

## Reading 1. Chemistry and other sciences

Asides being a science by its own right, Chemistry helps other sciences and industries. Chemical principles contribute to the studies of physics, biology, agriculture, engineering, medicine, special investigation, oceanography and other disciplines.

Chemistry and Physics are sciences that overlap, because both of them are based on the properties and behavior of matter. Biological processes are of chemical nature. The metabolism of food to give energy to living organisms it's a chemical process. The knowledge of the molecular structure of proteins, hormones, enzymes, and nucleic acids helps Biologists in their investigations on the composition, development and reproduction of living cells.

Chemistry plays an important role in the fight for the decrease of food in the world. The farm production has increased with the use of fertilizers, pesticides and improved seeds. Freezers make possible the industry of frozen food, which preserves big amounts of food that in other way will spoil. Chemistry also produces synthetic nutrients; there are a lot of things left to finish as the worldwide population increases in relation with the available fields for agriculture. The increasing needs of energy have brought difficult environmental problems as the pollution of water and air. Chemists and other scientists are working to find a solution to these problems.

Through the development of new drugs the advances in medicine and chemotherapy, have contributed to the elongation of life and the relief of human pain. Over than the 90% of medicines used today on the United States have been commercially developed on the last 50 years. The plastics and polymers industries, have revolutionized the textile and packaging industries, and produce useful and long lasting construction materials. Energy obtained out of chemical processes is used for transport, heating and lighting. Every industry does virtually depend on chemical products, for example: petroleum, steel, pharmaceutical, electronics, transport, cosmetics, clothing, aeronautics and television industries.

Hein M., "Química", Grupo Editorial Iberoamericana, pág. 7, 1992.