

The committee find according to a report in the *London Times* that, comparing the year 1923-24 with the year 1913-14, the number of full-time students in science at the British universities shows an increase of 60 per cent., while the number of bachelor degrees obtained in science has more than trebled. Over the same period, the number of full-time, post-graduate students engaged in scientific research has increased to more than four times the 1913-14 figure. The Department of Scientific and Industrial Research, the committee observe, have afforded great assistance to research students in training, but, except in one or two instances, the Research Associations of the department do not appear to be very extensively developed.

The funds at the disposal of the department are large, but in view of the sums annually spent on scientific research in the United States, and our general public expenditure, they can not, in the opinion of the committee, be described as adequate to the great needs of our industries. It appears from inquiries that there is considerable unemployment among recently trained scientific research workers, and that this is most serious in the case of research chemists.

The committee conclude that the value of scientific research to industry is now widely recognized; but that the part that industry itself can play in maintaining an adequate supply of research workers, and in promoting or supporting scientific research, is not so well understood. They suggest that the government could offer considerable inducement to commercial firms to support research, by permitting sums devoted to this purpose to be treated as trade expenses for the purpose of assessment for taxation. They consider it imperative that, before more men and women are encouraged to undertake scientific research training, the demand for them should first be assured. The committee do not look to the greater industrial concerns—many of which already realize to the full the value of scientific research—to provide a solution of the present difficulty, but rather to the hundreds of smaller firms whose industrial research associations, if fully developed, could utilize many more scientific research workers; to the benefit, the committee submit, not only of each particular industry, but of the industry of the country as a whole.

The committee further suggest an extension of the method adopted by the various research committees and coordinating boards of the Department of Scientific and Industrial Research, and by the Ministry of Agriculture and other Departments; a inquiry with a view to the establishment of an organization on the lines of the "A. D. Little" Laboratories in the United States; and also an extension of the scheme at present in operation in Bristol University, under which an

industrial firm endows for two years a research student who works on a special line of investigation in the laboratories of the university.

In a memorandum appended to the report the committee strongly recommend the formation of a permanent expert advisory committee on industrial inventions, the functions of which would be (1) to examine the claims of inventions and to decide which are of probable industrial value; and (2) to arrange for the semi-large scale, or complete commercial trial, of inventions passed by the committee.

RESULTS OF THE ASIATIC EXPEDITION OF THE AMERICAN MUSEUM

THE American Museum of Natural History has received cables from Roy Chapman Andrews, leader of the museum's third Asiatic expedition, now in Mongolian territory, giving details of the progress of the expedition. Dr. Clark Wissler has made public the following statement:

The results of the third Asiatic expedition prove the presence of early man in Asia and that is no mean achievement. It is certain that when the first try for paleolithic man in central Asia not only returns rich collections, but reveals two widely separated horizons, it is certain that the whole chapter of stone age history is to be read in Asia as well as Europe. This prospect holds out a promise for America, where there has been no clew to the direct relation of prehistoric man to the ancients of the old world.

Having found the implements which are associated with Neanderthal man in prehistoric Europe it can be safely predicted that sooner or later his bones will be found in Mongolia. The recent discovery of a Neanderthal skeleton in Palestine brings this type of fossil man one step nearer to Central Asia.

This discovery by the American Museum of Natural History adds another epoch to the prehistory of man in Asia. Andrews reports that a large collection has been made, sufficient fully to characterize the culture, and that it is parallel to the Azilian of Western Europe.

Azilian is the last of the old stone age cultures and marks the transition to the neolithic, or second great stone age. But the report goes further in stating that the finds promise to be somewhat older than the Azilian of Europe, which would put them back well within the old stone age.

We are also told that some sites examined yielded Mousterian stone tools. This is a period in stone age chronology far back of the Azilian, in fact just before the appearance of the more modern types of man in Europe, or in the time of the Neanderthals.

ANNUAL MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION

THE fifty-fourth annual meeting of the American Public Health Association will be held in St. Louis,

Missouri, from October 19 to 22, with the Hotel Statler as headquarters. This association is the professional society of sanitarians in North America, and its annual meetings always offer a program of interest to public health workers. Several special features add more than usual interest to this year's program.

In a broad and developing field such as public health, there is danger that its diverse branches will not maintain contact with each other and with the whole. The American Public Health Association, representing as it does all public health specialties, both official and non-official, brings together at its meetings and includes in its programs the various elements, personnel and subjects that go to make up our public health structure. With a view to correlating these elements, it has this year arranged for a greater number of joint sessions and general sessions than is customary.

The association's nine sections—public health administration, laboratory, sanitary engineering, food and drugs, vital statistics, industrial hygiene, child hygiene, health education and publicity, and public health nursing—will have programs of their own consisting of one or more sessions. In addition, in a number of instances two and sometimes four sections will combine to discuss in a joint meeting some outstanding development of interest to the various groups. One subject to be discussed from four angles is the epidemiology of respiratory diseases; another is oyster pollution. There will be also five general sessions participated in by the entire association. In the twenty-seven meetings arranged for, more than one hundred and twenty-five papers and reports are scheduled. These figures do not include luncheon and dinner sessions devoted to particular topics, nor a special session on mental hygiene sponsored by the National Committee on Mental Hygiene.

The local committee on arrangements has provided an attractive program of entertainment including trips to points of general and scientific interest in and near St. Louis, free tickets to the theatre and the traditional reception following the opening meeting. The ladies are especially invited to attend and plans have been made to occupy them during the full period of the meeting.

Members of the association and their families will receive a twenty-five per cent. reduction in railroad fare traveling to and from the meeting. Non-members should make application for reduced fare to Mr. Homer N. Calver, executive secretary, American Public Health Association, 370 Seventh Avenue, New York City. The secretary will also gladly furnish additional information regarding the meeting and the program.

THE AUTUMN MEETING OF THE AMERICAN ELECTROCHEMICAL SOCIETY

THE annual fall meeting of the American Electrochemical Society will be held this year at Chattanooga, Tenn., on September 24, 25 and 26. A number of important papers will be presented by well-known authorities on electrochemical subjects.

This meeting will closely follow completion of the Wilson Dam at Muscle Shoals and the society will take the opportunity to make an inspection trip to this point as part of the program.

In and around Chattanooga there are 378 factories making 1,329 kinds of products. Cheap transportation on the Tennessee River affords easy distribution of these. The Tennessee Electric Power Company now has about 233,000 h.p. available for industries and factories and on completion of the work at Muscle Shoals much additional power will be placed at the service of the Chattanooga district. This supply of cheap power should especially stimulate the growth of the electrochemical industry in this vicinity.

During the fall meeting, headquarters of the American Electrochemical Society will be at the Signal Mountain Hotel, forty minutes' ride from the heart of the city and noted for its beautiful surroundings.

The first two days of the meeting will be taken up with the technical program. The subject of the symposium for this meeting will be "The relation of electrochemistry to the fertilizer industry." Dr. H. C. Parmelee will be in charge of this symposium. Papers will be offered on nitrates, phosphates, hydrogen, potash and other subjects. On Friday a round-table discussion will be conducted on "Electric Ferro Alloys." Mr. Robert Trumbull will be chairman.

On Saturday, September 26, members and guests will spend the entire day at Muscle Shoals. This will afford an unusually fine opportunity to inspect America's largest dam, a development of immense interest to the electrochemical industry. A further program of visits among the local industries and nearby places of interest has been arranged by the local committee, of which Mr. Paul J. Kruesi is chairman.

RESEARCH FELLOWS AT THE CARNEGIE INSTITUTE OF TECHNOLOGY

EIGHT appointments as research fellows and one as research engineer have been made to conduct investigations of problems in mining and metallurgy this coming year in cooperation with the U. S. Bureau of Mines, according to an announcement from the Carnegie Institute of Technology.

The appointees to mining fellowships are: Russell B. Cooper, Johnstown, Pa., University of Pennsyl-