

EFFECT OF MAGNETIC FIELD ON SOLUBILITY SALTS

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The interaction of electrolytes and water is a chemical reaction that leads to the destruction of ionic or molecular crystals or molecules and the formation of hydrated ions.

Many non-aqueous solutions of ions are not formed by electrochemical dissociation, but because of other chemical reactions when potential electrolyte molecules and solvent exchanged with protons, ions or electrons.

Today experimentally found that the magnetic field affects the kinetics of chemical reactions. Therefore, as for any chemical reaction as a result of the magnetic field on the solution accelerates the chemical reaction of ions.

The purpose of research - to establish the influence of characteristics of magnetic field on the solubility of salts and fertilizers.

Materials and methods research. In the study of changes in the kinetics of chemical reactions under the influence of the magnetic field used the theory of collisions. The influence of magnetic field on the solubility of salts was performed using the theory of electrolytic dissociation.

Results. In theory clashes reactants are considered as a set of spherical particles of finite size. Before the collision, they do not react with each other, and at the time of the collision, the kinetic energy of the translational motion of the particles is converted into energy domestic species movement.

Chemical effects of collisions depends on the kinetic energy of the relative motion along the line of centers, defined normal component of velocity.

According to the theory of collisions leads to a chemical reaction collision only when the kinetic energy of the relative motion along the center line of particles participating in the reaction, higher than the critical value of E^* .

If you hit a charged particle in a magnetic field it the force of Lorentz. This changes the normal component of the velocity and kinetic energy of the relative motion of the particles along the center line. Therefore, the chemical reaction will

come share at a rate less than the critical value. This increases the rate of a chemical reaction

The speed of chemical reactions under the influence of the magnetic field is determined by the square of the magnetic induction and the normal component of the velocity of the particle.

Under the influence of magnetic field on the solution due to the growth rate of a chemical reaction increases the degree of electrolytic dissociation, which depends on the magnetic induction and the normal component of the angular velocity of the ions.

Effects of magnetic field on the solubility of salts vivid solutions for weak electrolytes in solution for strong electrolytes almost all molecules break down into ions and the degree of electrolytic dissociation close to unity.

Conclusions

When magnetic processing solutions increases the degree of electrolytic dissociation, which contributes to the dissolution of salts and amino acids. As the plants consume mineral elements in the dissociated state, as ions, it helps stimulate plant growth and development.