

Holds a B. Sc. in Special Chemistry and has about 8 years experience working as Operation / Laboratory / R&D Chemist.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 14/08/1993  
Gender : Male  
Marital Status : Single  
Residence : Beni Suef

## EDUCATION

: B. Sc. in Special Chemistry, Al-Azhar University, 2015

## LANGUAGES

Arabic : Native Language  
English : Good

## COMPUTER SKILLS

: Windows, MS Office (Word, Excel, Access, Power Point), Internet  
: Adobe Creative Cloud programs (Photoshop, Illustrator, Premiere Pro and After Effects)

## TRAINING COURSES AND CERTIFICATIONS

: Conducted training course on Laboratory Instruments: Atomic Absorption Spectroscopy, Ion Chromatography, Turbidimeter, Bomb Calorimeter and SDI.  
: Design of desalination plants using "Toray" Membrane software.  
: Heat circuits system – Advanced track with Horizon Academy.  
: English course in Berlitz.  
: Quality Assurance from CAME Organization.  
: Effective communication skills from Dale Carnegie Organization.

## CHRONOLOGICAL EXPERIENCE RECORD

**Dates** : From 2018 till now  
**Employer** : Veolia Water Technology

- Projects** : • South Helwan Supercritical Power Plant 3x650MW  
• Assiut Supercritical Power Plant 1x650MW  
• Cairo West Supercritical Power Plant 1x650MW
- Job title** : Operation Chemist
- Job Description** : • Follow up the operation and maintenance of all (online analyzers) of SWAS (Steam Water Analysis System) as pH, Conductivity, dissolved oxygen, ORP, Silica, Iron and sodium analyzer for the 3 units.  
• Prepare all reagents and stander solutions required for the analyzers and performing all the calibration procedures for these in the three boilers.  
• Perform operation activities of ultra-filtration (UF), reverse osmosis (RO), Mixed bed (MB), condensate polishers (CPP), waste water system, oily water separator, sewage water system, boiler chemical feed systems, chlorine gas feed system and potable water.  
• Follow up the operation and regeneration of three Condensate Polishers System and Mixed Bed system.  
• Follow up the operation and maintenance of all analyzers as pH, Specific Conductivity, Turbidity, ORP, Silica, Residual Chlorine, Sodium and iron analyzers.  
• Performing the calibration and maintenance of all analyzers as pH, Conductivity, Turbidity, ORP, silica, Sodium and iron analyzers.  
• Laboratory devices (operation, prepare reagents and calibration):  
- IC (High Performance Ion Chromatography) – for Identification and determination anions and cations in water. Device from Thermo Scientific – USA.  
- TOGA (Gas Chromatography) – for Identification and determination dissolved gases in transformer oil. Device from DANI – Italy.  
- NG (Gas Chromatography) – for Identification and determination gas components in natural gas. Device from DANI – Italy.  
- UV-Vis Spectrophotometer – for determination the concentration of elements and molecules. Device from Shimadzu – Japan.  
- UV-Vis Spectrophotometer (Single beam) – for determination the concentration of elements and molecules. Device from Hach – USA.  
- Atomic Absorption Spectroscopy – for determination the concentration of elements by graphite tube technique and for determination the concentration of elements by flame technique. Device from Analytik Jena – Germany.  
- TOC (total organic carbon) – for determination the Total Organic Carbon. Device from Analytik Jena – Germany.  
- Bomb Calorimeter – for Determination of calorific value of petroleum products. Device from IKA – Germany.  
- BOD – for determination the Biological Oxygen Demand in water. Device from WTW – Germany.  
- COD – for determination the Chemical Oxygen Demand in water. Device from WTW – Germany.  
- Automatic High Voltage – for determination the Dielectric Strength Tester. Device from HV Diagnostics – USA.  
• Quality Control for different systems:  
- Quality Control for water samples:  
❖ The three supercritical boilers, during start-up and normal operation.  
❖ CPP water system.

- ❖ Closed Cooling water system.
- ❖ Auxiliary boiler and Reboiler water system.
- ❖ Mixed bed exchanger system.
- ❖ Reverse Osmosis water system.
- ❖ Ultra-Filtration water System.
- ❖ Raw water system.
- ❖ Potable Water System.
- Quality Control for Environmental affairs samples:
  - ❖ Waste water system.
  - ❖ Sewage water system.
  - ❖ Circulated water system.
  - ❖ Ashes.
- Analyze Oil samples:
  - ❖ Transformer Oils:
    - Dissolved gases, TC gases.
    - Moisture Content (Water Content).
    - Viscosity, Density and breakdown voltage.
  - ❖ Equipment Oils.
- Analyze Natural Gas samples: Percent of gas component.
- Analyze Hydrogen Purity in Hydrogen system (Electrolysis of water).
- Analyze Fuel samples: Calorific value.
- Perform Calibration Curve and operation for Apparatus:
  - ❖ Absorption Spectroscopy.
  - ❖ GC Apparatus: Transformer Oil Gas Analysis (TOGA) and Natural Gas (NG).
  - ❖ Ion Chromatography (HPIC).
  - ❖ Double and Single beam Spectrophotometer.
  - ❖ pH meter, Conductivity meter, Turbidity meter, Oil Content, Density meter, Bomb calorimeter, BOD, COD and Tentimeter.

- Dates** : From 2016 till 2018
- Employer** : SIPES for paints
- Job title** : R&D Chemist
- Job Description** :
- Develop formulations for products to match to market needing. Solvent based, Wood Care and Automotive paint like:
    - Solid color for automotive.
    - Base coat for automotive (metallic and pearl).
    - Filler and putty.
    - Duco colors.
    - NC (sealer and varnish).
    - Polyester (sealer and surfacer).
    - Acrylic (sealer and varnish).
    - Polyurethane (sealer and varnish).
    - UV coat for wood and plastic.
  - Compare between owner product and the competitor product to improve owner weakness points and develop our strongness points.
  - Making a new product we don't make it.
  - Making overall process in product development:
    - Testing.
    - Reports.

- Making trail batches in production.
- Follow product in market after the produced batch.
- Estimate alternative raw material match to original raw material technical properties with cost save or availability property.