

after plans had been drawn and approved as indicated, and tentative support secured, biological organizations and individuals in Europe were visited and the plans presented for suggestions and advice. Although the *Concilium Bibliographicum* and the *Zoological Record* occupy different fields from that proposed for *Biological Abstracts*, those in charge were consulted, and cooperation suggested. Always the effort was made not only to avoid injury to any existing service, but ways to make the anticipated facilities of *Biological Abstracts* actively helpful were sought.

Finally, after all the years of planning, and of innumerable discussions, the request for financial support, presented by the National Research Council, was granted by the Rockefeller Foundation, and *Biological Abstracts* was ready for launching. No one unfamiliar with the practical operation of such enterprises can imagine the difficulties and complexities involved in their organization and operation.

First, it was necessary to build up an operating staff out of almost untrained material. One invaluable person, without whom *Biological Abstracts* would have been inconceivable, had been available for the days of planning, and he was now called upon to take charge when plans were to be executed. Dr. J. R. Schramm, editor-in-chief of *Biological Abstracts*, put aside his scholastic career, and, starting from nothing, sought out promising material and began training an editorial and clerical staff which is now, and always has been, characterized by a high degree of efficiency and devotion. Printers were consulted about typography, experts in papers advised regarding details of their weight, opacity and durability, psychologists gave their judgment concerning the most readable size and arrangement of type, biological groups formulated workable taxonomic systems, and in these and many other ways the practical conduct of the journal was determined.

A periodical of the scope and character of *Biological Abstracts* can, at best, be only an approximation to the ideal of completeness and selectivity. No one so fully realizes what remains to be done to approach this ideal as do the members of the editorial staff, who have formulated the plans for achieving the objective established by the representatives of our biological societies. But even in its present form it has served

as a model for *Social Science Abstracts* and finds encouragement for the future in the words of the *London Lancet*:

If this is the state of affairs within the field of medicine, how hopeless it may seem to bring medicine into any sort of effective contact with the whole scattered field of biology. But courage can achieve most things, and a first step has been made by the promoters of *Biological Abstracts*, who in 1927 began a monthly publication with no smaller object than to summarize the whole of current publications in biology, to abstract the relevant parts of some 6,000 journals and to make the results available to everybody. Judging from their first two years, they have made a good start at what seemed at first an impossible task, and, aided by a grant from the Rockefeller Foundation, they have issued a periodical which no one can read, but which almost everyone can consult with profit. Biology as a whole is gathered up together, and so it is very much easier for outsiders to find out what is going on. Revelations come as often as not from browsing about a little outside one's own proper field. It has as yet to find its permanent field in conventional biology, though it has done enough to show that it deserves all encouragement and support.

By the aid of the Rockefeller Foundation and the helpful cooperation of over 3,000 collaborators and section editors, plus the self-sacrificing devotion of a group of biologists who have laid aside their own work and teaching for the drudgery of editorial service, every biologist may have as his own a key which will unlock the published records of biological research the world over for the small sum which he might pay for a hat or a pair of shoes. The response in subscriptions so far has been splendid, the journal having already the largest number of subscribers of any technical biological publication; but to reach the fulness and completeness of *Chemical Abstracts*, somewhat the same unified support which it commands will be required. Those who have been charged by their fellow workers with the heavy responsibility of bringing to fruition their hopes for a prompt, accurate and full report upon current biological literature believe that it is necessary only to let it be known that now full support from individual workers must be forthcoming in order to secure the subscriptions that were provisionally promised in the referendum. In a very real sense it may be said that the future of *Biological Abstracts* is now in the hands of those whom it serves.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

PRELIMINARY ANNOUNCEMENT OF THE PASADENA MEETING

By Dr. CHARLES F. ROOS, Permanent Secretary

ABOUT twenty-five scientific societies, together with the fifteen sections of the American Association for

the Advancement of Science, will hold scientific sessions at Pasadena from June 15 to 20. This will be

the eighty-eighth meeting of the association and the first of a new series of annual summer meetings. The Los Angeles Chamber of Commerce has very generously furnished the funds necessary for mailing a printed preliminary announcement to all members of the association. Additional copies will be supplied by Mr. Harry H. Main, of the chamber, to those who request them. The mailing of this announcement makes it seem unwise to do more than emphasize important events and give additional information here.

As mentioned in the mailed announcement, much of the cost of the meeting is to be raised locally. Thus, the Los Angeles Chamber of Commerce expects to spend \$5,000 or more in printing and mailing the preliminary announcement, in printing the general program, in providing badges, signs, busses, excursions, lanterns and pay of operators, and in furnishing clerical assistance of all kinds. The California Institute of Technology will spend \$800 in securing invited speakers. The Mount Wilson Observatory will spend \$500, and the City of Pasadena \$350 for incidental local expenses of the local committee, and the Huntington Library and Art Gallery will spend \$1,000 or more on what promises to be one of the most brilliant receptions ever planned for the association. This reception will be held on the estate of the Huntington Library and Art Gallery, San Marino, California, at 2:00 p. m. on Monday, June 15.

The association has appropriated \$2,500 to pay expenses of invited speakers and expects to spend an additional \$3,000 to \$4,000 on this meeting, in addition to funds of about \$7,000 obtained from the Los Angeles Chamber of Commerce and the host institutions.

It is hoped that associate-membership fees and registration fees obtained in connection with the meeting will be sufficient to make it unnecessary for the association to use any of its reserve or current membership funds. Members who register will be entitled to an unusual number of special privileges, and therefore all who plan to attend should go immediately to Throop Hall to register. The registration fee will be two dollars, but life members and members of the association in good standing may register for one dollar. Associates for the meeting may register without paying any registration fee if they show their associate cards. Only those who register will receive badges and the official identification cards.

Official identification cards and badges will admit to the reception garden party at the Huntington Library and Art Gallery, to reserved seats for the five popular evening lectures at the Greek Theatre in Griffith Park, and to all the excursions arranged by the association, and will entitle the holders to free transportation at times between the hotels, meeting

places, and the Greek Theatre in Griffith Park, as well as to many other courtesies.

Nearly all scientific sessions will be held at the California Institute of Technology. The astronomers, however, plan one or more sessions on Mount Wilson and the botanists plan one or more sessions at near-by botanical gardens.

All who will present papers before the American Association for the Advancement of Science and the associated societies should without delay send two copies of their manuscript and an abstract of 1,000 words to Austin H. Clark, director of the Press Service, American Association for the Advancement of Science, Smithsonian Institution Building, Washington, D. C. Each manuscript should bear, at the top of the first page, the name of the organization before which the paper is to be presented, with information as to the date of presentation as nearly as that may be stated.

The Pasadena meeting will be held under the presidency of Dr. Franz Boas, of Columbia University. Dr. Boas is known throughout the world for his contributions to anthropology and has been the teacher of most American anthropologists. On Monday evening he will deliver an address on "Race and Progress," at which time the retiring president, Dr. Thomas H. Morgan, of the California Institute of Technology, will preside. On Tuesday, June 16, Dr. H. D. Arnold, director of research, Bell Telephone Laboratories, New York City, will give an experimental lecture entitled "Science Listens." On Wednesday evening, June 17, Dr. Arthur Day, director of the Geophysical Laboratory of the Carnegie Institution of Washington, will speak on "The Present Status of Seismology." On Thursday evening, June 18, Dr. Charles A. Beard, historian, author of "The Rise of American Civilization," "American Party Battles," etc., will speak on "Scientists and History." On Friday evening, June 19, a symposium conducted by an historian, an economist and a scientist, on "The Impact of Science upon Civilization, Past, Present and Future," is planned.

In honor of President Boas a special symposium on "The Antiquity of Man" will be held. The speakers for this occasion and the titles of their addresses are as follows: Barnum Brown, American Museum, "The Folsom Culture"; Alfred Romer, University of Chicago, "Pleistocene Mammals and their Relation to Early Man in America"; M. R. Harrington, Southwest Museum, "The Meaning of Gypsum Cave"; Malcolm J. Rogers, San Diego Museum, "Fossil Human Bones found near San Diego, California"; David Banks Rogers, Santa Barbara Museum, "Traces of Early Man near Santa Barbara, California"; and Chester Stock, California Institute of Technology, "Review of Antiquity of Man in the Southwest."

The president of the Pacific Division of the American Association for the Advancement of Science, Dr. T. Wayland Vaughan, will conduct a symposium on "Oceanographic Problems." Papers will be given by T. Wayland Vaughan, P. S. Galtsoff, T. G. Thomson, C. B. Van Wiel and others.

A special session of the zoologists and biologists in honor of a former president of the association, Dr. David Starr Jordan, scientist, teacher and administrator, who has just celebrated his eightieth birthday, is planned.

A number of special symposia are being planned by the sections in cooperation with the national societies which are meeting with the association.

D. R. Curtiss, O. D. Kellogg and J. V. Uspensky will give invited addresses before Section A (Mathematics). P. W. Bridgman, C. J. Davisson, Alexander Goetz, Fritz Zwicky, W. F. G. Swann, R. H. Fowler (Cambridge, England), W. Pauli (Zurich), W. D. Coolidge, E. O. Lawrence, C. C. Lauritsen and M. A. Tuve will deliver addresses before Section B (Physics) and the American Physical Society. Section C (Chemistry) and the Pacific Intersectional Division of the American Chemical Society are planning symposia on "Photochemistry and Band Spectra," "Chemical Reaction Rates," and "Quantum Mechanics of the Chemical Bond." R. H. Fowler will address Section D (Astronomy) on "The Internal Structure of Stars." The geologists, Section E, are planning symposia on "Rock Cut Surfaces," "Coast Range Structure," "Earthquake Proof Structures" and "Seismological Problems." Section F (Zoological Sciences) plans special symposia on "Economic Entomology with special reference to Termites and Citrus Enemies" and "Problems in Genetics." Section G (Botanical Sciences) plans several excursions and field trips to some of the many botanical gardens near Pasadena. The special symposium of Section H (Anthropology) on "The Antiquity of Man" has already been described in this note. The Pacific Division of the Social Science Research Council, which will meet with Section K (Social and Economic Sciences), plans a large number of round-table discussions. Section L (Historical and Philological Sciences) will join in the special program in honor of Dr. David Starr Jordan. The Engineers, Section M, are planning a symposium on "The Colorado River Dam and Aqueduct." Section N (Medical Sciences) will hold a symposium on "High Voltage X-Ray Tubes and their Medical and Biological Possibilities."

In addition to these special sessions and symposia the associated societies and some of the sections are holding sessions for miscellaneous scientific papers.

An unusual number of interesting scientific exhibits have already been secured.

Special low rates quoted by the Pasadena hotels for the meeting of the association are given below.

HOTELS

CONSTANCE—940 E. Colorado St. All rooms with bath. Single rooms, \$2.50 to \$5.00 per day; double rooms, \$4.00 to \$6.00 per day.

CROWN—677 E. Colorado St. Single rooms (with bath), \$2.00 to \$3.00; double rooms, \$3.50 to \$4.50. Suites, \$5.00 to \$6.00.

EL REY—87 E. Green St. Single, \$1.00 to \$1.50; (shower), \$1.50; (with bath), \$2.00 to \$2.50; double room, \$1.50 to \$2.00; (shower), \$2.00; (with bath), \$2.50 to \$3.00.

GRANT—127 N. El Molino Ave. All rooms have private bath; single rooms, \$2.00 per day; double, \$2.50.

GREEN—Corner Raymond Ave. and Green St. Single room, \$2.00 to \$2.50; (with bath), \$2.50 to \$4.00; double rooms, \$3.00 to \$3.50; (with bath), \$3.50 to \$5.00.

HUNTINGTON—South Oak Knoll Ave. Single rooms (with bath), \$4.00 per day; double rooms (with bath), \$7.00 per day.

HOLLY—4 Holly St. Single room, \$1.50; (with bath), \$2.50; double room, \$2.00; (with bath), \$2.50.

LIVINGSTONE (Apartment Hotel)—139 South Los Robles Ave. All rooms with bath; single rooms, \$3.50; double rooms, \$5.00.

MARYLAND—389 E. Colorado St. Single rooms (with bath), \$4.00 per day; (without bath), \$3.00; double rooms (with bath), \$6.00; (without bath), \$5.00 per day.

PARK VIEW—Corner Raymond and Green Sts. Single room, \$1.50 to \$2.00; (with bath), \$2.00 to \$2.50; double rooms, \$2.00 to \$2.50; (with bath), \$3.00 to \$3.50.

SOUTHERN—125 South Fair Oaks Ave. Single room, \$1.00; double room, \$1.50.

SIMPKINSON—141 North Madison Ave. \$1.50 and up.

TAYLOR—64 West Colorado St. Single room, \$1.00 and \$1.50; (with bath), \$2.00 and \$2.50.

VISTA DEL ARROYO—125 South Grand Ave. Single room (with bath), \$5.00 per day; two single rooms, with bath between, \$4.50 per day, each; double room (with bath), \$8.00 per day.

AUTO CAMP

CLARK'S AUTO CAMP—3019 E. Colorado St. All modern conveniences may be obtained for \$1.50 per day.

The Hotel Constance, which is nearest to the California Institute of Technology, is reserving a number of rooms for members of the Botanical Society of America. Members of this society should write directly to this hotel for reservations, stating that they are members of the Botanical Society.

Information concerning low summer excursion rates are given in the mailed announcement and can be obtained from any railroad agent. The usual certificate plan for the winter meetings will not be in effect, since excursion rates are lower (\$140 round trip from New York City).