

to man and his background, or perhaps I should say, man is part of it. The zoo therefore becomes a vivid expression of nature. We have a vision for the zoo of the future. It will be not only a place in which to be refreshed, to find recreation, but also a place in which to learn of the principles which govern all life. I am not glorifying animals—I am merely saying we would do well to know more of their scheme of things; we in turn, will get a better understanding of our own scheme of things.

This is a new day in zoological park planning. The distribution, on the various continents of this earth, of different types of animals—their evolution, their interdependence and social relationships—provide a miracle-story. It is up to us to tell it. In carrying out these new developments we shall be bringing the animals, to the greatest degree possible, out from behind their bars and return them to their natural surroundings.

A private citizen has made possible, for the public benefit, this first major step toward the zoo of the future. He does not want any gratitude but he can not escape it. It will come to him, whether or not he desires it, from the millions of persons who from this day on will enter here to enjoy and to learn.

THE CHICAGO MEETING OF THE AMERICAN SOCIETY FOR TESTING MATERIALS

THE forty-fourth annual meeting of the American Society for Testing Materials will be held at the Palmer House, Chicago, from June 23 to June 27.

Separate sessions will be devoted to such topics as iron, ferro-alloys; water, which includes a Symposium on Problems and Practice in Determining Steam Purity by Conductivity Methods; non-ferrous metals (two sessions); cementitious and building materials; steel, effect of temperature; fatigue of metals, corrosion; plastics, and concrete and concrete aggregates. There will be a joint session with the Western Society of Engineers dealing with three topics of specific local interest, namely, water supply, sewage disposal and sanitary conditions. This may involve some discussion of materials and problems in connection with the Chicago subway. In addition there will be a large number of papers and reports including a paper on tests of glued laminated wood beams impregnated with creosote, and the effect of rate of loading on tensile strength of cord and yarn. Other papers will cover a laboratory test for the ignitibility of coal, a study of the grindability of coal and the fineness of pulverized coal, and studies on the measurement of water vapor in gases. There will be a discussion of the performance specifications for greases and two papers cover the influence of recovery temperature on the ductility of recovered asphalt and the fundamental significance of the Oliensis spot test.

Throughout the week of the meeting some two hundred technical committees of the society are expected

to meet. On Monday the whole day will be devoted to these meetings. The address of the president, Dr. William M. Barr, chief chemical and metallurgical engineer of the Union Pacific Railroad Company, will be given on Tuesday morning at the first formal session. He will speak on "Speed, Specifications, and Safety"; J. H. Van Deventer, editor of *The Iron Age*, will make an address entitled "Mobilizing Materials for Defense."

The sixth exhibit of Testing Apparatus and Related Equipment in which a number of leading companies in the instrument and related fields will take part, will be in progress throughout the five days of the meeting. In addition several committees will sponsor exhibits, including exhibits of paint, varnish, lacquer and related products; lime; radiographic testing and welding research. A number of industrial, university and government research laboratories will also participate. They will show equipment and apparatus that has been developed for special work. This exhibition is held every two years. This year it will include the fourth photographic exhibit on "Materials, Testing and Research."

Local arrangements for the meeting are in charge of a Chicago committee, headed by E. R. Young, metallurgical engineer, of the Climax Molybdenum Company. Serving with him are some fifty leading technical executives in the district.

THE ONE HUNDRED AND TWENTIETH ANNIVERSARY OF THE PHILADELPHIA COLLEGE OF PHARMACY AND SCIENCE

THE Philadelphia College of Pharmacy and Science will celebrate the completion of its one hundred and twentieth anniversary on June 3. An extensive program has been arranged at the College Hall, the scene of activities commemorating the establishing of the college, which was the first of its kind in the Americas. The celebration, to be held in conjunction with the annual Alumni Homecoming Day, will be marked by the first official address of the recently elected president of the college, Dr. Ivor Griffith. It will be entitled "What the Future Has in Store for the Philadelphia College of Pharmacy and Science."

The formal program begins at noon with a luncheon, to be given in honor of the Class of 1891, alumni who have successfully completed fifty years of professional and scientific service. These men become members of a group of honored graduates, the "Semi-Centennialists." They will receive certificates making special recognition of their service.

Following this will be the annual meeting of the Alumni Association at which the address of the retiring president, Charles T. Pickett, for thirteen years

secretary of the Philadelphia Association of Retail Druggists, will be given. He will describe the progress of the college during the last twenty years.

There will be a "Jubilee Dinner" in the evening at which the toastmaster will be Colonel Samuel Price Wetherill, chairman of the Board of Trustees. A group of addresses will follow, also bearing upon the record of the past twenty years. Two decades ago, at its centennial, an extensive program of educational advancement was prepared. That program has advanced even more favorably than was expected. Now, completely equipped new buildings stand in pleasant surroundings as the visible tribute to its success. In addition, the courses of study have been materially expanded and lengthened. Graduate studies and programs of research have been instituted and there are now fifty members of the faculty.

Much of this record will be outlined by the president-emeritus, Dr. Wilmer Krusen, who for fourteen years served as head of the college and who is well known for his former service as head of the Department of Public Health of the City of Philadelphia. Dr. Ambrose Hunsberger, professional pharmacist of the city, will speak for the Board of Trustees, followed by the dean of science, Dr. J. W. Sturmer, formerly president of the American Association of Colleges of Pharmacy. The cooperation of alumni and friends during the past decades will be recognized by Mr. Pickett, for the alumni, and by Dr. Wilmer Krusen.

Dr. E. Fullerton Cook, head of the Operative Pharmacy Department of the college and active on the Board of Trustees, who is chairman of the Committee of Revision of the Pharmacopoeia of the United States, will describe the improved financial condition of the college. Gifts of more than \$1,000,000 have been received through the past two decades.

THE NINTH SUMMER CONFERENCE ON SPECTROSCOPY AND ITS APPLICATIONS

A NINTH Summer Conference on Spectroscopy and Its Applications will be held at the Massachusetts Institute of Technology on July 21, 22 and 23. Morning and afternoon sessions will be held during three days, with discussions by qualified experts on spectroscopic analysis of materials and on other applications of spectroscopy to biology, medicine, chemistry, metallurgy, mineralogy and to industrial and engineering problems.

This conference will repeat to a considerable extent the type of program presented at the conferences held during the past eight summers. The early sessions will be devoted principally to applications of spectroscopy to the analysis of materials. Other topics to

be considered are absorption spectrophotometry, photographic photometry, biological and chemical effects of spectral radiation, industrial applications of spectroscopy, analysis of spectra and the measurement of wavelengths. The more technical and theoretical papers will be reserved for the later sessions.

As soon as it has been prepared, copies of the detailed program of the conference will be sent to any one interested. Attendance at the conference will be limited to two hundred, and experience in previous years indicates that those who plan to attend from a distance should signify their intention in advance, to insure availability of space. No fees are charged for attendance.

Requests for copies of the program, for reservations, or for further information, should be addressed to Professor G. R. Harrison, Massachusetts Institute of Technology, Cambridge, Mass.

CONFERENCE ON MOLECULAR STRUCTURE

THE Graduate School of the Ohio State University will hold a conference on Molecular Structure in the first week of the summer quarter, from June 25 to June 28.

A member of the staff will review a topic and, after time for discussion, invited speakers will read papers on recent research along that line. An abbreviated program follows:

Wednesday, June 25. "The Electronic Structure of Molecules": A.M.—Professor L. H. Thomas, the Ohio State University (review); P.M.—Professor G. Herzberg, the University of Saskatchewan, and Professor Robert Mulliken, the University of Chicago; Evening—A discussion on nomenclature.

Thursday, June 26. "Rotation-Vibration Spectra": A.M.—Professor H. H. Nielsen, the Ohio State University (review); P.M.—Professor D. Dennison, the University of Michigan, and Professor G. Herzberg, the University of Saskatchewan.

Friday, June 27. "Thermodynamic Properties of Molecules": A.M.—Professor H. L. Johnston, the Ohio State University (review); P.M.—Professor E. Bright Wilson, Harvard University, and Professor L. H. Thomas, the Ohio State University.

Saturday, June 28. "Large Molecules": A.M.—Dr. E. Mack, Battelle Memorial Institute (review), and Professor Henry Eyring, Princeton University.

The conference will be open without fee to any who wish to attend it and any one who desires to do so is invited to take part in the discussions. Accommodation is available for men in Baker Hall, University Dormitory, at \$1.00 per night. Further information may be obtained from Professor L. H. Thomas, the Ohio State University, Columbus, Ohio.