



Fatma Akl Muhammad

Profession Hydraulics and Environmental Engineering,

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Nationality Egyptian

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Phone No.

EDUCATION

- Hydraulics, Sanitary, Fluid Lecturer at Thebes Higher Institute of Engineering (Ministry of Higher Education). .(teaching hydraulic course and fluid for third and second year for civil engineering)
- **I was selected for Attended Exceed** sea project international training workshop "Water Security Assessment" March"26-30, 2018", AITCC, AIT, Thailand.
- PhD Scholarship (EXCEED-SWINDON) Fund at Necmettin Erbakan university in Konya-Turkey.,(student exchange for 3 _month).
- Ph.D. “Doctoral degree” from Ain- Shams university faculty of engineering (Hydraulic and irrigation department).
- M.Sc. In wastewater treatment plant, (Odor Control),” from Ain- Shams university faculty of engineering (Sanitary department).
- Bachelor of Engineering in Civil Engineering – (Grad: Good), Banha Faculty of Engineer (Shubra Branch), Zagazig University.
- Year of Graduation (2004).
- Project of Graduation Sanitary Engineering (Grad: Excellent).
- Quality Management System, Awareness & Internal Audit (ISO 9001:2008).

- I had been selected before EXCEED for 3-month scholarship "(student exchange)", in Necmettin Erbakan University _Turkey, with prof.Dr.Mehmet Aydin, in addition to that, I gave two lectures to the doctoral and master's students(postgraduate) Necmettin Erbakan University _Turkey ,about Hydrodynamic Model and model setup.
- I participate in **Exceed** sea project international training workshop "Water Security Assessment" March"26-30, 2018", AITCC, AIT, Thailand.

PUBLICATIONS

- Assessment of recent rehabilitation projects' impact on water quality improvement in Lake Burullus, Egypt,(Ahmed Hany a,† Fatma Akl b, Mona Hagraas a,c, Ahmed Balah a,c), Ain Shams Engineering Journal,**2021**
 - Hydrodynamics and water quality monitoring of Lake Beysehir, Regional WS Water Scarcity Sousse, Tunisia, 2018.
- Environmental Mitigation –water security in Egypt, Hand book, www.lap-publishing.com, By Fatma Akl,16_April,2018.
- Environmental Hydrudynamic Mitigation of Burullus Lake in Eygpt “International journal of science”, By Fatma Akl, Iman El-Azizy, Mahmoud A. Azeem and Gamal A. Nasser, **vol. 5, issue 59, December 2016.**
- Environmental Hydrodynamics Mitigation and water quality modeling, case study EL-Burullus lake in Egypt-using SMS12.1” International journal of recent advances in multidisciplinary research” ”, By Fatma Akl, Iman El-Azizy, Mahmoud A. Azeem and Gamal A. Nasser, **Vol. 04, Issue 01, pp.2200-2208, January, 2017.**
- "Evaluation Of New Local Technique For Odor Control In Sewage Pump Stations", By el nadi, m. H., wahb, e.s., nasr,n. A. & mohamed,f.a., el azhar univ., faculty of eng., cerm of civil Eng., **vol. 33, No. 4, December, 2011.**

PROFESSIONAL EXPERIENCE

Name of Firm **Metito Water Treatment**
From May 2021 –Till Now

Profession Hydraulic Calculation for wastewater and surface water treatment plants
Position: Processes Senior Engineer

TYPE OF WORK: Design Review of projects submitted to client and NOPWASD. For approval and technical support for the team.

I Participated in:

Review of the Hydraulic Calculation of Al hammam Agriculture Drainage water Treatment, Plant (8.25 Mm³/d)
 Design and Review of the Hydraulic and process Calculation of ELODWA water Treatment Plant.

Design of the Hydraulic Calculation of Sfax Sea water Treatment Plant,(Moracco).

Name of Firm Shaker Consulting Engineering Office

From 2018 – 2020

Profession Sanitary Engineer

Position: Senior Design Engineer

TYPE OF WORK: Design Review for the projects submitted to client and NOPWASD.
For approval.

I Participated in:

Palm Hills project SODIC

–Parcel (5,6,7) New

Capital (R7) JOULS

I Participated also,in:

- Study and Design Riyadh Metro Project, our scope is to provide the necessary connection services to the Riyadh Metro for line (4,5,6), and allow a safe and Comfortable operation. These connections include potable water, and storm Drainage. Design and prepare the documents and proposal for , sanitary, works for the Wet milling production plant.as free-lance with Namaa consulting Office

Name of Firm **ELDAR Consulting Engineering Office**

From 2014 - March 2018

Profession Sanitary Engineer

Position: Team Leader Engineer (Senior Design Engineer)

TYPE OF WORK: Design Review for the projects submitted to client and NOPWASD.
For approval.

I Participated in:

- Design and prepare the documents and drawings for sanitary work for the tank and its pumping system for Elevated Tank for Tanta University.
- Design, specify and prepare detailed drawings for the intake, raw water pump station, for Raw Water Supply System for Northwest Cost, (through Talaat Consulting Office.
- Study, plan, design, supervise and prepare the as built drawings, for Storage tanks, booster pump stations and communities' connections Development, Upgrading for Sumusta Water Supply Network for Misr Contract Company.
- Concept, Design, specification & tender documents preparation for complete water treatment plant to remove high salinity, for Water Treatment Plant For New Communities In Wadi El Rayan, Fayoum For General Authority of Reconstruction And Agricultural Development.
- Study and design for wastewater system network, Burg Rasheed Village-Egypt (through Hydro consulting office).
- (Design review for irrigation, water and fire -fighting system networks), for Cairo Festival City- (CFC),(Through Emaar consulting office).
- Study and development wastewater system network, New Cairo, Egypt (Through Hydro consulting office).
- Study and design Water, fire, irrigation and wastewater system network Marassi- Blanca village

85&91, (Through Hydro consulting office).

- Plumbing system Design review for R w a f e d Hotel,kayan Project-Egypt (Through Hydro consulting office).
- Plumbing System Design review for Imam Ali School, kayan Project-Egypt (Through Sabour consulting office).
- Study and design for potable water system network, kayan Project-Egypt, sport zone (Through Sabour consulting office).
- Study and design for potable water system network,**110** military -kayan Project, sport zone – Egypt (Through Sabour consulting office).
- Plumbing System Design -Le Park, smart eco housing- Egypt (Through Sabour consulting office).
- Study and design for potable water wastewater system network, Layan Project-Egypt.
- Study and design waste water, irrigation and domestic water distribution system network, Alex West Project-Egypt (Through Sabour consulting office).
- Design for Olympic and kids Swimming pool Alex West project- Alexandria, Egypt, (Through Sabour consulting office).
- Design for Olympic and kids Swimming pool Forasn club - Ismailia, Egypt, (Through Sabour consulting office).
- Design for Entertainment Swimming pool Alex West - Alexandria, Egypt, (Through Sabour consulting office).
- Design for irrigation, water and fire networks Aydem Project-Oman, (Through Emaar consulting office).
- Review for irrigation, water and fire fighting system networks, Beat Elwattan project-6 of October-Egypt, (Through Hydro consulting office).
- Review for irrigation, water and fire fighting system networks, Iskan project, 6october (Egypt) phase-3, phas-4 and shop drawing with total area (48.126 fed.) (Through Hydro consulting office).

PROFESSIONAL EXPERIENCE

Name of Firm **MISRCONSULT– SAUD CONSULT**
From 2013 -TILL 2014

Position: Project Engineer

I Participated in:

- Design for irrigation network, Iskan AL-Ahsaa project- phase-3 and phas-4, Eastern Region KSA.
- New Cairo -Emaar- (Region –phase-3. Parcel (18-23) design for firefighting network.
- Review for irrigation, water and fire fighting system networks Hafer El-Batten Ahsaa project- Eastern area KSA.

PROFESSIONAL EXPERIENCE

Name of Firm **AAW Consulting Engineer – Ahmed Abd ELwareth**
From 2012 till 2013

Position: Team leader (Hydraulic Engineer)-Fire- fighting system design

I Participated in:

- Apache, kattamia Airbase Egypt,design for firefighting system and drainage rain water system.
- Re_Construction & Upgrading of Old Salwa Rps with Underground Reservoir (Plumbing & Fire Fighting Work)
- Alexandria East Wastewater Treatment Plant Rehabilitation, Extension of the Primary Treatment with Additional Secondary Treatment (design review)
- Sudan pipe line project- Pump Station (Plumbing & Fire Fighting Work)
- Make-up from underground for supplying Ezz Steel Projects in Ain Sukhna-Suez-Egypt-Stagen
- Design of Water Distribution Logistics at Heet -Pump Station (Plumbing & Fire Fighting Work)
- Water Supply System to Al Lakbi in Al Wusta Governorate, B- Al Lakbi Water Work Site
- Thumarait Site-Pump Station (Plumbing & Fire Fighting Work)
- Potable Water, Fire, Irrigation, Sewage and Storm Water Networks for Elfareeda - Dhaban City (Plumbing & Fire Fighting Work)
- Constructing service buildings with its infrastructure for the second settlement for officers' residential.
- Tag Sultan, Residential Compound (Plumbing & Fire Fighting Work)
- Palm Hills, Residential Compound (Plumbing & Fire Fighting Work) Design Review and value Engineering
- Madinty Sewage Treatment plant-phase-1 -Pump Station (Plumbing & Fire Fighting Work)

- Ajdan Waterfront Project -Pump Station (Plumbing & Fire Fighting Work)
- Construction of Tanks and Booster Station, Installation of Transmission pipelines (Salallah Desalination plant) (Plumbing & Fire Fighting Work)
- Potable water, Fire, Irrigation, Sewage and storm water networks for EL-Fareeda-Dahaban City - (Plumbing & Fire Fighting Work)
- Industrial wastewater treatment plant, Design Fire, Irrigation, Sewage, water and storm water network

PROFESSIONAL EXPERIENCE

Name of Firm **Khatib and Alami, Cairo – Egypt**
From 2008 till 2012
Position: Design Engineer (Sanitary Engineer)

I Participated in:

- Position: Sanitary & Fire Fighting Engineer (design & shop drawing)
- AL Rajhi Residential Tower - Al Khobar - K.S.A.
- Central Laboratory for General Water Directorate Aseer – KSA.
- ALmustawia-Pump Station (study and development for water and waste water for many provinces and Al Qaseem region.)
- Kharj water Tanks (Pump Station).
- Sih/West Site (Pump Station) -K.S.A.
- Red Crescent Tower Riyadh-K.S.A.
- AL-Khazzan Residential Complex Riyadh-K.S.A.
- Tabuk Main Pump Station Expansion, Tymaa (Pump Station), water&wastewater network (design)
- Bisha&Mahail Branch Laboratory Site layout, water and wastewater network (design)
- Study and Design phase2, For Water Transfer Line fromKhamis Mishit Reservoir to Yara.
- Yara site layout-Khaibar Filling Station, water wastewater network (design & shop drawing)
- Study and Design Water& Wastewater Network in Tabouk Region Sewage Pump Station
- (TANK 250,500,1000,2000), water wastewater network (design & work shop)
- Tathlith Water Treatment plant WTP (Abha), water&wastewater network (design & shop drawing)
- Water Pump Station at Abha Dam, (Alsaad pump station khamis meshit, Assir, water& wastewater network (design & shop drawing)
- El-salaam force main.
- Study and Design Water Network and Wastewater Network In Tabouk Region, (Bir Bin Hermas).
- Study and Design of General Master Plan for Water and Wastewater Networks of Taif City, (Contract.6, 9).
- Study and Redesign of Water Networks, Tanks, And Pump Stations in Jazan and Prepare Future Master Plan to Supply All Jazan.
- Design for storm &wastewater network (industrial Wastewater Treatment plant in el-madina- Elmenora), KS. A) with Tiba engineering company. Flow for IWWTP for 24 hrs = 6000 m³ / day.

- Had Elsaadah Urban – (Sultaanat Oman,Ministry of Education) Maintenance Of 24 Class Rooms Mixed Basic Education School.

PROFESSIONAL EXPERIENCE

Name of Firm **Consulting Engineering Group (CEG)**

From 2007 till 2008

Position: Design engineer

(Plumbing, firefighting protection system& sanitary system).

I Participated in:

- Miscellaneous Project for Qatar Radio & Television Corporation, Qatar.
- Public Park & Playground (Alrayyan- Alwaab Pin 55014502), Qatar.
- Technical Annex Building Alkawather Girls Secondary School, Qatar.
- Technical Annex Building Rowdat Bint Jassim (Girls Secondary School), Qatar.
- Dolffin Project (component Villas), Qatar.
- Offoq Project (component Villas), Qatar.
- Zayed Elkhayareen Hotel, Qatar.
- Giza Hotel, Egypt.
- Alrdwan Factory, Qatar.
- Qatar Factory for Metal &Mechanical Industries, Qatar.
- Dokki residential Tower, (high rise building) Egypt.
- International Cairo Airport (Terminal Building 3), Egypt.

PROFESSIONAL EXPERIENCE

Name of Firm **Al Beaah Company (KSA.)**

From 2004 till 2007

Position: Design Engineer

(Plumbing, firefighting protection system& sanitary system).

I Participated in:

- Future villas **(KSA.)**
- The national university
- Yanbou girl's schools in yanbou industrial city in Kingdom of Saudi Arabia, **(K.S.A.)**.
- The project consists of four schools, **(K.S.A.)**.
- Quran girls' school, **(K.S.A.)**.
- Primary girls' school, **(K.S.A.)**.
- Intermediate girls' school, **(K.S.A.)**.
- Secondary girls' school, **(K.S.A.)**.

COMPUTER SKILLS

- Auto CAD.
- Water CAD V8i.
- Sewer GEMS V8i.
- pipe2cad
- Arc. GIS
- Civil3D
- Google Earth
- All Microsoft Office Applications.
- SMS –surface water modeling system
- Microsoft project.

LANGUAGES

	Reading	Speaking	Writing
Arabic	Excellent	Excellent	Excellent
English	V. Good	V. Good	V. Good
Turkish	Little	Little	Little

SKILLS

- I am working well in a teamwork.
- Good in working under pressure.
- I have the spirit of leading.
- Technical Support.
- I have the ability to make fast and reliable decisions about how to solve problems.
- I can perform any other tasks as assigned by reporting manager.
- Self motivation.
- I am Quick Learner.

Key Technical Qualifications

I've been working as a project engineer for several projects in Gulf area (i.e. KSA, Oman, Qatar, etc.).

I've the capability of:

- Attending the progress meetings/communications with contractors/consultants and internal departments.
- Tendering Evaluation, I can review and assess the vendors' Tenders Documentation.

- Perform QC for drawings with specification and requirement of projects to minimize end user's comments.
- Design several infrastructure networks including domestic, drainage, irrigation and firefighting systems.
- Design for Irrigation Water system (Main-Secondary and Tertiary)-subsurface drains.
- Design experience including (plumbing, drainage and fire protection services).
- Preparing conceptual design right through to detailed design in the building hydraulic services.
- Design for Preparing Bills of quantities.
- Preparing Technical Report.
- Design and Technical coordination that includes drawings follow up project documents validation (drawings, SPECS, BoQ, Reports, etc.).
- I have Knowledge of British and NFPA standards and requirements.
- Experience in coordinating across multi-discipline project teams.
- Experience in technical report writing, cost reporting and client liaison at project level.