

- 1. Краєзнавство в Україні: сучасний стан і перспективи : наук. збірн. К. : Академія, 2003. – 232 с.
- 2. Миньяр-Белоручев Р. К. Лингвострановедение или иностранная культура / Р. К. Миньяр-Белоручев // Иностранные языки в школе. 1993. № 6. С. 54—57.
- 3. Нефедова М. А. Отбор материалов лингвострановедческого содержания для чтения / М. А. Нефедова // Иностранные языки в школе. 1994. № 4. С. 38–41.
- 4. Ощепкова В. В. Культурологические, этнографические и типологические аспекты лингвострановедения / В. В. Ощепкова. М., 1995. 96 с.
- 5. Рахштейн А. Д. Лингвострановедческий аспект в преподавании иностранных языков / А. Д. Рахштейн // Иностранные языки в школе. 1990. № 36 С. 13–16.

## Руслан Ярамішян

## RESEARCH OF THE DIELECTRIC PARAMETERS OF BLOOD

Research of the liquids properties and construction of a theoretical model of their behavior contributes to better understanding of the matter's structure and its properties, helps its widespread application in various fields of science, medicine, national economy. Study of dielectric properties of the substance, that means the behavior research of the complex dielectric constant, depending on frequency, temperature, pressure, electric field, and let us more accurately establish the composition of this substance [1; 2; 3].

The given article is devoted to the study of important dielectric parameters of blood, which allow detailed studies to determine the quality and composition of macromolecular liquids in wide range of frequencies.

It is known that changes in the electric field and current density will affect the behavior of the insulator. Permittivity is a dimensionless quantity and is characterized by the ratio of tanks after and before the introduction of a dielectric in an electric field condenser [2, p. 13].

From the physical point of view human blood is a condensed matter consisting of a polar liquid matrix (plasma and cytoplasm) and suspended in colloidal elements: electro active (cell membrane) and neutral (amino acids).

The active component of the complex dielectric constant corresponds to the relative dielectric constant, and reactive component  $\boldsymbol{\mathcal{E}}^{\prime\prime}$ , that characterizes the energy absorption in matter, placed in an electric field and is called the coefficient of dielectric losses. Parts of the complex



dielectric constant and loss tangent associated relaxation in dielectric loss ratio [1, p. 11]:

$$tg\sigma = \frac{\varepsilon''}{\varepsilon^i}$$
.

In real dielectrics, such as blood, which are contained in the electric field, there are active energy loss and phase shift angle between current and voltage, less than  $90^{\circ}$ . To characterize the losses we

use "the loss angle" 
$$\delta = 90^{\circ} - \varphi$$
:
$$tg\delta = ctg\delta = \frac{1}{\omega CR} = \frac{1}{2\pi fCR} = \frac{R}{2\pi fC}$$

Dielectric permittivity of the system with permanent voltage or at low frequency is determined by the fact that the operating voltage is enclosed to the boundary phase. In this case, the behavior of the whole colloidal system such as in the thickness of the resulting system, which is equal to the thickness of the boundary phase, but not the total value of the thickness of all phases. In this case the complex permittivity of dielectric permittivity exceeds its individual components dozens of times.

Dispersion region were examined (according to the Debye theory), which enabled to determine the so-called "long jump", to measure the size of the molecule dipole moment and relaxation time, which are the important constants of the theory of dipole liquids. This, in turn, made it possible to obtain more significant information about the structure and properties of the insulator.

The importance of this research work means also the simple methods of calculation formulas appearance and an accuracy of the results. The basic idea of the method consists in observing resonance curves of oscillatory circuit, which was put in the studied sample insulator. Determination of resonance curves before and after introduction of availability of the insulator allowed to define the valid and imaginary parts of dielectric sample. Bridge method in this research obtained the values of complex permittivity of human blood at a specific frequency range. There was defined the time of dielectric relaxation of water molecules in solutions of proteins and blood.

The curve of dielectric permittivity and blood conductance showed an intense increase of dielectric dispersion in high-frequency part of the region.

## REFERENCES

1. Брандт А. А. Исследование диэлектриков на сверхвысоких частотах / А. А. Брандт. – М.: Физматгиз, 1963. – 404 с.

- 2. Хиппель А. Р. Диэлектрики и их применение. / А. Р. Хиппель М. : Госэнергоиздат, 1959. 439 с.
- 3. Эме Ф. Диэлектрические измерения / Ф. Эме: [перевод с нем. под ред. канд. техн. наук Заславского И. И.]. М.: Изд. "Химия Москва", 1967. 225 с.

Віта Яцун

## COACHING AS A WAY OF IMPROVEMENT OF MANAGEMENT

Socio-political socio-economic changes taking place in Ukraine, significantly influence the current educational system. Management is the driving force, which is aimed at revitalizing the person through the optimal conditions for the manifestation and development of its creative potential. Therefore, management of educational processes is relevant, because school practice testifies to the insufficient preparedness of school to professional management activities, the absence of many of them have the necessary administrative culture, which is expressed through the development of personality, its self-organization [4, p. 215].

Scope management is always inseparably connected with the same control system and its specifics – of educational institution differs significantly from the management of industrial enterprise. Back in the late 80's 90's experts in the field of social and industrial management (O. Deineko, S. Kamenitser, G. Popov, V. Lisytsyn) And in school management (Yu. Konarzhevskyy, V. Krichevsky, E. Pavlyutenkov, E. Tonkonohaya, T. Shamova) based on the need to consider as a professional manager. Yes, Mr. Krichevskyy core professional school leader believes his administrative activity.

Heads of educational institutions to improve the efficiency of professional activity should use the current methods of management, quickly adapt to new environmental conditions, and thus constantly develop their own personality.

The importance of professional development manager has the concept of SELF. Self – Self-organization of their work behavior. Arrange any components caused by internal reasons, without external interference [3].

The process of self-organisation – the function of conscious human activity expedient to summarize the experience, the formulation of concepts, the knowledge and skills acquired, as well as normalization of things, properties and relations for the transition from the achieved level of development to a higher [4, p. 119]. Therefore, self-organization – a principle of personal manager or specialist work