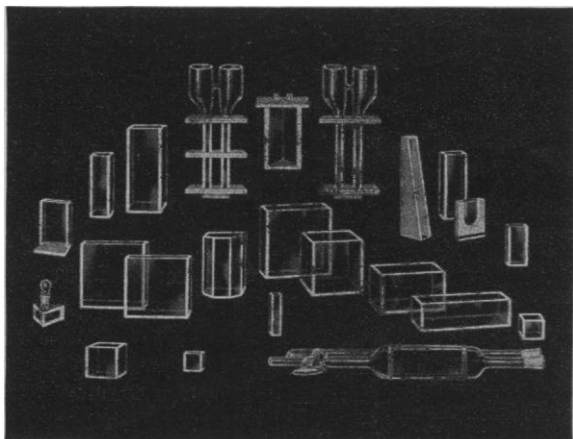


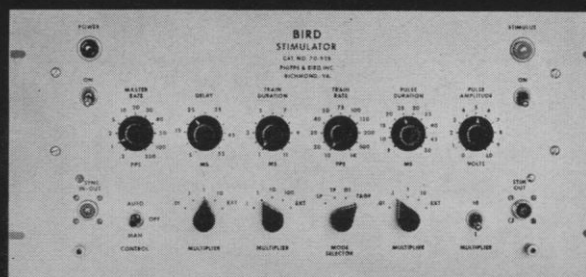
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The material in this section is prepared by the following contributing writers:

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).

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.

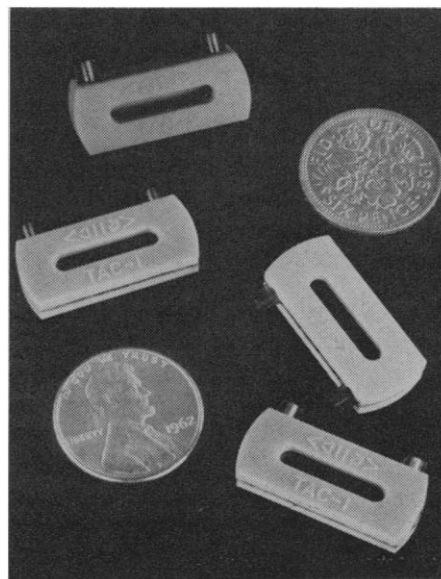
sealed water jacket around the specimen capsule. This water-cooled system eliminates disruption of cellular components by keeping the capsule range "cool," limiting the temperature rise to a maximum of 3°C under normal working conditions.—R.L.B. (Lourdes Instrument Corp., Dept. S861, 656 Montauk Ave., Brooklyn 8, N.Y.)

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Androst-4-ene-3,17-dione-4-C ¹⁴	50 μ C/mg	\$—	\$ 20	\$ 85	\$ 170	\$ 800	\$ †
3 β -Cholestanol-4-C ¹⁴	10	—	50	215	430	†	†
Cholestenone-4-C ¹⁴	50	—	15	40	80	325	650
Cholesterol-4-C ¹⁴	50	—	15	50	100	400	800
Cholesterol-26-C ¹⁴	40	—	20	55	110	425	850
Cholesteryl Palmitate-1-C ¹⁴	15	—	—	25	38	190	380
Cholesteryl Stearate-1-C ¹⁴	15	—	—	25	38	190	380
Cholesteryl-4-C ¹⁴ Stearate	10	—	25	110	220	900	†
Cholic-carboxyl-C ¹⁴ Acid	15	—	—	75	140	700	1400
Cortisone-4-C ¹⁴	10	40	70	280	560	†	†
Dehydroepiandrosterone-4-C ¹⁴	100	35	55	225	450	†	†
Desoxycorticosterone-4-C ¹⁴ (DOC)	100	55	105	425	850	†	†
Estradiol-17 β -4-C ¹⁴	40	50	90	350	700	†	†
Hydrocortisone-4-C ¹⁴	70	50	90	350	700	†	†
17 α -Hydroxydesoxycorticosterone-4-C ¹⁴	100	55	105	425	850	†	†
17 α -Hydroxyprogesterone-4-C ¹⁴	40	55	105	425	850	†	†
Lithocholic-carboxyl-C ¹⁴ Acid	50	—	—	50	90	450	900
17 α -Methyltestosterone-4-C ¹⁴	33	—	25	110	220	900	†
19-Nortestosterone-4-C ¹⁴ Acetate	16	—	25	70	140	550	1100
Progesterone-4-C ¹⁴	70	—	15	50	90	450	900
Testosterone-4-C ¹⁴	70	—	15	50	90	450	900

*Present lot

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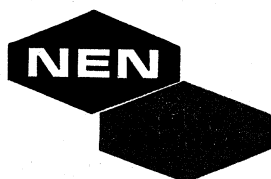
Compound	Specific Activity* Millicuries/Milligram	Price			
		250 μ C*	1 mc	2 mc	5 mc
Aldosterone-1,2-H ³	85 mc/mg	\$ 75	\$225	\$360	\$675
Androst-4-ene-3,17-dione-1,2-H ³	2	30	70	125	280
Androst-4-ene-11 β -ol-3,17-dione-1,2-H ³	2	30	70	125	280
Androst-4-ene-3,11,17-trione-1,2-H ³	4	30	70	125	280
Cholestanol-5,6-H ³	17	30	70	125	280
Cholesterol-7 α -H ³	2	30	70	125	280
Cholesteryl-7 α -H ³ Palmitate	0.1	70	200	320	600
Cholesteryl-7 α -H ³ Stearate	0.1	70	200	320	600
Corticosterone-1,2-H ³	2	30	70	125	280
Cortisone-1,2-H ³	2	30	70	125	280
11-Dehydrocorticosterone-1,2-H ³	2	30	70	125	280
Dehydroepiandrosterone-7 α -H ³	4	30	70	125	280
Dehydroepiandrosterone-7 α -H ³ Sulfate	0.4	50	150	270	600
Ammonium Salt	—	—	—	—	—
Desoxycorticosterone-1,2-H ³ (DOC)	2	30	70	125	280
Estradiol-17 β -6,7-H ³	150	30	70	125	280
Estrone-6,7-H ³	150	30	70	125	280
Hydrocortisone-1,2-H ³	2	30	70	125	280
17 α -Hydroxydesoxycorticosterone-1,2-H ³	2	30	70	125	280
17 α -Hydroxypregnenolone-7 α -H ³	40	30	70	125	280
delta 5-Pregnenolone-7 α -H ³	4	30	70	125	280
Progesterone-7 α -H ³	25	30	70	125	280
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Editor: Carl F. Kayan

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**NOW...
CORROSION-RESISTANCE
WITHOUT THE
DANGER OF GLASS**

NEW TORBAL B.T.L. **STAINLESS STEEL ANAEROBIC JAR**

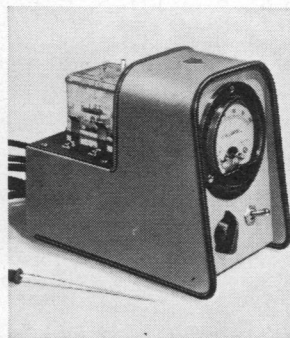


● The corrosion-resistant, stainless steel construction of the new Torbal B.T.L. anaerobic jar avoids the dangers inherent in glass jars. It is a simple but effective apparatus for producing anaerobic conditions, using a patented room temperature catalyst, which completely eliminates the need for electrical or auxiliary heating. Growth of anaerobes is safer, easier and quicker. For complete data write for Bulletin Torbal AJ.

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WITH THESE OTHER
TORBAL INSTRUMENTS**

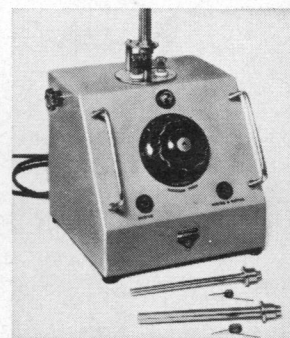
COMPACT, RAPID CHROMATOGRAPHIC DESALTER USES NO MERCURY

This low cost, Torbal B.T.L. Chromatographic Desalter reduces salt concentrations rapidly for chromatography. The unit consists of a built-in transformer, half wave rectifier, potentiometer and a virtually unbreakable cell which permits the solution to be observed at all times. No mercury is used and there is no temperature rise of the solution during desalting. For details write for Bulletin CD.



SEMI MICRO ZONE MELTING APPARATUS HANDLES FROM 0.15 TO 10 GRAMS

Designed from the original National Chemical Laboratory (England) model, this Torbal B.T.L. instrument is used to refine small amounts of organic compounds to a very high degree of purity or for the concentration of small amounts of impurities in samples for analysis. The molten zone is always visible, and its length can be adjusted by means of a potentiometer. For details write for Bulletin 2M.



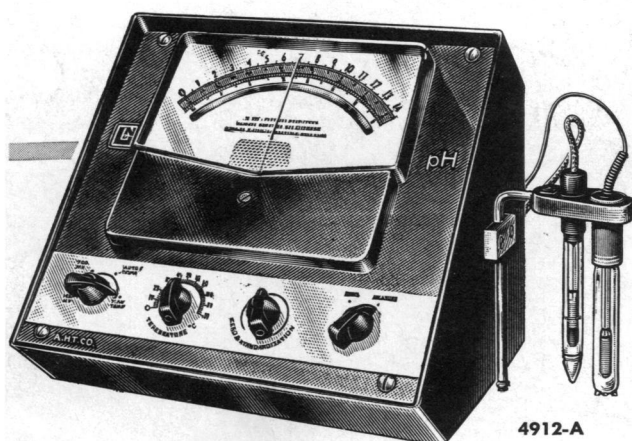
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TORBAL®

Stabilized, Line Operated . . .

Leeds & Northrup pH METER



- Stable, drift-free circuit
- Fast, direct reading
- Large 7-inch scale
- Portable metal case

A new, stabilized line-operated instrument for rapid and accurate pH measurements. Range pH 0 to 14 with an accuracy of ± 0.07 pH (readings reproducible to 0.02 pH). Millivolt ranges 0 to ± 700 mv and 0 to ± 1400 mv with an accuracy of ± 5 mv and ± 10 mv respectively. Advantages of this new pH Meter are:

Stability. Time-proved, feedback stabilized measuring circuit pioneered by L. & N. Unaffected by normal line voltage fluctuations or by changes in amplifier gain. No appreciable zero drift after warm-up of approximately one minute.

Fast Response. Pointer moves *directly* to reading in less than 2 seconds after warm-up.

Large Scale. The 7-inch mirrored scale covers a continuous pH 0 to 14 range and four mv scales. When using the millivolt ranges, zero can be placed at any point on the scale, permitting use of the full range.

Unbreakable Metal Case. Of heavy gauge steel with epoxy and vinyl finishes for chemical resistance. Built-in hand grip provides ease in carrying.

Convenient Operation. Rotary type controls are mounted on sloping front panel for maximum accessibility from any working position. Terminal board on back provides for grounding and for convenient connection of electrodes, adapter for polarizing current, automatic temperature compensator, and recorder.

Manual or Automatic Temperature Compensation. A dial 0 to 100°C is provided for use in manual compensation for solution temperature. For automatic compensation, a Thermohm[®] detector (offered as an accessory) is inserted in the solution and connected to the pH Meter.

With the substitution of a Platinum Electrode for the Glass Measuring Electrode, the instrument can be used for redox measurements; with the addition of a Polarizing Current Adapter and the use of two suitable Platinum or other metallic electrodes, the instrument can be used for Karl Fischer or similar dead-stop titrations.

4912-A. L. & N. pH Meter, Model 7401-A1, as described, with one each L. & N. 5-inch Glass Measuring and Calomel Reference Electrodes with 24-inch leads; electrode holder, 1 pt. Buffer Solution pH 6.86; 4 oz. KCl cryst.; and directions for use. With 3-wire cord, 3-prong plug and adapter. For 120 volts, 50 to 60 cycles **330.00**

Ranges	0 to 14 pH	0 to ± 700 mv	0 to ± 1400 mv
Smallest Division	0.1 pH	10 mv	10 mv
Readability	0.02 pH	1.0 mv	2.0 mv
Reproducibility	0.02 pH	1.0 mv	2.0 mv
Limits of Error Meter Indication	± 0.07 pH*	± 5 mv	± 10 mv

* ± 0.03 pH when careful measuring techniques are used.

Detailed descriptive Bulletin E-96 sent upon request.



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