



- FOR - "*Service to Science*"

**"FOR EVER EVEN"**

(if we may be permitted)

## **THE T & M "EVEN" OVENS**

**ONE CONTINUOUS HEATER LENGTH  
WITH 5 YEAR GUARANTEE**

**NEW SINGLE SLOW MOTION  
DIAL CONTROL**

**INDIVIDUAL CALIBRATION  
CHARTS SUPPLIED WITH  
EACH OVEN**

**NO ELECTRICAL PARTS INSIDE  
THE OVEN**

**VERY GOOD TEMPERATURE GRADIENT  
ALL OVER THE OVEN**

**TYPE 1 CONVECTION  
CIRCULATION**

**TYPE 2 FORCED AIR CIRCULATION  
(of exceptional excellence)**



After several years development and experiment we are now producing an Aluminium Oven which is reasonably cheap and really very good.

We have applied heat feed back principles, as originally developed for our special Thermostat baths, and a new built-in bi-metal (Al/Invar) regulator and have got really excellent sensitivity ( $\pm 0.4^{\circ}\text{C. @ } 150^{\circ}\text{C.!$ ).

Would you like further particulars?

**TOWNSON & MERCER LIMITED**  
CROYDON ENGLAND

# GURR'S

Established 1915



**STANDARD STAINS  
AND REAGENTS  
FOR MICROSCOPY**

**KNOWN AND USED  
THROUGHOUT  
THE WORLD**

**WRITE** for any of the following literature:

- A Catalogue of Stains Y 23**
- B Gurr's Commentary**
- C Laboratory Notes**
- D Biological Staining Methods**
- E Catalogue of Accessories**

**GEORGE T. GURR**

*Laboratories:*

**136 NEW KING'S ROAD  
LONDON, S.W.6**

THE **KARL FISCHER**  
TECHNIQUE

The determination of moisture in organic substances by the Karl Fischer method is now established practice. In addition, the method is being increasingly used to follow complex reactions in which water is liberated.

Instead of the two solutions first employed, the reagent is now issued in a single solution, stable under normal conditions; and a compact, inexpensive and convenient apparatus has been devised in the analytical laboratories of the B.D.H. Laboratory Chemicals Group to give precise results by direct instead of indirect titration.\*

Please ask for a copy of the new B.D.H. booklet about the Karl Fischer reagent which has just been published.

*\*This apparatus is obtainable from  
Townson & Mercer Ltd. Croydon Surrey.*

**THE BRITISH DRUG HOUSES LTD.**

B.D.H. LABORATORY CHEMICALS GROUP

**POOLE DORSET**

Telephone: Poole 962

Telegrams: Tetradome Poole  
LCIKFI

## BACTERIAL TOXINS

W. E. VAN HEYNINGEN

This monograph deals more fully with a subject that has not yet found its way into text-books of biochemistry. On bacterial substances directly toxic to the host and which assist the organism in its invasion, the author presents pathologists and bacteriologists with the point of view of a biochemist, and biochemists with a rich field of interesting problems.

Demy 8vo. 131 pages: 13 illustrations. 15s. net

TO BE PUBLISHED SHORTLY

THE  
AMINO ACID COMPOSITION  
OF PROTEINS AND FOODS

RICHARD J. BLOCK and D. BOLLING

Second Edition

601 pages: 45 illustrations 75s. 6d. net

**BLACKWELL  
SCIENTIFIC PUBLICATIONS**

BIOCHEMICAL SOCIETY

SYMPOSIA No. 6

## The Biochemistry of Fish

*Contributors:* R. A. Morton,  
E. Baldwin, G. Hamoir,  
J. M. Shewan, J. A. Lovern,  
T. W. Goodwin, G. A. D. Haslewood,  
C. L. Cutting, A. Wormald.

12s. net

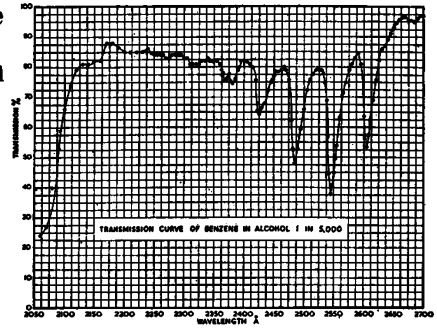
**CAMBRIDGE  
UNIVERSITY PRESS**

# UNICAM SP.500 Spectrophotometer

for ease and speed in the measurement of absorption from 2,000 to 10,000Å



Operator with Unicam SP.500 Spectrophotometer



This characteristic absorption curve of benzene in alcohol is typical of the results to be obtained with the Unicam SP.500 Spectrophotometer.

The high degree of stability achieved in the Unicam SP.500 Quartz Spectrophotometer and its excellent response throughout the ultraviolet, visible and near infrared regions render it an invaluable instrument for the quick and accurate analysis of samples in solution. Its speed and simplicity of operation are also important in saving time and expense.

Full information will gladly be sent on request.

UNICAM INSTRUMENTS (CAMBRIDGE) LTD · ARBURY WORKS · CAMBRIDGE

UI01 CE

## THE JOURNAL OF PHYSIOLOGY

**SUBSCRIPTIONS:** The price of the Journal is 45s. per volume of four parts. Subscriptions are payable in advance.

**BACK NUMBERS.** Complete sets of the Journal starting at volume 52 (1918) are still available.

**INDEXES:** Author and Subject Indexes of the Journal of Physiology, Vols. 61-100. Prepared by DR GRACE EGGLETON. 30s. net.

Author Index of the Journal of Physiology, Vols. 1-60. 25s. net.

Subject Index of the Journal of Physiology, Vols. 1-60. Prepared by DR J. G. PRIESTLEY. 15s. net.

**HISTORY.** History of the Physiological Society during its first fifty years 1876-1926. By SIR EDWARD SHARPEY-SCHAFFER, F.R.S. 15s. net.

The Price of the Author Index is reduced to 15s. when it is ordered with the Subject Index or the History of the Society.

*Subscriptions and inquiries for these publications should be sent to*

CAMBRIDGE UNIVERSITY PRESS  
Bentley House, 200 Euston Road, London, N.W. 1

*Increased Range—*



## **COMPLETE CULTURE MEDIA**

### **TABLETS**

For single tubes and small quantities of media

### **GRANULES**

For larger scale preparation

<b>MacCONKEY BROTH (Official Formula)</b>	<b>AGAR-AGAR</b>
<b>MacCONKEY BROTH (Purple)</b>	<b>GLUCOSE PEPTONE BROTH</b>
<b>MacCONKEY AGAR</b>	<b>NUTRIENT AGAR</b>
<b>GLUCOSE PEPTONE AGAR</b>	<b>NUTRIENT BROTH</b>
<b>LAB-LEMCO BROTH</b>	<b>YEAST EXTRACT AGAR</b>
<b>LAB-LEMCO AGAR</b>	<b>EDWARDS AGAR (Modified)</b>
<b>THIOGLYCOLLATE MEDIUM (Brewer)</b>	<b>MILK AGAR (Official Formula)</b>
<b>SABOURAUD AGAR</b>	<b>MILK AGAR (For Roll Tubes)</b>
<b>PEPTONE WATER</b>	<b>TETRATHIONATE BROTH BASE</b>
<b>BRILLIANT GREEN BILE (2%) BROTH</b>	<b>WILSON &amp; BLAIR MEDIUM (Bismuth Sulphite Agar)</b>

For those who prefer to prepare their own media,  
the following **OXOID** preparations are available:—

<b>BACTERIOLOGICAL LIVER EXTRACT</b>	<b>AGAR-AGAR</b>
<b>DESICCATED OX BILE</b>	<b>DESICCATED OX HEART</b>
<b>BILE SALTS</b>	<b>LAB-LEMCO</b>
<b>MYCOLOGICAL PEPTONE</b>	<b>BACTERIOLOGICAL PEPTONE</b>
<b>BACTERIOLOGICAL YEAST EXTRACT</b>	

FULL INFORMATION ON ANY OF THE ABOVE IS READILY AVAILABLE FROM

**OXO LIMITED (Medical Dept.)**

Thames House, Queen St. Place, London, E.C.4. Tel. CENTral 9781

# Books *supplied from stock or obtained to order on*

BIOCHEMISTRY, PHYSIOLOGY,  
MEDICINE, PHYSICS, ORGANIC  
AND INORGANIC CHEMISTRY.  
Catalogue on request.

*Scientific Lending  
Library* New books and latest  
editions obtainable promptly.

ANNUAL SUBSCRIPTION, TOWN OR  
COUNTRY, FROM TWENTY-FIVE SHILLINGS  
THE LIBRARY CATALOGUE revised  
to December 1949, containing a classified index  
of authors and subjects. Now ready.

To subscribers, 17s. 6d. net; to non-subscribers,  
35s. net; postage 1s.

*Prospectus post free on request*

## *Second-Hand Books*

140 GOWER STREET, W.C.1

**H. K. LEWIS & Co. Ltd.**

LONDON: 136 Gower St., W.C.1

Telephone EUSton 4282 (7 lines)

BUSINESS HOURS: 9 a.m. to 5 p.m. SATURDAYS to 1 p.m.

\*

## REPORTS ON PROGRESS IN PHYSICS

Volume XIV (1951)

*Recent Advances in Ultra-Violet Absorption Spectroscopy*, by W. C. Price. *Anomalous Fine Structure of Hydrogen and Singly Ionized Helium*, by W. E. Lamb, Jr. *New Techniques in Optical Interferometry*, by H. Kuhn. *Diffraction Theory of Aberrations*, by E. Wolf. *The Spectrum of the Airglow and the Aurora*, by A. B. Meinel. *The Microphysics of Clouds*, by B. J. Mason and F. H. Ludlam. *Angular Correlations in Nuclear Reactions*, by M. Deutsch. *Nuclear Effects in Atomic Spectra*, by E. W. Foster. *Nuclear Interactions of Cosmic Rays*, by G. D. Rochester and W. V. G. Rosser. *A Critical Survey of Ionospheric Temperatures*, by N. C. Gerson. *Some Applications of Nuclear Physics in Medicine*, by W. V. Mayneord.

Price £2. 10s. Members: One copy at 27s. 6d.  
Postage and packing 1s.

*Further information can be obtained from*

THE PHYSICAL SOCIETY

1 Lowther Gardens, Prince Consort Road,  
London, S.W.7

# UNUSUAL CHEMICALS

for research and  
laboratory

IT MAY BE that you just cannot find a source of supply for the particular compound you are needing. 'Genatosan' Fine Chemicals \*Price List (June 1950), which includes 300 Research Chemicals, may possibly contain the answer. Among the unique chemicals listed are:

Adenosine  $C_{10}H_{13}O_4N_5$

2 : 4-Dinitrophenyl semicarbazide

Malononitrile  $CH_2(CN)_2$

*m*-Nitroanisole

Phenanthraquinone-imine

$C_6H_4COC(NH)C_6H_4$

Quinolinic anhydride

$C_5H_3N(CO)_2O(2,3)$

In addition we are always willing to consider the manufacture of other unusual chemicals to your own specification.

\*A copy of the Price List will be forwarded immediately on request to:

GENATOSAN LTD.

(A division of British Chemicals & Biologicals Ltd.)

LOUGHBOROUGH LEICESTERSHIRE

Tel: Loughborough 2292



R.17

# E. K. BOWMAN LTD.

Established 1889

61, 61A & 63 HOLMES ROAD, KENTISH TOWN

LONDON, N.W. 5

Telephone: Gulliver 1653

★

*SPECIALISTS IN ALL TYPES OF*  
ANIMAL CAGES  
TUBULAR STEEL AND ANGLE IRON RACKING  
CAGES FOR  
MONKEYS, BABOONS AND THE SMALL RODENT

★

SEND FOR ILLUSTRATED CATALOGUE

## 'WELLCOME'

### DIAGNOSTIC AND LABORATORY MATERIALS

- AGGLUTINABLE SUSPENSIONS ● AGGLUTINATING AND PRECIPITATING SERA
- CULTURE MEDIA ● OLD TUBERCULIN ● OPACITY TUBES ● PENICILLINASE
- REAGENTS FOR COMPLEMENT FIXATION AND FLOCCULATION TESTS
- THE 'AGLA' BRAND MICROMETER SYRINGE
- SERA FOR IDENTIFICATION OF ANAEROBES

*Details and Price List on application*



Obtainable from: THE WELLCOME RESEARCH LABORATORIES  
Langley Court, Beckenham, Kent. Telephone: Beckenham 3422 or from:

**BURROUGHS WELLCOME & CO.** (*The Wellcome Foundation Ltd.*) LONDON