control would not provide a satisfactory foundation for the work. He therefore supported the view that the best place for the education of a higher technologist is a special institute of higher technology, and he hoped that the experiment of setting up at least one such institute in the United Kingdom would be undertaken. Prof. S. Zuckerman said he agreed that at least one institute of higher technology should be set up. He had been greatly impressed by the excellence of the research as well as the teaching work which he had seen at the California Institute of Technology, and thought that a college of the same general sort would be of great value to the United Kingdom.

Prof. R. S. Hutton said that a study of the history of the German technical high schools showed that it takes about twenty years to get these into proper working order and establish their reputation. Thus if a demand for such colleges is anticipated in the future, it is important to proceed with the plans quickly. He himself has no doubt that the qualifications demanded of the higher technologist are most successfully acquired in such institutions.

Prof. A. R. J. P. Ubbelohde said that the increase in technologists is required primarily in the top grades, and this constitutes a basic difficulty in utilizing local technical colleges for their training.

At the conclusion of the proceedings, Sir Henry Tizard thanked those who had contributed to the discussion, and said that the Advisory Council on Scientific Policy would give the matter further consideration in the light of the views which had been expressed.

OBITUARIES

Mr. A. J. Wilmott

Alfred James Wilmott died suddenly at South Kensington on January 26. He had given a students' lecture on "Geographical Distribution and Classification" at the Linnean Society the evening before.

He was born at Tottenham on December 31, 1888; but his parents soon moved to Cambridge, when his father, Alfred John Wilmott, was appointed lecturer in history and classics at Homerton Training College.

Young Wilmott soon showed that faculty of rapidly acquiring knowledge which lasted throughout his life. He gained an entrance to the new Cambridge County School, and from there a scholarship to St. John's College in 1906. As he was the first pupil of the School to go up to the University, he had been invited to speak at the jubilee celebrations to be held in July next, and had intended to hurry back from the International Botanical Congress at Stockholm to do so.

He early became interested in outdoor natural history, being encouraged by his father, who was a man of wide culture. At first entomology most attracted him; but at school Dr. Marion Dawson, who was biology mistress, turned his attention to her own special branch—botany. When he went up to the University his knowledge of field botany was much greater than was then usual among undergraduates.

At the University he obtained a first in both parts of the Natural Sciences Tripos, and was awarded a Hutchinson Scholarship at St. John's and the Frank Smart Prize. Like most who then did botanical research at Cambridge he was attracted by physiology, and worked under Dr. F. F. Blackman. He devised a glass 'bubbler' which, when fitted on to the cut stem of a submerged water plant, caused the liberated bubbles to be of a definite and constant size: the bubbles were delivered directly into a cup so that they did not enter into direct contact with the solutions that were being used. My own feeling is that Wilmott would have made a mark in plant physiology, for he had an aptitude for devising ways and means, and his fertile and imaginative mind would have benefited by precise and exact chemical and physical answers to his philosophizing.

Wilmott's knowledge of the flora of Cambridge brought him into contact with C. E. Moss, who had been appointed curator of the Herbarium in 1908, and who gave stimulating lectures on botanical taxonomy. When the Department of Botany, British Museum (Natural History), announced the impending appointment of an additional assistant to work at British and European plants, Moss suggested that he should become a candidate. Competition in those days was by examination, and Wilmott was successful, but did not take up his duties until May 1911. When he arrived, the European room had been built and a few cabinets installed. His first task was to extract the European plants from the general collections (the British plants had been segregated by Robert Brown in 1849). For the whole of his Museum career Wilmott was engaged in incorporating collections—an enormous task still far from completion, for there have been constant large and important accessions which have made the British and European Herbarium without a rival. It was his claim that his arrangement of unincorporated material ensured that every specimen was available for consultation. Whatever future rearrangements may have to be made because of expansion, Wilmott's curatorial work, extensive and precise, will remain as a solid foundation.

It is more difficult to assess Wilmott's scientific status. It cannot be gainsaid that he greatly influenced those studying British plants by his ever-ready help in the herbarium, by his insistence on accuracy—an insistence often most strongly expressed —by his wide knowledge of the habitats of British plants and the factors concerned in their distribution, and by his extensive acquaintance with the European flora. He was much in evidence in the affairs of the Botanical Society of the British Isles, sparing no pains in furthering its objects: he was in many matters the final authority, and this appreciation did much to stimulate him.

Wilmott was a man of ideas and of schemes. Unfortunately he did not possess the faculty of pressing on regardless of attractive side-lines, and became enmeshed in many of these.

He contributed the account of the genus *Atriplex* to the Cambridge Flora. He acted as editor to the tenth edition of Babington's "Manual of British Botany" (1922) at Mrs. Babington's request and provided an appendix to include the most important additions since Babington's death. For the most part his publications consist of short papers, the principal ones dealing with marsh orchids, *Sorbus*, *Alchemilla*, *Rhinanthus* and *Salicornia*; he had been engaged on a monograph of the British species of *Salicornia* for many years and it was nearing completion.

He was a convinced believer in the survival of a relict glacial flora and became the chief British exponent of the theory.

Nomenclature had an abiding attraction for him throughout his career, and his clear and logical treat-

ment of many problems gained him an international reputation: indeed, I know of no one who excelled him in critical analysis; but, unfortunately, this was not accompanied by a practical constructive ability. For several years he applied himself to the nomenclature of units below that of species and in their definition and typification.

He botanized widely in the British Islands for many years in company with Francis Druce, who endeavoured to see every native species in its natural habitat. In 1927 he accompanied C. C. Lacaita to the Sierra Nevada.

Wilmott was a man of many talents, but lacked the power of co-ordination which would have enabled him to become one of the most eminent of systematists. It was this failing which accounted for a manner which, occasionally boyish, was sometimes formidable to those who met him for the first time, for with his huge frame and excited criticisms he was wont to strike terror in the uninitiated. But beneath it all there was a gentle kindliness which was invariably shown when assistance was needed.

Having regard to his somewhat ungainly figure it is remarkable how he excelled at games of all kinds. His 'soccer' was ended in his undergraduate days by a displaced cartilage, but he continued with other games to the very end: his dislike of solitude may have had something to do with this. He was an international table tennis player and three times won the British Veteran's championship. He was also an accomplished pianist and violinist. J. RAMSBOTTOM

Dr. Helgi Pjeturss

DR. HELGI PJETURSS, an Icelandic scientist of outstanding distinction, died at his home in Reykjavík on January 22, 1949. He was born in Reykjavík on March 31, 1872. His mother's family were Icelandic Government officials; but his father's ancestors were gifted farmers in northern Iceland. After passing through the grammar school at Reykjavík, 1891, he studied zoology and geology at the University of Copenhagen and took his degree there in January 1897. In the summer of 1897 he was the geological member of a Danish scientific expedition to Greenland, where he carried out some remarkable researches. Returning to Iceland in 1899 he worked on the geology of Iceland, and during following years many geological papers by him appeared in Icelandic, Danish, English and German. He published the main results of his researches in the thesis for his doctorate (Copenhagen, 1905), "Om Islands Geologi" (On the Geology of Iceland). In his book "Island", a volume of the "Handbuch der regionalen Geologie" (Heidelberg, 1910), he described in detail his geological investigations in Iceland.

Dr. Pjeturss proved that the Dolerite and Palagonite formation of Iceland was not Pre-glacial, as had been generally held, but was formed during the Glacial age. His discovery of glacial facies in the Palagonite formation was announced in the *Scottish Geographical Magazine* (May 1900). It was at first received with some incredulity; but his find of arctic shells (for example, *Portlandia arctica*, Gray), together with boulder clay, in these hotly disputed strata, proved his conclusion that the Palagonite formation was, at any rate to a considerable extent, contemporaneous with the Pleistocene epoch. This was fundamental for Icelandic geology.

In addition, Dr. Pjeturss investigated more thoroughly the Crag formation in Tjörnes, especially its thickness and relationship to other strata in Iceland. He discovered post-glacial raised beaches, which had not been recognized before, in many places in Iceland.

In his later years, Dr. Pjeturss wrote extensively on philosophy and cosmogony. He attempted to investigate dreams and other difficult mental problems, and to explore the possibility of the continuation of our earth life on other stars. He maintained that a more intimate knowledge of our own soul-life would enable us to solve this problem. All his writings on cosmogony were in Icelandic. They are full of original thought.

Dr. Pjeturss was a classical scholar and a great linguist. His Icelandic was of a singular and superior quality. A fine looking man, he was a great athlete and used to swim daily, even in his old age.

JÓHANNES ÁSKELSSON

NEWS and VIEWS

Marine Biology Station, Port Erin: Mr. J. S. Colman

MR. J. S. COLMAN, who has been appointed to the directorship of the Marine Biology Station at Port Erin, Isle of Man, brings to his new duties a rich experience of the seas, the conditions of life and the animals that live therein. He is a widely travelled zoologist, having done research in Florida, Woods Hole and Harvard University (while holding a Commonwealth Fund Fellowship), the Great Barrier Reef off Queensland, and Jamaica and St. Helena. As zoologist to the late Lord Moyne he was able to study the sea in a world tour. He may therefore be expected to offer no narrow point of view, particularly when his comprehensive experience as a teacher is taken into account—one-time associate professor of zoology at the Memorial University College, St. John's, Newfoundland, and latterly senior lecturer in zoology in the University of Sheffield. Mr. Colman's numerous published researches cover many aspects of life in the sea, including additions to our knowledge of the zooplankton, the morphology of coral reefs, the zonation of animals and seaweeds between tides, seal and commercial fisheries. These many interests have been happily brought together in his recently published book, "The Sea and its Mysteries". His present studies are chiefly directed to shore ecology, and a detailed investigation of part of the Yorkshire coast is now nearing completion. No doubt Mr. Colman's colleagues at neighbouring marine stations in Wales, Ireland and Scotland will look forward to a long and fruitful period of co-operation with him.

Central Research Establishment of the National Coal Board: Dr. J. Bronowski

DR. J. BRONOWSKI has been appointed director of the National Coal Board's Central Research Establishment at Stoke Orchard, near Cheltenham, and will take up his post on May 22. This Establishment is a new one and is designed to carry out research into the underground problems of mining, coal prepara-