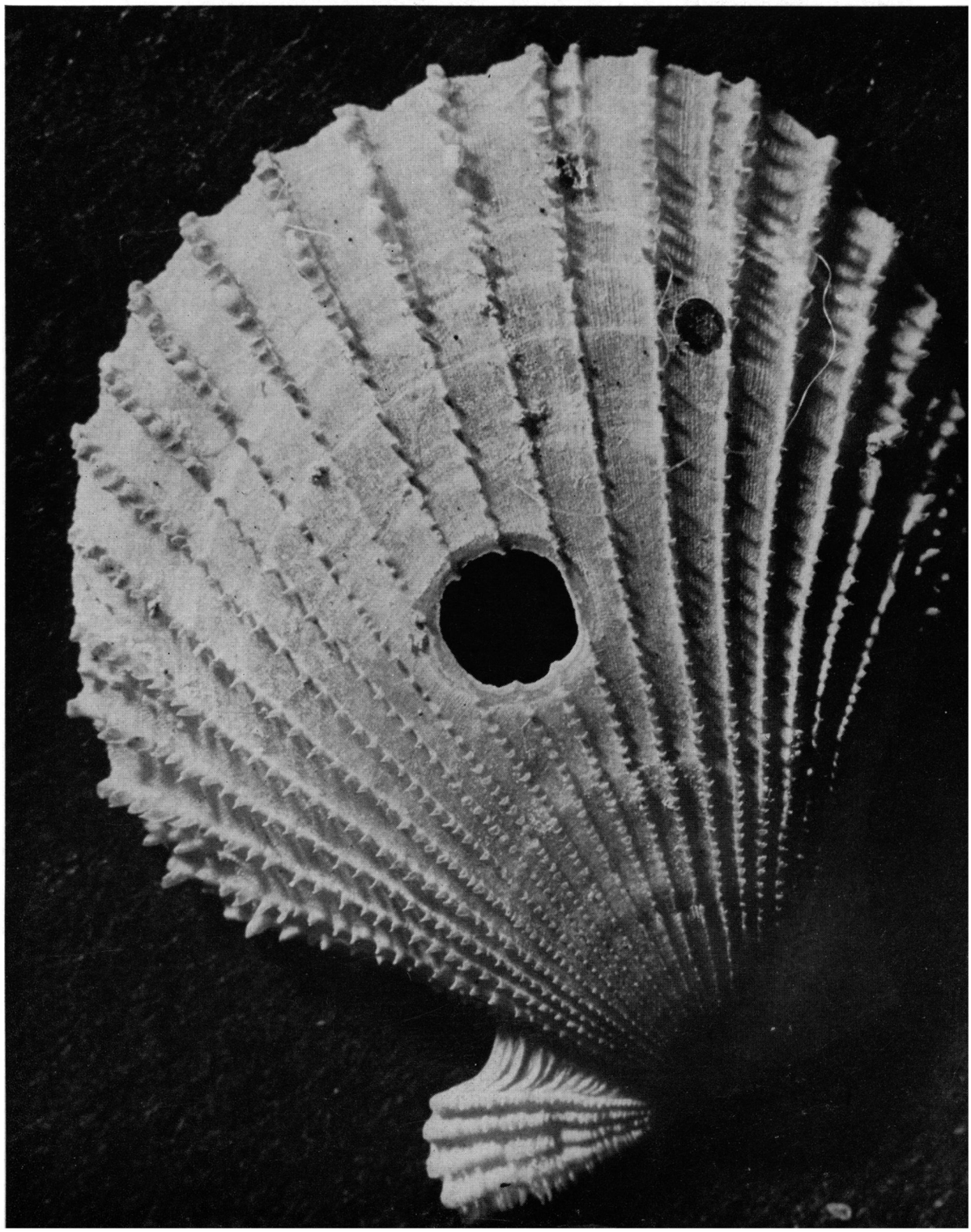
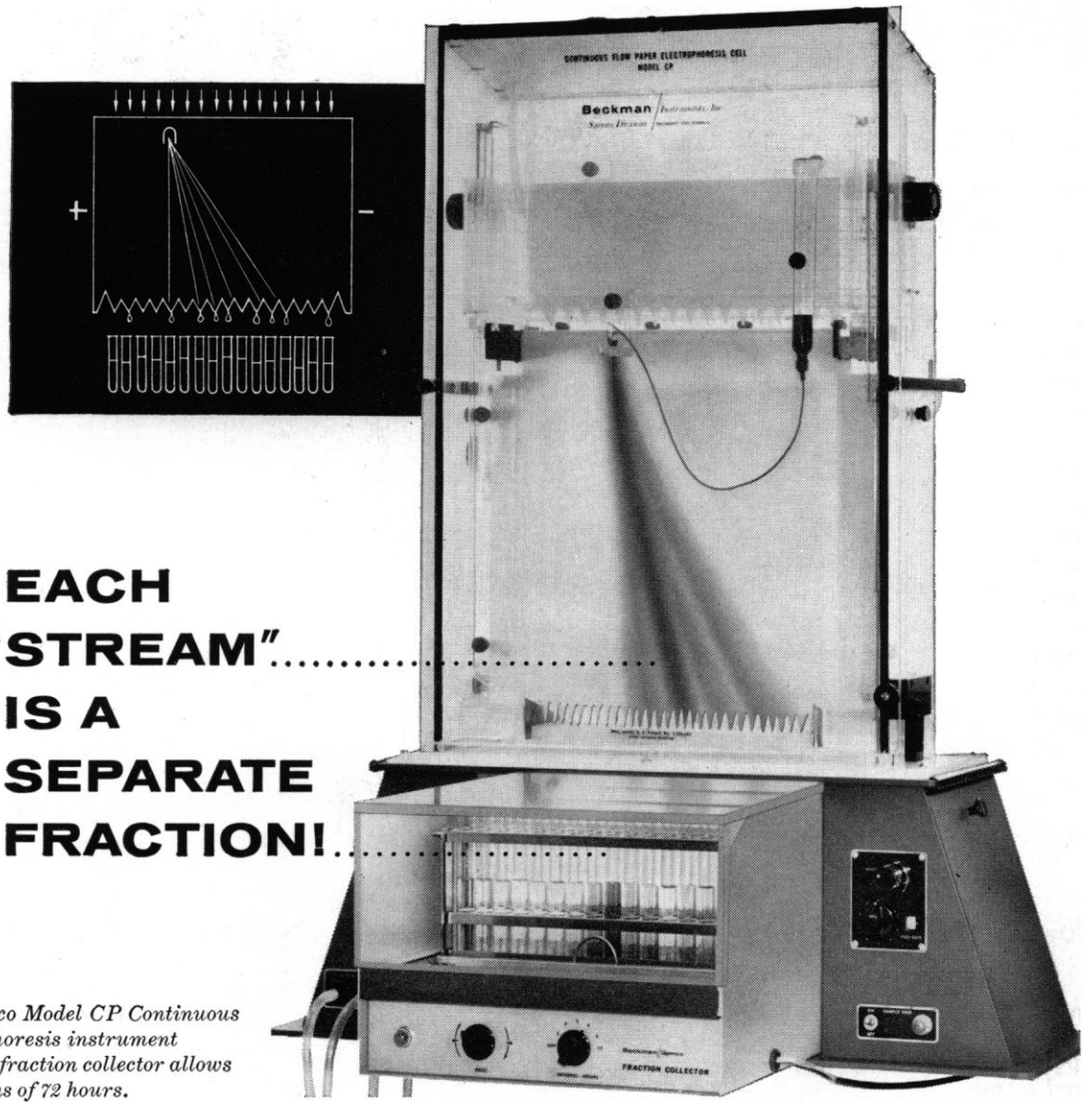
SCIENCE

12 August 1960

Vol. 132, No. 3424

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE





EACH "STREAM"..... IS A SEPARATE FRACTION!.....

Beckman/Spinco Model CP Continuous Flow Electrophoresis instrument with accessory fraction collector allows unattended runs of 72 hours.

As long as your biochemical or organic mixture is water-soluble and the fraction you want is ionized — chances are our Model CP Continuous Electrophoresis can separate it — and in quantity.

In the field for three years, the CP has solved a wide array of fractionating and purifying problems. In biochemistry the Spinco Model CP separates amino acids, peptides, hormones, sterols, bacteria, viruses, serum proteins and lipoproteins...is used in processing antibiotics and concentrating vaccines.

In organic chemistry the CP can isolate the end product in many types of reactions, in quantities up to a gram of pure material a day. Often the various side products can be separated as well.

If you face the problem of preparing pure fractions in volume, investigate the CP Continuous Electrophoresis now. Fill in the coupon and you will receive literature by return mail.

TO: Spinco Division, Beckman Instruments, Inc.
Stanford Industrial Park, Palo Alto 5, Calif.

☐ Please send me applications bulletin 6055 giving typical operating conditions and literature references.

☐ Please send descriptive literature and prices on the CP.

NAME_____

TITLE OR DEPARTMENT_____

FIRM OR INSTITUTION_____

ADDRESS_____

CITY_____ STATE_____

Beckman / **Spinco Division**
Beckman Instruments, Inc.

INSTRUMENTAL IN YOUR FUTURE · 25 YEARS · 1935-1960

S-65A

SCIENCE is published weekly by the AAAS, 1515 Massachusetts Ave., NW, Washington 5, D.C. Second-class postage paid at Washington, D.C., and additional mailing office. Annual subscriptions: $8.50; foreign postage, $1.50; Canadian postage, 75¢.

12 August 1960, Volume 132, Number 3424

SCIENCE

Cover

Shell of a pictinid bivalve through which a gastropod has drilled a hole 3 millimeters in diameter. The shell was collected by the Danish *Galathea* Expedition 1950–52 in the Australian Bight at a depth of 440 meters, and was made available by the Zoological Museum, Copenhagen. The photograph was made by S. M. Boone and M. R. Carriker. [M. R. Carriker, University of North Carolina]

Letters

Quantum Phenomena in Biology

C. Reid (*1*) discusses (among other topics) some recent trends in research on the visual process. In so doing, he keeps the action of rod and cone cells separate, referring to the former as a "monochromatic mechanism" and to the latter as a "trichromatic color-vision process." Wald (*2*) presented a very interesting set of deductions and speculations on the action of rhodopsin and the effect of its bleaching on rod *and* cone activity. The hypothesized structure of both rods and cones is one of compartments containing rhodopsin molecules. The number of compartments per cell can vary, as can the number of rhodopsin molecules per compartment. Sensitivity of a cell is a direct function of the number of compartments and of the amount of rhodopsin per compartment: the more rhodopsin, the higher the probability that that cell will absorb a quantum of light. Several deductions follow from a statistical theory based upon Wald's suggestions—for example, light and dark adaptation phenomena and scotopic and photopic luminosity curves. One new prediction was derived and tested with critical flicker fusion (*3*). The data showed a closer approximation to Wald's conceptualizations than to Crozier's (*4*).

With monochromatic light sources, similar predictions would be difficult to make. Again, some well-grounded speculations may be cited (*5*). First, it is interesting to note that Reid talks of a "trichromatic color-vision process in the cone cells" and observes that "none of the three mammalian cone-cell pigments (these have not yet been isolated) is rhodopsin." Young and Helmholtz started the trichromatic theories; Hering and Ladd-Franklin opposed them; Granit and Hartridge presented ample evidence that perhaps 7- or 11-color theories may be more correct (see *6*).

Trichromatic theories are still in vogue today, due to the existence of three physical primaries, or to our language habits, or to inertia, or to some combination of these, despite the evidence. From the work of Granit and Hartridge it is only one more step to a statistical theory of color vision. This is the step Shaw has taken. One could return to Wald from Shaw's theory and conceptualize compartments containing varying amounts of chlorophyll, xanthophyll, carotene, and other optically active substances. These varying amounts would be distributed normally (like rhodopsin) among cones and cone compartments, so that any given cone might contain close to the mean value of chlorophyll; or it might contain an amount of chlorophyll three standard deviations above the mean and would therefore be a "green cone"; or it might contain a large amount of xanthophyll and be a "yellow cone." Such a theory would seem to be more promising and closer to the content of Reid's paper than a trichromatic theory. I leave the details of such a theory to someone better versed in photochemistry than I.

HOWARD F. GALLUP
Psychology Department, Lafayette College, Easton, Pennsylvania

References and Notes

1. C. Reid, *Science* **131**, 1078 (1960).
2. G. Wald, *ibid.* **119**, 887 (1954).
3. H. F. Gallup, *NAMC-ACEL-341* (16 Aug. 1957).
4. W. J. Crozier, *Proc. Natl. Acad. Sci. U.S.* **28**, 65 (1940).
5. W. A. Shaw, *Psychol. Rev.* **63**, 228 (1956).
6. S. H. Bartley, "The psychophysiology of vision," in S. S. Stevens, *Handbook of Experimental Psychology* (Wiley, New York, 1951), chap. 24.

I believe that Gallup's interesting ideas about cone vision cannot be reconciled with the experimental facts. For instance, Rushton [*Proc. Natl. Acad. Sci. U.S.* **45**, 114 (1959)] has shown, by examination of the reflection spectrum of the fovea centralis of red-blind (protanopic) individuals, the absence of a pigment throughout the red region of the spectrum. Because of the widespread occurrence of this phenomenon, it seems very unlikely that more than one pigment is missing, and consequently this single pigment must be effective over a considerable region of the spectrum. A second pigment, effective in the blue-green region, was also identified by Rushton, and it seems quite reasonable to conclude that a third must exist, covering the blue part of the spectrum. There is nothing in Rushton's spectra to indicate the presence of rhodopsin in the cone cells.

C. REID
University of British Columbia, Vancouver, Canada

Pseudo Science and Censorship

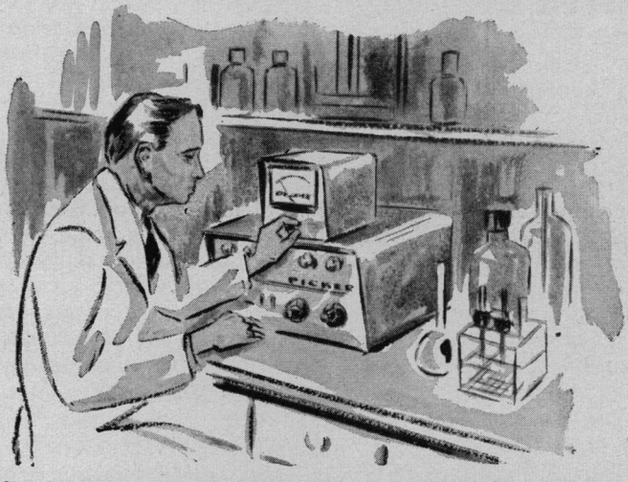
With reference to the editorial "Rebutting the preposterous" [*Science* **131**, 1163 (22 Apr. 1960)], two important questions are implied therein.

1) Who is to judge that grey area, between "accepted science" and pseudo or crackpot science? For it is here that new discoveries arise, and here originate the "breakthroughs" that all are so eagerly seeking. I remember well when the expanding universe and virus as a causative agent in cancer were two ideas believed to have very little merit —then pseudoscientific, if you will.

PICKER NUCLEAR

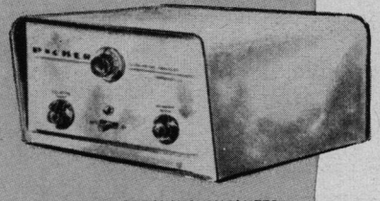
announces a new line of

***transistorized* NUCLEAR TRAINING INSTRUMENTS**

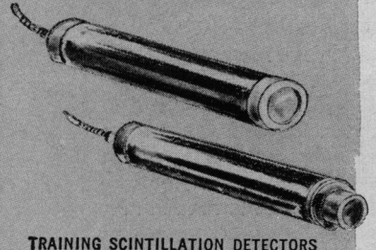


TRAINING SCALER

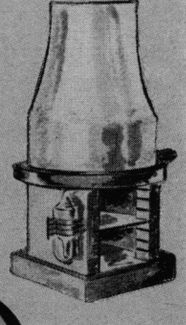
TRAINING RATEMETER



TRAINING ANALYZER



TRAINING SCINTILLATION DETECTORS



TRAINING FLOW COUNTER

PICKER QUALITY AT "BUDGET" OUTLAY

Picker Nuclear announces a comprehensive line of basic instrumentation for training students in radioisotope technics. Uniquely versatile, these instruments permit the scheduling of full laboratory courses in radioisotope technics (including such important fields as pulse height analysis and rate function studies).

The cost of this new equipment falls well within the reach of modest equipment budgets. Instruments can be delivered before the start of the 1960-61 academic year. For details, please call any local Picker office (see 'phone book) or write Picker X-Ray Corporation, 25 South Broadway, White Plains, New York.

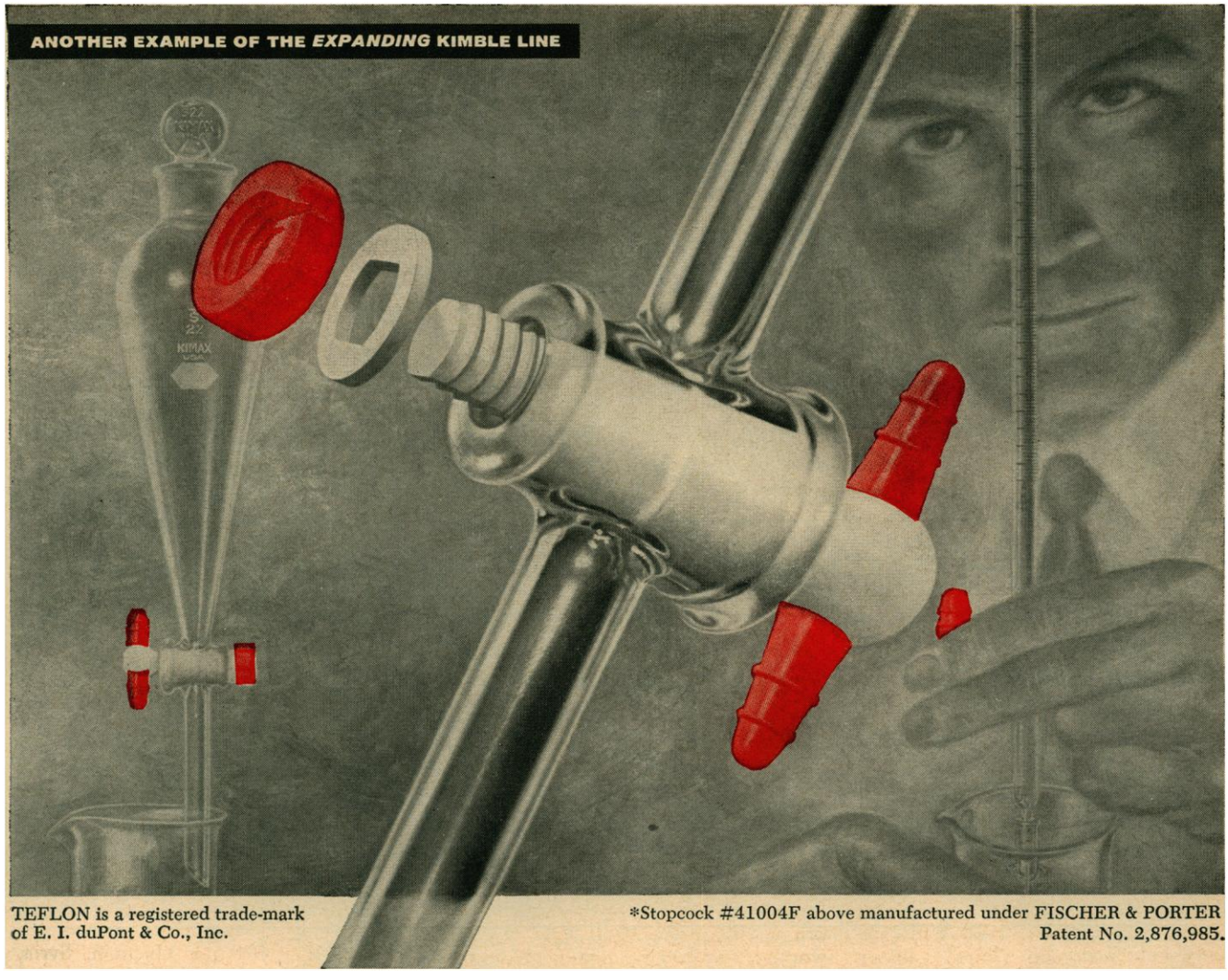
Hallmark of quality nuclear instrumentation

Picker nuclear

Standing behind every Picker instrument is a local member of the Picker X-Ray national sales and service network.

He's there to protect your investment.

Because of him the user of a Picker instrument is never left stranded.



TEFLON is a registered trade-mark of E. I. duPont & Co., Inc.

*Stopcock #41004F above manufactured under FISCHER & PORTER Patent No. 2,876,985.

Simplicity of design makes Kimble Stopcocks with TEFLON® Plugs easy to use, maintain and clean

New Kimble Stopcocks with TEFLON plugs are superior because:

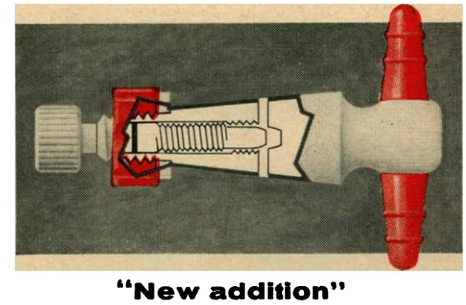
1. Plugs consist of only three parts
2. All three parts are made of self-lubricating, chemically inert TEFLON

therefore Kimble apparatus and TEFLON plugs . . .

- can be autoclaved
- can be cleaned in acids, alkalis or organics, hot or cold
- will not corrode—there are no metal parts
- can be positively controlled and adjusted—you don't rely on the whim of a spring
- won't bind or leak—accomplished by exaggerated 1:5 taper of plugs in polished glass barrels
- won't freeze because TEFLON is chemically inert

And, threads are exceptionally heavy and coarse to eliminate stripping.

Your dealer has stocks of new Kimble apparatus with TEFLON plugs. They are also listed in the new Kimble Catalog Supplement SP-57. For your free copy, write to Kimble Glass Company, subsidiary of Owens-Illinois, Toledo 1, Ohio.



"New addition"

Now! Kimble adds plugs with metering valve to its TEFLON line. They provide ultra-precise control. Construction is simple for ease of cleaning and use. Available as plug replacement (Catalog #41575F) or in straight bore stopcock #41002F or capillary stopcock #41007F.

KIMBLE LABORATORY GLASSWARE
AN (O-I) PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO

APPLICATION FOR HOTEL RESERVATIONS
127th AAAS MEETING
New York, 26-31 December 1960

The five hotels for the AAAS New York meeting have established special, **low, flat rates** and have reserved appropriately large blocks of rooms for this meeting. Thus everyone making room reservations for the AAAS meeting is assured substantial savings.

The list of hotels and the reservation coupons below are for your convenience in making your hotel reservation in New York. Please send your application, *not* to any hotel directly, but to the AAAS Housing Bureau in New York and thereby avoid delay and confusion. The experienced Housing Bureau will make assignments promptly; a confirmation will be sent you in two weeks or less.

If requested, the hotels will add a comfortable rollaway bed to any room, at $3.00 per night. Mail your application now to secure your first choice of desired accommodations. All requests for reservations must give a definite date and estimated hour of arrival, and also probable date of departure.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

For a list of the headquarters of each participating society and section, see page 230, *Science*, 22 July. Both the Commodore and the Biltmore are AAAS headquarters hotels.

Flat Rates for Rooms with Bath*

Hotel	Single	Double Bed	Twin Beds	Suites
Commodore	$ 8.50	$14.00	$15.50	$21.00 to $52.50
Biltmore	8.50	14.00	15.50	45.00 and up
Roosevelt	8.50	14.00	15.50	39.00 to 43.00
Belmont Plaza	8.50	14.00	15.50	30.00 and up
Waldorf-Astoria	10.00	16.00	18.00	45.00 and up

* All rates are subject to a 5% New York City tax on hotel room occupancy.

THIS IS YOUR HOUSING RESERVATION COUPON

AAAS Housing Bureau
90 East 42nd Street
New York 17, N.Y.

Date of Application .....

Please reserve the following accommodations for the 127th Meeting of the AAAS in New York, 26–31 December 1960:

TYPE OF ACCOMMODATION DESIRED

Single Room ..... Double-Bedded Room ..... Twin-Bedded Room .....

Suite ..... Desired Rate ..... Maximum Rate .....
(Desired rate and maximum rate apply only to suites)

Number in party ..... Sharing this room will be: .....

(Attach list if this space is insufficient. The name and address of each person, including yourself, must be listed.)

.....

.....

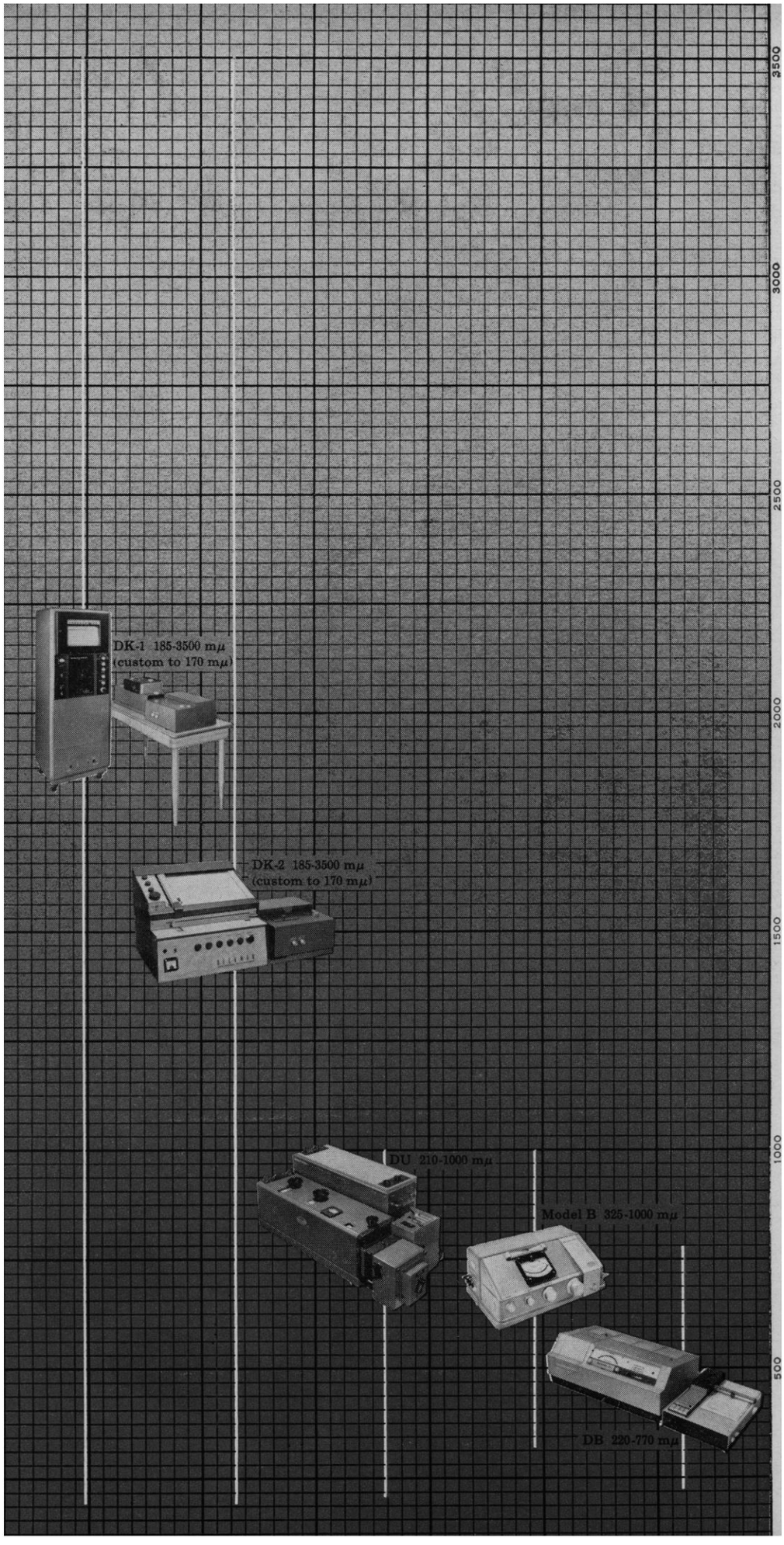
First Choice Hotel ..... **Second Choice Hotel** ..... **Third Choice Hotel** .....

DATE OF ARRIVAL ..... DEPARTURE DATE .....
(These must be indicated—add approximate hour, A.M. or P.M.)

NAME .....
(Individual requesting reservation) (Please print or type)

ADDRESS .....
(Street) (City and Zone) (State)

Mail this now to the Housing Bureau. **Rooms will be assigned and confirmed in order of receipt of reservation.**



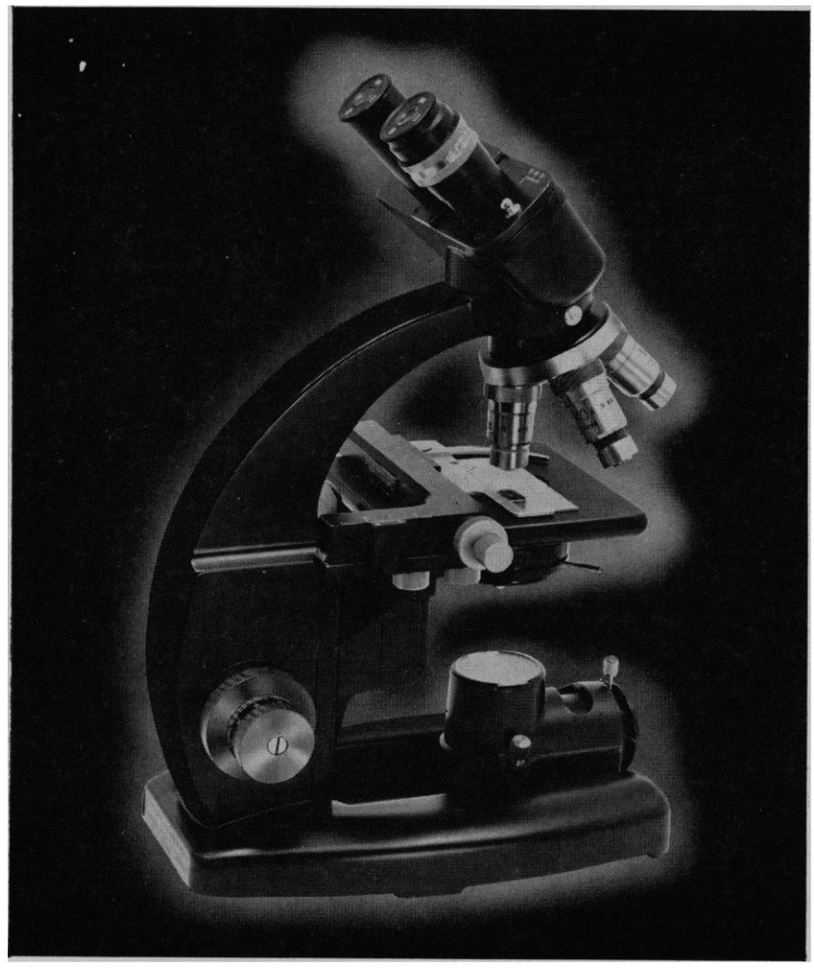
A single source for all your spectro needs... Ultraviolet, Visible, and Near-Infrared spectrophotometers. Only Beckman offers five different manual and automatic recording instruments, with wavelength ranges for all requirements, from 170 to 3500 mμ. Each is the product of Beckman engineering experience and leadership spanning more than 20 years. You can choose the new, low-cost DB* for manual *direct-reading*, or *automatic recording* with potentiometric recorder... the Model B for fast, accurate, routine analyses... the DU®, world-renowned laboratory workhorse... or the versatile ratio-recording DK*-1 and DK-2 (also customized for far-UV). One of these Beckman precision instruments will serve your specific applications best. You don't pay for more, nor accept less than you require. ⌘ In addition, with Beckman, you gain maximum measurement versatility through a full line of accessory attachments and absorption cells... skilled application engineering to help you with your sampling and measurement problems... prompt attention from a large complement of dealer sales and service personnel in more than 110 U.S. and Canadian locations. For details, call your Beckman dealer or write for Data File 38-33-03.

Beckman
Scientific and Process Instruments Division

INSTRUMENTAL IN YOUR FUTURE · 25 YEARS · 1935-1960

Beckman Instruments, Inc.
2500 Fullerton Road,
Fullerton, California

*Trademark, Beckman Instruments, Inc.



The Cooke M15 . . . a laboratory microscope with superior optical performance. Its clean design and precision construction offer unequalled convenience, versatility and durability.

Manufactured at York in England . . .

specifications on all models available on request . . .

Model M15BY, illustrated above, 30X to 1000X, F. O. B. Boston, $429.

COOKE TROUGHTON & SIMMS, INCORPORATED

91 WAITE STREET, MALDEN 48, MASSACHUSETTS • IN CANADA: 77 GRENVILLE STREET, TORONTO

12 August 1960, Volume 132, Number 3424

SCIENCE

SCIENCE, which is now combined with THE SCIENTIFIC MONTHLY, is published each Friday by the American Association for the Advancement of Science at National Publishing Company, Washington, D.C. The joint journal is published in the SCIENCE format. SCIENCE is indexed in the *Reader's Guide to Periodical Literature*.

Editorial and personnel-placement correspondence should be addressed to SCIENCE, 1515 Massachusetts Ave., NW, Washington 5, D.C. Manuscripts should be typed with double spacing and submitted in duplicate. The AAAS assumes no responsibility for the safety of manuscripts or for the opinions expressed by contributors. For detailed suggestions on the preparation of manuscripts and illustrations, see *Science* **125**, 16 (4 Jan. 1957).

Display-advertising correspondence should be addressed to SCIENCE, Room 740, 11 West 42 St., New York 36, N.Y.

Change of address notification should be sent to 1515 Massachusetts Ave., NW, Washington 5, D.C., 4 weeks in advance. If possible, furnish an address label from a recent issue. Give both old and new addresses, including zone numbers, if any.

Annual subscriptions: $8.50; foreign postage, $1.50; Canadian postage, 75¢. Single copies, 35¢. Cable address: Advancesci, Washington.

A Plank for Science

The main functions of the national conventions of the major political parties are to nominate candidates for the presidency and the vice-presidency and to adopt a platform. We shall here confine our attention to the platforms, which are traditionally statements of party principles and policies. Platforms follow classical lines: the party in power pledges to continue and expand the programs successfully launched under its guidance, excoriates the opposition, praises its own administration, takes credit for the favorable events that occurred during its tenure of office, minimizes setbacks, and paints a grim picture of the evils that would befall the nation should the voters make the mistake of turning control of the government over to the other party. The opposition pledges itself to introduce new legislation to remedy the mistakes of the party in power, to infuse new energy into programs begun under its aegis but allowed to languish during the current administration, excoriates the incumbents, maximizes their reversals, minimizes their accomplishments, and promises to restore the republic to the happy state it enjoyed before it was brought to the brink of ruin by maladministration.

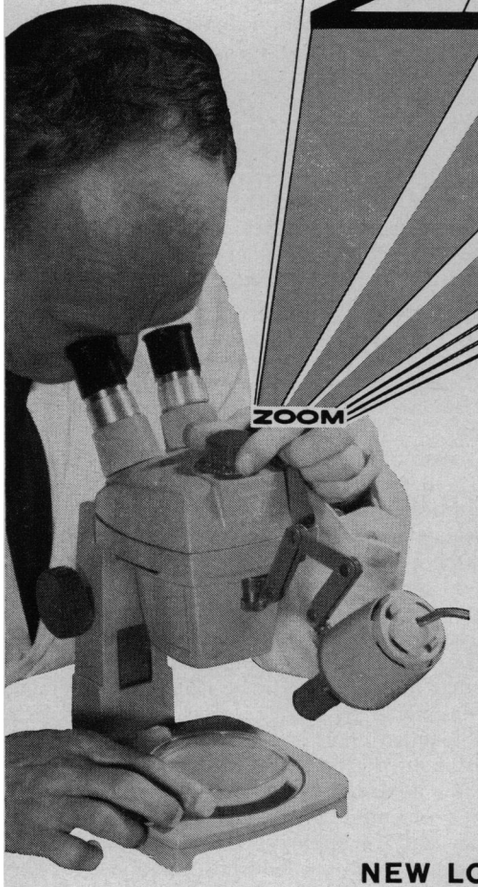
Platforms have been variously described as "something to run on but not to stand on," as "masterpieces of ambiguity," and as documents "full of sound and fury, signifying everything." But they are more than this. Their form is dictated by their function. They are designed to weld the party into unity, and hence must represent the least common denominator of party opinion. They commonly incorporate the major advances made by either party in the past and thus reflect changing concepts of government. A platform is no blueprint for specific action. It is rather an expression of general intent, and as such has something of the force of a moral commitment.

Platforms inevitably reflect current preoccupations of the nation: for some years there have been planks about labor, agriculture, health, foreign policy, domestic affairs, and so on in the platforms of both parties. This year, both Republicans and Democrats have included planks about science. Both parties favor accelerated space research and the international control of space and pursuit of research in atomic energy and medicine. They differ in the amount of detail they devote to basic research and to the role of the government in science. The Democrats "recognize the special role of the Federal Government in the support of basic and applied research" and stress especially an intensified program of reactor research for nuclear power. The Republicans are more specific about basic research: they recognize that "our continuing and great national need is for basic research"; they call for the federal government to support the basic research that industry cannot be expected to pursue. They advocate allowance of reasonable charges for overhead on research contracts, a matter that is not touched upon in the Democratic platform. The Democrats are also silent about the organization of the government for scientific administration and advice, but the Republicans advocate continuation of the President's Scientific Advisory Committee and of the Federal Council for Science and Technology. The Democrats plump for an expanded program in oceanography, a field not mentioned by the Republicans.

That the parties differ in detail is of less significance than that they agree on one major point: for the first time in history both have made the support and organization of science a major plank in their platforms.—G.DuS.

Selling FASTER than any microscope in history!

ZOOM



NEW STEREOZOOM* MICROSCOPES BY BAUSCH & LOMB!

Breaking all sales records! Just try one in a free laboratory demonstration and you'll soon see why . . . they're the newest step forward to faster and easier 3D work.

EXCLUSIVE NEW OPTICS!

Get StereoZoom . . . continuously variable power! Just a turn of the knob gives an infinite choice of magnifications throughout the whole stereo range . . . to 120× on some models.

EXCLUSIVE NEW POWER POD DESIGN!

A wholly enclosed optical system in a single unit. Keeps out dust and dirt; eliminates old fashioned nosepieces, annoying image jump and blackout. NEW VERSATILITY, TOO! Your choice of StereoZoom or fixed power in a Power Pod that interchanges among any of the five basic stands.

NEW LOW PRICE!

About ⅓ lower than previous line.

*Trademark, Bausch & Lomb Incorporated

BAUSCH & LOMB
SINCE B&L 1853

BAUSCH & LOMB INCORPORATED
64208 Bausch St., Rochester 2, N. Y.

☐ Send me new B&L StereoZoom Catalog D-15.
☐ Schedule a demonstration at my convenience.

Name, Title .....
Company .....
Address .....
City ..... *Zone* ..... *State* .....

Meetings

Congress of Anatomists

The 7th International Congress of Anatomists and the 73rd annual meeting of the American Association of Anatomists were held jointly in New York City, 11–16 April. All of the scientific sessions, except for certain symposia, were held at the Statler Hilton Hotel. The Albert Einstein College of Medicine, the College of Physicians and Surgeons of Columbia University, Cornell University Medical College, New York Medical College, New York University–Bellevue Medical Center, New York University College of Dentistry, the Downstate Medical Center of the State University of New York, and the Rockefeller Institute for Medical Research were the host institutions. Members of the congress committee were George W. Corner (president of the congress), H. Stanley Bennett (president of the American Association of Anatomists), Joseph C. Hinsey, Don W. Fawcett, and Wilfred A. Copenhaver. The local committee consisted of Ernst Scharrer, James B. Hamilton, Leonard L. Ross, and Roy C. Swan; the program committee, of Oliver P. Jones, Murray L. Barr, Edward H. Bloch, Edward W. Dempsey, Herbert Elftman, William U. Gardner, and Pinckney J. Harman.

The attendance (exclusive of guests) approximated 1700 individuals, including 337 from outside the United States. These latter came from 41 countries (from Canada, 76; Great Britain, 65; Germany, 24; Japan, 21; France and Mexico, 17 each; the U.S.S.R., 14; the Netherlands, 12; Argentina and Italy, 8 each; Sweden, 7; China, India, and Yugoslavia, 5 each; Australia, Belgium, and Switzerland, 4 each; Brazil, Ecuador, El Salvador, Finland, North Ireland, and the Union of South Africa, 3 each; Austria, Colombia, Peru, Thailand, and Venezuela, 2 each; the Belgian Congo, Costa Rica, Denmark, Egypt, Hungary, Korea, New Zealand, Norway, Panama, the Philippines, Spain, Uganda, and Vietnam, 1 each). A grant from the U.S. Public Health Service made it possible for many of the foreign participants to attend; 159 individuals from overseas were aided by this grant.

Six hundred and two papers, 36 motion pictures, and 126 demonstrations were presented. The papers given at the regular sessions may be grouped, for convenience, into the following categories: Neurology (general, experimental, comparative), 134; microscopic anatomy (histology, cytology, histochemistry), 123; embryology (human, comparative, and experimental embryology; teratology; reproduction),

91; general morphology (gross anatomy, physical anthropology, comparative anatomy), 72; endocrinology, 71; hematology, 32; histophysiology, 11; histopathology, 11. In addition, there were five symposia: on the eye (33 papers), on anatomy and biomechanics of bone (8 papers), on pituitary circulation (4 papers), on bone-marrow circulation (3 papers), and in tribute to Elmer G. Butler by his former students (9 papers).

Entertainment provided for congress members and guests included a smoker, a banquet, a boat trip around Manhattan, and an evening reception at the Metropolitan Museum of Art.

WILLIAM L. STRAUS, JR.
Johns Hopkins University, Baltimore, Maryland

Forthcoming Events

September

3–10. International Cong. of Preventive Medicine and Social Hygiene, 8th, Bad Aussee, Austria. (A. Rottmann, Liechtensteinstrasse 32/4, Vienna 9, Austria)

4–9. Cell Biology, 10th intern cong., Paris, France. (M. Chèvremont, Institut d'Histologie, 20, rue de Pitteurs, Liege, Belgium)

4–9. Laurentian Hormone Conf., Mont Tremblant, Quebec, Canada. (Arrangements Committee, Laurentian Hormone Conf., 222 Maple St., Shrewsbury, Mass.)

4–10. International Soc. of Orthopaedic Surgery and Traumatology, 8th cong., New York, N.Y. (A. Bailleux, Société de Chirurgie Orthopedique et de Traumatologie, 34, rue Montoyer, Brussels, Belgium)

4–10. World Cong. of Anaesthesiologists, Toronto, Canada. (R. A. Gordon, 516 Medical Arts Bldg., Toronto 5)

4–14. International Societies of Hematology and Blood Transfusion, 8th cong., Tokyo, Japan. (S. Murakami, Blood Transfusion Laboratory, Japanese Red Cross Soc., Shibuya, Tokyo)

5–7. Society for Biological Rhythm, 7th conf., Siena, Italy. (A. Sollberger, Dept. of Anatomy, Caroline Inst., Stockholm 60)

5–8. Legal and Administrative Problems of Protection in the Field of the Peaceful Applications of Atomic Energy, intern. symp., Brussels, Belgium. (Communauté Européenne de l'Energie Atomique, rue Belliard 51–53, Brussels)

5–9. Chemical Engineering (Czechoslovak Chemical Soc.), Prague, Czechoslovakia. (Technická 1905, Prague-Dejvice, Czechoslovakia)

5–10. Microbiology of Non-Alcholic Beverages, 5th intern. symp., Evian, France. (D. A. A. Mossell, Intern. Assoc. of Microbiological Societies, c/o Central Inst. for Nutrition Research, Catherinjnesingel 61, Utrecht, Netherlands)

5–9. Medium and Small Power Reactors, conf., Vienna, Austria. (International Atomic Energy Agency, 11 Kärntner Ring, Vienna 1)

5–10. Operational Research, 2nd intern. conf., Aix-en-Provence, France. (International Federation of Operational Research Societies, 11 Park Lane, London, W.1)

5–12. International Soc. of Bioclimatology and Biometerology, 2nd cong., London, England. (E. M. Glaser, Dept. of Physiology, London Hospital Medical College, Turner St., London, E.1)

5–15. International Scientific Radio Union, London, England. (R. L. Smith-Rose, Radio Research Station, DSIR, Ditton Park, Slough, Bucks, England)

5-17. Photogrammetry, 9th intern. cong., London, England. (J. B. P. Angwin, Intern. Soc. for Photogrammetry, 18 Cavendish Sq., London, W.1)

6–7. Some Fundamental Aspects of Atomic Reactions, symp., Montreal, Canada. (J. C. Polanyi, Dept. of Chemistry, Univ. of Toronto, Toronto 5, Canada)

6–8. Nuclear and Radio-Chemistry, symp., Chalk River, Ontario, Canada. (R. H. Betts, Atomic Energy of Canada Ltd., Chalk River, Ontario)

6–8. Society of General Physiologists, annual, Woods Hole, Mass. (J. W. Green, Rutgers Univ., New Brunswick, N.J.)

6–17. Use of Radioactive Isotopes in the Physical Sciences and Industry, conf., Copenhagen, Denmark. (International Atomic Energy Agency, 11 Kärntner Ring, Vienna 1, Austria)

7–8. Canadian Textile Seminar, 7th, Kingston, Ontario. (J. M. Merriman, Textile Technical Federation of Canada, 223 Victoria Ave., Westmount, P.Q.)

7–9. Canadian High Polymer Forum, 10th, Ste. Marguerite, near Montreal, Quebec, Canada. (D. A. I. Goring, CHPF, Pulp and Paper Research Inst., McGill Univ., Montreal)

7–9. International Soc. of Geographical Pathology, 7th conf., London, England. (J. S. Young, ISGP, c/o Dept. of Pathology, Forresterhill, Aberdeen, Scotland)

7–9. International Union of Pure and Applied Physics, Ottawa, Canada. (P. Fleury, 3, Boulevard Pasteur, Paris 15e, France)

7–9. Joint Automatic Control Conf., Boston, Mass. (H. A. Miller, Taylor Instrument Co., 95 Ames St., Rochester 1, N.Y.)

7–10. Calorimetry, 15th conf., Gatlinburg, Tenn. (D. W. Osborne, Argonne Natl. Laboratory, P.O. Box 299, Lemont, Ill.)

8–9. Technical Comunications, 2nd annual, Dayton, Ohio. (D. G. Peterson, Jr., Soc. of Technical Writers and Editors, 4564 Marlin Ave., Dayton 16, Ohio)

8–10. American Political Science Assoc., New York, N.Y. (E. M. Kirkpatrick, 1726 Massachusetts Ave., NW, Washington 6)

8–10. Great Issues of Conscience in Modern Medicine, Hanover, N.H. (G. O'Connell, Dartmouth College News Service, Hanover)

8-10. Parapsychological Assoc., 3rd. annual, New York, N.Y. (W. G. Roll, Parapsychology Laboratory, Duke Univ., Durham, N.C.)

8–18. History of Medicine, 17th intern. cong., Athens and Isle of Cos, Greece. (S. Oeconomos. Faculty of eMdicine, National and Capodistrian Univ. of Athens, Odos panepistimiou, Athens, Greece)

10–11. Air Pollution, intern. cong., New York, N.Y. (A. B. Conlin, Jr., ASME, 29 W. 39th St., New York 18)

11–15. International College of Surgeons, 12th intern. cong., New York, N.Y. (M. Thorek, ICS, 850 W. Irving Park Rd., Chicago 13, Ill.)