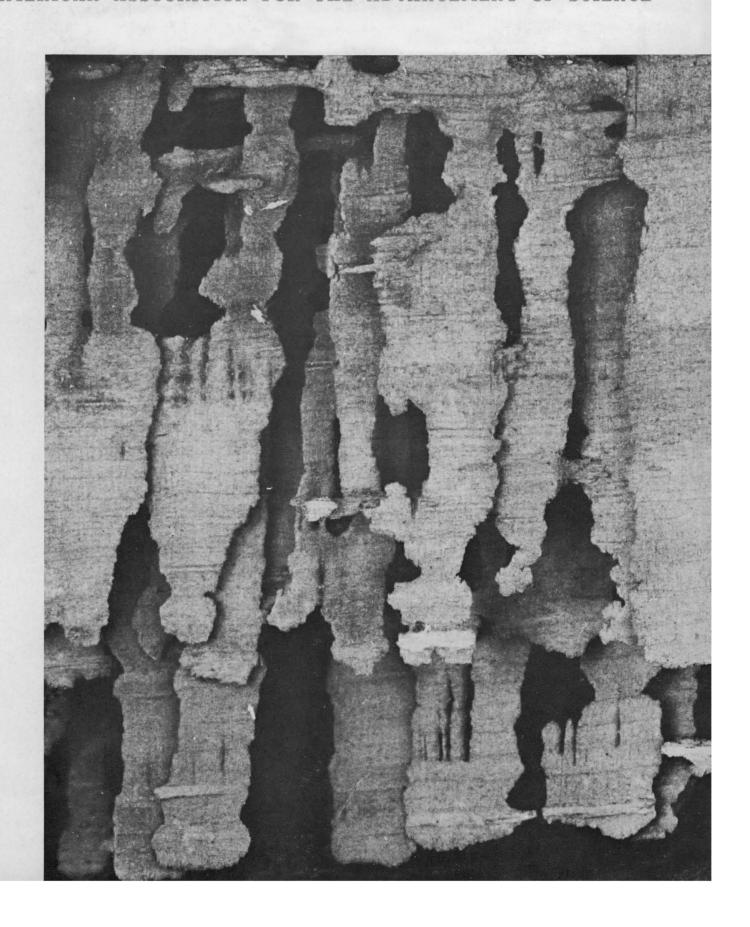
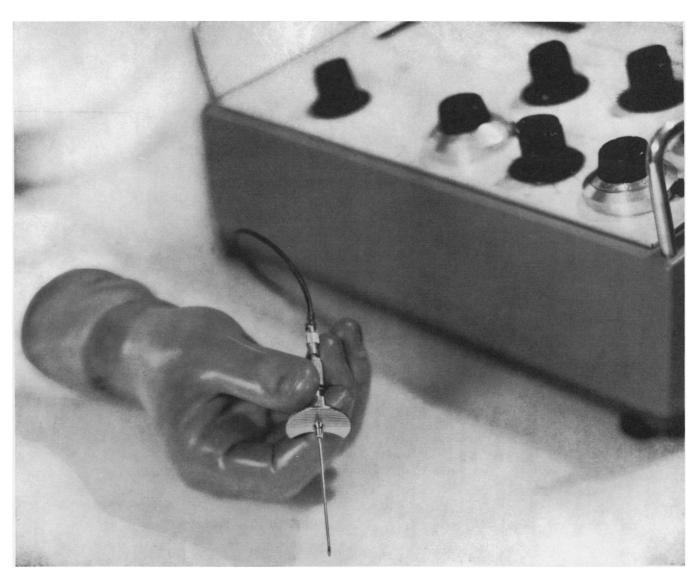
## SCIENCE

15 June 1962

Vol. 136, No. 3520

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE





### IN VIVO pO2 MEASUREMENT

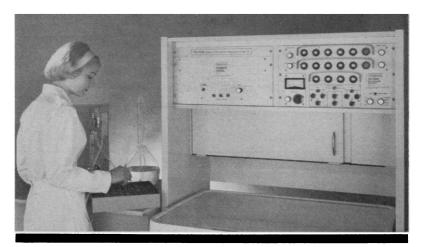
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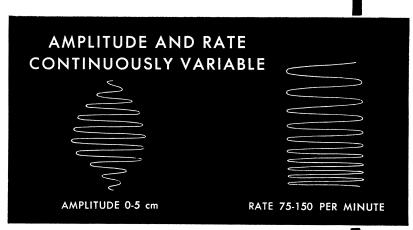
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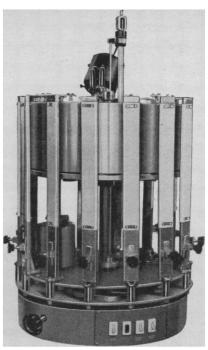
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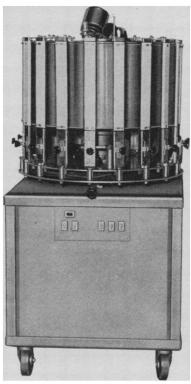
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Cover Decayed wood of oak tree (about × 15). [Tracy Borland, a student at Brooks Institute of Photography, Santa Barbara, Calif.]

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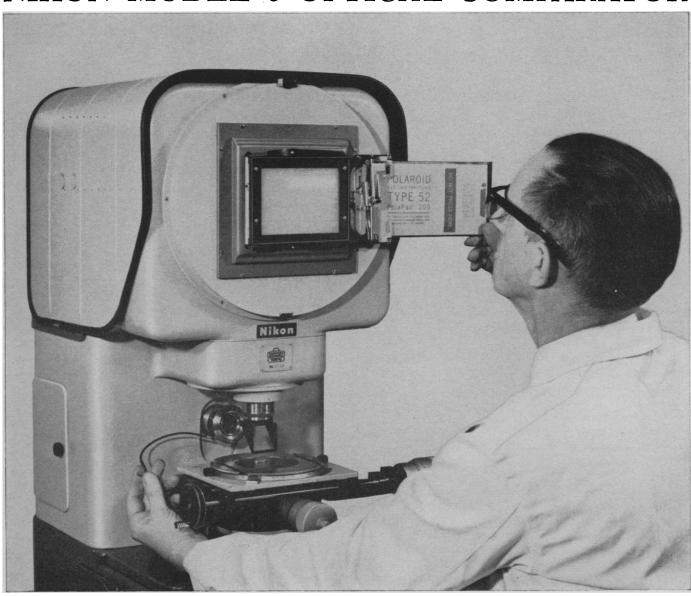
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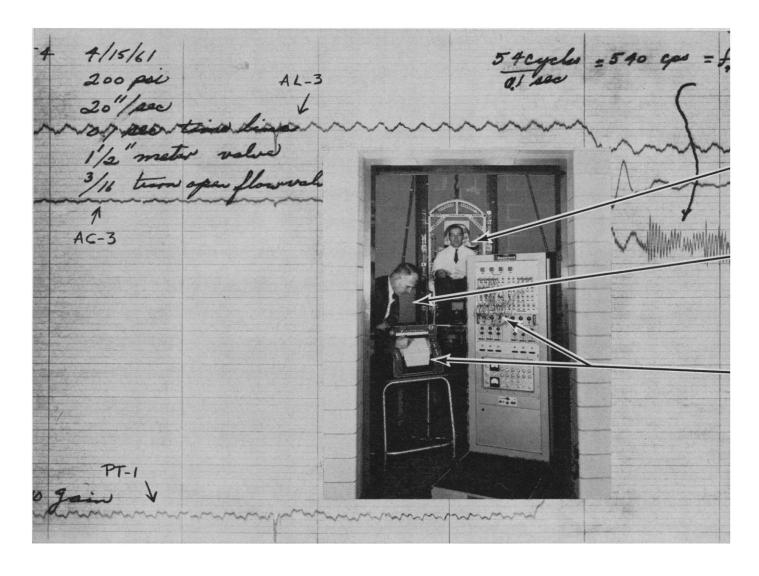
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## A Honeywell Visicorder Oscillograph charts stress on the human

Wayne State University, Detroit, is using a unique Visicorder system to study the effects of vertical acceleration on the vertebral column of the human body.

The purpose is to devise better, safer seating for automobiles and aircraft and, incidentally, to perfect better crash helmets and football helmets. Professor Lawrence M. Patrick of Wayne State is in charge of this research being conducted under a grant from the United States Public Health Service.

In the actual tests, an intact cadaver is installed in the air-driven accelerator. As the cadaver is accelerated vertically, compression strains on cervical, thoracic, and lumbar vertebrae are simultaneously recorded by the Visicorder system. Vertebral strain as a function of body restraint is charted through a series of restraint devices, and both mean and peak stresses are plotted.

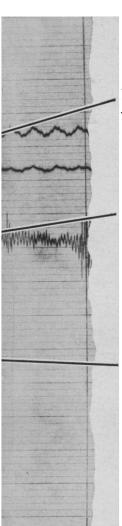
The chart shown above, an actual Model 1108 Visicorder Oscillograph record, shows the peak versus mean strains on the three vertebra. Trace AC-3 is the third cervical; PT-1 is the first thoracic; AL-3 is the third lumbar; and the accelerometer trace shows the acceleration.

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Voigt Hodgson, Research Associate, demonstrates the position of the cadaver in the ejection sled.

Professor Larry Patrick, Wayne State University, makes a notation on the Visicorder Oscillograph.

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the proficient and perplexes the uninstructed." It seems that Soulides has failed quite completely to understand the classic techniques of latinization of Greek words for use in biological taxonomy.

R. E. BUCHANAN Iowa State University, Ames

Use of Latin and neo-Latin nomenclature in systematic biology is a longestablished practice with which I have no inclination to quarrel. My objection applies to the nomenclatural innovation which Buchanan has introduced in the current edition of Bergey's Manualnamely, the arbitrary latinization of the Greek nouns and adjectives from which the accepted latinized names of microorganisms originate. Let me again explain my point, with another example. On page 513 of the Manual we read that the species name zooepidemicus derives from the "Gr. noun zōum an animal; Gr. adj. epidemius prevalent . . . . " These two words are neither Greek nor Latin. They are not to be found in any Greek, Latin, English, or biological dictionary. They are personal versions of the real Greek words zōon and epidemios. In this way hundreds of Greek words, throughout the Manual, have been remodeled and presented to the reader as "Greek" nouns and adjectives. In the instance of Peptostreptococcus micros (p. 537) the treatment was carried even farther; the phantom derivative micrus is given as the source of the actual Greek word micros (small). In his reply Buchanan has ignored all these basic points.

The confusion resulting from this unusual procedure was adequately discussed in my original letter.

I would like to renew my plea that, in the interest of established scientific scholarship, the innovation in question be discontinued and the accepted system, used in the previous edition of the *Manual*, be restored.

D. A. Soulides U.S. Soils Laboratory, Agricultural Research Service, Beltsville, Maryland

#### Water Conduits and Collectors

I would appreciate clarification of a point discussed in Robert Adams's informative article, "Agriculture and urban life in early Southwestern Iran" [Science 136, 109 (13 Apr. 1962)]. Adams writes of the "extensive use of

tunnels with periodic vent holes" both as water conduits and as ground-water collectors. Reference here is obviously to the famous kharez, kanats, or foggaras. These are usually described in the literature only as collectors and conduits for ground water, not as part of a system for transporting surface runoff. For example, Tolman [Ground Water (1937) pp. 12-15] mentions the kanats of Dizful extending under the gravel bars of the Ab-i-diz River rather than diverting surface water from the river itself. It would be extremely interesting if kanats were integrated with systems of surface stream diversion, with some of the tunnels serving two functions, as it were. This last is the implication I read into Adams's article.

I will be grateful for confirmation or clarification of this point.

BERL GOLOMB Center of Latin American Studies, University of California, Los Angeles

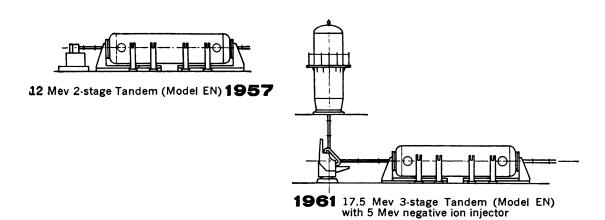
Golomb's inference is partly correct. The technique extensively applied in Iran for the construction of groundwater collectors also was applied in Khuzestan for surface diversion from the larger streams. I have entered and followed long-disused sections of major supply tunnels serving the Sassanian and early Islamic irrigation systems from their inlets along the Karkheh, Diz, and Karun river banks, and from the level of their beds it seems clear that these tunnels served as direct off-takes from the rivers themselves. How they were kept from being choked with silt under such circumstances is not entirely clear; presumably their gradients were great enough to prevent this.

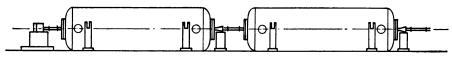
On the other hand, I know of no evidence that these same major supply tunnels also were fed by branching networks of smaller tunnels serving as ground-water collectors. The straight parallel rows of surviving vent holes on the air photographs suggest, instead, that they were used simply as underground conduits. Elsewhere in the area, to be sure, there were smaller systems of tunnels serving the more usual purpose of collectors. For example, one of apparent Sassanian date lay along the north slope of a low ridge north of the Shaur River (see Fig. 5 of the article).

With regard to the contemporary use of *kanats* in the area, I have no first-hand information.

ROBERT M. ADAMS

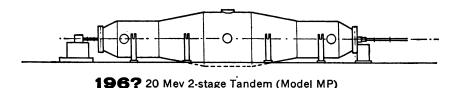
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SCIENCE, now combined with THE SCIENTIFIC MONTHLY, is published each Friday by the American Association for the Advancement of Science at National Publishing Company, Washington, D.C. SCIENCE is indexed in the Reader's Guide to Periodical Literature.

Editorial 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. Opinions expressed by authors are their own and do not necessarily reflect the opinions of the AAAS or the institutions with which the authors are affiliated. For detailed suggestions on the preparation of manuscripts, see Science 125, 16 (4 Jan. 1957).

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#### Say, Comrade

Considering the difficulty of finding a theme acceptable to both governments, there is a certain logic in the choice of a story about Soviet and American scientists working together as the subject for a movie to be produced by Soviet and American film makers working together. Both governments can only agree that cooperation between the two countries is good, otherwise there would be no making the movie in the first place. And it is the official view of each government that its quarrel is not with the people of the other country, only with the other government.

The agreement to produce the film, signed earlier this year, is between Mosfilm Studio, located near Moscow, and Lester Cowan, an independent American producer. It calls for four starring roles, two to be played by Americans and two by Russians, with part of the film shot here and part in the Soviet Union. The film is to be distributed in both countries in identical versions, except for language dubbing to make it intelligible to both audiences. The movie is to be based on the novel *Meeting at a Far Meridian*, which is itself a kind of cooperative venture. The book was written by an American, Mitchell Wilson, but has found, in translation, its most appreciative readers in the Soviet Union.

In the book, an American physicist and a Soviet physicist, working independently on the same problem in cosmic ray physics, have come up with opposing conclusions. They know each other's work, it being in the open literature, and have great respect for each other's abilities. In fact, the American, from whose viewpoint the story is told, feels a kind of mystical identification with his Russian counterpart. Neither scientist, however, can explain the discrepancy. They are able to meet through an exchange program and they seek to settle their scientific differences. They also seek to understand each other as persons.

Mitchell Wilson never explores any really fundamental political issue, such as possible differences in motivation of the Soviet Union and the United States in promoting exchange. But he does have his two heroes work their way through misunderstandings that arise from differences in background, from different loyalties, and even from the different ways that they try to spare each other's feelings.

The book is based on a good idea and it offers a solution to the problem of a theme acceptable to both governments. Its value as a piece of literature, however, is something else again. There are also romantic entanglements, and if no character ever says, "Let me take you away from all this," the omission is more an indication of Mitchell Wilson's ability to avoid anything with political overtones than it is of his originality of style. This does not mean that there is no hope for the movie. After all, the merits of *The Brothers Karamazov* did not assure success when, with the aid of Yul Brynner, it was made into a movie, while *Gone with the Wind* improved considerably in the filming.

Soviet and American scientists have shown that they can get together to produce science. It remains to be seen whether Soviet and American actors and film makers can get together to produce art, or at least good Hollywood fare. If they succeed on either level, the next step is clear. Like Richard Bissell writing the musical "Say, Darling" about the production of his earlier musical "The Pajama Game," the next step can be a movie about producing a movie on an exchange basis, to be titled, perhaps, "Say, Comrade."—J.T.

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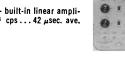


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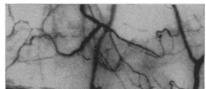
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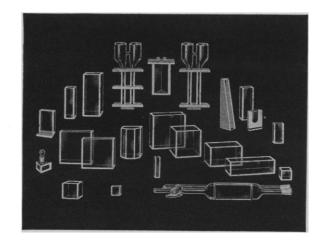




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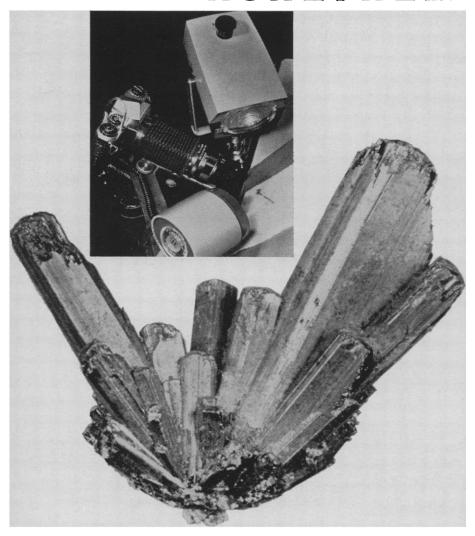
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This specimen of an unusual Stibnite crystal has been lighted with Honeywell Strobonar electronic flash units and photographed with the Pentax H-1 camera, appropriately outfitted with Bellows Unit.

The electronic flash shown in the foreground is the 65-A. It is fitted with a Neutral Density Lens from the accessory kit of four interchangeable lenses. The 65-A is triggered by the camera shutter, and its light synchronously triggers the other light source, which is a Modeling Slave Strobonar, model 52-A.

The crystal photograph was made with the 55mm, f/2.2 Takumar lens, standard on the Honeywell Pentax H-1 camera. The bellows unit is set 105 mm; aperture f/16.

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## Meetings

#### Forthcoming Events

July

9-14. Glass, intern. congr., Washington, D.C. (C. H. Hahner, Glass Section, Natl. Bureau of Standards, Washington, 25)

9-15. Clinical Aviation and Aerospace Medicine, mtg., NATO Advisory Group for Aeronautical Research and Development, Paris, France. (NATO, 64 rue de Varenne, Paris 17e)

9-27. Commission for Agricultural Meteorology, World Meteorological Organization, Toronto, Canada. (WMO, Geneva, Switzerland)

11-12. Bird Control, natl. seminar, Bowling Green, Ohio. (W. B. Jackson, Dept. of Biology, Bowling Green State Univ., Bowling Green)

11-13. American Farm Research Assoc., annual, Ames, Iowa. (I. Nathlich, Farm Bureau Service Co. of Iowa, 1019 High St., Des Moines 9)

11-21. South Pacific Conf., Utulei. American Samoa. (Secretary General, South Pacific Commission, P.O. Box 9, Nouméa, New Caledonia)

12-15. French Congr. of Anesthesiology, Montpellier, France. (J. du Cailar, Clinique Saint-Elio, Centre Hospitalier Universitaire, Montpellier)

15. International Soc. of Psychophathology of Expression, congr., Antwerp, Belgium. (ISPE, Centre Psychiatrique Sainte-Anne, 1 rue Cabanis, Paris 14°, France)

15. Psychosomatic Aspects of Odontostomatology, intern, symp., Milan, Italy. (B. Acht, Piazzetta Umberto Giordano 2, Milan)

16-18. Instrumentation, intern. conf., Hamburg, Germany. (Conference Secretariat, CERN, Geneva 23, Switzerland)

16-18. Instrumentation for High-Energy Physics, intern. conf., Geneva, Switzerland. (E. W. D. Steel, CERN, Geneva 23)

16-19. Novae, Novoids, and Supernovae, intern. colloquium, Lyons, France. (J. Dufay, Faculté des Sciences, Université de Lyons, 30 rue de Cavenne, Lyons)

16-20. Carbohydrate Chemistry, intern. symp., Birmingham, England. (General Secretary, Chemical Soc., Burlington House, London W.1)

16-20. Paramagnetic Resonance, 1st. intern. conf., Jerusalem, Israel. (W. Low, Hebrew Univ. of Jerusalem)

16-20. Physics of Semiconductors, intern. conf., Exeter, England. (Administrative Assistant, Institute of Physics and Physical Soc., 47 Belgrave Sq., London, S.W.1)

16-25 Aug. Theoretical Physics, semin., Trieste, Italy. (International Atomic Energy Agency, 11 Kaerntnerring, Vienna 1, Austria)

17-18. Data Acquisition and Processing in Medicine and Biology, conf., Rochester, N.Y. (K. Enslein, Brooks Research, Inc., P.O. Box 271, E. Rochester)

17-19. Lunar Missions, mtg., American Rocket Soc., Cleveland, Ohio. (J. J. Harford, ARS, 500 Fifth Ave., New York

36)
17-20. Fluorine Chemistry, intern.

symp., Estes Park, Colo. (D. N. Gray, Denver Research Institute, Denver 10, Colo.)

17-21. American Nuclear Soc., natl. mtg., Boston, Mass. (O. J. Du Temple, ANS, 86 E. Randolph St., Chicago 1, III.)

17-24. Prophylactic Medicine and Social Hygiene, intern., Grado, Italy. (E. Berghoff, Piaristengasse 41, Vienna, Austria) 18-10. Water and Soil Utilization, in-

18-10. Water and Soil Utilization, intern. semin., Brookings, S.D. (I. B. Johnson, Dept. of Animal Husbandry, South Dakota State College, Brookings)

21-28. Institute on Religion in an Age of Science, annual summer conf., Star Island, N.H. (IRAS, 280 Newton St., Brookline 46, Mass.)

22-28. Cancer, intern. congr., Moscow, U.S.S.R. (L. Shabad, Academy of Medical Sciences of the U.S.S.R., 14 Solyanka, Moscow)

22–28. Latin American Congr. of Gynecology and Obstetrics, Bogotá, Colombia. (R. Camero, Apartado No. 2463, Bogotá)

27-31. Psychoanalysis, intern. forum, Amsterdam, Netherlands. (L. Salzman, 1610 New Hampshire Ave., Washington 9, D.C.)

27-31. Recent Advances in Experimental and Theoretical Methods of Crystal Structure Research, symp., Munich, Germany. (F. Bopp, Institut für Theoretische Physik, Universität München, Schellingstrasse 4-8, Munich)

28-4. International Geographical Association (Esperantist), Odense, Denmark. (P. Thorsen, Dyblandsvangen 7, Copenhagen, Denmark)

30-10. Recent Advances in Clay Mineralogy, semin., University Park, Pa. (College of Mineral Industries and Continuing Education, Pennsylvania State Univ., University Park)

#### August

2-7. Long-Range Goals for Ethical Humanism, intern. congr. Blindern, Norway. (Secretariat, Intern. Humanist and Ethical Union, 152 Oudegracht, Utrecht, Netherlands)

5-8. Heat Transfer, conf. & exhibit, Houston, Tex. (A. B. Conlin, Jr., Amer. Soc. of Mechanical Engineers, 29 W. 39 St., New York 18)

5-11. Industrial Research, annual conf., New York, N.Y. (M. F. Garvey, 301A Seeley W. Mudd Bldg., Columbia Univ., New York 27)

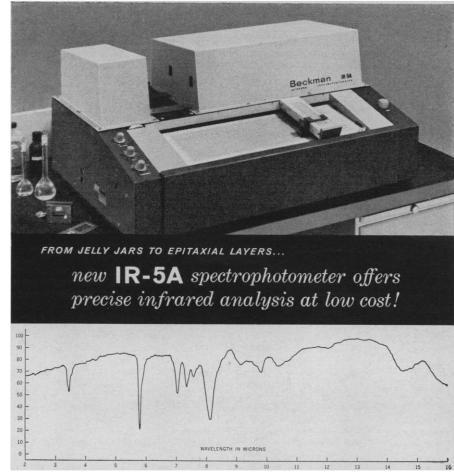
5-11. Radiation Research, intern. congr., Yorkshire, England. (A. Howard, Mount Vermon Hosp., Northwood, Middlesex, England)

6-10. Society for Clinical and Experimental Hypnosis, natl. convention—International Soc. for Clinical and Experimental Hypnosis, intern. congr., Portland, Ore. (J. G. Watkins, Clinical Psychology Dept., V.A. Hospital, Portland 7)

6-10. World Federation for Mental Health, annual, Lima, Peru. (Secretary General, 19 Manchester St., London, W.1, England)

6-17. International Commission for Prevention of Alcoholism, annual, Seattle, Wash. (ICPA, 6830 Laurel St., NW, Washington 12, D.C.)

7. World Medical Esperanto Assoc., an-



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AGRICULTURE: Research on new compounds that show promise as herbicides, weedlicides, or pesticides

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nual, Copenhagen, Denmark. (M. Jarnuszkiewicz, Majowieska 69, Krakow, Poland)

7-8. Forest Products Utilization, annual conf., Blacksburg, Va. (C. J. Holcomb, Virginia Polytechnic Inst., Blacksburg) 7-9. Low-Level Wind Conf., El Paso

7-9. Low-Level Wind Conf., El Paso and Dallas, Tex. (American Meteorological Soc., 45 Beacon St., Boston 8, Mass.)

8-10. Standards Laboratories, natl. conf., Boulder, Colo. (A. E. Hess, Circuit Standards Div., Natl. Bureau of Standards, Boulder)

8-10. X-ray Analysis Applications, annual conf., Denver, Colo. (W. M. Mueller, Metallurgy Div., Denver Research Inst., Univ. of Denver, Denver 10)

8-14. Trace Gases and Natural and Artificial Radioactivity in the Atmosphere, symp., Utrecht, Netherlands. (E. C. Junge, Intern. Assoc. of Meteorology and Atmospheric Physics, 26 Blueberry Lane, Lexington, Mass.)

8-15. Fertility and Sterility, intern. congr., Rio de Janeiro, Brazil. (J. A. Cabello, Parque Melitón Porras 161, Mirafores, Lima, Peru)

10-11. Man-Machine Competition, mtg., Seattle, Wash. (Inst. of the Aerospace Sciences, 2 E. 64 St., New York 21, N.Y.)

10-18. Poultry, intern. congr., Sydney, Australia. (World's Poultry Science Assoc., 674 W. Lane Ave., Columbus 10, Ohio)

11-13. International Mathematical Union, genl. congr., Saltsjöbaden, Sweden. (R. Thorn, Intern. Congr. of Mathematicians, c/o Kungl. Järnvägsstyrelsen, Stockholm C, Sweden)

12-16. American Veterinary Medical

Assoc., Miami Beach, Fla. (H. E. Kingman, Jr., AVMA, 600 S. Michigan Ave., Chicago, Ill.)

13-16. Biological Problems in Water Pollution, seminar—Effects of Radioactivity on Aquatic Environment, Concentration of Radioactive Materials and Suggested Safe Limits, symp., Cincinnati, Ohio. (C. M. Tarzwell, Taft Sanitary Engineering Center, 4676 Columbia Pkwy., Cincinnati 26)

13-16. Pacific Energy Conversion Conf., San Francisco, Calif. (R. S. Gardner, Amer. Inst. of Electrical Engineers, 33 W. 39 St., New York 18, N.Y.)

13-17. Antarctic Logistics, symp., Boulder, Colo. (invitation only). Natl. Acad. of Sciences, 2101 Constitution Ave., NW, Washington 25, D.C.)

13-17. Clay Minerals, annual conf., Ottawa, Ont., Canada. (D. Hunka, Natl. Research Council, Ottawa)

13-17. Lunar Exploration, intern. conf., Blacksburg, Va. (J. B. Eades, Jr., Dept. of Aerospace Engineering, Virginia Polytechnic Inst., Blacksburg)

14-16. Cryogenic Engineering, annual conf., Los Angeles, Calif. (K. D. Timmerhaus, Chemical Engineering Dept., Univ. of Colorado, Boulder)

14-16. Precision Electromagnetic Measurements, intern. conf., Boulder, Colo. (J. F. Brockman, Natl. Bureau of Standards, Boulder)

15-17. Electronic Packaging, annual symp., Boulder, Colo. (A. Brown, 352 Chemistry Bldg., Univ. of Colorado, Boulder)

15-22. Mathematics, intern. congr., Stockholm, Sweden. (B. Eckman, Intern. Mathematical Union, c/o Ecole Polytechnique Fédérale, Zurich, Switzerland)

16-18. Communications Technology, seminar, San Diego, Calif. (R. C. Cannon, Calif. Western Univ., 3902 Lomaland Dr., San Diego 6)

16-18. Food Microbiology, intern. symp., Montreal, Canada (by invitation). (D. A. A. Mossel, Food Microbiology and Hygiene Section, c/o Central Inst. for Nutrition Research, Catharijnesingel 61, Utrecht, Netherlands)

16-20. American Soc. for Pharmacology and Experimental Therapeutics, Atlantic City, N.J. (H. G. Mandel, George Washington Univ. School of Medicine, 1337 H St., NW, Washington 5, D.C.)

16-25. Theoretical Physics, seminar, Trieste, Italy. (Intern. Atomic Energy Agency, 11 Kärntnerring, Vienna 1, Austria)

17-24. International Soc. for Human and Animal Mycology, congr., Montreal, Canada. (R. Vanbreuseghem, Institut de Médecine Tropicale, 155 rue Nationale, Antwerp, Belgium)

19-22. American Soc. of Animal Science, Corvallis, Ore. (C. E. Terrill, Animal Husbandry Research Div., Agricultural Research Center, Beltsville, Md.)

19-23. Conservation Education Assoc., annual, Stevens Point, Wis. (O. C. Sand, 17715 Westview Dr., New Berlin, Wis.)

19-23. Health, annual conf. and exhibit, University Park, Pa. (M. Cashman, Pennsylvania Dept. of Health, P.O. Box 90, Harrisburg)

19-25. Microbiology, intern. congr., Montreal, Canada. (N. E. Gibbons, Natl. Research Council, Ottawa 2, Ont., Canada)

19-26. Image Formation and Vision, intern. conf., Munich, Germany. (H. Schober, Intern. Commission for Optics, München 19, Arnulfstr. 205, AEC-Haus, Germany)

19-31. International Union of Geodesy and Geophysics, general assembly, Berkeley, Calif. (Amer. Geophysical Union, 1515 Massachusetts Ave. NW, Washington 5, D.C.)

20-22. Progress in Nuclear Science and Engineering Education, conf., Gatlinburg, Tenn. (Univ. Relations Div., Oak Ridge Inst. of Nuclear Studies, P.O. Box 117, Oak Ridge, Tenn.)

20-23. American Soc. of Agronomy, annual, Ithaca, N.Y. (ASA, 2702 Monroe St., Madison 5, Wis.)

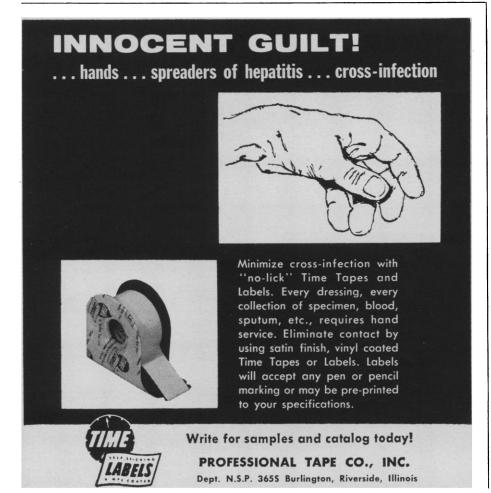
20-23. Problems of Gyroscopy, symp., Celerina, Upper Engadine, Switzerland. (H Ziegler, Comité Scientifique, UITAM, École Polytechnique Fédérale, Zurich, Switzerland)

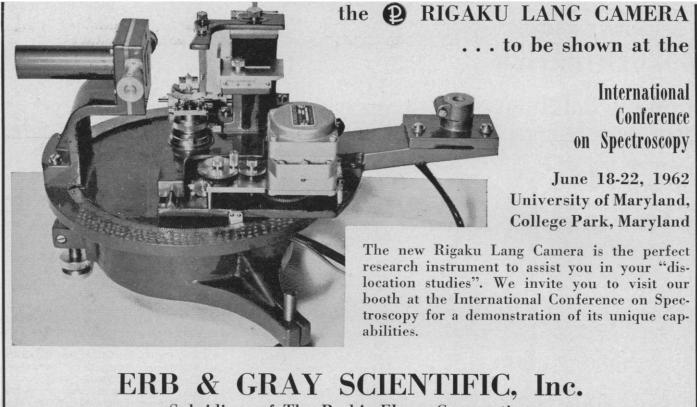
20-24. American Soc. of Agronomy, Denver, Colo. (M. Stelly, 2702 Monroe St., Madison 5, Wis.)

20-24. Chemistry, congr., Abo, Finland. (E Wänninen, Turun Yliopiston Kemian Laitos Vattenborgsvägen 5, Abo 2)

20-24. Scientific Committee on Antarctic Research, mtg., Boulder, Colo. (by invitation). Natl. Acad. of Sciences-Natl. Research Council, 2101 Constitution Ave., NW, Washington 25, D.C.)

20-24. Soil Science Soc. of America, annual, Ithaca, N.Y. (M. Stelly, Amer. Soc. of Agronomy, 2702 Monroe St., Madison 5, Wis.)





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## SCIENCES in Communist China

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20-25. American Soc. of Limnology and Oceanography, Madison, Wis. (G. H. Lauff, Dept. of Zoology, Univ. of Michigan, Ann Arbor)

igan, Ann Arbor)
20-25. Limnology, intern, congr., Madison, Wis. (J. C. Wright, Birge Hall, Univ. of Wisconsin, Madison 6)

21-24. Electronics, exhibit and convention, Los Angeles, Calif. (Technical Program Chairman, WESCON Business Office, 1435 S. La Cienega Blvd., Los Angeles 35)

21-24. Far Infrared Spectroscopy, intern. symp., Cincinnati, Ohio. (Office of Information, Wright Air Development Div., Wright-Patterson Air Force Base, Ohio)

21-24. Fracture in Crystalline Solids, intern. conf., Maple Valley, Wash. (Amer. Inst. of Mining, Metallurgical and Petroleum Engineers, 345 E. 47 St., New York 17, N.Y.)

21-25. International Inst. of Refrigeration, commissions mtg., Washington, D.C. (W. Pentzer, National Research Council, 2101 Constitution Ave., Washington 25)

21-25. International Scientific Committee for Trypanosomiasis Research, mtg., Dalaba, Guinea, Africa. (Commission for Technical Cooperation in Africa South of the Sahara, Private Mail Bag 2359, Lagos, Nigeria, Africa)

21-28. Acoustics, intern. congr., Copenhagen, Denmark. (F. H. B. Interslav, Tekniske Højskole, Østervoldgade 10,

Copenhagen)

21-6. Pan American Sanitary Conf., Minneapolis, Minn. (Pan American Sanitary Bureau, 1501 New Hampshire Ave., NW, Washington 6, D.C.)

22-23. International Commission on Radiological Units and Measurements, mtg., Montreal, Canada (members only). (H. O. Wyckoff, X-ray Section, Natl. Bureau of Standards, Washington 25, D.C.)

22-24. Calorimetry, annual conf., Berkeley, Calif. (J. A. Morrison, Div. of Pure Chemistry, Natl. Research Council, Ottawa, Ont., Canada)
22-24. X-ray Optics and Microanalysis,

22-24. X-ray Optics and Microanalysis, intern. conf., Stanford, Calif. (L. Zeitz, Biophysics Laboratory, Stanford Univ., Stanford)

22-25. Neurology Congr., Oslo, Norway. (S. Rufsum, Rikshospitalet, Oslo) 22-26. American Assoc. for the Ad-

22-26. American Assoc. for the Advancement of Science, Alaska Div., Juneau, Alaska. (A. Sosnkowski, Alaska State Museum, Box 2051, Juneau)

23-24. Thin Films Conf., Denver, Colo. (R. B. Feagin, Univ. of Denver Research Inst., Denver 10)

23-25. Obstetrics and Gynecology, congr., Copenhagen, Denmark. (P. Lange, Eivindsvej 36 Chl., Copenhagen)

23-26. International Union of the History and Philosophy of Science, Philosophy Div., genl. assembly, Helsinki, Finland. (R. Taton, 64 rue Gay-Lussac, Paris 5°, France)

24-25. Friends of the Pleistocene, Rocky Mountain section, annual field trip, Twin Falls, Idaho. (H. E. Malde, U.S. Geological Survey, Federal Center, Denver, Colo.)

24-31. Child Psychiatry, intern. congr., Scheveningen, Netherlands. (Secretary, c/o

Holland Organizing Center, Lange Voorhout 16, The Hague, Netherlands)

24-25. Plant Phenolics Group of North America, annual, Corvallis, Ore. (V. C. Runeckles, Imperial Tobacco Co. of Canada, P.O. Box 6500, Montreal, Ouebec)

ada, P.O. Box 6500, Montreal, Quebec) 24-1. Surveying, intern. congr., Vienna, Austria. (A. Barvir, Intern. Federation of Surveyors, Krotenthallergasse 3, Vienna 8)

24-2. International Pharmaceutical Students' Federation, congr., Barcelona, Spain. (A. Damen, IPSF, Spaargarenstraat 26, Oegstegeest-Leiden, Netherlands)

25-26. International Chiropractors Assoc., annual, Davenport, Iowa. (G. R. Price, 741 Brady St., Davenport)

25-31. Environmental Control of Plant Growth, intern. symp., Canberra, Australia. (L. T. Evans, C.S.I.R.O., Div. of Plant Industry, P.O. Box 109, Canberra City, A.C.T., Australia)

26. American Assoc. of Electromyography and Electrodiagnosis, annual, New York, N.Y. (M. K. Newman, 16861 Wyoming Ave., Detroit 21, Mich.)

26-29. American Inst. of Chemical Engineers, natl. mtg., Denver, Colo. (F. H. Poettmann, Ohio Oil Co., P.O. Box 269, Littleton, Colo.)

26-29. Soil Conservation Soc. of America, Washington, D.C. (H. W. Pritchard, 838 Fifth Ave., Des Moines 14, Iowa)

26-31. American Inst. of Biological Sciences-American Assoc. for the Advancement of Science, Pacific Div., Corvallis, Ore. (AIBS, 2000 P St., NW, Washington 6, D.C.)

The following 27 meetings are being held under AIBS auspices during the annual meeting in Corvallis:

American Bryological Soc. (R. O. Belkengren, Dept. of Botany & Plant Pathology, Oregon State Univ., Corvallis)

American Fern Soc. (L. Dennis, Dept. of Botany & Plant Pathology, Oregon State Univ., Corvallis)

American Fisheries Soc. (J. H. Wales, Fish & Game Management, Oregon State Univ., Corvallis)

American Microscopical Soc. (H. K. Phinney, Dept. of Botany & Plant Pathology, Oregon State Univ., Corvallis)

American Phytopathological Soc. (E. K. Vaughan, Dept. of Botany & Plant Pathology, Oregon State Univ., Corvallis)

American Soc. for Horticultural Science. (S. B. Apple, Jr., Dept. of Horticulture, Oregon State Univ., Corvallis)

American Soc. of Human Genetics. (J. D. Mohler, Dept. of Zoology, Oregon State Univ., Corvallis)

American Soc. of Limnology & Oceanography. (J. Pattullo, Dept. of Oceanography, Oregon State Univ., Corvallis)

American Soc. of Plant Physiologists. (H. J. Evans, Dept. of Botany & Plant Pathology, Oregon State Univ., Corvallis)

American Soc. of Plant Taxonomists. (K. L. Chambers, Dept. of Botany & Plant Pathology, Oregon State Univ., Corvallis) American Soc. of Zoologists. (A. W.

American Soc. of Zoologists. (A. W. Pritchard, Dept. of Zoology, Oregon State Univ., Corvallis)

Biometric Soc. (L. D. Calvin, Statistical Laboratory, Oregon State Univ., Corvallis) Botanical Soc. of America. (L. E. Jones, Dept. of Botany and Plant Pathology, Oregon State Univ., Corvallis)

Ecological Soc. of America. (W. W.



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National Assoc. of Biology Teachers. (S. E. Williamson, Dept. of Science Education, Oregon State Univ., Corvallis)
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Phi Sigma Soc. (W. H. Brandt, Dept. of Botany & Plant Pathology, Oregon State Univ., Corvallis)

Phycological Soc. of America. (H. K. Phinney, Dept. of Botany & Plant Pathology, Oregon State Univ., Corvallis)

Plant Phenolics Group of America. (H. Aft, Forest Products Laboratory, Oregon State Univ., Corvallis)

Society for Industrial Microbiology. (R. Bogart, Dept. of Dairy and Animal Husbandry, Oregon State Univ., Corvallis)

Society for the Study of Evolution, (W. F. Stephen, Dept. of Entomology, Oregon State Univ., Corvallis)

Society for the Study of Development and Growth. (A. W. Pritchard, Dept. of Zoology, Oregon State Univ., Corvallis) Society of General Physiologists. (E. J.

Dornfeld, Dept. of Zoology, Oregon State Univ., Corvallis)

Society of Protozoologists. (S. E. Knapp, Dept. of Veterinary Medicine, Oregon State Univ., Corvallis)

Tomato Genetics Cooperative. (W. A. Frazier, Dept. of Horticulture, Oregon State Univ., Corvallis)

The following nine meetings are being held under AAAS auspices during the annual meeting of the Pacific Division:

American Meteorological Soc. (L. D. Calvin, Statistical Laboratory, Oregon State Univ., Corvallis)

American Nature Study Soc. (R. E. Storm, Dept. of Zoology, Oregon State Univ., Corvallis)

American Soc. of Ichthyologists & Herpetologists, Western Div. (R. E. Storm, Dept. of Zoology, Oregon State Univ., Corvallis)

American Soc. of Limnology & Oceanography, Pacific Div. (J. Pattullo, Dept. of Oceanography, Oregon State Univ., Corvallis)

Institute of Food Technologists. (C. E. Samuels, Dept. of Food & Dairy Technology, Oregon State Univ., Corvallis)

Oregon Acad. of Science. (F. A. Gilfillan, Dean of Sciences, Oregon State Univ., Corvallis)

Oregon Marine Biological Soc. (J. H. Wilson, Public Health Service, Portland, Ore.)

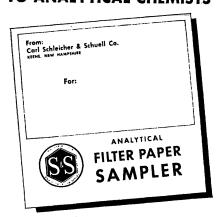
Society of Systematic Zoology. (J. D. Lattin, Dept. of Entomology, Oregon State Univ., Corvallis)

Western Soc. of Soil Science. (T. I., Jackson, Dept. of Soils, Oregon State Univ., Corvallis)

26-31. International Commission for Uniform Methods of Sugar Analysis, session, Berlin, Germany. (F. Schneider, Langer Kamp 5, Braunschweig, Germany)

26-1. International Federation of Information Processing Societies, annual,

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Munich, Germany. (I. L. Auerbach, Auerbach Electronics Corp., 1634 Arch St., Philadelphia 3, Pa.)

26-1. Radiology, intern. congr., Montreal, Canada. (C. B. Peirce, Suite 204, 1555 Summerhill Ave., Montreal 25)

26-2. History of Science, intern. congr., Ithaca, N.Y. (26-31 Aug.), and Philadelphia, Pa. (31 Aug.-2 Sept.). (Secretary, Intern. Congr. of the History of Science. Cornell Univ., Ithaca)

27-28. Culture Collections, specialists' conf., Ottawa, Ont., Canada (by invitation). (S. M. Martin, Div. of Applied Biology, National Research Council, Ottawa 2)

27-28. Scandinavian Neurosurgical Soc.,

annual, Odense, Denmark. (B. Broager, Neurokirurgisk Afdeling, Bispebjerg Hospital, Copenhagen, Denmark)

27-29. American Physical Soc., Seattle, Wash. (H. A. Shugart, Univ. of California, Berkeley 4)

27-29. Ballistic Missile and Space Technology, symp., Los Angeles, Calif. (C. T. Morrow, Aerospace Corp., P.O. Box 95085, Los Angeles 45)

27-29. Mathematical Assoc. of America, summer mtg., Vancouver, B.C. (H. L. Alder, MAA, Dept. of Mathematics, Univ. of California, Davis)

27-29. Metallurgy of Semiconductor Materials, conf., Philadelphia, Pa. (Amer. Inst. of Mining, Metallurgical, and Petroleum Engineers, 345 E. 47 St., New York 17, N.Y.)

27-30. American Assoc. of Clinical Chemists, Santa Monica, Calif. (G. F. Lanchantin, Cedars of Lebanon Hosp., Los Angeles, Calif.)

27-30. American Astronomical Soc., New Haven, Conn. (H. J. Smith, Yale Observatory, 135 Prospect St., New Haven)

27-30. American Soc. for Pharmacology and Experimental Therapeutics, Nashville, Tenn. (H. G. Mandel, George Washington Univ. School of Medicine, 1337 H St., NW, Washington 5, D.C.)

27-31. American Congr. of Physical Medicine and Rehabilitation, annual, New York, N.Y. (G. Gullickson, Jr., 30 N. Michigan Ave., Chicago 2, Ill.)

27-31. Space Technology and Science,

intern. symp., Tokyo, Japan. (F. Tamaki, Inst. of Industrial Science, Univ. of Tokyo, Shin-Ryudo-cho 10, Minato-ku, Tokyo)

27-1. Application of Automatic Control in Prosthetics Design, intern. symp., Opatija, Yugoslavia. (Yugoslav Committee for Electronics and Automation, Terazije 23, Belgrade)

27-1. Combustion, intern. symp., Ithaca, N.Y. (Combustion Symp. Office, Upson Hall, Sibley School of Mechanical Engineering, Cornell Univ., Ithaca)

27-1. International Assoc. of Logopadics and Phoniatrics, annual, Padua, Italy. (C. Croatto-Martinolli, Via Bergamo 10, Padua)

27-1. International Council of the Aeronautical Sciences, congr., Stockholm. Sweden. (Mr. Bergquist, Flugtechniska Föreningen, Bromma 11, Stockholm)

27-2. Chemistry of Natural Products, intern. symp., Prague, Czechoslovakia. (Symposium Secretariat, P.O. Box 159, Prague 6, Dejvice)

27-8. International Dairy Federation, annual, Copenhagen, Denmark. (IDF, 10

rue Ortélius, Brussels 4, Belgium)
28–31. American Physiological Soc... Buffalo, N.Y. (R. G. Daggs, APS, 9650

Wisconsin Ave., Washington 14, D.C.) 28-31. Catholic Intern. Federation of Hospital Institutions, congr., Evian, France. (A. A. M. Sanders, Carel van Bylandtlaan 8, The Hague, Netherlands)

29-31. Association for Computing Machinery, natl. mtg., Syracuse, N.Y. (J. Moshman, Council for Economic & Industry Research, 1200 Jefferson Davis Hwy., Arlington 2, Va.)

29-2. American Sociological Assoc., Washington, D.C. (T. Parsons, Emerson Hall, Cambridge 38, Mass.)

29-3. Prehistoric and Protohistoric Sciences, intern. congr., Rome, Italy. (L. Cardini, c/o Museo Preistorico L. Pigorini, Via del Collegio Romano 26, Rome)

29-4. International Assoc. of Logopedics and Phoniatrics, congr., Padua, Italy. (C. Martinolli, IALP, Via Bergamo 10, Padua)

29-5. British Assoc. for the Advancement of Science, annual, Manchester, England. (BAAS, 3 Sanctuary Buildings, Great Smigh St., London, S.W.1, England)

29-5. Electron Microscopy, intern, congr., Philadelphia, Pa. (Congress on Electron Microscopy, 7701 Burholme Ave., Philadelphia 11)

30. Alpha Epsilon Delta, Lafayette, Ind. (M. L. Moore, 7 Brookside Circle, Bronxville, N.Y.)

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