

Holds a B. Sc. in Chemistry and Master in Inorganic Chemistry. Has over 18 years hands-on experience working as Chemist in water treatment of Power Stations.

## **PERSONAL DATA**

Nationality : Egyptian  
Birth Date : 05/12/1977  
Gender : Male  
Marital Status : Married  
Residence : Currently KSA

## **EDUCATION**

: B. Sc. in Chemistry, Al-Azhar University, 1999  
: Pre-Masters degree, 2007  
: Master in Inorganic Chemistry, Menoufia University, 2015  
: Currently studying PHD in Energy Field (a new study of one of the new energy sources)

## **LANGUAGES**

Arabic : Native Language  
English : Very Good

## **COMPUTER SKILLS**

: Windows, MS Office, Internet

## **TRAINING COURSES AND CERTIFICATIONS**

- : ISO (GENERAL TRAINING COURSE) (Aug. 2018).
- : ENGLISH CONVERSATION TRAINING COURSE IN B.E.C in Oct./Nov. 2014.
- : Training of trainer (TOT) by Lecturers of international central administration of the training the Egyptian Ministry of Electricity in Apr. 2014:
  - Patterns of the four trainees.
  - Features a skilled coach.
  - Features interactive training.
  - Preparation of the training program.
  - How to write training goals.
  - Lesson design training.
  - Steps to prepare training material and Trainer's Guide.
  - Preparation of the training hall.

- Implementation of the training program.
  - Evaluation of the training process
  - Different views of the world.
  - How to analyze personal trainees.
  - Presentation skills.
- : SMS (SAFETY MANAGEMENT SYSTEM) in Mar. 2014 by Expert Occupational Safety and Health Engineer Muhammad Albgdadley in Osha Middle East & the certificate of training course Signed by the Arab Society for experts and professionals Occupational Safety and Health:
- Implementation of SMS systems.
  - Hazard Identification and Hazard analysis.
  - Safety & Health Programs.
  - Investigations and Incident Reports.
  - Work permit.
  - Effective Safety Committee Meetings.
  - Safety Reports AND Forms.
  - Safety Management System Evaluation.
  - Safety Self-Inspection.
  - Safety Training Methods.
- : Specialist Occupational Safety and Health of the National Center for the Study of Occupational Safety and Health (NIOSH) (Apr./May 2013):
- Acquainted with the concept and goals of occupational health and safety and how to secure working environment.
  - Acquainted with the labor law and safety legislation.
  - Identify the insurance and work-related injuries.
  - Social Security and the rights of the insured.
  - Training on how to follow up tasks Specialist Occupational Safety and Health.
  - Knowledge of the functions of the committees Occupational Safety and Health.
  - Knowledge of occupational injuries and how to overcome them, if possible, prevent or minimize them.
  - Knowledge of various statistical records Altai relay by specialist safety.
  - Acquainted with all kinds of different risks and how to prevent them and overcome them (such as the risk of physical, chemical, and mechanical and radiological ....etc.
  - Identify safety conditions in drilling operations and construction and demolition.
  - Learn how to organize information and trading.
  - Identify all types of fires and how to resist and control systems and various fire.
  - First Aid Training.
  - Learn how to analyze the risks and control.
  - Identify the types of boilers and safety conditions in the boiler must be met to become a safe.
  - Acquainted with the methods of waste treatment.
  - Acquainted with the psychology of work.
- : FIRST AID by General Federation of Trade Unions of Egypt Labor Culture Foundation (Jan. 2013).
- : Training course on the work of fire-rescue at the Civil Defense department of the lake of Beheira (Nov. 2012):

- Fire and types.
  - Types of materials used in fire.
  - The main causes of fire.
  - Ignition theory.
  - Fire Theory.
- : Training course (30 hrs.), OSHA GENERAL from Osha Academy in Egypt (Oct. 2012): Legislation Occupational Safety and Health / Escape routes / The risk of electricity / The closure of energy sources / Risk number and machines / Work safely indoors / Fires and fire extinguisher / Safety instructions cranes fork / Hand tools / Welding and cutting / Fluid inflamed and flammable liquids / Safety tasks for personal protection / Compressed gas cylinders / Work surfaces and walk / Strong protection program audio / Barriers of protection equipment.
- : Training course (30 hrs.), OSHA CONSTRUCTION from Osha Academy in Egypt (Nov. 2012): Legislation Occupational Safety and Health / Escape routes / The risk of electricity / The closure of energy sources / Risk number and machines / Work safely indoors / Fires and fire extinguisher / Safety instructions cranes fork / Hand tools / Welding and cutting / Fluid inflamed and flammable liquids / Safety tasks for personal protection / Compressed gas cylinders / Work surfaces and walk / Strong protection program audio / Barriers of protection equipment / Scaffolding / Drilling safety cranes / Lifting means / Guiding and warning signs / Individuals basket lifting cranes / Protection from the risk of falling / Delivery system of information on hazardous chemicals / Ladders and stairs / Safety of radiation / Delivery system of information on hazardous chemicals.
- : PMP course in Become Academy in Apr. 2012:
- What the project???
  - Initiation of the project.
  - Planning of the project.
  - Executive & control for the project.
  - Close the project.
- : Certificate of completion in continuous emission monitoring system training by ALTECH ENVIROMENT USA (May 2005): Training how to measure of continuous emission monitoring (SOx gases & NOx gases & carbon mono oxide gas & carbon di oxide gas water vapor & oxygen gas).
- : Training course on the work of fire-rescue at the Civil Defense department of the lake of Beheira (Mar. 2009):
- Fire and types.
  - Types of materials used in fire.
  - The main causes of fire.
  - Ignition theory.
  - Fire Theory.
- : Training course in the water treatment at Damanhour Power Station (Apr. 2004):
- Demineralization plant operation.
  - Pre-treatment system operation.
  - Sewage treatment system operation.
  - Potable water system operation.
  - Waste treatment system operation.
  - Oil/water separator system operation.
  - Chemical injection system.
  - Thermal cycle analysis system.

- : Maintenance and operation all pumps in water treatment and pumps used for injection in thermal cycle system in GERMANY & ITALY (Jun./Jul. 2005):
  - Training course as per the attached invitation by pumps GARBARINO (SPA) and OBL (BOMBE PUMP DOSATRICI) and SAVINNO PARBARA COMPANY (CHEMICAL INJECTION PUMP) this training by METITO WATER TREATMENT in Milano City in ITALY.
  - NEMO PUMP (SLUDGE PUMP, MIXRE COMPANY (for mixers), this training by METITO WATER TREATMENT in Munich City in GERMANY.
- : Training course (3 weeks) in Nubaria Power Station by METITO Overseas Limited Co. in the water treatment in following:
  - Demineralization plant.
  - Pre-treatment system.
  - Sewage treatment system.
  - Potable water system.
  - Waste treatment system.
  - Oil/water separator system.
  - Chemical injection system.
  - Thermal cycle analysis system.

## CHRONOLOGICAL EXPERIENCE RECORD

- Employer** : Saudi Electricity Company (SEC)  
**Project** : Shuqaiqe Steam Power Plant SSPP 2670MW, KSA  
**Job title** : Chief Chemist
- Employer** : Middle Delta for Electricity Production Co.  
**Project** : AFFAIRS STATIONS  
**Job title** : First Chemist  
**Job Description** :
  - Follow all the stations of the various reports of the company's chemical activities.
  - Follow up water production demilitarized water.
  - Follow up to the production of drinking water and quantity.
  - Follow up reverse osmosis system.
  - Follow up sewer system.
  - Follow up industrial wastewater system.
  - Follow up all different analyzes for all systems of treatment and desalination plants.
  - Follow up training curriculum for workers in the field of Alchemy stations.
- Dates** : From Nov. 2012 till Sep. 2013  
**Job title** : HSE Manager  
**Job Description** :
  - Follow up the implementation of all functions Specialized occupational safety and health.
  - Has developed a contingency plan for the station.
  - Roles distribution of work on health and safety:
    - Professional and technical specialist professional.
    - Occupational Safety and Health Administration.
  - For the trained staff of engineers, technicians and workers in the field. Occupational safety and health and all those involved in the station to

raise the technical competence and behavioral Towards the working environment and staff and equipment.

- Follow the daily and monthly reports and semi-annual work injuries and follow up orders regular job and hot.
- Participating in the periodic maintenance of the steam and Gas turbines.
- Follow all the daily reports of safety and health specialist Professional engineers and technicians Occupational Safety and Health and comments on all sections of the station.
- Participation in the Occupational Safety and Health station.
- Follow the civil defense department and weekly exercises for fire and follow up reports.
- Application of legislation and the laws of occupational safety and health in your state labor law.

**Dates** : From May 2012 till Nov. 2012  
**Job title** : Head of Environmental Affairs  
**Job Description** :

- Follow all the requirements of the Department of Reports on the state of the environment daily, weekly, Monthly and annual.
- Follow up analysis of exhaust gases from the ratios Combustion products to ensure the safety. The facility and staff and compliance of Standard and Threshold.
- Follow analyze all biological and drinking water Industrial Wastewater to keep the work environment and the Surrounding Environment.
- Get rid of harmful solid waste and supervise the burial in Accordance with environmental legislation.

**Dates** : From May 2005 till May 2012  
**Employer** : Middle Delta for Electricity Production Co.  
**Project** : Nubaria Power Station (3x750MW = 2250MW):

- SIEMENS Gas Turbine 2 Modules
- GE Gas Turbine 1 Module
- MITSUBISHI Steam Turbine 2 Modules
- ALSTOM Heat Recovery 2 Modules
- This plant provides electric power to the egyptian grid via 6 feeders of 500/220KV

**Job title** : Chief Chemist in Water Treatment Field  
(operation, commissioning, start-up & training)  
**Job Description** :

- Head of operation chemistry department for water treatment.
- First responsible on operation of Reverse Osmoses unit (R.O).
- Commissioning & start-up for NUBARIA POWER STATION 1 & 2 (1500MW) PROJECT WITH METITO WATER TREATMENT CO. (from 2004 till 2006).
- Commissioning & start-up for NUBARIA POWER STATION 3 (750MW) PROJECT WITH STF WATER TREATMENT CO. (from 2007 till 2009).
- LEAD OF REVERSE OSMOSIS UNIT (OPRATION & FOLLOW UP ALL MAINTENANCE).
- LEAD OF WATER TREATMENT SYSTEMS OPERATION & FOLLOW UP ALL MAINTENANCE) AS PRE-TREATMENT & POTABLE SYSTEM & SEWAGE SYSTEM & WASTE SYSTEM & DEMI PLANT SYSTEM & STEAM CYCLE TREATMENT & H2/O2 GASE PRODUCTION & OIL

## SEPARATOR SYSTEM & ANALYSIS TESTS AND ANALYSIS REPORT.

- Responsible for the operation of the reverse osmosis unit for the production of drinking water (R.O operation).
- Follow up CHEMICAL CLEANING PROCESS FOR TWO PROJECTS.
- R.O SYSTEM Responsibilities:
  - Follow up operation of Reverse Osmosis unit.
  - Follow up Sedimentation system (primary treatment system for desalination).
  - Follow up of chemical injection for water wells, as well as sedimentation tank, as well as water entering the unit and Nano-injection system after the process of nanotechnology.
  - Follow up to the continuous blowdown system sedimentation.
  - Follow up to backwash the sand filters with pressure for desalination system.
  - Follow up change CARTILGE filters.
  - Follow up backwash unit Ultura.
  - Follow up backwash unit Nano filtration system.
  - Follow up all different analyzes for all systems of treatment and desalination plants.
  - Follow up training of all workers in Desalination unit.
- WATER TREATMENT SYSTEMS Responsibilities:
  - Follow the daily operation of each different chemical treatments systems as Demi plant system, Sewage water treatment system, waste water treatment system, potable water treatment system, pre-treatment system, oil/water separator system, H2&O2 gases production, Boiler water treatment, super-heated steam treatment, saturation steam treatment).
  - Coordination between the tasks of operating and maintenance treatment every day.
  - Follow up study and analysis of all the results of chemical analyzes specific systems chemical treatments (primary treatment - treatment of drinking water - Unit disarmament salts - Treatment of industrial wastewater - sewage treatment - circles steam feed water and boiler water - and steam roasted and saturated condensate - Unit Reverse Osmosis – closed refrigeration circuits - cooling water entrance, where it is given - transformer oil - natural gas used as fuel in gas units).
  - Follow activate the ion exchange system cation exchanger and anion exchanger and double-exchanger.
  - Follow up preparations chemicals used daily chemical processing operations.
  - Follow up of daily and weekly reports and semi-annual water specifications, in all its forms (Potable water treatment system - Sewage wastewater - steam cycle treatment - feed water treatment - closed cooling water system specifications).
  - Follow up operation of hydrogen/oxygen gases production unit.
  - Make keep for boiler in case of exit units temporarily or long departure.
  - Follow up daily and coordination with all the different sections of the maintenance of such malfunctions.
  - Work as trainer for some training courses in water treatment station employee.

- Work daily and weekly and monthly samples of different chemical treatments chemically and biologically.
- Follow-up operating functions for each different chemical treatments through DCS CONTROL ROOM SYSTEM.
- Follow up operation of pretreatment system.
- Follow up Operation of the wastewater system.
- Follow up Operation the sewage system.
- Follow up Operation of the drinking water system.
- Follow up Operation of hydrogen - generating unit.
- Follow up Operation regeneration of cation exchanger and anion Exchanger.
- Follow up water, steam circuits adjust specifications.
- Follow up entry and exit of steam and gas units to modify and adjust the specifications water to keep metal of boiler, feed water and the condensate.
- Weekly sampling of electrical transformers, natural gas and give it to the Chemical Laboratory of Atinan Ali transformer oils and specifications as well as natural gas and efficiency.
- Follow up operating the pretreatment (sedimentation process and filtration process). This process produce 260 m<sup>3</sup>/hr from clarified water and 260 m<sup>3</sup>/hr from filtered water.
- Follow up operating the potable system (filtration with activated carbon filters & chlorination). This process produce 1200 m<sup>3</sup>/day from drinkable water.
- Follow up operating the Demineralization Plant system which done by ion Ex change process. This process contains three streams each stream contain (polishing filter, cation exchanger, decarbonator, anion exchanger, mixed bed exchanger). This process produce demi water with 0.1µs/cm and PH = 6.7 & SiO<sub>2</sub> 5 ppb. This process produce 1000 m<sup>3</sup>/day.
- Follow up operating the Waste treatment (clarification, filtration by gravity filters, and adjust PH in final PH, range 6-9 and cond. under 2000 µs/cm and this process produce 3000 m<sup>3</sup>/day.
- Follow up operating the Sewage treatment which work by activated sludge process (aeration process, settling process, chlorination process, drier bed process for disposal sludge) this process produce 2x200 m<sup>3</sup>/day.
- Follow up operating Oil separator system (API unite, flash mixer process, Dave unite, air saturation unite). This system produce 150 m<sup>3</sup>/hr.
- Follow up & operating R.O. unit in the Nubaria Power Station.
- Follow up Thermal cycle which contain Feed tank, Boilers with drums HP, IP, LP, steam turbine and this cycle include treated by hydrazine in feed tank as oxygen scavenger, Tri sodium phosphate in drum to make buffering in PH and prevent scale formation, ammonium hydroxide in condensate water to rise PH.
- Operation & follow up operating Hydrogen production unite for cooling generator and produce 10 m<sup>3</sup>/hr from oxygen & hydrogen.
- Follow up Closed cooling system for cooling several services in thermal cycle and keep this cycle at cond. Under 40 µs/cm, PH 7.5-8.5 and hydrazine 2-5 ppm.
- Each process monitored by several analysis (hourly, daily, weekly, monthly).

- Follow up to address the entrance and exit to and from the water station.
- Follow up operating previous different systems during the operating Scada.
- Follow up and work chemical analysis for samples of each test water treatments.
- Head of operation water treatment.
- Responsible for operation of the unit R.O.
- The work of all kinds of chemical and biological analyzes of water conservation standards in all phases of the processed water as drinking water and decaffeinated salts and water boilers and water condensate and cooling water inside and outside the cooled condensate.
- Work on the various devices used to make chemical and biological tests as organs electrical conductivity and pH measuring device and a device to measure ammonia and silicates, iron, and other hydrazine and laboratory equipment.
- Follow up sampling system.
- Follow up operation and regeneration of POLISHER SYSTEM IN THERMAL CYCLES.

<b>Dates</b>	:	From Sep. 2000 till May 2005
<b>Employer</b>	:	West Delta for Electricity Production Co.
<b>Project</b>	:	Damanhour Power Station: <ul style="list-style-type: none"> <li>• 1x325MW Steam Turbine</li> <li>• 3x65MW Steam Turbine</li> <li>• 2x15MW Steam Turbine</li> </ul>
<b>Job title</b>	:	Chief Chemist in Water Treatment Field (Operation, Commissioning, Start-up & Analysis)
<b>Job Description</b>	:	<ul style="list-style-type: none"> <li>• Follow up to address the entrance and exit to and from the water station.</li> <li>• Operation &amp; follow up drinking water treatment system.</li> <li>• Operation &amp; follow up to industrial waste water.</li> <li>• Operation &amp; follow up to industrial sewage water.</li> <li>• Operation &amp; followup and Demi water (Ion Exchange) system.</li> <li>• Follow up boiler water treatment system.</li> <li>• Follow up steam cycle specifications (boiler Feed water &amp; dearator &amp; Super-heated steam saturation &amp; Steam condensate water) through up sampling system.</li> <li>• Operation &amp; follow up all chemical injection systems.</li> <li>• Follow up and work chemical analysis for samples of each test water treatments.</li> <li>• The work of all kinds of chemical and biological analyzes of water conservation standards in all phases of the processed water as drinking water and decaffeinated salts and water boilers and water condensate and cooling water inside and outside the cooled condensate.</li> <li>• Work on the various devices used to make chemical and biological tests as organs electrical conductivity and pH measuring device and a device to measure ammonia and silicates, iron, and other hydrazine and laboratory equipment.</li> <li>• Follow up sampling system.</li> </ul>

**Further experiences :** Teaching: I taught high school students as well as university students.

**Field of experience :**

- OPERATION & COMMISSIONING & START-UP of Water Treatment Systems as Waste water treatment – Sewage water treatment – Desalination systems R.O SYSTEM – Potable systems – Boiler treatment – Steam treatment.
- OPERATION all Water Treatment Systems.
- CHEMICAL and BIOLOGICAL SAMPLES for the different Water Treatment Systems.
- Lecturer in any field of chemistry.