

**DEFORMED SHELLS IN MASS AND ENERGY DISTRIBUTIONS OF FISSION
FRAGMENTS OF ^{237}Pu COMPOUND NUCLEI FORMED IN $^{233}\text{U}(\alpha, f)$ REACTION
AT 29 MeV ALPHA PARTICLE ENERGY**

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Mass and energy distributions of fission fragments are formed under the influence of various effects in the fissile nucleus starting from classical charged liquid droplet effects, adding effects of spherical nuclear shells and finishing with deformed nuclear shells. The latter have come more into focus of research in recent years. We present short history of research of deformed nuclear shells and show how they can be used to decompose mass and energy distributions of fission fragments of ^{237}Pu compound nuclei formed in $^{233}\text{U}(\alpha, f)$ reaction at 29 MeV alpha particle energy into yields from charged liquid droplet effects, effects of spherical and deformed nuclear shells. The experiment was carried out at U-150M cyclotron at Institute of Nuclear Physics, Almaty, Kazakhstan. Fission fragments were identified using 2E method.