

The *James B. Macelwane Award* has been presented to Dr. K. F. Hasselmann, faculty member of the Institute of Geophysics of the University of California in La Jolla, in recognition of his outstanding contributions to the geophysical sciences, and especially for his work on non-linear wave interaction. During his work, Dr. Hasselmann has been able to account for the observed spectrum of microseism in terms of the observed spectrum of ocean swell.

Dr. J. W. Joyce, of the Department of State, has been presented with a *Special Award* for "his leadership in directing the course of the American Geophysical Union's international affairs and for his outstanding service on behalf of geophysics in the United States". In guiding the expansion of the Union's geophysical activities throughout the world, Dr. Joyce as secretary for international participation has provided a solid foundation of international diplomacy in geophysics on which the Union can build in the future. Dr. Joyce was head of the National Science Foundation Office for the United States International Geophysical Year Programme.

Control Engineering in the University College of North Wales, Bangor : Prof. R. J. A. Paul

MR. R. J. A. PAUL has been appointed to the newly created chair of control engineering within the School of Engineering Science at the University College of North Wales, Bangor. Mr. Paul is at present the deputy head of the Department of Electrical and Control Engineering in the College of Aeronautics, Cranfield. He had wide experience of control engineering in the motor and aircraft industries before going to Cranfield and his recent research work has been concerned with the use of computers in adaptive control systems. Mr. Paul's appointment fills the third chair in the Bangor School of Engineering Science, the others being electronic engineering and materials technology. The School has grown out of the electrical department which has been in operation for many years. This course has always had and still maintains a close affinity with the basic sciences, particularly physics and mathematics. The undergraduate course in electronic engineering includes general principles of electronics, electrical materials, and electrical machines. In essence, it provides a basic course in electrical science, mechanical science and materials science against a background of electronics and control. More specialized courses are offered for the M.Sc. degree in such subjects as electrical materials science, control engineering, electronic devices and electronic circuits.

Botany in King's College, London:

Prof. F. R. Whatley

DR. F. R. WHATLEY has been appointed to the chair of botany in King's College, London, in succession to Prof. T. A. Bennet-Clark, who has been appointed professor of botany and dean of the School of Biological Studies in the new University of East Anglia at Norwich. Dr. Whatley graduated from Selwyn College, Cambridge, in 1945 and continued as a postgraduate in the Department of Biochemistry, working with Dr. R. Hill. He began an investigation of the distribution and activity of nicotinamide adenine nucleotides in the leaves of higher plants at a time when their metabolic significance was less well appreciated than it is to-day. In 1947-48 he held the Levy studentship. He left Cambridge to work in Prof. Arnon's laboratory in California, where he has remained since except for two brief interruptions. He was therefore associated almost from its very beginnings with the work on electron transport and phosphorylation in isolated chloroplasts which developed in that laboratory and is now recognized as a basic contribution to our knowledge of the mechanism of photosynthesis. He held a senior lectureship at the University of Sydney during the period 1950-53 and during 1959-60 held a Guggen-

heim fellowship, to work in the Biochemistry Department, Oxford. During that year he studied the metabolism of autotrophic bacteria.

The Department of Scientific and Industrial Research Hydrological Research Unit: Dr. J. S. G. McCulloch

DR. J. S. G. McCULLOCH, head of the Physics Division of the East African Agriculture and Forestry Research Organization at Muguga, Kenya, has been appointed to take charge of the Department of Scientific and Industrial Research Hydrological Research Unit at Wallingford, near Oxford. Dr. McCulloch graduated in physics and mathematics at the University of Edinburgh, and gained his Ph.D. at the University of London. After service with the U.K. Atomic Energy Authority, he joined the East African Agriculture and Forestry Research Organization—part of the East African Common Services Organization—in 1955, as agricultural meteorologist in the Physics Division. In 1959, while on home leave, he gained a Diploma in Statistics (Biometrics) at the University of Aberdeen, and on his return the Statistics Section of the East African Agriculture and Forestry Research Organization was integrated with the Physics Division. Under the direction of Dr. McCulloch, the statistics staff recently carried out computations and provided statistical advice on matters ranging from nematodes to wildebeests. In 1961, Dr. McCulloch became head of the Physics Division, and he has since been responsible for all its agricultural meteorological work, including a comprehensive series of catchment area experiments, set up to investigate the hydrological consequences of land use changes in stream-source areas. With the advice and encouragement of Dr. McCulloch, a new, cheap research tool, a simplified lysimeter, by which the daily water use of a growing crop can be measured by observers with the minimum of training, was developed, and several have been installed by the Physics Division in East Africa. Dr. McCulloch was recently appointed chairman of a Working Group of the World Meteorological Organization, and his many published papers include one on radiometers.

Importation of Rare Animals

IN moving the second reading of a Private Member's Bill, "The Importation of Rare Animals", in the House of Commons on April 10, Miss Harrie Anderson quoted a resolution passed at the seventh General Assembly of the International Union for Conservation of Nature and Natural Resources, the Survival Service Commission and the Fauna Preservation Society at Cracow on June 24, 1950. The resolution requested the International Union to urge all Governments who did not yet restrict the import of rare animals in harmony with the export laws of the countries of origin to do so and thereby support the efforts to preserve the animals in danger of extinction. Miss Anderson, whose Bill received considerable support in the House, urged that Britain should set an example. She referred to a memorandum from a Conference of the Survival Service Commission of the International Union at Nairobi last September which directed particular attention to the existence of a large clandestine and profitable business based on the export of rare species. The real danger of extinction of some species was widely admitted in the House, and the Minister of State for Education and Science, Sir Edward Boyle, who replied for the Government as responsible for the Nature Conservancy, readily agreed with the objective of the Bill. He undertook to ask the Foreign Secretary to see whether he could persuade his Ministerial colleagues on the Committee of Ministers of the Council of Europe to take action also. However, while Sir Edward said that the Government entirely approved and welcomed a Bill along these lines, he could not advise the House to give a second reading to the present Bill. It was insufficient to