

## News and Views

Prof. A. Fowler, F.R.S.

PROF. A. FOWLER, who, at the meeting of the Royal Astronomical Society on May 11, was presented by Dr. Edwin Hubble with the Bruce Medal of the Astronomical Society of the Pacific, is the *doyen* of English-speaking spectroscopists. So long ago as 1885, he became attached to the Solar Physics Observatory at the Royal College of Science under the late Sir Norman Lockyer, with whom he remained until 1901 when, on Lockyer's retirement, he was given the charge of the astrophysical work of the College. The intimate experience he acquired of the practical aspects of spectroscopy—a subject much more specialised then than now—was turned to good account, and his share with Lockyer in recognising the existence and importance of 'enhanced' lines (the basis of modern ionisation theory) was rapidly followed by the attribution of the *M*-type stellar absorption bands to TiO and the 'comet-tail' bands to low pressure CO, the identification of many solar spectrum lines with bands of water vapour and magnesium hydride, and other astronomical work of the first importance.

THE sudden prominence given to spectroscopy in 1913 by Bohr's theory of the hydrogen atom offered an opportunity for the application of Prof. Fowler's peculiar knowledge which he was not slow to accept. The interpretation of enhanced lines as radiations from ionised atoms in the general case was mainly due to his work, and in a series of subsequent papers he provided some of the most fundamental observational data for the extraordinary development of atomic physics in recent times. Under his influence and direction, a considerable school of spectroscopists has grown up, and many vital contributions to modern spectroscopy have been made by workers who received their original impetus from him. Prof. Fowler was in large measure responsible for the organisation of the International Astronomical Union, of which he was the first general secretary, holding office for six years. Since 1923 he has been Yarrow research professor of the Royal Society—a position from which he retires at the end of the present session. In addition to the Bruce Medal, his long list of honours is to be augmented this year by the award of the honorary Sc.D. and D.Sc. degrees of the Universities of Cambridge and Durham, respectively.

Sir Richard Redmayne, K.C.B.

AT the annual meeting of the Institution of Civil Engineers held on May 8, Sir Richard Redmayne was elected president in succession to Brigadier-General Sir Henry Maybury. This is, we believe, the first time a mining engineer has been chosen for this position of distinction, and Sir Richard's election is a mark of recognition of his important services to Great Britain and to the mining industry generally. Born at Gateshead-upon-Tyne on July 22, 1865, Sir Richard, after being taught privately, passed through

the Durham College of Science, Newcastle-upon-Tyne, and at eighteen years of age began practical work in the Hetton Collieries, Durham, of which he became the under-manager. In 1891–93 he was in South Africa, and then returning home, was for eight years resident manager of the Seaton Delaval Collieries, Northumberland. In 1902, at the age of thirty-seven years, he was appointed professor of mining in the University of Birmingham, and to him fell the task of planning the Department of Mining. Six years later he was appointed H.M. Chief Inspector of Mines, and this important position he held throughout the War and until 1920. He had previously been employed by the Government on official inquiries and he afterwards served on many committees and Royal Commissions appointed to inquire into the use of electricity in mines, the organisation of rescue work, safety lamps, explosions and spontaneous combustion, and the organisation of the coal-industry. Both when at Birmingham and since his retirement from the Home Office, he has practised as a consulting mining engineer. He has served as president of the Institution of Mining and Metallurgy and is a vice-president of the British Science Guild and president of both the Institution of Professional Civil Servants and the Association of Scientific Workers.

New Foreign Members of the Linnean Society

PROF. CAMILLE SAUVAGEAU of Bordeaux, and Prof. G. Otto Rosenberg, professor of botany in the University of Stockholm, were elected foreign members of the Linnean Society at the meeting on May 10 to fill the vacancies caused by the deaths of Prof. K. von Goebel and Dr. Erwin Baur. Prof. Sauvageau first came into prominence in 1877 by his work on Tunisian cryptogams in collaboration with N. Patouillard. Since then he has been concerned almost exclusively with the study of the brown seaweeds. He has worked out the life-histories of a number of these algæ, choosing representatives of all the natural orders, and was the discoverer of the filamentous gametophyte in Laminariales. He has also made elaborate taxonomic studies of the difficult genera *Fucus* and *Cystoseira* based on extended collecting experience. Sets of his specimens illustrating the monographs have been distributed to the principal herbaria. Prof. Rosenberg is well-known for his cytological studies, mainly devoted to development in flowering plants. His thesis for his doctorate in 1897 was on the physiological cytology of *Drosera rotundifolia*. This was followed ten years later by an account of the cytology of the hybrid *Drosera longifolia* × *rotundifolia*, in which he established the occurrence of chromosome segregation. Other valuable researches have been on the embryology and pollen development of *Zostera* and the discovery of the phenomenon of apogamy in *Hieracium* and *Crepis*. His broad outlook on cytology has enabled him to make several generalisations which have had considerable influence on problems of taxonomy and phylogeny.