

A STUDY OF FISSION PRODUCTS WITH THE PINGIS SYSTEM

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PINGIS is an ISOL (Isotope Separator On Line)-system which uses the 225-cm cyclotron at the Research Institute for Physics as the production source. Before the cyclotron shut down in March 1971 the 43 MeV external alpha beam ($\sim 2\mu\text{A}$) was used to induce fission in ^{238}U . The Uranium target is placed in the discharge chamber of the ion source. The fission products are stopped and ionized in the ion source, accelerated, mass-separated and collected on a movable tape of aluminium on mylar backing. In order to obtain the necessary experience for a thorough study of mass-separated fission products a wide scan was performed where a large number of gamma and X-ray spectra were recorded with Ge(Li) detectors for different tape speeds. However, special efforts were also made to get more information about the level structure of the odd and even Sn and In isotopes in the mass region 120-128. Evaluation of these data are now in progress.