## OBITUARIES

Dr. Alexander Scott, F.R.S.

AT the great age of ninety-three, Dr. Alexander Scott died at Ringwood, Hampshire, on March 10. He was educated at Selkirk Grammar School, of which his father was rector, and at the University of Edinburgh, where he took first place in chemistry. In 1875 he became assistant to the Jacksonian professor at Cambridge, and having been awarded a Clothworkers' Exhibition in 1876 and a foundation scholarship of Trinity College in 1878, he gained a first class in the Natural Science 3 Tripos in 1879.

From 1884 Scott spent seven years organising the teaching of science in Durham School and Middlesbrough High School. It was while here that Scott found the teaching of science in poor case, being handicapped by science masters either ill-trained or having to subordinate their efforts to preparing their pupils for answering the highly specialized questions of scholarship examinations. In his presidential address to the Chemical Society in 1916, the opportunity for successful careers for science students is compared with the rewards open to classical or mathematical students, and an appeal is made for a change in outlook. Whatever our views may be as to the early concentration on purely scientific subjects, it must be allowed that some progress has now been made in the betterment of the position of the scientific man.

Returning to Cambridge in 1891, Scott resumed work under Dewar, the Jacksonian professor, but five years later removed to London, where he became superintendent of the Davy Faraday Research Laboratory of the Royal Institution (1896-1911), Dewar being director. This Laboratory had been provided by Dr. Ludwig Mond in 1896 to afford opportunities for skilled men with the wish and time to devote to the solution of important problems.

Here Scott for fifteen years devoted himself to chemical work, which he pushed to the highest degree of accuracy, in his determination of atomic weights and of fundamental ratios such as that between

hydrogen and oxygen.

Impressed by the accuracy of the work of Stas and by the view of that chemist of the illusory character of Prout's hypothesis—that the atomic weights of the elements are multiples of that of hydrogen-he remarks in his second presidential address to the Chemical Society that under its spell everyone falls who engages in work on atomic weights. This spell had certainly its influence on Scott, who by his skill and critical faculty clearly showed that Prout's hypothesis, in its original acceptation, could not be maintained; but he held that no work undertaken to determine the atomic weight of any element has led directly or indirectly to such an "increase in natural knowledge" as that centring around nitrogen, on which he did much careful work. Before the subject was cleared up by the discovery of isotopes, Scott in 1917 looked forward "to future investigation to focus out what is the true expression underlying Prout's principle", so that it would "lose its character as a will-of-the-wisp which it had borne in the eyes of so many distinguished men for a hundred years".

In his position as superintendent of the Davy Faraday Research Laboratory, Scott's relations with the workers there were amicable and helpful; many of them are now well known for the researches which they completed during their stay or as a result of further labours after leaving. Among them were

Horace T. Brown, H. Debus, A. Liversidge, A. Mallock, Hugo Müller, Joseph Petavel, Charles E. S. Phillips, P. C. Ray, W. J. Russell, G. Senter and H. T. Tizard. Intolerant of slipshod work, Scott held the respect of his staff and showed a kindly friendliness to the sincere worker, a phrase used recently by one of the workers of that time now with us.

Scott was secretary to the Chemical Society (1899-1904) and treasurer (1904-15), much to the benefit of that Society; during 1915-17 he was its president. He was elected into the Royal Society in 1898, and elected a member of the Athenaum under Rule II in 1923. In 1906 he married Agnes Mary, daughter of Dr. W. J. Russell, F.R.S., and leaves no family. ROBERT ROBERTSON

I FIRST met Dr. Scott when he was seventy-one years of age: erect, with an imposing presence and an immense fund of scientific knowledge; critical, but, as I was to discover, with a capacity for kindness and friendship which can seldom have been surpassed. In 1919 he was invited by the Department of Scientific and Industrial Research at the instance of the Trustees of the British Museum to prepare a report on the condition of museum objects subsequent to their storage in a war-time repository. In accordance with his recommendation, a research laboratory was established at the British Museum, and he was director there until his retirement in 1931. I had the honour to be his assistant. During this period he made various important contributions to restoration work in the fields of archæology and painting, and such studies were his absorbing interest until the last.

Scott was particularly fitted to make these investigations. His career of service to chemistry had by no means precluded ancillary studies: he was a keen botanist and was prepared to tackle almost any inquiry in his private laboratory at home, from the most exacting work on atomic weights to the microscopical identification of plant structures. He was interested in solving problems for their own sake and could not resist the urge to experimentation. Thus it was that his advice was sought by all and sundry, and it was given generously and gratuitously.

He visited Luxor in 1923 and co-operated with Dr. Howard Carter and his chemical advisor, Alfred Lucas, in the prodigious task of organising the preservation of the objects from the tomb of Tutankh-Amun discovered the previous year-a task which was, as all the world knows, accomplished in the most trying circumstances with outstanding

It can have fallen to few to live the full life of service to science described above by Sir Robert Robertson, and to go beyond this and find time and energy in his latter years to become an authority of international repute in an entirely new field. If for nothing else, the name of Alexander Scott will be remembered for his pioneer work in inculcating the laboratory idea in museums: the recent development of this section of museology both in Great Britain and abroad bears testimony to his vision and judgment.

In the quality of his accomplishments Scott was a great man. He was, in addition, a notable benefactor to scientific research and, in my own knowledge, he helped many to a settled and happy life. He lived for science and truth, and found in this creed the formula of happiness. H. J. PLENDERLEITH