The FISHER NEFLURO-PHOTOMETER
“Three Instruments In One”

Colorimeter

Light of specific wavelengths is absorbed by the unknown in solution. The amount of absorption is measured and related to the concentration.

Fluorometer

Light of one wavelength causes some substances to fluoresce or emit light (of a different wavelength) which is measured at right angles to the incident light and related to the concentration.

Nephelometer

Dispersed particles scatter the incident light by reflection and diffraction. This scattered light is measured at right angles and related to the concentration of the particles.

This versatile new instrument permits accurate quantitative determinations to be made by any of the three methods shown at left.

The same few simple controls are used for all three types of determinations and readings for all analyses are made from the combination percentage transmission-logarithmic scale of the instrument.

The Nefluoro-Photometer is quickly interchangeable for colorimetric, fluorometric or nephelometric analysis. Sets of filters, cells, light sources, etc., are available for determinations in the three fields.

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FOR BIOLOGICAL PROCEDURES

Long-continued experimentation with animals in our own laboratories has led to the development of many special diet materials which we have found valuable in nutritional research. While the preparation of these materials in small quantities in the individual laboratory would be troublesome and costly, our production facilities enable us to offer them—conveniently packaged and economically priced—as a service to investigators engaged in biological assay and research.

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VITAMIN A TEST DIET, U. S. P. XII, GBI. For depletion of animals within allotted time-weight limits specified for Vitamin A assays.

RACHITOTGENIC DIET NO. 2, U. S. P. XII, GBI. For depletion of animals within allotted time-weight limits specified for vitamin D assays.

VITAMIN B COMPLEX TEST DIET GBI. For use with suitable animals and experiments, to produce deficiencies of thiamine chloride, riboflavin, niacin, pyridoxine and pantothenic acid.

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- UNIQUE MAGNIFIED SCALE
- SIMPLE TO USE
- DIRECT READING
- ECONOMICAL

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1451E. DUBROVIN GAUGE TYPE B
table model, 20 mm. range, 9 to 1 scale, without mercury.
Each, $48.00

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Flame Photometry—the new and faster method of base ion analysis

The Perkin-Elmer Flame Photometer provides a new method for analysis of base ions of diagnostic importance. Fluid samples or solid samples placed in solution are simply diluted and measured in direct comparison with synthetic standards. The internal standard technique permits high accuracy, speed, and elimination of cumulative errors.

The table below shows the Na and K content of three human blood sera as determined by the flame photometer. The results were obtained in triplicate on each diluted serum sample. The net time for each triplicate ion analysis, after sample dilution, is ten minutes.

<table>
<thead>
<tr>
<th></th>
<th>Analysis</th>
<th>Na MEQ/L</th>
<th>K MEQ/L</th>
<th>Na MEQ/L</th>
<th>K MEQ/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>151.5</td>
<td>4.91</td>
<td>146.9</td>
<td>4.47</td>
<td>146.2</td>
</tr>
<tr>
<td>2</td>
<td>152.0</td>
<td>4.95</td>
<td>147.8</td>
<td>4.41</td>
<td>146.2</td>
</tr>
<tr>
<td>3</td>
<td>150.4</td>
<td>4.88</td>
<td>148.2</td>
<td>4.37</td>
<td>147.5</td>
</tr>
</tbody>
</table>

For additional information write The Perkin-Elmer Corporation, Dept. 62, Glenbrook, Connecticut
This is the new Technicon Fraction Collector, an apparatus which will automatically collect up to 200 rigidly controlled samples of predetermined fluid volumes. Each sample may comprise any number of drops from one to four hundred. After the selected number of drops have been collected in the test tube, the carriage automatically advances to repeat the identical collection in successive samples until the whole fractionation has been completed, whereupon the machine shuts itself off.

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AUTOMATIC SAVING IS SURE SAVING U.S. SAVINGS BONDS

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