

## EQUIPMENT NEWS

The information reported here is obtained from manufacturers and from other sources considered to be reliable. Science does not assume responsibility for the accuracy of the information. All inquiries concerning items listed should be addressed to Science, Room 740, 11 W. 42 St., New York 36, N.Y. Include the name(s) of the manufacturer(s) and the department number(s).

■ **SURFACE-TEMPERATURE TRANSDUCER** is said to be accurate between  $-320^{\circ}$  and  $950^{\circ}\text{F}$ . The transducer consists of a woven grid of fine platinum wire. A resistance change of 100 ohms or more can be obtained for a temperature span of as little as  $100^{\circ}\text{F}$ . Response time is 0.5 sec. A special cement is used to attach the transducer to the surface to be measured. (Charles Engelhard Inc., Dept. S425)

■ **REPEAT-CYCLE TIMER** uses resistance-capacitance networks for timing. Each timing cycle initiates the next. On-time is adjustable from 0.2 to 200 sec, off-time from 0.1 to 60 sec. The intervals are interchangeable. (G. C. Wilson and Co., Dept. S296)

■ **ELECTROLYTIC HYGROMETER** automatically and continuously measures water concentration in vapor samples with 5 percent accuracy in the 0- to 1000-ppm range. The measurement is made by passing the sample-gas stream through an analytic element that absorbs and electrolyzes water present in the stream. The electrolysis current is a measure of the rate of absorption of water. The instrument will measure samples at temperatures up to  $100^{\circ}\text{C}$ . An incorporated alarm system can be set at any point in the instrument's range. Output will operate a 10 or 50 mv recorder. (Beckman Instruments, Inc., Dept. S434)

■ **PRESSURE PICKUP** may be installed in the body of a standard spark plug. It permits retention of the original thermal, ignition, and physical characteristics of the spark plug, and provides a tool for research on internal combustion engines. A pressure-sensitive diaphragm in the electrode cavity of the spark plug is linked with an unbonded strain gage contained in the outer plug body to provide an electric signal. Pressure range is 0 to 1000 lb/in<sup>2</sup>. Full-scale output with 22-v excitation is 20 to 30 mv. (Dynamic Instruments Co., Inc., Dept. S435)

■ **PORTABLE POTENTIOMETER** covers the range of 0 to 100 mv with a single turn-dial. Sensitivity is 0.05 mv and accuracy is given as  $\pm 0.1$  mv. The galvanometer is of the torque suspension type and does not require locking in transit. Its low resistance makes the instrument suitable for use with thermocouples. (Williamson Development Co., Inc., Dept. S426)

■ **RADAR RESTITUTER** automatically computes the errors that give rise to the distortions present in radar photography and produces a new photograph on which ground objects are accurately located. The chief distortions eliminated arise from the observation of slant distance rather than ground distance and from the motion of the radar. The corrected photographs are suitable for compilation of maps. (Fairchild Camera and Instrument Corp., Dept. S427)

■ **MAGNETIC DRUM MEMORY** stores more than 12,000 bits and associated clock and reference information in 14 channels. Each channel is 0.070 in. wide and has a capacity of 1024 bits. The drum is 3.5 in. in diameter, and the case is 6 in. in diameter and 3.25 in. wide. The drum is belt-driven at speeds up to 15,000 rev./min. Access time is approximately 1.2 msec. Other models with up to 36 channels will be produced. (Borg-Warner Corp., Dept. S436)

■ **TENSION METER** has a range of 1 to 20 lb, with greatest resolution at the low-tension end. During operation, the material under test—for example, a wire—runs between two rollers and a third roller. The rollers deflect the material from a straight line and the meter measures the force required. Readings are made while the material moves at production speeds. (Tensitron, Inc., Dept. S429)

■ **COUNTER** with a range of 100,000 counts is battery operated. A self-contained battery charger permits the instrument to be kept in readiness for field use. Five glow-tube decades perform the counting, with push-button reset and a spring-wound timer providing a predetermined time counting range from 0.25 to 6 min. A stop switch is also provided. (Nuclear-Chicago Corp., Dept. S440)

■ **SINGLE CRYSTALS** as well as large-grain polycrystals are offered in most metals. A broad range of metal purity, crystal orientation, and overall size is available. The crystals may be obtained with the surface etched or electropolished, or with the surface unchanged from its condition at the end of growth. (Flow Corporation, Dept. S445)

JOSHUA STERN  
National Bureau of Standards

dependable **NALGON**

...flexible plastic tubing

NALGON TUBING\* is saving time and money in plants and laboratories everywhere. Perfect flexibility, high chemical resistance, absolute safety, true transparency and excellent dimensional stability prove efficiency in use . . . and it's economical too! The  $\frac{1}{4}$ " ID with  $\frac{1}{16}$ " wall sells for less than 15¢ per foot. You'll find NALGON easy to handle and available in all sizes from  $\frac{1}{8}$ " ID through 2" ID. Ask your dealer for catalog E-956

\*A **VOPLEX** PRODUCT

the **NALGE CO. Inc.**  
ROCHESTER 2, NEW YORK

World's largest producer of Plastic Laboratory Ware

Downloaded from https://science.sagepub.com at Georgetown University on September 29, 2012

# Science

## EQUIPMENT NEWS

JOSHUA STERN

*Science* **126** (3264), 136.

DOI: 10.1126/science.126.3264.136

### ARTICLE TOOLS

<http://science.sciencemag.org/content/126/3264/136.citation>

### PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

---

*Science* (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. The title *Science* is a registered trademark of AAAS.

Copyright © 1957 The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works.