregnancy and Lactation in a Cat after Treatment of Mammary Gland Tumor When Using Photothermal Therapy with Gold Nanorods: A Case Report , Journal of Nano medicine & nanotechnology. Volume 6, Issue 5.

51. Abdoon AS, Al-Ashkar EA, Kandil OM, **Shaban AM**, Khaled HM, El Sayed MA, El Shaer MM, Shaalan AH, Eisa WH, Eldin AA, Hussein HA, El Ashkar MR, Ali MR, Shabaka AA (2016). Efficacy and toxicity of plasmonic photothermal therapy (PPTT) using gold nanorods (GNRs) against mammary tumors in dogs and cats. Nanomedicine;12(8):2291-2297. doi: 10.1016/j.nano.2016.07.005. Epub 2016 Jul 22.

52 . El-Karamany, M.F. , Waly, A., **Shabaan, A.M.**, Bakry, A.B., Elewa,T.A.(2016). Utilization of hydrogel for reducing water irrigation under sandy soil condition 4-yield and yield components of sunflower as affected by hydrogel and drought stress in sandy soil. Research Journal of Pharmaceutical, Biological and Chemical Sciences, Volume 7, Issue 4, July-August 2016, Pages 1056-1063.

53. Waly, A.I. , El-Karamany, M.F. , **Shabaan, A.M.** , Bakry, A.B. , Elewa, T.A.(2016) Utilization of hydrogel for reducing water irrigation under sandy soil condition 5-yield and yield components of potato (*Solanum tuberosum* L.) as affected by hydrogel and drought stress in sandy soil. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*, Volume 7, Issue 4, July-August 2016, Pages 1039-1054.
54. M. S. Shalaby, H. H. Shaarawy, **A. M. Shaban**, H. Abdallah, “Evaluation For RO-Brackish Water Desalination: A Case Study in Tor Sinai - South Sinai Governate”, *ARPJ Journal of Engineering and Applied Sciences*, VOL. 11, NO. 23, December 2016, 13650-13658.
55. H. Abdallah, M. S. Shalaby, **A.M. Shaban**, “Fabrication of reverse osmosis spiral wound Membranes using local materials”, *Proceedings of the 11th water desalination conference in the Arab countries*, 18-19 April 2017.
56. Laura Borea , Vincenzo Naddeo , Marwa S. Shalaby , Tiziano Zarr, Vincenzo Belgiorno , Heba Abdalla , **Ahmed M. Shaban** (2017). Wastewater treatment by membrane ultrafiltration enhanced with ultrasound : Effect of membrane flux and ultrasonic frequency. *Ultrasonics*, under press, available online 20 June 2017.