Scientific Meetings

Southwestern and Rocky Mountain Division of the AAAS

A notable feature of the 1956 meeting of the Southwestern and Rocky Mountain Division of the AAAS was the extent to which the sessions appealed to a general scientific audience and even to an audience that included a respectable number of nonscientists. One afternoon was held free of competing sessions so that everyone who wished to could attend a symposium on the locally important problem of arid land use and development. The program consisted of a progress report by the Committee on Desert and Arid Zone Research, of which Peter C. Duisberg is chairman. C. W. Botkin gave a history of organized scientific efforts in the Southwest to deal with problems of aridity; a panel discussion reviewed the significance and follow-up efforts of the Association's 1955 International Arid Lands Meetings; a representative of the State Engineer's Office described ground-water trends in New Mexico: and Anton H. Berkman discussed plans and prospects for future work. These topics are of interest to farmers and ranchers, to engineers and development planners as well as to scientists, and the audience included members of all of these groups.

Three evening lectures were given on topics of general scientific interest. In his presidential address, E. F. Castetter of the University of New Mexico described, with many and excellent illustrations, the vegetation of the several plant-association zones of the state. The annual Powell Memorial lecture was given by Seth B. Nicholson of the Mount Wilson and Palomar Observatories, who described sunspot cycles and work on the development, history, and influences of sunspots. The third evening lecture was by Russell K. Sherbourne, chief physicist of the New Mexico College of Agricultural and Mechanic Arts and president of the New Mexico-West Texas Section of the American Rocket Society. He described the techniques of upper atmosphere research through rocketry, and appropriately-or inappropriately-did so on the evening of the day on which an Aerobee-Hi missile shot off at nearby White Sands Proving Ground had failed at a height of 2 or 3 miles instead of reaching a hoped-for new altitude record.

On the final afternoon, a general symposium was held on the subject of education of scientists. The training of science teachers was considered by John G. Lyon, and plans for the improvement of science teaching in secondary schools were discussed by Sophie D. Aberle and a panel.

Sectional meetings on botanical, physical, social, and zoological sciences were scheduled at times not preempted by the more general sessions. Research papers presented at these sessions dealt with the customary wide range of topics, but notable among the papers were a number that—like the more general sessions—were of interest to persons outside the particular field of specialization of the author. Some dealt with local flora, geologic problems, and archeological materials

The division will hold its 1957 meeting in Tucson, Ariz., and its 1958 meeting in Las Vegas, N. M.

DAEL WOLFLE

Developmental Biology and Cytodifferentiation

The study of development and growth is assuming ever-increasing importance as a basic biological discipline, both in its own right and in its bearing on the medical and agricultural sciences. Its most substantial contributions come from such a variety of sources as anatomy, biochemistry, biometry, biophysics, botany, cytology, embryology, endocrinology, genetics, histology, immunology, microbiology, neurology, pathology, physiology, radiology, and zoology. Such diversity calls for integrative effort.

As one step toward this end, the Biology Council of the Division of Biology and Agriculture, National Academy of Sciences–National Research Council, under the chairmanship of Paul Weiss, is arranging this summer a series of congresses, conferences, symposia, and workshops, aiming at conjoint interdisciplinary reviews and discussions of the common problems in developmental biology in the broadest sense. Generous grants from private and public foundations,

government agencies, and industrial firms will enable about 70 experts from foreign countries to join their United States colleagues in the various programs.

This International Developmental Biology Conference Series will culminate in two events that are open to the scientific public, the International Congress of Developmental Biology and the International Symposium on Cytodifferentiation, to be held under the auspices of the International Institute of Embryology and the International Union of Biological Sciences, respectively, from 23 to 31 July, at Brown University. The detailed program of these two meetings, arranged by the United States program committee (E. G. Butler, George W. Corner, Louis B. Flexner, J. S. Nicholas, Paul Weiss, B. H. Willier, J. Walter Wilson) is given here. Registration fee will be \$5. For room accommodations, apply to Professor J. Walter Wilson, Department of Biology, Brown University, Providence 12, R.I.

International Congress of Developmental Biology

Symposium on Embryonic Nutritional Requirements and Utilization

23 July, afternoon: Ernst Hadorn (University of Zürich), presiding; introductory remarks, J. S. Nicholas (Yale University); "Embryonic energy exchange," E. J. Boell (Yale University); discussion leader, Søren Løvtrup (University of Göteborg); "Metabolic patterns in the echinoderm embryo," J. L. Kavanau (Rockefeller Institute for Medical Research); discussion leader, Tryggve Gustafson (Wenner Gren Institute for Experimental Biology); "Yolk utilization in fishes," Sidney Smith (Cambridge University); discussion leader, Ch. Devillers (Collège de France).

24 July, morning: M. W. Woerdeman (University of Amsterdam), presiding; "Antigens as tracers of embryonic synthesis," James D. Ebert, Jr. (Carnegie Institution of Washington); discussion leader, J. Langman (Free University, Amsterdam); "Nutrient necessities in chick development," Nelson T. Spratt (University of Minnesota); discussion leader, C. H. Waddington (Institute of Animal Genetics, Edinburgh); "Enzymes, their development and formation," Florence Moog (Washington University, St. Louis); discussion leader, George W de Villafranca (Smith College).

Symposium on Regeneration in Vertebrates

23 July, afternoon: M. W. Woerdeman (University of Amsterdam), presiding; introductory remarks, E. G. Butler (Princeton University); "Lens and retinal regeneration," L. S. Stone (Yale University)

versity); discussion leader, Randall W. Reyer (University of Pittsburgh); "Mechanics of tail regeneration," Howard Holtzer (University of Pennsylvania); discussion leader, Alberto Stefanelli (University of Rome); "Cellular basis of limb regeneration," D. T. Chalkley (University of Notre Dame); discussion leader, Paul Weiss (Rockefeller Institute for Medical Research).

24 July, morning: F. E. Lehmann (University of Bern), presiding; "Influence of nerves on regeneration," Marcus Singer (Cornell University); discussion leader, C. S. Thornton (Kenyon College); "Role of hormones in regeneration," Oscar E. Schotté (Amherst College); discussion leader, Jerry J. Kollros (State University of Iowa); "Effects of x-rays on regenerative capacity," H. A. L. Trampusch (University of Amsterdam); discussion leader, E. G. Butler (Princeton University).

Papers by Fellows of the International Institute of Embryology

24 July, afternoon: "Degradations and syntheses in the first days of rodent eggs (according to cytochemical data," A. M. Dalcq (University of Brussels); "Proteins in the Arbacia embryo in normal development and in experimental conditions," Silvio Ranzi and P. Citterio (University of Milan); "Action of antisera against various antigens of sea urchins on cell division and development," Albert Tyler (California Institute of Technology); "Studies on embryonic induction using radioactive tracers," C. H. Waddington (Institute of Animal Genetics, Edinburgh); "On the factors controlling the size and differentiation of early organ rudiments in different species of Anura,' B. I. Balinsky (University of the Witwatersrand, Johannesburg); "Studies on the development of the amphibian pituitary," Richard M. Eakin (University of California); "Cytodifferentiation of paraganglia," A. C. Da Costa (University of Lisbon); "General remarks on neuron differentiation," Alberto Stefanelli (University of Rome); "Mechanisms of control of nerve growth," Viktor Hamburger (Washington University, St. Louis); "Atypical regeneration of aneurogenic salamander limbs following innervation," C. L. Yntema (State University of New York, Syracuse); "Inhibition of histological differentiation in the notochord of Triton," Ernst Hadorn (University of Zürich); "Facts of experimental sex reversal and their bearing on the problems of genic control of embryonic development," Emil Witschi (State University of Iowa).

Section A, Session for Free Papers

25 July, morning: "Experiments in the developmental biology of mammalian gametes," R. A. Beatty (Institute of Ani-

mal Genetics, Edinburgh); "Agglutination of sperm by fertilizin in the starfish, Asterias forbesii," C. B. Metz (Florida State University); "Acrosome filament and its relation to sperm entry in certain holothurians and starfishes," L. H. Colwin and A. L. Colwin (Queens College, New York); "Parthenogenesis in turkey eggs," M. W. Olsen (U.S. Department of Agriculture); "Variation in the time of human ovulation," E. J. Farris (Wistar Institute); "Electronmicroscopic observations on differentiation of the cortex and inclusions in oocytes of Rana pipiens," Norman Kemp (University of Michigan); "Studies on the mitochondria of the sea urchin egg before and after fertilization," Alberto Monroy and R. Maggio (University of Palermo); "Rabbit egg coverings," B. G. Böving (Carnegie Institution of Washington); "Hyaline membranes of the mammalian placenta: their occurrence and histochemistry," W. A. Wimsatt (Cornell University); "Placental barrier to gamma globulins in the rat," J. M. Anderson (Cornell University); "Histochemical indications of a relation between the placental structures and the developing liver of the rat," H. A. Padykula (Harvard University); "Histochemical horizons in human embryos: Streeter horizons XIII and XIV," D. G. McKay, E. C. Adams, A. T. Hertig, and Sara Danziger (Harvard University).

25 July, afternoon: "Mitotic behavior of the neural epithelium of chick embryos as revealed by the colchicine technique," R. L. Watterson (Northwestern University); "Developmentatl pattern of the Nissl substance in isolated embryonic chick spinal ganglia," E. R. Peterson and A. D. Deitch (Columbia University); "Stimulation of nerve fiber outgrowth in vitro by a heat-labile factor in snake venom," Rita Levi-Montalcini and Stanley Cohen (Washington University, St. Louis); "Experimental studies in vivo of regenerative patterns of vagus nerve branches in frog tadpoles," C. C. Speidel (University of Virginia); "Effects of hypothyroidism and hormone therapy on enzyme activities of the developing cerebral cortex in the rat," Max Hamburgh and L. B. Flexner (Yeshiva University and University of Pennsylvania); "Effect of steroid hormones on the sex differentiation of Scyliorhinus canicula," Giovanni Chieffi (University of Naples); "Role of adrenal corticoids in the late development of the chick embryo," Florence Moog (Washington University, St. Louis); "Hormonal determination in the differentiation of amphibian mesonephric blastema," S. J. Segal (State University of Iowa); "Fetal thyroid in the thyroidectomized pregnant rabbit," A. J. Waterman (Williams College); "Hormonal control of onset of the corneal reflex in Rana pipiens," J. J. Kollros (State University of Iowa).

25 July, morning: "Experimental analysis of cartilage formation from the neural crest of the frog, Rana japonica," Mamori Ichikawa (University of Kyoto, Japan); "Some morphological and biochemical data of lens development of the chick embryo," Jan Langman (Free University, Amsterdam); "Distribution of radioactive sulfate in the developing eye," G. K. Smelser (Columbia University); "Origin and early development of the human eyeball musculature," P. W. Gilbert (Cornell University); "Studies on the differentiation of muscle tissue in Amblystoma," W. B. Muchmore (University of Rochester); "On the transformation of chick embryonic somite cells into cartilage and muscle," J. Lash, S. Holtzer, and H. Holtzer (University of Pennsylvania); "Development of contractility of somitic muscles and appearance of actomyosin in early tailbud embryos of amphibians (Rana pipiens)," Joyce Bruner-Lorand (Northwestern University); "Observations on the fine structure of developing intercalated discs in cardiac muscle," A. R. Muir (University of Edinburgh); "Certain dehydrogenases and cytochrome-c reductases in developing heart muscle," T. O. Sippel (Johns Hopkins University); "Distribution of radioactive sulfate in the heart of fetal, newborn, and adult rabbits," W. M. Copenhaver (Columbia University); "Endocrine regulation of protein and nucleic acid accumulation in embryonic chick skeletal muscle," I. R. Konigsberg and D. S. Love (University of Colorado); "Vascular outgrowth in relation to mesenchymal environment in the chick embryo," Beatrice Mintz (University of Chicago).

25 July, afternoon: "Embryonic induc-M. C. Niu (Rockefeller Institute for Medical Research); "Modification of inductive relationships by antiserums in cultures of Triturus pyrrhogaster and Hynobius nigrescens embryo tissues, Kazuko Inoue and T. Ishikawa (Kanazawa University, Japan); "Some new experiments on limb induction," B. I. Balinsky (University of the Witwatersrand, Johannesburg); "Effects of the apical ectodermal ridge on the regional differentiation and inductive specificity of limb mesoderm in the chick," J. W. Saunders, Jr. (Marquette University); "Lens induction in Amblystoma punctatum and Triturus viridescens," R. W. Reyer (University of Pittsburgh); ' lenium-induced malformations in the chick: an example of the role of degeneration in abnormal development," Peter Gruenwald (Margaret Hague Maternity Hospital); "Inhibition of alkaline phosphatase and morphogenesis in feathers by extracellular RNA," H. L. Hamilton (Iowa State College); "Effect of antibiotic substances on early developmental

processes," Alexander Wolsky (Fordham University); "Behavior in vitro of aggregates of combined embryonic chick and mouse cells," Aron Moscona (Rockefeller Institute for Medical Research); "Potentialities of normal embryo-liver hematopoietic cells implanted in radiated genetically anemic adult hosts," E. S. Russell, L. J. Smith, and F. A. Lawson (Roscoe B. Jackson Memorial Laboratory); "Standard stages and tables of vertebrate development: a discussion of guiding principles and of recent proposals," Emil Witschi (State University of Iowa).

Section C, Session for Free Papers

25 July, morning: "Early development of cutaneous melanocytes in man," A. A. Zimmerman and S. W. Becker, Jr. (University of Illinois); "Pituitary function in axolotl pigment pattern development," H. C. Dalton (New York University); "Developmental 'relationship between melanocytes and melanophores in melanomas," Myron Gordon (American Museum of Natural History); "Changing metabolic patterns of cells during differentiation," C. L. Markert (University of Michigan); "Correlation of antigenic changes in Rana pipiens with morphogenetic events," G. W. Nace (Duke University); "Differentiation kinetics of urodele pre- and postgastrula cells in response to environmentally supplied metabolites," C. E. Wilde (University of Pennsylvania); "Quantitative determinations of incorporation of labeled glycine into explanted chick embryos," Heinz Herrmann (University of Colorado); "Growth and rates of activities of a reversible transaminase system," W. W. Nowinski and W. C. Mahaffey (University of Texas); "Isolation and characterization of a protein involved in mitosis of the sea urchin egg," Robert Kane and Daniel Mazia (Johns Hopkins University and University of California); "Evidence for substrate and enzymatic cofactor essential for morphogenesis of the mouse embryo," M. N. Runner and Morris Smithberg (Roscoe B. Jackson Memorial Laboratory); "Some genetic growth processes in mammalian morphogenesis," P. B. Sawin and D. D. Crary (Roscoe B. Jackson Memorial Laboratory); "Slightness of teratogenic vitamin deficiencies," A. Giroud (University of Paris at the Sorbonne).

25 July, afternoon: "Transplantation of neurula nuclei," T. J. King (Institute for Cancer Research and Lankenau Hospital Research Institute); "Ocular implantation of the mammalian ovum," Herbert Shapiro and T. S. Harvey (Wills Eye Hospital); "Cortiso-endoplasmic differentiation in the ameba and the mechanism of cellular movement," R. D. Allen (Princeton University); "Hybridization of frogs, with special reference to the

mechanism of abnormal gastrulation and neurulation," C. Y. Chang (State University of Iowa); "Mesodermal and endodermal movement in the Amblystoma punctatum neurula," Sally Wilens (Yale University); "Cellular movements in the early forelimb regenerate of the newt and their relation to the nerve," E. K. Ray and Marcus Singer (Cornell University); "Role of the epidermis in the regeneration of intracoelomic forelimbs of adult Triturus viridescens," R. J. Goss (Brown University); "Influence of intracentral nerves on limb regeneration in Amblystoma," C. S. Thornton (Kenyon College); "Submicroscopic relations of cells, fibrils, and ground substance in the rat tail tendon," William Bondareff (University of Chicago); "Influence of local x-ray irradiation on the development of the head of young axolotls (Siredon mexicanum)," V. V. Brunst (Roswell Park Memorial Institute).

International Symposium on Cytodifferentiation

Cytodifferentiation in Relation to Genic Endowment

27 July, morning: Ernst Hadorn (University of Zürich), chairman; panel, R. A. Beatty (Institute of Animal Genetics, Edinburgh), Ernst W. Caspari (Wesleyan University), M. Errera (Free University of Brussels), Gerhard Fankhauser (Princeton University), H. Grüneberg (University College, London), Berwind P. Kaufmann (Carnegie Institution of Washington, Cold Spring Harbor), C. H. Waddington (Institute of Animal Genetics, Edinburgh).

Chemical and Morphological Indices of Cytodifferentiation (Proteins, nucleic acids, enzyme systems, metabolism, and particulate cell components)

27 July, afternoon: Holger Hydén (University of Göteborg), chairman; panel, Max Alfert (University of California, Berkeley), Edgar J. Boell (Yale University), A. M. Dalcq (Free University of Brussels), Don W. Fawcett (Cornell Medical College), Tryggve Gustafson (Wenner Gren Institute for Experimental Biology), F. E. Lehmann (University of Bern), Clement L. Markert (University of Michigan), Florence Moog (Washington University, St. Louis), George E. Palade (Rockefeller Institute for Medical Research), Silvio Ranzi University of Milan), Paul C. Zamecnik (Massachusetts General Hospital).

Special Instances of Cytodifferentiation (fibrogenesis, myogenesis)

28 July, morning: W. E. Ankel (University of Giessen, Germany); panel, H.

Stanley Bennett (University of Washington), James D. Ebert, Jr. (Carnegie Institution of Washington), Jerome Gross (Massachusetts General Hospital), Heinz Herrmann (University of Colorado), Howard Holtzer (University of Pennsylvania), Charles B. Metz (Florida State University), Aron Moscona (Hebrew University, Israel), Keith R. Porter (Rockefeller Institute for Medical Research).

Internal Milieu in Cytodifferentiation (including cell emanations)

30 July, morning: V. B. Wigglesworth (Cambridge University), chairman; panel, Harry Eagle (National Institutes of Health), A. Giroud (University of Paris at the Sorbonne), E. Hintzsche (University of Bern), F. Jacoby (University College of South Wales and Monmouthshire), J. Langman (Free University, Amsterdam), Petar Martinovitch (Serbian Academy of Sciences, Yugoslavia), Walter J. Nickerson (Rutgers University), Alberto Stefanelli (University of Rome), B. H. Willier (Johns Hopkins University), E. N. Willmer (Cambridge University).

Growth in Relation to Cytodifferentiation, Cancer, Etc.

30 July, afternoon: Isaac Berenblum (Weizmann Institute), chairman; panel, Howard B. Andervont (National Institutes of Health), Otto M. Bucher (University of Lausanne), E. Bünning (University of Tübingen), Jacob Furth (Harvard Medical School), A. Glücksmann (Strangeways Research Laboratory, England), C. P. Leblond (McGill University), Harald Teir (University of Helsinki), Victor C. Twitty (Stanford University).

Evaluation and Perspectives

31 July, morning: M. W. Woerdeman (University of Amsterdam), chairman.

Meeting Notes

■ The ninth Oak Ridge Regional Symposium will be presented 30–31 July in Blacksburg, Va., under the sponsorship of the Virginia Polytechnic Institute and in cooperation with the Oak Ridge Institute of Nuclear Studies, the Oak Ridge National Laboratory, and the U.S. Atomic Energy Commission. Entitled "Atomic Energy and Science," the symposium will include an exhibit from the American Museum of Atomic Energy in Oak Ridge, and a General Electric Company film, "A is for Atom." These symposia are presented periodically for high-school and college students and faculty members to stimulate interest in

science and to provide up-to-date reviews of current research and applications of atomic energy.

■ The 84th annual meeting of the American Public Health Association, and meetings of 40 related organizations, will take place in Atlantic City, N.J., 12–16 Nov. More than 4000 public health workers from all parts of the free world are expected to attend. Representing both governmental and voluntary health organizations and institutions, they will include physicians, dentists, nurses, engineers, statisticians, veterinarians, sanitarians, nutritionists, health educators, entomologists, biologists and other specialists concerned with disease prevention and health protection.

A keynote symposium entitled "How are we doing in public health?" will open the meeting. Approximately 75 sessions will deal with various public health activities, both administrative and scientific, in relation to the health needs of people in a changing world.

Approximately 400 papers will be given. Each of the association's 14 specialized sections will hold sessions, and other meetings will deal with subjects that cut across the lines of several specialties, including prevention of communicable diseases, rehabilitation of the chronically ill, problems of the aging, adult health education, the impact of suburbanization on public health and industrial health, safety, and sanitation. Supplementing the meetings will be a week-long scientific and technical exhibit by government agencies and private firms whose products or services have health importance.

The American Public Health Association, with headquarters at 1790 Broadway, New York, is the largest professional organization of public health workers in the world. Membership totals more than 12,000 men and women in North and South America. The president is Ira V. Hiscock, chairman of the department of public health at Yale University.

Society Elections

- Illinois State Academy of Science: pres., Joan Hunter, Edwardsville High School; 1st v. pres., Wayne Wantland, Illinois Wesleyan University; 2nd v. pres., C. W. Hudelson, Illinois State Normal University; sec., R. A. Evers, State Natural History Survey, Urbana; treas., Walter B. Welch, Southern Illinois University.
- American Association of Pathologists and Bacteriologists: pres., Granville A. Bennett; v. pres., Sidney Farber; sec., Edward A. Gall; treas., Elbert DeCoursey.

- American Association of Clinical Chemists: pres., Robert M. Hill, University of Colorado Medical School; v. pres., Joseph I. Routh, State University of Iowa; sec., Max M. Friedman, Lebanon Hospital, New York; treas., Louis B. Dotti, St. Luke's Hospital.
- Southwestern and Rocky Mountain Division of AAAS: pres., Marlowe G. Anderson, New Mexico College of Agricultural and Mechanic Arts; v. pres., M. F. Stubbs, New Mexico Institute of Mining and Technology; executive sec.-treas., Frank E. E. Germann, University of Colorado.
- American Society for Experimental Pathology: Frank W. Hartman, Henry Ford Hospital; v. pres., Emory D. Warner, University of Iowa Medical School; sec.-treas., Cyrus C. Erickson, Institute of Pathology, University of Tennessee. Representatives to the AAAS Council are Warner and Charles C. Randall.
- Association of Research Directors: pres., John H. Nair, Thomas J. Lipton, Inc.; v. pres., Llewellyn B. Parsons, Lever Brothers Company; sec.-treas., Wallace S. Peck, American Dyewood Company.

Forthcoming Events

July

30-31. Oak Ridge Regional Symposium, 9th, Blacksburg, Va. (Information Dept. Oak Ridge Inst. of Nuclear Studies, P.O. Box 117, Oak Ridge, Tenn.)

30-4. International Physiological Cong., 20th, Brussels, Belgium. (J. J. Reuse, Faculté de Medecine, 115 Boulevard de Waterloo, Brussels.)

August

1-3. Western Soc. of Crop Science, Lethbridge, Alberta, Canada. (R. W. Woodward, WSCS, Utah State College, Logan.)

I-6. International Cong. of Human Genetics, 1st, Copenhagen, Denmark. (Secretariate, 1st ICHG, 14, Tagensvej, Copenhagen, N.)

5-10. International Conf. of Social Work, 8th, Munich, Germany. (J. R. Hoffer, 345 E. 46 St., New York 17.)

6-10. Poultry Science Assoc., annual, Raleigh, N.C. (C. B. Ryan, Dept. of Poultry Husbandry, Texas A & M College, College Station.)

6-7. International Mathematical Symposium on Algebraic Topology and Its Applications, Mexico City, Mexico. (Miss J. Silva, Instituto de Matemáticas, Torre de Ciencias, Ciudad Universitaria, México 20, D.F.)

6-8. Soc. of Automotive Engineers, national West Coast meeting, San Francisco,



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Calif. (Meetings Div., SAE, 29 W. 39 St., New York 18.)

9-18. International Geographical Cong., 18th, Rio de Janeiro, Brazil. (H. O'R. Sternberg, Centro de Pesquisas de Geografia do Brasil, Faculdade Nacional de Filosofia, Av. Presidente Antonio Carlos 40, Rio de Janeiro.)

10-11. Minnesota Acad. of Science, New London, Minn. (B. O. Krogstad, Univ. of Minnesota, Duluth 5B.)

12-17. World Federation for Mental Health, 9th annual, Berlin, Germany. (Secretariat, 19 Manchester St., London W.1, England.)

13-16. National Medical Assoc., 61st annual, New York, N.Y. (J. T. Givens, 1108 Church St., Norfolk 10, Va.)

15-22. Canadian Teachers' Federation, Fredericton, N.B., Canada. (G. G. Croskery, 444 MacLaren St., Ottawa, Ontario, Canada.)

16-21. Symposium on X-Ray Microscopy and Microradiography, Cambridge, England. (W. C. Nixon, Cavendish Lab., Cambridge.)

17-25. International Cong. of Entomology, 10th, Montreal, Canada. (J. A. Downes, Div. of Entomology, Science Service Bldg., Ottawa, Ont., Canada.)

19-23. International Cong. on Discases of the Chest, 4th, Cologne, Germany. (Executive Offices, American College of Chest Physicians, 112 E. Chestnut St., Chicago 11, Ill.)

19-24. International Symposium on

Combustion, 6th, New Haven, Conn. (Combustion Symposium Office, Mason Lab., Yale Univ., New Haven 11.)

20-21. Mathematical Assoc. of America, 37th summer, Seattle, Wash. (H. M. Gehman, Univ. of Buffalo, Buffalo 14, N.Y.)

20-21. National Telemetering Conf., Los Angeles, Calif. (R. E. Rawlins, Lockheed Aircraft Corp., Burbank, Calif.)

20-24. Conf. on Scientific and Technical Writing, Philadelphia, Pa. (H. F. Arader, Univ. of Pennsylvania, 3400 Walnut St., Philadelphia 4.)

20-24. Institute of Mathematical Statistics, Seattle, Wash. (G. E. Nicholson, Jr., Dept. of Statistics, Univ. of North Carolina, Chapel Hill.)

20-24. International Cong. of Physical Medicine, 2nd, Copenhagen, Denmark. (S. Clemmesen, Kommune-hospitalet, Copenhagen.)

20-25. American Mathematical Soc., 61st summer, Seattle, Wash. (J. H. Curtiss, AMS, 80 Waterman St., Providence 6, R.I.)

21-24. Western Electronic Show and Convention, Los Angeles, Calif. (B. Angwin, General Electric Co., 11840 W. Olympic Blvd., Los Angeles 64.)

22-29. World Cong. of Sociology, 3rd, Amsterdam, Netherlands. (T. B. Bottomore, Skepper House, 13 Endsleigh St., London, W.C.1, England.)

26-30. American Inst. of Biological Sciences, Storrs, Conn. (H. T. Cox, 2000 P St., NW, Washington 6.)

26-1. International Soc. of Haematology, 6th cong., Boston, Mass. (ISH, New England Medical Center, Harrison Ave. at Bennet St., Boston 11.)

27-31. Biological Photographic Assoc., 26th annual, Rochester, N.Y. (BPA, c/o 343 State St., Rochester 4.)

27-31. Colloquium on Statistical Mechanics of Transport Processes, IUPAP, Brussels, Belgium. (I. Prigogine, 40 Avenue F. D. Roosevelt, Brussels.)

27-31. Infrared Spectroscopy Inst., 7th annual, Nashville, Tenn. (N. Fuson, Dept. of Physics, Fisk Univ., Nashville 8.)

28-2. Colloquium on Semiconductors and Phosphors, IUPAP, Garmisch-Partenkirchen, Germany. (H. Maier-Leibnitz, Walter-von-Dyck-Platz 1, Munich 2, Germany.)

29-5. British Assoc. for the Advancement of Science, annual, Sheffield, England. (Secretary, BAAS, Burlington House, Piccadilly, London, W.1., England.)

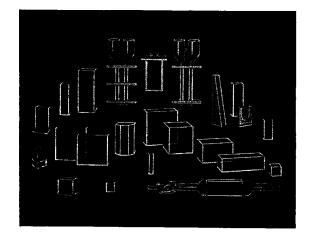
29-8. International Soc. of Soil Science, 6th cong., Paris. (F. A. Van Baren, ISSS, Royal Tropical Inst., Mauritskade 63, Amsterdam, Netherlands.)

30-5. American Psychological Assoc., Chicago, Ill. (F. H. Sanford, 1333 16 St., NW, Washington 6.)

30-5. Psychometric Soc., Chicago, Ill. (L. V. Jones, Dept. of Psychology, Univ. of Chicago, Chicago 37.)

(See issue of 15 June for comprehensive list)

GLASS ABSORPTION



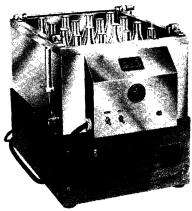
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