quite improbable that any national language will approach universal usage. Much material is now published in English, but many cannot read English. For example, the recent UNESCO report [*Scientific and Technical Translating and Other Aspects of the Language Problem*, J. E. Holmstrom, Ed. (Columbia Univ. Press, New York, 1957), p. 13] says: "Nearly two-thirds of engineering literature appears in English, but more than two-thirds of the world's professional engineers cannot read English and a still larger proportion of English-reading engineers cannot read scientific literature in other languages. In other words, leaving qualitative differences aside, the greater part of what is published is inaccessible to most of those who could otherwise benefit from it."

The average scientist can probably read Interlingua at sight with 80 percent comprehension. Thus, material written in Interlingua is immediately useful to him, since much of his reading consists in scanning articles to see if they contain material of importance for his work. For articles which require 100 percent comprehension, or for writing in Interlingua, use of the dictionary and grammar will of course be necessary. [To test whether Esperanto would be equally readable and useful, the reader may compare the parallel texts in Interlingua and Esperanto in the *American Journal of Physics* [**21**, 471 (1953)] or in the UNESCO report (p. 200)].

To speak for myself, if a scientist who is by no means a linguist could first see a sample of Interlingua in February and begin editing and publishing a periodical the first issue of which appeared in May of the same year, despite a concurrent heavy schedule of teaching and research, it certainly cannot be too hard to learn to write in Interlingua.

The scientist is a busy person. If he has to take the time to study a new language, however simple, before it begins to be of use to him, he probably will not do it. But if there begins to appear literature of importance to him in a language he can largely comprehend at sight, he will probably scan it. And if by such scanning, and by use of the dictionary and grammar for careful reading of those articles that are of importance for his work, he is able gradually to perfect his comprehension while obtaining information that is of use to him, then it is possible that he may begin to appreciate the advantages of this common language. He may even finally begin to write and speak it in order to carry his ideas and results to a wider audience. Let us hope so. For if this were universally done, the gain to science would be substantial.

FORREST F. CLEVELAND
Department of Physics, Illinois Institute of Technology, Chicago

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).*

■ CRYSTAL LATTICE MODELS of German manufacture now include feldspar, alpha quartz I, alpha quartz II, beta quartz I, and beta quartz II. Models, consisting of wooden spheres fixed and joined by metal rods, are designed on the basis of x-ray- and electron-diffraction data. Linear magnification is 2.5×10^8, so that 1 A is 25 mm. (Arthur S. LaPine & Co., Dept. S907)

■ POWER-SUPPLY REGULATION ANALYZER measures applied d-c voltage, the percentage change in applied voltage, and the root-mean-square ripple of regulated and unregulated power sources. Voltage range is 1 to 3000 v; accuracy is ± 0.1 percent. Percentage regulation is measured in four ranges of sensitivity from 0.005 percent to 5 percent each side of the null position. Ripple voltage is measured in 11 ranges to 100 v r.m.s. Provision is made for oscilloscope display and for external recording. (Kepco Laboratories Inc., Dept. S917)

■ TRAVELING-WAVE OSCILLOSCOPE is designed to display transient and repetitive phenomena in the millimicrosecond region. Frequencies as high as 2000 Mcy/sec and voltage levels of 40 to 50 mv can be detected. The total size of the display is 0.4 by 0.6 in., but the extremely small size of the cathode-ray beam spot, 0.002 in., permits resolution equivalent to that of a standard 5-in. cathode-ray tube. In terms of trace widths, sensitivity is 0.06 v per trace width. (Edgerton, Germeshausen & Greer, Inc., Dept. S925)

■ DENSITY MEASURING SYSTEM consists of a probe and a power supply. The probe is coated to resist the action of liquids being observed. A standard model has a range of 0.60 to 1.45 g/cm³. Time response for a change of density of 0.01 g/cm³ is about 1 sec. Temperature range is 0° to 100°C. Output from the instrument can be used for recording density. (General Communication Co., Dept. S930)

■ OSCILLOGRAPH allows simultaneous and directly visible recording of up to 16 processes. Recording is rectilinear. Frequency response is from d-c to 165 cy/sec. Sensitivity is 3 mv, peak-to-peak, per millimeter, and each record is 20

mm wide. Five attenuation steps are provided. Input impedance is about 1 megohm. Chart speeds are selectable from 10 to 200 mm/sec. (Brinkmann Instruments Inc., Dept. S931)

■ SIEVE SHAKER uses a shaking pattern which involves rotation of the sieve platform in a small circular arc at the same time that it is being swayed in a vertical arc. An impact is imparted to the platform six times per revolution. Hand-operated and motorized models are available in sizes for 8- or 12-in. diameter sieves (Soiltest Inc., Dept. S932)

■ TEMPERATURE - COMPENSATING TIMER permits compensation for the influence of temperature on photographic development. The temperature change to be compensated is detected by a thermistor and is used to control the frequency of current supplied to an electric clock. Thus the clock rate is retarded or advanced as required to insure proper development. Range of compensation is ±4°F. Calibration can be accomplished for almost any film-developer combination. (Eastman Kodak Co., Dept. S934)

■ CORE TESTER provides a display of coercive force, saturation flux density, *Br* to *Bm* ratio and differential permeability, and the shape of the hysteresis loop. The tester is of the current-reset type. Characteristics are displayed 60 times each second. (Mack Electronics Division of Mack Trucks Inc., Dept. S937)

■ PROXIMITY DETECTOR is sensitive to change of position of metallic objects passing within ½ in. of the pickup. A 1/16-in. change in position is detectable. Response rate is 400 per minute. Output is nominally 5v, dc across a 5 Meg load. (Autron Engineering Inc., Dept. S938)

■ REACTOR PERIOD AND POWER LEVEL indications are provided by a combination of a logarithmic picoammeter and a reactor-period meter. Current is measured from 10^{-13} to 10^{-6} amp; positive and negative reactor period from 3 to 30 sec. After warm-up, drift of the log circuit is within 0.05 decade in 24 hours. The period meter has 5-sec recovery time from overload and adjustable response time over a 10-to-1 range. (Keithley Instruments Inc., Dept. S939)

■ HEIGHT GAGE uses a glass scale and glass vernier scales to provide readability to 1 mil. Height adjustment knobs are located in the base of the device to avoid any tilting tendency on adjustment. Available sizes range from 18 to 84 in. (George Scherr Co., Inc., Dept. S940)

JOSHUA STERN
National Bureau of Standards

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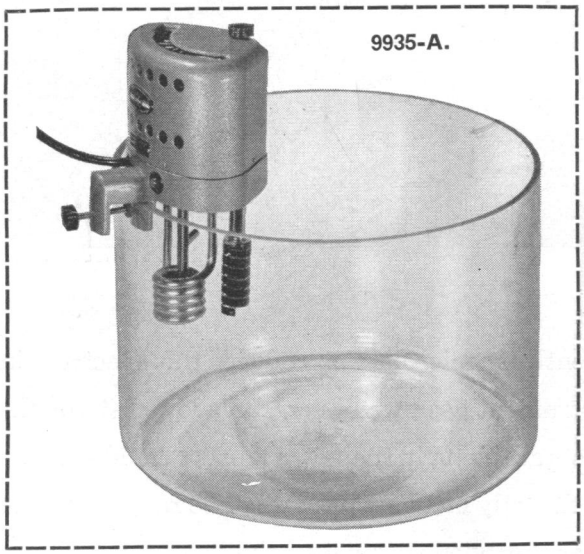
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