

methods have been worked out for predicting the effects on the condition of the water of any given discharge, thus enabling the best way of dealing with the pollution problem to be assessed accurately.

Mr. A. L. Downing

MR. A. L. DOWNING is to succeed Dr. Southgate as director of the Water Pollution Research Laboratory. Until Dr. Southgate's retirement in 1966 Mr. Downing will act as deputy director. Mr. Downing, who is thirty-eight, was born at Trentham, Stoke-on-Trent. He was educated at Arnold School, Blackpool, and was awarded a County scholarship to the University of Cambridge where he read natural sciences. Mr. Downing's first appointment within the Department of Scientific and Industrial Research was to Water Pollution Research in October 1946. In October 1947 he was seconded to the Ministry of Agriculture, Fisheries and Food for research at Lowestoft on the effects of radioactive materials on fish. In December 1948 he joined the staff of the Government Chemist in London while studying for an external degree at the University of London, returning to the Water Pollution Research Laboratory in August 1950. Mr. Downing is at present in charge of a large group of sections concerned primarily with biochemical engineering.

Neurophysiological Feedback Research in the National Physical Laboratory : Dr. Thomas B. Mulholland

DR. THOMAS B. MULHOLLAND, JUN., of the Veterans Administration Hospital, Bedford, Massachusetts, has been awarded a Carnegie Institution fellowship grant of 12,000 dollars for a year's research on stimulus-brain feedback systems, at the National Physical Laboratory, Teddington. Dr. Mulholland graduated from Tufts College in 1951 and then studied at Clark University, where he received an M.A. in 1952 and a Ph.D. in 1956. He became a post-doctoral trainee at the Veterans Administration Hospital in Bedford in 1956, and is still associated with that hospital. In addition, he is a lecturer in the Division of Continuing Education at Boston University and a lecturer at Clark University. Dr. Mulholland's field is psychology. For the past two years he has been investigating the development of a stimulus-brain feedback system and its application to a variety of psychological and neuropsychological problems.

Mathematics in the University of Strathclyde: Prof. W. D. Collins

THE University of Strathclyde has announced the appointment of Dr. W. D. Collins, at present lecturer in applied mathematics in the University of Manchester, to a new professorship in mathematics, from January 1, 1965. Dr. Collins graduated with first-class honours in mathematics at the University of London in 1953 and was awarded the degree of Ph.D. in 1956. He began his career as a scientific officer with the Admiralty Research Laboratory, Teddington, in 1956. In 1957 he was appointed to a lectureship in applied mathematics at King's College, Newcastle upon Tyne, a post which he held until 1961, when he joined the staff of the University of Manchester. For nine months in 1963 he was on leave of absence as a research associate in the Division of Electromagnetic Research at the Courant Institute of Mathematical Sciences, New York University. Dr. Collins's main research interests are in solid mechanics, diffraction theory and methods of applied mathematics, in particular the investigation of integral equations and their application.

Veterinary Microbiology and Parasitology in the Royal Veterinary College, London : Prof. A. O. Betts

DR. A. O. BETTS, at present lecturer in animal pathology in the University of Cambridge, has been appointed to the newly established chair of veterinary microbiology

and parasitology in the Department of Pathology at the Royal Veterinary College, London. He himself graduated from the Royal Veterinary College in 1949. Following this he became a research student in the Department of Animal Pathology, Cambridge, where he gained his Ph.D. in 1953. He was appointed demonstrator in that Department in 1952 and became a lecturer in 1956. He was awarded a Commonwealth Fund fellowship in 1955 and studied at the New York State Veterinary School at Cornell, and other centres. His research was at first centred round respiratory diseases of pigs and later his interests spread to include many virus diseases of animals. He has been a pioneer in the study of enteroviruses of domestic animals. He is a member of the World Health Organization's Committee on the Classification of Veterinary Viruses and was co-chairman of a conference on "Comparative Virology" held in New York in 1962 under the auspices of the New York Academy of Sciences. In addition to a number of visits to the United States he has also lectured at several veterinary research establishments on the continent of Europe.

Recruitment of Graduates to School Teaching

THE report of the Sub-Committee on Recruitment to School Teaching of the University of Glasgow Appointments Committee notes a disturbing decline in the proportion of men graduates of Glasgow (honours and ordinary) and of women with ordinary degrees in arts and science entering teaching in 1962 (Pp. 16. Glasgow: The University, 1964). The proportion of men graduates with ordinary degrees in science who enter teaching has decreased by 17.5 per cent since 1959, and that of women by 12 per cent since 1960. The Sub-Committee does not consider that salary is now an important deterrent, but the apparent lack of good prospects for promotion in teaching is a serious deterrent and the very considerable change for the better since 1961 is not yet sufficiently widely known. It is also critical of the rigidity of present regulations on certification and recognition, and the Sub-Committee believes that the postgraduate year in a College of Education may also be a deterrent owing to misunderstanding of the nature of the courses, doubts as to necessity or value of the training, and the prolonged dependence on Government grants or parental resources. The limitations of day-school teaching can also deter some, through fear of losing their specialist knowledge, risk of staleness and lack of contact with the adult world. The report makes several suggestions for remedying the defective information position by better descriptive literature and talks to students, but also suggests experiments with trial runs. The defects in the system itself must await Government action, and, while welcoming the Ministry of Education's consultation of the appointments officers of the universities and its commissioning of an enquiry by the Social Survey into what undergraduates know and think about prospects in the teaching profession, and what makes school teaching attractive or unattractive to them, the Sub-Committee recommends immediate attention to three particular defects. First, early consideration should be given to the advisability of pay during training. Secondly, the regulations relating to the certification of teachers should be speedily revised to bring them up to date and make them more flexible. Thirdly, the problem of promotion should be tackled appropriately without delay to create a more uniform and smoothly working system with some real incentive to the able young teacher.

Medical Schools of the World

THE third edition of the *World Directory of Medical Schools* will be of great value to everyone who is either concerned with medical education or is planning that kind of education for himself (Pp. 348. Geneva: World Health Organization; London: H.M.S.O., 1963. 20 Sw. fr.; 35s.; 6.75 dollars). It provides detailed information about the