



CHEMISTRY AND ITS TASKS, IMPORTANCE OF CHEMISTRY

Kochkarova Yulduz Soliyboy kizi Student of Karakalpak State University named after Berdak

Abstract: This article is about chemistry, that is, the science of chemistry, about its development. The more any specialist pays attention to the methodology of his work, the greater results he will achieve. The main teaching method of the teacher's work is the method of teaching and educating students. The basis of the chemistry teacher's work is the methodology of teaching chemistry.

Key words: chemistry, Lomonosov, transformation industry, industrialization.

Chemistry is a science of nature, which provides detailed information about material bodies such as physics, biology, and mineralogy: Chemistry is the science of substances, their composition, properties, structure, and changes in them. In chemical changes (reactions), products with different composition and other properties are obtained from raw materials. In chemical changes, of course, the composition of the initial substances changes, but in physical changes, this point is not observed. The progress of chemical processes depends on the composition of the substances involved in the reaction and the structure of the particles that make them up. Therefore, it is important to study the relationship between the structure of substances and their ability to react.

Several thousand years ago, people widely used chemical phenomena in extracting metals from ores, preparing metal alloys, making glass and similar processes. Russian scientist M.V. Lomonosov published in 1751 "Two words about the benefits of chemistry" ("Slovo o polze khimiya"), "Chemistry extends its slaves to all works related to human needs. No matter where we look, everywhere we see the achievements made by the application of chemistry." Using the knowledge gained from chemistry, it is possible to create substances with new properties, as well as to prepare products with wonderful properties that are not found in nature. The abundance of crude oil, coal, natural gas, mineral salt and ores necessary for the chemical industry in our country makes it possible to create various new chemical products. Like other republics, chemistry and chemical industry has developed in Uzbekistan. All branches of scientific research institutes in our republic (inorganic, organic, analytical, physical chemistry) have developed, and highly qualified specialists have emerged. Chirchik "Elektrokhimprom" association, Kokand, Samarkand, Fergana, Navoi, and Almalyk chemical plants supply the national economy with necessary fertilizers. Chemistry can be called an industry of great changes. It allows synthesizing materials that are not found in nature and using them to create various machines and tools, to build residential buildings and to produce consumer goods.

The chemical industry produces synthetic rubber, plastic masses, artificial fiber, synthetic dyes, medicines and many other substances. Products of the main chemical industry - acids, alkalis, salts - are produced in large quantities. In agriculture, mineral

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fertilizers, chemical means of plant protection, substances that regulate their growth, chemical substances added to animal feed, most polymer materials are widely used.

Metals, which are the basis of the industrialization of our country, are extracted using chemical methods and their corrosion is protected by chemical methods. The importance of chemistry in the development of scientific technology is that. Fuel that moves rockets, alloys and metals used in making rockets, spacesuits, etc. cannot be imagined without chemistry. In recent times, environmental protection has become one of the most important issues facing humanity, i.e. cleaning of flowing water, controlling the purity of water and air, etc., is solved by the science of chemistry. Chemistry studies substances and their changes. In studying these changes and correctly imagining them, M.V. Lomonosov's atomic-molecular theory helps a lot. (1741) Atomic molecular theory studies the internal structure of matter. The essence of atomic molecular theory is as follows. All matter consists of molecules. Molecules are in constant motion. Molecules consist of atoms, and atoms, like molecules, are in constant motion. Certain (and) mass dimensions of atoms. Simple substance molecules are composed of 1 different atoms, and complex substances are composed of different atoms. In chemistry, the atomic molecular doctrine was adopted in 1860 at an international meeting of chemists, and it was defined as follows. A molecule is the smallest particle that retains the chemical properties of a particular substance. Atom is the smallest particle of a chemical element. The chemical property of an atom is determined by its structure. The chemical property of a molecule is determined by its composition and chemical structure. Let's look at the basic concepts of chemistry. Chemical element - From the point of view of atomic molecular points, any individual type of atoms is called an element, or it is a set of atoms with the same chemical properties.

In our country, great privileges are given to the teacher and the education of the young generation. For this reason, it is necessary for higher education to accept young people who are educated, spiritual and have a unique mindset of the Uzbek nation, to arm them with knowledge and to raise them to the level of a great person in the highest sense. The service of science teachers is great in doing this. The teacher should be a well-rounded expert in chemistry. In addition to chemistry, chemical knowledge and practical methods, it is necessary to know the psychology of children depending on their age. He must perfectly master the methods of implementation of all stages of advance education. He should learn the didactic foundations of the subject he teaches, take into account the general methods of imparting knowledge to children, and convey knowledge based on his life experience. The teacher must constantly improve his knowledge, that is, master pedagogical technologies, try to perfect the educational process. Because if the teacher stops in his research, the next day he will have a stereotyped way of thinking, and he will be out of the group of people with a high level of desire, and the respect for him will decrease among the students, and the children will lose their desire and imitation of him. Each teacher should fill it with his own experience, without copying the experience of others, and then the learning process will be perfect, because each person has his own style and personal qualities. Methods of teaching chemistry are studied in a certain order. First, the main tasks of the study process are considered. Then the methods of organization of the learning process, teaching tools,

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form and methods of scientific organization of the teacher's work are considered. Chemistry teaching methods are not only imparted through lectures, students need to know the methods of demonstration of experiments, lesson planning, methods of solving chemical problems, teaching methods, etc. Therefore, they should do coursework and work independently in pedagogical practice. When teaching styles, it is necessary to make excursions to schools, academic lyceums, vocational colleges. It is important to organize special courses and internships from special courses.

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