

tance, and to his extreme regret, to be with us, but we are honored in the presence of the esteemed Envoy and Minister of Norway, in Washington, and Madame Bachke, as the guests of the academy. The minister

has graciously consented to serve as the representative of his distinguished countryman, the Agassiz Medalist for the year 1934. I shall ask Professor Bigelow to set forth the reasons governing the award.

## AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

### PRELIMINARY ANNOUNCEMENT OF THE BERKELEY MEETING

Edited by Dr. HENRY B. WARD

PERMANENT SECRETARY

THE ninety-fourth meeting of the association will be held in Berkeley, Calif., from June 18 to 23, 1934. This will be the fourth summer meeting of the association on the Pacific Coast, previous meetings having been held at San Francisco in 1915, at Portland, Oregon, in 1925 and at Pasadena in 1931. All these have been joint meetings with the Pacific Division. This year the University of California and the Pacific Division of the association are cooperating as hosts. Sessions will be held for the most part in lecture halls of the University of California on the campus at Berkeley. As has been found desirable in summer meetings, symposia and invited programs are emphasized and field trips are numerous.

The fine program secured by the efforts of the Pacific Division and the local committee, the attractive environment of the region and the preliminary correspondence regarding attendance all indicate a most successful meeting. It is hoped that a representative attendance from the membership in other sections of the country will take advantage of this opportunity.

#### LOCAL COMMITTEE, OFFICERS OF SECTIONS AND COOPERATING ORGANIZATIONS

The general chairman of the local committee is Roy Elwood Clausen, professor of genetics at the University of California; the general secretary is Alva Raymond Davis, professor of plant physiology at the University of California; and the treasurer is L. A. Nichols. More than fifty others have been working with these officers as members of subcommittees to provide in various ways for the convenience and comfort of visitors and to make the occasion a conspicuous success. The following sections with the officers indicated have arranged the particular programs and the facilities for the meetings of the sections and the associated societies meeting in Berkeley at this time.

In Mathematics Professor E. R. Hedrick is secretary and Professor T. M. Putnam local representative. The American Mathematical Society is to meet

with this section. In Physics Professor L. B. Loeb is secretary *pro tem* and local representative. The American Physical Society and the American Meteorological Society are meeting with the physicists. In Chemistry the secretary *pro tem* and local representative is Professor G. K. Rollefson. The Pacific Intersectional Division of the American Chemical Society joins with the section. In Astronomy Professor C. D. Shane is secretary *pro tem* and local representative. The Astronomical Society of the Pacific is to meet with this section.

In the Zoological Sciences the secretary *pro tem* and local representative is Professor S. F. Light. The Western Society of Naturalists, the Western Division of the American Society of Ichthyologists and Herpetologists, the Pacific Coast Branch of the American Association of Economic Entomologists, the Entomological Society of America and the San Francisco Aquarium Society will meet with the zoologists. In the Botanical Sciences Professor R. M. Holman is secretary *pro tem* and local representative. The Botanical Society of America, the American Phytopathological Society and the American Society of Plant Physiologists are meeting with the botanists. The Genetics Society of America and the Ecological Society of America will also meet with the zoologists and botanists. In Anthropology the secretary is Professor W. M. Krogman and the local representative is Professor A. L. Kroeber. The American Anthropological Association is to meet with this section. In Psychology Professor J. A. McGeoch is secretary and Professor Warner Brown is local representative. The Western Psychological Association joins with the section.

In the Social and Economic Sciences Professor Robert D. Calkins, University of California, has been appointed secretary *pro tem* and is taking charge of the program; the contributing organizations are the Econometric Society, represented by Professor J. B. Canning, the San Francisco Chapter of the American Statistical Association, represented by Professor B. F. Haley, and the Social Science Research Confer-

ence of the Pacific Coast, represented by Professor Stuart Daggett. In the Historical and Philological Sciences Professor Chauncey D. Leake is secretary *pro tem* and local representative. The History of Science Society will meet with this section.

In Engineering the secretary *pro tem* and local representative is Professor B. M. Woods. The American Society of Mechanical Engineers, the Pacific Coast Section of the American Society of Agricultural Engineers, the American Geophysical Union and the Institute of Aeronautical Sciences are to meet with the engineers. In the Medical Sciences Dr. Earl B. McKinley is secretary and Dr. J. N. Force is local representative. The Pacific Coast Branch of the Society for Experimental Biology and Medicine and the California State Veterinary Medical Association will meet with this section. In Agriculture the secretary *pro tem* and local representative is Dean C. B. Hutchison. The Western Society of Soil Science and the Western Branch of the American Society of Agronomy are meeting with the agriculturists. In Education Dean G. N. Kefauver is secretary *pro tem* and Professor Noel Keys is local representative.

#### HEADQUARTERS AND REGISTRATION

General headquarters for the meeting will be in the Stephens Union Building on the campus near Sather Tower. The building is centrally located with reference to the buildings in which sessions are scheduled and will be a convenient social gathering place for members attending the meeting. Officers of the association will be quartered in the Hotel Durant; otherwise no assignments of hotel headquarters for individual sections and societies have been made.

The main registration office will be in the Men's Club Room of the Stephens Union, and a subsidiary registration desk will be located in the lobby of the Gymnasium for Men during the general evening sessions of the meeting. Registration will be open, upon payment of a fee of \$1.00, to all persons who are interested in the advancement of science or education.

Each registrant receives a copy of the program, an identification card and a badge. Registration will be necessary for attendance upon the general reception, participation in excursions and other events. The registration office will include an information desk and will handle reservations for luncheons, dinners, excursions and other activities. Mail, telegrams, etc., may, if desired, be addressed to Headquarters A. A. A. S., Stephens Union, Berkeley, Calif.

#### HOTEL ACCOMMODATIONS

The following Berkeley hotels are available in the immediate vicinity of the campus:

*Hotel Durant*: Detached bath, single occupancy from \$2.00, double, \$2.50; with bath, single occupancy from \$2.50, double \$3.00.

*Hotel Whitecotton*: Detached bath, single occupancy from \$2.00, double \$3.00; with bath, single occupancy from \$2.50, double \$3.00.

*Hotel Claremont* (one mile from the campus): Detached bath, single occupancy from \$2.00, double \$3.00; with bath, single occupancy \$2.50, double \$4.00; suites for from 3 to 5 persons, per person, \$2.00.

*Hotel Carleton*: Detached bath, single occupancy from \$1.50, double \$2.00; with bath, single occupancy \$2.00, double \$3.00.

*Berkeley Inn*: Detached bath, from \$1.00; with bath, from \$1.50.

In addition to these hotels, excellent accommodations may be obtained in the following houses, which are operated under university auspices:

*International House*: Accommodations for men and women separately, detached bath, \$1.50 per day, \$7.00 per week.

*Bowles Hall*: Accommodations for men only, detached baths, suites of three rooms for two persons, per person \$1.50 per day, \$7.00 per week.

Information as to other rooming and boarding places will be available at the registration office. Members attending the meeting, particularly those who desire accommodations in the International House or Bowles Hall, are urged to make reservations in advance.

While accommodations in the vicinity of the campus will probably be adequate to care for all who desire them and will be extremely convenient for attendance upon the sessions, some members may prefer to stay in Oakland or San Francisco hotels. Transit from downtown Oakland by street car requires about twenty minutes; from San Francisco by ferry and electric train, about forty-five minutes.

#### TRANSPORTATION

Those planning to attend the Berkeley meeting will be able to take advantage of summer excursion tickets at greatly reduced rates for the round trip. Season tickets are good until October 31, but from some points tickets for a forty-five day limit may be purchased at lower rates than for season tickets. Reduced rates for shorter periods are also available from many points west of the Rocky Mountains. It is advisable to consult the local ticket agent for information regarding stop-over privileges and for other details.

In addition to train routes, transcontinental air lines and motor transport are available, and it is possible to go by steamer from eastern ports through the Panama Canal to San Francisco.

For automobile parties the most direct transcontinental routes are by way of the Lincoln and Victory highways, but northern and southern routes are also available. In the west auto camps along the way provide convenient over-night stopping places. A visitor's registration permit should be obtained at the first office of the California Automobile Association encountered on the route. The offices of this organization are prepared to supply maps and touring information. Eastern visitors who plan to make a tour of California will find it distinctly to their advantage to have their own automobiles, for all the principal scenic attractions of the state are reached by the highway system and auto camps are everywhere available.

Those coming to the meeting from coast points will find that motor transport as well as rail lines offer reduced summer rates. Pacific coast ports are also connected with San Francisco by coastwise steamers, which offer cheap rates and attractive service. Air lines connect the principal western cities with Oakland.

#### EXHIBITS AND DEMONSTRATIONS

A special committee is making arrangements for exhibits, demonstrations, etc. Besides the departmental activities noted below, scientific apparatus of a novel type and contributed exhibits from participating societies and individuals will be included.

On Tuesday afternoon university departments and institutes will hold open house for visiting members of the association. Special types of apparatus and numerous departmental exhibits will be open for inspection, and informal demonstrations of research materials will be given. Permanent exhibits, as well as some of the specially arranged departmental exhibits, will be open for inspection throughout the week.

#### SOCIAL EVENTS

The general reception for visiting members will be given in Hearst Gymnasium, following the opening general session in the Gymnasium for Men. Admission will be by identification card.

A number of luncheons, dinners, smokers and other social gatherings are being arranged by the various participating societies and groups, as noted under sectional and society programs.

The Women's Section Club, an organization of women interested in various cultural activities, has accepted sponsorship for a special program of entertainment for women, including garden tours, teas, short excursions and informal exhibits of a cultural nature. Wives of members who intend to participate in these activities are requested to register at headquarters. Detailed information will be contained in

a special leaflet distributed on registration. No separate registration fee will be charged.

#### EXCURSIONS

The following excursions to nearby points of interest have been arranged by Professor R. W. Chaney. Details as to routes, starting times, expenses, etc., will appear in the program.

(1) Branch of the College of Agriculture of the University of California, Davis, on Saturday. At Davis visitors may have a choice of guidance by several groups of faculty members, who will show various phases of agricultural research.

(2) Leland Stanford Junior University, on Friday afternoon. A visit to the laboratories and other points of interest at Stanford University and Palo Alto.

(3) Mt. Tamalpais. A trip by motor bus north of the Golden Gate to Mt. Tamalpais and the redwood forest at Muir Woods National Monument.

(4) Strawberry Canyon and the Berkeley Hills. A trip on foot under the guidance of members of university departments for observation of typical central Californian flora, fauna and geological structure, including a visit to the Botanical Garden of the university.

(5) Mt. Hamilton and the Lick Observatory on Friday afternoon, by automobile. Demonstration of the observatory and observation through the telescopes after dark.

(6) San Francisco. On Saturday morning members of the association are invited to inspect the exhibits and departments of the California Academy of Sciences and the Steinhart Aquarium in Golden Gate Park. A buffet luncheon will be served at noon, and at two o'clock, through the courtesy of the San Francisco Chamber of Commerce, the excursion will be continued by a motor bus tour through the city.

(7) Yosemite National Park. A week-end excursion to the park will be arranged, provided sufficient applications are received.

#### THE SAN FRANCISCO BAY REGION

The San Francisco Bay Region is the center of the commercial and industrial activities of central and northern California. An almost continuous succession of communities with a combined population of about 1,300,000 extends along the shores of the bay. Southward from San Francisco on the peninsula are Burlingame, San Mateo, Hillsboro, Palo Alto, Los Altos, Santa Clara, San Jose and many other smaller towns. Northward from San Francisco on the Marin Peninsula are San Rafael, Sausalito, Mill Valley, San Anselmo and many smaller towns and resorts picturesquely located amid attractive natural surroundings. On the eastbay shore are the larger cities of Richmond, Berkeley, Oakland, Alameda, Piedmont, together with numerous smaller towns.

San Francisco contains many places of interest:

Chinatown, with its oriental shops, restaurants and theaters; Nob Hill, Russian Hill, Telegraph Hill and other hill sections, with their unique cable cars; the Presidio, headquarters of the U. S. Army Ninth Corps Area; Golden Gate Park, with its Japanese tea garden, the California Academy of Sciences, the Steinhart Aquarium and the de Young Museum; the Civic Center, including the City Hall, the Exposition Auditorium, the Opera House, the Public Library and other buildings; the Palace of the Legion of Honor with its art collections; many notable business structures; and the extensive port facilities of the Embarcadero. The city is famous for the number and variety of its eating places.

Berkeley, Oakland, Alameda and Piedmont make up a single continuous community lying on the eastbay shore directly across from San Francisco. While the population of these cities is largely suburban, about 100,000 passengers are carried daily by the transbay systems, the convenience of access to rail and water transportation has led to the development of many important industries, including oil refining, sugar refining, shipbuilding, soap manufacturing, automobile assembling, etc.

Outside of San Francisco points of interest include the Sunnyvale Naval Station, base of the dirigible *Macon*; the Mare Island Navy Yard at Vallejo; Muir Woods, the redwood forest and Mt. Tamalpais on the Marin Peninsula; the Oakland Airport, terminus of transcontinental air lines and the great deciduous fruit section of the Santa Clara Valley. Besides the University of California at Berkeley and Stanford University at Palo Alto, there are numerous smaller educational institutions, among them Mills College in Oakland, St. Mary's College at Moraga, Santa Clara University at Santa Clara; the University of San Francisco and the medical schools and hospitals of the University of California and Stanford University in San Francisco. Four bridges cross the bay at various points and two notable ones are under construction; the huge suspension bridge across the Golden Gate, with towers over 750 feet high, one of which is nearing completion, and the five-mile long double suspension transbay bridge from San Francisco to Oakland.

The eastbay communities are served by a single street car and motor bus system. The University of California is located in the center of Berkeley close to main street car and transbay lines and may be reached from railroad stations by use of these systems.

The summer climate of the San Francisco Bay Region is cool, and visitors are advised to bring light wraps for evening wear.

#### SCENIC ATTRACTIONS AND VACATION OPPORTUNITIES

Those who come to the meeting, particularly from the east, will have an excellent opportunity to com-

bine a vacation trip with their attendance upon the meeting. Trips may be arranged without extra cost to come by one route and return by another, with liberal stopover privileges to visit points of interest along the way. Groups visiting the national parks—Yosemite, Sequoia, Lassen Volcanic, Crater Lake, Rainier, Grand Canyon, Yellowstone and others—are advised to get in touch with the park superintendents, with whom special arrangements may be made for securing the free services of the national park educational staff.

Many of the scenic attractions and vacation centers of California are readily accessible from the San Francisco Bay Region. Northward along the coast among the redwood forests are numerous popular resorts, particularly the Russian river region (74 miles) and, more distant, Eureka (284 miles), center of the redwood lumber industry. This region is traversed by the famous Redwood Highway, which connects with highways through Oregon and Washington. Inland northward and eastward are the gold country (176 miles), Mt. Shasta (305 miles), Mt. Lassen (280 miles), Feather River (225 miles) and Lake Tahoe (230 miles). Southward and eastward are Yosemite (187 miles), General Grant (237 miles) and Sequoia (260 miles) national parks; and southward, the Santa Cruz mountains (75 miles) with numerous summer resorts, the Monterey Bay country (122 miles) and Santa Barbara (367 miles). Los Angeles (470 miles) and other points in Southern California may be reached overnight by train or steamship or by automobile via coast or valley highways.

Paved highways lead to all these regions, and motor bus as well as rail transportation is available. Automobile parties will find it convenient to stay at auto camps, which are located at convenient intervals along the way. Upon individual request Californians, Inc., San Francisco, will send to members of the association a sixty-four-page illustrated booklet descriptive of the San Francisco Bay Region and outlying scenic attractions and vacation centers and will supply specific information as desired.

#### GENERAL SESSIONS

The opening general session on Monday evening will be devoted to the presidential address of Professor J. H. Hildebrand, president of the Pacific Division. This session will be followed by a reception tendered by the president of the university to the officers and members of the association and participating societies and invited guests. Dr. John C. Merriam, of the Carnegie Institution of Washington, will address the general session on Wednesday evening and President Karl T. Compton, of the Massachusetts Institute of Technology, that on Friday evening. General sessions will be held on Tuesday and

Thursday evenings also. Tuesday evening will be used for the Maiben Lecture, which will be given by Dr. L. Dudley Stamp, Director of the Land Utilization Survey of Britain, on the topic "Planning the Land for the Future." The Thursday evening session will be addressed by Dr. E. B. Wilson, of Harvard University.

#### SECTION MEETINGS AND SPECIAL PROGRAMS

The Section on Mathematics (A) will meet jointly with the American Mathematical Society, which will hold its principal sessions on Wednesday, both morning and afternoon. There will be a luncheon between the sessions.

The Section on Physics (B) will meet jointly with the American Physical Society and the American Meteorological Society. The American Physical Society and the Astronomical Society of the Pacific will hold a joint session on Tuesday afternoon, with papers by invitation on the general subject, "Spectroscopy in Astro-Physics." They will also hold an all-day symposium on Wednesday, on the structure of the nucleus and its disintegration by rapidly moving particles and cosmic rays. The speakers and their subjects are as follows: Professor R. J. Van de Graaf, of Massachusetts Institute of Technology, "The Production of High Energy Radiations"; Professor C. C. Lauritsen, of the California Institute of Technology, "Disintegration by Protons and Deutons"; Professor E. O. Lawrence, of the University of California, "Recent Disintegration Experiments at the University of California"; Dr. Thomas Johnson, of the Bartol Research Foundation of Philadelphia, "Recent Cosmic Ray Investigations and the Latitude Effect"; Dr. Carl D. Anderson, of California Institute of Technology, "Nuclear Disintegrations and Cosmic Rays"; and Dr. Merle A. Tuve, of the Carnegie Institution. Discussion will be led by various mathematical physicists, including Professors J. R. Oppenheimer and Felix Bloch.

On Thursday there will be a symposium on fundamental physical constants, with six papers by invitation from the following speakers: Professor R. A. Millikan and Dr. Jesse DuMond, of the California Institute of Technology; Professor P. A. Ross and Professor Paul H. Kirkpatrick, of Stanford University; Professor W. V. Houston, of the California Institute of Technology; and Professor R. T. Birge, of the University of California. On Friday and Saturday mornings the Physical Society will meet for its regular session of contributed ten-minute papers.

The American Meteorological Society will hold sessions on June 19, 20 and 21, with discussion of various phases of meteorology and climatology, giving particular attention to recent developments in forecast-

ing. Arrangements are being made for an informal luncheon of meteorologists and their friends, for a visit to the Weather Bureau office at the Oakland airport and for an excursion to the Naval Air Station at Sunnyvale.

The Section on Chemistry (C) has as the principal feature of its program two symposia conducted by the Pacific Intersectional Division of the American Chemical Society, at dates to be announced later. The topics for discussion are "Fundamental Biochemistry" and "Recent Advances in Physical Chemistry." There will also be a number of general sessions and the usual dinner.

The Section on Astronomy (D) will meet jointly with the Astronomical Society of the Pacific in general sessions for contributed papers on Thursday and Friday. Members will also participate in the symposium with the American Physical Society.

The newly organized Society for Research on Meteorites will hold morning and afternoon sessions with contributed papers on Tuesday and Wednesday.

The Section on Geology and Geography (E) will not participate in the program at Berkeley. The Committee on the Oceanography of the Pacific will hold a luncheon meeting for its members with an informal program, consisting of reports on recent and current researches in the oceanography of the Pacific coast of Canada and the United States. The committee will also consider the organization of a society to consist of those engaged in oceanographic research on the Pacific coast. The program has been arranged by Dr. T. Wayland Vaughan, chairman of the committee.

The Section on Zoological Sciences (F) and the Western Society of Naturalists will have special programs on experimental morphogenesis and parasitology and will conduct jointly a symposium on "The Life History of Protozoa." Another joint meeting will be held by the American Association of Economic Entomologists, Pacific Slope Branch, and the Entomological Society of America. The American Association of Economic Entomologists will hold sessions in the mornings and afternoons of Wednesday and Thursday, a dinner on Thursday evening, a session on Friday morning and field trips on Friday afternoon. The Wednesday afternoon session will be held jointly with the California State Veterinary Medical Association.

Individual society meetings, with addresses and contributed papers, will also be held by the Western Society of Naturalists, the Entomological Society of America, the California State Veterinary Medical Association, the San Francisco Aquarium Society and the American Society of Ichthyologists and Herpetologists. Visits to the neighboring aquarium, zoological garden and museums will also be undertaken.

A general dinner for biologists will be sponsored by the Western Society of Naturalists.

The Section on Botanical Sciences (G) will hold two symposia: on "The Absorption and Accumulation of Mineral Elements by Plants" and on "The Origin and Development of North Pacific Floras."

Contributed papers will be presented in joint sessions beginning on Tuesday morning, in which this section, the Botanical Society of America, the American Society of Plant Physiology and the American Phytopathological Society will participate. There will be a special session addressed by Mrs. Ynez Mexia on her explorations of the upper Amazon.

The Sections on Botany and Zoology will collaborate with the Western Society of Naturalists, the Botanical Society of America and the Genetics Society of America in presenting a symposium on some subject concerning genetics, which will probably consume an entire day. The Ecological Society of America, under the joint auspices of the two sections, will hold two half-day sessions for contributed papers.

The Section on Anthropology (H) will hold a series of joint meetings with the Pacific Division of the American Anthropological Association. The Wednesday morning session will be devoted to problems of southwestern archeology. Among other papers, F. M. Setzler, of the National Museum, will discuss his cave work in Texas, Dr. S. B. D. Aberle will present a paper on vital statistics of the Indians of the Southwest, and R. L. Beals will outline problems of Southwestern and Mexican contacts. The Thursday morning program will be given over to Southwest and California ethnology. Papers will be contributed by members of the Department of Anthropology of the University of California. The discussion of the Friday morning session will center upon problems of methodology in American anthropology. Dr. Franz Boas will present a paper on "Scope and Method of Anthropological Research." If the number of papers warrants, sessions will convene on Thursday and Friday afternoons, devoted to physical anthropology and descriptive archeology. A joint luncheon or dinner is planned.

The Section on Psychology (I) will hold a symposium on Thursday afternoon on the subject "Can Personality be Measured?" and morning and afternoon sessions on Friday and Saturday jointly with the Western Psychological Association. The presidential address of that association will be given on Friday evening following the dinner.

The Section on Social and Economic Sciences (K) will hold a joint session with the Econometric Society, which will have a program extending through five or six sessions. Arrangements have been made for papers by Dr. Fritz Machlup, of Austria; Dr. George Peterson and Dr. Leo Rogin, of the University of

California; Dr. E. L. Grant, Dr. J. B. Canning and Dr. Holbrook Working, of Stanford University; Mr. O. P. Wheeler, of the San Francisco Federal Reserve Bank; Dr. Norman J. Silberling, and others. George Bousquet, of the University of Algiers, will present a paper. On Saturday, following a dinner, there will be a joint session of Section K, the Econometric Society and the San Francisco Chapter of the American Statistical Association, at which Dr. W. L. Crum, of Harvard University, will present a paper. A program on "Land Utilization" is being arranged for a joint session with the Section on Agriculture (O).

The Section on Historical and Philological Sciences (L) will meet jointly with the History of Science Society for contributed papers and one symposium. The latter will be on the topic "The Hearst Medical Papyrus and Its Relation to Other Medical Papyri." The speakers will be Dr. Harold Lutz, Dr. Sanford Larkey and Professor Chauncey D. Leake, all of the University of California.

The Section on Engineering (M) for its main activity is sponsoring a national meeting of the Aeronautics and Hydraulics Divisions of the American Society of Mechanical Engineers on June 19, 20 and 21. In addition the hydrology division of the American Geophysical Union and the American Society of Agricultural Engineers have arranged a joint session to be held in cooperation with the American Society of Mechanical Engineers and as a part of the program of the Section on Engineering. The aeronautics portion of the meeting is further sponsored by the Institute of the Aeronautical Sciences. Among the more prominent speakers will be Professor Bakhmeteff, of Columbia University, Dr. Theodor von Kármán, of the California Institute of Technology, and Mr. Elmer A. Sperry, Jr., of the Sperry Gyroscope Company.

Tuesday and Wednesday will be devoted to morning and afternoon sessions at the University of California. A dinner meeting will be held on Wednesday evening. Thursday will be given over to a morning session at Stanford University in Palo Alto and an afternoon excursion to points of engineering interest. Professor William F. Durand, of Stanford University, has been appointed honorary chairman of the meeting.

The Section on Medicine (N) will hold four sessions at the Berkeley meeting, two of which will be given over to a consideration of the field of endocrinology and two of which will deal with aspects of hygiene and parasitology. The first session will be devoted to a symposium on general phases of the endocrine problem under the general title of "A Survey and Evaluation of the Present Status of Endocrine Investigations." Professor E. M. K. Geiling, of the department of pharmacology, the Johns Hopkins Uni-

versity, will speak on "Present Problems"; Professor Vincent du Vigneaud, of the department of biochemistry, George Washington University School of Medicine, will speak on "Chemistry"; while Professor James M. Luck, department of biochemistry, Stanford University, will speak on "Interrelationships."

The second session will be addressed by a distinguished scholar in the field of endocrine studies, and this address will be followed by a series of shorter papers dealing with original investigations concerning the various hormones. The third and fourth sessions will be devoted to problems in the general fields of hygiene and parasitology, and the details of these programs will be announced later.

The Pacific Coast Branch of the Society for Experimental Biology and Medicine will conduct its regular June meeting in conjunction with Section N. There will be a dinner on one evening, followed by contributed papers.

The California State Veterinary Medical Association will meet jointly with the American Association of Economic Entomologists for one session. The association will also meet on Tuesday, Wednesday and Thursday.

The Section on Agriculture (O) contemplates conducting several meetings and conferences. The program includes a conference on the general topic "Land Utilization," under the direction of Dr. H. E. Erdman, of the Giannini Foundation for Agricultural Economics, University of California. The conference will be addressed by Dr. L. Dudley Stamp, in charge of the land utilization survey of Great Britain. A symposium will be conducted under the auspices of the section, with Dr. W. W. Robbins as chairman, on the topic, "Weed Control, with Particular Emphasis on the Physiological Problems Involved."

A joint symposium with the Western Society of Soil Science, covering an entire day, will be held on the topic, "Soil Phosphate." The Western Society

of Soil Science will also hold four sessions for contributed papers, beginning on Monday. The American Society of Agronomy, Western Branch, will hold meetings for contributed papers and a dinner.

The Section on Education (Q) has taken as the central theme of its program "The Applications of Science to Different Aspects of Education." Six areas have been submitted to the membership for an indication of studies under way and to be reported on at summer meetings, *viz.*: (1) Educational problems arising from the application of science to modern society; (2) application of science to the diagnosis and treatment of individual learning difficulties; (3) applications of science to the solution of problems of school finance; (4) applications of science to the problems of teaching personnel; (5) applications of science to the problems of guidance, and (6) applications of science to the non-school educational agencies.

The four with the most promising group of investigations for report will be used in the four separate sessions. The four symposia will involve opening presentations, discussions by a selected panel and general discussion by the full group in attendance.

The separate meetings of the section will be held on June 19 and 20. The joint meetings with the Section on Psychology will be held on June 21. One half day will be given to a consideration of "The Measurement of Personality." The theme of the second joint session has not yet been determined.

#### GENERAL NOTICES

Full details of all events will be found in the final program issued to members and visitors on registration in Berkeley. Material for that program is gathered by the secretaries of the various organizations and transmitted to Professor R. E. Clausen, Chairman of the Local Committee, Berkeley, California. In order to be included in that program items must reach Berkeley not later than June 1.

## SCIENTIFIC EVENTS

### CARNEGIE GRANTS TO BRITISH COLONIAL AND DOMINION MUSEUMS

ACCORDING to *The Museum News*, the Carnegie United Kingdom Trust has liberalized the conditions for grants to British museums. During the first three years that the grants were available they were restricted to municipal museums in towns of 10,000 to 70,000 population. During the remaining two years these restrictions will be removed and any active museum in Great Britain may apply for a grant for museum development. These grants, obtainable through the Joint Committee of the Museums Association and the Carnegie Trustees, will be not more

than £250 each. The grants can not be used for ordinary expenses, but must go into reorganization and experiment in museum development. In addition the Carnegie trustees will consider, through the committee, applications for grants of about £200 to aid museums in extending their services to rural areas.

The Museums Association announces that it is prepared to receive applications from museums in Newfoundland, Southern Rhodesia and the British colonies for grants of not more than £1,000 each. In general the grants may be used for study of accumulated material and publication of results, reorganization of collections, purchase of exhibition equipment, develop-