

is daily self-evident. The theoretical physicist using the dielectric approach has probably made a more remarkable contribution to the theory of the solid state and, to a less extent, the liquid state; but his fertility has rather overwhelmed the experimentalist. The rich and varied experimental techniques disclosed at these meetings give, however, high promise for the eventual elucidation of these difficult but fundamental problems.

OBITUARY

Sir George Julius

WHEN the Australian Council for Scientific and Industrial Research was established in 1926, Sir (then Mr.) George Julius was invited to take the part-time chairmanship of the Council and of its Executive Committee. He held office until the end of 1945, and so was intimately associated with all the developments of this virile organisation during its first twenty years. He died on June 28 at the age of seventy-three.

Born in Norwich, Julius was educated at the Church of England Grammar School in Melbourne and later at the University of New Zealand, where he attended classes with his contemporary and friend, Ernest Rutherford. Graduating in engineering, he was appointed in 1896 to a post in the Locomotive Department of the Western Australian Railways, and while there he carried out an extensive investigation of the mechanical properties of Australian hardwoods. After eleven years he left Government service and set up as a consulting engineer in Sydney. His firm (later Julius, Poole and Gibson) was in the

course of years associated with very many of the main engineering enterprises of Australia.

Sir George's personal contacts were wide, but his chief interest lay always in mechanical invention, much of his work being done in a very fine private workshop at his beautiful home at Darling Point on the edge of Sydney Harbour. He is perhaps best known to most people for his work on the Julius totalizer, now in use on many racecourses throughout the world. His father, the late Churchill Julius, formerly Archbishop and Primate of New Zealand, and himself no mean amateur engineer, was always deeply interested in his son's inventions, including all improvements to the totalizer; but he was careful to preface an approach to the subject by a declaration that such machines might well be sunk in the Harbour!

In 1898 Julius married Eva, the third daughter of another very famous Australian engineer, Mr. C. Y. O'Connor, who built the Mundaring Weir at Perth and, despite deplorable political interference, carried through to complete success a scheme for the transmission of water from Mundaring to the goldfields of Kalgoorlie and Coolgardie.

As president of such bodies as the Australian Institution of Engineers, the Engineering Association of New South Wales, and the Electrical Association of New South Wales, Sir George played a notable part in the professional public life of his adopted country. He was knighted in 1929 and later received the honorary degree of D.Sc. from the University of New Zealand. His last visit to England was in 1927, when he attended the Empire Agricultural Conference which led to the establishment of the Imperial Agricultural Bureaux. DAVID RIVETT

NEWS and VIEWS

New President of the British Association:

Sir Henry Dale, O.M., G.B.E., F.R.S.

SIR HENRY DALE has been elected president for the year 1946 of the British Association for the Advancement of Science. Sir Henry was formerly director of the National Institute for Medical Research and for ten years before that he directed the Wellcome Physiological Research Laboratories (1907-14). He has achieved world recognition for his work on the physiological effects of histamine, a derivative of ergot, which was followed by brilliant researches resulting in the isolation of histamine and acetylcholine from animal tissues. Later work was devoted to examining the part played by these substances in physiological and pathological processes. Many other research workers have carried out their investigations under Sir Henry's guidance.

But apart from his own scientific research work, Sir Henry Dale has taken a very active part in the organisation of scientific work in Great Britain. For ten years (1925-35) he was one of the secretaries of the Royal Society of London and in 1940 was elected president of the Society—an office which he filled with conspicuous success until his statutory resignation in 1940. Until September of this year he is director of the laboratories and Fullerian professor of the Royal Institution—a post he has

held since 1942. He is also a member of the Medical Research Council. He is a foreign member of numerous learned societies throughout the world. It is clear that in view of Sir Henry's outstanding career both as a scientific research worker and as administrator and organiser, the Council of the British Association has made an eminently wise choice for its next president.

Botany at the Fouad I University, Cairo

Prof. F. J. Lewis

PROF. F. J. LEWIS has recently retired from the chair of botany in the Fouad I University, Cairo, which he has held since 1935. A graduate of the University of Liverpool, he devoted himself to ecological investigations and published a number of important papers on the post-glacial beds of the peat mosses of the north of England and also of Scotland. He gave up his lectureship in Liverpool to become professor in the newly founded university of Alberta, where he continued his ecological work, relating it to the rigorous climatic conditions of Canada. It must have been a great change for him to settle in Egypt; but new opportunities for ecological investigations presented themselves and led him to the establishment of a desert laboratory some little distance from Cairo. Very different problems also presented themselves by the accumula-

tion of weeds blocking the canals and drains of the Nile Delta. With the help of two of his assistants, he undertook to investigate for the Ministry of Public Works this serious interference with the system of irrigation.

As a teacher and organiser of research Lewis was most successful, as can be gathered from the rapid growth of his Department and from the fact that many of his students stayed on to prepare for the M.Sc. and Ph.D. degrees by research. During the earlier years of his stay in Egypt, the Faculty of Science was housed in an old palace at Abbassia between Cairo and Heliopolis, but for his growing department a new and more spacious laboratory was planned at Giza, the main site of the University (*Nature*, July 13, p. 43). With infinite tact and patience Lewis overcame all the difficulties this proposal involved and he now leaves the Botanical Department adequately housed for the accommodation of about 1,200 students and the large staff of lecturers and demonstrators. Fortunately, during the last few years Lewis has had the help of another professor, Prof. Y. S. Sabet, who has been a most loyal colleague. With both his students and his staff Lewis has been deservedly popular. Thus Prof. Lewis can now look back on his ten years of hard work in Cairo with complete, as well as pleasurable, satisfaction, and perhaps that has enabled him, in spite of a trying climate and war-time conditions, to retain abundant physical and mental energy.

Botany at University College of Science, Calcutta Prof. S. P. Agharkar

PROF. SHANKAR PURUSOTTAM AGHARKAR, of the University College of Science, Calcutta, has retired after thirty-two years of service. Prof. Agharkar was appointed Ghose professor of botany in 1914 and deputed to Germany for further studies. In Berlin he studied under A. Engler, L. Diels, G. Haberlandt and others and obtained the doctorate of the University in 1919. In the meantime, with the inauguration of the Post-Graduate Department of the University of Calcutta, the palatial residential building of the late Sir Tarak Nath Palit at Ballygunge was converted into the Biological Laboratory and Prof. Paul Brühl was placed in charge of the Botany Department. He equipped it on a large scale in different branches of botany and initiated research work by students at the University. Prof. Agharkar returned to the University in 1920. In 1929 he took complete charge of the Department after the retirement of Prof. Brühl. From then onwards, Agharkar succeeded in increasing the number of members of the teaching staff for the different branches of botany, so that to-day facilities for research in mycology, cytogenetics, physiology and palaeobotany, etc., are available in the laboratory, and much good work has been published.

Throughout his career, Prof. Agharkar has played a prominent part in the different scientific societies of India: he presided over the Botany Section of the Indian Science Congress in 1924; he was president of the Indian Botanical Society in 1934; hon. secretary of the Indian Society of Soil Science (1935-40); president of the Botanical Society of Bengal (1939-42); president of the Indian Ecological Society (1944-46); biological secretary of the Royal Asiatic Society of Bengal (1943-44). He has been a member of the Committees of the Imperial Council of Agricultural Research since 1930, of the Indian Central

Jute Committee since its establishment, of the governing body of the Indian Research Fund Association 1939-42. He played a prominent part in organising the scientific activities of the two well-known All India scientific organisations, namely, the Indian Science Congress Association as its general secretary from 1924 until 1934 and the National Institute of Sciences of India as its honorary secretary during 1935-45.

Prof. P. C. Sarbadhikari

PROF. P. C. SARBADHIKARI, who succeeds Prof. Agharkar in the Ghose professorship of botany at the University College of Science, Calcutta, is a former pupil of the late Sir John Bretland Farmer, at the Imperial College of Science and Technology, London, where he obtained the degree of D.Sc. in the University of London and won distinction as a research student. His original work has been mainly cytological, and in this field he has made notable contributions to our knowledge of the life-histories of fungi, ferns and flowering plants. Both as a student and while on leave as a teacher at Colombo he made wide contacts, by working at the Royal Botanic Gardens, Kew, at the John Innes Horticultural Institution during the time of Bateson, at the Jodrell Laboratory with Miss Digby, and in Paris where he worked under Guillermond. For many years associated with the University of Ceylon, first as a lecturer and later as professor of botany, Sarbadhikari returns with a long and varied experience to the University of Calcutta where he had first graduated a quarter of a century ago.

Civil Engineering at King's College, London: Prof. A. D. Ross

DR. A. D. ROSS, who will succeed Prof. C. H. Lobban in the University of London chair of civil engineering at King's College (see *Nature*, July 20, p. 91), graduated at Edinburgh in 1929. After some years in professional civil engineering on railway and road construction, he returned to the University of Edinburgh as an assistant in the Engineering Department under the late Sir. T. Hudson Beare. He left Edinburgh to serve for a time as an education officer with the Air Ministry, and since 1935 he has held the appointment of lecturer in the Department of Civil and Mechanical Engineering at King's College, London. Dr. Ross's main interest has been in the field of concrete and reinforced concrete, and he has studied especially the non-elastic deformations in this material and their effects on the stress distribution in structures. His earlier work was concerned with an analysis of the numerous factors controlling creep, and he has devoted attention to the influence of the ratio of surface area to volume on the magnitude and distribution of shrinkage. Subsequent work has been concerned with the application of the knowledge of creep and shrinkage to reinforced concrete structures, and he has obtained solutions to a variety of problems in the distribution of stress by means of an idealized Voigt model. The results of his researches have been communicated in papers published by the Institution of Civil Engineers and other technical bodies.

International Federation of University Women

THE International Federation of University Women is holding its twenty-sixth Council meeting—the first since the War—at Crosby Hall, Chelsea, by