

UTILIZATION OF THE MAGNET MONOCHROMATOR OF THE ISOHRON CYCLOTRON U-240 FOR THE STABLE IONS SEPARATION

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This paper reviews one of the possible variants of the electromagnetic separator for stable isotopes production with analyzing magnet inhomogeneous magnetic field. Detailed beam optical calculations are described for chosen ion-optical scheme of the separator. Results show that this magnet can be used for isotopes production with excellent efficiency for any ion mass. Factors affecting the separation process – beam parameters, space-charge and aberrations are discussed.