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SOLOMENKO Liudmyla, Ph.D. (biological), dots., Senior Research Fellow of department of scientific and methodological work and abstracting National Scientific Agricultural Library of the National Academy of Agrarian Sciences of Ukraine (Kyiv, Ukraine) <u>solomenkoludmila@gmail.com</u> ORCID: <u>https://orcid.org/0000-0001-8224-</u> 3548

## THEORETICAL AND METHODOLOGICAL BASIS OF THE EVOLUTION OF SCIENTIFIC VIEWS ON XENOBIOTIC RESEARCH 20TH CENTURY

## Summary

The article traces the evolution of scientific views on xenobiotic research with the development and formation of modern ecology during the 20th century. A historical analysis of the relationship between society and nature was conducted, which shows that the intensification of anthropogenic transformations in the biosphere was not so much related to the growth of the population as to its technical equipment and social organization of work. With the development of society, with the formation of large social associations (tribes, tribal unions, states), these processes continuously intensified. Therefore, the stages of interaction between society and nature correspond not only to the stages of improvement of the means of production, with which people directly influenced nature, but also to the stages of the development of industrial relations, to the stages of the development of human society itself. It is shown that at the end of the 20th century, at the third stage of the interaction between society and nature, when a functionally closed global socioecosystem had already formed, there was a need for scientific knowledge on which the rules and safety assessment of synthetic chemicals and drugs would be based, which became an important motivation for the study of xenobiotics. Actively developing applied branches of modern ecology, which investigate the xenobiotic properties of synthetic substances and their impact on the environment. Research has shown that the International Society for the Study of Xenobiotics (ISSX) was founded at this time and became the main scientific organization for researchers interested in the metabolism and distribution of foreign substances. At the end of the 20th century, domestic scientists actively began to study the hygiene of the use of pesticides,

investigating their xenobiotic properties. It has become necessary that scientists working in such diverse fields as clinical and fundamental pharmacology, biochemistry, toxicology, ecotoxicology and oncology are involved in the study of the metabolism of synthetic substances both in universities and research institutes, as well as in pharmaceutical, chemical, agrochemical, plant protection, food, tobacco and cosmetic industries.

*Keywords:* evolution, scientific views, xenobiotics, xenobiotic research, stages of interaction between society and nature, ecology.