M. N. Sobolev and co-workers: Metallurgy of ferrovanadium.

E. I. Antonovskiĭ and co-workers, of the Balkhash Copper Combine and the Leningrad Mining Institute: Development of a successful method of producing molybdenum.

F. F. Vol'f and co-workers, of the Ural Aluminum Industry. Vol'f is professor at the Ural Industrial Institute: Development of a method of large-scale manufacture of aluminum from Ural bauxites.

P. A. Rebinder, corresponding member of the Academy of Sciences: Research on surface phenomena and the effect of small additions of active substances on the properties of solids. This work led to the development of new cutting fluids which facilitate the machining of metal. Substances were also developed as a result of these studies which reduce the hardness of geologic formations in drilling.

A. P. Belopol'skiĭ and co-workers, of the Institute of Fertilizers and Insectofungicides: Development of a new method of manufacture of soda and ammonium sulfate from mirabilite, resources of which are very extensive in the U.S.S.R.

G. K. Boreskov and A. G. Amelin, of the Institute of Fertilizers and Insectofungicides: Improvements in the contact method of sulfuric acid manufacture through perfection of the method of preparation of the vanadium catalyst and the refining of the gases handled.

I. N. Usyukin: Suggestion of a method of intensification of the nitric acid industry, which is stated to have high defense value.

Z. A. Rogovin and co-workers, of the Mendeleev Institute of Chemical Technology and the Institute of the Cotton Industry: Invention, now being used by industry, of a simple method of making cloth fire resistant and water repellent.

B. A. Dolgoplosk and B. A. Dogadkin: Development of a method of preparation of latex from synthetic rubber.

I. N. Nazarov, Institute of Organic Chemistry: Synthesis of vinylacetylene derivatives used by optical, machine-building, and other industries as adhesives.

A. I. Kiprianov, corresponding member of the Academy of Sciences: Invention of cyanine dyestuffs and photosensitizers.

O. Yu. Magidson, of the Chemico-Pharmaceutical Institute: Inventions in the field of pharmaceuticals, including sulfamide preparations.

A. V. Vyshnevskiĭ: Development of the widely used method of novocaine anesthesia and a new type of bandage.

In addition to the impetus given to chemical research by the Stalin prizes granted by the Soviet Government, the Chemical Society of the U.S.S.R. also actively encourages research. A Russian chemical journal just received contains a news account of a contest conducted by the Mendeleev Chemical Society for the best research in chemistry. The researches offered were to be judged on the basis of the following criteria: (a) importance to the war effort; (b) significance for the national economy; (c) novelty of methods used and objects of the investigation selected; (d) quality of the work carried out; (e) theoretical value of the data obtained. The day on which the researches were to be submitted was postponed from January 1 to May 1, 1943. Ten prizes, ranging from 1,000 to 5,000 rubles, and ten certificates of merit were to be awarded.

SCIENTIFIC EVENTS

PRESIDENTIAL ADDRESS AT THE ANNUAL MEETING OF THE ROYAL SOCIETY

SIR HENRY DALE, in his presidential address to the annual meeting of the Royal Society, urged that plans for the reconstruction of London should include provision for a spacious central home for the scientific societies.

There was a large gathering, and at an informal luncheon preceding the meeting the president welcomed the presence of General Smuts, a fellow of the society since 1930, and many guests, including Mr. Attlee, Sir John Anderson, Lord Woolton, R. S. Hudson, L. S. Amery, W. S. Morrison, the High Commissioner for India and the High Commissioner for New Zealand.

Reviewing the history of the society and the different quarters it had occupied, Sir Henry Dale recalled that the society remained for 50 years from its foundation a tenant of rooms in Gresham College, till in 1710, when Isaac Newton was president, it acquired the house in Crane Court, off Fleet Street, which was its home for another 68 years. In 1778 it was granted quarters in Somerset House, where the accommodation was regarded from the first as inadequate and where the society remained for nearly 80 years.

He described proposals then made for bringing the major scientific societies under one roof—the Royal, Linnean, Geological, Astronomical and Chemical Societies—centralizing and coordinating their libraries without any attempt at fusion. He said the acquisition by the Government of Burlington House, Piccadilly, provided what seemed to be the ideal opportunity of giving effect to such a plan, and the Prince Consort, with a vision of the future meaning of science far in advance of his time, privately urged the five societies to press their claim to the site.

There was much rival lobbying in those days, and a magnificent opportunity to give London a scientific

center worthy of the nation's effort was lost. The Government had already made some kind of commitment to the Royal Academy so far as the mansion of Burlington House was concerned.

In 1867 evidence came to the society, first through a statement in *The Times*, that the Government had decided to give the Royal Academy a permanent lease of Burlington House, and the right to extend northwards by building over its gardens. About the same time the large building which now fronted on Burlington Gardens was begun, and was opened by Queen Victoria in 1870.

The Royal Society began to find its present quarters inadequate as early as 1900. Its accommodation was still the same to-day. Its walls could not find room to hang the society's important collection of scientific portraits. Its great library was badly overcrowded, and it continued to grow. Library pressure, in fact, was felt to varying degrees by all the societies there, and he thought it was still true that no scheme would be able to deal with the problem efficiently, and to meet modern needs without disturbing historic associations, which did not include some kind of central coordination of libraries.

REPORT OF THE INTERNATIONAL BOARD OF INQUIRY FOR THE GREAT LAKES FISHERIES

RECOMMENDATION for joint action by the United States and Canada to restore the depleted fisheries of the Great Lakes is made in a report of the International Board of Inquiry for the Great Lakes Fisheries issued after the completion of a two-year survey and now made available to the public.

The board, consisting of two members from the United States and two from Canada, was appointed by the governments of the two countries in 1940 to study the critical situation of the Great Lakes fishing industry and to make recommendations for its preservation and development.

Although the Great Lakes are the principal source of the U. S. supply of fresh-water fish, the more valuable species are now much less abundant than formerly and some no longer support fisheries.

The Great Lakes sturgeon, source of caviar, has been commercially extinct for many years, as are several species of chubs in certain waters. Whitefish, once abundant in all the lakes, is now taken only in certain restricted areas. Lake trout, yellow perch, yellow pike perch and blue pike are among other species threatened locally.

While the total yield of the lakes—some 110,000,000 pounds annually—has not declined greatly during the past half century, less valuable species are now making up the bulk of the catch because of the decline of the choicer food fishes.

Canada's share of the Great Lakes fishery yield is some 25 to 30 million pounds or about a fourth of the total. Of the U. S. catch, about 20 per cent. is made in Lake Superior, 27 per cent. in Lake Michigan, 16 per cent. in Huron, 35 per cent. in Erie and 2 per cent. in Ontario.

During the past sixty years at least twenty-seven international or interstate conferences have been held in an effort to bring about an effective system of regulations for the fisheries of the Great Lakes. The most recent of these conferences, held in 1938, was called by the Council of State Governments and led to the establishment of the International Board of Inquiry.

In a supplement to the report of the full board the United States members, Dr. John Van Oosten, of the U. S. Fish and Wildlife Service, and Hubert R. Gallagher, of the Council of State Governments, cited as precedents for international control of a living resource the Migratory Bird Treaty, the International Fisheries Commission for the restoration of the Pacific halibut and the International Pacific Salmon Fisheries Commission. The Migratory Bird Treaty and the Halibut Commission have already achieved recognized success. The Salmon Commission, after a preliminary period of investigation, will soon undertake regulation of the sockeye salmon fishery of the Fraser River and Puget Sound.

According to the report, the majority of the U. S. fishermen of the Great Lakes favor unified control of the fisheries and are not opposed to an international treaty as a means of attaining it. A poll of fishermen conducted by the board showed that 93 per cent. favored uniform regulation and 68 per cent. expressed approval of negotiating a treaty with Canada.

THE SCIENTIFIC STUDY AND DEVELOPMENT OF PHYSICAL MEDICINE

THE first center for the scientific study and development of physical medicine as a branch of medical practice has been set up in the Graduate School of Medicine of the University of Pennsylvania under the auspices of the National Foundation for Infantile Paralysis. The foundation has made a grant of $150,000 for the five-year period from January 1, 1944, to December 31, 1948.

A statement made by Dr. Basil O'Connor, president of the foundation, reads:

> We believe this to be one of the most important steps which the National Foundation has taken. It will not only advance the treatment of infantile paralysis, but of many other diseases as well.
>
> This is but the first step in a program which should afford a scientific basis for physical therapy and lead to the establishment of a more desirable teaching program.
>
> If this branch of medicine can be given a sound professional standing, medical men of the highest caliber