

Holds a B. Sc. in Special Chemistry and a Diploma in Analytical Chemistry. Has about 24 years hands-on experience working as Chemist at several Power Stations.

PERSONAL DATA

Nationality : Egyptian
Birth Date : 19/11/1974
Gender : Male
Marital Status : Married
Residence : Sharkia

EDUCATION

: B. Sc. in Special Chemistry, Zagazig University, 1998
: Diploma in Analytical Chemistry, 2007
: Master Researcher, Institute of Environmental Studies and Research, Ain Shams University

LANGUAGES

Arabic : Native Language
English : Very Good

COMPUTER SKILLS

: Windows, MS Office, Internet

TRAINING COURSES AND CERTIFICATIONS

: Operation on-shore and Maintenance by E.M.I.T for:
• Condensate Polisher system.
• Hypo Chlorination system.
• Demineralization water plant.
• Industrial waste water plant.
• Maintenance for on Line analyzers (Silica, pH, Conductivity and NaOCL conc.).
: Basics and site specifics training courses, constituting program of concentrated study of power plant equipment and system theory and application.
: Instrumentation of Chemical Analyses.
: Steam Boilers.
: Pollution and Boiler fuel problems and combustion Efficiency.

- : Occupational Health & Safety Management systems (OHSAS 18001:2007) Auditor / Lead Auditor, certified from IRCA (International Register of Certificated Auditors).
- : Fire fighting system & Safety in power station.
- : Fire fighting practical training in Suez Civil Defense Administration.
- : First Aid.
- : 5S Training and system implementation (Workplace organisation to ensure safe and efficient operations).
- : Leadership (Leaders Anatomy).

CHRONOLOGICAL EXPERIENCE RECORD

Dates : From Sep. 2009 till now
Employer : EDRA GLOBAL ENERGY subsidiary of China General Nuclear Power Corporation (CGNPC), was formerly known as E.D.F. (Electricité De France) Egyptian Operating Company (EOC)
Project : Suez Gulf Power Station BOOT Project (2x341MW)
Job title : Manager - Head Chemist

Dates : From Jun. 2008 till Aug. 2009
Project : Suez Gulf Power Station BOOT Project (2x341MW)
Job title : Chemist

Dates : From Jul. 2004 till May 2008
Project : Shoubra El-Kheima Power Station (4x315MW)
Job title : Shift Chemist

Dates : From Sep. 1999 till Jun. 2004
Project : Ayoun Moussa Power Station (2x320MW)
Job title : Chemist

Dates : From Aug. 1998 till Aug. 1999
Employer : CERAMICA CLEOPATRA GROUP
Job title : Chemist

Responsibilities:

- Responsible for produce, control the boiler water quality, check requirements respect of the physic-chemical parameters and corrosion protection.
- Responsible for thermal Desalination units (MED) & (MSF) Operation control, response for any Troubleshooting and issue work request for maintenance, calculate chemical injection, prepare reports, performing quality control analysis and Acid cleaning.
- Responsible for short- and long-term evaluation of the chemical processes of the plant.
- Recommending and implementing changes in chemical processes where appropriate.

- Coordination between company and regulatory agencies on sampling and operational issues related to plant chemistry and water treatment.
- Prepare data, reports and procedures for company use or submission.
- Sponsor for water treatment and conditioning systems. Creates annual operating budgets, operating procedures, spare parts inventory levels and maintenance plans for each system.
- Assist in the research and preparation of documentation for permits and licenses as requested.
- Conduct analysis and interpret results to analyze data to discover patterns and discrepancies.
- Review and recommend facilities improvement.
- Responsible for internal quality and safety control.
- Prepare training files and train operation staff as requested.
- Attending the daily work meeting. Communicates issues that cannot be immediately resolved to the operation and maintenance managers.
- Quality control inspection of the purchased chemicals for operation and laboratory uses according to standard methods.
- Preparing the quality control, water production and chemicals consumption reports.
- Control of the quality of water through performing all the required water analysis for the industrial water including (feed water, boiler water, steam, cooling water) and the environmental analysis for the seawater and wastewater according to the international standards.
- Establishing and implementing waste management procedures according to standards.
- Improve and implement the environmental protection action plan.
- Control of the dosing limits of the process water conditioning chemicals.
- Perfect in dealing with the pipelines & instrumentation diagrams and the processes flow diagrams and define locking required.
- Perfect in dealing with the software of the computerized maintenance management system (CMMS) of the plant.
- Performing all manual analysis to control all chemical process in the plant.
- Responsible for safe and efficient operations and environmental performance of all equipments.
- Safe operation in normal and emergency situations according to vendor recommendation and guidelines.
- Control the quality of potable water.
- Laboratory analyses by Spectrophotometer, Gas Chromatography, TOC, HPLC, particle size account, Viscosity meter, Atomic Absorption Graphite Furnace and flame. Troubleshooting and calibration curve preparation.
- Measuring air quality and stack emission gases (NO_x, SO₂ and CO) by portable flue gas analyzer.
- Control the quality of Hydrogen Generator unit.
- Inspection of all the raw materials that are use in production according to the quality procedure.
- Implementing the calibration plan of the laboratory instrument and online analyzers of the water / steam cycle (Hydrazine, Sodium, Silica, pH, conductivity, oxygen and Chloride analyzers).
- Responsible for operating the following:
 - Work with control systems (DCS).

- Desalination plants (MED) & (MSF) and performing chemical cleaning.
- Three streams of demineralization plants each one consists of (Carbon filter - Cat ion resin vessel - De carbonator - Anion resin vessel - Mixed bed vessel).
- Electro-chlorination plant produces sodium hypochlorite from seawater, perform monthly acid cleaning for the electrolyses each one (55 ton/hour).
- Four Condensate Polisher units (External Regeneration).
- Raw water process with quality control (Chlorination, Clarification and Filtration).
- Industrial waste oil treatment process with quality control (Oil-Water separator tank - Surge tank - Reaction tank - pH correction tank).
- Industrial wastewater treatment process with quality control (Neutralization tank - Boiler wash down tank - Retention Basin - Reaction tank - Clarification – Filtration - thickener - pH adjustment tank - Flocculate press dewatering) and Sewage Treatment unit by means of aerobic bacteria.
- Additional tasks:
 - Follow-up construction, commissioning, start-up activities of chemical systems and acid cleaning for the two boilers in (Ayoum Moussa Power Station).
 - Performing Acid Cleaning for two type of Desalination plants:
 - MSF in Ayoum Moussa Power Plant (2 x 5000 m³/day/unit).
 - MED in Suez Gulf Power Plant (2 x 60 m³/hour/unit).
 - Assistant Project Manager in (E.M.I.T), Process Engineer commissioning and start-up activities of chemical systems in (Cairo North Power Station).
 - Assistant Project Manager in (SIEMENS) for development the operation and control of chemical systems from PLC to DCS in (Shoubra El-Kheima Power Station).
 - Attend and help in acid cleaning for unit 4 in (Abu Sultan Power Station).

- Field of experience :**
- Water Treatment Specialist since 1999.
 - I have occupied the following poses during my work in different power plants, Chemist, Shift Chemist then Manager Chemist.
 - Master Researcher (Institute of Environmental Studies and Research) - Ain Shams University - for Characterization and sustainable management of sludge produced from seawater electrolysis in Power Plants.
 - Executing of chemical and physical water production as well as waste conditioning treatment in the power industry.
 - My work as a Process Chemist comprises the operation and maintaining of the quality of the following systems:
 - Chlorination (Liquefied chlorine gas, Sodium Hypochlorite, and Electro chlorination system).
 - Raw Water Treatment (Chlorination, Clarifiers, Filters).
 - MED & MSF Desalination units.
 - Ion Exchange (Makeup Demineralized).
 - Condensate Polishers.
 - Waste water and oil treatment (Clarifiers, filters, oil separation, sludge dewatering) and Sewage treatment unit by means of aerobic

bacteria.

- My work as a Boiler Treatment Chemist comprises the quality of the following activities:
 - The traditional chemical analysis.
 - The calibration and use of Spectrophotometers, TOC, HPLC, Atomic Absorption, Flame Photometer.
 - Calibration and use of On-line analyzers like pH meters, conductivity meters, Dissolved oxygen and Sodium Ion electrodes, Chloride and Silica analyzers.
- My work as a Manager Chemist comprises the following activities:
 - Preparation for annual operating budgets, operating procedures, spare parts inventory levels and maintenance plans for each system.
 - Purchasing chemicals for operation and laboratory uses and perform quality control inspection according to standard methods.
 - Prepare training files and train operation staff.
 - Prepare and compile data for daily, weekly and monthly reports.
 - Applying the hazard identification and risk assessment rules for all the activities and elementary systems of the plant and preparing the standard safe operating procedures and work instructions.
 - Planning and performing the internal audit plan for the integrated management system (IMS) against ISO 9001:2000, ISO 14001:2004 and OHSAS-18001 standards.