

Association Affairs

Preliminary Announcement of the New York Meeting and Call for Papers by AAAS Sections

In the 112 years of its existence the American Association for the Advancement of Science has followed the intentions of its founders by holding the annual meeting in a wide variety of cities in the United States and Canada. This year's 127th meeting, 26–31 December, will be the eighth annual meeting to be held in the nation's largest city. Only four cities (Boston, Philadelphia, Washington, and Chicago) have been host as many as seven times. This will be the first occasion on which it has been possible for the AAAS to meet in New York's Grand Central zone.

Those who have attended recent AAAS meetings—notably in Washington in 1958 and last December in Chicago—need not be reminded that no other scientific meeting presents such a variety of important and attractive symposia in all major fields of science or affords such opportunities for interdisciplinary programs and special events of general interest. Those who have not been to an AAAS meeting for some years may not realize what continuing growth there has been in the attendance—a reflection of the ever-increasing attractiveness of the programs.

Every New York meeting of the AAAS has been well attended, but there are factors that make it virtually certain that the previous New York meeting's registration total of 5327 will be exceeded this year by 1000 or more. These are, the nature and number of the participating societies; the increasing scientific population of the New York area; the improved pattern of the meeting, which tends to prevent too heavy a concentration of events on any one day; and, most of all, the care and thought that have already been devoted to the selection of topics and speakers for the symposia and special events. The attractiveness of this year's programs will make the eighth New York meeting a particularly large and memorable scientific congress.

Despite its size, however, the meeting will be convenient, comfortable, and comparatively inexpensive. The five large hotels which will house the ap-

proximately 300 sessions—the Commodore, Biltmore, Roosevelt, Belmont Plaza, and Waldorf-Astoria—are clustered around Grand Central Station on East 42nd Street. All have good-sized and comfortably furnished lobbies and session rooms. The special flat rates for sleeping rooms—single, \$8.50, double with double bed, \$14, and double with twin beds, \$15.50 in the first four hotels and \$10, \$16, and \$18 respectively, in the Waldorf—are almost unprecedentedly low. Those interested in combining a winter vacation trip with the meeting will find the theatre district, Fifth Avenue shops, Rockefeller Center, the United Nations, and a variety of museums within easy walking distance of the Grand Central zone. In the expectation that a considerable number of wives will accompany their husbands, there will be a Committee on Women's Events.

All 18 sections and many participating societies have arranged sessions both for the specialist and for those concerned with general developments in science. Thus, there will be programs, events, and features of interest to all. As the major portion of this announcement makes clear, the officers of the sections and the other program chairmen are working early and hard to emulate their past achievements.

Among the societies holding their national meetings with the AAAS are the following: American Astronomical Society, American Nature Study Society, American Society of Zoologists, History of Science Society, National Association of Biology Teachers, Scientific Research Society of America, Sigma Delta Epsilon, Society for General Systems Research, Society for the Study of Evolution, Society for the History of Technology, Society of Systematic Zoology, and Society of the Sigma Xi.

Among other societies with special or regional programs of several days' duration are the following: American Association of Clinical Chemists, American Astronautical Society, American Geophysical Union, American Meteorological Society, American Physiological Society, American Psychiatric Association, American Society of Criminology, Association of American Geographers,

Ecological Society of America, National Science Teachers Association, and Torrey Botanical Club.

Still other organizations will have important conferences or programs—for example, the New York Academy of Sciences, the Institute of Management Sciences, American Economic Association, American Sociological Association, American Statistical Association, American Political Science Association, Society for Industrial and Applied Mathematics, and the American Council on Women in Science.

Special Sessions

The Committee on AAAS Meetings, which has responsibility for the general pattern of the meeting and the details of the two general sessions, on "Moving Frontiers of Science," in a joint meeting with the secretaries of the AAAS Sections, early this year, outlined a particularly attractive series of general events. In chronological order, these are as follows.

26 December, evening. Part I of the AAAS General Symposium on "Moving Frontiers of Science." This program, which consists of lectures by authorities in their respective fields, is planned to be of general interest to the entire attendance and to include recent developments in terms intelligible to scientists in other disciplines. All of the sections and many of the participating societies have left these times open in their schedules.

One of the lectures on this first evening of the meeting will be "Recent work on meteorites," by Edward Anders, department of geological sciences, California Institute of Technology, whose shorter paper on meteorites, presented before a joint session of Section D—Astronomy and the American Astronautical Society at the Chicago meeting, received the 1959 Newcomb Cleveland Prize.

27 December, evening. A special program on the critical challenge to scientists of the conditions—social, political, and moral—that exist in the world today. Sir Charles P. Snow, internationally known scientist, writer, and lecturer, will state the major aspects of the current challenge, and several scientists of prominence will give their views on how they think scientists should respond to these great problems.

28 December, morning. Three interdisciplinary symposia in the physical, biological, and social sciences, presented concurrently: "Plasma: Fourth State of Matter," jointly sponsored by sections B—Physics and D—Astronomy and by the American Astronomical Society (Stanley S. Ballard, University of Florida); "Life under Extreme Conditions" (Karl M. Wilbur, Duke University), the more general portion of

the symposium of section F—Zoological Sciences on the same subject; "Urban Development and Renewal" (Frank C. Whitmore, Jr., U.S. Geological Survey, and Firman E. Bear, Rutgers University), a broader part of the symposium of section O—Agriculture on "Rural Land Use," cosponsored by sections E—Geology and Geography and K—Social and Economic Sciences and by a number of appropriate societies.

28 December, afternoon. Part II of "Moving Frontiers of Science." There will be two lectures, one of which will be "The molecular basis of vision," by George Wald, Biological Laboratories, Harvard University.

28 December, evening. The AAAS retiring presidential address, by Paul E. Klopsteg, and a reception for all registrants.

29 December, evening. Honor Societies Night. The annual joint address of the Society of the Sigma Xi and the United Chapters of Phi Beta Kappa and the second annual address of the Tau Beta Pi Association with the AAAS probably will be given concurrently. The AAAS Smoker for all registrants will follow.

30 December, evening. The annual illustrated lecture and film of the National Geographic Society, usually a first showing.

Other General Events

The AAAS Committee on Science in the Promotion of Human Welfare (Barry Commoner, Washington University, St. Louis) plans a series of important sessions: (i) A one-session symposium on "Science in the 1960 Elections"; (ii) open hearings, 4 to 6 P.M. on three days, with selected papers on "What are scientists' responsibilities in the promotion of human welfare?" (prior to the meeting AAAS members and other scientists will be invited to submit one-page abstracts from which the Committee will select the papers to be read and discussed); and (iii) a conference on "Public Education on Radiation Problems."

The program of the AAAS Cooperative Committee on the Teaching of Science and Mathematics (John R. Mayor, AAAS) will be (i) separate sessions on "Progress in Teacher Certification in Science," which will include a report on the NASDTEC-AAAS Teacher Preparation-Certification Study and references to the Garrett report, as published in *Science* in April, and (ii) a symposium, "Science in the Elementary School" (three or four papers), in which the problems of teaching science in the elementary school will be analyzed and in which there will be reports from current curriculum studies in the area, such as the study at the University of California

under the direction of Robert Karplus, department of physics.

The ninth annual Conference on Scientific Communication (George L. Seielstad, Applied Physics Laboratory, Johns Hopkins University, Silver Spring, Md.) this year will be devoted largely—or more probably, entirely—to a multisession symposium, "The Sciences in Communist China," an objective, factual appraisal as complete as circumstances permit. The speakers will be competent scientists in their respective fields who will have studied the literature in Chinese and in translation. It is anticipated that some speakers will have traveled in Communist China and thus will have a first-hand familiarity with research there. This program, the responsibility of the AAAS as a whole, will be cosponsored by the National Science Foundation and by ten organizations—American Chemical Society, American Geological Institute, American Geophysical Union, American Institute of Biological Sciences, American Institute of Physics, American Mathematical Society, American Meteorological Society, Engineers Joint Council, Federation of American Societies for Experimental Biology, and Social Science Research Council—whose official representatives constitute the planning committee.

The program of the tenth annual Conference on Scientific Manpower (Thomas J. Mills, National Science Foundation), cosponsored by the National Science Foundation, National Research Council, Engineering Manpower Commission, Scientific Manpower Commission, and Section M—Engineering, though not completely formulated, is expected to include papers in the area of science teaching and science teachers and possible cooperation with the Junior Scientists Assembly.

The Academy Conference, founded in 1927 and composed of the official representatives of the now 46 academies of science affiliated with the AAAS, has had a program at each annual meeting of the Association since the fifth New York meeting of December 1928. At this year's meeting of the conference, the 32nd, following a session on junior academies (the afternoon of 26 December), there will be a full day of sessions, 27 December. In the business meeting in the morning, an innovation will be the distribution (rather than the reading) of reports of the individual academies; thus more time will be provided for individual comments and for a general discussion of academy problems. In the afternoon, a symposium on National Science Foundation grants to the academies will be particularly valuable. The day will conclude with the annual Academy Conference

Dinner and the conference presidential address by John G. Arnold, Jr. (Loyola University, New Orleans).

The third annual conference of the American Council on Women in Science, held jointly with Sigma Delta Epsilon, will have a major speaker, one panel ("Changing Educational Trends") coordinated by Father John Cortelyou, and a second panel ("Changing Cultural Attitudes") coordinated by Margaret Mead.

The AAAS Council will hold at least two sessions, on 27 and 30 December. Because election of the AAAS president-elect and of new members of the Board of Directors is now conducted by mail, more time is available at these sessions for consideration of matters that affect all science and society. The work of the Council is materially assisted by the Committee on Council Agenda and Resolutions and the Committee on Council Activities and Organization. Other committees and many of the sections will have business meetings.

Science Exhibits

The significance of the eighth New York meeting has already been recognized by those who produce the books, instruments, and materials which scientists and teachers use. Applications for exhibit booths on the ballroom floor of the Biltmore are being received at a most gratifying rate. At this time, seven months in advance of the meeting, only a few booths remain to be assigned.

The 1960 Annual Exposition of Science and Industry will be one of the most balanced and attractive ever staged. In the 103 booths available, leading publishers, optical companies, instrument makers, and many suppliers of laboratory materials and equipment will show their latest publications and products. In addition, there will be selected displays of some of the research activities of large industrial firms. The exposition alone would justify a trip to New York, and it is hoped that every registrant will budget his time so that he can visit the exhibits.

Incidentally, the exposition is *not* intended for young people below the college, or the exceptional high-school senior, level, for most of the exhibits would be too technical for younger students of science. (To meet the interests of the latter, the Association's Academy Conference annually arranges a Junior Scientists Assembly, at which eminent scientists address a large audience of high-school students on aspects of science and scientific careers.) In the best interests of both exhibitors and those interested in their displays, *only registrants will be admitted to the exposition.*

The AAAS Science Theatre again will show a choice selection of science films, foreign and domestic, in a special room within the exposition area. Some have suggested that the theatre be expanded into a major attraction, but it has not seemed desirable to do this and, in a sense, compete with program sessions. As usual, the theatre will run each film at least twice. Those who are especially interested in a particular film thus will have more than one opportunity to see it.

Physical Facilities

For the AAAS as a whole, there will be coheadquarters hotels. The Commodore (2000 rooms, at 42nd Street between Grand Central Station and Lexington Avenue), with its capacious ballroom, will accommodate the large evening events, the AAAS business sessions, and the AAAS Pressroom. The Biltmore (1000 rooms, 43rd Street and Vanderbilt Avenue) will house the AAAS Office, the Visible Directory of Registrants, the Annual Exposition of Science and Industry, and the AAAS Science Theatre. Both hotels—one and one-half blocks apart, on two sides of Grand Central Station (they can be reached by underground passages *through* the station)—will have AAAS Main Registration-Information Center facilities.

Three other hotels will be the headquarters of related sections and societies—the Roosevelt (1100 rooms, 44th Street and Vanderbilt Avenue); the Belmont Plaza (800 rooms, 49th Street and Lexington Avenue); and the Waldorf-Astoria (2200 rooms, 49th Street and Park Avenue).

The headquarters of the sections and societies will be announced in *Science* in July, at which time coupons for housing and advance registration will appear among the advertising pages. (To secure the special flat rates, the hotel room coupon, or a reasonably accurate copy of it, should be used and sent directly to the AAAS Housing Bureau, 90 East 42nd Street.) As usual, advance registrants will receive the General Program early in December, by first-class mail. With all five hotels so close to each other, the meeting will be a particularly convenient one.

Programs. A synopsis of the programs, arranged by disciplines, follows. The names given in parentheses are those of section and society officers or program chairmen.

Mathematics (A)

The program of Section A (C. C. MacDuffee, University of Wisconsin) will begin on 26 December with the vice-presidential address of William L. Duren, Jr. (University of Virginia); a second, deferred vice-presidential ad-

dress will be given by Gustav A. Hedlund (Yale University). Section A will sponsor a symposium on some problems in mathematical education (27 Dec.) and will cosponsor the symposium of the *Society for Industrial and Applied Mathematics* (Brockway Millan, Bell Telephone Laboratories, Whippany, N.J.) (28 Dec.).

The Association for Computing Machinery (W. F. Cahill, National Aeronautics and Space Administration, Silver Spring, Md.) is arranging a session (29 Dec.) of invited papers on computing machines, which Section A will also cosponsor.

Physics (B)

Section B (Stanley S. Ballard, University of Florida), with Section D and the American Astronomical Society, will jointly sponsor the symposium on "Plasma: The Fourth State of Matter" (28 Dec.) mentioned above under General Events. In association with Section M-Engineering, a panel discussion is being planned on the place of nuclear engineering in the university curriculum. The annual physicists' luncheon will be cosponsored by Section B and Sigma Pi Sigma. The address following the luncheon will be given by retiring vice president Frederick Seitz (University of Illinois).

The American Astronautical Society will hold its first Annual Eastern Regional Meeting, with the New York Section (Ross Fleisig, 58 Kilburn Road, Garden City, N.Y.) as host. The program will include a two-session symposium, "Lunar Exploration," and a panel discussion on bioastronautics on 27 December and a second symposium, "Astro-Vehicle Systems Development," on 28 December. The society will cosponsor the "Space Physiology IV" symposium of the American Physiological Society.

The American Meteorological Society (Kenneth Spengler, AMS) will have a joint program with the National Science Teachers Association on the teaching of meteorology in secondary schools and papers on the significance of the data collected by the Tiros satellite. The society will also cosponsor appropriate sessions.

Chemistry (C)

The program of Section C (S. L. Meisel, Socony Mobil Oil Company, Paulsboro, N.J.) begins 26 December with sessions for submitted papers. Symposia on successive days are as follows: 27 December, two sessions, biochemistry and organic chemistry symposium: "Mechanism of Action of Antitumor Agents" (C. C. Price, University of Pennsylvania); 29 December, two sessions, organic chemistry symposium: "Recent Advances in the Chemistry of Macromolecules" (C. G.

Overberger, Polytechnic Institute of Brooklyn); concurrent in the afternoon, inorganic chemistry symposium: "Chemistry of Synthetic Zeolites" (G. T. Kerr, Central Research Division, Socony Mobil Oil Company); 30 December, inorganic chemistry symposium: "New Developments in Coordination Chemistry" (J. C. Bailar, Jr., University of Illinois).

A chemists' dinner will be held the evening of 27 December. It is possible that the New York section of the *American Chemical Society* will cosponsor the entire program of Section C, as the Chicago section of the society did at the Chicago meeting in 1959.

The American Association of Clinical Chemists (Harry Goldenberg, Hillside Hospital, Glen Oaks, N.Y.) will have a symposium on a topic of current interest, sessions for contributed papers, and a dinner with a speaker.

Astronomy (D)

Section D (Frank Bradshaw Wood, University of Pennsylvania) will cosponsor all sessions of the American Astronomical Society and Section B's symposium on plasma. The vice-presidential address will be given by Ira S. Bowen (Mt. Wilson and Palomar Observatory), with N. U. Mayall (Lick Observatory) presiding.

The national meeting of the *American Astronomical Society* (J. Allen Hynek, Smithsonian Astrophysical Observatory, Cambridge, Mass.) will begin with a council meeting the afternoon of 28 December and continue through the morning of 31 December. It is anticipated that the Society's sessions, all in one hotel, will include three or more sessions for contributed papers, a symposium, the astronomers' dinner, and, probably, an address by a distinguished lecturer. Special joint AAAS-AAS convention badges will be used.

The Astronomical League (Chandler H. Holton, 833 Drewry Street, N.E., Atlanta, Ga.) is arranging a session which may be held early in the meeting period.

Geology and Geography (E)

The program of Section E (Frank C. Whitmore, Jr., U.S. Geological Survey) (27–30 Dec.) includes three two-session symposia, on different aspects of geology, and cosponsorship of other programs, notably part of the symposium of Section O on urban renewal (28 Dec.) and the program of the Association of American Geographers. At the annual Section E smoker (27 Dec.) the vice-presidential address will be delivered by Howard A. Meyerhoff (Scientific Manpower Commission). All geological sessions will be cosponsored by the *Geological Society of America*.

The Association of American Geographers, New York-New Jersey Di-

vision (Charles Morrison, Jr., American Geographical Society) will sponsor one or more sessions for contributed papers in geography (27 Dec.) and arrange a symposium, cosponsored by Section E.

The *National Speleological Society* (Brother G. Nicholas, University of Notre Dame) will have two symposia (27 Dec.), one on cave biology, the other on cave mineralogy (William B. White, Pennsylvania State University). The *National Geographic Society* will present its usual outstanding lecture and accompanying film on 30 December.

Zoological Sciences (F)

The program of Section F (Karl M. Wilbur, Duke University) will be coordinated with the national meetings of the American Society of Zoologists and the Society of Systematic Zoology. The two-session symposium, "Unsolved Problems in Biology V," will be joint with Section G and cosponsored by appropriate biological societies. The first two or three sessions of a second symposium, "Life Under Extreme Conditions," which will be specialized in nature, will precede the more general, interdisciplinary, final session on 28 December, already mentioned under General Events. Part 1, on cells, tissues, and microorganisms, will be arranged by A. Cecil Taylor (Rockefeller Institute), and part 2, on man, will be arranged by John P. Marbarger (Aeromedical and Physical Environment Laboratory, University of Illinois).

The vice-presidential address, by Viktor Hamburger (Washington University), is tentatively scheduled for the zoologists' dinner, held jointly with the zoological societies (probably 30 Dec.). The section's business meeting will immediately follow that of the American Society of Zoologists.

The program of the national meeting of the *American Society of Zoologists* (Ray L. Watterson, Northwestern University), with more than 20 sessions (27–30 Dec.) includes 11 or more sessions for contributed papers throughout the meeting period and a series of symposia, as follows: "Physiology of Molluscs" (Division of Comparative Physiology) and "Evolution of Vertebrate Feeding Mechanism" (Division of Vertebrate Morphology) concurrently, and "Evolution of Sex"—the genetics, cytogenetics, embryology, and endocrinology of sex determination—arranged by Emil Witschi (State University of Iowa) (28 Dec.). The four-session symposium, "Spermatazoön Motility" (David Bishop, Carnegie Institution of Washington, Baltimore), cosponsored by Section F, will be held 29 and 30 December; a two-session symposium, "Teaching of Animal Behavior" (Division of Animal Behavior), will be held jointly with the Ecological Society of America (30 Dec.). A panel

discussion on research training facilities, under the auspices of the ASZ Education Committee, will be held on one of the last two evenings of the meeting. The zoologists' dinner probably will be held 30 December. The annual business meeting and election of officers of the society is scheduled for 29 December.

The *Society of Systematic Zoology* (Charles F. Lytle, Indiana University) will hold its 12th annual meeting with the AAAS. Key events will be a symposium featuring a series of anecdotal sketches of famous zoologists, arranged by a committee headed by Carl L. Hubbs (Scripps Institution of Oceanography) (27 Dec.) and a panel discussion of the forthcoming edition of the *International Code of Zoological Nomenclature*, led by W. I. Follett (California Academy of Sciences) (29 Dec.). The program will also include sessions for contributed papers, meetings of the council, the annual business meeting, social events for members and their guests, and a field trip to the American Museum of Natural History. The annual SSZ Library and Book Lounge for all zoologists will be open 27–30 December.

Biological Sciences (FG)

As a major part of its annual national meeting, the *American Society of Naturalists* (Reed C. Rollins, Gray Herbarium, Harvard University) will sponsor a two-session symposium, "Modern Trends in Population Biology," cosponsored by the Society for the Study of Evolution, the Ecological Society of America, and the American Society of Zoologists (27 Dec.). The symposium will include the presidential address of Leslie C. Dunn (Columbia University). The business meeting of the society will be held at the end of the morning session.

Beta Beta Beta Biological Society (Mrs. Frank G. Brooks, Box 515, Ansonia Station, New York 23, N.Y.), which meets biennially with the AAAS, will hold an interim meeting of the policy committee, two sessions, and a luncheon (27 Dec.).

The program of the *Ecological Society of America* (Richard S. Miller, University of Saskatchewan) will consist of sessions for contributed papers on plant ecology, animal ecology, and general ecology, and two or more symposia arranged by members of the society (26 and 27 Dec.); the two-session symposium, "Teaching of Animal Behavior," sponsored by the Section on Animal Behavior and Sociobiology, to be held jointly with the American Society of Zoologists and the National Association of Biology Teachers (30 Dec.), arranged by E. B. Hale (Pennsylvania State University). The Society will also cosponsor appropriate

programs, including the symposium "Modern Trends in Population Biology," sponsored by the American Society of Naturalists; and the Human Ecologists' luncheon (27 Dec.).

The *Mountain Lake Biological Station* (Horton H. Hobbs, Jr., University of Virginia) again will sponsor an annual breakfast with the AAAS for all persons who have been students, investigators, or staff members, at the station since its founding in 1929. Probably it will be held 28 December and in the hotel where the biological societies will be based.

The annual national meeting of the *National Association of Biology Teachers* (Paul V. Webster, Bryan City Schools, Bryan, Ohio) will begin with business meetings on 26 December. During the meeting period there will be a joint meeting (27 Dec.) with the American Nature Study Society, the National Association for Research in Science Teaching, and the National Science Teachers Association; the annual NABT presidential address and luncheon (28 Dec.); and a series of separate sessions (27, 29, and 30 Dec.).

As in Chicago, the *Nature Conservancy* will hold a meeting of its National Committee for Natural Areas for Schools; arrangements will be made by John W. Brainerd (Springfield College, Springfield, Mass.).

The national meeting of the *Society for the Study of Evolution* (H. H. Ross, Illinois Natural History Survey, Urbana) begins 27 December with the two-session symposium "Modern Trends in Population Ecology," arranged by the American Society of Naturalists. On the morning of 28 December there will be concurrent symposia, "Phylogenetic Aspects of Evolution" and "Genetic and Biochemical Aspects of Evolution," presented by sections A and B, respectively. The general meeting of the society—business session and invited papers, with Alfred E. Emerson (University of Chicago) presiding—will be held the morning of 29 December. On the afternoon of 28 December, sections C and D, respectively, will sponsor concurrent symposia, "Speciation and Variation" and "Ecological Aspects and Methods."

The *Society of General Physiologists* (James W. Green, Rutgers University) is considering presentation of one or more groups of invited papers.

Botanical Sciences (G)

In addition to the two-session symposium, "Unsolved Problems in Biology V," to be held jointly with Section F, Section G (Barry Commoner, Washington University) will have a symposium, "Machine Methods in Biology," arranged by David Rogers (New York Botanical Garden), cosponsored by Section F and a number of biological

societies, including the *Botanical Society of America*. This program will be supplemented by a tour of the IBM offices. There will be sessions for contributed papers in the principal fields of botany, probably held jointly with the Torrey Botanical Club. The vice-presidential address of the section, by Barry Commoner, will be given at the joint botanists' dinner of Section G and all participating botanical societies.

The *Torrey Botanical Club* (C. A. Berger, Fordham University) is planning a luncheon, a series of talks, and exhibits.

Anthropology (H)

The program of Section H (Eleanor Leacock, City College, New York) will consist of the vice-presidential address of Cornelius Osgood (Yale University) (27 Dec.); a group of invited papers on the development of new nations, arranged by Elliott Skinner (New York University) (27 Dec.); sessions for contributed papers (28 and 30 Dec.); a two-session symposium, "Anthropological Theory," arranged by Solon Kimball (Columbia University) (29 Dec.), in which practical applications and important theoretical advances in different areas of anthropology will be discussed; and a symposium on 30 December—a total of at least eight sessions.

Psychology (I)

Section I (Frank W. Finger, University of Virginia) has scheduled the vice-presidential address of Clifford T. Morgan (University of Wisconsin) for 29 December and will have four symposia (29 and 30 Dec.) as follows: "Applications of Behavioral Technology" (Murray Sidman, Walter Reed Army Institute of Research); "The Physiology of Feeding and Drinking Behavior" (Eliot Stellar, University of Pennsylvania School of Medicine); "Concept Formation" (Roger Shepard, Bell Telephone Laboratories); and "Theories of the Visual Contrast Threshold" (Robert Boynton, University of Rochester).

Social and Economic Sciences (K)

Section K (Donald P. Ray, George Washington University), the American Political Science Association, and the National Institute of Social and Behavioral Science will jointly sponsor a symposium (27 Dec.) on "Some Perspectives on Political Science and Science." The speakers will be Robert A. Dahl (Yale University) who will discuss bases of local political influence in a democracy; Wallace S. Sayre (Columbia University) who will speak on scientists and American science policy; and Pendleton Herring (Social Science Research Council), who will deliver

the vice-presidential address of Section K.

In addition, Section K will sponsor sessions for contributed papers in the social and economic sciences (30 and 31 Dec.) and will cosponsor appropriate programs of the K series and a program of the Institute of Management Sciences. These programs are arranged so that, with few exceptions, sessions are not concurrent.

The *American Economic Association* (Kenneth E. Boulding, University of Michigan) will have a group of invited papers, cosponsored by Section K (26 Dec.). These are scheduled early so that AEA members may attend both the AAAS meeting and their national meeting, to be held 28–30 December in St. Louis.

The *American Political Science Association* (Evron M. Kirkpatrick, APSA) will have a special program (27 Dec.) cosponsored by Section K.

The *American Society of Criminology* (Donal E. J. MacNamara, New York Institute of Criminology) will sponsor a luncheon with speakers and four groups of invited papers on various aspects of scientific criminology and penology.

The *American Sociological Association* (Mrs. Matilda Riley, Washington Square College, New York University) will probably have two different symposia (28 and 29 Dec.), cosponsored by Section K.

It is anticipated that the *American Statistical Association* (Donald Riley, ASA, Washington, D.C.) will have two sessions of particular interest to local statisticians, similar to their successful special meetings with the AAAS in Washington and Chicago. Their program will be cosponsored by Section K.

Details of the programs of the *Metric Association* (J. T. Johnson, 694 West 11th Street, Claremont, Calif.) and of the *National Academy of Economics and Political Science* (Amos E. Taylor, Parkton, Md.) will be announced later.

History and Philosophy of Science (L)

The program of Section L (John W. Streeter, Chester Springs, Pa.) (27–30 Dec.) will be coordinated with the programs of the History of Science Society and the Society for the History of Technology. There will be several joint sessions and cosponsorships. Section L is arranging a two-session symposium on "Scientism" (30 Dec.), which will probably be cosponsored by the Philosophy of Science Association. The vice-presidential address of the section will be given by Harry Woolf (University of Washington).

The biennial national meeting of the *History of Science Society* (Derek J. de Solla Price, Yale University) will be

gin (27 Dec.) with a council meeting and will continue with a session on 19th-century science and technology, to be held jointly with the Society for the History of Technology; the speakers will be Thomas Hughes (Washington and Lee University) and Arnold Daum (Indiana University Extension, Gary). The annual dinner of the society, at which the George Sarton Medal will be presented, will be followed by the George Sarton Memorial Lecture, sponsored by the George Sarton Memorial Foundation. Members of Section L and all others interested will be welcome at the lecture. On 28 December there will be a session on sociology and psychology of scientists, jointly with Section L; the speakers will be Karl W. Deutsch (Yale University) on "Sources of scientific manpower and competence: some issues for historical and political research," Bernard Barber (Barnard College) on "The scientist's resistance to scientific innovation," and Anne Roe (Harvard University) on "The psychology of scientists." Also on 28 December will be a luncheon and the address of retiring president Henry Guerlac; a session on ancient, medieval, and Renaissance science; and a meeting of the editorial board of *Isis*. A session for short papers on work in progress and the business meeting of the society are scheduled for 29 December.

The *Philosophy of Science Association* (Lewis K. Zerby, Michigan State University) will cosponsor the symposium of Section L on "Scientism" and may have sessions of its own.

A session of the *Society for General Systems Research* (Charles A. McClelland, San Francisco State College) (29 Dec.) will be concerned with "The Boundaries of Systems" and will include four or five invited papers under two subheadings: "Problems in the Identification and Location of System Boundaries" and "Functions and Performances of Boundaries in Certain Systems." There will be a session on 30 December for contributed papers.

The annual program of the *Society for the History of Technology*, a recent affiliate (Carl W. Condit, Northwestern University), will include a symposium on automation, cosponsored by Section L, in addition to the joint session with the History of Science Society on 19th-century science and technology.

Engineering (M)

The principal program of Section M (Clarence E. Davies, United Engineering Center Project, New York) will be the symposium "The Place of Nuclear Science Engineering in the University Curriculum," to be held jointly with Section B (Stanley S. Ballard, Universi-

ty of Florida). Section M will co-sponsor the program of the Conference on Scientific Manpower.

The *Tau Beta Pi Association* (Robert H. Nagel, University of Tennessee) will sponsor an address of general interest by a prominent engineer or scientist (29 Dec.).

Medical Sciences (N)

Section N will have at least a four-session symposium (26 and 27 Dec.), with speakers and discussants coming from all parts of the country; a fifth session may be scheduled for 28 December. This year's subject, in a program arranged by Abraham Shanes (National Institutes of Health), will be "Biophysics of Physiological and Pharmacological Actions." In scope, this symposium will include "artificial and simple" animate systems that serve as models of transport; models for the study of drug interactions and of muscle contraction; the structure, biochemistry, and electrochemistry of nerves; the structure, electrochemistry, and contractile properties of skeletal, heart, and smooth muscle; and myoneural junctions. The vice-presidential address of Carl F. Schmidt (University of Pennsylvania) and the announcement of the winner of the 16th Theobald Smith Award, given by Eli Lilly and Company, will immediately precede or follow one session. Section N will also co-sponsor various appropriate programs.

Alpha Epsilon Delta (Maurice L. Moore, national secretary) will devote its usual symposium to "Career Opportunities in Medicine, Dentistry, and Related Health Fields." This session will be held 29 December and will be followed by the annual luncheon during which someone of prominence will speak.

The *American Physiological Society* (Fred A. Hitchcock, Ohio State University) is planning a symposium on "Space Physiology IV," to be cosponsored by the American Astronautical Society. The most recent developments in this fast-moving field will be presented.

The *Committee on Research, American Psychiatric Association* (Peter H. Knapp, Boston University School of Medicine) will sponsor its customary four-session program with the AAAS, to be devoted, this year, to "Expression of the Emotions in Man"—a symposium on the methods of studying, and the psychological classification of, emotional phenomena. Subtitles and content of the four sessions (cosponsored by Section I and the American Psychoanalytic Association) are: (29 Dec.) "Historical and Developmental Aspects"—a historical review and summary of phylogenetic and ontogenetic aspects of

emotional expression; "Emotional Communication: Methods of Study"—a discussion of methods for the analysis of expressive phenomena; (30 Dec.) "Emotional Communication in the Clinical Setting"—utilization of psychotherapeutic interviews and the role of the empathic observer; and "Toward a Classification of Emotional Phenomena"—contributions of the psychoanalyst, neurophysiologist, and social scientist.

Among the participants will be Henry W. Brosin, René A. Spitz, P. MacLean, Roy Schafer, Ray L. Birdwhistell, George F. Mahl, M. Reiser, Felix Deutsch, Joseph G. Kepekis, D. Hamburg, Margaret Mead, and George L. Engel.

Dentistry (Nd)

Section Nd (Earl O. Butcher, School of Dentistry, New York University) will have a symposium, "The Fundamentals of Keratinization" (30 Dec.), with a luncheon between the morning and afternoon sessions. The 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 three-day program of Section Np (John E. Christian, Purdue University) includes sessions for contributed papers in hospital pharmacy and the section's dinner and vice-presidential address by Joseph V. Swintowsky (Smith, Kline and French Laboratories, Philadelphia) (27 Dec.); two other sessions for papers (29 and 30 Dec.); and a two-session symposium, "The Scientist's Contribution to the Safe Use of Cosmetics" (29 Dec.).

Section Np's entire program will be cosponsored by the *American Association of Colleges of Pharmacy*, *American College of Apothecaries*, *American Society of Hospital Pharmacists*, *American Pharmaceutical Association*, Scientific Section, and the *National Association of Boards of Pharmacy*.

Agriculture (O)

Section O (Firman E. Bear, Rutgers University) will have a six-session symposium on "Land Zoning in Relation to Agricultural, Suburban, Industrial, Forest, and Recreational Needs of the Future" (27-30 Dec.). Among the subjects and speakers are the following. (27 Dec., morning) "Rural Land Zoning," Wallace D. Bowman (Conservation Foundation) presiding; "Misuse of land—a national disgrace," Donald A. Williams (Soil Conservation Service, USDA); "Principles of rural land zoning," Earl B. Solberg (Agricultural Research Service, USDA); "Creating Per-

manent agricultural reserves," Karl J. Belser (Santa Clara County planning specialist, Civic Center, San Jose, Calif.); "Tax deferrals for land withheld from development," T. W. Schulenberg (State Department of Commerce, Indianapolis). (27 Dec., afternoon) "Suburban Planning," Louis Wolfanger (Michigan State University) presiding; "Subdivision control," Hugh Pomeroy (Westchester County Department of Planning, White Plains, N.Y.); "Soil-survey information for suburban development," C. S. Coleman (Soil Conservation Service, Fairfax, Va.); "New concepts on suburban development districts," Marion Clewson (Resources for the Future, Inc., Washington, D.C.); "Regulating flood-plain development," Gilbert F. White (University of Chicago). (28 Dec.) "Urban Renewal"; a joint program with sections E-Geology and Geography, K-Social and Economic Sciences, and P-Industrial Science is being developed. (29 Dec., morning) "Community Planning," Byron E. Munson (Ohio State University) presiding; "Small-city community planning," Herbert H. Smith (Community Planning Associates, Trenton, N.J.); "Large-city community planning," George H. Smeath (Planning Commission Salt Lake County, Salt Lake City, Utah); "County and regional planning board cooperation," Luther Gulick (Institute of Public Administration, N.Y.); "Possibilities in rural planning," Sanford Farness (Tri-County Regional Planning Commission, Lansing, Mich.). (29 Dec., afternoon) "Forest and Recreational Planning": "Biological requirements of man," Paul B. Sears (Yale University); "Conservation of open spaces," Charles Eliot (Harvard University); "Program planning and legislation for recreation," E. C. Crafts (U.S. Forest Service, Washington, D.C.); "Development of water and forest preserves," Raleigh Barlowe (Michigan State University). (30 Dec.) "Government as Land-Owner and Redistributor": "British Town and County Planning Act," Charles Haar (Harvard University); "Law of the open spaces," Shirley Adelson Siegel (Regional Planning Association, N.Y.); "Government land corporations," Charles Abrams (Harvard University); "Governmental help in backward rural regions," Robert Lowry (Tennessee Valley Authority, Wilson Dam).

Industrial Science (P)

Section P (Allen T. Bonnell, Drexel Institute of Technology) will cosponsor the "Urban Renewal" portion of the symposium of Section O and the symposium on management science of the Institute of Management Sciences. The address of the retiring vice president,

Earl P. Stevenson (Arthur D. Little, Inc.) will be given at the annual luncheon of the section. Another session will be the fifth Industrial Citation Dinner.

The *Institute of Management Sciences* (Merrill M. Flood, Mental Health Research Institute, Ann Arbor, Mich.) will have its second symposium on management science, cosponsored by Section P (30 Dec.); the Institute may have another session, jointly with Section K, the morning of 27 December.

It is probable that the *Society for Industrial Microbiology* will arrange a special program.

Education (Q)

The program of Section Q (Herbert A. Smith, University of Kansas) includes two joint sessions with the *Council for Exceptional Children* (26 Dec.); two sessions, joint, with the *American Educational Research Association* (30 Dec.); a symposium on machine processing (29 Dec.), probably cosponsored by the AERA and by the National Association for Research in Science Teaching, arranged by William Cooley (Harvard University); at least four sessions for contributed papers; a business meeting; and the vice-presidential address of John C. Flanagan (American Institute for Research, Pittsburgh, Pa.).

The annual national meeting of the National Association of Biology Teachers is discussed above under Biological Sciences (FG).

The four science teaching societies (ANSS, NABT, NARST, NSTA), meeting with the AAAS (coordinator, Phyllis B. Busche, Washington Square College, New York University), will have a joint session (27 Dec.) and a series of concurrent sessions similar to the coordinated program of recent years.

The *National Association for Research in Science Teaching*, it is expected, will have a research symposium. The program of the *American Nature Study Society* (Ruth E. Hopson, Portland State College, Portland, Ore.) includes a session on the natural history resources of the New York area and the annual showing of Kodachromes (27 Dec.); a session at the American Museum of Natural History and a session on "Pet Nature Projects" (28 Dec.); a tour of the Brooklyn Botanic Garden, jointly with NABT, and a business meeting (29 Dec.); sessions on "Techniques in Nature Photography" and "Illustrating Nature Books" and the annual ANSS banquet (30 Dec.).

Following two meetings of the Executive Committee (26 Dec.), the regional meeting of the *National Science Teachers Association* (Margaret J. McKibben, NSTA, Washington, D.C.) will be held. This will consist of a five-

sion symposium, "The New Science—A Teacher Challenge," in which the speakers will be authorities in their scientific fields. The titles of the individual sessions are "Earth Science" and "Weather" (27 Dec.); "Chemistry" and "Biochemistry of Behavior" (29 Dec.); and "Astronomy" (30 Dec.). A session on NSTA affairs is scheduled for 28 December.

Science in General (X)

A number of organizations, too general in their interests to be placed in any sectional series or under any specific discipline, will constitute the "X series" in the General Program. In this preliminary synopsis of the eighth New York meeting, the programs of many of these—the Academy Conference, the American Council on Women in Science, the Conference on Scientific Communication, and the Conference on Scientific Manpower—have already been mentioned under "Other General Events," and thus will not be repeated here.

The *American Geophysical Union*, under the auspices of its Planetary Sciences Committee, will sponsor a program of one or more sessions on space science, arranged by Homer Newell and Robert Jastrow (National Aeronautics and Space Administration).

The regular annual meeting of the *National Association of Science Writers* (Earl Ubell, New York *Herald Tribune*) with the AAAS will include a business session and dinner. A feature of the latter will be the second awards of the new series of the AAAS—George Westinghouse Science Writing Awards for excellence in science writing in newspapers and magazines.

The national convention of the *Scientific Research Society of America* (Donald P. Prentice, Yale University) is scheduled for 29 December. The award of the William Procter Prize and the annual RESA address will follow the joint luncheon with the Society of the Sigma Xi.

The national meeting of *Sigma Delta Epsilon*, graduate women's science fraternity (Mrs. Ethaline Cortelyou, Aeroprojects, Inc., West Chester, Pa.), includes cosponsorship of the third conference of the American Council on Women in Science, on encouraging the participation of women in science, and a business meeting (27 Dec.); a luncheon for women in science (28 Dec.); and the annual dinner and grand chapter meeting (29 Dec.). A headquarters room will be maintained throughout the meeting period.

The 61st annual convention of the *Society of the Sigma Xi* (Thomas T. Holme, Yale University) will be held on 29 December, following the joint luncheon with RESA. In the evening

the Society of the Sigma Xi will join with the *United Chapters of Phi Beta Kappa* (Carl Billman, Phi Beta Kappa) in sponsoring an address by a prominent scientist. Since their inauguration in 1922, these distinguished lectures, of interest to all participants, have been special sessions of the Association.

Call for Papers by AAAS Sections

Six sections of the Association will arrange sessions for contributed papers at the New York meeting. The secretaries or program chairmen to whom titles and abstracts should be sent, *not later than 30 Sept.*, follow:

C—CHEMISTRY. S. L. Meisel, Socony Mobil Oil Company, Paulsboro, N.J.
G—BOTANICAL SCIENCES. Barry Commoner, Henry Shaw School of Botany, Washington University, St. Louis 5, Mo.

H—ANTHROPOLOGY. J. L. Giddings, Brown University, Providence 12, R.I., or Eleanor Leacock, The City College, New York 31, N.Y.

K—SOCIAL AND ECONOMIC SCIENCES. Donald P. Ray, Hall of Government, George Washington University, Washington 6, D.C.

NP—PHARMACY. John E. Christian, School of Pharmacy, Purdue University, Lafayette, Ind.

Q—EDUCATION. Herbert A. Smith, U.S. Office of Education, Room 5919, General Services Administration Building, Washington 25, D.C.; (after 15 Aug.) University of Kansas, Lawrence, Kan.

Although the deadline is 30 September, most sections, and subsequently the AAAS office, would be happy to receive titles in advance of this date.

RAYMOND L. TAYLOR
Associate Administrative Secretary

Forthcoming Events

June

15–24. International Union for Conservation of Nature and Natural Resources, Warsaw and Cracow, Poland. (H. J. Coolidge, National Research Council, Washington 25, D.C.)

15–25. Large Electric Systems, intern. conf., Paris, France. (British National Committee, Thorncroft Manor, Dorking Rd., Leatherhead, Surrey, England)

15–29. Nuclear Congress and Exhibition on Electronics and Atomic Energy, 7th intern., Rome, Italy. (Secretariat, Rassegna Elettronica, Nucleare e della Cinematografia, Via della Scrofa 14, Rome, Italy)

16–17. National Colloid Symp., 34th, Bethlehem, Pa. (B. R. Ray, Dept. of Chemistry, Washington State Univ., Pullman)

16–18. American Scientific Glassblowers Soc., 5th annual conf., Pittsburgh, Pa. (W. E. Barr, Gulf Research & Development Co., P.O. Box 2038, Pittsburgh 30)

16–18. Growth; Molecule, Cell, and Organism, intern. symp., Lafayette, Ind.