

Holds B. Sc. and M. Sc. in Chemistry and has about 11 years hands-on experience working as Chemist at Cairo West Power Station.

## **PERSONAL DATA**

Nationality : Egyptian  
Gender : Male  
Residence : Giza, Cairo

## **EDUCATION**

: B. Sc. in Chemistry, Benha University, 2007  
: M. Sc. in Chemistry, Benha University, 2014

## **LANGUAGES**

Arabic : Native Language  
English : Fair  
German : Good

## **COMPUTER SKILLS**

: Windows, MS Office (Word, Excel, Power Point), Internet

## **TRAINING COURSES AND CERTIFICATIONS**

- : General course in Shoubra El-Kheima Power Station on mechanical, electrical, instrumental, chemical systems theoretical and practical for 3 months.
- : Training on spectrophotometer ion chromatography (IC), Gas chromatography - mass spectrometry (GC - MS), inductively coupled plasma mass spectrometry (ICP - MS) at Egyptian Desalination Research Center of Excellence (EDRC), Desert Research Center.
- : Training on reverse osmosis (RO), forward osmosis (FO), and membrane distillation (MD): Introduction, mechanism of operation, and manufacture of membrane in lab.
- : Water treatment courses in industrial and sewage treatment.
- : Water treatment courses for boilers.
- : Training different Extraction Methods in Egyptian National Research Center (NRC).
- : Workshop on Water Desalination & Renewable Energy for sustainable develop in EDRC in Egypt.
- : Courses in Environmental Affairs and Polluants resulted from combustion of Mazout and Natural gas.

- : Training in Chemical Central Laboratory in Egyptian Electricity Transmission Company, Ministry of Electricity and Energy.
- : Trained on ISO 9001/2008.
- : Chosen to participate in 8th International Conference on Water Resources and Arid Environments in Kingdom of Saudi Arabia (22-24 Jan. 2019).
- : German: A1 level.

## CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From 2008 till now
- Employer** : Cairo Electricity Production Company (CEPC)
- Project** : Cairo West Power Station
- Job title** : Chemist
- Job Description** :
- Work as Specialist in environmental impact assessment studies for power plant project units 7 & 8.
  - Make Environmental studies of Nile water specification, soil and air quality after and before operation of power station.
  - Worked with PGESCO (consultant) and CTS (contractor) companies in environmental studies.
  - Operate shelters for environmental apparatus such as NO, SO<sub>2</sub>, CO, and TSP and calibrating them.
  - Follow up analysis of flue gases resulting from mazout combustion.
  - Work in air quality measurements and management of environmental laboratories.
  - Work in water quality measurements in lab and as Operator.
  - Disposal of the chemical waste at the start-up, commissioning and during operation of plants.
  - Work as Chief Chemist for water treatment plants 7 & 8 such as pre-treatment plant, demineralized plant, potable water plant, sewage plant, industrial waste, polishers and chemical feed systems for boilers.
  - Make regeneration for cationic, anionic and mixed resins for demineralization plant and for polishers for water - steam cycles.
  - Make back wash for primary filters for pre-treatment plant and demineralization plant.
  - Operate industrial waste water plants from filters, regeneration, and water - steam cycle for power station.
  - Operate ultrafiltration plant (UF), reverse osmosis (RO) plant, and electro deionization (EDI) plant.
  - Make chemical wash for UF and RO.
  - Make chemical treatment for gas heaters and make treatment for its waste before get rid of it.
  - Follow up closed cooling system for units by determine hydrazine in it.
  - Work as Chemist in lab to make all tests for all samples taken from these plants during operation and regeneration such as PH, conductivity, turbidity, Hardness, biological oxygen demand BOD, chemical oxygen demand COD.
  - Make all experiments on spectrophotometer double beam to determine concentration of Ammonia, Hydrazine, Phosphate and Silica.
  - Work on atomic absorption to specify concentration of metals in samples.

- Make biological testes for potable and sewage water plants.
- Make calibrations and standard curves for lab apparatus in water treatment lab and on line apparatus.
- Work at counter and co counter systems for water treatment.
- Supervised on Metito (Emiratian Company) for water treatment and CTS for environmental affairs.
- Participated at Veolia (French Company) for water treatment in unit 9 in water treatment systems using UF, RO, and EDI.
- Work on chlorination system to produce sodium hypochlorite as liquid with 3% concentration units 5 & 6.
- Work with system with 12% concentration sodium hypochlorite units 7 & 8.
- Supervised on a new system for chlorination as gas in unit 9.
- Operate chemical system of fuel additives for mazout such as KI and Nalco.
- I have applicable good ideas in the field of water desalination and electricity that we can produce electricity and industrial water at lowest costs at the same time eco-friendly.
- I have goods ideas to get rid of different wastes in different industries and achieve high benefits from it.