

Holds a B. Sc. in Special Chemistry, a Diploma in Applied Chemistry, M. Sc. in Inorganic Chemistry and PhD in Inorganic Chemistry. Has over 11 years experience working as Chemist.

## PERSONAL DATA

Nationality : Egyptian  
Birth Date : 24/12/1988  
Gender : Male  
Marital Status : Married  
Residence : Mahmoudia

## EDUCATION

- : B. Sc. in Special Chemistry, Beni Suef University, 2009
- : Diploma in Applied Chemistry (Petrochemicals), Alexandria University, 2012
- : Master's degree in Inorganic Chemistry, Damanhour University, 2018
- : PhD in Inorganic Chemistry, Menoufia University, 2021

## LANGUAGES

Arabic : Native Language  
English : Fluent

## COMPUTER SKILLS

- : Windows, MS Office, Internet

## TRAINING COURSES AND CERTIFICATIONS

- : A comprehensive diploma course in the skills of running, maintaining and designing desalination plants with a reverse osmosis system - Approved by the Academy of Water Technology Experts (Jan. 2022).
- : ISO 14001:2015 Environmental Management System Awareness, Knights of Safety Academy (Jan. 2022).
- : Fundamentals of Digital Transformation Certificate, Central Unit of IT Training, Menoufia University (2021).
- : TOEFL ITP with general grade "452", Language Center, Menoufia University (2021).
- : Training program on types of water desalination in power plants, Abu Qir Training Center (Nov. 2020).
- : Completed Training Course on Research Ethics, Research Methods, Communication Skills and Effective presentation Skills from Leadership Development Center, Damanhour University (from Aug. till Dec. 2017).

- : TOEFL ITP with general grade "575", Language Center, Damanhour University (Nov. 2017).
- : Training course on operation and maintenance of steam stations, Abu Qir Training Center (May 2017).
- : Training in Abu Qir Training Center (Oils and its Chemical Properties) (Oct. 2015).
- : Civil protection course, Civil Protection Department in Buhaira Governorate (Jul. 2014).
- : Training in Sedpic Company for petrochemicals (Aug. 2010).
- : ICDL (International Computer Driving License), Information System Institute (Nov. 2008).

## CHRONOLOGICAL EXPERIENCE RECORD

- Dates** : From Jun. 2022 till now
- Employer** : Ansaldo Caldaie & [EGYPTROL](#)
- Projects** :
  - Elwalidia generation sector, Assiut Supercritical Power Plant 1x650MW (CP-105), EGYPT (from Apr. 2023 till now)
  - El-Kureimat generation sector, South Helwan Supercritical Power Plant 3x650MW (CP-105), EGYPT (Jun. 2022 – Mar. 2023)
- Job title** : Power Project Chemist

- Dates** : From Oct. 2012 till May 2022
- Employer** : WDEPC
- Project** : Damanhour Power Production Sector:
  - Steam Power Plants 300MW (Ansaldo boilers)
  - Steam Power Plants 3x65MW (German Boilers)
  - Gas Power Plants 4x25MW (Hitachi boilers)
  - Combined Power Plant 1x58MW (GE boilers)
- Job title** : Chemist (Analyst & Operation)
- Job Description** :
  - Responsible for analysis of the water samples in all stages of chemical treatment, pre-treatment and ion exchange treatment water treatment units, industrial wastewater treatment unit, internal samples of Water and steam circuit inside the unit 300MW and unit 3x65MW, steam turbine and high-pressure boiler.
  - Make required analysis for boiler water to adjust and Control Boiler water quality and internal water Treatment for boiler and Heaters.
  - DCS System Operator for PGP control for Ion exchange plant, pretreatment plant, drinkable water plant, waste plant, sewage treatment plant & demineralization plant).
  - Shift Chemist, responsible for demineralized water treatment plant, drinking water plant, industrial waste and sewage treatment plant and all chemicals injected in these for adjust specifications according to boiler specifications as well as environmental controls.
  - Responsible for chemical injection operations in the total water and steam circuit in the units During the period of loading the unit on the network in the normal state to maintain specifications, as well as chemical preservation of the boiler and maintaining all chemical specifications required during entry or exit of units from service on the

electrical network.

- Make required in acid cleaning for Sodium hypo chloride unit and the hypo pipes.
- Responsible for RO plants, injection operations, chemical treatment, methods for determining dosing of chemicals, maintenance of faults, methods of chemical washing and design skills of the reverse osmosis plants.
- Responsible for Protecting the unit from corrosion by (removing the causes of corrosion - injecting chemicals to prevent corrosion).
- Responsible for providing consumption water for the boiler, drinking water for the unit and the colony.
- Controlling the works of the unit in coordination with the engineer responsible for operating the entire station.
- Provision of hydrogen gas needed for cooling on the generator.

Publications:

- Ahmed, A. M., Ayad, M. I., Eledkawy, M. A., Darweesh, M. A. & Elmelegy, E. M. (2021). Removal of iron, zinc, and nickel-ions using nano bentonite and its applications on power station Wastewater. Heliyon, 7(2), e06315.
- Removal of Aluminum (III) from water using agriculture product, M. A. Eledkawy et al., J Ecosys Eco graph 2018, Volume: 8 DOI: 10.4172/2157-7625-C2-035.

- Field of experience :**
- Commissioning, Operation & Laboratory Chemist.
  - All water treatment system, water steam cycle treatment in high pressure boilers.
  - More than 11 years' experience of progressive employment in power generation projects in commissioning, start-up, operation with applied experience in demineralized water plants, ion exchangers, Reverse osmosis, ultra-filtration, wastewater treatment, sewage treatment, Desalination, chemical analyzer online devices and chemical laboratory instruments and high pressure boilers SWAS analyzers devices maintenance, reagent preparation, Calibration, chemical cleaning start-up and normal operation, heaters chemical washing, closed cooling water treatment, boiler shutdown and preservation methods of High pressure boilers.