

ELECTRONIC EQUIPMENT FOR COMPLEX INFLUENCE ON BIOLOGICAL OBJECTS

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Influence of composite weak electromagnetic fields (EF). An assessment of factors, determining a quantity of absorbed electromagnetic energy, dielectric properties of tissues, geometric, mass and weight parameters of object, its orientation, field polarization, configuration and parameters of radiation source, duration, intensity and frequency of radiation, all the peculiarities of generation and propagation of electromagnetic radiation. Control of person and animal conditions with EF influence.

Biological effects under different conditions of EF influence. Effect of EF on hematologic indices of peripheral blood and state of circulatory system. Change of clinicobiological indices depending on EF parameters. Approbation of biochemical tests, suitable for determination of biological effects reversibility that were occasioned by EF. Lethal and non-lethal physical factors.

Near unidirectional action portable equipments with pulse power equal 5W and damage range up to 500 m. Damage degree: disturbance of breathing, blood circulation, partial consciousness loss, painful irritation, paralysing active conscious activity.

Mobile and stationary installations with pulse power equal 1 kW and considerable damage area. Damage degree: heart arrhythmia, sharp jump of blood pressure, vomiting, diarrhea, asthmatic spasms, that leads to a general discomfort, deep depression, space confusion.

An assessment of EF influence on biological objects as one of urgent problems. Its solving is necessary for conception development of NLW creation. Key words: NLW, electromagnetic field, clinicobiological indices, test, damage degree, prototype.