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Actinide Measurements at the TANDY AMS Facility

At the Tandy AMS facility (0.5MV) the detection efficiency for actinide measurements was improved by a factor of 3 using He as stripper gas in the terminal of the accelerator. Modifications in the stripper gas supply were required to guarantee stable measurement conditions.

Various actinide isotopes are interesting for AMS (^{236}U , ^{237}Np , $^{239-244}\text{Pu}$). In this talk the technical challenges for the AMS measurement of these isotopes will be presented along with possible applications. Current projects include studies of the transport of anthropogenic actinides into the environment and the measurement of Np and Pu for dosimetry.