CHEMISTRY AND ITS PROPERTIES

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Abstract: The material world around us is made up of bodies. They differ in size, color, mass, shape and other characteristics. What they use for a purpose is called buy urn. The fact that objects have different properties depends primarily on their composition. The components of the body are called substances.

Keywords: chemistry, bodies, synthetics, history of development.

Nowadays, a lot of clothes, household items, details of machines, synthetic-derived substances-plastics, artificial leather, rubber, chemical fibers - are being prepared. So, it will be appropriate to conclude that" chemistry is a science that studies the properties of natural and artificial substances, the processes of formation of new substances due to the change in their composition." Among them is the production of a huge number of medicines and herbal remedies. From these, it can be seen that from the main tasks of chemistry, bin consists in improving the material and domestic conditions of people and ensuring their health. The current tasks of chemistry arise from the study of problems that have not yet been fully solved in order to satisfy the material and spiritual needs of society, that is, the search for their solution. As the most important problems waiting for a solution, the following can be indicated: (a) a more complete satisfaction of the population's need for food and extensive consumer goods; b) to find and introduce sources of energy supply of the national economy into production; d) to find ways to study non-chemical processes in a living organism and control them; e) chemical protection of the environment issues-to develop and implement perfectly; f) to create technology without waste; g) to use the nergy of chemical changes.

A brief development of the science of Kirnyo, the history of human beings has long been consuming vegetable products rich in sugar, fat and protein. They knew that 6 thousand years of awal gold and silver jewelry would be ready. Margimush was used in clearing against agricultural pests in China 2,000 years ago BC. In those times, turii dye substances from plant and animal organisms were prepared in Egypt, and medicinal substance from zinc and sulfur. All peoples have known the process of bijection from a very old time. Hai was a distinctive spiritii drink of a people. Those who made it from grain honey or grape juice. Vinegar was not only used in food preparation, but was also used to extract paint. But in those times, only mahsui people were involved in chemistry.

Organic chemistry is the science that studies the formation of organic compounds by carbon with other elements and the laws of change of these compounds. A branch of chemistry. The main task of organic chemistry is to obtain organic compounds in their pure form and determine their structure, to study the mechanism of reactions, the connection between the chemical structure and properties of substances, as well as to research ways to use them in practice. Organic compounds are extremely important in the human existence of the Earth and its practical activities. All the main components that make up living organisms are proteins, nucleic acids, carbohydrates, fats, vitamins, hormones and other — organic compounds. Almost all synthetic and natural fibers, plastics, pesticides, dyes, medicines and shahrik. also applies to organic compounds. Currently, organic compounds that embody amazing properties are synthesized from 250 to 300 thousand per year, while the total number of them exceeds 10 million. Some organic substances have been known to man for a very long time. For example, people knew that grape juice would turn into alcohol when it was dissolved, and acetic acid when the mussel stood outdoors. Vegetable oils and animal fats have long been used as food. The use of soap and various dyes has been known since ancient times.Pure organic

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matter was initially produced by arab alchemists in the 900s. But organic chemistry as a science took shape in the 2nd half of the 19th century. The term" organic chemistry " was first introduced to science in 1827. Ya. Berselius entered. In 1828, the German chemist F. Violer synthesized mochevina in laboratory conditions. German scientists A. Kolbe, F. A. Kekule, a Scottish chemist. Cooper et al found that a carbohydrate has 4 valences, its atoms having the property of forming a ring. Later Organic Chemistry A. M. Butlerov develops on the basis of the structure theory of organic compounds (1861). F. Kekule proposed the modern cyclic formula of benzene (1865). Ya. X. Vant-Goff and the French chemist J. Le Bel advanced the theory of spatial arrangement of atoms in a molecule. As a result of the development of electronic and, in particular, quantum-mechanical imaginations, the orientation of chemical bonds in space, the difference between the properties of saturated and unsaturated compounds, the aromaticity of benzene, the interaction of atoms in molecules of organic compounds were explained. With the help of physical methods, chemical bonds in organic compounds methods, the chemical structure of some complex organic compounds — vitamin B12, penicillin, chlorophyll, a number of proteins, nucleic acids and others-was anicized.

A descriptive property to organic compounds is that carbon atoms are able to form straight lined, chain-shaped, 1, 2, 3 and multi-ringed (nucleated) or carapace compounds through a simple, double or triple bond with each other. The basis of such compounds can be replaced by atoms other than light, chain carbohydrates. These atoms are called heteroatoms (mas, oxygen, nitrogen, sulfur). According to its structure, organic compounds are divided into aliphatic compounds (open, chain hydrocarbons and their derivatives), closed carbon chain carbocyclic compounds (alicyclic compounds, aromatic compounds) and heterocyclic compounds. Hydrocarbons and their derivatives that do not have a double bond or 3 bonds in their chain are saturated compounds, while those that hold a double bond or 3 bonds are unsaturated compounds.

A genetic array can be induced by exchanging hydrogen atoms in each hydrocarbon for different functional groups, mas, ethane — ethylchloride — ethanol — acetic aldehyde — acetic acid, etc.k. These include hydrocarbons RH (no functional group), halogenated derivatives RHal, alcohols ROH, aldehydes RCHO, ketones R,COR2, carbonic acids RCOOH, primary, secondary, and tertiary amines RNH2, r2nh, and RN nitrobirikms RNO2, thiols (markeptans) RSH, sulfides R2S, and other carbon — carbon adducts are also included among the functional guruchs.

Homologous series arise when organic compounds with similar functional groups with the same structure differ in the number of -SN2 - groups in the carbon chain.

In addition to the carbon and hydrogen atoms in the molecule and the organogenic atom (Hal, O, N, 8), compounds with carbon-bonded elements are elemental inorganic compounds.

V. Russian scientists in the development of organic chemistry. V. Markovnikov, N. N. Zinin, A. Ye. Favorsky, S. V. Lebedev, N. D. Zelinsky, A. N. The services of Nesmeyanov and others are great.

There is also a significant contribution of chemists of Uzbekistan in the development of organic chemistry. In the 20s of the 20th Century, professor S. at the Faculty of chemistry of the University of Central Asia. N. Led by Naumov, he made observations on the determination of the structure of quinone and tolukhinone — dibromides (1933). 2,3-cyclogexanedione 1,4-dicarbon ether structure has been studied. From the derivatives of this substance, quinoxalin, monoxalin, dioxym, monogibrazone, pi-razolone, bipyrazolone, oazones were obtained, brine oil was studied and the content of hydrocarbons and sulfur was determined.

In the 40s, O. S. Under the leadership of Sadigov, the intake of organic acids, biological stimulants, vitamin RR, quinosidine and others was established. In the 50s, S. Yu. Yunusov went on to study the extraction and composition of unique organic substances contained in the plants of Uzbekistan. Alkylation and alkylation of aromatic compounds were performed (I. P. Sukervanik et

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al. Orthocyclogexylphenol was synthesized (prof. A. R. Abdurasulova). Alkylation reactions of various organic compounds, derivatives of huminic acids have been studied (prof. A. B. Ram). A. S. Sultanov applied it in practice by synthesizing effective catalysts for the oil refining sector. His pupils were M. F. Professor A with Obidova. Abdukodirov also made a significant contribution to the development of organic catalysis.

Metallurgical compounds (prof. 3. M. Minulkin) and kumir chemistry (prof. D. T. Zambramsky) was developed. A method of fractional separation of humic acids by deposition with electrolytes was recommended for use. Carbonylation reactions of organic compounds have been researched (Yo. Yu. Aliyev).

Over the next 30 years, the chemistry of phosphororganic compounds, physiologically active substances, elementorganic compounds, complexons, and organomineral fertilizers developed rapidly. In this regard, a. A. Abduvahobov, Sh. I. Solihov, S. The work of Iskandarov and others is admirable.

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