100648-CHE-18OS-E-2008

Team Leader Chemist

Holds a B. Sc. in Special Chemistry and has about 14 years hands-on experience, including 13 years working in Commissioning, Start-up & Operation which related to industrial projects such as Power generation, Utilities, desalination, water treatments / wastewater treatment & Sewage treatment projects, Chemical laboratories.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 23/06/1987
Gender : Male
Marital Status : Married
Residence : Giza, Cairo

EDUCATION

B. Sc. in Special Chemistry, Cairo University, 2008

: Pre-master degree in analytical chemistry, Cairo University

LANGUAGES

Arabic : Native Language

English : Excellent

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

- : Training in Cairo University Center for Hazard Mitigation.
- : Training on Basic and site-specific training courses, constituting a program of concentrated study of power plant equipment and system theory and application by Cairo Electricity Production Company (for 3 months).
- : On-Shore operation and maintenance training for Cairo West Power Station (units 7 & 8) Water and Waste Water treatment for one month by METITO Company.
- Training on Operation & Routine protective maintenance of SO2 & NO & NO2 & NOx & CO and Flue Gas Analyzers by CTS (chemical and Technical Service) Company.
- : Training on Corrosion types and types of protection by Society of Mechanical Engineer.
- : Training on Air pollution and emission by Cairo West Power Station.

- : Training on all HACH ULTRA –POLYMETRON ultra-pure water analyzers SENTRY sample conditioning and analysis panel by IBERFLUID instruments (INITEC Energia).
- : Training on Hydrogen plant operation and maintenance at Cairo west thermal plant by Spirare Energy (INITEC Energia).
- : Training on all laboratory device such as Atomic Absorption, spectrophotometer (double beam), Turbidity, oil content, Karl Fischer, PH, conductivity, Dissolved oxygen, chlorine and...... etc.
- : Operation and maintenance training for potable water plant contain Nano filter by Middle East Company.
- : Training on HRSG engineering and design.
- : Training on HRSG pressure parts and vessel as (dearator, drum and ...).
- : Training on HRSG lay-out and equipment.
- : Training on HRSG operation activity.
- : Training on operation and maintenance of SWAS system (steam water analysis system) in Giza North Power Station.
- : Training on HRSG chemistry chemical cleaning and preservation.
- : Off-Shore training program for Giza North Power Station Water and Waste Water treatment (Jan./Feb. 2015) in United Arab Emirates (UAE).
- : On-Shore operation and maintenance training for Giza North Power Station Water and Waste Water treatment for one month by METITO Company.
- : Off-Shore training program for Giza North Power Station electrical transformer (Oct./Nov. 2016) in China.
- : Training on chemical cleaning process by VECOM Co.

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Jul. 2020 till now

Employer: VEOLIA WATER TECHNOLOGY

Job title : Team Leader Chemist

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Job Description

- Abu Rewash Sewage Treatment Plant phase 2: Perform all commissioning start-up and operation activities of sewage treatment plant (450,000 – 500, 0000 m3/day) including (Preliminary treatment Corse screen, fine screen, grit/grease removing system and primary clarifier).
- Port Said Seawater Reverse Osmosis Pilot Plant: Perform all commissioning startup and operation activities of Port Said reverse osmosis (RO) 500 m3/day including (Multimedia filter, Cartridge filter, RO seawater membrane skid, Pressure exchanger (PX) and RO chemical dosing systems).
- South Helwan Supercritical Power Project (3x650MW):
 - Perform all the remaining commissioning/start-up and operation activities of Ultra filtration (UF), reverse osmosis (RO), condensate polishers (CPP), waste water system, oily water separator, sewage water (STP) system, boiler chemical feed systems, chlorine gas feed system (3 x 1350 kg/hr.), potable water system and Follow up its operation during the project period.
 - Perform the CIP and CEB of Ultra filtration (UF) and reverse osmosis (RO) units.
 - Perform all performance test of Ultra filtration (UF), reverse osmosis

(RO), condensate polishers (CPP), waste water system, oily water separator, sewage water (STP) system, boiler chemical feed systems, chlorine gas feed system (3 x 1350 kg/hr.), potable water system.

- Follow up the operation and regeneration of three Condensate Polishers System (3 x 900 m3/hr.) and Demineralization System (Mixed Bed Exchanger).
- Follow up the installations and commissioning of water analysis lab, oil analysis lab and biological /environmental labs which included GC, TOGA, TOC, IC, Atomic Absorption, double and single beam Spectrophotometer, ...etc.

Dates : From Jan. 2020 till Jul. 2020

Employer : AC Boilers

Project : South Helwan Supercritical Power Project (3x650MW)

Job title : Power Project Chemist

Job Description: • Follow up the water chemistry of the three supercritical boilers, which may be AVT (O), AVTR, or oxygenated treatment (OT).

Follow up the preservation of the three supercritical hails

Follow up the preservation of the three supercritical boilers.
 Follow up the operation and maintenance of all analyzers of the supercritical boilers.

 Follow up the operation and maintenance of all analyzers of steam water analysis system (SWAS) as PH, conductivity, dissolved oxygen, ORP, Silica, Sodium and iron analyzers during the project period.

• Prepare all the reagent and stander required for operation of Silica, Sodium and iron analyzers in the three boilers.

 Performing the calibration and maintenance of all analyzers as PH, conductivity, dissolved oxygen, ORP, Silica, Sodium and iron analyzers during the project period.

 Follow up operation and maintenances of stack CEMS (Continuous Emissions monitoring system) of the three boilers which includes SOx, NOx, CO, O2 and Opacity analyzers.

 Performing the calibration of all CEMS analyzers SOx, NOx, CO, O2 and Opacity analyzers.

Dates : From Nov. 2018 till Dec. 2019

Employer : <u>EGYPTROL</u>, AC Boilers Subcontractor

Project: South Helwan Supercritical Power Project (3x650MW)

Job title : Consultant Chemist

Job Description

 Follow up and attend all commissioning / start-up activity of Ultra filtration (UF), reverse osmosis (RO), condensate polishers (CPP), waste water system, oily water separator, sewage water (STP) system, boiler chemical feed systems, chlorine gas feed system (3 x 1350 kg/hr.), potable water system and follow up its operation during the project period.

 Supervisor on chemical cleaning process of the three supercritical boilers (3x650MW), condensate and feed water systems which done by VECOM & ENSOL Company.

• Follow up the operation and regeneration of three Condensate Polishers System (3x900 m3/hr.) and Demineralization System (Mixed Bed Exchanger).

Follow up the CIP and CEB of Ultra filtration (UF) and reverse osmosis

(RO) units.

Dates : From Feb. 2018 till Nov. 2018

Employer: Techint Engineering & Construction

Projects: WEST DAMIETTA AND AL-SHABAB POWER PROJECTS, CONVERTING

EXISTING SIMPLE CYCLE TO COMBINED CYCLE, 4 x HRSG + one

Steam turbine

Job title : Lead Commissioning Chemist

Job Description : Start-up, commissioning and Operation for waste Water, oily water separator, sewage water, HRSG chemical feed system and Potable

Water Systems at West Damietta combined cycle power project.

 Start-up, commissioning and Operation for waste Water, oily water separator, sewage water, HRSG chemical feed system and Potable Water Systems at Al-Shabab combined cycle power project.

Start-up, commissioning of closed cooling cycle.

 Start-up, commissioning of Chemical injection systems and sampling systems.

• Start-up, commissioning of Condensate polishing system.

 Perform on-shore training for waste Water, oily water separator, sewage water, HRSG chemical feed system and Potable Water Systems to the clients in WEST DAMIETTA and AL-SHABAB POWER PROJECTS.

 Installed all laboratory devices of Main laboratory, oil analysis lab and biology laboratory with its tools, instruments, chemicals and furniture in WEST DAMIETTA and AL-SHABAB POWER PROJECTS.

Dates : From Jun. 2012 till Feb. 2018

Employer : CEPC

Project : Giza North Power Project (3x750MW) Combined Cycle

Job title : Senior Chemist (Operation, Lab. and Maintenance)

Job Description

 Start-up, commissioning and Operation for Pretreatment clarifiers, Ultra filtration (UF) & waste Water & oily water separator & sewage water and Potable Water Systems.

- Start-up, commissioning, Operation and Regeneration of Demineralization System (Cation, Anion, organic trap and Mixed Bed Exchanger).
- Follow up the operation and maintenance of chlorine gas feed system for potable, sewage, pretreatment and circulating system (3 x 720 kg / hr.)
- Start-up, commissioning and Operation for RO (Reverse Osmosis) and NANO filter plants.
- Follow up the chemical cleaning of NANO filter and RO (Reverse Osmosis) plant.
- Follow up the operation, CEB and CIP of Ultra filtration units.
- Describe and Follow up the mechanical and Electrical Maintenance.
- Controlling and calculating all Chemicals dosing and quantity of Chemicals used in water treatment operation.
- Perform all chemical analysis for determine chemical dose of Boiler (ammonia & hydrazine and phosphate).
- Perform all chemical analysis and Preparations to adjust the specifications of pretreatment & demineralized water and chemical feed systems.

 Follow up the environmental and social impact assessment of Giza north project.

 Perform Calibration and maintenance of all online analyzer such as (PH meter & Conductivity meter & Turbidity meter & Sodium analyzer & Silica analyzer & TOC analyzer & Residual Chlorine Analyzer and Dissolved Oxygen Analyzer).

Dates : From Jul. 2010 till Jun. 2012

Employer : CEPC

Project : Cairo West Power Project (units 7 & 8) (2x350MW)

Job title : Chemist

Job Description: • Handed over all the water treatment systems from METITO company after finishing all the reliability tests and performance tests.

 Follow up reliability tests and performance as per contract for pretreatment, dematerialized & condensate Polisher & Chemical feed & Waste systems and it's dosing of chemicals and make required analysis to adjust quality.

 Perform Calibration curve and analysis for double beam Spectrophotometer.

 Perform Calibration Curve and analysis for Atomic Absorption Spectroscopy.

- Perform operation and Calibration of all bench top analyzer as oil Content & Karl fisher & visible Calorimeter & PH meter & Conductivity meter and Turbidity meter.
- Follow up operation and maintenances of two air-monitoring shelters.
- Follow up operation and maintenances of stack CEMS (Continuous Emissions monitoring system).
- Follow up the efficiency of Oil Transformer.
- Follow up closed cooling dosing system.
- Perform training for online analyzer as (PH meter & Conductivity meter & Turbidity meter & Sodium analyzer & Silica analyzer & TOC analyzer & Residual Chlorine Analyzer and Dissolved Oxygen Analyzer) to all chemists in Cairo electricity Production Company every year.

Dates : From Sep. 2009 till Jul. 2010

Employer : CEPC

Project : Cairo West Power Project (units 5 & 6) (2x350MW)

Job title : Operation Chemist

Job Description: Maintaining Safe and Efficient operations for the following:

- Pretreatment clarifier & MM filters & Carbone filters and demineralization mixed beds.
- Condensate polisher systems.
- Chemical injection systems and required chemical analysis.
- Sodium hypo Chlorite injection systems.
- Waste water treatment facilities, Oil / Water separation units.
- Manage all the chemistry programs required to maintain boilers water/steam systems in the limits.
- Provide annual budget for chemistry operations.
- Natural Gas and Fuel Oil quality.
- Follow up the Transformer Oil quality.

Dates : From 2008 till 2009
Employer : EMA Pharm Company
Job title : Medical Representative

Skills:

- Perform training for online analyzer as (PH meter & Conductivity meter & Turbidity meter & Sodium analyzer & Silica analyzer & TOC analyzer & Residual Chlorine Analyzer and Dissolved Oxygen Analyzer) to all chemists in Cairo electricity Production Company every year.
- Trouble shooting, correction and corrective actions.
- Cost reduction & consumption optimization.