SCIENTIFIC EVENTS

TRIESTE AND MARINE BIOLOGY

DR. M. STENTA, director of the Natural History Museum in Trieste, delivered an address, in October, 1921, at the Trieste meeting of the Italian Society for the Advancement of Science, on the part played by Trieste in the study of marine biology. The address has recently been published and is abstracted in *Nature*, from which we quote.

Dr. Stenta referred to the observations of Abbot Fortis published in 1771 on the islands of the Quarnero, and those of Abbot Olivi (1792), who gave, in his "Zoologia Adriatica," a catalogue of the animals of the Gulf of Venice. Almost all the naturalists who visited Trieste in the first half of last century were German; of these, two may be named: I. L. C. Gravenhorst, who recorded (1831) the results of his studies on various molluscs, echinoderms and Anthozoa; and J. G. F. Will, who gave an account (1844) of the anatomy of Scyphozoa, ctenophores and siphonophores. K. E. von Baer came in 1845 from Russia to Trieste to search for larvae of echinoderms, but the results in that and in the following year were not very satisfactory. His visit, however, was fruitful in another respect, for he encouraged Koch, a young Swiss merchant resident in Trieste and an ardent collector, in his project of founding a museum of the Adriatic fauna, which became the center of studies on the Gulf of Venice. Johannes Müller spent the autumn of 1850 in Trieste working on the development of echinoderms and worms.

Among many who worked at the museum between 1850 and 1870 were Oscar Schmidt, who carried on researches on sponges; A. E. Grube, who examined the annelids and discovered the parasitic rotifer *Seison nebaliae*; and Kowalevsky, who described (1868) the remarkable sexual dimorphism in *Bonellia viridis*. In 1874 the Adriatic Society of Natural Science was founded and the 27 volumes of its bulletin are rich in observations on the biology of the area.

In 1875 the Institute of Marine Biology was established by the Austrian Government, and many famous naturalists have worked in its laboratories, *e.g.*, Metchnikoff, on intracellular digestion and phagocytosis; Kowalevsky, on medusae; Driesch, on the development of isolated blastomeres; the brothers Hertwig, F. E. Schultze, K. Grobben and Hatschek.

In 1900 the zoological station was enlarged and reorganized under the new director, Professor C. I. Cori. A list of the more important investigations carried on at the laboratory from that time until 1915 is given by Dr. Stenta, including Friedländer's investigation of the constitution of the purple secretion of Murex, for which 14,000 specimens were collected; Heider's work on the development of Balanoglossus, and Przibram's researches on regeneration in Crustacea. There were also several investigations in applied zoology; the culture of sponges, the coral fishery, and parasitic protozoa of fishes.

It appears from the concluding part of the address that the Italian Royal Committee for Marine Investigation, which took over the zoological stations at Trieste and Rovigno, proposes to suppress the former, and Dr. Stenta puts forward a plea for its retention.

LIVERPOOL MEETING OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

A PRELIMINARY program of the Liverpool meeting of the British Association, to be held from September 12 to 19, under the presidency of Sir Ernest Rutherford, has been issued. The railway companies have agreed to supply return tickets at a single fare and a third to all members who obtain vouchers from the offices of the association, at Burlington House. The president is to deliver his address at the opening meeting on the first evening, taking as his subject the "Electrical Structure of Matter." He will probably be able to describe recent work in the experimental transmutation of elements.

In accordance with the innovation made since the war, the thirteen addresses of the sectional presidents are to be distributed over the week, five being given on the Thursday, five on Friday, and three on Monday. In these the applied side of science is to be given full scope, Professor Ashworth discussing the bearing of zoology on human welfare; Dr. Vaughan Cornish, the opportunity of the British Empire; Dr. Crowther, science and the agricultural crisis; Sir H. Fowler, science and transport; Mr. C. Burt, the mental differences of individuals with special reference to industry; and Sir William Beveridge, employment and population. The presidents of the geological, physiological, botanical, chemical and mathematical sections are to deal with pure science. Professor Nunn is to discuss the education of the masses, and Professor Newberry is to devote his address to Egypt as a field for anthropological research.

The two most important discussions are to be held by the physicists, chemists and engineers on cohesion and molecular forces, and by the chemists and physiologists on the physical chemistry of membranes and its relation to human physiology. There will be a discussion on the origin of domestic animals by geographers and anthropologists.

The Lord Mayor of Liverpool is to give a reception on the Thursday evening, on Friday evening Professor Elliot Smith is to lecture on the study of man, and on the Tuesday evening there is to be a scientific soirée. The more important industrial works in or near Liverpool are to give opportunities to members