

Przemysł chemiczny / Chemical sector

- Strona 1
- Chemical industry operator
 - Strona 2
 - Strona 3
- Chemical technology technician
 - Strona 4
 - Strona 5
 - Strona 6
 - Strona 7
- Chemical analyst
 - Strona 8
 - Strona 9
 - Strona 10
 - Strona 11
 - Strona 12

Chemical industry operator



Source: LEARNETIC SA, licencja: CC BY 4.0.

It is chemical industry devices operator's job to monitor the proper operation of the equipment and remedy the damage, provided that the system has failed. Since there is a little tolerance margin it is absolutely necessary to do one's job with utter thoroughness and precision. Such a person must be disciplined as it is their duty to do as instructed.

The job involves monitoring the operation of machines and devices, assessing their technical condition, packing, marking and storing materials, as well as preparing the equipment for the maintenance works, ongoing repairs, and overseeing the entire production process.

Due to the fact that the chemical industry devices operators are exposed to several hazardous factors such as changing temperature, dust pollution, chemical reagents, bothersome noise, rotating machine parts, or emission of technological gases, a person who wishes to become an operator must meet certain requirements other than just high qualifications and competence.

A chemical industry devices operator should feature:

- stress immunity,

thoroughness,
the ability to make quick and informed decisions in a critical situation,
perceptiveness,
attention span,
good hearing (sensitive to specific sounds),
strong sense of responsibility,
discipline,
precision,
technical skills,
spatial imagination,
resourcefulness,
independence,
endurance,

The job is highly promising, but it requires constant improving of one's qualifications. New tools, modernised technological solutions, and projects keep emerging. That's why a chemical industry devices operator is expected to participate in appropriate trainings and courses. Once they have graduated from a specialised school, they obtain a certificate that confirms their professional qualifications both as a technologist in general, and specifically, as a chemical industry devices operator.

A well-trained operator will find employment in fertilisers production, food industry, pharmaceuticals production, paper, paint and lacquer production, chemical labs, scientific institutions, or chemical processing plants.

Chemical technology technician

- patience.



Source: LEARNETIC SA, licencja: CC BY 4.0.

A job of a chemical technologist is commonly recognised as an age-old profession, although it has been differently called over time. Currently it refers to a very demanding profession, one that requires extreme caution for it is not too difficult to make a mistake that may cost a company huge financial loss. Due to the constant contact with chemical substances it is necessary to wear protective clothing, a helmet, and goggles.

A person who works as a chemical technologist is occupied with producing semi-finished and finished chemical products, operating the chemical industry equipment, organising and monitoring the technological processes and carrying out lab tests.

A chemical technologist participates in and oversees the technological processes and unit operations, they conduct lab and technological tests of new products, modernise the production methods, take part in estimating norms of material consumption, and perform research and implementation works related to developing the new and improving the already existing technological methods of production.

Since the job is a highly demanding one, persons who wish to do it must possess the following character traits and skills:

- technical and organisational skills,
- composure, endurance, and systematicity,
- attention span,

- the ability to make quick decisions,
- the immunity to varying work environment,
- physical fitness and mental well-being,
- discipline and patience,
- willingness to improve one's skills,
- the ability to cooperate with others,
- thoroughness,
- the ability to keep one's head cool in a critical situation.

The job is in high demand everywhere in the world and so the chemical technologists must constantly improve their skills and broaden their knowledge.

Chemical technologists will find employment in organic and inorganic synthesis plants, petroleum and olefin refineries, rubber production and cleaning of natural gas plants, plastics processing plants, pharmaceutical plants, factories producing paint and lacquer, water processing plants, municipal wastewater treatment facilities, workshops and offices of companies working in construction and technology business, or scientific institutions.

Chemical analyst



A chemical analyst is a person whose job it is to make sure that anything people have contact with is properly inspected. They search for abnormalities that are potentially dangerous for humans.

A chemical analyst prepares the lab equipment and reagents to be used in analytical tests, takes the samples and prepares them for analysis, performs the tests on materials, semi-finished products, products, and supporting materials. They also conduct bioanalytical and environmental analyses.

The job of a chemical analyst involves carrying out analytical tests of materials and specialised analyses that are required by the industrial procedures, but it is also their duty to make predictions.

The profession is highly responsible, one where there is no room for rush, negligence, or imprecision. It often requires repeating certain actions several times, so an analyst must not be discouraged easily. Stable movements are of high importance, as a chemical analyst is constantly exposed to the hazardous influence of the reagents.

Thoroughness and a strong sense of responsibility are very much valued in a chemical analyst, no less than technical skills, physical fitness, well-developed senses, attention span, and systematicity.

The ability to work in a team is also important since each and every sample undergoes several analyses performed by different persons. It must not be forgotten that the knowledge of foreign languages is crucial as well. Chemical analysts must be able to understand guidelines and read the specialised literature written in a foreign language.

The profession of a chemical analyst requires constant willingness to improve one's skills, as the knowledge gained at school is merely not enough. The market is constantly changing and new spectrophotometric technological solutions are arriving on it all the time. This is the reason why courses and conferences for chemical analysts are frequently organised. Due to the similarity of methods applied in scientific research throughout the world, a chemical analyst will find a well-paid job not only in the country, but also abroad.

The job involves working in a lab environment, production halls, or measurement stations, where is it necessary to wear protective clothing.

A chemical analyst will find employment in such fields as chemical industry, food industry, petrochemicals and in scientific institutions, hospitals, clinics, pharmaceutical and medical labs, or at universities.