## Eighth Philadelphia Meeting

Preliminary Announcement of Programs for the 129th Annual Meeting and Call for Papers by AAAS Sections.

Raymond L. Taylor

Those who have had no occasion to visit Philadelphia within the past year or two cannot have seen the great changes that have occurred—and are still occurring—in that venerable and historic city. It is possible to pass through the nation's first capital by train, or to fly over it, without a glimpse of the greatly transformed Penn Center, the rebuilt Mall around Independence Hall, residential Society Hill (lately a large dock area), and the nexus of expressways that make Philadelphia "close in" to its jet airport, the railroad station, and all the turnpikes.

National magazines have reported on the new face of Philadelphia, but relatively less attention seems to have been paid to the results of tearing down the Pennsylvania Railroad's old Broad Street Terminal and the old brickarched "Chinese Wall" that carried the tracks to the Schuylkill. All this is gone, and spacious Penn Boulevard is lined, from 30th Street Station to City \*Hall (especially in the four blocks nearest Broad Street), with architecturally harmonious buildings. One of these buildings is the 22-story Sheraton Hotelheadquarters hotel for this year's AAAS meeting, the 129th, to be held from 26 to 31 December.

When the Association returns to the city in which it was born 114 years ago, everyone who attends should, if at all possible, allow an extra day or two to visit the unique historic shrines and the many points of scientific interest.

It will be the programs, however, that will bring five or six thousand scientists to Philadelphia in December to join the several thousand of their colleagues who live there. The high quality of the special sessions, of the "Moving Frontiers of Science" lectures, and of

will bring to Philadelphia many of the 4709 scientists who were registered participants at last year's Denver meeting, and others who wish they had been there. The care with which the Committee (currently under the chairmanship of Philip H. Abelson of the Carnegie Institution of Washington) is planning these sessions will be evident when all program details are complete.

Those who have attended recent

the other sessions that are the respon-

sibility of the Committee on Meetings

Those who have attended recent AAAS meetings are well aware 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. There has been a steady growth in the variety of the sessions and in the attendance—a reflection of the ever-increasing attractiveness of the programs. Many of the symposia will be of particular assistance to college teachers.

The proceedings of some of the many symposia, or their constituent papers, are eventually published—as AAAS symposium volumes, as articles in *Science*, or as articles in specialized journals—but not all are published, and in any event there is a time lapse. Moreover, only by attending can one meet the authors face to face and discuss points of mutual interest.

Of the societies that will hold national meetings with the AAAS, the American Society of Zoologists is the largest; it will have perhaps 40 sessions. Others are the American Nature Study Society, the American Society of Criminology, the American Society of Naturalists, the Herpetologists' League, the National Association of Biology Teachers, the Scientific Research Society of America, the Society for General Sys-

tems Research, the Society of Systematic Zoology, and the Society of the Sigma Xi.

Societies with special or regional programs of several days' duration will include the following: Academy of Psychoanalysis, American Association of Clinical Chemists, American Astronautical Society, American Meteorological Society, American Physiological Society, American Psychiatric Association, Association of American Geographers, Ecological Society of America, History of Science Society, Institute of Management Sciences, National Speleological Society, National Science Teachers Association, and Society for the History of Technology.

Still other organizations will have conferences or programs—for example, the American Economic Association, the American Rocket Society, the American Sociological Association, the American Statistical Association, the American Political Science Association, the Association for Computing Machinery, the Society for Industrial and Applied Mathematics, Sigma Delta Epsilon, the Conference on Science Manuscripts, the Conference on Scientific Manpower, and the Academy Conference, composed of representatives of the 47 state and city academies affiliated with the AAAS.

#### **Special Sessions**

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

26 December, evening. Part I of "Moving Frontiers of Science." This program, which consists of lectures by authorities in various fields, is planned to be of general interest to all who attend the Philadelphia meeting and to present recent developments in terms intelligible to scientists in other disciplines. All of the sections and many of the participating societies have left these lecture periods open in preparing their schedules.

A fundamental paper on this first evening of the meeting will be given by Homer E. Newell, director of the Office

The author is associate administrative secretary of the AAAS.

of Space Sciences, National Aeronautics and Space Administration. The other speaker of the evening will be Sterling B. Hendricks (U.S. Department of Agriculture Plant Industry Station), who will discuss biological rhythms in plants and animals.

28 December, morning. Two interdisciplinary symposia, one in the physical-biological sciences and the other in the social sciences, will be presented concurrently.

The first of these, "The DNA Story"—including the latest on Coding—will include presentations by specialists, in terms understandable to most scientists and teachers, of the very latest discoveries in this fast-moving field of molecular biology or biochemistry.

The second interdisciplinary symposium, "The Spread of Knowledge as an Instrument of Economic Development," will be arranged by Bert F. Hoselitz (University of Chicago).

The papers to be presented are: "Mechanisms of transfer of knowledge between nations" (William N. Parker, University of North Carolina); "The spread of technical information through industrialization" (W. Paul Strassmann, Michigan State University); "The spread of technical knowledge in agriculture" (E. A. Wilkening, University of Wisconsin); and "Scientific communication networks and the advance of knowledge" (Robert S. Merrill, University of Rochester).

28 December, afternoon. Part II of "Moving Frontiers of Science." There will be two lectures; one will be given by William O. Baker (Bell Telephone Laboratories).

28 December, evening. Address of the retiring president of the AAAS, Thomas Park. Announcement will be made of several awards—the Newcomb Cleveland prize for 1961, the Socio-Psychological prize, and the AAAS-Campbell award for vegetable research. After the address there will be a reception for all registrants, with refreshments and cigarettes provided. Alcoholic beverages will be served at a "Dutch treat" bar. The reception thus will include the AAAS Smoker 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 will be given by a prominent scientist. After a brief interval, the annual address of the Tau Beta Pi Association with the AAAS will be given.

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) will arrange one or more sessions.

The AAAS Cooperative Committee on the Teaching of Science and Mathematics. John R. Mayor (AAAS) plans to sponsor, jointly with the science teaching societies, a symposium on elementary science, arranged by Dorothy Matala (Iowa State College of Science and Technology). Reports from the Educational Services, Incorporated, program, which will be in operation in Cambridge this summer, and from AAAS summer conferences and activities will probably be included.

In a second session an attempt will be made to analyze the various senior high school science courses prepared under National Science Foundation sponsorship from the point of view of relations among the sciences. A physicist will be asked to comment on the chemistry course from the point of view of physics, and a chemist, on the physics course from the point of view of chemistry. Biologists and mathematicians will also be called on for comment.

The AAAS Committee on Desert and Arid Zones Research (H. E. Dregne, New Mexico State University, program chairman) will have a 1-day symposium of eight papers on arid land research, including papers on prehistoric man.

The program of the 11th Conference on Scientific Manpower (Thomas J. Mills, National Science Foundation), cosponsored by the National Science Foundation, National Research Council, Engineering Manpower Commission, and Scientific Manpower Commission and by Section M-Engineering, will have two sessions, probably on 29 December, on local programs for the recruitment of youth to science and engineering.

The Academy Conference, founded in 1927 and composed of the official representatives of the 47 academies of science affiliated with the AAAS, has had a program at each annual meeting of the Association since 1928. This year's 34th meeting of the conference

will begin with a session on junior academies (26 Dec.).

There will be a full day of sessions on 27 December. At the business meeting in the morning, reports of the individual academies will be distributed rather than read, to provide more time for individual comments and for a general discussion of academy problems. The report of John D. Hopperton (New Mexico Institute of Mining and Technology) on his studies (supported by an NSF grant) of junior and collegiate academies, and a discussion of the report, will be major items.

In the afternoon there will be papers on tax-exemption for academies, on sources of academy support, and on problems of incorporation, in a program arranged by chairman Robert C. Miller (California Academy of Sciences). The day will conclude with the annual Academy Conference Dinner and the conference presidential address by E. Ruffin Jones (University of Florida), with Robert C. Miller presiding.

The Academy Conference also will sponsor the 16th Annual Junior Scientists Assembly, a program for selected high school students interested in science and scientific careers. It will be arranged this year by Kenneth W. Prescott (Academy of Natural Sciences of Philadelphia).

#### **AAAS Council Meetings**

The AAAS Council will, as usual, hold two sessions, at 4 p.m. on 27 December and at 9 a.m. on 30 December. Because election of the AAAS president-elect and of new members of the Board of Directors is now conducted by mail, with results simply announced at the first session, more time is available at these sessions than in the past for consideration of matters that affect all science and society. The work of the Council is materially assisted by the Committee on Council Affairs. Other committees and many of the sections will have business meetings.

#### Science Exhibits

The significance of the eighth Philadelphia meeting has already been recognized by those who produce the books, instruments, and materials which scientists and teachers use. Applications for exhibit booths in the Exhibit Hall of the Sheraton Hotel have been received at a gratifying rate. At this time, 7 months in advance of the meeting, although the number of booths has been increased by a third, relatively few booths remain to be assigned.

Larger than usual, this year's Annual Exposition of Science and Industry will be one of the most balanced and attractive ever presented. Leading publishers, optical companies, and 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 and exhibits of governmental agencies.

Incidentally, the Exposition is not intended for young people below the college, or the exceptional high-school senior, level, for most of the exhibits are 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 Philadelphia, the instructive exhibits of the Academy of Natural Sciences and of the Franklin Institute are quite near the Sheraton Hotel.) In the best interests of exhibitors and those interested in their displays, only registrants are admitted to the exposition. With very rare exceptions, young people under 16 are neither registered nor admitted.

#### Science Theatre

The AAAS Science Theatre, a regular feature of the Association's annual meeting, again will show a choice selection of science films, foreign and domestic; these will be shown in a special room just off the exhibit area. The theatre will run each film at least twice, so that those who are interested in a particular film will have more than one opportunity to see it.

#### **Physical Facilities**

Despite its size, the meeting will be reasonably convenient, comfortable, and inexpensive. The hotels which will house a majority of the approximately 300 sessions are close together in the Penn Center-City Hall area—the Sheraton, Bellevue Stratford, Warwick, Robert Morris, Sylvania, and Adelphia—

with the Benjamin Franklin available if needed. All except, perhaps, the lastnamed are within easy walking distance of one another.

The 22-story Sheraton, Philadelphia's newest hotel (opened in 1957) will be AAAS headquarters. It has 1000 rooms and is very conveniently located on Penn Boulevard and 17th Street. With its excellent exhibit facilities on the concourse level (connected with the lobby by an escalator) and its excellent range of well-equipped session rooms, the Sheraton was the logical choice as the site of the Association's business sessions, Pressroom, and Office. The Annual Exposition of Science and Industry and the AAAS Science Theatre will be housed in Sheraton Hall, while the special sessions and most of the general events will be held in the large ballroom. The park-it-yourself garage just across the street holds 1000 cars. The other hotels will be the headquarters of related sections and societies. Principal among these are the luxurious Bellevue Stratford (750 rooms), on Broad Street near Walnut; the Sylvania (400 rooms), on Locust Street near Broad; and the Warwick (750 rooms), at 17th and Locust Streets. In reserve are the Adelphia (400 rooms) and the Benjamin Franklin (1200 rooms).

The Robert Morris (300 rooms, but no session rooms) is very near the Sheraton, at 17th and Arch Streets. Operated by the Methodist Church, it is comfortable and moderate in price; it is strongly recommended for graduate students and others who are not on expense accounts.

The Franklin Motor Inn (300 units) will also be available; it is just across the Parkway from the Franklin Institute, which is expected to house a few sessions, as is the Academy of Natural Sciences.

Special low flat rates have been established at two levels, as follows. Sheraton, Bellevue Stratford, Warwick, Benjamin Franklin, and Franklin Motor Inn, room with single bed, \$8.50; room with twin beds, \$14. Sylvania and Adelphia, room with single bed, \$7; room with twin beds, \$12. Robert Morris, room with single bed, \$5.50 to \$7.50; room with double bed, \$9 to \$11; room with twin beds, \$10 to \$11.

The headquarters of the sections and societies will be announced in *Science* in July, at which time there will be coupons for housing and advance registration among the advertising pages. (To secure the special rates, registrants

should use the hotel room coupon, or a reasonably accurate copy of it, and should send it directly to the AAAS Housing Bureau, Hospitality Center, 16th St. and Pennsylvania Blvd., Philadelphia 2, Pa.) As usual, advance registrants will receive the General Program early in December.

*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 (Wallace Givens, Northwestern) will begin (26 Dec.) with a session for invited papers, "A Ten-year Report on Applied Mathematics," sponsored jointly with the Society for Industrial and Applied Mathematics, which is celebrating its decennial. On the morning of 27 December there will be an invited address and the 1961 vice-presidential address of J. L. Walsh (Harvard), "The geometry of zeroes of extremal polynomials with certain prescribed coefficients." That afternoon Section A will cosponsor a symposium on computer applications, arranged by William F. Cahill (NASA) for the Association for Computing Machinery. On the morning of 29 December there will be invited addresses; in the afternoon H. F. Bohnenblust (California Institute of Technology) will give his vice-presidential address, and there will be a session sponsored jointly with Section U-Statistics.

Also on 29 December Section A will cosponsor the symposium "The Curriculum in Mathematics for Applications," arranged by R. C. Buck (University of Wisconsin), chairman of the Committee on the Undergraduate Program in Mathematics of the Mathematics Association of America.

#### Physics (B)

Section B (Stanley S. Ballard, University of Florida), will have a session of invited papers on the teaching of physics (29 Dec.), followed by the annual physicists' luncheon, which will be jointly sponsored by Section B and Sigma Pi Sigma. The address after the luncheon will be given by past vice president Henry D. Smyth (Princeton). In the afternoon, Section B will hold a



The Penn Center area, showing the Hospitality Center (low circular building) and the Architects Building (right foreground). [Jules Schick]

joint symposium with Section D-Astronomy on the dynamics of planetary atmospheres.

The American Astronautical Society will hold a regional meeting.

The American Meteorological Society (Kenneth Spengler, AMS) is planning a special program on biometeorology.

The American Rocket Society (Francis S. Johnson, Graduate Research Center of the Southwest, Dallas) will have a session (28 Dec.) on the meteorological rocket program, arranged by the society's Physics of the Atmosphere and Space Committee.

#### Chemistry (C)

The comprehensive program of Section C (James R. White, Socony Mobil Oil Company, Princeton, N.J.) will extend through most of the meeting period. It will include sessions for contrib-

uted papers, planned with the assistance of seven American Chemical Society sections in the Delaware Valley, and three symposia.

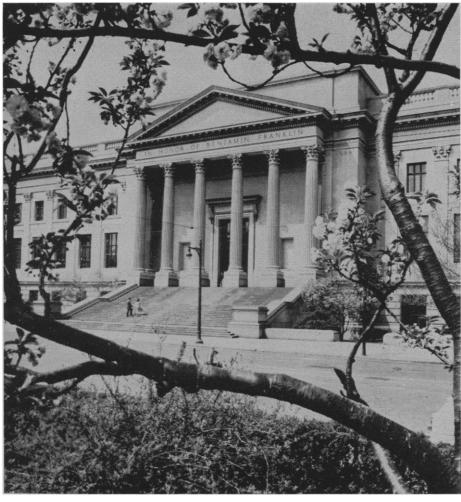
A symposium on "Techniques of Structural Chemistry" arranged by M. K. Wilson (Tufts), will include "Nuclear magnetic resonance spectroscopy" (W. D. Phillips, Du Pont Company); "Molecular beams" (John Ross, Brown University); "Molecular structure and magneto-optical rotation spectra" (Victor Shashoua, Du Pont); "Electronic spectra" (D. A. Ramsey, National Research Council, Ottawa); "Crystal structure analysis by x-ray diffraction" (Kenneth N. Trueblood, UCLA); Mossbauer effect" (S. S. Hanna, Argonne); "Electron spin resonance spectroscopy" (S. I. Weissman, Washington University); and "Neutron diffraction" (Walter C. Hamilton, Brookhaven). Two other symposia will be on "Mechanisms of Organic Chemistry" (Paul Schleyer,

Princeton), 27 Dec.; and on "Nuclear and Radiochemistry" (Robert A. Naumann, Princeton), 29 Dec.

The American Association of Clinical Chemists (Peace Paubionsky, Abington Memorial Hospital, Abington, Pa.), for its annual meeting with the AAAS (probably 26–27 Dec.), is planning two symposia (one, probably, on problems of electrolyte-fluid balance in the light of homeostatic mechanisms): and two or more sessions of contributed papers.

#### Astronomy (D)

Section D (Frank Bradshaw Wood, University of Pennsylvania) will sponsor a session for contributed papers (29 Dec.) and will have primary responsibility for the joint symposium with Section B-Physics on the dynamics of planetary atmospheres (Julius London, High Altitude Observatory, Boulder,



The Franklin Institute on the Benjamin Franklin Parkway. The building also houses the Fels Planetarium.

Colo.). The speakers and their papers will be as follows: Arnt Eliassen (University of Oslo), "Vertical propagation of energy in the atmosphere"; Phillip D. Thompson (National Center for Atmospheric Research), "Role of convection in the dynamics of planetary atmospheres"; C. O. Hines (Defence Research Board, Canada). "Turbulence in the upper atmospheres"; and Raymond Hide (M.I.T.), "Laboratory experiments relating to the dynamics of planetary atmospheres." The vice-presidential address (29 Dec.) will be given by Robert M. Petrie (Dominion Astrophysical Observatory, Royal Oak, British Columbia), with Frank K. Edmondson (Indiana) presiding.

#### Geology and Geography (E)

The program of Section E (Richard H. Mahard, Denison University) (26–30 Dec.) will include symposia on coastal geomorphology (two sessions, 27

Dec.), on the geography and economics of coal (30 Dec.), and on widespread erosion surfaces preserved in stratigraphic sequences (two sessions, 29 Dec.). There will be contributed papers in geography (27 Dec.) and in geology (30 Dec.). The Section E cocktail party, dinner, and vice-presidential address (by Richard J. Russell, Louisiana State University), will be held on 27 December, and the Section E committee meeting, on 29 December. Section E will cosponsor other programs, notably the program of the Association of American Geographers. All geological sessions will be cosponsored by the Geological Society of America.

The Middle-Atlantic Division of the Association of American Geographers (Meredith F. Burrill, Association of American Geographers, Washington) is expected to have a program of several days' duration.

The National Speleological Society (William E. Davies, 125 W. Greenway Blvd., Falls Church, Va.) will have two

sessions (29 Dec.), one on cave biology and the other on cave geology.

The *National Geographic Society* will present its lecture and film on the evening of 30 Dec.

#### Zoological Sciences (F)

The program of Section F (David W. Bishop, Carnegie Institution of Washington, Baltimore, Md.) will be coordinated with the national meetings of the American Society of Zoologists, the Herpetologists' League, and the Society of Systematic Zoology. In view of the many sessions of these societies, Section F's program will be restricted to cosponsorship of appropriate symposia and other sessions and joint sponsorship of the Biologists' Smoker (27 Dec.), the Zoologists' dinner, and the vice-presidential address of Ernst W. Caspari (University of Rochester). Section F will also jointly sponsor a session on genetics statistics. The business meeting of the section will immediately follow that of the American Society of Zoologists. Section F will cosponsor the symposia of the zoological societies meeting with the Association.

The tentative program of the national meeting of the American Society of Zoologists (Ray L. Watterson, University of Illinois), with more than 30 sessions (28–30 Dec.), includes 21 or more sessions for contributed papers, sponsored by all six divisions of the Society, to be held throughout the meeting period; business meetings of five divisions; the annual business meeting of the Society as a whole; and a series of symposia. The subjects and speakers at the symposia have not yet been announced.

The Herpetologists' League (Wade Fox, Jr., Louisiana State University School of Medicine) plans four sessions for contributed papers and a business meeting (27-29 Dec.).

The Society of Systematic Zoology (Charles F. Lytle, Tulane) will hold its 14th annual meeting with the AAAS. The program will include a symposium on patterns and problems of distribution in the invertebrates and a session of contributed papers (29 Dec.); Council meetings (27 and 29 Dec.); and the annual breakfast and business meeting (30 Dec.). There will be a coffee hour in the Society's book lounge (29 Dec.). The annual SSZ library and book lounge for all zoologists will be open from 27 to 29 December.

#### **Biological Sciences (FG)**

Features of the annual national meeting of the American Society of Naturalists (William K. Baker, University of Chicago) will be a two-session symposium on principles and methods of phylogeny (27 Dec.) and the presidential address of Ernst Mayr, "What is a fauna?," to be given the morning of 28 December. The business meeting of the society will follow.

The program of the Biomedical Information-Processing Organization (Robert S. Ledley, National Biomedical Research Foundation) will be on existing and proposed computer programs to aid biology and medicine.

The Biometric Society, Eastern North American Region (T. A. Bancroft, Iowa State University of Science and Technology) is planning sessions on problems in mathematical biology (H. L. Lucas, North Carolina State College); some uses of high-speed computers in statistics (T. A. Bancroft and H. O. Hartley, Iowa State University); and sampling for zoologists (Fred Schultz, Biometrical Services, U.S. Department of Agriculture). A genetics statistics session will be held jointly with Section U-Statistics and with the Society for the Study of Evolution. Presentation of sessions on other subjects-on statistical problems in drug screening, for example—is being considered.

The program of the Ecological Society of America (Robert B. Platt, Emory) will include several symposia (one of them on radioecology); sessions for contributed papers on plant, animal, human, and aquatic ecology; and a series of sessions jointly sponsored by the Section on Animal Behavior and Sociobiology and by the Division of Animal Behavior and Sociobiology of the American Society of Zoologists. The Society will also cosponsor the tour to the Pine Barrens of the Philadelphia Botanical Club.

The Mountain Lake Biological Station (James L. Riopel, 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.

The annual national meeting of the National Association of Biology Teachers (Philip R. Fordyce, Oak Park-River Forest High School, Oak Park, Ill.) will begin with business meetings on 26 December. There will be a sym-

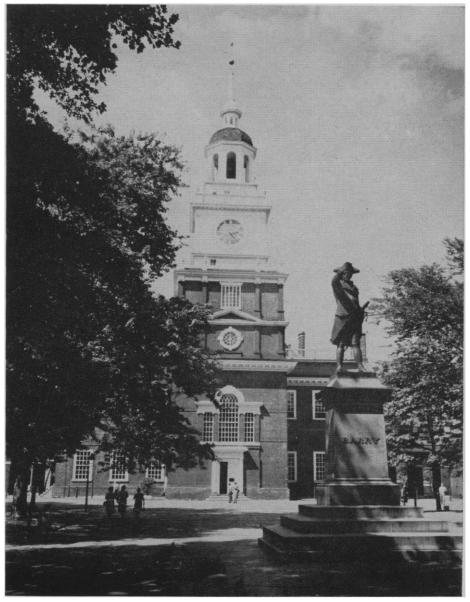
posium on recent research and its implications for teachers, held jointly with the American Nature Study Society, the National Association for Research in Science Teaching, and the National Science Teachers Association; a session on elementary-school science-curriculum development, held jointly with Section Q (27 Dec.); the annual NABT presidential address and luncheon, with Severo Ochoa as speaker; and a series of separate sessions (28–29 Dec.) on "Manning the Frontiers." There will be a field trip on 30 December, sponsored jointly with ANSS.

As it did at the New York meeting of the AAAS in 1960, the *Nature Con*servancy will hold a meeting of its National Committee for Natural Areas for Schools; arrangements will be made by John W. Brainerd (Springfield College).

Sections F and G will cosponsor a Biologists' Smoker (27 Dec.) at the Academy of Natural Sciences.

#### **Botanical Sciences (G)**

Section G (Harriet B. Creighton, Wellesley) will continue its series of symposia sessions, "Plant Biology Today." There will be two sessions of invited papers on basic topics for biology teachers, to keep them informed on recent advances (27 Dec.). The program will include papers on plant structure and function. Between the two sessions there will be a luncheon for all botanists, at which John N.



Independence Hall.

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Couch (University of North Carolina) will deliver the vice-presidential address. There will be two or more sessions for contributed papers (26 and 29 Dec.).

The Philadelphia Botanical Club (Walter M. Benner, Academy of Natural Sciences of Philadelphia) will sponsor, jointly with the Ecological Society of America, a field trip to the Pine Barrens of New Jersey.

#### Anthropology (H)

The program of Section H (Eleanor Leacock, Bank Street College of Education, New York) will include a symposium on ethnic minorities (27 Dec.), arranged by Morton H. Fried (Columbia). On 29 December there will be symposia on contemporary uses of sociological methods in anthropological analysis of complex societies (arranged by Pauline Mahar, Michigan State University); on structural analysis of ideologies (arranged by Anthony Leeds, Pan American Union); on dating of the Pleistocene (arranged by Ralph Solecki, Columbia); and on physical adaptations to culture change (arranged by Stanley M. Garn, Fels Research Institute). There will be two additional symposia on 30 December-one on linguistic approaches to culture analysis (cosponsored by AAAS Section I-Psychology and arranged by Muriel Hammer, Psychiatric Institute) and one on problems in archeological analysis (arranged by Robert Ascher, Cornell). The vicepresidential address by William S. Laughlin (University of Wisconsin) and a session for contributed papers will complete the program.

#### Psychology (I)

The program of Section I (Frank W. Finger, University of Virginia) will be held on 29 and 30 December. A symposium on the concept of maturity has been arranged by Dale B. Harris (Pennsylvania State University), to be cosponsored by the Society for Research in Child Development. Participants will include representatives from the field of psychiatry (Leon Saul, University of Pennsylvania), human biology (Wilton M. Krogman, University of Pennsylvania), physiology (Nathan Shock, National Institutes of Health), and psychology (F. R. Wake, Carleton University, Ontario). "Memory" will be the general subject of the vice-presidential address, by Arthur W. Melton (University of Michigan), and of two sessions of invited papers arranged by him.

#### Social and Economic Sciences (K)

Section K (Donald P. Ray, National Institute of Social and Behavioral Science), with the American Economic Association and the National Institute of Social and Behavioral Science as cosponsors, will hold a symposium (27 Dec.) entitled "Growth Economics: Some Theories and Concepts." The papers will include the vice-presidential address of Simon S. Kuznets (Harvard) on problems in measuring economic growth; a discussion of institutional change in modern economic growth, by Wilbert E. Moore (Princeton); and a discussion of societal values and developmental economics, by Bert F. Hoselitz (University of Chicago). This session is an outgrowth of the work of the Committee on Economic Growth of the Social Science Research Council.

In addition, Section K will sponsor a session for contributed papers in the social and economic sciences (30 Dec.) and will cosponsor appropriate programs of the K series.

The American Economic Association (Kenneth E. Boulding, University of Michigan) will have a program of invited papers, cosponsored by Section K. This is scheduled early in the meeting (26 Dec.) so that AEA members may attend both the AAAS meeting and their own national meeting, to be held in Pittsburgh, Pa., from 27 to 29 December.

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

The national meeting of the American Society of Criminology (Donal E. J. MacNamara, New York Institute of Criminology), which has as its general theme "An Interdisciplinary Approach to Crime and Delinquency," will open on 29 December with a session on psychiatry and psychology and one on sociology and anthropology. Other sessions (30 Dec.) will be on law and politics and on administration and management. The annual awards and memorial session of the Society will be held on the evening of 29 December; the presentation will be preceded by the annual business meeting.

The American Sociological Association (Wilbert Moore, Princeton) will

have two symposia (29 Dec.), cosponsored by Section K. One of these, arranged by Burton R. Clark (University of California, Berkeley); will be on the sociology of education. The other will be sponsored jointly with the *Population Association of America*.

The American Statistical Association will have a number of sessions sponsored jointly with the new Section U-Statistics, and perhaps others cosponsored by the Biometric Society and by Section K.

Details of the programs of the Metric Association (Robert P. Fischelis, Washington, D.C.) and of the *National Academy of Economics and Political Science* (Emmet B. Mittlebeeler, American University, Washington, D. C.) are not yet available.

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

Details of the program of Section L (Norwood Russell Hanson, Indiana University) are incomplete, but there will be five or six sessions in the two areas of interest of its members. The subject of one of these sessions, to be held jointly with the Society for the History of Technology, will be the history of space exploration; of another, the origins of science in the Philadelphia area; and of a third, the effects of the Darwinian revolution.

The section vice-presidential address, which will probably also be the third Géorge Sarton memorial lecture, will be given by Gerald Holton (Harvard University).

Other programs in the "L series" include the sessions of the Conference on Science Manuscripts, arranged by Nathan Reingold (Library of Congress) (27 Dec.); the biennial meeting of the History of Science Society; the meeting of the Philosophy of Science Association (Lewis K. Zerby, Michigan State University); and the annual meetings of the Society for General Systems Research (G. M. Weinberg, 787 United Nations Plaza, New York) and the Society for the History of Technology (Thomas Hughes, Washington and Lee University). The Society for the History of Technology will sponsor, jointly with Section P-Industrial Science (27 Dec.), a session on the history of the industrial laboratory; jointly with Section L (27 Dec.), a session on the history of the technology of atomic energy; and jointly with Section L (28 Dec.), a session on the history of rocketry.



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#### Engineering (M)

The program of Section M (L. K. Wheelock, Engineers Joint Council) will include one or more sessions on technical information flow and on sciences in engineering education. Section M will cosponsor 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.).

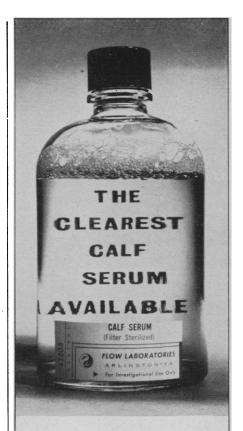
#### Medical Sciences (N)

As in previous years, Section N will have a four-session symposium (27 and 29 Dec.), with participants coming from all parts of the country. The general subject is new concepts regarding biological control mechanisms. The sessions and their chairmen are "Repression mechanisms" (Boris Magansanik, M.I.T.); "Feedback mechanisms" (H. Edwin Umbarger (Cold Spring Harbor): "Hormonal phenomena" (Earl W. Sutherland. Western Reserve); and "Permeability phenomena" (Charles R. Park, Vanderbilt). The vice-presidential address will be given by DeWitt Stettin, Jr. (National Institute of Arthritis and Metabolic Diseases).

A new affiliate of the AAAS, the Academy of Psychoanalysis (Sandor Rado, 235 E. 73rd St., New York) will meet from 28 to 30 December, with one or more business meetings and four scientific sessions. The general title of the meeting will be "Violence," and the sessions will be on neurophysiology and ethology, anthropology and sociology, psychoanalysis, and large-group relationships.

The American Physiological Society and the Bioscience Programs of the Office of Space Sciences of the National Aeronautics and Space Administration will jointly sponsor a symposium on "Life Support in Space: Basic Physiology and Systems Design." Coordinators are Robert E. Smith (Department of Physiology, UCLA Medical Center), and Orr E. Reynolds (director of Bioscience Programs, NASA).

The American Psychiatric Association, Committee on Research (Milton Greenblatt, George H. Grosser, and Henry Wechsler, all of Massachusetts Mental Health Center and Harvard Medical School) will sponsor a five-session program on "Human Reactions to Unknown or Impending Disaster."



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#### Dentistry (Nd)

Section Nd (Ned B. Williams, University of Pennsylvania School of Dentistry) will have a two-session symposium on hard-tissue destruction (29 Dec.). The program 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)

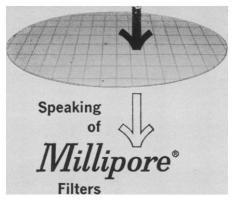
The 3-day program of Section Np (John E. Christian, Purdue) will include sessions for contributed papers in hospital pharmacy, other sessions for contributed papers, and a symposium "Uses of Computers in Research and Practice," 29 Dec. The section luncheon, with the vice-presidential address by John Autian (University of Texas), and a dinner will be held 27 Dec.

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

#### Agriculture (O)

Section O (George W. Irving, U.S. Agricultural Research Service) will have a four-session symposium on food quality "Production Practices and Processing." The individual sessions will be on genetic and environmental factors, protection of food crops against insects and diseases, processing factors, and quality evaluation and measurement. Considered in each session will be cereals, fruits, vegetables, meats, dairy products, poultry, and eggs.

At luncheon meetings invited papers will be presented on such overall aspects of the symposium subject as pharmacological factors in food quality and nutritional aspects of processed food.



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Lindeken, C. L., 1961 American Industrial Hygiene Assoc. Journal 22:232-237, August

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AAAS Symposium Volume No. 60

#### Edited by Benjamin Pasamanick

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#### **Industrial Science (P)**

Section P (Allen T. Bonnell, Drexel Institute) is considering presentation of a symposium on communication in its broader aspects. It will also cosponsor the symposium on management science of the Institute of Management Sciences. Past vice-president S. O. Morgan (Bell Telephone Laboratories) will give the vice-presidential address at the annual luncheon. The Section will also give the 7th Industrial Citation Dinner.

The Institute of Management Sciences (Burton V. Dean, Case Institute of Technology) will have four sessions, as follows: "The Use of Judgments in Models of Decision Making" (26 Dec.); "Research and Development Management" (26 Dec.); "Experimental Design in Simulation" (27 Dec.); and "History of the Theory of Decision Making" (27 Dec.). These sessions probably will be cosponsored, respectively, by sections K-Social and Economic Sciences, P-Industrial Science, U-Statistics, and L-History and Philosophy of Science.

#### Education (Q)

The program of Section Q (Herbert A. Smith, University of Kansas) includes two or three joint sessions with the Council for Exceptional Children (26–27 Dec.); two joint sessions with the American Educational Research Association (30 Dec.); four or more sessions for contributed papers and possibly a symposium on the training of elementary school teachers for science (29–30 Dec.); a business meeting (29 Dec.); and the vice-presidential address of Kenneth E. Anderson (University of Kansas) (29 Dec.).

The four science teaching societies (ANSS, NABT, NARST, and NSTA), meeting with the AAAS (coordinator, William Gregory, Philadelphia Board of Education), will have a joint session (27 Dec.) and a series of concurrent sessions similar to the coordinated programs of recent years. A joint coffee hour and mixer will be held 27 Dec.

The national annual meeting of the American Nature Study Society (John A. Gustafson, RD 1, Homer, N.Y.) will begin with a board meeting (26 Dec.). After the joint session of all science teaching societies (27 Dec.) there will be a session on the nature study movement and one on early naturalists. On 28 December there will be museum tours, a session on nature photography, and presentation of a



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group of papers on the natural history of the Philadelphia area. On 29 December papers on nature instruction, and acquisition of areas for nature study will be presented, and in the evening the annual banquet will be held, at the Academy of Natural Sciences. The field trip with the National Association of Biology Teachers will probably be to Brigantine National Wildlife Refuge, New Jersey (30 Dec.).

For details of the annual national meeting of the National Association of Biology Teachers, see the summary given under "Biological Sciences (FG)."

The National Association for Research in Science Teaching (George G. Mallinson, Western Michigan University) will schedule its usual research symposium.

After the joint meeting of the science teaching societies, there will be a meeting of the *National Science Teachers Association* (Majorie Gardner, NSTA, Washington, D.C.). This will consist of two sessions—one afternoon session (27 Dec.) and one morning session (28 Dec.).

Science Service (Leslie V. Watkins, Science Service) will sponsor a session on a science youth program (29 Dec.).

#### Information and Communication (T)

The Association's 19th section, the new Section T-Information and Communication (Phyllis V. Parkins, Biological Abstracts) will hold its first regular meeting on 29 December, under the auspices of the Section Committee. As stated when the Section was organized, its primary aim is to bring informationcommunication experts and practising scientists together, for their mutual benefit. The morning will be reserved for invited speakers on information systems in use abroad. After a "Dutch treat" luncheon, with a well-known speaker who will deal with some of the larger aspects of scientific information and communication, the afternoon will be devoted to the vice-presidential address of George Seielstad and invited papers on topics still to be decided.

#### Statistics (U)

Organization of the Association's 20th section, Section U-Statistics, was authorized at the 1961 Council Meeting. The new section is planning a session on decision theory, to be held

jointly with Section A; one on astronomy, to be held jointly with Section D; one on Tribolium experiments, to be held jointly with Section F; and one on genetics, to be held jointly with the Biometric Society, ENAR, and the Society for the Study of Evolution. Sessions on developments in mathematical psychology, on the evaluation of statistics on ethnic origin, and on economic statistics are tentatively being planned.

Sessions on the teaching of statistics are also planned, with a view to helping individuals who are called upon to teach statistics even though their primary interests are in other areas. There will also be contributed papers.

Jerzy Neyman (University of California, Berkeley) will give a vice-presidential address, on "Statistics as a servant of all the sciences and as an independent discipline." A general discussion of the purposes of Section U and of its future program will be developed around this address.

A social event—either a smoker or a dinner—for persons interested in statistics, and their guests, is tentatively planned.

Cooperating with Section U in the arrangements is a committee of the Philadelphia Chapter of the American Statistical Association (John de Cani, University of Pennsylvania, chairman).

#### 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 printed *General Program*. In this preliminary synopsis, the programs of two of these—the Academy Conference and the Conference on Scientific Manpower—have already been mentioned, under "Other General Events."

The American Geophysical Union (Waldo Smith, AGU, Washington, D.C.) will cosponsor appropriate sessions

The regular annual meeting of the National Association of Science Writers (Nate Haseltine, Washington Post) with the AAAS will include a business session and a dinner. A feature of the latter will be the fourth presentation of the new series of the AAAS-George Westinghouse Science Writing Awards for excellence in science writing in newspapers and magazines (27 Dec.).

The national convention of the Scientific Research Society of America (Donald B. Prentice, Yale) is scheduled



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for 29 December. The award of the William Procter prize and the annual RESA address will follow the luncheon, to be held jointly with the Society of the Sigma Xi.

The annual meeting of Sigma Delta Epsilon, graduate women's scientific fraternity (Dorothy Quiggle, Pennsylvania State University) will include a luncheon (27 Dec.), for all women in science and the grand chapter dinner and meeting (28 Dec.). A headquarters room will be maintained throughout the meeting period (26–29 Dec.).

The 63rd annual convention of the Society of the Sigma Xi (Thomas T. Holme, Society of the Sigma Xi, New Haven) will be held on 29 December, after the joint luncheon with RESA. In the evening the Society will join with the United Chapters of Phi Beta Kappa (Carl Billman, Phi Beta Kappa, Washington, D.C.) in sponsoring an address by a prominent scientist. Since the inauguration of the series in 1922, these distinguished lectures, of interest to all participants, have been a special feature of the Association meeting.

#### Call for Papers by Sections

Nine sections of the Association will arrange sessions for contributed papers at the Philadelphia meeting. The secretaries or program chairmen to whom titles and abstracts should be sent, not later than 30 September, are as follows: C-Chemistry. James R. White, Socony Mobil Oil Company, Box 1025, Princeton, N.J.

- D-ASTRONOMY. Frank Bradshaw Wood, Flower and Cook Observatory, University of Pennsylvania, Philadelphia 4.
- E-GEOLOGY AND GEOGRAPHY. Richard H. Mahard, Department of Geology and Geography, Denison University, Granville, Ohio.
- G-BOTANICAL SCIENCES. Harriet B. Creighton, Department of Botany and Bacteriology, Wellesley College, Wellesley 81, Mass.
- H-Anthropology. Eleanor Leacock, Bank Street College of Education, 69 Bank Street, New York 14, N.Y.
- K-Social and Economic Sciences.

  Donald P. Ray, National Institute of
  Social and Behavioral Science, 863
  Benjamin Franklin Station, Washington 4, D.C.
- NP-PHARMACY. John E. Christian, School of Pharmacy, Purdue University, Lafayette, Ind.
- Q-EDUCATION. Herbert A. Smith, Bailey

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U-STATISTICS. Morris B. Ullman, 7604 Cayuga Avenue, Bethesda, Md.

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

### Meetings

#### **Forthcoming Events**

#### June

25-27. American Soc. of Heating, Refrigerating and Air-Conditioning Engineers, Inc., annual, Miami Beach, Fla. (ASHRAE, United Engineering Center, 345 E. 47 St., New York 17)

25-27. National Convention on Military Electronics, annual, Washington, D.C. (J. J. Slattery, Electronics Div., Martin Co., Baltimore, Md.)

25-28. Society for Investigative Dermatology, Chicago, Ill. (H. Beerman, SID, 255 S. 17 St., Philadelphia 3, Pa.)

25-29. Coordination Chemistry, intern. conf., Stockholm, Sweden. (L. G. Sillen, Dept. of Inorganic Chemistry, Royal Inst. of Technology, Stockholm 70)

25-29. Gordon Research Conf. on Nuclear Chemistry, New London, N.H. (W. G. Parks, Univ. of Rhode Island, Kingston)

25-29. Nobel Physicists, Lindau im Bodensee, Germany. (Ständiger Arbeits-ausschuss für die Tagungen der Nobel-preisträger in Lindau, Postfach 11, Lindau im Bodensee)

25-29. Theoretical Interpretation of Upper Atmosphere Emissions, intern. symp., Paris, France. (J. W. Chamberlain, Yerkes Observatory, Williams Bay, Wis.)

25-30. Alpine Tundra Ecology, seminar, Estes Park, Colo. (M. Potts, Rocky Mountain Natl. Park, P.O. Box 1080, Estes Park)

25-30. Electromagnetic Theory and Antennas, symp., Copenhagen, Denmark. (Symp. Secretary, Øster Voldgade 10G, Copenhagen K.)

25-20 July. National Science Foundation, Summer Conf. for College Teachers of the History of Mathematics, Ann Arbor, Mich. (P. S. Jones, Dept. of Mathematics, Univ. of Michigan, Ann Arbor)

26-28. American Assoc. of Physics Teachers, Northfield, Minn. (R. P. Winch, Williams College, Williamstown, Mass.)

26–28. American Meteorological Soc., general meeting, Fairbanks, Alaska. (J. E. Miller, Dept. of Meteorology and Oceanography, New York Univ., University Heights, New York 53)

26–29. American Home Economics As-

26-29. American Home Economics Assoc., Miami Beach, Fla. (D. S. Miller, 3705 Van Buren Ave., Corvallis, Ore.)

26-29. Poultry Science Assoc., Urbana, Ill. (C. B. Ryan, Texas A & M College, College Station)

(See 18 May issue for comprehensive list)



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