

# Scientific Meetings

## Preliminary Announcement of the Seventh New York Meeting

Since its founding more than a century ago, the American Association for the Advancement of Science has held 122 national meetings. One of the fundamental purposes for which the association was founded, in September 1848, still endures: "... by periodical and migratory meetings to promote intercourse between those who are cultivating science. . . ." In recent years the association has also increasingly recognized its responsibility to inform the general public on scientific developments and its obligation to assist all organizations concerned in the encouragement of qualified young people to prepare for, and enter, careers in science. All of these objectives will influence the programs this year.

For its 123rd meeting—the annual meeting of 1956, 26–31 Dec.—the association will return to New York, for the seventh time, and after an interval of 7 years. As in 1949, this large assemblage of research scientists, teachers, research directors, university presidents, engineers, and other science-minded professional men and women will occupy the five hotels closely grouped around the Pennsylvania Railroad Station. The Statler and New Yorker are among the largest in the nation; there are available, with the Sheraton-McAlpin, Governor Clinton, and Martinique, 6700 rooms for transient guests and an exceptional number and variety of session rooms, all of them committed to the use of the AAAS and the participating societies. Since these five hotels are such close neighbors—interconnected by tunnels in three instances—a particularly unified, convenient, and time-saving meeting is assured.

Center of the group, the Hotel Statler will be AAAS Headquarters and site of all general events and the large-scale exhibits. The mezzanine of the Statler not only has a large ballroom (capacity 1800) and other session rooms, but it can also accommodate the AAAS Main Registration-Information Center, AAAS Office, AAAS Press Room, AAAS Science Theatre, Zoologists' Lounge, and the Annual Exposition of Science and Industry, sponsored by the association

for the 33rd time. These exhibits of the latest in the materials and tools that scientists use—and of the technical accomplishments of large industries—will occupy the Ivy Suite, Foyer, and Georgian Room just opposite the ballroom. With so many session rooms in one hotel—most of them on the mezzanine level—and all the hotels so near one another, the exhibits can be visited repeatedly, during any spare moment, and with a maximum of convenience. Exhibitors have already recognized this fact and, at this time, more than 6 months in advance of the meeting, most of the available boothspace has been rented.

Among the general events scheduled for the ballroom and adjacent areas are the AAAS Presidential Address and Reception on the evening of 28 Dec. At this event, Paul B. Sears will preside, and George W. Beadle will give his retiring address. The distinguished evening lectures of RESA, Sigma Xi, and the United Chapters of Phi Beta Kappa, as well as the AAAS Smoker on the evening of 29 Dec., are all scheduled for the ballroom or adjacent Keystone Room. The two afternoons of 27 and 28 Dec. have been set aside for the two parts of the AAAS General Symposium, "Moving frontiers of science," organized by the Committee on AAAS Meetings. Because of the general interest of this program, the details of which will be announced later in a special release, all AAAS sections and most of the participating societies have not scheduled any sessions concurrent with it. This symposium will be in the Statler ballroom.

The tenth annual Junior Scientists Assembly, sponsored by the association's Academy Conference, a full afternoon program exclusively for high-school students interested in careers in science, will be held in the large auditorium of the American Museum of Natural History on 27 Dec. Following the pattern of the Berkeley meeting's assembly, with the theme this year, "What makes a scientist," there will be an appropriate address, an industrial science show, a panel, and a concluding illustrated lecture. Program chairman is Zachariah Subarsky of the Bronx High School of Science.

Those concerned with various aspects of communications will find much to

interest them in the six sessions of the fifth Conference on Scientific Editorial Problems, arranged by a committee headed by J. G. Adashko, Ford Instrument Company, and in the national meeting of the American Documentation Institute. It is probable that these programs will be cosponsored by one or more of the relatively new societies on technical writing. An interesting exhibit of the latest equipment for the storage and retrieval of information will be jointly sponsored by the ADI and the National Bureau of Standards. A noteworthy event of this year's program in chemistry will be the silver anniversary of the AAAS-Gordon Research Conferences, culminating in a dinner at which Glenn T. Seaborg, 1951 Nobel prize winner, will speak.

As the following synopsis of programs indicates, there will be interesting and important programs in all principal fields of science. In addition to the sessions for contributed papers that meet the needs of specialists, there will be a rich variety of symposia, and among these symposia there will be a number that are interdisciplinary and explore relatively neglected scientific areas—a type of program especially appropriate for an association of 264 affiliates and well over 50,000 individual members.

It is already apparent that the 123rd meeting will be one of the most significant in the long annals of the 108-year-old AAAS—and the attendance will be commensurate. The 18 sections of the association by themselves assure a large and diversified meeting but, in addition, some 40 societies and organizations are arranging programs of their own, and more than 50 others are participating as cosponsors. Fortunately, the session rooms of the Penn Zone hotels are sufficient in number to house nearly all the sessions and large enough to minimize crowding. The Hotel New Yorker will be headquarters for the Entomological Society of America; the Sheraton-McAlpin will house the science teaching societies; and the History of Science Society will be based at the Hotel Governor Clinton. All hotel headquarters assignments will be announced in the association's journals in July, at which time the advertising pages will begin to carry housing reservation and advance registration coupons. As in recent years, advance registrants will receive the book-size General Program-Directory early in December by first-class mail.

A synopsis of programs follows. The names given within parentheses are program chairmen.

## Mathematics (A)

The *Association for Computing Machinery* (J. P. Nash, University of Illinois) is planning several sessions and

the *Society for Industrial and Applied Mathematics* (Donald L. Thomsen, International Business Machines) is arranging a program of invited papers. Both organizations are meeting with the AAAS for the first time, and details are not yet available. It is anticipated that Section A (Rudolph E. Langer, University of Wisconsin) will cosponsor one or more of these sessions and will schedule a vice-presidential address.

#### Physics (B)

Section B (J. Howard McMillen, National Science Foundation) is organizing symposia on "Optics and oriented nuclei" (William B. Hawkins, Jr., Yale University), "Optical absorption in solids" (William F. Meggers, National Bureau of Standards), "Diffusion in solids" (H. B. Huntington, Rensselaer Polytechnic Institute), and "Crystal growth" (Nicholas Cabrera, University of Virginia); a fifth symposium on biophysics is under consideration. The Physicists' Dinner will be cosponsored by *Sigma Pi Sigma*, and the retiring vice-presidential address of Section B will be given by Alan T. Waterman of the National Science Foundation.

The *American Meteorological Society* (Kenneth Spengler, AMS) will cosponsor the Association of American Geographers' invited papers on climatology and other appropriate sessions.

#### Chemistry (C)

Section C's (Ed. F. Degering, Quartermaster Research and Development Laboratories, Natick, Mass.) full program includes sessions for contributed papers and symposia (Karl Folkers, Merck & Co.), the cosponsorship of Section Nd's symposium on "Antienzymes," and a vice-presidential address by Folkers. The symposia are on "Substances with selective toxicity" (Werner Braun, Rutgers University), 27 Dec.; "Steroids" (Boyd Woodruff, Merck & Co.), 28 Dec.; and "Organic chemistry" (Ellis Brown, Seton Hall University), 29 Dec. As mentioned earlier, the *AAAS-Gordon Research Conferences* will celebrate their silver anniversary with a dinner on 27 Dec., at which Glenn T. Seaborg will speak. *Alpha Chi Sigma* (H. G. Seavey, secretary of the New York Professional Chapter) is planning a meal function for all chemists.

#### Astronomy (D)

The *American Astronomical Society* (J. Allen Hynek, Ohio State University), for the first time in many years, will schedule its national meeting with the AAAS. The Hayden Planetarium of the American Museum of Natural History is cooperating. The Helen Warner prize lecture will be given by Harold Johnson of the Lowell Observatory. With the AAAS providing a full program of sessions

for contributed papers and other events, Section D's program will be restricted to cosponsorship of the AAAS program and the retiring vice-presidential address of Seth B. Nicholson of the Mount Wilson Observatory.

#### Geology and Geography (E)

Section E (Robert L. Nichols, Tufts University) will have sessions for contributed papers in geology; a four-session symposium, "Geochronometry" (J. Laurence Kulp, Columbia University), one session of which, on "Carbon dating," will be cosponsored by Section F; "Ground water" (A. Nelson Sayre, U.S. Geological Survey); and "Appalachian structure and stratigraphy" (Kurt E. Lowe, City College, New York)—all cosponsored by the *Geological Society of America*. Symposia on "Carbonate sedimentation" and "Uranium geology," as well as a panel on the International Geophysical Year, are being considered. Section E will cosponsor the sessions of the special meeting of the *Association of American Geographers* (Peter M. Stern, Conservation Foundation), with the New York Metropolitan Division as host, which will include sessions for contributed papers in geography and invited papers on climatology. Section E's customary Geologists' Smoker will include the retiring vice-presidential address of Carl Tolman. The *National Geographic Society* will have its usual excellent lecture and accompanying film—one of the special evening sessions—and the *National Speleological Society* (Brother G. Nicholas, Cumberland, Md.) again will hold a general session for contributed papers and a social hour.

#### Zoological Sciences (F)

The program of Section F (H. H. Plough, Amherst College) includes a symposium on "Museum techniques" cosponsored by the *American Museum of Natural History* (Gordon Reekie, manager of exhibition and construction, American Museum of Natural History); cosponsorship of the two-session symposium, "Communication in the social insects," of the International Union for the Study of Social Insects; a symposium, "Problems of aging" (Howard J. Curtis, Brookhaven National Laboratory)—topics: "Aging in lower organisms," "Physiological aspects of aging in mammals," "Aging in populations," and "Radiation-induced aging"; a symposium, "The biochemistry of the cell nucleus" (A. W. Pollister, Columbia University), jointly with the *Genetics Society of America*—topics and speakers are "Introduction," A. W. Pollister; "The correlation of nucleic acid content with chromosome complement," Cecilie Leuchtenberger; "The time of synthesis of desoxyribose nucleic acid," J. Herbert Taylor; "Changes in the inter-

phase nucleus with cellular function," Max Alfert; and "Chemical studies of the giant chromosomes of Diptera," George T. Rudkin. Section F will cosponsor "Carbon dating," part II of Section E's symposium on "Geochronometry" (J. Laurence Kulp, Columbia University); the joint symposium of the *New York Zoological Society* and the *New York Academy of Sciences* (Ross F. Nigrelli, New York Zoological Society); the symposium of the *American Society of Zoologists* (Rudolph T. Kempton, Vassar College); and a symposium, jointly with Section G, on "Problems of aging in plants and animals." The Zoologists' Luncheon for all zoologists will feature the vice-presidential address of Bentley Glass. Contributed papers submitted to Section F will be joint with the societies just mentioned or immediately following.

The 4 days of concurrent sessions of the annual national meeting of the *Entomological Society of America* (P. W. Oman, Plant Industry Station, Beltsville, Md.), which last met with the association in 1947, are scheduled for 27–30 Dec., inclusive, at the Hotel New Yorker. The *Herpetologists League* (James A. Fowler, Academy of Natural Sciences of Philadelphia) is planning a regional meeting of contributed papers. The *International Union for the Study of Social Insects, North American Section* (T. C. Schneirla, American Museum of Natural History), in addition to the symposium on "Communication in the social insects"—part I, "Perspectives on fact and theory for the principal social insects" and part II, "Special problems concerning techniques, modalities and potentialities"—will sponsor a symposium, "The effects of radiation on insects" (Orlando Park, Northwestern University), jointly with the Ecological Society of America. The national annual meeting of the *Society of Systematic Zoology* (R. E. Blackwelder) will follow the pattern of former meetings with the association, with sessions for contributed papers, one or more panels or symposia—one of them jointly with the Entomological Society of America—evening lectures, and a business meeting. A feature will be the annual SSZ Library and Lounge for all zoologists.

The New York Zoological Park (Bronx Zoo) will sponsor a daily guided tour throughout the meeting period, 27–31 Dec., beginning at the administration building at 11 A.M. (John Tee-Van, director).

#### Biological Sciences (FG)

The *Ecological Society of America* (Murray F. Buell, Rutgers University) will have sessions for contributed papers, two sessions of invited papers, "Ecology in the Northeast and its applications," and a group of papers on animal behav-

ior and sociobiology (J. P. Scott, Jackson Memorial Laboratory); the symposium, "The effects of radiation on insects," of the International Union for the Study of Social Insects and the grassland ecology part of Section O's symposium on grasslands will be cosponsored. The symposium of the Genetics Society of America has been mentioned under Section F.

The *Society for the Study of Evolution* (Harlan Lewis, University of California at Los Angeles), which last met with the AAAS in 1949, in addition to sessions for contributed papers and a business meeting, will have a symposium, "Biotic communities in the past and today," with Jens C. Clausen as chairman. Titles of papers and speakers are "Genic variability in relation to environment," J. C. Clausen; "Migration of Cenozoic forest communities in North America," Erling Dorf; "Rise of the grass-eating mammals," Joseph T. Gregory; and "Man changing the environment"; this program will be cosponsored by the *Society of Vertebrate Zoology* and other societies.

It is expected that the *American Society of Naturalists* (Bruce Wallace, Cold Spring Harbor, N.Y.) will either arrange a symposium or cosponsor one in the F, FG, or G series.

The annual national meeting of the *National Association of Biology Teachers* (John Breukelman, State Teachers College, Emporia, Kan.) will begin with a business meeting, 26 Dec. It will include three general programs, a luncheon on 27 Dec., a joint session with the other science teaching societies, and a session at the American Museum of Natural History. A field trip with the American Nature Study Society on 30 Dec. will conclude the meeting. The *Society of General Physiologists* (Abraham Shanes, National Institutes of Health) plans a symposium and one or more sessions for contributed papers.

#### Botanical Sciences (G)

Section G (Barry Commoner, Washington University) will have a two-session symposium, "Problems of aging in plants and animals" (Paul J. Kramer, Duke University) jointly with Section F; and a second symposium, "Some unsolved problems in biology"—for example, the chemistry of inheritance, mechanisms of growth and development—(Barry Commoner) cosponsored by Section F and various societies including the *Botanical Society of America* and commemorating this society's golden anniversary. Section G will cosponsor Section O's grassland symposium. The vice-presidential address by Paul J. Kramer will follow the Botanists' Dinner, 27 Dec., a special occasion further celebrating the 50th anniversary of the Botanical Society of America. Sessions for contributed papers in plant ecology, plant physiol-

ogy, and general botany will be held jointly with the Ecological Society of America and the *Torrey Botanical Club* (David Keck, New York Botanical Garden). The Torrey Botanical Club will also arrange a program, probably in the field of plant taxonomy.

#### Anthropology (H)

The full program of Section H (Gabriel Lasker, Wayne University College of Medicine) includes sessions for contributed papers; a symposium to commemorate the 100th anniversary of the discovery of the Neanderthal man (Loren C. Eiseley, University of Pennsylvania, and William L. Straus, Jr., Johns Hopkins University), sponsored jointly with the *American Institute of Human Palaeontology*; a two-session symposium, "Man in the tropics" (Vera Rubin, Columbia University), with speakers from both the United States and Caribbean areas; an Anthropologists' Dinner with one or more addresses by W. Montague Cobb and perhaps other recent vice presidents of Section H. Section Nd's symposium, "Forensic dentistry," will be cosponsored.

#### Psychology (I)

Section I (Conrad G. Mueller, Columbia University) has arranged sessions for six groups of invited papers, four of which are "Experimental psychopathology," "Physiological mechanisms of motivation and reward," "Sensory functions," and "The place of experimental psychology in anthropological field work." It is anticipated that there will be sessions for contributed papers and that Section I will cosponsor parts of Section N's symposium, "Evolution of nervous control from amoeba to man." The vice-presidential address will be given by Clarence H. Graham of Columbia University.

#### Social and Economic Sciences (K)

Section K's symposium, "The impact of the natural sciences on the social sciences: an interpretation" (Donald P. Ray, George Washington University), will be of general interest. It is cosponsored by the *American Political Science Association* and the *American Sociological Society*. Section K will cosponsor the symposium, "Science and national security" (Benjamin H. Williams, Industrial College of the Armed Forces), of the *National Academy of Economics and Political Science* with the collaboration of *Pi Gamma Mu*, the national honorary society in the social sciences, which, it is anticipated, will have a dinner for the speakers of Section K.

#### History and Philosophy of Science (L)

The program of Section L (Jane M. Oppenheimer, Bryn Mawr College) comprises two sessions for contributed

papers, a joint session and dinner with the History of Science Society, a business meeting, the vice-presidential address of Henry Guerlac, and a two-session symposium, "Science and ethics" (Joseph Mayer, Miami University, Ohio), probably cosponsored by the *Philosophy of Science Association*, which plans five sessions on measurement. Section L will cosponsor the special meeting of the *American Philosophical Association, Eastern Division* (John Wild, Harvard University) commemorating the 100th anniversary of the birth of Sigmund Freud.

The annual national meeting of the *History of Science Society* (Pearl Kibre, Hunter College) begins with business meetings on 27 Dec.; includes the symposium, "The interaction of science and technology," joint with Section L, and a luncheon and report on the international conference, 28 Dec.; and concludes, 29 Dec., with two symposia, "The impact of ancient science on the Middle Ages" and "The history of medicine: interpretations and advocates." The *Society for the Advancement of General Systems Theory* (Ludwig von Bertalanffy, Mt. Sinai Hospital, Los Angeles) will have a business meeting and a session for contributed papers, 29 Dec., and a symposium, 30 Dec.

#### Engineering (M)

Section M (Clarence E. Davies, ASME) has set up a program committee to plan and implement a three-session symposium (Irving P. Orens, Newark College of Engineering) entitled "Man and his physical environment," scheduled for 26 and 27 Dec. Part I will deal with "The present integration of man and machines"; Part II, "The future integration and necessity for new machines"; and part III, "Machines and progress in the mechanical translation of languages." The *Engineering Manpower Commission* will cosponsor the sessions of the Conference on Scientific Manpower.

#### Medical Sciences (N)

As in previous years, Section N will have a four-session symposium, the participants of which come from all parts of the continent. This symposium is scheduled for 29 and 30 Dec. This year's subject "Evolution of nervous control from amoeba to man" (Bernard B. Brodie, National Institutes of Health), will range from the rudiments of intracellular phenomena in protozoans through intercellular communication and neurohumors in both invertebrates and vertebrates to the basic actions of drugs on animal and human behavior; included will be the vice-presidential address of Irvine H. Page, and the announcements of the 12th Theobald Smith award, given by Eli Lilly and Company, and the second AAAS-Anne Frankel

Rosenthal Memorial Award in Cancer Research. Part of this symposium may be cosponsored by the Society of General Physiologists and Section I. Section N will cosponsor a variety of appropriate programs.

*Alpha Epsilon Delta* (Maurice L. Moore, national secretary) will have its customary annual luncheon and a speaker of prominence. Details of the special programs of the *American Association of Hospital Consultants* (E. Dwight Barnett, Columbia University), the *American Psychiatric Association* (Benjamin Pasamanick, Ohio State University Health Center), and the *American Physiological Society* (Fred A. Hitchcock, Ohio State University) are not yet available.

#### Dentistry (Nd)

On 28 Dec., Section Nd (George C. Paffenbarger, American Dental Association Research Fellowship, National Bureau of Standards) will have sessions for contributed and invited papers, "Contributions of science to everyday practice." On 29 Dec., there will be a symposium, "Forensic dentistry" (W. M. Krogman, University of Pennsylvania), cosponsored by Sections H and N; a luncheon; a second symposium, "Antienzymes," cosponsored by Sections C, N, and Np; and a business meeting. The entire program of the section will be cosponsored by the *American College of Dentists*, the *American Dental Association*, and the *International Association for Dental Research, North American Division*.

#### Pharmacy (Np)

The full program of Section Np (John E. Christian, School of Pharmacy, Purdue University) begins 26 Dec. with an evening session for contributed papers and continues 27 Dec. with the vice-presidential address of Rudolph H. Blythe, contributed papers, and a symposium, "The significance of cosmetics in medical practice," cosponsored by the *Committee on Cosmetics of the American Medical Association*. On 28 Dec. there will be a symposium, "Tablet manufacture," and papers, and, on 29 Dec., the Hospital Pharmacy program and Section Nd's "Antienzymes." Section Np's entire program will be cosponsored by the *American Association of Colleges of Pharmacy*, the *American College of Apothecaries*, the *American Pharmaceutical Association, Scientific Section*, and the *American Society of Hospital Pharmacists*.

#### Agriculture (O)

Section O (H. B. Sprague, Pennsylvania State University) will have a four-session symposium, "Grasslands in our national life," 29 and 30 Dec. Part I deals with "Forage utilization and re-

lated animal nutrition problems"; part II, "Forage production in humid regions"; part III, "Applications of plant sciences to grasslands"; and part IV, "Grassland machinery, equipment, and irrigation systems." Among the many organizations expected to cosponsor appropriate portions of this symposium are Section G, American Dairy Science Association, American Institute of Nutrition, American Phytopathological Society, American Society of Agricultural Engineers, American Society of Agronomy, American Society of Animal Production, American Society of Biological Chemists, American Society of Plant Physiologists, American Veterinary Medical Association, Botanical Society of America, Ecological Society of America, Entomological Society of America, Farm Equipment Institute of America, Genetics Society of America, Soil Conservation Society of America, and Soil Science Society of America.

#### Industrial Science (P)

Section P (Allen T. Bonnell, Drexel Institute of Technology) will hold a two-session symposium and a luncheon session at which Earle L. Rauber of the Atlanta Federal Reserve Bank will give the vice-presidential address.

#### Education (Q)

The program of Section Q (Herbert A. Smith, University of Kansas) includes two sessions joint with the *International Council for Exceptional Children*, 26 Dec.; two sessions joint with the *American Educational Research Association*, 29 Dec.; some four sessions for contributed papers, 29-31 Dec.; a business meeting, 30 Dec.; and the vice-presidential address of Dean A. Worcester. This section will cosponsor appropriate sessions of the programs of the science teaching societies—all of which (J. Darrell Barnard, New York University, Washington Square) are cosponsoring the AAAS General Symposium, "Moving frontiers of science," holding a joint mixer the evening of 26 Dec. and a joint session the evening of 27 Dec.

Additional sessions of the regional meeting of the *National Science Teachers Association* (Alfred D. Beck, New York Board of Education) are tours, 26 Dec.; a Business-Industry Luncheon, 27 Dec.; and concurrent sessions, 28 and 29 Dec. The *National Association for Research in Science Teaching* (Nathan Washton, Queens College) will meet on 27 Dec. and will also participate in the joint session of the science teaching societies that evening. The *AAAS Cooperative Committee on the Teaching of Science and Mathematics* (Morris Meister, Bronx High School of Science) will probably hold a panel discussion on the proposed extension of the Smith-Hughes

Act, which would provide federal subsidies for science and mathematics teachers; and it will cosponsor the Junior Scientists Assembly of the Academy Conference.

#### Science in General (X)

The Annual *Academy Conference* (Leland H. Taylor, West Virginia University), composed of delegates and other members of the 41 academies affiliated with the association, will hold a day of sessions, 29 Dec., and will sponsor the tenth annual Junior Scientists Assembly.

Details of the annual national meeting of the *American Documentation Institute* (James W. Perry, Western Reserve University), which is meeting with the AAAS for the first time, are not yet available; one feature, however, will be an exhibit of the latest equipment for the storage and retrieval of data, jointly sponsored by the ADI and the National Bureau of Standards. The *American Geophysical Union* (Waldo E. Smith, AGU) probably will cosponsor the session on climatology of the Association of American Geographers and other appropriate programs within the wide range of the interests of its membership.

The annual national meeting of the *American Nature Study Society* (Richard L. Weaver, University of Michigan) includes an opening session on the afternoon of 26 Dec. and the joint mixer that evening; the joint session of the science teaching societies, 27 Dec.; a session, 28 Dec.; and, with NABT a joint session, 29 Dec., and a joint field trip, 30 Dec. The ANSS banquet and showing of kodachromes is scheduled for the evening of 29 Dec.

The fifth *Conference on Scientific Editorial Problems* (J. G. Adashko, Ford Instrument Company) will hold six (non-concurrent) sessions on various aspects of scientific and technical writing, editing, and publishing; it is expected that one of these sessions will be concerned with foreign translation problems. The program will be coordinated with the sessions of the American Documentation Institute so that potential conflicts are eliminated or minimized.

The recurrent *Conference on Scientific Manpower* (Thomas J. Mills, National Science Foundation) is scheduled for 4 P.M., 26 Dec. As in previous years, it will be cosponsored by the *Engineering Manpower Commission*, the *Scientific Manpower Commission*, the *National Academy of Sciences-National Research Council*, and the *National Science Foundation*.

The national meeting of *Sigma Delta Epsilon*, graduate women's science fraternity (Clyde Chandler, Boyce Thompson Institute), begins with a business meeting, 26 Dec. and includes the annual



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dinner and grand chapter meeting on 27 Dec., a luncheon for all women in science on 29 Dec., and probably a tea on 30 Dec. A headquarters room will be maintained throughout the meeting period.

The *National Association of Science Writers* (Roland H. Berg, *Look Magazine*) will have its annual symposium and a business meeting with the AAAS. The annual address and award of the William Procter prize of the *Scientific Research Society of America* is scheduled for the evening of 26 Dec., preceding the society's joint luncheon with the Society of the Sigma Xi and the annual convention of RESA on 27 Dec. The annual address of the *Society of the Sigma Xi* will be held the evening of 27 Dec., following the 57th annual convention of the society on that day. The 17th annual lecture of the *United Chapters of Phi Beta Kappa* is scheduled for the evening of 27 Dec.

Societies and organizations participating in the AAAS meeting are as follows.

*National annual meetings:* Academy Conference; American Astronomical Society; American Documentation Institute; American Nature Study Society; Conference on Scientific Editorial Problems; Conference on Scientific Manpower; Entomological Society of America; History of Science Society; National Association of Biology Teachers; Scientific Research Society of America; Sigma Delta Epsilon; Society for the Advancement of General Systems Theory; Society of the Sigma Xi; Society for the Study of Evolution; Society of Systematic Zoology.

*Special or regional meetings, with programs:* AAAS Cooperative Committee on the Teaching of Science and Mathematics; AAAS-Gordon Research Conferences; Alpha Chi Sigma; Alpha Epsilon Delta; American Association of Hospital Consultants; American Philosophical Association, Eastern Division; American Psychiatric Association; American Society of Zoologists; Association of American Geographers; Association for Computing Machinery; Ecological Society of America; Genetics Society of America; Herpetologists League; International Union for the Study of Social Insects, North American Section; National Academy of Economics and Political Science; National Association for Research in Science Teaching; National Association of Science Writers; National Geographic Society; National Science Teachers Association; National Speleological Society; New York Academy of Sciences; New York Zoological Park; New York Zoological Society; Pi Gamma Mu; Society of General Physiologists; Society for Industrial and Applied Mathematics; Torrey Botanical Club; United Chapters of Phi Beta Kappa.

*Cosponsors:* American Association of

Colleges of Pharmacy; American College of Apothecaries; American College of Dentists; American Dairy Science Association; American Dental Association; American Educational Research Association; American Geophysical Union; American Institute of Human Palaeontology; American Institute of Nutrition; American Medical Association, Committee on Cosmetics; American Meteorological Society; American Museum of Natural History; American Pharmaceutical Association, Scientific Section; American Physiological Society; American Phytopathological Society; American Political Science Association; American Society of Agricultural Engineers; American Society of Agronomy; American Society of Animal Production; American Society of Biological Chemists; American Society of Hospital Pharmacists; American Society of Naturalists; American Society of Plant Physiologists; American Sociological Society; American Veterinary Medical Association; Botanical Society of America; Engineering Manpower Commission; Farm Equipment Institute; Geological Society of America; International Association for Dental Research, North American Division; International Council for Exceptional Children; National Academy of Sciences-National Research Council; National Bureau of Standards; National Science Foundation; Philosophy of Science Association; Scientific Manpower Commission; Sigma Pi Sigma; Society of Vertebrate Zoology; Soil Conservation Society of America; Soil Science Society of America.

RAYMOND L. TAYLOR

Associate Administrative  
Secretary, AAAS

## Meetings Notes

■ A conference on the Management of Industrial Research will be held 11-15 June under the auspices of Columbia University at its 100-acre Harriman Campus in Harriman, N.Y. Director of the conference will be Robert T. Livingston, professor of industrial and management engineering at Columbia and a former director of research at the Long Island Lighting Company.

The conference will study methods for the design of research programs from the viewpoint of integrating them with other aspects of company operations. Two special panel discussions have been planned: "Human relations in research," moderated by Lyman Bryson, professor emeritus of education at Columbia University Teachers College; and "Operations research does a job on industrial research," moderated by David B. Hertz, director of operations research for Popular Merchandise, Inc.

In considering the design of research

programs, participants and speakers will discuss methods of research, problem formulation and analysis, the translation of results into operation, and the coordination of research efforts to aid management in making effective decisions. In addition to formal presentations, clinic sessions will be held at which participants will pose and solve their own problems under the direction of trained group leaders.

Principal speakers will include C. C. Furnas, Assistant Secretary of Defense for Research and Development; Rear Admiral Rawson Bennett, chief of Naval Research; T. F. Davies Haines, president of Ciba Pharmaceutical Products, Inc.; Irving Wolff, vice president in charge of research, R.C.A. Laboratories; and J. J. Healy, assistant to the vice president for research, development, and engineering, Monsanto Chemical Company. The conference proceedings will be published by King's Crown Press, Columbia University.

■ More than 1000 chemical engineers gathered recently in New Orleans to attend the national meeting of the American Institute of Chemical Engineers. The program included five symposia and 28 technical papers. Great interest centered around a panel discussion on "Effective financial aid to the colleges from industry," which was led by Kenneth O. Beatty, Jr., of North Carolina State College.

C. W. Humphreys, manager of Shell Chemical Corporation, New York, presided over a symposium on "Foreign chemical developments and their effect on the U.S. chemical industry," and Walter G. Whitman, president of the institute, and secretary-general of last summer's International Conference on the Peaceful Uses of Atomic Energy, participated in a specially televised program that stressed the shortage of scientific and engineering graduates and dramatized the advantages of choosing a scientific career.

■ Fisk University is sponsoring its seventh annual Infrared Spectroscopy Institute 27-31 Aug. The Fisk institutes serve to introduce chemists, biologists, physicists, and engineers to infrared spectroscopy and its use in industry, in research, and in teaching. Participants will have opportunities during the week to discuss problems of their own particular interest with the institute faculty. Further information and application forms may be obtained by writing to Nelson Fuson, Infrared Spectroscopy Institute, Fisk University, Nashville, Tenn.

■ The second congress of the World Confederation for Physical Therapy will open in New York on 18 June. Jonas E. Salk will take part in a panel discussion on

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physical therapists' role in evaluation studies following field trials of the poliomyelitis vaccine. Other participants will be Thomas Francis, Jr., University of Michigan, who directed the evaluation of field tests; Lucy Blair, American Physical Therapy Association; and Miriam Jacobs, Watson School of Psychiatry, Leetsdale, Pa. More than 2000 physical therapists and health specialists from the United States and some 20 other countries are expected to attend the 5-day congress.

## Forthcoming Events

### June

25-27. Symposium on Uses of High Temperatures in Science and Industry, Berkeley, Calif. (N.K. Hiester, Stanford Research Inst., Menlo Park, Calif.)

25-29. American Soc. for Engineering Education, annual, Ames, Iowa. (W.

Leighton Collins, Univ. of Illinois, Urbana.)

25-29. American Inst. of Electrical Engineers, Summer and Pacific General, San Francisco, Calif. (N. S. Hibshman, AIEE, 33 W. 39 St., New York 18.)

25-29. Alpha Chi Sigma Fraternity, biennial convention, University Park, Pa. (J. R. Kuebler, 5503 E. Washington St., Indianapolis 19, Ind.)

25-29. International Cong. on Physiology-Pathology of Animal Reproduction and of Artificial Insemination, 3d, Cambridge, England. (J. Edwards, Production Div., Milk Marketing Board, Thames Ditton, Surrey, England.)

25-29. Ship Behavior at Sea, seminar, Hoboken, N.J. (Experimental Towing Tank Laboratory, Stevens Inst. of Technology, 711 Hudson St., Hoboken.)

25-30. International Assoc. for Bridge and Structural Engineering, 5th cong., Lisbon, Portugal. (M. L. Gretner, Swiss Federal Inst. of Technology, Zurich, Switzerland.)

26-28. Entomological Soc. of America, Pacific Branch, Berkeley, Calif. (L. M. Smith, Dept. of Entomology, Univ. of California, Davis.)

26-29. American Home Economics Assoc., annual, Washington, D.C. (Miss M. Horton, AHEA, 1600 20 St., NW, Washington 9.)

28-1. International Scientific Conf. of Rheumatism, Aix-les-Bains, France. (M. Graber-Duvernay, 6, rue de Liege, Aix-les-Bains.)

11-15. Conf. on Industrial Research, 7th annual, Harriman, N.Y. (R. T. Livingston, 409 Engineering, Columbia Univ., New York 27.)

28-1. Symposium on Comparative Biology of Aquatic Species, Roscoff, Brittany, France. (G. Montalenti, Instituto di Genetica, Naples, Italy.)

### July

1-7. International Conf. on Nuclear Reactions, Amsterdam, Netherlands. (S. A. Wouthuysen, Zeeman Laboratorium, Pl. Muidergracht 4, Amsterdam (C).)

1-7. National Education Assoc., Portland, Ore. (W. G. Carr, NEA, 1201 16 St., NW, Washington, D.C.)

2. Astronomical League, Miami, Fla. (W. A. Cherup, 4 Klopfer St., Millvale, Pittsburgh 9, Pa.)

2. Gamma Sigma Delta Biennial Conclave, Ames, Iowa. (J. A. Johnson, Dept. of Flour and Feed Milling Industry, Kansas State College, Manhattan.)

2-3. National Science Teachers Assoc., Corvallis, Ore. (R. H. Carleton, NSTA, 1201 16 St., NW, Washington 6.)

2-7. Brazilian Soc. for the Progress of Science, 8th annual, Ouro Preto, Minas Gerais. (Sociedade Brasileira para o Progresso da Ciencia, Caixa Postal 2926, São Paulo, Brazil.)

6-14. International Union of Forestry Research Organizations, 12th cong., Oxford, England. (Secretariat of Union, Viale delle Terme di Caracalla, Rome, Italy.)

9-11. Symposium on Chemical Additives in Foods, 2nd of 5 symposiums, Amsterdam, Netherlands. (H. F. DuPont, International Bureau of Analytical Chemistry, 18 Ave. de Villars, Paris 7, France.)

11-14. American Malacological Union, annual, San Diego, Calif. (Mrs. M. C. Teskey, P.O. Box 238, Marinette, Wis.)

12-14. International Astrophysical Symposium on Molecules in Cosmic Sources, 7th, Liege, Belgium. (H. C. Urey, Inst. for Nuclear Studies, Univ. of Chicago, Chicago 37, Ill.)

16-17. Symposium on Synthetic Polymer Chemistry, Notre Dame, Ind. (G. F. D'Alelio, Dept. of Chemistry, Univ. of Notre Dame, Notre Dame.)

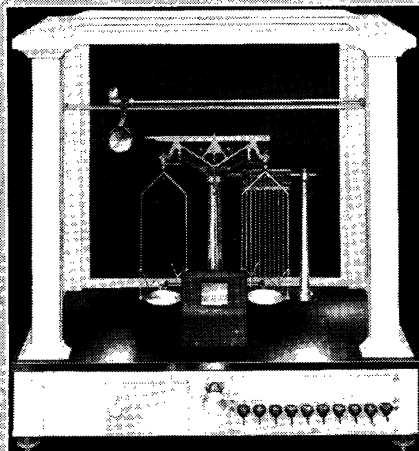
16-21. French Assoc. for the Advancement of Science, Dijon, France. (Mlle. Henri-Martin, Secretary, 28, rue Serpente, Paris 6°.)

17-26. International Soc. of Photogrammetry, 8th cong., Stockholm, Sweden. (P. O. Fagerholm, Bragevägen 8, Stockholm.)

18-20. Soc. for the Study of Development and Growth, annual, Providence, R.I. (M. V. Edds, Jr., Brown Univ., Providence 12.)

(See issue of 18 May for comprehensive list)

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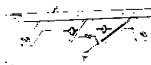
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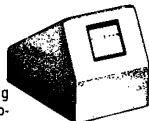
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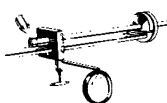
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