many extremely interesting details. He has produced a very readable volume, which deals with the broader phase of our relations to insects in such a way as to command the attention of thoughtful people throughout the world. It is not a volume limited to the entomology of the United States or the entomology of the present day. It is world-wide in scope; it contains gems from the writers of earlier days and much attractive to the general reader interested in an authoritative and entertaining discussion of progress in different lines of science.

E. P. FELT

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE HOST INSTITUTION AND HOTEL ACCOMMODATIONS FOR THE SYRACUSE MEETING

THE Syracuse meeting of the American Association for the Advancement of Science from June 20 to June 25, the ninetieth of the American Association, and the second annual summer meeting of the new series, will be held under the presidency of Dr. John J. Abel. Syracuse University will be the host institution. Dean Hugh P. Baker, the chairman of the local committee for the Syracuse meeting, has supplied the following information regarding the host institution.

Syracuse University occupies approximately one hundred acres of campus on a hill in the southern section of the city of Syracuse. Its buildings overlook the city's business section, and beyond that Onondaga Lake and the rolling country toward Seneca Lake and Lake Ontario. The elevation is 600 feet above sea level, the prevailing summer breezes are cool, and the climate is healthful.

The university was established in 1871 when Genesee College was moved from Lima, New York, and the city of Syracuse bonded itself in support of a larger institution. The university is not under control of any church denomination; among its important extensions are numbered the Medical College, one of the oldest medical foundations in the state, transferred from Geneva, New York; also a university hospital founded by Bishop Huntington, of the Episcopal Church; and the State College of Forestry, affiliated after the non-denominational character of the university was confirmed. Seventeen separate colleges or educational divisions now make up the institution: they are the Colleges of Agriculture, Applied Science, Business Administration, Fine Arts, Medicine, Law, and Teachers College; and the Schools of Citizenship and Public Affairs, Extension Teaching, Graduate School, Library Science, Nursing, Public Speech and Dramatic Art, and the Summer Session. In all these divisions women share equal privileges with men, though the men outnumber the women by about one thousand.

There are thirty buildings on the campus, several of which have been erected in recent years. Among these are the Hendricks Memorial Chapel; Sims Hall dormitory for men; Slocum Hall, which houses the Colleges of Business Administration, Home Economics, Agriculture, and the School of Citizenship and Public Affairs. The New York State College of Forestry has just completed the Louis Marshall Memorial building and the School of Citizenship expects to be housed in the near future in a building which will be started this spring. The departments of zoology, botany, geology and geography and bacteriology are located in Lyman Hall; Bowne Hall houses the department of chemistry. The third and fourth year medical students, as well as the students who graduated from medicine, are taught in the College of Medicine building. The Good Shepherd Hospital is operated in connection with the College of Medicine. These two units provide the necessary class rooms and laboratories and, in conjunction with the many city hospitals, make for a well-rounded medical unit.

The College of Law holds its courses in Hackett Hall, situated across the street from the county courthouse in the down-town district. The other departments of the university, with the exception of the College of Medicine which is located in the downtown district, are conducted in buildings on the campus between University Place and College Place.

Nearly all the freshmen are housed in dormitories either owned or operated by the university. Sims Hall, dormitory for men, is located on the campus and houses 144 students. Opposite the campus on University Place are Reid Hall, Haven Hall and Winchell Hall, and several smaller dormitories for women.

Although the university has a small endowment, the pressure for admittance continues, despite rigid maintenance of academic standards and increase of tuition charges. This fact is explained by the several currents of student life flowing steadily toward the university, including the original stream of Methodist young people from the towns, villages and farms of central New York, and the added stream of students from the high schools of manufacturing cities, many of them choosing Syracuse because of the opportunities for self help in a city of 210,000 people. The

present enrolment is 5,300, exclusive of summer session and extension courses, which bring the total to 10,000.

The administration of the university is encouraging to educational experiment, so that in addition to "projects" now under way at Syracuse supported by four of the great educational foundations, a great deal of reconstruction is going on in curricula, in a cottage system of student housing in individual tutor-adviser work with freshmen, and in a progressive program for intramural athletics.

The Hotel Syracuse has been designated as convention headquarters. The decision has not been made as yet as to whether the university dormitories will be opened for convention guests. Hotel accommodations, together with information concerning the hotels are as follows:

Hotel Syracuse—Harrison, Warren and Onondaga Sts. (608 rooms). Single rooms, $3 to $6.50 per day; double rooms, $4 to $8.50 per day. All rooms with bath.

Onondaga Hotel—Warren and Jefferson Sts. (500 rooms). Single rooms, with or without bath, $2.50 to $6 per day; double rooms, with or without bath, $4 to $9 per day.

Yates Hotel—Montgomery and East Washington Sts. (200 rooms). Single rooms, with or without bath, $1.50 to $3 per day; double rooms, with or without bath, $3.50 to $6 per day.

Jefferson-Clinton Hotel—Jefferson and Clinton Sts. (140 rooms). Single rooms, with or without bath, $2 to $4 per day; double rooms, with or without bath, $4 to $6 per day.

Mispah Inn—Montgomery and Jefferson Sts. (120 rooms). Single rooms, with or without bath, $1.50 to $3 per day; double rooms, with or without bath, $2.75 to $5 per day.

Hotel Hilton—Harrison and Montgomery Sts. (120 rooms). Single rooms, $2.50 to $3.50 per day; double rooms, $3.50 to $5 per day. All rooms with bath.

Hotel Wood—Jefferson and Clinton Sts. (50 rooms). Single rooms, $2 to $3 per day; double rooms, $4 per day. All rooms with bath.

Truax Hotel—Warren and Harrison Sts. (51 rooms). Single rooms, with or without bath, $2 to $2.50 per day; double rooms, with or without bath, $3 to $5 per day.

Kirk Hotel—West Fayette and South Clinton Sts. (31 rooms). Single rooms, with or without bath, $1.50 to $2.50 per day; double rooms, with bath, $4.50 to $5 per day.

The evening lectures are to be held in the large auditorium of Syracuse Central High School. The high school is situated between the down-town district and the university and is within easy walking distance of either the hotels or the university campus. All the hotels given above are centrally located and are within convenient walking distance of the Central High School. All are convenient to direct transportation lines to Syracuse University.

We are assured that a sufficient number of rooms will be reserved by these hotels to accommodate those who attend the Syracuse meeting, but in order to save possible disappointment, members are urged to make their reservations at once. These should be sent direct to the hotels selected.

CHARLES F. ROOS,
Permanent Secretary

SCIENTIFIC APPARATUS AND LABORATORY METHODS

THE ESTIMATION OF THE HYDROGEN-ION CONCENTRATION OF THE TISSUES IN LIVING ANIMALS

THE great need for suitable methods for the estimation of chemical potentials in the tissues of living animals was emphasized in previous papers from this laboratory.[1] The purpose of this note is to briefly describe a method for the estimation of pH by means of the capillary glass electrode. Further details concerning this method and its application to biological problems will be published in another paper (Public Health Reports). We have previously called attention to the superiority of the glass electrode over other electrodes for the measurement of pH in biological material.[2] The chief advantage of the glass electrode is that it is not affected by the presence of oxidation-reduction systems which are always present in tissues. Another advantage is that the glass electrode can be given almost any desired shape. For the purpose of measuring tissue pH the capillary type is the best, because the glass capillary can be inserted into any of the soft tissues with a minimum of tissue injury.

Special soda lime glass tubing (No. 015 Corning Glass Works) of the following composition is used: SiO_2 72 per cent., CaO 6 per cent., Na_2O 22 per cent. Tubing of approximately 7 mm outside diameter and 1 mm wall thickness is drawn out to a thin-walled capillary, tapering rapidly from the shank. The latter should be about 20 cm in length. The capillary is severed at a distance of 10 to 15 mm from the shank and the tip is carefully sealed in a flame. The work of Kahler and DeEds[3] has shown that the

[1] C. Voegtlin and Floyd DeEds, Public Health Rep., xliii, 380, 1928; H. Kahler, Floyd DeEds, S. M. Rosenthal and C. Voegtlin, *Amer. J. Physiol.*, xci, 225, 1929.

[2] C. Voegtlin, Floyd DeEds and H. Kahler, Public Health Rep., xlv, 2223, 1930.

[3] H. Kahler and Floyd DeEds, *J. Amer. Chem. Soc.*, liii, 2998, 1931.