

she who had conceived the idea for the erection of a new building and had done so much to bring it to fruition.

Horton was a physicist gifted with remarkable experimental skill, and those who worked with him were inspired by the dextrous and confident manner in which he would handle and adjust highly sensitive instruments. He was never more pleased than when he could watch an undergraduate carrying out an experiment with meticulous care.

The funeral service was held on November 2 at St. John's College Chapel, and the large attendance on that occasion testified to the high esteem in which Prof. Frank Horton was held. C. J. SMITH

Dr. Paul D. Merica

WE regret to announce the death of Dr. Paul D. Merica, of the International Nickel Co. of Canada, in New York on October 20. Dr. Merica was born in Warsaw, Indiana, in 1889. He attended De Pauw University during 1904-7, graduated from the University of Wisconsin in the following year, and received his Ph.D. from the University of Berlin in

1914. During 1914-19 he was associated with the metallurgical division of the U.S. Bureau of Standards in Washington. Dr. Merica carried out a number of researches on duralumin and other aluminium alloys and developed his theory of the precipitation hardening of metals and alloys.

Dr. Merica first became associated with the International Nickel Co. in 1919, becoming director of research and later assistant manager of the Development and Research Department. He was made president of the company in May 1952, retiring from the last post in April 1954.

For his contribution in the field of metallurgy and outstanding leadership in physical metallurgy, Dr. Merica, who was a member of the U.S. National Academy of Sciences, was awarded the James Douglas Medal in 1929, the John Fritz Medal in 1938, the Institute of Metals Medal in 1941, the Franklin Institute Medal in 1942, and American Society for Metals Gold Medal in 1951. Dr. Merica was an honorary member of the American Institute of Mining and Metallurgical Engineers, of which he was a former vice-president and director, as well as of the American Society for Metals.

NEWS and VIEWS

Metallurgy at Oxford:

Prof. W. Hume-Rothery, O.B.E., F.R.S.

THE development of metallurgical science at Oxford has been continuously associated with the work of Dr. Hume-Rothery, and his many friends will warmly welcome his appointment as the first Isaac Wolfson professor of metallurgy (see p. 1319 of this issue). Dr. Hume-Rothery was at the beginning of an army career when a serious illness left him totally deaf. Despite this affliction, he obtained a first in chemistry at Oxford and a Ph.D. at the Imperial College of Science and Technology, London, before returning to Oxford to found the research school in alloy theory, which soon became internationally famous. He was elected a Fellow of the Royal Society in 1937, and he was Warren Research Fellow of the Society during 1932-55, when he became the first holder of the George Kelley readership. Post-war developments in the teaching of metallurgy are largely the result of his enthusiasm and hard work. Dr. Hume-Rothery's early experimental work led to our present understanding of many of the factors governing the form of metallurgical equilibrium diagrams. Perhaps the best-known results are the discovery of the 'electron compounds' and the enunciation of the famous size-factor rule. During the War, his group worked on complex aluminium alloys, and since then his main interest has been in high melting point alloys of the transition metals. He is equally distinguished as the author of five text-books, and his very successful expositions of modern theories have been translated into many languages. Dr. Hume-Rothery was awarded the platinum medal of the Institute of Metals in 1949, and has also received awards from scientific societies in the United States, the Netherlands and Italy.

Reports of the Nationalized Industries in Britain

IN a debate in the House of Commons on November 26, which took note of the annual reports and

statements of accounts of the Gas and Electricity Industries, the Paymaster-General, Mr. R. Maudling, as representing the Minister of Power, said that the surplus of £3.8 million shown in the latest report of the gas industry is due to the increased efficiency of the industry. The number of units in the industry have been reduced from 1,050 at vesting day to 611; the thermal efficiency has been increased to 77.8 per cent, and although the cost of coal and manual labour has risen by 65 per cent since 1950, the price of gas, which represents two-thirds of the industry's sales, has risen by only 47 per cent, and that of coke and by-products by 78 per cent. Mr. Maudling referred to the increasing competition of electricity and the increasing scarcity and cost of good-quality coking coal. The industry is accordingly seeking to exploit lower-grade cheaper coal, and much work is being done on the Lurgi process of complete gasification and on the hydrogenation of oil and coal. The Lurgi process, however, yields gas of low calorific value, and it has not yet been fully proved with grades of coal available in Britain; but if the work of the North Western Board on hydrogenation is successful, it should be possible to produce gas of good quality from a wide range of comparatively low-quality, low-priced coal. Both the Lurgi process and hydrogenation have the advantage of producing no coke, of which there is at present a surplus. The industry is also examining the use of surplus products from the oil refineries, as well as of imported oil, and, besides prospecting for natural gas in Britain, is studying the import of liquefied methane, the use of coke-oven gas and, in co-operation with the National Coal Board, the use of methane from coal pits, as well as both the long-distance transmission and the storage of gas.

Turning to the electricity industry, Mr. Maudling said that total sales last year increased by 6.7 per cent, and sales to farms by 18 per cent, while the average price of electricity sold by the Central Electricity Board increased by 4.7 per cent. Since 1948 the