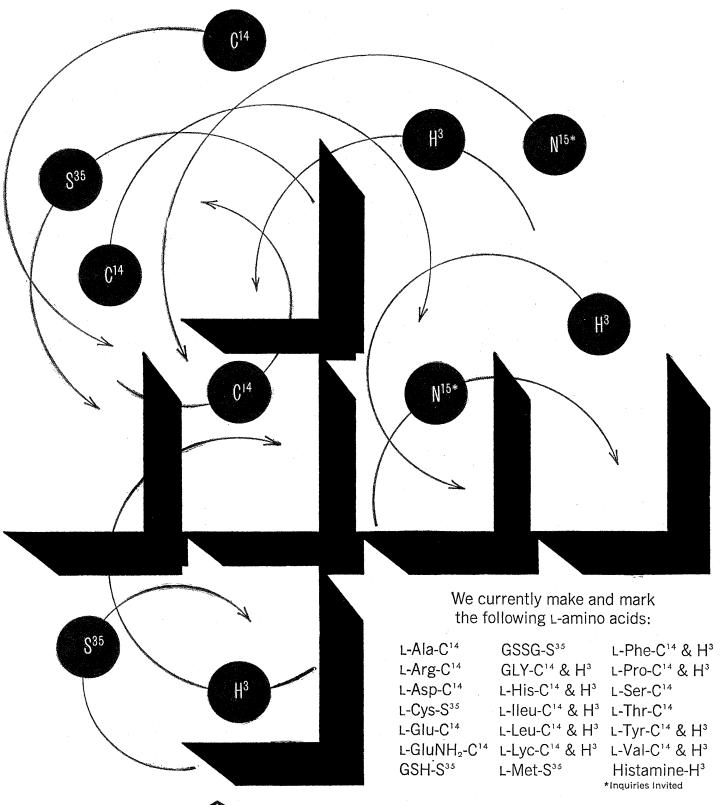
Labeled L-amino acids



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Rotator-oven allows the agitation of various sizes of bottles, flasks, test tubes, and syringes in a temperature-controlled atmosphere. The rotating head assembly is attached to the hinged oven door which may be opened horizontally or vertically depending on which side the oven is placed. Plastic legs facilitate repositioning, and glass windows on two sides allow viewing of the rotation procedures. Either of two rotation heads, a tissue culture head (with a capacity of 64 test tubes) or an all-purpose head (accommodating up to 36 test tubes, 10 bottles, or a variety of metal-tipped syringes), may be employed. A thermostat with a sensitivity of ± 1°C con-

The material in this section is prepared by

medical laboratory equipment).

Joshua Stern (J.S.), Basic Instrumentation Section, National Bureau of Standards, Washington 25, D.C. (physics, computing, electronics, and nuclear equipment).

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Address inquiries to the manufacturer, mentioning Science and the department number.

trols temperature from room temperature to 100° C. The rotator utilizes a 6- to 60-rev/minute, variable-speed motor and incorporates an automatic timer which times up to 2 hours and activates a buzzer at the end of the desired cycle. The oven has an internal area of $9 \times 14 \times 16$ inches $(23 \times 36 \times 41 \text{ cm})$ with the door closed, and requires 450 watts of 110 volts a-c.—D.J.P. (Scientific Industries, Inc., Dept. S182, 220–05 97th Ave., Queens Village, N.Y. 11429)

Paper chromatography oven accommodates ten papers up to 22 by 24 inches (56 by 61 cm) and makes them individually accessible. The unit provides a temperature range from +35°C to +180°C (+356°F). The horizontal mechanical air-flow unit features an external damper control which proportions the ratio of exhaust air to recirculated air. When fully open, the heated air is convected only once over the heaters and paper chromatograms are exhausted outward or through a fume hood exhaust, preventing any possibility of hazardous atmosphere buildup. Even when fully closed, a 25-percent positive exhaust is maintained with 75-percent recirculation. A replaceable Fiberglas filter mounted over a large fresh-air intake prevents room contaminates from entering the chamber. An all stainless pull-out rack permits individual paper chromatogram removal as needed. Extremely accurate temperature control is provided by the patented POWER-O-MATIC 60 Saturable Reactor Proportioning Control System which offers straight-line performance, is entirely stepless, and has no moving parts, no arcing components, no auxiliary devices to wear, burn, or replace. It is equipped with Range-Lock Overtemperature Protection, a built-in mechanical locking device which prevents excessive rise of temperature even if thermal system ruptures or control knob is inadvertently turned. A "Memory" Ring Temperature Calibrating Dial permits temperatures to be reset easily and the temperature setting can be secured in place by means of a dial pointer lock. The new oven proper has a stainless interior, including door face and perimeter. Exterior is heavy-gauge, cold rolled enameled steel. There is 3-inch-thick Fiberglas insulation. Blackheat, controlled low-watt density from continuous heating elements located remote from the work chamber eliminates radiant heat and thermal shock. The oven comes complete with thermometer and stainless pull-out rack. All wiring is complete, enclosed, and meets N. E. Code, as amended. The oven operates on 230 volts, 60 cy, a-c, single phase.—R.L.B. (Blue M Electric Co., Dept. S149, 138 and Chatham Streets, Blue Island, Ill.)

Two-color automatic pyrometer features an internal self-calibration system, solid-state circuitry, and plug-in circuit modules. The self-calibration system, which detects deviations from standardized values and makes necessary corrections, can be programmed for intervals of 1, 2, or 24 hours, as desired. Temperature range of the instrument is 1000° to 7500°F (538° to 4149°C) and accuracy is said to be of the order of 1 percent. Principle of operation is based on converting the ratio of intensity of two selected wavelengths of the visible and near-infrared spectrum into a linear measurement representing temperature.—J.s. (Latronics Corp., Dept. \$153, Lloyd Ave., Latrobe, Pa.)

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The material in this section is prepared by the following contributing writers:

Robert L. Bowman (R.L.B.), with the assistance of Denis J. Prager (D.J.P.), Laboratory of Technical Development, National Heart Institute, Bethesda 14, Md. (medical electronics and biomedical laboratory equipment).

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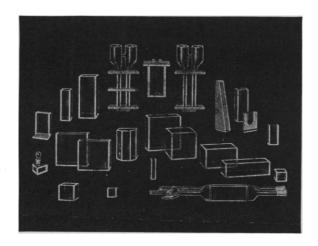
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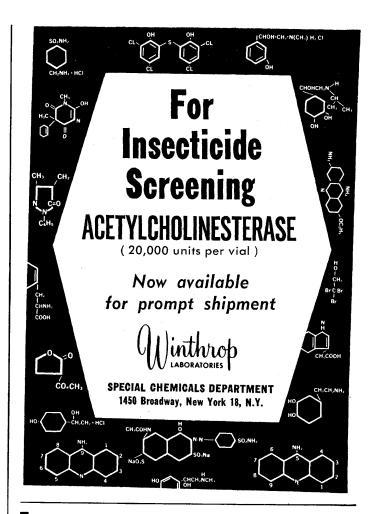
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