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## THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

### PRELIMINARY ANNOUNCEMENT OF THE COLUMBUS, OHIO, MEETING

Edited by DR. F. R. MOULTON

PERMANENT SECRETARY

FROM next December 27 to January 2 the association and about 30 of its affiliated and associated societies will meet in Columbus, Ohio. This will be the one hundred fifth meeting of the association.

Columbus, the capital of Ohio, is a city of approximately 500,000 inhabitants situated near the center of the state and the center of population of the country. It is the seat of the Ohio State University, which has more than 17,000 students. Although the university has a campus of nearly 400 acres, most of its fifty buildings are within three miles of the business and hotel district of the city. A number of other state institutions and the Ohio Wesleyan University, located at Delaware only twenty-three miles distant, add to the large scientific population of the region. More-

over, Ohio is noted for having perhaps more colleges than any other equal area in the world.

#### REGISTRATION

Registration will be in the Civic Auditorium, which is only a few blocks from the Deshler-Wallick Hotel, the headquarters of the meeting. The Annual Science Exhibition and social center of the meeting will also be in the same building.

Each person registering will receive a General Program of the meeting and a badge of admission to the address of the retiring president and to other general sessions. The General Program contains the programs of all sections and societies and their places and times of meeting, a schedule of all general sessions, a list of

all symposia, a catalogue of exhibits in the annual science exhibition, a schedule of all dinners, luncheons, social functions and excursions, and an alphabetical list of all persons who present addresses, papers or exhibitions during the meeting. Since about 200 scientific sessions will be held, before which at least 1,600 addresses and papers will be presented, a well-organized general program is necessary for a person to make best use of the precious hours he will be among his fellow scientists in Columbus.

Although the registration fee is only \$1, there has been a tendency for the members of some affiliated societies to neglect to register at the meetings. With the growing complexity of science and the increasing importance of the inter-relations of science, scientists owe it to themselves, even from the most selfish point of view, to mingle widely with their fellow scientists. And quite apart from their own direct interests, they owe a heavier responsibility to our civilization than ever before. The British Association for the Advancement of Science requires a person to register before he may attend any sessions whatever of the meeting, and the registration fee is about \$10!

#### HOTELS AND HEADQUARTERS

*General Headquarters:* Deshler-Wallick Hotel.

Headquarters of the sections of the association and of the affiliated and associated societies meeting with the association in Columbus are as follows:

*Deshler-Wallick:* All sections of the association except G and O, American Physical Society, American Association of Physics Teachers, Sigma Pi Sigma, American Society of Zoologists, American Association of Economic Entomologists, Entomological Society of America, American Society of Parasitologists, American Society of Naturalists, American Microscopical Society, Metric Association, American Science Teachers Association, Society of the Sigma Xi, United Chapters of Phi Beta Kappa, Honor Society of Phi Kappa Phi and Pi Gamma Mu. Rates: with bath—single, \$3–\$7; double, \$5–\$10.

*Neil House:* Section on Botanical Sciences (G), Botanical Society of America, American Phytopathological Society, American Society of Plant Physiologists, Mycological Society of America, Sullivant Moss Society, American Fern Society, Genetics Society of America, National Association of Biology Teachers. Rates: with bath—single, \$3–\$5; double, \$4.50–\$7.

*Fort Hayes:* Section on Agriculture (O), Ecological Society of America, Limnological Society of America, Phi Sigma Society, American Society of Agronomy, Potato Association of America, Gamma Alpha Graduate Scientific Fraternity. Rates: with bath—single, \$2 and up; double, \$3.50 and up.

*Chittenden:* American Meteorological Society, Society for Research on Meteorites, American Nature

Study Society, History of Science Society, American Mathematical Society, Mathematical Association of America, National Council of Teachers of Mathematics. Rates: with bath—single, \$2.50–\$3; double, \$3.50–\$4.50; without bath—single, \$1.50–\$2.50; double, \$2.50–\$3.50.

#### OTHER HOTELS IN COLUMBUS

*Seneca:* Rates: with bath—single, \$2; double, \$3.50–\$6.

*Southern:* Rates: with bath—single, \$2.50–\$3; double, \$3.50–\$4.50; without bath—single, \$1.50–\$1.75; double, \$2.50–\$2.75.

*Virginia:* Rates: with bath—single, \$2 and up; double, \$3–\$4; without bath—single, \$1.50; double, \$2.50.

*Broad-Lincoln:* Rates: with bath—single, \$2 and up; double, \$3–\$4.50.

*Note:* The Deshler-Wallick Hotel has available large-capacity rooms with combination tub and shower and single beds; three persons in a room, \$2.50 per person per day; for four persons in a room, \$2 per person per day.

The mathematical societies, the American Society for Horticultural Science and Sigma Delta Epsilon Graduate Women's Scientific Fraternity have arranged for rooms in dormitory buildings on the campus of the Ohio State University. Information about these rooms will be contained in announcements from the societies named.

#### TRANSPORTATION

Columbus is at the almost exact geographical center of Ohio, and it is about 200 miles east of the center of population of the United States. Columbus may be reached conveniently by railroad, by airplane or by bus. Forty highways pass through Columbus, 15 divisions of five trunk-line railways serve the city, and there is airplane service on two lines.

Railway fares have been substantially reduced this year, both for one-way tickets and for round-trip tickets. Special fares will be in effect during the period of the meeting, information respecting which and time schedules may be obtained from local agents of transportation companies. At the present fares, round-trip railroad tickets to Columbus, exclusive of Pullman fares, from representative cities are as follows: Baltimore, \$28.25; Boston, \$44.70; Chicago, \$18.30; New York, \$35.40; Philadelphia, \$30.70; Washington, \$28.25; Atlanta, \$28.50; New Orleans, \$44.80; San Francisco, \$109.20.

#### OFFICIAL MEETINGS

*The Executive Committee* of the association, to which matters for the council are first submitted, will meet at 10:00 A.M. on Wednesday, December 27, in the

permanent secretary's rooms in the Deshler-Wallick Hotel, and thereafter as may be arranged. The council of the association will meet at 2:00 P.M. on Wednesday, December 27, in the Wallick Suite of the Deshler-Wallick Hotel and thereafter as may be arranged. The council will elect a president and other officers of the association at a meeting that will be held in the Wallick Suite at 9:00 A.M. on Saturday, December 30.

*The Academy Conference* will be held at 3:00 P.M. on Wednesday in the Wallick Suite of the Deshler-Wallick Hotel. The conference will be followed by a complimentary dinner to one representative of each affiliated academy and to designated representatives of the association.

*The Secretaries Conference* will be held at 9:15 on Friday evening in the Wallick Suite of the Deshler-Wallick Hotel. The secretaries of the sections of the association and of all affiliated and associated societies are invited to attend.

#### ANNUAL SCIENCE EXHIBITION

The annual science exhibition, which will be housed in the Civic Auditorium within five minutes' walk of the principal hotels, will include exhibits both of research laboratories and of manufacturers of scientific apparatus, equipment and supplies. In addition, the outstanding books on science published during 1939 will be on display and available for examination. Interesting and important scientific motion-picture films will be exhibited adjacent to the science exhibition.

#### SYMPOSIA AND JOINT SESSIONS

Recent meetings of the association have been distinguished by comprehensive symposia organized by the sections and cooperating societies. The Columbus meeting will maintain the high level of previous meetings. Among the symposia that promise to be of importance and wide interest are those on "Isotopes" and "Photosynthesis," organized by the Section on Chemistry; "Speciation," organized by the American Society of Zoologists, in cooperation with the Genetics Society of America; "The Relation of Ecology to Human Welfare," organized by the Ecological Society of America; "Defense Mechanisms in Plants and Animals," organized by the American Society of Naturalists; "The Internal Environment and Behavior," organized by the Section on Psychology; "Effects of Science upon Human Beings," organized by Alan Gregg for the Section on the Social and Economic Sciences; and "Blood, Heart and Circulation," organized by the Section on Medical Sciences. For a complete list of symposia and joint sessions consult the programs of the sections and societies which follow.

The association is publishing symposia that are "of such high order of scientific merit that it can not afford not to publish them." It has published several in the

field of public health on such subjects as "The Cancer Problem," "Tuberculosis and Leprosy," "Syphilis" and "Mental Health," with "The Gonococcus and Gonococcal Infection" now in press. Each of these symposia has added to the value and prestige of the previous ones, and the officers of the association look with satisfaction on others to follow on such subjects as "Blood, Heart and Circulation" (the Columbus Meeting) and "Malaria" (the Philadelphia Meeting). It is desired that other sections and societies, especially those in the broad fields of biology, will even more vigorously than in the past formulate plans for series of symposia of the highest character in respect to organization, participants, character of contributed papers and comprehensiveness with the hope that they will be published by the association. The success of the symposium on "Problems of Lake Biology" (now in press), organized by the Limnological Society of America, is a promise of the welcome that they will receive. In organizing, presenting and publishing such symposia, the societies concerned and the association will fulfil their primary purposes.

#### GENERAL SESSIONS

All evening general sessions will be held at 8:15 in Memorial Hall, which has a seating capacity of 3,500 persons. The places at which other general sessions will be held are stated in connection with their announcement.

*Wednesday evening, December 27.* Dr. Wesley C. Mitchell, of Columbia University, will deliver an address as retiring president of the association on "The Public Relations of Science."

*Thursday evening, December 28.* The annual address under the joint sponsorship of the association and the Society of the Sigma Xi will be delivered by Dr. Kirtley F. Mather, of Harvard University, on "The Future of Man as an Inhabitant of the Earth."

*Friday, December 29.* At 4:30 P.M. Dr. Julian Huxley, of London, England, will deliver the first address in America under the arrangement with the British Association for the Advancement of Science for exchange lectures on alternate years. His address, on "Science, War and Reconstruction," will be delivered in the Chapel in University Hall.

*Friday evening, December 29.* The annual address under the auspices of the United Chapters of Phi Beta Kappa will be delivered by Dean Marjorie Nicolson, of Smith College, on "Science and Literature."

#### BREAKFASTS, LUNCHEONS AND DINNERS

*Wednesday, December 27*

*Luncheon:* American Meteorological Society.

*Dinners:* Section on Chemistry. Ecological Society of America.

*Thursday, December 28*

*Luncheons:* Gamma Alpha. Sigma Delta Epsilon.

*Dinners:* American Mathematical Society and The Mathematical Association of America. Section on Chemistry. American Association of Economic Entomologists and The Entomological Society of America. The American Phytopathological Society. American Society of Plant Physiologists. Joint dinner by Section on Psychology and Section on Education. Biologists' Smoker.

*Friday, December 29*

*Breakfasts:* Phi Kappa Phi. Sigma Delta Epsilon.

*Luncheons:* American Astronomical Society. American Society of Parasitologists. Genetics Society of America. American Nature Study Society. Pi Gamma Mu. Sigma Pi Sigma.

*Dinners:* American Astronomical Society. American Society of Zoologists. Section on Teaching of American Association of Economic Entomologists. The Botanical Society of America and all botanists. National Association of Biology Teachers. American Society for Horticultural Science.

*Saturday, December 30*

*Luncheon:* Subsection on Dentistry.

*Dinners:* American Society of Naturalists. Phi Sigma Society.

## SECTION AND SOCIETY PROGRAMS

*Section on Mathematics and Affiliated Societies.* On Thursday morning the section will hold a joint session with the American Mathematical Society, at which J. R. Kline, retiring chairman of the section and vice-president of the association, will deliver an address on "The Jordan Curve Theorem." On Thursday evening the Section on Mathematics, the American Mathematical Society and The Mathematical Association of America will hold a joint dinner. On Friday morning the Section on Mathematics, the Section on Geology and Geography and the American Mathematical Society will hold a joint session on "Applications of Mathematics to Geological and Geophysical Problems."

The American Mathematical Society will hold a session on Thursday afternoon, before which D. H. Lehmer will deliver an invited address on "The Applications of Bernoulli Polynomials to Some Problems in Diophantine Analysis."

On Wednesday afternoon at 4:30 the J. Willard Gibbs annual lecture will be delivered by Theodor von Kármán on "Grapppling with Non-linear Problems."

The Mathematical Association of America will hold sessions on Friday afternoon and Saturday morning, with addresses by W. B. Carver and T. C. Frye on "The New Mathematical Reviews." Papers will also be presented by Henry Blumberg, Saunders MacLane, G. T. Whyburn and E. F. Beckenbach. On Friday afternoon the Mathematical Association of America and the National Council of Teachers of Mathematics

will hold a joint session for discussing subjects of common interest.

*Section on Physics and Affiliated Societies.* On Friday afternoon the section will hold a joint session with the American Physical Society and the American Association of Physics Teachers at which Herbert E. Ives, retiring chairman of the association, and John T. Tate, president of the American Physical Society, will deliver addresses.

The American Physical Society will hold its forty-first annual meeting (its 232d regular meeting) from Thursday to Saturday, inclusive. The society and the American Association of Physics Teachers will hold a joint dinner on Friday evening.

The American Association of Physics Teachers will hold sessions from Wednesday to Friday, inclusive. The American Meteorological Society will hold sessions on Wednesday and Thursday, the principal feature of which will be a program on "Rainfall and Evaporation in Relation to Run-off and Floods." A luncheon of the society will be held on Wednesday. The honorary society in physics, Sigma Pi Sigma, will hold a luncheon on Friday.

*The Section on Chemistry.* The section will hold sessions all day Wednesday and Thursday and on Friday morning, and will have its annual dinner on Wednesday evening in honor of the retiring vice-president of the section, Harold C. Urey, to which all friends of Dr. Urey are invited. On Thursday evening there will be a dinner especially for those interested in the symposium on "Photosynthesis," following which there will be a round-table discussion of the papers presented at the symposium. It is requested that those planning to attend either or both of these dinners notify, previous to the meeting, Dr. A. B. Garrett, Ohio State University, Columbus. The program of the symposium on "Isotopes," which will be held on Wednesday, beginning at 9 A.M., is as follows:

## ISOTOPES

1. The Dependence of Physical and Chemical Properties on Mass, and the Separation of Isotopes. H. C. UREY.
2. The Nitrogen and Carbon Heavy Isotopes in Kinetic Research. H. S. TAYLOR.
3. The Electrical Separation of Isotopes in Quantity. LLOYD P. SMITH.
4. Measurement of Isotopic Abundances in the Heavy Elements. A. J. DEMPSTER.
5. Methods of Increasing the Efficiency in Thermal Separation of Isotopes. A. KEITH BREWER.
6. Thermal Separation of Isotopes. W. W. WATSON.
7. The Atomic Masses of the Lighter Isotopes. K. T. BAINBRIDGE.
8. Accurate Determinations of the Relative Abundances of Isotopes. A. O. C. NIER.

The program of the symposium on "Photosynthesis," which will be held on Thursday at 9 A.M., is as follows:

## PHOTOSYNTHESIS

1. Introductory remarks. CHARLES FRANKLIN KETTERING.
2. Induction and Related Phenomena. E. D. MCALISTER.
3. The Efficiency of Photosynthesis. FARRINGTON DANIELS.
4. The Absorption of Radiant Energy by Leaves. W. E. LOOMIS.
5. Relation of Photo-Oxidation to Solarization. J. E. MEYERS and G. O. BURR.
6. A brief review of Certain Investigations on Chlorophyll and Photosynthesis at the C. F. Kettering Laboratories. O. L. INMAN.
7. Factors Influencing the Apparent Efficiency of Photosynthesis. ROBERT EMERSON.
8. The Growth of Plants under Artificial Light. JOHN M. ARTHUR.
9. On the Purification of the Chlorophyll Components. F. P. ZSCHEILE.
10. Relative Amounts of Photosynthesis in the Yellow, Green, and Blue Mercury Lines. G. RICHARD BURNS.
11. Variations in the Daily Rate of Photosynthesis in Mature Apple Trees during Four Successive Seasons. A. J. HEINICKE.
12. A Contribution to the Theory of Photosynthesis. JAMES FRANCK.
13. Chlorophyll as the Prosthetic Group of a Protein in the Green Leaf. EMIL L. SMITH.
14. The Physico-Chemical Properties of Chlorophyll in their Relation to Photosynthesis. EUGEN RABINOWITCH.

On Friday at 9 A.M. a session will be held at which 12 papers on a variety of subjects will be presented.

*Section on Astronomy and Affiliated Societies.* The section and its affiliated societies will meet from Wednesday to Saturday, inclusive. The sessions on Wednesday will be held at the Ohio State University and those on Thursday and on Friday morning at the Ohio Wesleyan University, at Delaware. On Friday afternoon, at the Ohio State University, R. M. Stewart will deliver an address at a joint meeting of the section and the American Astronomical Society as retiring chairman of the section and vice-president of the association. On Saturday morning the section will hold a joint session with the Society for Research on Meteorites. On Saturday and Sunday the Observatory of the Ohio Wesleyan University will be host to members and guests of the A. A. A. S. irrespective of their section affiliations.

*Section on Geology and Geography and Affiliated Societies.* The section and the Geological Society of America, in collaboration with the Section on Geology of the Ohio Academy of Science, will hold eight sessions, before which approximately 50 papers will be presented, including two joint sessions, one with the Section on Mathematics and one with the Section on Astronomy and The Society for Research on Meteor-

ites. The general topic of the papers which will be presented on Wednesday morning is "Geomorphic and Glacial Problems on the Appalachian West Slope." On Wednesday afternoon Walter H. Bucher will deliver his address as retiring chairman of the section and vice-president of the association on "Problems of the North Atlantic Ocean." Dr. Bucher's address will be followed by a session for the presentation of papers on "The Non-Metallic Mineral Industry." The topic which will be discussed on Thursday morning is "Methods and Problems in the Teaching of Elementary Geology." On Thursday afternoon the subject for discussion is "Current Research in the Paleozoic Stratigraphy of the Ohio Basin." On Friday morning the section will hold a joint session with the Section on Mathematics and The Mathematical Society of America on "Applications of Mathematics in the Earth's Sciences." At the same time a joint session will be held with the Society for Research on Meteorites on "Meteorite Falls and the Rate of Accretion." The subject for discussion on Friday afternoon is "Hydrologic Problems in the Ohio and Michigan Basins." Among the speakers representing the section in the joint sessions are Walter D. Lambert, Lachlan Gilchrist, M. M. Slotnick, Archie Blake and Fletcher Watson.

*Section on Zoological Sciences and Affiliated Societies.* No section has stronger or more active affiliated societies than has Section F. Consequently, in order to serve most effectively the interests of zoology, the section gives way to the American Society of Zoologists, the Entomological Society of America, the American Association of Economic Entomologists and the American Society of Parasitologists in organizing programs in the field of the zoological sciences.

The American Society of Zoologists will hold sessions on Thursday, Friday and Saturday, at which approximately 300 papers will be presented. On Thursday afternoon the society will join with the Genetics Society of America in the presentation of a symposium on "Speciation," organized by Th. Dobzhansky, at which papers will be presented by Sewall Wright, E. M. Mayr, L. R. Dice, Warren P. Spencer and Th. Dobzhansky. On Friday morning the society will present a symposium on "Experimental Study of Cellular Organization," at which Robert Chambers, L. V. Heilbrunn, Daniel Mazia, M. H. Jacobs and Francis O. Schmitt will present papers. On Saturday afternoon the society will join with the American Society of Naturalists in sponsoring a symposium, organized by W. H. Taliaferro, on "Defense Mechanisms in Plants and Animals," at which papers will be presented by F. W. Went, W. C. Price and William Bloom. On Thursday evening, at 9 o'clock, the society will join with the American Society of

Naturalists and the members of other biological societies in the Biologists' Smoker. The annual dinner of the society, to which all zoologists and friends are invited, will be held on Friday evening, at which Wesley R. Coe, retiring chairman of the section and vice-president of the association, will deliver an address on "Divergent Pathways in Functional Development."

The Entomological Society of America will hold its thirty-fourth annual meeting on Wednesday, Thursday and Friday. On Wednesday afternoon the society will join with the American Association of Economic Entomologists in a symposium on "Fifty Years of Entomological Progress." On Thursday morning the society will hold a joint session with the Ecological Society of America, at which the papers will be devoted to insect ecology. The annual public address of the society will be delivered by A. Avinoff on "Adventures of a Lepidopterist in Jamaica," which will be illustrated by colored motion pictures and Kodachrome slides. On Thursday evening the society will join with the American Association of Economic Entomologists in the Entomologists' dinner. The other sessions of the society on Wednesday morning, Thursday afternoon and Friday will be devoted to papers by members of the society in the general field of entomology.

The American Association of Economic Entomologists will hold sessions from Wednesday to Saturday, inclusive, at which a total of 112 papers will be presented. In celebration of the fiftieth anniversary of the founding of the society, a symposium will be held jointly with the Entomological Society of America on "Fifty Years of Entomological Progress," with Herbert Osborn presiding. Papers will be presented on this program, each devoted to a period of ten years, by C. L. Marlatt, Lawson Caesar, C. L. Metcalf, E. O. Essig and S. A. Rohwer. The presidential address of the society will be delivered by E. R. Sasser on "Undesirable Insect Aliens." The banquet of the society will be held on Thursday evening. On Friday morning the society will hold a joint symposium with the Section on Plant Quarantine and Inspection of the American Association of Economic Entomologists and the American Phytopathological Society on "Viruses and Plant Quarantine." On Friday evening the society's Section on Teaching will hold a dinner at the Southern Hotel, followed by a session at the Deshler-Wallick Hotel.

The American Society of Parasitologists will hold sessions on Thursday, Friday and Saturday, at which 77 papers and demonstrations will be presented, this being the largest program in the history of the society. At the sessions on Friday afternoon 33 papers will be presented on a demonstration program representing all fields of parasitology. On Thursday afternoon Cornelius B. Philip, United States Public Health Service, will show a thirty-minute colored motion-picture film

on "How Rocky Mountain Spotted Fever Vaccine Is Prepared and Used." On Friday morning Horace W. Stunkard, president of the society, will deliver an address on "Life History Studies and the Development of Parasitology." On Friday at 12 o'clock a parasitologist luncheon will be held in Pomerene Hall of the Ohio State University, following which the society will hold its annual business meeting.

*Section on Botanical Sciences and its Affiliated Societies.* The section and its affiliated societies will meet from Thursday to Saturday, inclusive. On Thursday at 2 P.M. Raymond J. Pool, retiring chairman of the section and vice-president of the association, will deliver an address on "White Man versus the Prairie." This address will be followed by a paper on "Problems in Breeding for Disease Resistance," by Donald Reddick, another on "Recent Investigations in the Cytogenetics of Maize," by Barbara McClintock, and one on "The Communal Nature of the Fruiting Process in the Acrasieae," by Kenneth B. Raper.

The Botanical Society of America will hold meetings of its General, Paleobotanical, Systematic and Physiological sections on Thursday, Friday and Saturday mornings. On Thursday afternoon the society will hold a joint session with the other botanical societies. On Friday afternoon the Physiological Section of the society will hold a joint session with the American Society for Horticultural Science and the American Society of Plant Physiologists. Also on Friday afternoon, the General Section of the society will hold a joint session with the Ecological Society of America. On Friday evening the society will join in its annual dinner for all botanists, at which Arthur J. Eames, retiring president of the society, will deliver an address. On Saturday afternoon the society will join in the symposium on "Defense Mechanisms in Plants and Animals" organized by the American Society of Naturalists.

The American Phytopathological Society will hold its thirty-first annual meeting from Wednesday to Saturday, inclusive, at which approximately 120 papers will be presented. The first session of the society will be held on Wednesday afternoon. Among the papers presented at this session will be one on "The Influence of Ultraviolet Irradiation on the Pathogenicity of *Phytophthora tumefaciens*" by B. M. Duggar and A. J. Riker. On Wednesday evening at 7:15 the society will hold a "Plant Disease Survey," and at 8:15 P.M. a second conference on "The Resistance of Plants to Diseases," the latter under the chairmanship of E. C. Stakman. On Thursday morning three sectional meetings of the society will be held, one on "Diseases of Fruits," another on "Diseases of Small Grain Crops," and the third on "Diseases of Southern and Miscellaneous Crops." On Thursday afternoon the society will hold a joint session with the

Section on Botanical Sciences and its other affiliated societies. Also on Thursday afternoon the Extension Plant Pathologists will hold a conference on "Fire Blight of Apple and Pear." On Thursday evening the society will hold its annual dinner at 6:30 o'clock in the Neil House. On Friday morning the society will hold a joint session with the American Association of Economic Entomologists. Also on Friday morning the society will hold three sectional meetings, one on "Virus and Tobacco Diseases," the second on "Diseases of Vegetables," and the third on "Fungicides and Diseases of Cherries." On Friday afternoon the society will hold a round-table conference on "Laboratory Testing of Fungicides," during which such subjects as standardization of the fungus and factors involved in deposition of sprays will be considered. On Friday evening a conference will be held on "Eradicant Fungicides," with reports on old and new eradicator fungicides by G. W. Keitt, H. W. Anderson, R. C. Baines and E. E. Wilson. On Saturday morning the society will hold a joint session with the Potato Association of America. Also on Saturday morning the society will hold a joint session with the Floriculture Section of the American Society for Horticultural Science on "The Diseases of Ornamental Plants." A third joint session will be held on Saturday morning with the Mycological Society of America. A fourth joint session will be held on Saturday morning with the Society of American Foresters on "The Diseases of Trees." On Saturday afternoon the society will hold a joint session with the Physiological Section of the Botanical Society of America and the American Society of Plant Physiologists on "Cotton Diseases and the Relation of Physiology to Disease." Two distinguished foreign scientists will appear on the program of the society, Dr. Jean Dufrenoy, of Corrèze, France, and Dr. A. A. Bitancourt, of São Paulo, Brazil. Special attention is called to the fact that the society has made arrangements for a display of phytopathological exhibit material during the meetings. Pathologists who desire to exhibit material are requested to communicate with Dr. A. L. Pierstorff, Ohio State University.

The American Society of Plant Physiologists will hold sessions from Thursday to Saturday, inclusive. On Thursday afternoon the society will hold a joint session with the Section on Botanical Sciences, the Botanical Society of America and the American Phytopathological Society. On Thursday evening the society will hold its annual dinner at which the presidential address will be delivered by W. F. Loehwing and the Charles Reid Barnes life membership award will be announced. On Friday morning the society will hold a session for the presentation of papers and on Friday afternoon a joint symposium with the American Society for Horticultural Science on "Physiological Processes of Plants in Relation to Temperature." On

Friday evening the society will join in the dinner for all botanists. Following the dinner a symposium will be held under the chairmanship of O. F. Curtis on "The Teaching of Plant Physiology." On Saturday morning a session will be held for the presentation of general papers. On Saturday afternoon the session will be held in two sections, the second of which will be a joint symposium with the American Phytopathological Society and the Physiological Section of the Botanical Society of America on "Cotton."

The Mycological Society of America will meet from Thursday to Saturday, inclusive. On Thursday morning the address of the retiring president of the society will be delivered, following which will be a regular program, including papers on new fungi from the northwest and Bermuda, fungi parasitic on man, fungi parasitic on plants, and several papers on morphology, physiology and genetics of fungi. On Thursday afternoon the society will hold a joint meeting with the Section on Botanical Sciences, and on Saturday morning it will present a joint program with the American Phytopathological Society.

The American Fern Society will hold its annual meeting on Saturday morning, at which Robert T. Clausen, president of the society, will deliver an address.

*Societies Affiliated with the Sections on Zoological Sciences and Botanical Sciences.* The American Society of Naturalists will hold its fifty-seventh annual meeting on Thursday afternoon, at which, in cooperation with the American Society of Zoologists, the Botanical Society of America and the Genetics Society of America, it will present a symposium on "Defense Mechanisms in Plants and Animals." The program consists of three formal papers; "Local Reactions in Plants," by F. W. Went; "Generalized Reactions in Plants," by W. C. Price; and "Local and Generalized Reactions in Animals," by William Bloom. The annual business meeting will follow the symposium, and the Naturalists' Dinner will be held at 6:30 in the evening, at which the presidential address will be delivered by Ivey F. Lewis on "Cell Reactions."

*The Ecological Society of America* will meet from Wednesday to Saturday, inclusive. The program for Wednesday morning consists of a business meeting and a general session for animal ecologists. On Wednesday afternoon the society will present a symposium on "The Relation of Ecology to Human Welfare," Charles C. Adams presiding. The participants in the symposium are Homer L. Shantz, C. W. Thornthwaite, Benton MacKaye, Robert E. Park, A. B. Hollingshead and E. C. Lindeman. The society will hold a banquet on Wednesday evening, at which the retiring president, Charles T. Vorhies, and A. H. Wright will speak. On Thursday morning the society will hold a joint session with the Entomological Society of America and also a

general session for animal ecologists. On Thursday afternoon, in addition to a session on animal ecology, there will be a meeting, at 4 o'clock, of the Committee on the Preservation of Natural Conditions. On Friday morning the society will hold a general session, a joint session with the Botanical Society of America and a joint session with the Limnological Society of America.

The American Microscopical Society will hold its fifty-eighth annual meeting on Thursday afternoon. The formal session will consist of a meeting of the executive committee, followed by the annual meeting of the society.

The Genetics Society of America will meet from Thursday to Saturday, inclusive. On Thursday it will join the American Society of Zoologists in a symposium on "Speciation," and on Saturday it will join the American Society of Naturalists and other societies in a symposium on "Defense Mechanisms in Plants and Animals." On Friday the society will present an invitation program at which the speakers will be Karl Sax, L. C. Dunn, M. R. Irwin, M. Gordon and B. P. Kaufman.

The Limnological Society of America will hold its fifth annual meeting on Thursday to Saturday, inclusive. It is planned to have at least three half-day sessions for the presentation of papers. On Friday forenoon the society will hold a joint meeting with the Ecological Society of America and will provide about one half the program.

Phi Sigma Society will hold sessions on Friday and Saturday. The speakers on the scientific programs will be student members of the society. A banquet will be held on Saturday evening, at which Paul B. Sears will deliver an address on "The Scientist as a Citizen."

The National Association of Biology Teachers will meet on Friday, both morning and afternoon, and will hold a dinner in the evening.

*The Section on Anthropology* will hold a one-day session on Wednesday at the Museum of the Ohio State Archaeological and Historical Society. Papers will center on the theme of the North American Indians and their archeological cultures. The address of the retiring chairman of the section, Diamond Jenness, will be on "Canada's Indian Problems." Section members will be shown the Museum by Director H. C. Shetrone and will inspect the recently established Lithic Laboratory. At the conclusion of the sessions adjournment will be to the Chicago meeting of the American Anthropological Association.

*The Section on Psychology* will hold sessions from Wednesday to Friday, inclusive. Besides several sessions for the presentation of general papers, there will be a symposium on Thursday morning on "The Internal Environment and Behavior," under the chairmanship of Ross A. McFarland. In this symposium,

the effect of changes in the blood stream on the brain and consequent alterations in behavior will be discussed. Special emphasis will be given to the effect of alterations in temperature, oxygen, blood sugar and the endocrines. Also on Thursday, there will be a joint session with the Section on Education and a joint dinner with the same section, at which J. F. Dashiell will speak on "A Neglected Fourth Dimension to Psychological Research."

*The Program of the Section on the Social and Economic Sciences* will consist of three parts, a session on Friday under the chairmanship of Alan Gregg, a conference under the sponsorship of the American Association of Scientific Workers on "Science and the Public," and a luncheon by Pi Gamma Mu on Wednesday, at which officers of the association will speak.

*The Program of the Section on Engineering* will consist in part of a session by the Institute of Radio Engineers.

*The Section on Medical Sciences* will present a program, consisting of six sessions for the presentation of a symposium, on "Blood, Heart and Circulation," and a joint session with the biological societies sponsoring the symposium on "Defense Mechanisms in Plants and Animals." The subjects of the six divisions of the symposium on "Blood, Heart and Circulation" are: "Blood"; "The Physiology of Coronary Blood Flow"; "Pathology of the Coronary Circulation"; "Cardiac Failure"; "Hypertension," and "Heart and Circulation in Special Territories." On Thursday morning the address of Carl J. Wiggers, retiring chairman of the section and vice-president of the association, will be delivered on "Pathways of Natural Progress." On Thursday afternoon the Theobald Smith Award in Medicine will be presented to Albert B. Sabin by Walter B. Cannon, president of the association, following which Dr. Sabin will deliver an address entitled "Constitutional Barriers to Involvement of the Nervous System by Certain Viruses."

*The Subsection on Pharmacy of the Section on Medical Sciences* will hold a session on Wednesday morning at which five papers will be presented, and another on Wednesday afternoon at which four papers will be presented. The papers for the morning program are: "The Chemistry of the Viburnums," by Justin L. Powers; "Methenamine Mandelate: Preparation, Toxicity, and Antiseptic Value," by Glenn L. Jenkins; "The Bioassay of Aconite," by B. V. Christensen and J. W. Nelson; "The Use of Oral Vaccine in the Prophylaxis of the Common Cold," by Leonard J. Piccoli; and "Solanum Carolinense," by R. L. Murray. The papers for the afternoon session are: "A Method for the Determination of Peptic Activity," by Carl J. Klemme and Lee F. Worrell; "Employee Predictive Tests," by C. M. Brown; "The Pharmacology of Soaps," by Leroy D. Edwards; and "A Criterion for Distinguishing be-



tween Virgin and Parous Animals," by Richard A. Deno.

*The Subsection on Dentistry of the Section on Medical Sciences* will hold a session on Thursday, at which papers will be presented on "Definite Oral Manifestations in Systemic Disease," by Lester Cahn, T. J. Cook, T. R. Blayney, Norman Topping, George Stein, W. N. Taylor and Bruce Wiseman.

*The American Society for Horticultural Science* will hold its meetings from Thursday to Saturday, inclusive. On Thursday afternoon the Vegetable Crop Section of the society will hold a joint session with the Potato Association of America. On Friday afternoon the society will hold a joint session with the American Society of Plant Physiologists, the Physiology Section of the Botanical Society of America, and the American Society for Horticultural Science on "Effects of Temperature on Absorption, Growth and Reproduction in Plants." On Saturday morning the Floriculture and Ornamental Horticulture Section of the society will hold a joint session with the American Phytopathological Society. On Saturday afternoon the society will hold a joint session with the Section on Agriculture and the Society of American Foresters, at which R. M. Salter, retiring chairman of the Section on Agriculture and vice-president of the association, will deliver an address on "Some Soil Factors Affecting Free Growth," following which there will be a symposium on "Problems of Fruit, Shade and Forest Trees." In addition to the program of 294 papers, the largest number in the history of the society, there will be four round-table discussions on Thursday evening on the following subjects: "Fruit Varieties and Nomenclature," "Extension Work," "Educational Methods" and "Vegetable Variety Types." At the banquet and social evening on Friday the retiring president, V. R. Boswell, will deliver an address on "Performance and Attitude of the Individual in Relation to Research Accomplishment."

The Potato Association of America will hold sessions on Thursday, Friday and Saturday. On Thursday afternoon the program will consist of a joint discussion with the American Society for Horticultural Science. On Saturday morning a joint session with the American Phytopathological Society will consider such topics as irrigation, grading and packaging, internal quality,

crop reporting, bacterial ring rot and breeding for disease resistance.

#### OTHER PROGRAMS

*The Society of the Sigma Xi* will hold its fortieth annual convention at 4 P.M. on Thursday afternoon. The eighteenth annual lecture, given under the joint auspices of the association and the society, will be delivered by Kirtley F. Mather, of Harvard University, on "The Future of Man as an Inhabitant of the Earth."

*The United Chapters of Phi Beta Kappa* on Friday evening will present the fifth of its series of lectures at annual meetings of the association. Dean Marjorie Nicolson, of Smith College, will deliver an address on "Science and Literature."

*The Graduate Scientific Fraternity, Gamma Alpha*, will hold its annual meeting on Thursday, including a luncheon at the Hotel Fort Hayes.

*The Honor Society of Phi Kappa Phi* will hold business meetings on Thursday and Friday mornings, present a lecture open to the public on Thursday afternoon, and unite at a breakfast on Friday morning.

*The Graduate Women's Scientific Fraternity, Sigma Delta Epsilon*, will meet on Wednesday, Thursday and Friday. On Wednesday afternoon the society will hold a business meeting. On Thursday a luncheon will be held for all women in science, at which Dr. Marie J. Weiss will deliver an address on "Genius and Youth in Mathematics." The annual breakfast of the society will be held on Friday morning, following which the annual convention of the society will be held.

*The American Nature Study Society* will hold meetings on Thursday, Friday and Saturday. On Thursday the society will meet jointly with the American Science Teachers Association; on Friday it will be host to the American Science Teachers Association in a program which will emphasize the place of nature study in the community, children's museums, teacher's colleges, the public press, conservation and the wildlife program. A broadcast will be demonstrated. The society will hold a luncheon on Friday noon. The Saturday program will be devoted to specific school problems, nature study work in state parks and a discussion of the contributions of affiliated chapters.

*The American Science Teachers Association* will meet on Thursday and jointly with the American Nature Study Society on Friday.

## SCIENTIFIC EVENTS

### THE PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

IN the various actions of the House of Delegates during the special session held in Chicago in September last year, and again at the meeting in St. Louis, according to the *Journal* of the association, certain con-

structive proposals were made which had the full approval of the House of Delegates. Now the Board of Trustees has formulated these concepts into a constructive platform. This platform is set up as a guide to indicate the trend which the American Medical Association believes should be followed in the develop-