

Applied Physics at Durham : Dr. D. A. Wright

It was decided recently to set up a Department of Applied Physics in the Faculty of Applied Science within the Durham Division of the University of Durham. This is the first 'applied' department in the Durham Division and is intended to give Durham students closer contacts with industry and to contribute to the training of applied scientists. The first professor of applied physics, Dr. D. A. Wright, will take up his appointment on April 1, 1960. Dr. Wright graduated with a first-class honours degree in physics at the University of Birmingham in 1932 and later carried out research at Birmingham for which he was awarded the M.Sc. In 1955 he was awarded the degree of D.Sc. of the same University. Since 1934 Dr. Wright has been a member of the scientific staff of the research laboratories of the General Electric Company, Wembley, and is now head of the Combined Electron Physics and Solid State Physics Laboratory. His research groups have published work of high quality in the fields of thermionics and semi-conductors. Dr. Wright's recent work has been concerned with thermo-electricity, a subject which may well have considerable industrial and commercial applications. Dr. Wright has taken an active interest in the Physical Society and the Institute of Physics. He is treasurer of the Physical Society and represents it on the Parliamentary and Scientific Committee.

New Geophysical Observatory in Belgium

THE magnetic observatories founded in the nineteenth century near large cities are steadily having to be transferred to areas remote from electric transport. This happened many years ago for Kew and Greenwich. Now the Royal Belgian Meteorological Institute has had to transfer its magnetic observatory from Uccle, near Brussels, to Dourbes in south-east Belgium. The new observatory had to be sited at least 15 km. from present or potential electric transport, a requirement more difficult of fulfilment in Belgium than in the British Isles. The opportunity has been taken to build a truly magnificent comprehensive geophysical observatory, equipped for recording the terrestrial magnetic elements, earth currents, atmospheric electricity, radio atmospherics, radio-activity in the air, seismic waves, and ionospheric variations. The observatory is lavishly described with detailed descriptions of buildings and instruments, photographs (many in colours) and architectural plans in a recent publication of the Institute (Institut Royal Meteorologique de Belgique. Publications Serie A, No. 7: Réalisation du Centre de Physique du Globe à Dourbes. Par Prof. E. Lahaye. Pp. 104. Bruxelles: Institut Royale Meteorologique de Belge, 1958). This publication will be studied with great interest, and some envy, by those responsible for geophysical observatories in other countries. The detailed building plans which it contains will be invaluable in designing other new observatories or in re-designing existing ones.

Atmospheric Sciences Advisory Panel

THE U.S. National Science Foundation has announced the names of six scientists who will form the Foundation's Advisory Panel on Atmospheric Sciences. The purpose of the Panel is to provide advice to the Atmospheric Sciences Programme on the development of a programme of basic research and supporting facilities, including such fields of science

as physics, engineering, oceanography, meteorology and mathematics. The Panel will consist of: Dr. Thomas F. Malone, director of research, Travelers Insurance Co., Hartford, Connecticut; Dr. Walter H. Munk, professor of geophysics, University of California at La Jolla, La Jolla, California; Dr. Walter Orr Roberts, director of the High Altitude Observatory, University of Colorado, Boulder, Colorado; Dr. Verner E. Suomi, professor of meteorology, University of Wisconsin, Madison, Wisconsin; Dr. Arthur H. Waynick, director of the Ionosphere Research Laboratory, Pennsylvania State University, University Park, Philadelphia; and Dr. E. J. Workman, president, New Mexico Institute of Mining and Technology, Socorro, New Mexico.

U.S. Expenditure on Research and Development for 1957

A PRELIMINARY report on a survey conducted by the Bureau of the Census for the National Science Foundation indicates that funds for research and development in private industry in the United States in 1957 totalled 7,200 million dollars, compared with 6,000 million dollars in 1956 (Reviews of Data on Research Development, No. 14, August 1959, Funds for Research and Development Performance in American Industry, 1957. Pp. 6. Washington, D.C.: Government Printing Office). The aircraft and electrical equipment industries accounted for more than half (2,544 million dollars and 1,170 million dollars, respectively), representing increases of 21 per cent and 24 per cent on 1956 figures. Motor vehicles and other transport, and the machinery industries, were next with 708 million dollars and 688 million dollars, followed by industrial chemicals (384 million dollars), petroleum refining and extraction (230 million dollars) and communications (206 million dollars), the percentage increases over 1956 being 6, 22, 14, 23 and 16. Scientific and mechanical measuring instruments increased by 30 per cent, to 126 million dollars. Of the total of 7,200 million dollars, 3,700 million dollars came from Federal funds, which represented 85 per cent of the total in the aircraft industry and 61 per cent in the electrical industry. Expenditure on basic research totalled 241 million dollars, and of this 52 million dollars were expended by the aircraft industry, 38 million dollars by the electrical equipment industry, 30 million dollars by the petroleum refining and extraction industry, and 29 million dollars by the chemical industry. The physical and mathematical sciences claimed 54 per cent of the expenditure on basic research, engineering sciences 36 per cent and the biological sciences about 10 per cent.

The Acute Radiation Syndrome

ACCIDENTS which result in exposure of man to doses of ionizing radiation in the lethal range are sufficiently rare to be extremely important. A report by the United States Atomic Energy Commission (Report ORINS-25: The Acute Radiation Syndrome—a Medical Report on the Y-12 Accident, June 16, 1958. Compiled by Marshall Brucer. Pp. viii+188. Washington, D.C.: Office of Technical Services, Department of Commerce, 1959. 1 dollar), which follows closely to a similar one from France (Jammet, H., *et al.*, "Etude de six cas d'irradiation totale aigue accidentelle", *Rev. Franc. d'et. Clin. et Biol.*, 4, 210; 1959), therefore merits study by physicians, radiobiologists, health physicists, administrators and the