## DR. R. H. JUDE.

MUCH regret was felt in scientific circles at the death of Dr. R. H. Jude on June 1. Until his retirement during the War, Dr. Jude was for more than thirty years in charge of the Mathematical and Physical Department of Rutherford College, Newcastle-on-Tyne, and he played a very prominent part in the higher education particularly of young engineers on Tyneside, many of whom now occupy prominent positions in the engineering world. For several years he had been a victim of diabetes, but, in spite of ill-health and progressive deafness and blindness, he retained to the end a brave fortitude in his outlook, an active and a clear mentality, and his letters rarely lacked in that spark of dry humour so characteristic of him in earlier years

Dr. Jude was born on December 31, 1853, at Camberwell, and after receiving his early education at King's College School, Strand, he gained a scholarship and proceeded to Christ's College, Cambridge, where he took the B.A. degree. In 1876 he was bracketed 18th Wrangler in the Mathematical Tripos, and the following year he obtained a first class, with a special mark of distinction, in the Natural Science Tripos. One year later, in 1878, he gained the degree of D.Sc. of the University of London, and for a short period after graduation he also studied at the University of

Heidelberg.

During his long association with Rutherford College, Dr. Jude played a large part in the development of the scientific side of that institution. In the words of one of his former colleagues, he had "a profound and ready grasp of his subjects, and a singularly lucid power of exposition"; but above all he wielded "a quickening influence over his students, based on a lively sense of sympathy with both their difficulties and their aspirations, and he so mingled these qualities with a forestalling courtesy as to combine in a rare degree all that gives efficiency and charm to a lecturer." Whilst he took a keen and helpful interest in and had unbounded patience with his elementary students, Dr. Jude was untiring in his efforts to develop the advanced work of his department. In addition to advanced courses in mathematics, he also instituted courses in higher mathematics for engineers and a tutorial class for advanced students, held on Saturday afternoons. Those of us who were privileged to attend these classes saw him at his best, and found in him a friend to whom no labour was a trouble, so long as it might benefit his students. Not merely content with solving his students' difficulties, he often pursued their problems and derived interesting and original results, and although Dr. Jude did not publish many original papers in mathematical and physical subjects, this was undoubtedly due to the monopolisation of his time by teaching duties and problems arising from them. Nevertheless, we owe a great debt to him for his admirable treatise on physics, and for his books on elementary and advanced electricity and magnetism, all of which have been favourably reviewed in these columns. By their clearness and originality of treatment these books have done inestimable service to British students of science. Much of the apparatus described in them was of his own design.

In his youth, Dr. Jude acquired proficiency in French and German, and could converse freely in either language. Moreover, in addition to Greek and Latin, he made a study of Arabic. Quite late in his active career, and in connexion with the translation of one of his books into Russian, he took up the study of that language so that he might be able to look over the proofs of the translation. But perhaps the most remarkable of his linguistic achievements took place after his retirement. Living in Wales, and constantly hearing it spoken, he obtained a considerable knowledge of Welsh, in spite of failing vision, and was able to converse freely with the villagers.

By his kindly, unobtrusive, and gentlemanly bearing, Dr. Jude was endeared of all with whom he associated. His active life was spent in the service of others. He had much to give, and gave of it unstintingly. Our sympathy goes out to his widow, for whose unfailing encouragement and help he was ever grateful, especially

in later years of failing sight and hearing.

ROBERT W. LAWSON.

## PROF. ALBERT HESSE.

THE issue of the Chemisches Zentralblatt for May 28 announces the death at Berlin-Wilmersdorf-of Prof. Albert Hesse, who was editor of that journal from 1902 until 1923. He died on May 10, after a long and painful illness, at the comparatively early age of fifty-seven. The systematic co-ordination and abstracting of pure and applied chemical literature was the main achievement by which Dr. Hesse is known, and his great success in this field has been and is still of great service to the chemist. The fusion of the Chemisches Zentralblatt with the abstract journal of the Zeitschrift für angewandte Chemie in 1919 was a great achievement for Dr. Hesse, and this union will help also in the solution of the problem, yet unaccomplished, of including an abstract of the current patent chemical literature of the world.

Before concentrating on editorial work Dr. Hesse was an active chemist both from the academic and industrial aspects. He was a pupil of Wallach, and made a close study of the ethereal oils. His studies on sesquiterpene alcohols and the odoriferous constituents of flowers, including jasmin, rose, ylang, tuber, and orange-blossom, and the synthesis of camphor were among the problems which at different times occupied his attention. He was associated for some time with the famous firm of Heine and Co. of Leipzig, and his name occurs in many patents connected with essential oil.

In addition to his editorial work and his contribution to patent literature, reference may be made to two publications of a more economic character. Jointly with Prof. Grossmann he wrote a report entitled "England's Trade War and the German Chemical Industry," and in 1909 in the Wallach-festival publication he dealt with "The Development of the Ethereal Oil Industry in the last 25 years in Germany."

J. REILLY.