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**DEUTERON NUCLEAR INTERACTION POTENTIAL
WITH HEAVY NUCLEI IN SINGLE FOLDING MODEL**

Deuteron interaction potential with heavy nuclei at sub-barrier energies has been constructed in the framework of single folding model using the complex dynamic polarization potential. It is shown that the account of finite deuteron size leads to significant increasing of nuclear potential in outer region of interaction. Cross sections of deuteron elastic scattering on ^{208}Pb at energy 7, 7.3 and 8 MeV were calculated and compared with experiment data. Calculations were performed without any variations of parameters.

Keywords: deuteron, ^{208}Pb , elastic scattering, deuteron polarization.