Considerable advances have since been made in our knowledge of the fundamental process of photosynthesis, notably as the result of suggestive discoveries by Professor Baly and his collaborators, but nevertheless we still have much to learn from nature in regard to the synthesis of carbon compounds. This study of the products of the vital activities of animal and vegetable organisms was the original province of organic chemistry, and to this circumstance the science owes its distinctive name. During the last eighty years, however, organic chemists have extended the scope of enquiry to many substances which are produced not as the result of vital forces, but through the agency of the laboratory arts.

For instance, the organometallic compounds, which have no counterparts in nature, have received intensive study because of their influence on the development of modern chemical theory, their practical application in many operations of organic synthesis and their utilization as drugs, weapons of chemical warfare and antidetonants. No objection can be urged against the continued investigation of such important artificial products providing that naturally occurring organic materials are not overlooked.

Professor Japp's address supplies the philosophic reason for a closer study of the products of vital activity, and at present other more mundane considerations may be adduced in support of such researches.

Political and economic forces are bringing into prominence the urgency for a mutually advantageous interchange of commodities between the constituent nations and colonies of the British Empire, and in this pooling of natural resources organic chemistry must play an essential part. Many of the natural products of the dominions and dependencies are in need of systematic chemical study.

Animal and vegetable fats have been mentioned by an investigator in that field as constituting a neglected chapter of organic chemistry, but the phrase is at least as applicable to many other groups of organic substances, for example: the essential oils, the natural gums and resins, and the numerous products of fermentation processes.

By catalytic reductions, involving high temperatures and pressures, one obtains from the oxides of carbon many members of the homologous series of alcohols, aldehydes, fatty acids and esters. Plant life accomplishes similar results under ordinary atmospheric conditions. A comparative study of these two dissimilar sets of processes is clearly demanded.

The importance of imparting to organic chemistry an increasingly biological bias has been illustrated in a convincing manner by my immediate predecessor, Professor Barger, so that anything more than a passing reference to this desirable tendency is hardly required of me. Perhaps, however, I should add that in stressing the need of more systematic research in inorganic and mineral chemistry and in the organic chemistry of vital products, I am convinced that the best results will only be attained if the problems are attacked with the newest weapons which the armory of modern physics can provide.

The primary object of such investigations is the collection of accurate chemical information, but the workers in these two great fields should be stimulated in every possible way to keep a shrewd lookout for any practical applications of their scientific knowledge. When viewed from this standpoint it will be realized that a state experiment in chemical research such as I have described provides competent and enterprising investigators with favorable opportunities for developing their inventive talent in fundamental work of national value and importance.

OBITUARY

RECENT DEATHS

THE death is announced of Dr. W. Howard Forsyth, assistant professor of dairy husbandry at the Connecticut Agricultural College.

DR. EDWARD L. SPITZER, an attending physician and former president of the Jewish Memorial Hospital in New York, died on September 18 at the age of sixty years.

FREDERICK D. PRATT, engineer of the General Electric Company, who on March 8 sailed from New York with a group of other engineers to supervise the establishing of electrical plants for the Soviet Government in Russia, died on September 20 at Moscow.

CARL A. MEISSNER, metallurgical engineer, who has for twenty-five years been connected with the U. S. Steel Corporation, died on October 13, at the age of seventy-one years.

DR. LEWIS EVANS, collector of and writer on old scientific instruments, founder of the Lewis Evans Collection of Scientific Instruments in the Old Ashmolean Building at the University of Oxford, died on September 25, aged seventy-seven years.

HERBERT E. SOPER, statistician of the School of Hygiene and Tropical Medicine, London, died on September 10.

M. JEAN BRUNHES, who was for sixteen years pro-

fessor of geography at the University of Freiburg, Switzerland, died on August 25, aged sixty-one years.

A CORRESPONDENT writes: Dr. Carl Tigerstedt, professor of physiology of the University of Helsingfors, in an accident while sailing was drowned on June 21. Communications from his widow state that thus far his body has not been found. Professor Tigerstedt had visited America twice, the last time at the International Physiological Congress in August, 1929. The successor to his father, Professor Robert Tigerstedt, he had accomplished a great deal in research in physiology and particularly in nutritional studies in Finland. His loss will be keenly felt by all workers in nutrition.

GIULIO FANO, formerly professor of physiology and head of the faculty of science at the University of Florence and lecturer at the Universities of Madrid and Barcelona, died on September 28 at the age of seventy-four years.

PROFESSOR M. BOGOSLAVSKI, one of the bridge-building engineers of Russia, died at Leningrad on October 8 at the age of seventy-one years. He built the span over the Volga River. In recent years he had been a professor in the Institute of Communications at Leningrad.

DR. AKOS SZALAY, curator of the National Hungarian Museum, has been killed by a landslip while endeavoring to unearth a prehistoric canoe sunk under the embankment of the River Tisza.

MEMORIALS

AT the initiative of the Prime Minister of Norway, J. L. Mowinckel, twelve prominent Norwegians recently handed over to Professor Sem Saeland, rector of the University of Oslo, the sum of 100,000 crowns, about $25,000, for the purchase of "Polhögda," the home of Fridtjof Nansen at Lysaker, near Oslo, with the adjoining land, amounting to some 20,000 square meters. The donors desire that the property shall be kept as a lasting memorial to Nansen. They do not, however, wish his home to be turned into a museum, but rather to be utilized for the activities in which the explorer was interested, to be a residence and place where those activities can be carried on. The heirs of Nansen, who have already presented to the public his library and other possessions of public interest, have expressed their willingness to make over the estate for the purpose mentioned. Designs have been approved by the Soviet authorities for a monument to Fridtjof Nansen to be erected in Moscow.

Nature calls attention to the hundredth anniversary of the birth of Albert Günther, one of the most distinguished naturalists in England in the second half of the last century and for twenty years keeper of the Department of Zoology in the British Museum. To mark the centenary, his son, Dr. R. T. Günther, of Oxford, has prepared a bibliography of his father's writings, which has been published as a supplementary number of the *Annals and Magazine of Natural History* (August).

THE *Scottish Geographical Magazine* reports that in July last a massive stone cairn carrying a bronze tablet was unveiled at Inchnadamph, Sutherland, as a memorial to the two distinguished Scottish geologists, Benjamin Neeve Peach and John Horne. The tablet bears the following inscription: "To Ben. N. Peach and John Horne, who played the foremost part in unravelling the geological structure of the Northwest Highlands, 1883–1897. An International Tribute, erected 1930." Mr. H. M. Cadell presided at the unveiling ceremony, which was performed by Sir John Flett, director of the Geological Survey of Great Britain.

SCIENTIFIC EVENTS

THE BRITISH GEOLOGICAL MUSEUM

THE British Geological Survey Board reports that excavations preliminary to the construction of the foundations for the new building adjoining the Science Museum in South Kensington have begun.

In the "Summary of Progress of the Geological Survey of Great Britain and the Museum of Practical Geology for the Year 1929," as abstracted in the London *Times*, the director reports that the position in Exhibition Road is ideal for the purpose, being midway between the eastern wing of the Natural History Museum and the new buildings of the Science Museum. With both of these institutions the new Geological Museum is to have direct connection by means of passages through which the public can travel from one series of galleries to the other. In this way the mineralogical and paleontological galleries of the British Museum and the mining, metallurgical and geophysical galleries of the Science Museum will be in close juxtaposition with the exhibits of stratigraphical geology and economic geology in the Geological Museum, and the combined exhibition will provide a display of objects illustrating the composition and history of the earth's crust that has never hitherto been available in any country.

The work of construction will take at least three years. Although the details of the exterior of the building have not yet been finally settled, it is ex-