MAR 23 1964

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Running title: Box for Radioautography

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A DESICCANT-HOLDING SLIDE BOX FOR
RADIOAUTOGRAPHIC EXPOSURE

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Abstract. A double-depth plastic slide box is made by removing the bottoms of two standard 25-slide boxes and cementing the remaining frames together, bottom to bottom. A desiccant is placed in one box cover and fitted to the lower section of the cemented unit. A piece of screening is placed over the desiccant, the upper section filled with slides for radioautography, and the empty cover applied to the top of the assembled box. Thus all slides are kept effectively and uniformly dehydrated during exposure.

It is generally agreed that radioautographic emulsion should be exposed in a dry atmosphere to minimize fading of the latent image. To provide this atmosphere a desiccant can be kept in the plastic slide box during exposure. Usually the drying agent is placed at one end of the box, either in a perforated vial, in a tissue paper bag, or wrapped in gauze. A blank slide separates the drying agent from the sensitized slides being exposed, as shown in Figure 1b.

An improved plastic slide box (Figure 1a) allows for more efficient drying of a full box of 25 slides and all are equally exposed to the desiccant. The double-depth box is easily made from two ordinary plastic boxes as shown in Figure 2. The cover of one box becomes the holder for the desiccant (Figure 2a). The bottoms of both boxes are cut out. One of these is later permanently fitted with a screen to hold the desiccant in place, should the assembled unit become accidentally turned over (Figure 2b). The frame of the second box (Figure 2c) holds the

slides in the usual manner. Parts 2b and 2c are cemented together, bottom to bottom, and the seam reinforced and made light tight by wrapping it with black plastic electrical tape. The entire unit is now treated as a single plastic box with two removable covers.

To use, place the desiccant in part a, seal with black plastic electrical tape, place the slides in c and apply the empty cover d.-- This work was carried out at Brookhaven National Laboratory under the auspices of the U. S. Atomic Energy Commission.

FIGURE 1a.

FIGURE 1b.

FIGURE 2a.

FIGURE 2b.

FIGURE 2c.

FIGURE 2d.

7