


CURRICULUM VITAE

PROF. DR. MAHA MOUSTAFA EL SHAFEI

Name of Staff	Prof. Dr. Maha Moustafa El Shafei	
Specialization	Environmental and Water Quality Specialist	
Career Level	Professor of Sanitary and Environmental Engineering	
Major Skills	Teaching, Training, Design, Consultation, and Professional Studies	
Mobil	(202) 01006270605	
Nationality	Egyptian	
Languages	English (Excellent spoken and written) – Arabic (mother tongue)	
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E-mail	m_elshafai@yahoo.com	
Education	Ph.D. in Chemical Engineering, Cairo University, 2000	
	Master's degree in Chemical Engineering, Cairo University, 1994	
	Diploma in Nuclear Engineering, Cairo University, 1988	
	Bachelor of Chemical Engineering, Cairo University, 1984	
Current Position	<ul style="list-style-type: none"> ▪ Director of the Egyptian Codes Department , Housing & Building National Research Center, Cairo, Egypt ▪ Professor of Sanitary and Environmental Engineering and the Technical Manager of Chemistry Lab for Water and Wastewater ▪ Previous director of Sanitary and Environmental Engineering Institute, Housing & Building National Research Center, Cairo, Egypt 	
Major Subject and Keys of Qualification	<ul style="list-style-type: none"> ▪ Training courses and consulting services for area of water quality environmental field including studies, design, analysis, evaluation, and monitoring ▪ Twenty years of experience in water quality, solid waste treatment, monitoring and evaluating the radioactive unit. Also, Experience extends to establishing working relationship with the effect of 	

	<p>environmental Quality Control especially in matters relating to the influence of the Environmental and Meteorological Department. As well as classification of soil and preparing researches concerned with partial damage of buildings. Finally, experience amplified in wastewater treatment, solid waste treatment, chemical analysis, waste reduction, and the use of waste materials in construction</p>
<p>Employment Record:</p>	
<ul style="list-style-type: none"> ▪ Previous Director of Sanitary and Environmental Engineering Institute, Housing & Building National Research Center, Cairo, Egypt ▪ Professor in sanitary and environmental engineering ▪ Technical Manager of Chemistry Lab for Water and Wastewater 	
<p><u>2014 till current</u></p> <ul style="list-style-type: none"> ▪ Professor in sanitary and environmental engineering ▪ Technical Manager of Chemistry Lab for Water and Wastewater 	
<p><u>2008-2014</u></p> <ul style="list-style-type: none"> ▪ Director of Sanitary and Environmental Engineering department, Housing and Building National Research Center ▪ Chief of Microbiology department 	
<p><u>2005- 2008</u></p> <ul style="list-style-type: none"> ▪ Associate Professor of Sanitary and Environmental Engineering department, Housing and Building National Research Center and Technical manager of chemistry lab for water and wastewater 	
<p><u>Job Description</u></p> <ul style="list-style-type: none"> - Supervisor of different national projects specialized in water and wastewater technologies. - Leading research team specialized in: <ul style="list-style-type: none"> ▪ Chemical analyses for different types of potable water and sewage water according to the Egyptian and international specifications ▪ Chemical analyses of glass planting resistance of the plumping fixtures ▪ Chemical analyses of acid resisting bricks for lining sewerage tunnels ▪ Chemical analyses for concrete and plastic pipes ▪ Chemical analyses for different insulating materials. 	
<p><u>1999 – 2005</u></p> <ul style="list-style-type: none"> ▪ Researcher of Sanitary and Environmental Engineering. <p><u>Job Description</u></p> <p>Chief of water analysis department and environmental engineering, Specialized in Chemical analyses for different types of potable water and sewage water according to the Egyptian and international specifications.</p>	

1987 – 1999

- Research Assistant at Sanitary and Environmental Engineering department, Housing and Building National Research Center.

Job Description

- Working as a Research Assistant in the Department of Soil Mechanics and Foundation Engineering specialized in chemical analysis for different types of soil and ground water according to the ASTM, ESS and BS. Participating in the Soil Mechanics tests, classification of soil and preparing researches concerning partial damage of buildings.
- Mechanical analysis for all types of soil.
- Chemical analysis for all types of Raw Materials (clay, sand, limestone, dolomite, cement, concrete, etc.).

1986 – 1987

- Chemical Engineer in Nuclear Regulatory and safety Center.

Job Description

- Working as Chemical Engineer specialized in the field related to Environmental and Meteorological Engineering. Shared in team member are studied the following points.
- Atmospheric dispersion of Radionuclides from nuclear power plants.
- Dispersion of Radionuclides in water flooding problems.

1985 – 1986

- Chemical Engineer at Industrial Gases Company El-Hawamdia, Cairo.

Job Description

- Industrial Gases Company produce different types of gas, my tasks were monitoring and evaluating the production process to be compatible with the original design. During this work, I proposed another design concerning the modification of the existing production process, which was accepted by the German Company in Industrial Gases Company.

1984 – 1985

- Chemical Engineer in the Department of Metallurgy at Nuclear Research Center at Reactor Inshas, Cairo.

Job Description

- Working as chemical Engineer in the Department of Metallurgy and the main job is related to monitor and evaluate the radioactive unit.

Detailed Tasks Assigned

- Principal investigator for the national project for using non-traditional techniques in removing phosphorus from wastewater in the light of the principle of green architecture and sustainable development - HBRC, 2012.
- Principal investigator for the national project for the application of wastewater treatment using low-cost technologies to realize the principle of green architecture and sustainable development- HBRC,

2012.
<ul style="list-style-type: none"> ▪ Principal investigator for the national project Find ways to sewage treatment and industrial processes of leather tanning in the settlement and development of ancient Egypt in the tanneries zone 6 robbikki - HBRC, March 2010.
<ul style="list-style-type: none"> ▪ Preparation of water and wastewater Master plan for Kafr El-Sheikh Governorate via Utilities engineering office within the framework of national master plans overall Egypt for all governorate in the field of water and wastewater funded and followed by HCWW.
<ul style="list-style-type: none"> ▪ Preparation of strategic master plan of Fowa City , Kafr El-Sheikh governorate and Kom Hamada City, Behera governorate for Basic Urban Service BUS (Water, Sanitation and Solid waste management) via direct contract with Habitat in the framework of the project of Strategic master plan for Small cities overall Egypt.
<ul style="list-style-type: none"> ▪ Participate in the national research project for the use of bentonite caly to remove iron and copper radicals from ground water (First, Second and Third stages) 2006-2008.
<ul style="list-style-type: none"> ▪ Evaluation of wastewater collection system and master plan upgrading for the city of Tripoli, Libyan Arab Republic, Ministry of Municipalities, 2003.
<ul style="list-style-type: none"> ▪ Participate in the data collection, TV inspection and evaluation of existing 600 km of sewers, 12000 manholes, 44 marine outfalls, 22 pump stations and three wastewater treatment plant and identification of the required solution. Team Member in the development of the designs (conceptual and final) and workshop drawings for hydraulically model, gravity sewers, force main, pumping station, treatment plant. The old master plan of the city shall be upgraded to the year 2025.
<ul style="list-style-type: none"> ▪ Hazard Waste Management Project in Alexandria, Engineering Services, 2002.
<ul style="list-style-type: none"> ▪ Team member responsible for developing the detailed design, construction drawings and preparation of tender documents for all landfill ponds, water and wastewater systems.
<ul style="list-style-type: none"> ▪ The project comprises the construction of a hazardous waste sanitary landfill of 14,000 m² and four evaporation ponds with a total net area of 1,300 m². In addition to, an administration building, a water distribution and drainage system; a fire fighting system; a workshop and store; a weighting bridge; an electric distribution and lighting system; a fence and surrounding ditch for flood protection.
<ul style="list-style-type: none"> ▪ Gravity Sewer Rehabilitation in the City of Suez - Detailed Design Engineering Services, 1997 – 1999.
<ul style="list-style-type: none"> ▪ Participated in the development of the detailed designs (conceptual and final) and workshop drawings for 17.8 km of gravity sewers divided into 23 reaches with diameters ranging between 175 and 800 mm.
<ul style="list-style-type: none"> ▪ Responsibility includes also preparing all the required reports.
<ul style="list-style-type: none"> ▪ A \$17 million sewer rehabilitation project resulted from the findings of the City of Suez Sewer System Evaluation (Infiltration/Salinity Survey carried out by Chemonics Egypt for ABB SUSA Inc. / Dillingham JV). The report identified areas within the system that need to be rehabilitated. The rehabilitation works project included the replacement and repair of manholes and sewer pipelines identified in the ISS report.
<ul style="list-style-type: none"> ▪ Environmental Protection of Naga Hammadi Villages Sanitary Drainage/Building Protection Project,

2002.
<ul style="list-style-type: none"> ▪ Team Member, responsible for data collection and evaluation related to the groundwater survey, geotechnical analysis and identification of affected buildings. Assisted in the development of the fact-finding report for nine villages. Assisted in the development of the sanitary sewer system in the nine villages.
<ul style="list-style-type: none"> ▪ Prepare technical offers for the following project <ul style="list-style-type: none"> - Master plan for Wastewater system - greater Cairo city. - Master plan for Water supply system - Alexandria city.
<ul style="list-style-type: none"> ▪ Participated in the design and/or construction supervision for water and wastewater system in the following projects: <ul style="list-style-type: none"> - Pre feasibility study for over 75 villages in 6 governorates. - Several buildings for Environmental Ministry. - Wastewater system for Barnsht and Masged Mousa villages in Beni Suef Governorate.
<ul style="list-style-type: none"> ▪ Participate in the national research project for using Rice husk in the production of building units and environmental protection - Report no.2, 3, August 2004. "Using rice husk in the adsorption of iron and manganese from groundwater using lab and semi pilot scale " Manial Sheiha, Giza, Egypt, 2004-2005.
<ul style="list-style-type: none"> ▪ Participate in the national research project for recycling wastes of building works and materials that pollute the environment in Egypt and the possible methods to utilize it-Report no.5, 6, 8 (2002-2003). "Using of CKD in improving the properties of collapsible soils".
Preparation of the Egyptian codes
<ul style="list-style-type: none"> ▪ Member at Egyptian code for the design and implementation of the wastewater collection systems for the villages Egyptian treatment systems, 2017.
<ul style="list-style-type: none"> ▪ Member at Egyptian code for the design and implementation of the environmental-friendly building blocks made from industrial waste to be used in various construction purposes, 4-2017.
<ul style="list-style-type: none"> ▪ Member and Commission decision of permanent Committee of the "Egyptian Code of designing principles and execution terms of salt water desalination plants" 2012 till now.
<ul style="list-style-type: none"> ▪ Member of the Egyptian Code of Practice Committee "Egyptian Code of designing principles and execution terms of municipal solid wastes management" from 2013
<ul style="list-style-type: none"> ▪ Member of permanent Committee of updating the "Reuse of Treated Wastewater Code of Practice and Guidelines" from 2012 till now.
<ul style="list-style-type: none"> ▪ Member of the Egyptian Code of Practice Committee "Building Water and humidity Insulation" from 2006 till now.
<ul style="list-style-type: none"> ▪ Member of the Egyptian Code of "Recycling of different solid wastes and reuse it in building" from 2010 till now.

<ul style="list-style-type: none"> ▪ Member of the executive Committee for preparing water and wastewater utilities regulators accreditation Certificate Program from 2010 till now
<ul style="list-style-type: none"> ▪ Member of permanent Committee of updating the "Egyptian Code of designing principles and execution terms of drinking water and wastewater purification plants" from 2012 till now.
<ul style="list-style-type: none"> ▪ Member of subsidiary specialized Committee (water efficiency) of the "Egyptian Code of Green Buildings" from 2010 till now.
<ul style="list-style-type: none"> ▪ Member of the high committee, of the integrated management of wetland and maintaining biological variation, headed by Environmental Affairs Minister pursuant to Prime Minister decree No. 2649/2007.
<ul style="list-style-type: none"> ▪ Member of the committee supervising the study of using biological substances to improve Abu-Rawash primary plant efficiency.
<ul style="list-style-type: none"> ▪ Member of multi-purposes projects reviewing committee of wastewater works.
<ul style="list-style-type: none"> ▪ Member of permanent Committee of the Egyptian "Plumbing code".
<p>Official & Scientific Responsibilities</p>
<ul style="list-style-type: none"> ▪ Head of a research team of international research project for Enhancing Biological Phosphorus Removal (EBPR) In Domestic Wastewater between HBRC in Egypt and University of Alberta in Canada (2014). ▪ Attending a training course entitled "Membrane Technology Desalination for Saline Waters" in Duisburg, Germany on 14-17/2/2011. ▪ Coordinator for Study tour to Attending workshop in the field of "Water Quality Control and Assessment of Water and distribution systems sources" in Netherlands, on 6-12/2/2010 pursuant to the administrative decree No. 181/2009 which managed according to (MYA) agreement between Rural Training Institute and the Netherlands Aid whereas a training course in this field has been held in Housing & Building National Research Center for two weeks on November 2009. ▪ Coordinator for Study tour to Attending workshop in the field of "Advanced Wastewater Management" in Netherlands, on 23-29/1/2010 pursuant to the administrative decree No. 182/2009 which managed according to (MYA) agreement between Rural Training Institute and the Netherlands Aid whereas a training course in this field has been held in Housing & Building National Research Center for two weeks on October 2009. ▪ Visiting polypropylene tubes testing laboratories of Aqua-therm Company which used in distribution networks of Attendorn State buildings, Frankfort, Germany – on 17-25/10/2008 pursuant to the administrative Decree No. 131/2008. ▪ Research visit at Wageningen University, the Netherlands Nov. 2004. ▪ Events Coordinator of IWA-Specialized Group of Institutional Governance and Regulation since Jan. 2007. ▪ Training of Trainers (TOT) in certification of Engineering inspectors (2009). ▪ Research Visit at University of , USA, Mar. 2008.
<p>Participating in workshops and seminars</p>

<ul style="list-style-type: none"> ▪ Canadian Nuclear Safety Regulations, the Egyptian Canadian seminar, 1-5 March 1987, Cairo, Egypt.
<ul style="list-style-type: none"> ▪ Quality Assurance, the Egyptian German Seminar, 9-19 February 1987, Cairo, Egypt.
<ul style="list-style-type: none"> ▪ Plant layout and civil structure in Nuclear plants, workshop Organized by the Egyptian, International Atomic Energy Authority (IAEA), and U.S.A, 22 June-3 July 1986, Cairo, Egypt.
<ul style="list-style-type: none"> ▪ Chernobyl accident and its implication in collaboration with Nuclear Regulatory and safety center in Egypt, and an Atomic Authority (AEA) seminar, 15-16 May 1986, Cairo.
<ul style="list-style-type: none"> ▪ Environmental Impact Assessment of Nuclear power plants”, the Egyptian – IAEA and U.S. Nuclear Regulatory (NRC) workshop, 26 January – 13 February 1986, Cairo, Egypt.
<ul style="list-style-type: none"> ▪ Pressurized Water Reactor Safety”, NRC, AEA and the commission of European communities' seminar, 16 Nov. – 11 Dec. 1985, Cairo, Egypt.
<ul style="list-style-type: none"> ▪ Participating in the Egyptian Codes.
<p>Conference Attendance</p>
<ul style="list-style-type: none"> ▪ Middle East Career Buiding Summit 21-22 April 2015. Sofital Cairo Elgezirah Hotel, Egypt.
<ul style="list-style-type: none"> ▪ The 1st Arab forum on sustainable communities & green building , 1st AFSCGB, 2014.
<ul style="list-style-type: none"> ▪ Expanding the horizon for innovative strategies in water & wastewater sector at the Concord Hotel on 28-29 April, 2014.
<ul style="list-style-type: none"> ▪ Participate in the "1st International Conference and Exhibition Sustainable Water Supply and Sanitation (SWSSC).at the Cairo In'l Conference Center in Cairo–Egypt, July 25–27 2010.
<ul style="list-style-type: none"> ▪ International Conference innovation in Building a safer world "Legislation – Codes – Standards" November 9-12, 2008, Cairo, Egypt.
<ul style="list-style-type: none"> ▪ International Conference "Towards a low-cost housing" Cairo-in 2007.
<ul style="list-style-type: none"> ▪ Workshop for anaerobic treatment of sewage-Cairo-in 2006.
<ul style="list-style-type: none"> ▪ 9th International Conference on water technology Sharm el-Sheikh-in 2005.
<ul style="list-style-type: none"> ▪ International Conference "outlook and the challenges of urban development-Cairo-in 2005.
<ul style="list-style-type: none"> ▪ Technology Conference recycling waste in the construction industry-Research Center Housing and construction-Cairo in 2005.
<ul style="list-style-type: none"> ▪ International Conference on recycling and waste treatment and clean technology Madrid-Spain-in 2004.
<ul style="list-style-type: none"> ▪ Symposium for the Arab Codes and their Influence on the economic integration of Arab league, Cairo, 2003.
<ul style="list-style-type: none"> ▪ Symposium on the urban development in arid areas and the problems of construction in it, Saudi Arabia, 2002.
<ul style="list-style-type: none"> ▪ 17th international conference of solid waste technology and management, USA, 2001.
<ul style="list-style-type: none"> ▪ 6th international conference on the transitions of the Egyptian society of chemical engineering, Cairo, 2001.
<ul style="list-style-type: none"> ▪ 6th international conference on potable water managements and water treatment technology (ICAT),

Cairo, 2001.
▪ 15th international conference on chemical education, Cairo, 1998.
▪ 16th annual conference of Corrosion problems in industry, Cairo, 1997.
▪ 7th international conference on environmental protection is a must, Cairo, 1997.
▪ 15th annual conference of Corrosion problems in industry, Cairo, 1996.
▪ National Geology conference, Cairo, 1995.
Training courses
Green calc as a tool for a friendly environment, Housing and Building National Research Center (HBRC) Dokki – Egypt, October 24-25, 2010.
Environmental Friendly Infrastructure Training Course. Housing and Building National Research Center (HBRC)- Dokki – Egypt, October 18-22, 2010.
Advanced Wastewater Management of the Egypt Urban Development program from UNESCO-IHE (Institute for Water Education). Housing and Building National Research Center (HBRC)- Dokki – Egypt, October, 2009.
Training courses and consulting services for area of water quality environmental field including studies, design, analysis, evaluation, and monitoring. Egypt, 2008.
Workshop for anaerobic treatment of sewage Cairo– Egypt, 2006.
Role in the management and development of cemeteries health of the solid residues Training Institute and Studies Research Center-urban housing and construction. Cairo– Egypt, 2005.
A course on environmental impact assessment. Faculty of Engineering - Cairo University 2004.
Course on the anaerobic treatment of the remnants of a human and industrial effluent for re-use, agriculture National Research Center, 2003.
Role in the establishment and development of cemeteries health-project-Dutch Research Center Housing and construction in 2003.
Role in the treatment and analysis of water for different uses-Association of Scientific-in 2001.
Training course on laboratory tests of chemical and natural soil and geotechnical engineering foundations in 1999.
Publications
1. Rabie S. Farag, Maha M. El shafai, Ahmed. Mahmoud, Mohamed K. Mostafa and Robert W. Peters "Green Synthesis of Nano Iron Carbide:Preparation, characterization and Application for Aqueous Phosphate Removal "Annual AIChE Meeting; Pittsburgh, PA, October 28 - November 2,2018
2. Rabie S. Farag, Maha M. Elshfai, Ahmed S. Mahmoud " Adsorption and kinetic studies using nano zero valent iron (nZVI) in the removal of chemical oxygen demand from aqueous solution with response surface methodology and artificial neural network approach"

3. Maha M. El-Shafei, Ahmed Hamdy and M. M. Hefny "Zero-valent iron nanostructures: synthesis, characterization and application A BSTRACT" journal of Environment and Biotechnology Research, Vol. 7, No. 1, Pages 1-10, 2018
4. Yanyan Zhang, Md. Shahinoor Islam, Kerry N. McPhedran, Shimiao Dong, Ehab M. Rashed, Maha M. El-Shafei, Ahmed M. Noureldin and Mohamed Gamal El-Din " A comparative study of microbial dynamics and phosphorus removal for a two side-stream wastewater treatment processes" journal of The Royal Society of Chemistry Sep. 2017
5. Md. Shahinoor Islam ,Yanyan Zhang, Shimiao Dong , Kerry N. McPhedran, Ehab M. Rashed, Maha M. El-Shafei, Ahmed M. Noureldin and Mohamed Gamal El-Din" Dynamics of microbial community structure and nutrient removal from an innovative side-stream enhanced biological phosphorus removal process" Journal of Environmental Management, August 2017
6. Maha M. El Shafei and Enas M. Abd Elmoteleb "INVESTIGATE THE EFFECT OF EFFECTIVE MICROORGANISM (EM) ON IMPROVING THE QUALITY OF SEWAGE WATER FROM AL-GABAL AL-ASFAR AREA IN EGYPT ,The 1st International Conference Towards A Better Quality of Life, Technische Universität Berlin Campus El Gouna, Egypt 24 - 26 Novemeber 2017
7. Mohamed K. Mostafa, Maha M. Elshafei, Robert W. Peters "Improve Water Quality at the El-Rahawy Drain and the Rosetta Branch, Egypt." Journal of Environmental Protection, 2015, 6, 1139-1148.
8. Mahmoud S. Ibrahim, Talaat A. El-Monem, Rifaat A. Wahaab, Maha M. El- Shafei, Mohamed A. Heikal and Samah A. Sanad "Enhancement of reverse osmosis membranes" Egyptian Journal of Applied Sciences –30 (1), 2015: 1-12.
9. Maha M. El Shafei and M.S. Mahmoud "Enhanced sorptive reduction of phosphate ions from wastewater using activated red mud" Seventh International Conference on Nanotechnology in Construction. Sharm El-Sheikh, Egypt, 2015.
10. Ehab A. Rashed, Maha M.El shafei , M.A. Hieklc, Minerva E. Matta D and Khaled M. Naguibe "Cleaning RO Membranes Scaled With Silica Using ABF As Cleaning Agent" HBRC Journal Housing & Building National Reserch Center , 2015.
11. Shakinaz Taha El Sheltawy, Ehab Rashed, Maha M. El Shafei and Amira Sayed "Use of red mud for removal lead from wastewater" Egyptian Journal of Applied Sciences, 30 (4) , 2015.
12. Bayoumy M., Maha M. El-Shafei, Moustafa H. and Adel A. "Effect of Sodium Acetate Addition on Phosphorus Release in a Modified Contact Stabilization Reactor" Civil Engineering Research Magazine CERM, Civil Engineering Department, Faculty of

Engineering, Al-Azhar University, Cairo -Volume , Number , 2015.
13. Rifaat A. Wahaab, Maha M. El- Shafei, Mahmoud S. Ibrahim, Talaat A. Hegazy and Nouran Y. Mohamed (2014). "Polymer-coated iron oxide magnetic nanoparticles-preparation and characterization using chemical co-precipitation method". Egyptian J. of Applied Sciences, 29(12), December, 2014.
14. S. T. Sheltawy, Maha M. El-shafei and Rasha A.Sary Eldeen "Use of Sewage Sludge Ash (SSA) as Adsorbent Material for Copper Removal from Wastewater" The 29th International Conference on Solid Waste Technology and Management, Pheladelphia, USA, (March, 2014).
15. Ehab A. Rashed, Maha M. Elshafei, M.A. Hiekl, Minerva E. Matta, Khaled M. Naguib "On-line dosing of Ammonium Biflouride for reduction of silica scaling on RO membranes" HBRC J, 2014.
16. M. Fadel, Naziha M. Hassanein, Maha M ElShafei, Amr H. Mostafa, Marwy A. Ahmed and Hend M. Khater , " Biosorption of manganese from groundwater by biomass of saccharomyces cerevisiae." HBRC J ,2014.
17. Naziha M. Hassanein, Mohammed F. Ahmed, Amr H. Mostafa, Maha M ElShafei, Marwy A. Ahmed and Hend M. Khater , " Biosorption of Iron from groundwater by biomasses of Yeast (saccharomyces cerevisiae)." Egyption J. of Plants, 2014.
18. Maha El Shafai, Sherien Mohamed and Khaled Naguib "On-Line Anti scaling System for RO Membrane Pretreatment" International Journal on Water Resources and Arid Environments (IJWRAE), Volume 4, number 1 (December 2014).
19. Nadia G. Kamdil, Maha M. El Shafei, Amr H. Mostafa and Shymaa M. "Preparation and characterization of polyester nano and quaternary ammonium salts for improvement the mechanical properties of drinking water pipes" J. of Scientific Research in science, vol: 31, Egypt.
20. Ehab A. Rashed, Maha M. El Shafei and Mohamed M Massoud "The effect of effective microorganisms (em) on ebpr in modified contact stabilization system" HBRC Journal Housing & Building National Research Center , 2014.
21. Marwa, M. El-Tayieb; M.M. El- Shafei; M.S. Mahmoud; "The Role Of Alginate As Polymeric Material In Treatment Of Tannery Wastewater" IJST UK, International Journal of Science and Technology Volume 2, Number 2, Febraury (2013).
22. Ehab M. Rashed, Maha M. El-Shafei , Mohamed A. Heikal and Ahmed M. Noureldin "Application of contact stabilization activated sludge for enhancing biological phosphorus removal (ebpr) in domestic wastewater" HBRC Journal Housing & Building National Reserch Center – Volume 6, Number 1, April 2013.
23. Maha. M. El-Shafei and Ahmed. M. Noureldin "Application of Sustainability in Enhancing the Efficiency of Upflow Anaerobic Sludge Blanket Reactor (UASB) By Using Effective Microorganism Solution (EM)" HBRC Journal Housing & Building National Reserch Center – Volume 6, Number 3, April 2013 .
24. Maha. M. El-Shafei and Sherien.M.Ahmed "Finding Advanced Treatment Methods for

Domestic & Industrial Wastewater of Leather Tanning For Housing & Development of Old Egypt Tanneries Relocated at Robbiki District)" (2013).
25. Mohamed G. EL.malky, Maha M. El Shafei, Adeson C. Nasir, Aisha F. Rahel"Assessment of Groundwater Quality in Sirte City -Libya"(2013).
26. M.M. El- Shafei, H.H. El-Sheikh, Marwa, M. El-Tayieb, M.S. Mahmoud; "treatment of tannery wastewater using free and immobilized cells of sodium hydroxide treated <i>Aspergillus niger</i> strain" 2 nd international conference & Exhibition on sustainable water supply & Sanitation Dercember 3-5, 2012, Cairo, Egypt.
27. M.M. El- Shafei, Marwa M. El-Tayieb, Azza Mohamed El-Shafei and sarah Magdy Tawfik. "Potential use of spent TEA leaves waste for removal of lead ions from aquous solution" Egyptian Journal of Applied Sciences –27(12), 2012: 108-117.
28. Rifaat Abdel Wahaab, Maha El Shafei, and Samah Adel Sanad 2nd International Conference and Exhibition Sustainable Water Supply and Sanitation (SWSSC 2012) BIODEGRADATION OF TEXTILE EFFLUENT USING ACTIVATED SLUDGE – GIZA COMPANY, EGYPT: A CASE STUDY(2012).
29. Abouzekry S.H ;El Mokadem M.T; El Shafei M.M ; and Alyaa A.A "Comparison of Standard and Defined Substrate Media for Detection of Injured Bacteria in Drinking Water" (2012).
30. M.M. Elshafie, A.H. Mostafa, N.Y Mohamed "Adsorptive removal of phosphate using dolomite as natural adsorbent", " Civil Engineering Research Magazine CERM, Civil Engineering Department, Faculty of Engineering, Al-Azhar University, Cairo -Volume 34, Number 2, April 2012.
31. M.M. Elshafie, A.H. Mostafa, N.Y Mohamed, "Using a filter pilot-scale with dolomite media for phosphate removal from wastewater" Civil Engineering Research Magazine CERM, Civil Engineering Department, Faculty of Engineering, Al-Azhar University, Cairo -Volume 34, Number 2, April 2012.
32. M.M. Elshafie, A.H. Mostafa, N.Y Mohamed, "Applying Filter Models with Different Dolomite Size Media for Phosphate and Main Pollutants Removals from Wastewater" Civil Engineering Research Magazine CERM, Civil Engineering Department, Faculty of Engineering, Al-Azhar University, Cairo -Volume 34, Number 3, July 2012.
33. Abdallah, Nagwa A., Maha M. El- Shafei, Salah A. Elenin and Rehab G. Hassan "Assessment of some bacterial strains for leachate treatment in Alexandria landfill" Egyptian Journal of Applied Sciences –26(5), 2011: 15-30.
34. Rifaat Abdel Wahaab, Maha M. El- Shafei, Sousan Ahmed Abdel Halim, Wafia El Sayed Toyor and Samah Adel Sanad " Bioremediation assessment of some dyes commonly used in textile industry in Egypt" Egyptian Journal of Applied Sciences –26(4), 2011: 136-143.
35. O.E. Abdel Salam, N.A. Reiad, M.M. el-shafei " A study of the removal characteristics of heavy metals from wastewater by low cost adsorbents" J. of Advanced Research Magazine, Cairo University, 2(4), 297-303, October, 2011.
36. Maha M. El Shafei , Marwa. M. El-Tyeb and Amr H. Mostafa "Improvement of Wastewater Characteristics Resulting From Paper Manufacturing by Using Plain Sedimentation and Chemical Addition"Cairo University Journal for Environmental Sciences- Volume 8, Number

1, May 2010.
37. Maha M. El Shafei "Physicochemical Characterization of the Industrial Tannery Sludge" HBRC Journal Housing & Building National Research Center – Volume 6, Number 1, April 2010.
38. Sufe W. H. and Maha M. El Shafei "Effect of Ammonia as a Major Constituent of Wastewater on the Physico-Mechanical Properties and Deterioration of Structure of the Hardened Cement Pastes" Egyptian Journal of Applied Sciences –Volume 25, Number 2A, February 2010.
39. Maha M. El Shafei, Marwa, M. El-Tayieb. "The efficiency of the removal of some heavy metals from contaminated water using natural bentonite" First Arab Conference on Housing (sustainable construction in the Arab region, especially the desert environment) December 23 to 26, 2010, Cairo – Egypt.
40. N.A. Reiad, O.E. Abdel Salam, M.M. el-shafei " Removal of heavy metals from aqueous solutions using natural zeolite" Al-Azhar University Magazine, Cairo, Egypt: 4(1), October, 2009.
41. M.M. el-shafei, O.E. Abdel Salam, N.A. Reiad, " Removal of heavy metals from wastewater onto peanut husks carbon" Housing and Building National Research Center Magazine, Cairo, Egypt: 5(3): 81-88, December, 2009.
42. Maha M. El Shafei "Heavy Metals Removal by Adsorption onto Natural Zeolite" Journal of Al-Azhar University Engineering Sector –Volume 4, Number 13, October 2009.
43. Maha M.El Shafei , T.A. Osman and M.M. Abd El-Razik, "Economic Study of Thermal Insulation in Egypt" HBRC Journal Housing & Building National Reserch Center -Volume 5, Number 2, August 2009.
44. Maha M. El Shafei "Treatment of Paper Industry Wastewater Through Direct Deposition or Triggers Deposition" World Applied Sciences Journal WASJ- Pakestan, International Digital Organization for Scientific Information IDOSI Volume 7, Number 6, June 2009.
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PROFESSIONAL CERTIFICATES
- Consultant Engineer in field of (Industrial Wastewater Treatment and Sewage, Industrial Drainage and Environment Waste Matters
POSTGRADUATES STUDENT SUPERVISION
- Ph.D. Thesis of Eng / Lamiaa Ahmed Maher "TREATMENT OF LANDFILL LEACHATE" Cairo University 2008
- Ph.D. Thesis of Eng / Khalid Mohammed Najib " Improving membrane quality by chemical coagulation to remove silica from brackish water " Cairo University 2016
- Ph.D. Thesis of Eng / Ahmed Mohamed Nur al-Din " Study the Application of Contact Stabilization Activated Sludge Technology for Enhancing Biological Phosphorus Removal (EBPR) In Domestic Waste Water". Cairo University, 2013
- Ph.D. Thesis of Chemist /Mohammed Ali Saeed " Studies some factors affecting the growth of biofilm in the water distribution networks and improve water quality by using innovative technique " Zagzig University, 2017
- Ph.D. Thesis of Chemist /Mohamed Said Mahmoud "Biotechnological Application Of Wastewater

Treatment Using Fungi". Al-Azhar University, 2012

- Ph.D. Thesis of Chemist /Rehab Jamal Hassan "Biodegradation of hazardous wastewater pollutants" Ain Shams University, 2017
- Ph.D. Thesis of Chemist/Nuran Yosery Mohammed "Environmental study of some of the methods chosen for water treatment resulting from petroleum residues" Domitta Univ. 2015
- Ph.D. Thesis of Chemist / Samah Adel Mohammed "A Study to enhance the efficiency of membrane and membrane fouling reduction "Domitta University 2016
- Ph.D. Thesis of Eng / Mohamed Mahmoud Mohamed Massoud "The use of non-conventional ways to remove hydrogen and phosphorus in wastewater in order to achieve the principle of sustainable development," Cairo University, 2014
- Ph.D. Thesis of Chemist / Marwa Abdel Atti " Biosorption of iron and manganese from ground water by biomasses of Saccharomyces cerevisiae yeast"Ain Shams University, 2018
- Master Thesis of Chemist/ Samah Adel Mohammed" Evaluation of bio-effect of some compounds commonly used in the Egyptian industry" Helwan University, 2012
- Master Thesis of Chemist / Shaimaa Mahmoud Kamel" Preparation and characterization of some polyester nanocomposites to use in the manufactureof drinking water pipes" Ain Shams University, 2012
- Master Thesis of Eng / Rasha Ali Saredine "Use of sewage sludge as adsorbent material for heavy metals removal" Cairo University, 2012
- Master Thesis of Chemist/ Nuran Yosery Mohammed" Use of certain industrial waste and natural materials in the removal of phosphate from wastewater " Cairo University, 2013
- Master Thesis of Eng / Amira Sayed Abdul Rahman " Adsorption of Heavy Metals Ions From Industrial Wastewater Using Solid Waste" Cairo University, 2015
- Master Thesis of Eng / Rana Ehab Mamoud The Effect of Different Electrodes on Performance of Electrocoagulation Process Used for Treatment of Wastewater. Cairo University, 2016
- Master Thesis of Chemist / Walaa Mohammed Mustafa "Parasitological & invironmental study on two aquatic ecosystem & role of some locally produced seeds in water" Cairo University,2013
- Master Thesis of Chemist /Enas Mortata Abd Elmoteleib "Using biologically treated wastewater from Algabal AlAsfar area (Cairo) in fish farming" Cairo University, 2011
- Master Thesis of Eng / Taha Ismail Ahmed" Using Dolomite in Removal Of Phosphorus From Waste Water" Cairo University, 2013
- Master Thesis of Eng / Ahmed Adel Hassan Ali "Optimization of phosphorous removal in EBPR wastewater system by external carbon Source addition " Ain Shams University, 2015

- Master Thesis of Chemist / Sarah Magdi Tawfiq " The effectiveness of the use of certain agricultural waste with bio-adsorption property in the removal of heavy metals from waste water" Ain Shams University, 2014
- Master Thesis of Eng / Neama Ahmed Subhi Ahmed "Study on the treatment of heavy metals by Adsorbed low cost materials " Cairo University, 2012
- Master Thesis of Chemist / Ahmed Hamdi " the development of decentralized processing systems for the purpose of re-use of treated water in a safe manner in the appropriate use of nanotechnology purposes " Cairo University, 2018
- Master Thesis of Chemist / Ahmed Said Mahmoud " Study the removal of most hazardous pollutant from aqueous solution using nanoparticles" , 2017
- Master Thesis of Chemist / Alia Ali Ahmed " Evaluation of the incidence of injured indicators of pollution in drinking water" Ain Shams University, 2013
- Master Thesis of Eng / Dina Daa Mohammed El-Sawy " Modeling of Chromium Removal from Tannery Wastewater using Bagasse" Cairo University, 2017

MEMBERSHIP OF PROFESSIONAL ASSOCIATIONS

Membership of the Royal Society of Chemistry (RSC).

Membership of International Association of Hydrological Sciences (IAHS).

Membership of The International Society for Environmental Information Sciences (ISEIS), Canada.

Member of International Egyptian Engineering Syndicate

Member of Society of Chemical Engineers

Member of Society of General Egyptian engineers

Member of the Egyptian Code of Practice Committee "Reuse of Treated Wastewater Code of Practice and Guidelines

Member of the Egyptian Code of Practice Committee "Building Water and humidity Insulation"

Member of the Egyptian Code of Recycling of different solid wastes and reuse it in building No 462/2010

Member of Filtration Separation Magazine

Member of ACWUA " Arab Countries Water Utilities Association

Member of the committee supervising the study of using biological substances to improve Abu-Rawash primary plant efficiency

Member of multi-purposes projects reviewing committee of wastewater works

Member of the water committee Engineers Syndicate
Member of the Environment and Health Professional committee Engineers Syndicate
Member of technical committee of purchasing tender of equipments and tools required for water and wastewater laboratory in Environmental & Sanitary Engineering Department.
GRANTS /AWARDS
The Second prize from environmental studies research center, Cairo University - in environmental awareness week, March 2005 in research in Title "Recycling of industrial dried food wastes" Production of building block from sludge