

important contribution by creating a lectureship in "Physical Chemistry including Radio-activity" (1904) and appointing the youthful Soddy. His work there on isotopes resulted in the communication in *Nature*, where, from the various explanations of "chemically inseparable" substances, he came down firmly for "isotopes"—for which he there first adopted the name—and also provided a valid interpretation of atomic number in terms of nuclear charges. This work on isotopes is referred to in his Nobel prize citation (1921). Soddy's Glasgow colleagues, Lord Fleck and John A. Cranston, will speak on these researches; H. J. Emeleus will review the present field of radiochemistry, and Dr. Andrew Kent will present a historic note.

#### Basic Research at the Royal Armament Research and Development Establishment : Dr. J. W. Maccoll

ON September 30, Dr. J. W. Maccoll retired from the post of principal superintendent of the Basic Research Division of the Royal Armament Research and Development Establishment, Fort Halstead. Dr. Maccoll, who was born in Aberdeenshire, graduated B.Sc. at the University of Glasgow in 1924, where he studied mechanical engineering and pure science, and afterwards pursued aerodynamic researches under Thom at Glasgow, Bairstow at the Imperial College of Science and Technology, where he took his Ph.D. in 1927, Prandtl at Göttingen, and von Kármán at Aachen. He joined the Ordnance Board as ballistic research officer in 1929, to apply the principles of aerodynamics to ballistics, and it was in the 1930's that his fruitful collaboration with Sir Geoffrey Taylor led to their classic paper on 'Taylor-Maccoll' flow, and other papers. Following the report of the Guy Committee in 1942, and the creation of the Armament Research Department with Prof. (later Sir) John Lennard-Jones as its first chief superintendent, Dr. Maccoll was first appointed deputy superintendent and, later, superintendent of the newly formed branch for theoretical research. Since 1945 he has been in charge of basic research at Fort Halstead and has built up, over the years, a substantial group, with extensive experimental facilities for work on hypersonic flow, hypervelocity projection and flow in the upper atmosphere, and with up-to-date facilities for high-speed computation (see *Nature*, 185, 346; 1960). Dr. Maccoll, who has always been a well-known figure at scientific meetings, will be remembered, particularly in the Scientific Civil Service, for the importance he has always attached to sound fundamental research, for his scientific foresight and his shrewd judgment. Although officially retired, he has not severed his connexion with the Royal Armament Research and Development Establishment, but is maintaining his interest in the work of the Establishment by acting as a part-time consultant.

#### Genetics in the University of Leicester:

Prof. R. H. Pritchard

DR. R. H. PRITCHARD, who has been appointed to the newly established chair of genetics in the University of Leicester, has distinguished himself especially by his studies on the properties of the genetic material of micro-organisms. Using a selective technique which permitted a high degree of resolution, he showed that the processes of recombination between sites very close to each other on the chromosome of *Aspergillus nidulans* obeyed rules different from those governing recombinations between more distant sites. His present work, with *Escherichia coli*, is contributing greatly to the elucidation of the factors underlying thymine-less death and induction in lysogenic bacteria. Dr. Pritchard, who was born in 1930, gained the Carter Gold Medal and first-class honours in botany from King's College, London, prior to joining the Department of Genetics in the University of Glasgow in 1951. After completing his Ph.D. work, he spent a year as Rask-Ørsted Fellow in the University of Copenhagen.

He returned to Glasgow in 1955 and remained there as, successively, Nuffield research assistant and lecturer until his appointment to the staff of the Medical Research Council's Microbial Genetics Research Unit at the Hammersmith Hospital in 1959. The selection of Dr. Pritchard to head a new Department in the University augurs well for the continued development of biological studies at Leicester.

#### New Department of Microbiology in the Queen's University of Belfast

LORD HARDING OF PETHERTON, chairman of the National Fund for Research into Poliomyelitis and other Crippling Diseases, laid a plaque to mark the foundation of a new building for the Department of Microbiology, Queen's University of Belfast, on November 12. The National Polio Fund made a grant of £70,000 towards the cost, the Northern Ireland Hospitals Authority is contributing £50,000 and the balance of cost of approximately £350,000 is to be met by the Government of Northern Ireland. Sir Hugh Casson is the architect of the new building, which is being erected near the Institutes of Pathology and of Clinical Science on the hospitals site at Grosvenor Road. It is linked to these Institutes and to the Royal Victoria Hospital. It provides in a podium extensive animal houses and in five floors teaching and research laboratories and a virus reference laboratory for the Hospitals Authority. The building is expected to be completed by October 1964.

#### Science and Adult Education

A REPORT entitled *Science and Adult Education*, issued by the Association of Scientific Workers, recommends that in view of the importance of science and technology to the nation, the number of science classes in adult education should be increased to 20 per cent of the total within the present quinquennium, and especially in the longer courses (Pp. 11. London: Association of Scientific Workers, 1963. 2s.). This extension should be directed particularly at students with little or no previous education in science, and additional funds for this extension should be made available by the Ministry of Education. Some additional full-time appointments of science tutors with responsibility for both teaching and expanding the provision of science classes should be made by extramural departments and by the Workers' Educational Association. An immediate and substantial increase in the fees of part-time tutors is proposed as well as funds for extending special experimental schemes. Special attention should be directed to including science courses in summer schools and week-end schools to create an atmosphere in which science is regarded as a normal feature of adult education; to ways of integrating science into courses in social studies and the arts; and to ways of adapting science courses for the needs of special groups. More books suited for adult teaching are required and the publication of such books by successful tutors should be encouraged. Branches of the Workers' Educational Association should be encouraged to discuss ways of recruiting students for science classes and of conducting publicity for such classes.

#### Shortage of Science Teachers

THE report of a recent survey carried out by the National Union of Teachers, by means of a questionnaire, to which 22,000 schools responded, throws further light on the shortage of specialist teachers in England and Wales (*The State of Our Schools: a Report of the Findings of the National Survey of Schools, 1962*. Part 3: *An Analysis of the Findings Relating to Grammar Schools, Comprehensive Schools and Special Schools*. Pp. 19. London: National Union of Teachers, 1963. 2s. 6d.). In grammar schools, among all subjects, the greatest shortages are in mathematics, in which 28 additional teachers are required per 100 schools, and in science, for which