

## **CHANGES OF CHARACTERISTICS OF PHASE TRANSITIONS AT THE IRRADIATION**

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Within the framework of fundamental thermodynamics theoretical approach to the influence of irradiation on thermodynamic properties of matter is considered. These properties are determined by the change of chemical potential of liquid and its components. It allows finding the changes of parameters of phase transitions and conditions of existence of different phases. Value and sign of changes depend on the properties of irradiated substance, rates of generation and relaxation. Solubility conditions of solids in irradiated liquid, which is consequence of change of chemical potentials, are obtained.