

## EQUIPMENT

### Ultramicrotome Cuts in Two Thickness Ranges

A motor-driven ultramicrotome designed to cut 0.1 micron sections for electron microscopy has been developed by Process Instruments.

An interesting feature of the device is the gear shift which provides two ranges of section thickness: 0 to 1 micron for electron microscopy and 0 to 10 microns for optical microscope specimens.

With this gear shift it is possible to shift from 1.0 to 0.1 micron thickness between the cutting of two serial sections, giving one section for phase microscope comparison with its serial for electron microscope. **E1**

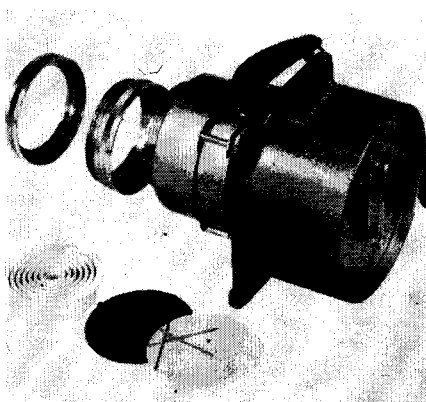
### Semi micro Spatula

Fisher Scientific Co. has designed a stainless steel spatula specifically for semi-micro work. One end of the 16-cm. long spatula is tapered down to a 3.5-mm. round tip to simplify removal of precipi-

tates from 5-ml. centrifuge tubes. The other end is flattened to a slightly rounded 6.5-mm. tip for work with regular centrifuge tubes. **E2**

### Air Sampler for Detecting Dust Contamination

An instrument developed by the Atomic Energy Commission to sample radioactive airborne contamination is



View of unassembled air filter

now available from the Atomic Center for Instruments & Equipment, Inc. The company says it can be used to sample any type of airborne dust.

Called the High Volume Air Sampler, it consists of a filter holder with an interchangeable filter paper system, a pump and motor designed for 24-hr. sampling of a minimum air flow of 30 cu. ft. per min., an aluminum fan-housing assembly, and flow indicator. **E3**

### Kit for Testing Salt Content of Water in the Field

A kit for checking the salt content of irrigation water is announced by the Farm Service Laboratory. Measuring 5.25 by 3.25 by 3.5 inches, the kit can be used for testing a sample in about two minutes in the field. The result, total ionized solids content, is read directly in milliequivalents of salts per liter of water and can be converted to tons per acre foot, grains per gallon, or irrigation classification.

In operation, the water sample is passed through a packed tube, treated with an indicator solution, and involves a purple-to-green color change.

The manufacturer points out that the kit does not give a complete water test, since it does not tell the sodium-calcium-bicarbonate relations.

The error of the determination is less than 10% in the range of normally usable waters (to 75 equivalents per million). **E4**

### Tape for Identifying Atmospheric Hydrogen Fluoride

A method for identifying and continuously analyzing atmospheric samples for hydrogen fluoride has been recently developed at Stanford Research Institute. The detection device is based on photoelectric scanning of a coated tape which fluoresces in the presence of trace amounts of the gas. **E5**

### Viscosity Control by Ultrasonics

An ultrasonic instrument for the continuous measurement of viscosity is available from the Bendix Corp. Developed by Stanley R. Rich and Wilfred Roth of Rich-Roth Laboratories, the device is called the Ultra-Viscoson and is now being produced by Bendix for process industries.



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