

Chemistry is the science that studies matter and the changes that occur to it, specifically by studying its properties, structure, composition, behavior, interactions, and what they cause through them.

Chemistry studies atoms and the bonds that occur between them to form molecules, and how these molecules are later connected to form matter, and it also studies the interactions that occur between them..

Chemistry is of great importance in our lives. It is involved in many fields and plays an important role in industries of various types, such as the food industry, the manufacture of cleaning materials, paints, dyes, and the pharmaceutical industry, and it has other applications in medicine and other sciences.

The body is mostly composed of water, hydrogen, and oxygen. Nearly 99% of the human body's mass consists of six elements: oxygen, carbon, hydrogen, nitrogen, calcium, and phosphorus. Only about 0.85% consists of five other elements: potassium, sulfur, sodium, chlorine, and magnesium. necessary for life..

Chemistry is divided into five basic sections, and each section contains many branches, and the main sections are:

Inorganic chemistry: It is the study of the properties and interactions of inorganic compounds. There is no clear distinction between organic and inorganic chemistry, and there is significant overlap between them, the most important of which is in another branch called organometallic chemistry.

Organic chemistry is the study of installation, properties, and reactions of organic compounds.

Physical Chemistry: It is the study of the physical origin of chemical reactions and systems. More specifically, it studies changes in energy states in chemical reactions. Among the branches of interest to chemists specializing in thermochemistry, kinetic chemistry, quantum chemistry, statistical mechanics, and spectroscopy.

Biochemistry: It is the study of chemicals and chemical reactions that occur in living organisms.

Analytical chemistry: It is the analysis of samples of a substance to determine its chemical composition and how it is structured.

The importance of chemistry

Chemistry is one of the most important sciences in daily life, and in the following lines we will show you the importance of chemistry in our lives:

Chemistry has a major role in the medical sector and the pharmaceutical industry. Various medicines can be manufactured using chemical materials, by examining these materials and testing their ability and effectiveness in eliminating diseases.

This science contributes to identifying toxic substances that may harm the health of living organisms, distinguishing beneficial substances, and then staying away from toxins and avoiding their use.

This science helps in the process of improving materials, by adding other materials that help improve their properties, which increases the usefulness of the materials and facilitates the process of using them in the manufacture of various high-quality products and industries.

Chemistry is used in agricultural fields, through the manufacture of tools used in the irrigation process, in addition to the manufacture of chemical fertilizers that improve the fertility of agricultural soil.