DIAGNOSTICS OF LIVING ORGANISMS BY USING SIGNALS OF OWN ELECTROMAGNETIC FIELDS OF BIOLOGICALLY ACTIVE POINTS

P. Tyapin
Supervisor – G. Lyashenko
Kharkiv Vasylenko National Technical University of Agriculture
(Department of Biomedical Engineering and Theoretical Electrical Engineering,
19, Rizdvyana street, Kharkiv, 61052, tel. (057) 712-42-32)
E-mail: tte_nniekt@ukr.net

The possibility of diagnosing living organisms by analyzing the signals of own electromagnetic fields of biologically active points of biological objects is considered.

Traditional methods of medical control of the physiological state of a living organism are biochemical blood tests, radiography and x-ray, etc. At the same time, new, more advanced methods of control and research are being intensively developed.

The aim of the research is to substantiate the possibility of diagnosing living organisms by analyzing the signals of own electromagnetic fields of biologically active points of biological objects.

The perspective direction of the research is the study of the regularities of the functioning of the biological object. The registration and analysis of electromagnetic fields and radiation of biological objects are considered to be of paramount importance. This is due to the fact that the change in electromagnetic fields of biologically active points is much earlier than external and clinical diagnostic features, which allows you to diagnose at the earliest stage of the disease and allows you to begin timely treatment.

The electromagnetic field, which is fixed in biologically active points of the organism, has high diagnostic value. On the basis of the analysis of recent research it is proposed to use a volt-ampere characteristic of biologically active points for the diagnostics. Comparison of the volt-ampere characteristic of biologically active points of patients and healthy organisms has shown that the coordinates of extremums are diagnostic features.

From the analysis of literary sources, it follows that a significant role in receiving, transforming of physicochemical irritation and generating of radiations and particles is played by biologically active points on the surface of the skin of the biological object. However, so far, the physical and mathematical models, that allow us to describe the electrodynamic processes occurring in the biologically active points, and the mechanisms of the influence of electromagnetic fields on the body of the biological object in the biologically active points areas haven't been created, which is of interest for further research.