

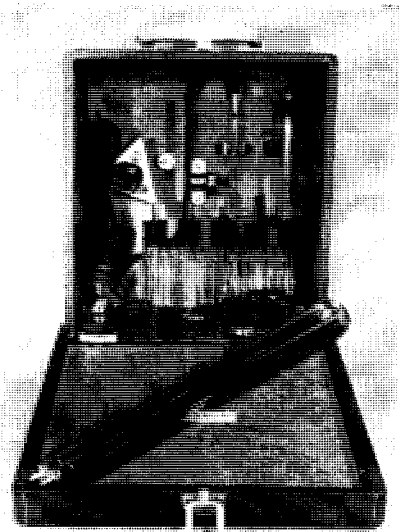
# NEW PRODUCTS AND EQUIPMENT

## Portable Air Sampler

A portable air sampler of interest to those testing agricultural chemicals is available from the Compact Air Samplers Co. The electrically operated unit contains all the necessary equipment for collecting airborne material by either the wet scrubbing or dry dust filter methods. The carrying case for the unit contains a small air pump with a measuring device for controlling air flow.

The manufacturers believe the unit should find application in studies undertaken to establish safe levels for toxic airborne substances and to monitor the airborne concentrations of toxic substances in industrial operations. **PE1**

The portable air sampler manufactured by Compact Air Samplers Co. Provision is made for transporting sampling solutions and the glass scrubbers within the case



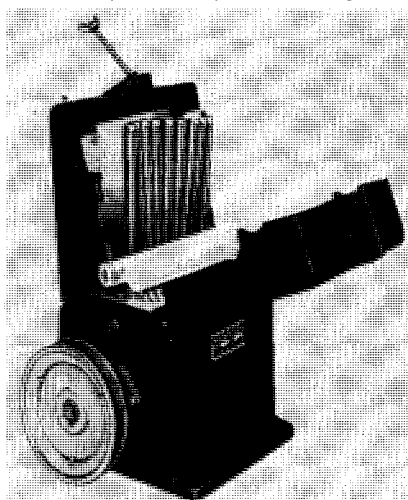
## Synthetic-Boundary Ultracentrifuge Cell

Devised to permit measuring the sedimentation constant of a slow component moving in the presence of a fast component, the new Spinco synthetic-boundary ultracentrifuge cell offers new avenues of application for analytical centrifugation. In effect, it extends the range of ultracentrifugal analysis downward in the macromolecular region from molecular weights of about 10,000 to about 500.

The principle of the new device depends upon the layering of one solution, the supernatant, over the mixture under study, thus producing a boundary away from the meniscus. In the case of two components, a solution containing only

the fast component is layered over a mixture of the fast and slow components. This procedure artificially creates a boundary of the slow component in the presence of the fast component, and measurements of the movement of this boundary are made by conventional optical methods. **PE2**

View of Sigamotor pump; with hinged top open exposing the steel fingers which compress the plastic tubing



## Novel Pump for Corrosive Liquids

Sigamotor Inc. has a new and larger model of its unusual sigamotor pump. In addition to handling tubing up to 1 inch in diameter, the new model has a hinged top so tubing can be placed against the pumping fingers without disconnecting either end.

The novel feature of the pump is the series of steel fingers which exert pressure on the flexible tubing. The fingers alternately compress the flexible tubing pumping the liquid along the pipe line. Fluid within the tubing never comes in contact with the pump; this eliminates the possibility of corrosion or contamination of the pump.

The unit will pump liquids, gases or solids in solution. It is rated to handle from 45 to 250 gallons per hour at 500 RPM. Different sizes of tubing can be pumped simultaneously by the same pump. **PE3**

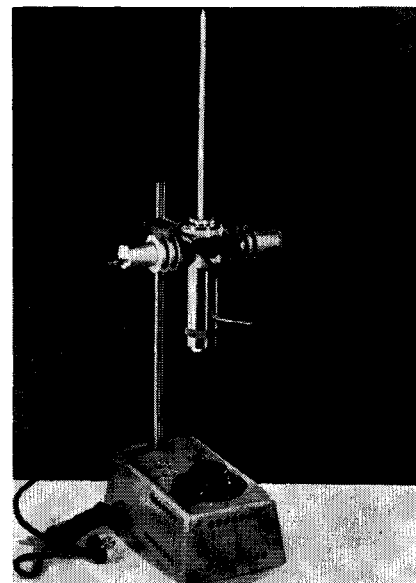
## Melting Point Apparatus Reads Directly to 0.2° C.

A reflected light melting point apparatus is available from the National Instrument Co. of Baltimore. Called the melt-meter the macro type instrument indicates melting points up to 360° C. and features a 3 part lighting system, cooling jacket and stepless heat control.

The company claims that the instru-

ment makes melting point determinations possible with increased ease and accuracy. Precision thermometers, supplied with the apparatus, permit direct reading of the melting point to 0.2° C. without interpolation. The 3 way lighting system illuminates the sample from 3 sides against a background of soft diffuse light. The result is a stereoscope effect which makes the sample appear with 3 dimensions. **PE4**

The heater control forms the base for the reflected light melting point apparatus, sample is viewed thru the opening in the center of the illustration and readings are taken directly from the thermometer tube



## Stainless Steel Pump Handles Wide Variety of Materials

The Vanton Pump Corp. is offering a stainless steel pump which permits pumping a wide variety of foods and chemicals. The design eliminates stuffing boxes, gaskets and internal check valves with a wide choice of materials for the flexible liner.

The pumps are particularly adaptable for extreme corrosive service and for handling liquids and slurries where contamination can not be tolerated. The only parts of the pump which come into contact with the material being pumped are the stainless steel body block and the flexible liner.

The unit is available in capacity ranges from 1/3 to 20 gallons per minute with suction lifts up to 26 inches of mercury. **PE5**

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