Dr. D. R. Cox, reader in statistics in the College, has been appointed to the new chair. His interests are the scientific and technological applications of statistics and probability, and the theory of statistics. His published work includes a book on the *Planning of Experiments* and he is joint author of a book on the theory of queues to be published shortly. His present research interests include prediction theory, various applications of the theory of probability in operational research, and the design and statistical analysis of experiments.

## Division of Pure Physics, National Research Council of Canada: Dr. D. C. Rose, O.B.E.

Dr. D. C. Rose has been appointed director of the Division of Pure Physics, National Research Council of Canada. Dr. Rose was born in Prescott, Ontario, in 1901, and gained his B.Sc. degree in 1923 and his M.Sc. degree in 1924 from Queen's University. He was awarded an 1851 Scholarship for study, under Rutherford, at Cambridge, where he obtained his Ph.D. degree in 1927. After continuing his work at the Cavendish Laboratory until 1928, he spent 1928-29 at the H. H. Wills Physical Laboratory, Bristol, and 1929-30 as a lecturer at Queen's University. In 1930 he joined the Division of Physics of the National Research Council of Canada. During the Second World War, Dr. Rose was seconded to the Department of National Defence, first as scientific adviser to the Chief of the General Staff, during 1943-45, and later, during 1945-47, as chief super-intendent of the Canadian Armament Research and Development Establishment at Valcartier. Returning from war-time duties to the National Research Council, he established a laboratory in cosmic-ray physics, which he still heads. For his contributions to the war effort, Dr. Rose was made O.B.E. Dr. Rose was elected a Fellow of the Royal Society of Canada in 1936; he has served the Society for several years as secretary of Section III. He is a past president of the Canadian Association of Physicists, a member of the American Physical Society and a member of the Engineering Institute of Canada.

## **Building Contracts for Universities**

In his report to the University Grants Committee reviewing the methods used by universities of contracting and of recording and controlling expenditure, Sir Arthur Rucker has some fourteen conclusions relating to the recommendations of the Gater The appointment of a small project Committee. sub-committee for each major building project is generally desirable and now usual, and this subcommittee should have in mind both the user's need and the needs of economy. There is occasionally difficulty in finding suitable persons with business and financial experience from outside a university to serve on the council and committees of the university, but every effort should be made to do so. Universities should keep their needs for staff under review to ensure that they and their committees have the advice and assistance they require to maintain proper control in their expanded building programme. No university should include in the list of firms invited to tender for a building contract any firm to which, if it were the successful competitor, the university would not desire to award the contract. Undue economy in capital costs at the expense of maintenance costs would be regrettable, but in a well-designed building it should be possible, within a reasonable

over-all cost, to use materials and methods that will avoid excessive future maintenance costs.

It is important that all possible means should be sought both to make the maximum use of costly university buildings and to avoid planning new buildings on too low a standard of student use. Economy will always best be served by avoiding a break in the continuity of construction, and this should normally be possible in the present enlarged building programmes. The control exercised by universities and their committees and by the University Grants Committee over variations in plan after tenders have been invited is firm, and it is essential it should remain so. The normal practice of universities is, and should continue to be, to invite competitive tenders on a fixed price basis; in suitable cases negotiated contracts may be advantageous. Methods of letting sub-contracts have varied, but none of the methods used appears to have caused difficulty. The selection of sub-contractors before the letting of the main contract is, however, desirable. It is usually necessary to specify the date by which a contract is to be completed in the tender form, but the date should not be a matter for competition. The present practice of providing a sum for contingencies not exceeding 3 per cent appears to be generally satisfactory to universities, and is satisfactory so long as it is used for true contingencies and not for changes in plan. Architects should be required by all universities to make regular written reports to the responsible committees at least once a month, and in all universities the responsible committee should be provided at regular intervals with figures showing the estimated final commitment on each major contract. general features of the Rucker Report are discussed elsewhere in this issue of Nature (p. 427).

## Student Wastage in Australia

According to a Times correspondent, Prof. R. Le Fèvre, professor and head of the School of Chemistry in the University of Sydney, has stated that that University failed 1,000 first-year students who sat for chemistry examinations in 1960. Prof. Le Fèvre said that if failures in other science subjects were included, the failure-rate would be about 50 per cent. There were too few lecturers and too many students. "We have a British university system imposed on an American schooling system. What we need is something like the American junior college system or the British sixth form which provides a suitable bridge between high school and university." Prof. Le Fèvre said that some students did not know how to work and some just wanted to have a good time. The only solution appeared to be the introduction of some kind of pre-selection system.

There seems to be little doubt that, so far as science, in any event, is concerned, the Australian system needs serious overhauling. Far too much time, money and space are wasted in the training of first-year students. This is, of course, to the detriment of standards within the university itself; but even worse is the fact that such student failures have apparently wasted one year of the most formative phase in their lives.

## International Laws on Nuclear Incidents

THE Convention on Third Party Liability in the Field of Nuclear Energy, of July 29, 1960, was signed at Paris by the Governments of the West German Federal Republic, Austria, Belgium, Den-