

new products



Simpler, smaller gas analyzer

Since the days of Dempster, physicists have been using the force of a magnetic field to separate and identify charged particles of different masses. Such mass spectrometers, as they are called, depend on the fact that a magnetic field will cause a light ion to turn in its course farther than a heavier one.

The latest in spectrometers is a small, simply constructed instrument that its developers say will outperform more carefully manufactured analyzers. Three small screens of coarse wire mesh take the place of the conventional high-precision electrodes.

In the new spectrometer, a variable magnetic field is set up by a combination of direct and radio-frequency alternating voltages. Gas ions are injected into a space surrounded by electrodes which set up a varying field. Ions of a particular mass are affected by the variations in such a way that they are trapped within the field. Other ions follow unstable trajectories and escape from the trap. The trapped ions are then allowed to strike a detector, where their number is measured. Then ions of another mass can be detected by applying a different combination of direct and RF voltages.

The new spectrometer, which weighs less than two ounces, is particularly effective with dilute concentrations of gases, where the total pressure may be one thousand-trillionth of normal atmospheric pressure.

*General Electric Research and Development Center
P.O. Box 8, Schenectady, N.Y.
12301*

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Projector for microscope

The whole class can view microscope slides with an attachment that provides both short and long range projections to a screen viewer. The attachment is part of a versatile biological microscope system that also includes fully automatic 35-millimeter photography attachments as well as direct microscopic investigation with polarized light, blue light and fluorescence.

*Hacker Instruments Inc.
P.O. Box 646*

West Caldwell, N. J. 07006

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Cooler for electron microscopes

A mobile thermostatically controlled water cooler, designed for use with electron microscopes, can also be used with vacuum evaporators, diffusion pumps, column chromatography equipment and spectrophotometers as well. Mounted on casters, it is small enough to be used under tables where space is limited. The cooler operates almost noiselessly and has a half-horsepower compressor with a heat removal rating of 3,500 BTUs. No plumbing connections or external water sources are necessary.

Better Equipment for Electron Microscopy

P.O. Box 132

*Jerome Avenue Station
Bronx, New York 10468*

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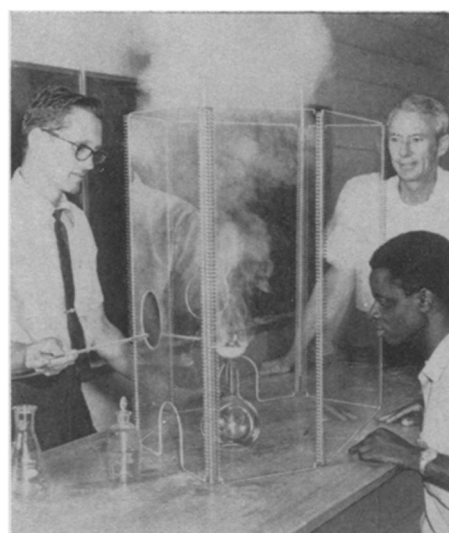
Disposable chemical containers

Ready-to-use packages of chemical solutions eliminate the need for bottle washers, avoid contamination and cut down handling of dangerous materials. Useful in both research laboratories and schools, the line of 91 prepared solutions, both organic and inorganic, are packed in flexible polyethylene cubes surrounded by an outer cardboard carton. As the solution is drawn from its faucet at the lower end of the unit, the cube inside collapses by atmospheric pressure. Air cannot be drawn back into the package to contaminate the remaining solution. When the material is used up, the container is discarded. Most solutions are available in 2.5 and 5 gallon sizes.

Fisher Scientific Co.

*501 Fisher Building
Pittsburgh, Pa. 15219*

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Shield for demonstrations

A transparent safety shield for science demonstrations encloses experiments and provides protection for both lecturer and students without impairing visibility. Use of the shield also helps to emphasize the importance of safety to the audience.

Made of acrylic plastic, the 30-inch-high shield is made of from four to six transparent panels. Access ports in two panels allow the lecturer to manipulate equipment easily. These rear panels also have entry ports for electric, fuel and air lines.

The shield can be folded flat for storage.

*Instruments for Research and Industry
108 Franklin Ave.
Cheltenham, Pa. 19012*

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Portable Electric Power Supply

Electric laboratory apparatus, telescopes, black light units, tape recorders, infrared apparatus, centrifuges and other equipment may be operated in the field away from regular power by means of this 100-volt, 60-cycle portable power supply. The self-contained unit comes with battery, charger and power inverter and will deliver up to 175 watts of AC power.

Terado Corp.

*1068 Raymond Ave.
St. Paul, Minn. 55108*

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Products are selected and listed as an editorial service geared to reader interest. The claims are the manufacturers', and further information on Products of the Week, should be secured from them.