

An interesting and vigorous discussion followed on all the papers presented to the congress. Special interest was taken in the report of Laue on the interference phenomena observed in crystals with X-rays. A valuable contribution was made by Professor Bragg on selective reflection of X-rays by crystals, and on the information afforded by this new method of research on crystalline structure. The report of Mr. Barlow and Professor Pope on the relation between crystalline structure and chemical constitution was illustrated by a number of models, and was followed with much interest. A report on the papers and discussions at the conference will be published as promptly as possible.

The arrangements for the meeting, which was successful in every way, were admirably made by Dr. Goldschmidt. All the members stayed at the same hotel, and thus were afforded the best of opportunities for social intercourse and for the interchange of views on scientific questions. During the meeting, the members were very hospitably entertained by Mr. Solvay and Dr. Goldschmidt, while a visit was made to the splendid private wireless station of the latter, which is one of the largest in the world, capable of transmitting messages to the Congo and Burmah.

The committee of the International Physical Institute, who were present at the conference, held meetings to consider the applications for grants in aid of research, made possible by the sum set aside for this purpose by Mr. Solvay at the foundation of the institute.

It was arranged that the next meeting of the Conseil de Physique should be held in three years' time at Brussels, when there will be a new program of subjects for discussion. In order to extend the scope of the congress, and to make it as representative as possible, it has been arranged that the original members will retire automatically at intervals, while their place will be taken by new members, who will be specially invited to take part in discussion of definite scientific topics.

E. RUTHERFORD

THE GEOLOGICAL SOCIETY OF AMERICA

THE twenty-sixth annual meeting of the Geological Society of America will be held in Princeton, N. J., on December 30, 1913, to January 1, 1914, inclusive. The sessions of the Society will be held in Guyot Hall and the council is going to continue the plans adopted for the management of last winter's meeting. The morning sessions will be devoted to papers that promise to be of general interest; the noon recess will be long in order to give some time for social intercourse, group discussions and the examination of special exhibits; the afternoon sessions will be somewhat short and will be given over to sectional meetings and to papers of less general scope. A special room (or more than one, if needed) will be provided for the display of specimens, the hanging of charts not needed in the public reading of papers, and for similar purposes. The smoking and general conversation room or rooms will be independent of the foregoing.

The annual address of the retiring president, Professor E. A. Smith, will be delivered on the evening of Tuesday the 30th. Dr. Arthur L. Day, director of the Carnegie Institution's geophysical laboratory has consented to give an illustrated lecture on "Kilauea During the Year 1912," which was the most active period of the volcano within historic times. Dr. Day will include in his address a statement of the results of the work done at the geophysical laboratory on the gases and other material collected at Kilauea. The lecture will be given at a time to be announced later.

The council respectfully urges the fellows to consider the following points in the preparation and presentation of their papers:

1. Subjects selected for presentation should include, as far as possible, matters of general interest and wide application. Details of local problems seldom hold the attention of the audience so closely as the new aspects of general considerations which such details may exemplify.

2. The time required for presenting a paper should be not more than twenty minutes, or at the outside thirty minutes. If the speakers will carefully estimate the time actually needed

for the completion of their papers, such time will, within reasonable limits, be allowed; the speakers will then be saved from the disappointment of being interrupted before their conclusions are reached, and the officers will be relieved from the embarrassment of enforcing the rule regarding the time-limit.

3. It is particularly urged that diagrams and charts should be made on such a scale that they can be deciphered easily at a distance of 30 or 40 feet; and that lantern slides should be exhibited in moderate number, only such being chosen as directly illustrate the subject under discussion. Lantern slides should, if possible, be introduced as the points that they illustrate are reached, rather than after the conclusion of the paper.

By invitation of the fellows residing in Princeton the usual smoker or general social gathering will be held on Tuesday evening, the 30th, after the presidential address. The customary subscription dinner will take place Wednesday evening.

A valuable feature of the regular and social sessions of the annual meetings has always been the attendance of students and other junior workers in geological science, as visitors. The council desires to increase the number of such attendants, and with this object requests each fellow to send to the secretary, not later than December 10, the names and addresses of persons who, whether they can attend the meeting or not, are seriously interested in geology and deserving of recognition as visitors, although they have not yet reached such standing as to gain membership in the society. The council will then write to the persons thus nominated, inviting them to attend the Princeton meeting.

The Paleontological Society will hold its annual meeting in connection with the meeting of the Geological Society, the sessions beginning on Wednesday, December 31, 1913. Detailed information regarding this meeting may be obtained from Dr. R. S. Bassler, U. S. National Museum, Washington, D. C., Secretary of the Society.

EDMUND OTIS HOVEY,
Secretary

THE SOCIETY OF AMERICAN BACTERIOLOGISTS

THE annual meeting of the Society will be held in Montreal, December 31, 1913, and January 1 and 2, 1914 under the presidency of Professor C.-E. A. Winslow. The meetings of the society will be held in the new Medical Building of McGill University on December 31 and January 2. The society will meet at Macdonald College on January 1, leaving Montreal at 9:10 A.M., and returning at 5:42 P.M. Luncheon will be served to the members at Macdonald College.

The annual dinner will be held at the University Club on the evening of January 1. The president's address "The Characterization and Classification of Bacterial Types" will follow the dinner.

The program is divided into topics each of which will occupy one session of the meeting. Titles of papers should be in the hands of the Program Committee not later than November 20, 1913.

Soil Bacteriology—Otto Rahn, University of Illinois, Urbana, Illinois.

Sanitary Bacteriology—including Water and Dairy Bacteriology—H. W. Hill, Institute Public Health, London, Ontario, Canada.

Systematic Bacteriology—H. J. Conn, Geneva, New York.

Technic—L. A. Rogers, Department of Agriculture, Washington, D. C.

Immunity—Benjamin White, Director of Hoagland Laboratory, Brooklyn, New York.

Pathology—P. F. Clark, No. 1027 N. Caroline Street, Baltimore, Md.

Typewritten abstracts of papers (not more than 300 words) should be in the hands of the secretary not later than the last session. These abstracts last year were published in *SCIENCE* and *Cent. f. Bakt.*

A. PARKER HITCHENS,
Secretary

GLENOLDEN, PENNSYLVANIA

THE ATLANTA MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE sixty-fifth meeting of the American Association for the Advancement of Science,