

said that he and his colleagues considered it a very great honor that an account of their researches on insulin should be given so prominent a place on the program. There was no other problem in the whole vast field of medical science that had attracted such diverse groups of workers as that of the relationship between the pancreas and disturbances in carbohydrate metabolism. Professor Macleod sketched the history of the discovery of insulin by Banting and Best, who worked in his laboratories. Insulin appeared to act not in the blood but in the tissue cells themselves. It caused the tissue cells to take up more glucose (blood sugar). "Insulin sets up some process by which, as it were, a vacuum for sugar becomes established in these cells, so that sugar is removed from the blood."

The various theories which have been advanced to explain this removal were discussed, and then Professor Macleod pointed out that insulin, or at least substances resembling it in certain particulars, had been obtained from clams and other shellfish and, in the case of yeast, from the vegetable kingdom.

SYMPOSIUM ON INDUSTRIAL, AGRICULTURAL AND FOOD CHEMISTRY

"BREAD" will be the subject for the symposium which will occupy the first half-day of the Industrial Division's session at the Milwaukee meeting of the American Chemical Society during the week of September 10. Under this heading will be presented papers dealing with the following:

1. Flour—Its manufacture.
2. Flour—Its physico-chemical characteristics.
3. Bread materials—How they are purchased, how formulas are set and carried out in production.
4. Control processes—How the baker regulates temperature, flour storage, fermentation rooms, mixer, oven, proof box, cooling rooms; humidity, in fermentation rooms, proof box and oven, synthesized operations, etc.
5. Bread—Its rôle in nutrition. A discussion of the new developments which our growing knowledge of vitamins and nutrition is stimulating.
6. Possibly some discussion of world wheat production, having in mind the probability that within a few decades our increasing population and diminishing wheat acreage will present a most vital problem.

Some of the speakers before this symposium will be: Professor Bailey, University of Minnesota; Professor R. A. Gortner, State Experiment Station of Minnesota; Dr. H. E. Barnard, director, American Institute of Baking; Dr. G. C. Thomas, Atlas Bread Factory, Milwaukee; Professor Worth Hale, Harvard Medical College. Dr. H. E. Barnard, director of the American Institute of Baking, will preside.

The afternoon of the first day's session will be devoted to a joint meeting with the Chemical Education

Section under the leadership of Dr. Edgar F. Smith, on "Chemical Education."

THE FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE annual meeting of the association was held at Bordeaux from July 30 to August 4 under the presidency of M. Desgry, a member of the Academy of Medicine. A list of the sections with their presidents follows: Mathematics, astronomy, geodesy and mechanics, Lieutenant Colonel Perrier; Navigation, aeronautics, civil and military engineering, M. Charles Camichel; Physics, M. Maurice de Broglie; Chemistry, M. Georges Denigès; Meteorology and physics of the globe, M. Luc Picart; Geology and mineralogy, M. Joseph Blayac; Botany, M. Lucien Beille; Zoology, anatomy and physiology, M. Louis Boutan; Anthropology, Dr. Henri Martin; Medical sciences, M. Jules Sabrazès; Medical radiology, Dr. Louis Jaulin; Odontology, M. Louis Quintin; The pharmaceutical sciences, M. Albert Astruc; Experimental psychology, Dr. Angelo Hesnard; Agriculture, M. Ulysse Gayon; Geography, M. E. Camena d'Almeida; Political economy and statistics, M. G. Pirou; Education, M. Julien Ray; Hygiene and public health, M. B. Auché; Sub-section for archeology, M. J. A. Brutaux; for linguistics and quantitative philology, M. J. Depoin.

THE LOS ANGELES MEETING

ARRANGEMENTS for the seventy-seventh meeting of the American Association for the Advancement of Science to be held in Los Angeles from September 17 to 20 are appropriately in charge of the Pacific Division of the association which will then be holding its seventh annual meeting. The Pacific Division covers a wide range of territory, including over one thousand members. Its meetings have been held successively at San Diego, Stanford University, Pasadena, Seattle, Berkeley, Salt Lake City, and this year at Los Angeles. The Southwestern Division, embracing a membership in Arizona, New Mexico, western Texas and Chihuahua, Mexico, will this year unite with the Pacific Division and the summer session of the association as a whole, holding its fourth annual meeting in Los Angeles.

The Southwestern Division will be represented on the program of the general sessions by the address of its president, Dr. V. M. Slipper, of Lowell Observatory, who will speak on "The Planets" on Monday evening, September 17, sharing the platform with Dr. E. P. Lewis, president of the Pacific Division.

Secretary E. A. Beals, of the American Meteorological Society, reports great interest among meteorologists and foresters in the Los Angeles meeting, with

many important papers already scheduled. It is likely that their presentation will require several sessions. A whole day session is planned for a symposium to discuss the relationship between weather and forest fires.

The meeting of the American Association of Petroleum Geologists which is arranged for September 20 to 22 will be representative of the oil interests of the United States and Mexico and will be a significant event in the development of this important industry and of this branch of geology. The association has a large membership, including many prominent geologists. Their program will be of great general interest. The holding of these sessions following the period allotted for the general convention will afford an opportunity for attendance of which many will take advantage.

Secretary C. O. Esterly, of the Western Society of Naturalists, anticipates an attendance of at least 200 members. One session on Tuesday afternoon, September 18, will be devoted to a joint symposium with the Ecological Society of America on "Evolutionary and Ecological Aspects of Distribution of Plants and Animals in California." Papers will be presented on plant life of the desert by Dr. Forrest Shreve; on different aspects of evolution among desert animals, by Dr. Joseph Grinnell and by Dr. Francis B. Sumner, and on floral elements of California, by Dr. LeRoy Abrams.

One of the significant features of the Los Angeles program will be a joint symposium arranged for Wednesday afternoon, September 19, in which the Physiological Section of the Botanical Society of America, The American Phytopathological Society of America, the American Association of Economic Entomologists and the Ecological Society of America will participate, the subject being "Ecological Factors in the Distribution and Severity of Plant Diseases and Insect Pests."

W. W. SARGEANT,
Secretary of the Pacific Division

SCIENTIFIC NOTES AND NEWS

RAPHAEL PUMPELLE, the distinguished geologist and explorer, died at his home in Newport, on August 10, at the age of eighty-six years.

DR. T. WINGATE TODD, professor of anatomy in the school of medicine of Western Reserve University, Cleveland, has been elected foreign corresponding member of the Royal Academy of Brussels, Belgium. Dr. Todd's election was unanimous, a result which has not occurred in years.

GEORGE W. CARVER, Tuskegee Institute, has been awarded the Spingarn medal for 1922, given annually

for the most notable achievement by an American citizen of African descent. Mr. Carver is known for his work in applied chemistry in agricultural products, particularly those of the peanut and sweet potato.

THE DUKE OF CONNAUGHT, president of the Royal Society of Arts, at a meeting of the society in July presented the Albert Medals of the society, awarded to Sir David Bruce and Sir Ronald Ross "in recognition of the eminent services they have rendered to the economic development of the world by their achievements in biological research and the study of tropical diseases."

DR. PINERUA, professor of chemistry, University of Madrid, will be guest of honor at a banquet given in connection with the unveiling of his bust in his lecture hall by former students on his reaching the age limit.

At the Portsmouth meeting held during the third week of July, Dr. C. P. Childe was elected president of the British Medical Association.

DR. A. RUSSELL has been elected president and Sir James Devonshire vice-president of the British Institution of Electrical Engineers.

SURGEON REAR-ADMIRAL JOSEPH CHAMBERS has been appointed director-general of the Medical Department of the British Navy, in succession to Surgeon Vice-Admiral Sir Robert Hill, to date from October 1, 1923.

S. T. DANA, forest commissioner of Maine, has been appointed director of the northeastern forest experiment station of the Forest Service, which was provided for by the last Congress, according to an announcement by the United States Department of Agriculture. It will cover in its activities the northeastern forest region, including the New England States and New York, with headquarters at Amherst, Mass.

DR. FRANK M. PHILLIPS, who has been with the U. S. Public Health Service for the past four years, has accepted the position of chief of the Division of Statistics, effective August 1. He has been retained as consultant in research in the Public Health Service and in the Bureau of Mines. He is also professor in statistics at George Washington University.

DR. NATHANIEL ALLISON, dean of the Medical School of Washington University, St. Louis, has been appointed chief of the Orthopedic Department of the Massachusetts General Hospital.

DR. LELAND E. COFER has been appointed director of the division of industrial hygiene of the New York State Department of Labor. Dr. Cofer has been an officer in the U. S. Public Health Service for more than thirty years.