

THE CONCEPT OF THE NUCLEAR REACTOR WITH SUBCRITICAL CORE, NEUTRON FIELD CONTROL USING GASEOUS OR LIQUID FLOWS OF FISSILE MATERIAL

O.V. Nedelin, V.M. Pavlovych, S.A. Yatskevych

The concept of research nuclear reactor with subcritical core of solid fuel which reaches the critical state inserting part of the fuel in the form of gas or liquid containing the atoms of fissile material. Such design permits to create the superfast emergency protection and to obtain the satisfactory characteristics of the energy distribution in the core.