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## THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

### PRELIMINARY ANNOUNCEMENT OF THE ROCHESTER MEETING

Edited by Dr. HENRY B. WARD

PERMANENT SECRETARY

ROCHESTER, NEW YORK, is to welcome the association on Tuesday, June 16, 1936, for a three-day session, terminating there on Thursday evening, June 18, when the association adjourns to convene again the following day in Ithaca for the remainder of the summer meeting. This unusual arrangement was entered into because of the semi-centennial of Sigma Xi, which had invited the association to designate this event as an integral part of the summer meeting for 1936. This is the ninety-eighth meeting of the association and the second to be held in Rochester, for the forty-first meeting in August, 1892, was in the same city. It is also the second to be held at Ithaca, as the fifty-sixth meeting was held there in June, 1906.

The first meeting in Rochester was held in August, 1892, and was the forty-first in the record of the association. On that occasion three famous geologists are listed among the officers of the meeting: Professor Joseph Le Conte, of the University of California, was president of the association; among the vice-presidents was Professor H. S. Williams, of Cornell, often spoken of as the founder of Sigma Xi, and Professor H. L. Fairchild served as local secretary. For the coming meeting Professor Fairchild has been given the place of honorary chairman; Professor J. Edward Hoffmeister is chairman, Dr. W. R. Line, secretary, and R. L. Thompson, treasurer. On the general committee some thirty members of the faculty of the University

of Rochester and leaders in civic life of the city are organized in various subcommittees to perfect arrangements for the activities of the meeting.

#### THE ROCHESTER REGION

*(Material furnished by the Local Committee)*

The city of Rochester, with a population of about 400,000, is located at the falls of the Genesee River, extending along its banks for about ten miles to its mouth on Lake Ontario. It is in many ways an ideal location for a summer meeting because of its normally mild summer climate and its location within easy reach of the Lake Ontario beaches, the famous Finger Lake region, and other points of scenic interest, such as Niagara Falls and the Letchworth State Park.

Within the city the visitor will find many points of interest. One of the chief of these is the Genesee River, which at the south end of the city crosses the New York State Barge Canal. A barge channel is maintained along the river to the center of the city at the Court Street dam. At this point the river enters a rocky bed, passes over five waterfalls, then flows in a deep gorge through the northern part of the city to its mouth on Lake Ontario. Two city parks, Maplewood Park and Seneca Park, are maintained on opposing banks of this gorge, connected by the beautiful Veterans Memorial Bridge spanning the gorge 200 feet above the river. At the mouth of the river is located Ontario Beach Park with a fine public bathing beach. Further east on the lake shore is located Durand Eastman Park with a bathing beach and public golf course. There are many other city parks, some of which have noted floral displays. Highland Park, a few minutes' drive from the University River Campus, contains 3,900 varieties of trees, shrubs and perennials, including an unusual display of lilaes, peonies, azaleas and other flowers. Genesee Valley Park, located on the Genesee River adjacent to the River Campus, is equipped with a public golf course, playgrounds and picnic sites.

Industrially the city of Rochester is of unique interest to scientists, being the home of the Eastman Kodak Company, the Bausch and Lomb Optical Company, Taylor Instrument Companies, the Ward Natural Science Museum, the Stromberg Carlson Radio Company and other scientific centers. Excursions will be arranged to the factories and research laboratories of most of these companies.

Within easy reach of Rochester there are many points of unusual scenic and historic interest. To the south and west of Rochester lies the heart of the famous Finger Lakes region, less than an hour's drive from the city. This region contains six large lakes, varying from eleven to forty miles in length, together with numerous smaller lakes. These are surrounded

by a rugged wooded region, with many hills rising to an altitude of over 2,300 feet. There are nine state parks in this region, covering more than 5,000 acres and containing many gorges, waterfalls and other points of unusual scenic interest. There are 1,000 waterfalls in the region, one of them being over two hundred feet high. Visitors driving from Rochester to Ithaca will pass through the heart of this region and will find it worth their while to arrange a tour which will take them through Bristol Hills district, Watkins Glen, Taughannock Falls and other points.

Fifty miles south of Rochester, on the upper Genesee River, is located Letchworth State Park, containing some of the most notable waterfalls and river gorge scenery in eastern United States. The park contains many camping and picnic sites and a museum of Indian relics.

Many visitors will be interested to plan their trip in such a way as to include Niagara Falls and Buffalo, ninety miles west of Rochester, or the St. Lawrence district and the Thousand Islands, about one hundred and fifty miles to the northeast. The mountainous regions of southern New York State and northern Pennsylvania offer many attractions and tempting camping sites for the tourist on vacation. Complete information and road maps for visitors who are planning automobile tours may be obtained by writing to J. Allan Doyle, Rochester Convention Bureau.

#### THE UNIVERSITY OF ROCHESTER

The University of Rochester, which will be host to these meetings, is a non-denominational, privately endowed institution organized in 1850. As a result of generous gifts of the late George Eastman and of an extensive endowment campaign in 1920 the university has undertaken a considerable expansion of its activities since that time. It now consists of the College of Arts and Science, the Eastman School of Music and the School of Medicine and Dentistry. The College of Arts and Science is subdivided into a College for Men and a College for Women, with separate campuses. The old campus, located on University Avenue at Prince Street, now houses the College for Women and contains many fine buildings, both old and new, including a Memorial Art Gallery.

Most of the association section meetings will be held on the River Campus of the College for Men. This campus, which was first occupied in 1930, is located on a beautiful site overlooking the Genesee River and includes an exceptionally fine group of modern college buildings. Most of the science research laboratories are located on this campus, as well as the beautiful Rush Rhees Library. The men's dormitories, where some of the visitors may be housed, are located here, as well as Todd Union, where meals will be served.

The facilities of the new men's gymnasium and swimming pool will be available to visiting scientists. The research laboratories of the science departments will be open for inspection, and guides will be provided for those who wish to visit points of interest on the campus.

The School of Medicine occupies a new group of buildings located within five minutes' walk of the River Campus. These buildings were erected in 1924 at the time the Medical School was organized and contains some of the most modernly equipped medical research laboratories in the country. The Strong Memorial Hospital of the University of Rochester and the Rochester Municipal Hospital are included in the group. A number of the meetings of the Section on Medical Sciences will be held at the Medical School, where cafeteria service is also available.

The Eastman School of Music occupies a group of buildings in the downtown section, including the beautiful Eastman Theater, in which the general meetings which are open to the public will be held.

#### SIGMA XI SEMI-CENTENNIAL

On Friday morning members of the association and its associated societies will proceed to Ithaca, N. Y., in such manner as meets with personal approval. Railroad and bus service as well as private autos may be utilized. Full information will be available at registration desks, where a representative of the Sigma Xi Society will be in attendance. Those desiring to participate should make arrangements at an early date in order to insure the best service. Secretary Ellery, of Sigma Xi, writes, "It is the desire and hope of Sigma Xi that all members of the A. A. A. S. and associated societies will find it possible to attend the meetings and other events scheduled for Ithaca."

The American Association for the Advancement of Science will thus join the Society of Sigma Xi in celebrating at Cornell University on June 19 and 20 the fiftieth anniversary of the founding of the society. The program will be comprised of three sessions—Friday afternoon and evening, and Saturday forenoon.

The Friday afternoon program will include an address on "The Service of Sigma Xi in the Universities of the Future," by President Karl T. Compton, of the Massachusetts Institute of Technology. On Friday evening the Semi-Centennial address will be given by President Max Mason, of the Rockefeller Foundation, on "Science and the Rational Animal."

On Saturday morning, after presentation of the Semi-Centennial awards two addresses will be given, on "Accomplishments and Future of the Physical Sciences," by Dr. Willis R. Whitney, in charge of research of the General Electric Company, and "Accomplish-

ments and Future of the Biological Sciences," by Dr. Frank R. Lillie, president of the National Academy of Sciences and chairman of the National Research Council.

Two additional items in the celebration will be of especial interest to members of Sigma Xi. On the afternoon of June 19 there will be held a reception in honor of the surviving founders of Sigma Xi, to whom special invitations to attend the celebration have been sent. During the program on the morning of the 20th, there will be unveiled a tablet erected at Cornell University by the Society of Sigma Xi to commemorate the founding of the society. A large number of delegates from the several chapters and many invited guests will attend the celebration.

Cornell University has provided for the accommodation of guests by opening its residential halls. Requests for reservations should be sent at an early date to Professor C. C. Murdock, Department of Physics, Cornell University, Ithaca, N. Y. Meals will be served at Willard Straight Hall, the student union on the Cornell campus. The Cornell Chapter of Sigma Xi will present a complimentary buffet dinner to delegates and guests on the evening of June 19.

#### PRESS SERVICE

(From Austin H. Clark, Director)

Representatives of all sections of the press are co-operating with the association for the purpose of making known throughout the entire country, and also abroad, the proceedings of the Rochester meeting.

We who are occupied with science in this country receive our support directly or indirectly from the American public. Year by year the public is becoming increasingly interested in what we are doing. Their knowledge of what we are doing comes to them through the medium of the press. So it is incumbent upon the members of the association to provide the press with all the material it may wish to use.

All who will present papers or addresses at Rochester are requested to make sure that the Press Service is supplied with copies of their manuscripts as long in advance as possible. Two copies of each paper, each accompanied by an abstract, should be sent to the Press Service at Washington.

Manuscripts are made available for study by the representatives of the press as soon as received. The earlier they are received the more time there is to study them and to prepare full and accurate accounts of their contents. Early receipt of manuscripts is of great benefit and advantage to all concerned—especially the authors.

The Press Service is for your benefit, as well as for the benefit of the association and of science as a whole. Its success depends upon your cooperation.

## HEADQUARTERS AND REGISTRATION

General headquarters for the meeting and the main registration office will be in the Museum, Dewey Building, River Campus, University of Rochester. This building is readily reached from other buildings on the campus and will be a convenient gathering place for members attending the meeting. The office of the permanent secretary will also be located in this building. A branch registration office will be in operation in the main lobby of Strong Memorial Hospital, where sessions of societies related to medical sciences will be held. Officers of the association will be quartered in the Hotel Seneca, which will be the hotel headquarters. Further information regarding hotels and other living quarters in Rochester will be found in *SCIENCE* for April 17, 1936. Mail, telegrams, etc., may if desired be addressed to Registration Headquarters, A. A. A. S., Dewey Building, River Campus, University of Rochester.

Registration will be open upon payment of a fee of \$1.00 to all persons who are interested in the advance of science and education. Each registrant receives a copy of the program, identification card and badge. Registration will be necessary for attendance upon the general reception, participation in excursions and other events.

For the convenience of those arriving early, a registration desk will be in operation in the Hotel Seneca on Monday afternoon from 2:00 to 5:00 o'clock. The registration offices on River Campus will be open at 9:00 A. M., on Tuesday, and will remain in operation throughout the period of the meeting.

## TRANSPORTATION

No arrangements will be made for reduced railroad rates on the convention plan. This is due in part to the confused situation in connection with the proposed reduction of the regular rates now being considered by a number of the Eastern railroads. It is therefore advisable for all who are planning to attend the Rochester meeting to consult their local ticket agent for information regarding the possibility of summer excursion fares and other reduced rates. Members are urged to bear in mind the Semi-Centennial celebration of the Society of the Sigma Xi and if possible to have their tickets routed through Ithaca with stop-over for this event after the sessions at Rochester.

## GENERAL SESSIONS

The evening general sessions will be held in the Eastman Theater, which is located down town within easy reach of the hotels. It is a finely equipped and beautiful music hall and motion picture theater, seating over 3,000 people and admirably adapted for the larger audiences of the general sessions and for the reception on Wednesday evening.

Dr. C. E. K. Mees, director of research, Eastman Kodak Company, has consented to address the general session on Tuesday evening on "Color Photography." The lecture will be illustrated with both lantern slides and motion pictures, demonstrating the most recent developments in the use of color in this field.

The Maiben Lecture for 1936 will be given on Wednesday evening by Dr. Charles Camsell, deputy minister of mines for the Dominion of Canada. Dr. Camsell has been for many years a leader in scientific work; he is a former president of the Royal Society of Canada, well known by his geological researches and writings and welcomed at scientific conferences at home and abroad. The lecture will be an illustrated address on a four-thousand-mile flight over northwestern Canada that Dr. Camsell made in August, 1935. The important observations made at that time were mainly geographical and concern the northern termination of the Rocky Mountain system. The address, while non-technical in character, contains new and significant data on a cross-section of the Canadian Cordillera. The speaker is well known in our sister nation as a leader in research and in public address.

Dr. Carl Snyder, who was retiring vice-president last year of the Section on Social and Economic Sciences, was prevented by illness from presenting his address at Saint Louis. He has been for many years statistician of the Federal Reserve Bank of New York and was formerly president of the American Statistical Association. His address as retiring vice-president will be given on Thursday evening on the subject "The Rôle of Capitalism in Civilization."

The Ecological Society of America is sponsoring the general symposium for the Rochester meeting on the topic, "Scientific Aspects of Flood Control." This will be covered by speakers on three general headings which indicate the chief aspects of the problem: "Forestry in Relation to Flood Control"; "Land Use in Relation to Flood Control"; "Engineering in Relation to Flood Control." Men of scientific standing and national repute will discuss the question, but it is not possible to announce names of speakers at this date.

The general subject constitutes one of the most pressing problems in the field of conservation and touches the field of ecology and different sections of the association at many points. In the light of recent events the subject has special significance for the country at the present time. Both the scientifically trained public and those who are not technically informed are deeply concerned in ascertaining the facts in the case, in learning what has been done to solve the problem and what further measures must be undertaken to prevent future disasters. The symposia will be held in the Strong Auditorium on the River Campus on Thursday afternoon at 3.

Various societies and sections have adjusted their

programs to avoid conflicts and permit wide general participation in this consideration of a great public problem on a strictly scientific basis.

Last fall the Bausch and Lomb Optical Company of Rochester communicated to the executive committee that at about the time of the meeting in Rochester the 250,000th microscope would appear from their plant. They suggested that the association might like to cooperate in awarding the microscope to some investigator who had done outstanding work in one of the biological sciences. It was suggested that a committee be appointed to consider the selection of some living American scientist who had made an outstanding contribution for the welfare of mankind through the use of the microscope as a tool in his researches. The matter was discussed very fully by the executive committee, and it was voted to approve the general plan and incorporate the event in the program of the Rochester meeting. As a result of conferences and correspondence the subcommittee reported to the executive committee in April, recommending that the award of the microscope be made to Dr. F. G. Novy, of the University of Michigan, in view of the fundamental significance of the researches he had made. The report was approved and unanimously adopted.

The Bausch and Lomb Optical Company has invited the association to a complimentary luncheon at the Oak Hill Country Club on Thursday noon. It seemed appropriate to have the award presented to the recipient at that time. Dr. E. G. Conklin, the president of the association, will preside and will introduce Mr. Edward Bausch, who will make the presentation. Dr. Novy has consented to be present and to make a brief talk on some of the results of microscopic research which have been of specific significance for human welfare. Members and visitors will secure cards of admission at the time of registering in Rochester.

#### SOCIAL EVENTS

Following the Maiben Lecture on Wednesday evening, President Alan Valentine and the trustees of the University of Rochester will give an informal reception to visiting scientists in honor of the officers and members of the American Association.

The Section on Geology and Geography is planning a special luncheon on Wednesday, with short talks in recognition of the Centennial of the New York State Geological Survey.

On Wednesday evening a dinner for the bacteriologists is contemplated. Other groups are considering similar special luncheons or dinners, concerning which further information will be given in the printed program or can be obtained on registration in Rochester.

On Tuesday noon a luncheon meeting of the Section on Social and Economic Sciences will be held at the Rochester Chamber of Commerce. The speaker

will be Mr. Harper Sibley, president of the U. S. Chamber of Commerce; he will speak on "Individual Initiative versus Government Control in Community Organization."

#### EXCURSIONS, FIELD TRIPS AND DEMONSTRATIONS

The region about Rochester offers special attractions for field studies in natural history, and sections and societies are planning to take advantage of the opportunities offered. Many field trips are already organized in geology, botany and anthropology, and by various special groups. Precise data regarding these items, some of which are optional and some of which are necessarily limited to special groups or in number of participants, will be obtainable on registration in Rochester. The local committee has given special attention to organizing these trips and providing for their guidance. If the number and interest warrant, the Section on Anthropology will arrange a visit to a neighboring reservation of the Six Nations. The Association of Official Seed Analysts of North America will have excursions to trial grounds and seed establishments in the vicinity of Rochester.

The laboratories and plants of the chief industrial concerns in Rochester have arranged for visits and inspection of their facilities and products at different times during the meetings, so that individual groups may enjoy better opportunities than could be had through a single inspection by a larger body of visitors. This will also enable special society groups to give attention to those features of more particular interest in any industry. Registration for such trips will be arranged after arrival in Rochester.

Some exhibits and demonstrations are being planned by various societies and incorporated in their programs. Special notice should be given to exhibits in bacteriology by the department at the University of Rochester and to exhibits and demonstrations by the Rochester Section of the International Association for Dental Research, which are sponsored by both groups giving the dental program.

#### OFFICIAL NOTICES

The executive committee of the association will meet on Monday afternoon and evening and the council will hold its first session on Tuesday morning at 9. Later sessions will be held at the same hour on other days as decided. By rule all business is presented to the council through the executive committee. Members are requested to forward items for the council to the permanent secretary's office in Washington on or after June 10 to the Hotel Seneca, Rochester.

Full data regarding participants, time and place of various events and other details will be found in the official program of the meeting, which will be distributed to members on registration in Rochester.

SECTION MEETINGS AND SOCIETY  
PROGRAMS

The Section on Mathematics (A) will hold a session on Thursday. Among the speakers will be Professor Cassius J. Keyser, of Columbia University, on "The Rôle of Infinity in the Cosmology of Epicurus," and Professor Temple R. Hollcroft, of Wells College, on "Curves on Algebraic Surfaces."

The Section on Physics (B) has arranged three joint symposia. On Tuesday morning the symposium will be a joint one with the Section on Geology and Geography, on problems of common interest to physics and geology, mainly concerned with recent developments in radioactive age determinations and geothermal studies, with papers by Dr. R. D. Evans and Dr. W. D. Urry, of the Massachusetts Institute of Technology, and others to be announced. On Wednesday morning the symposium will be a joint meeting with the American Meteorological Society, on mass air analysis and its application in weather forecasting. It is expected that Dr. W. R. Gregg, of the U. S. Weather Bureau, Dr. H. C. Willett, of the Massachusetts Institute of Technology, and others will participate. The symposium should be of great interest to all those wishing to gain information concerning the new developments in weather forecasting based on the work of Professor Bjerknes, of Norway. The third symposium on Thursday morning will be on the subject of physiological effects of radiations. Among the speakers expected to participate are Dr. B. M. Duggar, of the University of Wisconsin, Dr. D. W. Bronk, of the University of Pennsylvania, and Dr. B. O'Brien, of the University of Rochester. Afternoon excursions will be arranged to the plants of the Eastman Kodak and Bausch and Lomb Optical Companies. During the meetings it is expected that a high altitude balloon will be released by Dr. L. F. Curtiss, of the National Bureau of Standards, in cooperation with the Institute of Optics of the University of Rochester. The balloon will be of a type recently developed at the Bureau of Standards and equipped for sending data to the ground on temperature and barometric pressure by radio signals. It is expected that it will carry photographic plates for the registration of high energy cosmic rays.

The American Meteorological Society plans to have meetings on Tuesday and Wednesday. Papers given on Tuesday morning will include one by Dr. K. O. Lange, of Harvard University, on "Radio Meteorography," and one on "The Solar Climate of Madison, Wisconsin," by Eric Miller. An outstanding feature of the program will be a lecture by Dr. Bradford Noyes, Jr., of the Taylor Instrument Companies, on thermometers. A trip to the laboratories of the Taylor Instrument Companies is planned for Tuesday afternoon. On Wednesday a joint symposium with the

Section on Physics will be held, on the subject of air mass analysis and its application in weather forecasting.

The Section on Chemistry (C) celebrates its fifty-fifth anniversary in Rochester, the city in which one of its founders and most active proponents formerly lived and worked. In 1873 at a meeting of the association being held in Newport, R. I., a group of chemists formed themselves into a committee, with Professor Samuel P. Lattimore, first professor of chemistry at the University of Rochester, as chairman, and asked permission of the officers of the association to form a subsection of chemistry within Section A. This was granted. The subsection developed so rapidly that by 1881 chemistry was made Section C of the association. The action of the committee, headed by Professor Lattimore, marked the first step in a nation-wide organization of American chemists. It is of interest to note that the meetings of the section will be held this June in the fine chemical laboratory at the University of Rochester, which bears the name of one of its illustrious founders, Samuel P. Lattimore. According to present plans the meetings of the section will cover two days, Wednesday and Thursday. Wednesday morning will be devoted to a symposium on immuno-chemistry. Dr. A. B. Hooker, of Evans Memorial Hospital, Boston, will give a general paper on the chemistry of immunity, and it is anticipated that papers dealing with the rôle of fats and of carbohydrates in immunity and serological investigations will be presented. Caryl P. Haskins, of the General Electric Research Laboratory in Schenectady, has promised a paper on "Problems in the Biological Fixation of Atmospheric Nitrogen at Ordinary Temperatures and Pressures." On Wednesday afternoon Professor J. W. McBain, of Stanford University, together with T. F. Ford and D. A. Wilson, will present a paper on "New Methods of Studying the Surfaces of Ordinary Solutions." During the same session Professor Wilder D. Bancroft, of Cornell University, with W. E. Heming and John E. Rutzler, Jr., will describe "The Mechanism of Anesthesia in Insects." If time permits, one or two other papers on physical-chemical topics will follow. These will probably be "A Phase Rule Study of the Calcium Arsenates," by G. W. Pearce and L. B. Norton, of the New York State Agricultural Experiment Station, and "The Relation of Spatial Structure and Chemical Behavior of Solid Iron Oxides and Iron Oxide Hydrates," by Oskar Baudisch, of the Institute of Balneology, Saratoga Springs, N. Y. The titles of two papers on vitamin research have been received from members of the New York State Agricultural Experiment Station and will be given on Thursday morning. They are: "The Effect of Various Extraction Procedures upon the Determination of Ascorbic

Acid by Chemical Methods," by G. L. Mack, D. K. Tressler and R. B. Dearborn, and "The Decomposition of Ascorbic Acid by Metallic Catalysts," by G. L. Mack and Z. I. Kertesz. Other papers on organic chemistry, probably dealing with research on dyes closely related to the cyanine dyes which have proved so valuable as photographic sensitizers, are expected. The section meeting is being arranged by the Rochester Section of the American Chemical Society as an intersectional meeting in cooperation with the Eastern and Western New York and Cornell Sections of the Chemical Society.

The Section on Astronomy (D) will hold a session for papers on Thursday morning. "The Spectroheliograph of the Van Vleck Observatory" will be the subject of a paper by Dr. Frederick Slocum, director of the Van Vleck Observatory at Wesleyan University. Dr. Robley C. Williams, of the University of Michigan Observatory, will speak on "Aluminizing the 37½-inch Reflector of the University of Michigan." Other interesting speakers are expected to contribute to this program.

The Section on Geology and Geography (E) will feature a recognition of the one hundredth anniversary of the New York State Geological Survey; therefore most of the program will deal with problems of New York State and related geology. On Tuesday morning at a joint session with the Section on Physics papers will be read by R. D. Evans, of the Massachusetts Institute of Technology, and others, dealing with radioactivity and the age of the earth. On Tuesday afternoon there will be an option of two field trips, one devoted to stratigraphy, the other to glacial geology. On Wednesday morning a symposium on New York and Pennsylvania stratigraphy will include papers by Bradford Willard, Frank M. Swartz, Marshall Kay, Louis W. Ploger, John T. Sanford and Tracy Gillette. George B. Cressey will be toastmaster at a special luncheon on Wednesday noon, when Rudolf Ruedemann and Chris Hartnagel will tell about the past and present activities of the State Survey. Following the luncheon there will again be the option of stratigraphic and glacial field trips. The Thursday morning program will be devoted to papers on structure, oil and gas occurrence, pre-Cambrian problems, and glacial geology in New York State. Speakers will include Wilmot Bradley, G. B. Richardson, George B. Cressey, Nelson C. Dale, Earl T. Apfel, Alfred C. Hawkins and George H. Chadwick.

The American Society of Plant Physiologists, the Physiological Section of the Botanical Society of America and the American Society for Horticultural Science will cooperate in a joint program. On Wednesday morning a session is to be devoted to a symposium on "The Physiology of Reproduction in Higher

Plants." This will include a discussion of recent developments in photoperiodism, vernalization, nutrient balance and carbon nitrogen ratios. The Wednesday afternoon session is to comprise a series of invitation papers on photosynthesis and enzymatic processes. Hotel accommodations can be had close to the meetings, most of which are in the new campus of the University of Rochester, a short distance from the city. Professor H. C. Thompson, of Cornell University, is chairman of the program committee and will endeavor to assist those planning to attend. Executive committee meetings are planned for Thursday and Friday. Members are requested to submit to the secretary, W. F. Loehwing, Iowa City, Iowa, such matters as they desire to put on the committee agenda.

The Section on Anthropology (H) will meet on Wednesday and Thursday. The Rochester Museum of Arts and Sciences will be host to the section. The program will center about the Indians of the New York area, their prehistory, history and present-day status. Dr. Arthur G. Parker, director of the museum, will discuss culture-patterns of the New York Tribes. William N. Fenton, of the U. S. Indian Service, Tonawanda Reservation, will discuss their social organization. William A. Ritchie, of the Rochester Museum, and Dr. Donald Cadzow, of the Pennsylvania Historical Commission, will present papers on the archeology of New York State and adjacent areas. It is planned also to have a general discussion of physical types, based not only upon the remarkable skeletal material collected by Dr. Parker and Mr. Ritchie, but upon living groups as well. If the number and interest warrants, the members of the section will be given the opportunity to visit a neighboring reservation of the Six Nations.

The Section on Social and Economic Sciences (K) will be represented by two separate group meetings, one in economics and one in sociology. The economics meeting will take the form of a symposium on "Social Security" and will be held on Wednesday afternoon. Among the speakers will be Dr. Carl Snyder, for many years statistician of the Federal Reserve Bank of New York City; Craig Cochrane, of the Eastman Kodak Company, and a representative of the Bureau of Research and Statistics of the Social Security Board at Washington. On Tuesday morning the sociologists will conduct a round-table discussion on the subject, "The Role of Mental Hygiene in Student Guidance," to be led by Dr. Eric Kent Clarke, associate professor of medicine and director of the division of psychiatry at the University of Rochester. An article by Dr. Andrew Akelaitis on "Student Guidance at the University of Rochester," giving case illustrations, will be mimeographed and made available in advance to provide a common background. Any one planning to at-

tend this discussion may secure a copy by writing to Dr. Paul Pigors, 42 Prince Street, Rochester, N. Y. On Tuesday at 12:15 there will be a luncheon meeting at the Rochester Chamber of Commerce. The speaker is Harper Sibley, president of the U. S. Chamber of Commerce.

The Section on Engineering (M) will hold sessions on Wednesday and Thursday mornings. On Wednesday morning Professor Earl Church, of Syracuse University, will speak on "Aerial Photogrammetry—a New Science." The application of aerial photography has grown rapidly in recent years, and the difficulties involved have increased so that better and better technique has been demanded. Professor Church is an authority on this subject who has done considerable pioneering, and his paper should be of wide interest. "Administrative Engineering at Cornell University" will be the subject of a paper by Professor J. R. Bangs, Jr., of Sibley College of Engineering at Cornell University. He will show why the administrative engineering curriculum was adopted and how the various economic and socialized courses were used to make it up, a subject of great interest at this time when so much attention is being devoted to revising engineering curricula. On Thursday morning Carl L. Shapiro, assistant metallurgist of the Halcomb Steel Company, Syracuse, N. Y., will discuss "Factors Influencing the Alpha-Gamma Iron Transformation in Carbon Tool Steels," a subject on which he has conducted extensive research. A paper on "Grain Size and Its Influence on the Manufacture of Steel Wire" will be read by B. L. McCarthy, metallurgist of the Wickwire Spencer Steel Company, Buffalo, N. Y. The knowledge of this subject has been added to extensively in recent years so that it has become one of the most interesting developments, and it is expected that the speaker will present much new and interesting information resulting from his work in this field. "The Microcharacter as a Research Tool" will be the subject of a paper by W. E. Conley, W. J. Conley, Harold J. King and Laurence Unger, of the University of Rochester, who have been engaged in investigations on the hardness of metals and alloys during the past four years. The microcharacter is a comparatively unknown research tool which has possibilities that are hardly appreciated at this time. An attempt will be made to show how useful it can be in solving many problems in the application of alloys and in the study of fundamental structure of such materials. The work has been done in close cooperation with Mr. Bierbaum, vice-president of the Lumen Bearing Company of Buffalo, who developed the instrument.

The Institute of the Aeronautical Sciences will devote its sessions on Wednesday morning to photogrammetry. The interest in this development of a combina-

tion of surveying and aerial photography has grown in this country during the past few years, and in 1934 the American Society of Photogrammetry was organized. Both the institute and the society are acting as sponsors of this meeting. Papers covering new developments as well as the major problems of the science will be presented at the meeting. The necessity of mapping large areas more quickly and with greater economy has brought about the employment of aerial photography in connection with surveying. Special equipment of cameras and plotting machines has been developed for this highly specialized work both in this country and abroad. Lieutenant O. S. Reading, of the U. S. Coast and Geodetic Survey, who is to be one of the speakers at the meeting, is responsible for the development of the latest type of multi-lens camera. This camera has nine lenses, which record on one piece of film twenty-four inches square areas as large as five hundred square miles from an altitude of twenty thousand feet. The United States Government is using aerial photography in practically all its major mapping problems. The Soil Conservation Service is mapping vast areas in connection with its problems. Marshall S. Wright, in charge of this service, will describe the methods used in making planimetric and contour maps. The research work done by the Army Air Corps at Wright Field in the use of aerial photographs for producing certain maps by an aeroprojector will be discussed by Captain Louis J. Rumaggi, of the Corps of Engineers, U. S. Army. Other important problems, such as films, lens requirements and apparatus especially adapted to photogrammetry as well as the final use of maps made by aerial photography, will be discussed by other speakers. Leon T. Eliel, of the Fairchild Aerial Surveys, Inc., will preside. In the afternoon a visit will be made by members attending the meeting to the laboratories of the Eastman Kodak Company at Kodak Park.

The Section on Medical Sciences (N) will hold sessions on Wednesday and Thursday. The Subsection on Dentistry will also have sessions on Wednesday, and the Subsection on Pharmacy will hold one session on Thursday morning. The outstanding feature of the program of the section will be the memorial session on Thursday morning in honor of Theobald Smith. This will be a joint session with the Central New York Branch of the Society of American Bacteriologists. It will be opened by an address by Dr. Simon Henry Gage, of Cornell University, commemorating the work and life of Theobald Smith, the title of which will be "Theobald Smith; Investigator and Man." It may be recalled that Theobald Smith published his first scientific publication with Dr. Gage. Dr. Edwin G. Conklin, president of the association, will preside at the memorial session.



The Theobald Smith memorial address will be followed by a series of scientific papers dealing with bacteriological subjects. Dr. R. J. Anderson, of Yale University, will present a paper on his chemical studies on the wax fractions of the tubercle bacillus. Dr. Augustus B. Wadsworth, of the Department of Public Health, Albany, will discuss some of the practical problems in the serum therapy of bacterial infection, and Dr. Thomas Ordway, of the Albany Medical College, will present some of his observations on pneumonia. Dr. George P. Berry and Dr. Helen M. Dedrick, of the University of Rochester, will give a paper on the transformation of the virus of rabbit fibroma (Shope) into that of infectious myxomatosis (Sanarelli). The question of the coexistent infections of individual cells by more than one filterable virus will be discussed by Dr. Jerome T. Syverton and Dr. George P. Berry, of the University of Rochester. The session will be brought to a close by a discussion of gonococcal infection from the standpoint of diagnosis by the cultural method and of fever therapy, by Dr. Charles M. Carpenter, of the University of Rochester. This will be illustrated with motion pictures.

The section will hold a joint meeting on Wednesday with the Western New York Branch of the Society of Experimental Biology and Medicine. The program will consist of a variety of topics. A paper entitled "Some Aspects of Muscle Creatine" will be read by Dr. Victor C. Myers, of Western Reserve University. Dr. I. Newton Kugelmass, of New York City, will discuss the question of "Modifying Milk for Infants' Digestion." Papers on the "Clinical Significance of the Plasma Proteins in Tuberculosis" and a paper on "Alcohol and Its Influence upon Phenomenon of Impulse Transmission in the Peripheral and Sympathetic Nervous System" will also be presented.

The Subsection on Dentistry reports that the Rochester Section of the International Association for Dental Research, in conjunction with the Rochester Dental Study Club, is planning a one-day meeting on Wednesday. The morning program will consist of a symposium on "Dental Caries." Ten papers will be presented which report research on tooth decay as influenced by diet, saliva, bacteria, heredity, and in relation to chemical and physical properties, histopathological and pathological changes. The afternoon session will open with a paper on "Bacteriophage in Relation to Oral Infection." Other papers will be given, including one illustrated by moving pictures. Scientific demonstrations and exhibits will be given by members of both dental groups sponsoring the meeting.

The Subsection on Pharmacy will hold a session on Thursday morning, and a very interesting program has been arranged. Dr. Marvin Thompson, of the

University of Maryland, will present a paper on "A Comparison of the Pharmacological Syndromes of Ergostetrine (Ergotoxine, Ergobasine, Ergotoecin, Ergonovine) and the Ergotoxine-Ergot Alkaloids." Another paper related to this subject will be given by Dr. E. I. Evans, of the University of Chicago, who will discuss "The Minimal Emetic Dose for Fluid-extract of Ergot, Ergotoxin, and Ergonovine." "A Further Study of the Effect of Cyanide on Rat Sarcoma" will be presented by Dr. John C. Krantz and associates at the University of Maryland. "Variations in the Toxicity of Strychnine" will be discussed by Dr. James C. Munch, of Temple University. The program will also include papers by Dr. H. B. Haag, Medical College of Virginia; Dr. Heber W. Youngken, Massachusetts College of Pharmacy; Dr. H. V. Arny and Dr. W. C. Mende, Columbia University College of Pharmacy; Dr. F. K. Riggs and Dr. A. Beaty, Rutgers University; Dr. L. S. Tice and Dr. W. G. Batt, Philadelphia College of Pharmacy and Science; and Dr. William Reindollar, Bureau of Chemistry, Maryland State Department of Health.

The Central New York State Branch of the Society of American Bacteriologists will hold sessions on Wednesday and Thursday. The Wednesday morning session will be a joint symposium with the Rochester Section of the American Chemical Society, on the subject "Immuno-chemistry." One of the outstanding speakers will be Dr. Sanford B. Hooker, of Evans Memorial Hospital, Boston. Arrangements are being made to have several other speakers who will present papers on closely allied topics. Sessions for the reading of papers on bacteriology will be held on Wednesday afternoon and Thursday morning. At the Wednesday afternoon session Dr. Robert S. Breed, of the Agricultural Experiment Station at Geneva, N. Y., will speak on the systematic relationships of the red chromogenic bacteria, and Dr. David H. Bergey of Philadelphia will discuss the genus *Staphylococcus*. A paper on the oxygen supply of aerobic cultures in liquid media will be read by Professor Otto Rahn, of Cornell University, and one on a water-soluble form of alpha naphthal and its inhibitive action upon the intestinal flora of the human subject by Herbert C. Carel, of Redondo Beach, California. Grace Kimball, of Cornell University, will discuss the influence of magnetism upon the growth of yeast, and Leslie A. Sandholzer, of the University of Rochester, will speak on some properties of bacteriophage purified by adsorption and elution methods. On Wednesday evening there will be a dinner for the bacteriologists. On Thursday morning the bacteriologists will participate in the Theobald Smith memorial program arranged jointly with the Section on Medical Sciences. Scien-

tive demonstrations and exhibits will be presented in the Medical School Building of the University of Rochester.

The Association of Official Seed Analysts of North America will convene on Tuesday morning. A comprehensive program has been arranged with three invited speakers. Excursions to trial grounds and seed establishments in the vicinity of Rochester have been planned to follow the formal program of papers for

each day. On Friday morning the entire association will move to the State Experiment Station at Geneva to visit that institution and more particularly the seed testing laboratory and seed control fields there. This day's program will also include round-table and group conferences in the laboratories. Special emphasis and attention is being given to the reports of the various committees, especially those dealing with the revision of rules, legislation and the handbook of seed testing.

## OBITUARY

### ROGER G. PERKINS

THE faculty of the School of Medicine of Western Reserve University has adopted a resolution signed by Drs. Frederick C. Waite, T. Wingate Todd and James A. Doull in memory of the late Roger G. Perkins:

The faculty of the School of Medicine of Western Reserve University records its deep regret at the death of Roger Griswold Perkins, a member of its teaching staff since 1899, and, at the time of his death at Providence, Rhode Island, on March 28, 1936, professor emeritus of hygiene and preventive medicine in this school.

Dr. Perkins brought to his work here a spirit of scholarship and devotion to service, with a catholicity of interests that marks a man of culture. The spirit of scholarship stamped his teaching and the spirit of service imbued his strivings for public welfare.

With willing unselfishness, he carried his share of the burdens of committee work and from June, 1927, to March, 1929, he served as secretary to the faculty.

For the chair of hygiene and preventive medicine established in 1910, Dr. Perkins was the logical choice and this was followed by the creation, for him, of a separate department of hygiene and bacteriology in 1914.

His keen sense of public welfare carried the activities and contributions of his department beyond the walls of the school and beyond its student body to the entire community, and particularly to the public health problems of the City of Cleveland. He succeeded in impressing upon both official and voluntary agencies the scientific and detached point of view of a research worker in public health.

Charming manners, personal dignity, unvarying cheerfulness and tolerance of the opinions of others, marked all his professional relationships and attached him to his colleagues both as a co-worker and as a personal friend.

The members of this faculty, regarding his death as a personal loss, cherish the memory of his services through more than three decades to this school and university.

### RECENT DEATHS AND MEMORIALS

DR. HARRY M. KELLY, since 1894 professor of biology at Cornell College, Mount Vernon, Iowa, died on April 10 at the age of sixty-nine years.

DR. ALBERT H. LOW, chemist, of Denver, member of the firm of Von Schulz and Low, died on April 9 at the age of eighty years.

DR. F. C. SAUER, assistant professor of zoology at the University of Wichita, Kansas, died on April 16. He was thirty-three years old.

DR. AUSTIN CAREY, of Lake City, Fla., logging engineer of the National Forest Service, died on April 28 at the age of fifty-six years.

DR. ALBERT CARLESS died on April 29 at the age of seventy-three years. He was emeritus professor of surgery at King's College, London, and a fellow of the American College of Surgeons.

*Nature* records the death of Professor James Rice, associate professor of physics in the University of Liverpool and author of books on the theory of relativity, on April 17, aged sixty-two years.

THE death is announced by cable from Zurich of Professor Georg Wiegner, agricultural chemist.

A PORTRAIT of the late Dr. Edgar Fahs Smith, professor of chemistry and provost of the University of Pennsylvania, was formally presented to the new Edgar Fahs Smith Junior High School in York, Pa., on April 29. The portrait, painted by Mrs. Elsa Koenig Nitzsche, depicts Dr. Smith conducting chemical experiments in his laboratory at the university.

AN Associated Press dispatch from Hamburg to *The New York Times* reports that the names of one hundred and sixty-five roentgenologists who have sacrificed their lives to medical research have been chiseled on a simple sandstone memorial in front of the Roentgen Institute of St. George's Hospital. The honor list includes 46 French, 40 American and 17 German radiologists. Other countries represented are Great Britain, Italy, Hungary, Switzerland, Austria, Denmark, Czechoslovakia, Spain, Belgium, Finland, Russia and Holland.