ACTIVATION DEVICE
FOR OBTAINING ACTIVE DEPOSIT
OF THE THORON ON THIN WIRE

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The ThB + C + C'' source provides a number of reliable standard calibration lines for beta-ray spectroscopy. To obtain active deposit on thin wire (~0,1 mm) two procedures are generally used: the wire together with the source-holder is placed into the activation device [1—3] or the wire itself is singly activated and then stretched (e.g. [4]). The disadvantage of the first procedure is that not only is the wire activated but the source-holder too. In the second procedure it is difficult to stretch the active wire on the source-holder.

In this short note an activation device designed for obtaining ThB + C + C'' on thin wire is described. Here the thin wire stretched by a steel spring is activated and after activation the wire can be easily fixed on a suitable source-holder.

The activation device is seen in Fig. 1. The device consists of the following parts: the stainless steel vessel containing the emanating preparation,
the wire stretched by the steel spring (bow), and the upper and lower parts of the unscrewable plexiglass plug (Fig. 2).

Before activation the plug is unscrewed and the wire stretched by a steel spring (the bow) is placed into the corresponding groove on the lower part of the plug. When the two parts of the plug are screwed up electric contact exists between the wire and the negative jack (Fig. 3).

![Fig. 2. Parts of the device](image)

![Fig. 3. Cross section of the device](image)

The whole activation device is fastened to a metal disc supplied with a positive jack. The changeable lead shield surrounding the device is mounted on this disc.