

**NEUTRINO–DINEUTRON REACTIONS
(LOW-ENERGY NUCLEAR REACTIONS INDUCED BY D₂ GAS
PERMEATION THROUGH PD
COMPLEXES. Y. IWAMURA EFFECT)**

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Anomalous elemental changes have been observed on the Pd complexes after D₂ gas permeation. This effect—effect Y. Iwamura—belongs to a new category of nuclear reactions. The effect of Y. Iwamura can stimulate development of physics of electromagnetic interaction neutrino including physics of relic neutrino and physics of the dineutrons. It is possible to suggest that low-energy neutrino and even relic neutrino can initiate effect of transmutation in special cases. The suggested hypothesis application about new class ν^- nuclear reaction existence can be useful for the problems: alternative energetic, radioactive isotopes reducing and rare isotopes production.

1. Introduction

Recently some experimental evidences confirming the assumed existence of the relic neutrino and the anomalous neutrino magnetic moment have been obtained. The said assumption is based on the concept of occurrence of stable dineutrons; the function of neutrino and dineutrons in phenomena studied by physical chemistry and low-energy physics. The existence of bound states of neutrino (latent) with protons, deuterons, and other nuclei follows from the well-known estimations of anomalous neutrino magnetic moment¹ and the Dirac’s equation.^{2,3} The concept of relic neutrino leads to the possibility of the neutrino component of the matter. If we assume the existence of the neutrino component of the matter, the question arises as to whether these neutrinos are capable of initiating nuclear transmutations. Nuclear experimentation evidence shows that small quantities of nuclei occur in excited meta-stable nuclear states. Capture of neutrino by the said nuclei may trigger transition from the excited meta-stable states to the basic one and lead to the output of energy sufficient to initiate nuclear transmutations.

The above concept provides grounds to study the problems of neutrino and the dineutrons function in a number of processes, discovered in experiments in allied

