

SCIENTISTS IN THE PUBLIC SERVICE IN BRITAIN

SPECIAL PROMOTIONS

FURTHER posts have been created in the Civil Service as in previous years under provisions included in the White Paper on the Scientific Civil Service (Cmd. 6679, 1945) to provide for the promotion of individual research workers of exceptional merit. The promotions were effective from July 1, and include the following.

Deputy Chief Scientific Officer

DR. J. S. HEY joined the Army Operational Research Group in 1940, becoming its head in 1949. In 1952 he formed a research section of what is now the Royal Radar Establishment. Both before and since going to Malvern, he made exceptionally distinguished pioneering contributions to radio astronomy which were the basis for his D.Sc. His work for the Ministry of Supply has also included important contributions on the mechanism of electromagnetic scattering and the ionization associated with discontinuities in hypersonic gas flows, all marked by originality and simple elegance in experimental technique. He is a Fellow of the Physical Society and the Royal Astronomical Society, has served on the Council of the latter and was this year awarded the Eddington Medal. He serves on Commissions of the International Astronomical Union.

DR. H. G. HOPKINS was at the Royal Aircraft Establishment during the war years, working primarily on the theory of elastic stability and of stress distribution in aircraft structure. In 1946 he returned to academic teaching and research. He joined the Armaments Research Development Establishment in 1954 and has been concerned with damage to structures, camouflet and crater formation in soils and dynamic studies in metal plasticity.

MR. D. H. SADLER is superintendent of H.M. Nautical Almanac Office, the work of which is divided between the highest theoretical and numerical requirements of fundamental astronomy and celestial mechanics: and the practical requirements of astronomical navigation. It was largely due to him that the Royal Air Force had such excellent almanacs and tables during the Second World War. Since then the provision for astronomical navigation, both at sea and in the air, has been much expanded and is now completely unified with that in the United States. Mr. Sadler has contributed much to the theoretical side of navigation and has been awarded the premier awards of both the British (Gold Medal, 1957) and the American (Thurlow Award, 1948) Institutes of Navigation; he was president of the British Institute during the period 1955-56. He is at present general secretary of the International Astronomical Union, and he was secretary of the Royal Astronomical Society during 1939-47. During the Second World War he also directed the computational side of the highly successful Admiralty Computing Service.

Senior Principal Scientific Officer

MR. J. M. CRADDOCK is serving in the assistant directorate of Dynamical Research in the Meteorological

Office of the Air Ministry and is engaged on research into the problem of long-range weather forecasting.

MR. F. J. BRADSHAW, of the Metallurgy Department, Royal Aircraft Establishment, is a fertile research worker on the physics of metals.

MR. A. G. EARL, of the Guided Weapons Department, Royal Aircraft Establishment, is a research engineer who has studied the fuel system and control systems of guided missiles.

DR. H. KOLSKY, of the Armament Research and Development Establishment, after a distinguished outside career devoted mainly to the mechanics of solids, has recently joined Dr. Hopkins at Fort Halstead.

DR. E. H. MANSFIELD, of the Structures Department, Royal Aircraft Establishment, has studied mathematical aspects of aircraft structural research, most recently in connexion with the effects of kinetic heating.

MR. A. H. COOK (National Physical Laboratory, Standards Division) is primarily engaged in the accurate measurement in absolute terms of certain physical quantities and constants.

MR. C. G. GILES (Road Research Laboratory) has conducted research aimed at finding ways of reducing the number of road accidents due to skidding.

DR. A. C. HULME (Ditton Laboratory of the Food Investigation Board, now of the Agricultural Research Council) works on various aspects of the biochemistry and physiology of apples and other fruits, especially on biochemical changes in respiration during storage.

MR. A. SILVERLEAF (National Physical Laboratory, Ship Division) is in charge of the group responsible for research and design in the fields of ship propulsion, cavitation and vibration.

DR. E. H. RHODERICK joined the Services Electronics Research Laboratory in 1955 and is working at present on very fast switching for computers using superconductors.

MR. S. B. KENDRICK, of the Naval Construction Research Establishment, is an authority on the design of submarine pressure hulls.

Similar promotions have been made by:

(1) U.K. Atomic Energy Authority :
Deputy Chief Scientific Officer

DR. G. E. BACON spent the war years at the Telecommunications Research Establishment on the development of ground radar equipment, particularly aerial systems. In 1946 he joined the Atomic Energy Research Establishment at Harwell, where he has worked on the application of X-ray and neutron diffraction to the study of the solid state. He is known especially for his work on the structural crystallography of graphite and for neutron studies of hydrogen bonds and thermal motion in hydrated and organic substances.

DR. W. B. THOMPSON took up a Harwell Senior Fellowship in 1950 and is now the senior theoretical physicist working on the problems of fusion reactors. His section of the Theoretical Physics Division carries out mathematical investigation into the stability of high-current gas discharges, on the rates of loss of heat from gases at temperatures of more than a million degrees centigrade, and on the effects of magnetic fields on the bulk and particle motions of highly ionized plasmas. The work includes interpretation of the many fundamental experiments in this field carried on in all parts of the world and assessment of its significance to the building of a theory good enough to allow final success in the fusion reactor field.

MR. W. WALKINSHAW is one of Britain's leading particle accelerator theoreticians, joining the Telecommunications Research Establishment in 1940 where he carried out theoretical research on radar and on high-energy particle accelerators. He has worked at the Atomic Energy Research Establishment, Harwell, since 1951. His section of the Theoretical Physics Division is very closely associated with the Rutherford Laboratory of the new National Institute for Nuclear Research, and has been engaged principally on the large 7,000 MeV. proton synchrotron which is still under construction. In addition to this continuing task, the group is charged with the duty of conceiving new types of accelerating machines and specifying designs for other machines of tested types.

Senior Principal Scientific Officer

DR. K. W. BAGNALL is at Harwell in charge of a section of the Radiochemistry Branch of the Chemistry Division which is concerned with research into the chemistry of the actinide and other heavy elements. At present, the main interest is in protactinium.

DR. A. M. LANE is part of the team of theoreticians whose task it is to ensure that the Atomic Energy Authority is fully armed with the most up-to-date and reliable knowledge of nuclear physics.

(2) Agricultural Research Council: Deputy Chief Scientific Officer

DR. R. L. MITCHELL joined the staff of the Macaulay Institute for Soil Research, Aberdeen, in 1937. He

is deputy director of the Institute and head of the Department of Spectrochemistry. Dr. Mitchell has been responsible for the development of spectrochemical methods applicable to the analysis of soils, plants and related materials, involving the evolution of techniques and equipment for arc, spark and flame emission methods. The chemical concentration technique is now quite widely used throughout the world and many overseas workers have visited the Macaulay Institute to study the spectrochemical methods developed by Dr. Mitchell and his co-workers. More than sixty publications describe methods employed and the valuable results obtained in the study of trace element relationships in soils and plants and of the geochemical background to their occurrence. The work of his department also includes the use of infra-red and ultra-violet absorption methods for the examination of organic and inorganic soil constituents.

Senior Principal Scientific Officers

DR. N. J. BERRIDGE is a member of the staff of the National Institute for Research in Dairying and is well known as an authority on rennin.

DR. ALAN ROBERTSON, of the Agricultural Research Unit of Animal Genetics, Edinburgh, is widely recognized as one of the most successful students of the rapidly expanding subject of population genetics.

DR. V. P. WHITTAKER, of the Agricultural Research Institute of Animal Physiology, Babraham, Cambridge, has done outstanding research in the cholinesterase field.

(3) Development Commission: Senior Principal Scientific Officer

DR. J. W. G. LUND is in charge of the Freshwater Biological Association and has made important contributions to the understanding of the factors which, by controlling the annual phytoplankton cycle, determine the fertility of lakes and reservoirs.

(4) Nature Conservancy: Senior Principal Scientific Officer

MR. J. G. SKELLAM is head of the Biometrics Branch of the Nature Conservancy, contributing to mathematical biology, and in particular to theoretical study of population dynamics and statistical ecology.

CONCEPTION OF EVOLUTION

MEETING IN PARIS

THE Muséum National d'Histoire Naturelle celebrated on June 5 the anniversaries of the "Precurseurs et Fondateurs de l'évolutionnisme—Buffon, Lamarck, Darwin": the 250th anniversary of Buffon's birth, the 150th anniversary of the publication of Lamarck's "Philosophie zoologique", and the centenary of Darwin's "Origin of Species". The meeting was held in the famous Grand Amphitheatre, planned during Buffon's administration, and which, reconditioned about four years ago, is again used for its original purpose. A large and distinguished audience including many famous scientists, some of whom have long been retired, was present.

Prof. Roger Heim, director of the Museum, gave an opening discourse, first summarizing the pre-Buffon period with his customary clarity and grasp of essentials. If in this he appeared to stress the views of naturalists of the old Jardin du Roi it was inevitable, for naturalist-philosophers were almost confined to France at the time—and to the Garden. There were clear statements about transformism before Buffon, and equally there was a belief in the fixity of species after him. An upholder of this was Bosc, one of the founders of the Linnean Society of Paris in 1788, the same year as that of London was started. One of the first acts of the society