

## The Current Trends in Organic Chemistry

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As is known to all, organic chemistry is everywhere in people's colorful life. For a country, chemical industry is very important and accounts for a high proportion in GDP. Organic chemistry is a subject of studying organic compounds, synthesis, structure, performance, application and the related theories. These years, a rapid growth have seen in the organic synthetic processing of both simple and complex molecules, aimed at meeting the needs of society in all aspects of life since successful synthesis of urea in 1828. Many efforts have been devoted to the development of new biologically active compounds, new materials with innovative properties, such as bio-compatibility, new catalysts allowing highly selective transformations, and technologies facilitating the organic chemistry processes, and so on. Organic chemistry is the basis of a series of related industries, and it provides the theory, technology and materials for related disciplines such as materials science, life science, environmental science, etc.

In recent years, because of the introduction of computer, makes it easier to determine the structure of organic chemistry, molecular design and synthesis of design, so this subject develops more quickly. In the 21st century, organic chemistry faces new development opportunities. On the one hand, with the development of organic learning itself and new analytical technology, physical method and biological method, human in understanding the performance of organic compounds, reactions and synthesis will be updated; On the other hand, with the development of materials science and life science,

and the new requirements for the environmental and energy, organic chemistry is facing a new topic and challenge.

I predict the following fields will be greater development. First is physical organic chemistry. Physical organic chemistry is a discipline to use physical and chemical method to study the organic chemistry problems. It is a foundation. The development of modern spectrum analysis and microscopy techniques provides the basis for the characterization of molecular structures. Second is interdisciplinary, like organometallic chemistry, pharmaceutical chemistry, biochemistry or materials chemistry. Interdisciplinarity can make the best of both worlds and produce more new things. Last but not the least is green chemistry. Facing the great pressure of environmental protection, green chemistry proposed some new ideas. The base of this point is to research and improve the chemical reaction and related process, which will reduce or even eliminate the by-products and solve the problem of environmental pollution from the source.

In a word, Organic chemistry plays an important role in energy, information, materials, population, health, environment, and implementation of the defense plan. It will promote the development of science and technology, social progress and improve the quality of human life, the environment for the survival of the human race. Organic chemistry is a highly innovative discipline. International scientific development and the competition are fierce, and discipline integration and cross also become the general trend of scientific development. I believe organic chemistry will continue to get rapid development.

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