To and Fro

The international exchange of people, knowledge, and technical skills has probably never been more extensive than it is now. Americans, under the auspices of the international exchange program of the State Department, have taken part in a wide range of activities abroad. Some of our cultural exports under this program in recent years have been as follows: Dizzy Gillespie, Porgy and Bess, Oklahoma, symphony orchestras, weightlifters, trackmen, basketball players, engineers, scientists, agricultural experts, technicians, teachers, and students.

For the most part, exchange has been a two-way street. From abroad, with State Department aid, foreign legislators, legal experts, public administrators, lecturers, teachers, scientists, and engineers have come to this country. In addition, mention only a single example, American methods of handling the news have been learned by foreigners through on-the-job training at our newspapers and television stations.

The extent of exchange in education may be appreciated by a glance at the figures compiled recently by the Institute of International Education for the year 1956-57. During that year 40,666 foreign students, 1153 foreign teachers and research workers, and 6741 foreign physicians were in the U.S. At the same time 1492 faculty members from U.S. institutions were abroad. The figures for American students abroad during that year are not yet available, but for 1955-56 they numbered 9887.

These are impressive figures, and so are the figures for geographic distribution. The foreign students, for example, came from more than 100 countries; American students went to 54 countries. The countries in which American students were not to be found and from which few or no students came to America were in the Soviet bloc.

Thus, the exchange is not as free as it might be. Despite the statements of high officials in both the Soviet and the U.S. Government about the desirability of promoting cultural exchange, very little has happened. True, there have been some exchanges of agriculturalists, engineers, and scientists. But these people came to the U.S. as Soviet officials and thus were able to sidestep the U.S. requirement that nonimmigrant aliens must be fingerprinted. The fingerprinting requirement has blocked attempts to negotiate an agreement for a more general exchange of people between the U.S. and the Soviet Union. Neither students nor ballerinas can pass as government officials.

In an attempt to break the impasse, Senator Javits and Representative Carnahan have introduced identical legislation in the Senate and the House. The bills propose that the State Department negotiate agreements for reciprocal exchange with the Soviet Union and that the Secretary of State and the Attorney General be authorized to waive the fingerprinting requirement. These legislators join the State Department in having no fear that waiving the requirement would jeopardize our security; nor does the President, who said last January that the requirement lacks "any significant contribution to our national security."

If the Soviet objection to fingerprinting is only a pretense, passage of these bills would make it apparent. But it is not the main point of the legislation to test this objection. The main point is to try to find some way to promote a freer exchange in the belief that this would lessen the tensions and thus improve the chances for peace. It is worth a try.—G. DeS.
E-X-T-E-N-D-E-D

Range!

NEW TESTS, NEW APPLICATIONS

Simple, inexpensive tests, helpful in diagnosis of coronary artery disease, can now be made with Bausch & Lomb Spectronic 20 Colorimeters. Special adaptation, extending instrument range to 340m$\mu$ in the U-V, makes assay of serum glutamic-oxalacetic transaminase a routine clinical procedure. (Detailed clinical method available on request.)

Many other new tests, including vitamin assays, are made possible by pinpoint selection of any wavelength in the 340m$\mu$-950m$\mu$ range.

SAME EASE, SPEED AND DEPENDABLE ACCURACY

Easy As Tuning Your Radio! Dial instantly sets Certified-Precision diffraction grating to desired wavelength; no color filters to fuss with.

Fastest Readings! Simply insert sample tube; instant-acting meter gives exact percent transmission, or optical density.

Accurate Analyses! Narrow band pass (only 20m$\mu$) assures highest spectral purity. 49 clinical calibrations available.

LOW PRICE, DOUBLE VALUE

Colorimeter plus spectrophotometer, 375m$\mu$-950m$\mu$ (extended range to 340m$\mu$ at slight extra cost), for less than the price of most colorimeters alone!

MAIL COUPON TODAY FOR VALUABLE DATA

BAUSCH & LOMB OPTICAL CO.
85621 ST. PAUL ST., ROCHESTER 2, N. Y.

☐ Send me 11-page reprint of "Clinical Method for Assay of Serum Glutamic-Oxalacetic Transaminase" plus references and charts.

☐ Send me B&L Spectronic 20 Catalog D-266.

☐ I would like an obligation-free demonstration of the B&L Spectronic 20 Colorimeter at my convenience.

NAME ........................................

TITLE ........................................

ADDRESS .....................................

CITY ........................................ ZONE STATE

BAUSCH & LOMB
SINCE 1853

America's only complete optical source... from glass to finished product.

SCIENCE is published weekly by the AAAS, 1515 Massachusetts Ave., NW, Washington 5, D.C. Entered at the Lancaster, Pa., Post Office as second class matter under the act of 3 March 1879. Annual subscriptions: $7.50; foreign postage, $1; Canadian postage, 50c.
activities for the improvement of secondary-school science and mathematics programs. The conference was held with the cooperation of the University of California, Los Angeles, and the AAAS.

At the close of the meeting, Joseph B. Platt, president of Harvey Mudd College, was named chairman of a Southern California Industry-Education Council that will carry the responsibility of promoting cooperation between industry and education in Southern California during the coming year. The council membership also includes two school superintendents and two representatives of Southern California Industry. A report of the July conference may be obtained from Dr. Randall M. Whaley, National Academy of Sciences—National Research Council, Washington 25, D.C.

Society Elections


Forthcoming Events

September

29-30. World Medical Assoc., Istanbul, Turkey. (L. H. Bauer, 10 Columbus Circle, New York 19.)

30-2. American Oil Chemists’ Soc., fall, Cincinnati, Ohio. (Miss L. R. Hawkins, AOCS, 35 E. Wacker Dr., Chicago 1, Ill.)

30-8. International Council for the Exploration of the Sea, 45th annual, Bergen, Norway. (A. Fridriksson, ICES, Charlottenlund Slot, Charlottenlund, Denmark.)

October


2-4. American Soc. of Photogrammetry, semi-annual, St. Louis, Mo. (C. E. Palmer, ASP, 1515 Massachusetts Ave., NW, Washington 5.)

2-4. Antibiotics, 5th annual symp., Washington, D.C. (H. Welch, Div. of


4-6. Role of Agriculture in Future Society, 75th anniversary symp., Geneva, N.Y. (New York State Agricultural Experiment Station, Cornell Univ., Geneva.)


7-9. National Electronics Conf., Chicago, Ill. (J. S. Powers, NEC, 84 E. Randolph St., Chicago 1.)


7-11. Research Contributions to Clinical Practice, New York Acad. of Medicine Postgraduate Week, New York. (Secretary, Postgraduate Week, New York Acad. of Medicine, 2 E. 103 St., New York 29.)

8-10. International Assoc. of Milk and Food Sanitarians, annual, Louisville, Ky. (H. H. Wilkowski, Daisey Science Dept., Univ. of Florida, Gainesville.)

8-10. Upper Air Conf., American Meteorological Soc., Omaha, Nebr. (K. C. Spengler, AMS, 3 Joy St., Boston 8, Mass.)

9-11. High Vacuum Technology, 4th annual symp., Boston, Mass. (Committee on Vacuum Techniques, P.O. Box 1282, Boston 9.)

9-11. Society for Experimental Stress Analysis, fall, San Diego, Calif. (W. M. Murray, SESA, P.O. Box 168, Cambridge 39, Mass.)

9-12. Tau Beta Pi Assoc., annual, Madison and Milwaukee, Wis. (R. H. Nagel, Univ. of Tennessee, Knoxville.)

10-11. Noise Abatement Symp., 8th annual, Chicago, Ill. (J. J. Kowal, Armour Research Foundation, 10 W. 33 St., Chicago 16.)


13-18. American Acad. of Ophthalmology and Otolaryngology, annual, Chicago, Ill. (W. L. Benedict, 100 First Avenue Blvd., Rochester, Minn.)


14-18. American College of Surgeons, 43rd annual clinical cong., Atlantic City, N.J. (ACS, 40 E. Erie St., Chicago 11, Ill.)


16-23. Enzyme Chemistry, internat. symp., Tokyo and Kyoto, Japan. (Inter-
DANGER!
DO NOT STOP

that's right — when knives have been honed on the new automatic E & G Microtome Knife Sharpener — stropping will actually impair their super sharp edges!

This instrument, the world's finest microtome knife sharpener, was originally developed at the University of California at Los Angeles to meet the exacting requirements for ultra thin sectioning — but has proven itself even more efficient for routine sectioning.

The new E & G Microtome Knife Sharpener, with its special, high frequency vibration honing plate, and knife holder which automatically turns, accommodates knives up to 185 mm. in length. It is compact, sturdy and easy to clean, and is so automatic that it can be easily operated by your laboratory personnel.

For further information on the unparalleled new automatic E & G Microtome Knife Sharpener, write to

ERB & GRAY SCIENTIFIC
854 S. FIGUEROA ST.
LOS ANGELES 17, CALIF.

THE NEW RSCO
AUTOMATIC
FRACTION COLLECTOR

Check these Features!

VERSATILITY

• Metering by Volumetric Siphoning, Timing or Drop Counting
• Operation with multiple columns or with single column and swivel funnel
• 24” and 15” Turntables accommodating 90 to 500 tubes of 10 to 25 mm diam

RELIABILITY

• Positive indexing system
• Funnel drains into output container at end of run
• Automatic stop accessory turns off columns at end of run
• Motor and drive mechanism sealed against moisture
• Cast aluminum base with rigidly attached stainless steel column support rods for assured permanent alignment

SPACE ECONOMY

• Plug-in control units for Timing and Drop Counting require no added bench space
• Total required bench space 24” x 34” with 24” Turntables, 15” x 25” with 15” Turntables

Write for Bulletin 1205-A or contact your authorized RSCO Dealer

RESEARCH SPECIALTIES CO.
2005 HOPKINS ST.
BERKELEY 7, CALIF.

PRICES FROM $435.00
national Symp. on Enzyme Chemistry, National Science Council of Japan, Ueno Park, Tokyo.)

17-18. American Ceramic Soc., 10th Pacific Coast mtg., San Francisco, Calif. (C. E. Pearce, ACS, 4055 N. High St., Columbus 14, Ohio.)

17-18. Industrial Hydraulics, natl. conf., Chicago, Ill. (Conference Secretary, Armour Research Foundation, 10 W. 35 St., Chicago 16.)

17-19. Indiana Acad. of Science, Greencastle. (H. Crull, Dept. of Mathematics, Butler Univ., Indianapolis 7, Ind.)

17-19. Optical Soc. of America, Columbus, Ohio. (S. S. Ballard, Visibility Lab., Scripps Institution of Oceanography, San Diego 52, Calif.)


20-22. American College of Apothecaries, St. Louis, Mo. (R. E. Abrams, Hamilton Court, Chestnut and 39 St., Philadelphia, Pa.)


22-25. American Dietetic Assoc., annual, Miami, Fla. (Miss R. M. Yekel, ADA, 620 N. Michigan Ave., Chicago 11, Ill.)

24-25. Computer Applications Symp., Chicago, Ill. (Conference Secretary, Armour Research Foundation, 10 W. 35 St., Chicago 16.)

24-25. Engineers General Assembly, New York, N.Y. (Engineers Joint Council, 29 W. 39 St., New York 18.)

24-25. New Mexico Acad. of Science, annual, Albuquerque. (W. J. Koster, Dept. of Biology, Univ. of New Mexico, Albuquerque.)


24-27. American Soc. for Aesthetics, annual, Washington, D.C. (T. Munro, Cleveland Museum of Art, Cleveland 6, Ohio.)

24-5. Pan Indian Ocean Science Assoc., 3rd cong., Tananarive, Madagascar. (R. Paulian, Institut de Recherche Scientifique, B.P. 454, Tananarive.)


25-26. Midwest Conf. on Biology Teaching in Colleges and Smaller Universities, Des Moines, Iowa. (L. P. Johnson, Dept. of Biology, Drake Univ., Des Moines 11.)


(See issue of 16 August for comprehensive list)
Searching for One Dependable Source for All Your Research Biochemical Needs

NUTRITIONAL BIOCHEMICALS CORPORATION offers you quality that merits your complete confidence... service you can always rely upon... plus the economy of lowest possible prices.

• OVER 200 AMINO ACIDS
• OVER 75 PEPTIDES
• MISCELLANEOUS BIOCHEMICALS
• VITAMINS
• ENZYMES
• GROWTH FACTORS

• OVER 200 NUCLEOPROTEINS, PURINES, PYRIMIDINES
• STEROID HORMONES
• BIOLOGICAL SALT MIXTURES
• BIOLOGICAL TEST MATERIALS

NUTRITIONAL BIOCHEMICALS CORPORATION
21010 Miles Avenue... Cleveland 28, Ohio

PHOTOVOLT Densitometer
for Partition Chromatography and Paper Electrophoresis

A photoelectric precision instrument for the rapid and convenient evaluation of strips and sheets of filter paper in partition chromatography and paper electrophoresis.

Write for Bulletin #800 to
PHOTOVOLT CORP.
95 Madison Avenue
New York 16, N. Y.

Write For New Catalog
July 1957
Over 1700 Items
Write Dept. 102

PHOTOMETER

CUSTOM MADE

TOOL FOR THE ANALYSIS OF COMPLEX COLLOID SYSTEMS, AND FOR THE CONTROL OF PRODUCTION OF PURIFIED PROTEINS, ENZYMES, HORMONES

KLETT MANUFACTURING CO.
179 EAST 87TH STREET
NEW YORK, N. Y.
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).

**GAS-DENSITY BALANCE** measures the buoyancy effect of a gas in producing a rotational moment in a small dumbbell that is supported on a horizontal quartz fiber. The dumbbell is restored to its null position by application of electrostatic force. The magnitude of the balancing potential required is proportional to the density of the sample and is used to operate a meter or recorder. Ranges of 0.05 total span relative to air anywhere from 0 to 5.00 are available. Sensitivity is $\pm 1/2$ percent of full scale, accuracy $\pm 11/2$ percent of full scale. Response of 95 percent is obtained in 1 min. Output is 0 to 5 mv. (Arnold O. Beckman, Inc., Dept. S560)

**TIME-TO-PULSE-HEIGHT CONVERTER** is designed for measurement of time intervals in the range 250 $\mu$sec to 1 $\mu$sec. The instrument requires that the time interval of interest be defined by an initial and a final pulse. The output is a pulse whose amplitude is proportional, within $\pm 1$ percent, to the time interval being measured. Readout may be accomplished either by a multichannel pulse-height analyzer or by an oscilloscope. Resolution times of the order of 40 $\mu$sec are said to have been achieved by the instrument. (El Dorado Electronics Co., Dept. S512)

**PROGRAMMER** for six- and eight-channel oscillograph recording systems produces the following automatic sequence for analog computer readout: recorder is turned on; calibration signal voltages are fed to all channels; d-c levels of computer are read; computer output is recorded for predetermined chart length or as controlled by computer; recorder is turned off and programmer is reset. (Sanborn Co., Dept. S502)

**NUCLEAR-POWERED ELECTRIC TIMER** has a shelf and use life of more than 25 years. One model of the timer, 1/3 in. in diameter by 1/3 in. long, provides an electric time delay ranging from several milliseconds to 40 hours with accuracy of $\pm 3$ percent over the temperature range $-65^\circ$ to $165^\circ$ F. Time delay may be initiated by snap-action switch, pull wire, or electric signal. Power is furnished by a nuclear battery made in current ratings from 50 to 5000 $\mu$A and equilibrium voltages in the order of 10,000 v. (Universal Winding Co., Dept. S546)

**INFRARED MONOCROMATOR** is designed to determine the absolute spectral distribution of radiation from airborne targets in the 1.5 to 25- $\mu$m region and to determine total radiation. Measurements are recorded on a two-channel recorder. Radiation collected by a Newtonian telescope optical system is reflected alternately to a total radiation detector and a monochromator. Thermistor bolometers are used as detecting elements. (Servo Corporation of America, Dept. S519)

**ABRASION TESTER** combines rotary and reciprocating motions to test the durability of materials that are to be subjected to rubbing and twisting types of wear. Both the reciprocating table and the rotating head to which the sample is attached are equipped with ring clamps, which permit substitutions of a variety of surfaces. Provision is made for wet-and-dry tests. (United States Testing Co., Inc., Dept. S520)

**MICROHOBMMETER**, manufactured by Electronic Instruments Ltd., of England, measures resistance from 20 $\mu$ohm to 1200 ohm. The instrument is line-operated, using a-c test currents at line frequency. Power dissipated in the test specimen is less than 1/5 w in the worst case. Accuracy is approximately $\pm 2$ percent of full scale. A calibration circuit permits the accuracy to be checked. (Herman U. Sticht Co., Inc., Dept. S526)

**IONIZATION GAGE** measures pressure from $1 \times 10^{-9}$ to $2 \times 10^{-12}$ mm-Hg in eight linear ranges. Tube degassing by both resistance and electron bombardment is provided. Degassing current is

---

**ORGANIC CHEMISTS • BIOCHEMISTS • PHARMACOLOGISTS**

**B.S., M.S. and Ph.D.**

With or Without Several Years' Experience

- Expanding research organization in a well established and growing company, manufacturing nutritional and pharmaceutical products.
- Opportunities for personal growth and development in modern laboratories stressing a program of product diversification.
- Regular salary reviews, based on up-to-date compensation schedules.
- Liberal employee benefits, including life, medical and hospital insurance, sick leave pay, bonus, stock option and pension plans.
- Pleasant mid-western city of 130,000. Town and country residential areas within easy commuting distance of company location.
- Financial assistance with relocation expenses.
- Inquiries will be considered promptly and held confidential.

Professional Employment Manager
MEAD JOHNSON AND COMPANY
Evansville 21, Indiana