

1. BULK AND SURFACE SYMMETRY ENERGY FOR THE NUCLEI FAR FROM THE VALLEY OF STABILITY

V. M. Kolomietz, A. I. Sanzhur

The direct variational method have been applied to the calculation of the symmetry energy for medium and heavy nuclei. The functional of energy of the Thomas - Fermi approximation with the effective Skyrme forces have been used. The behavior of the bulk and the surface symmetry energy as the function of the bulk nucleon density $\rho_{q,0}$ and the neutron excess have been studied for the various sets of Skyrme forces. We have calculated the average number of neutrons in the surface region, N_d , for the nuclei at the line of β -stability and the dependence of N_d on the nucleon density $\rho_{q,0}$ and on the remoteness from the line of β -stability.