and better faculty housing as added inducements to keep young faculty members with growing families in Cambridge.

Efficient Analysis

SCIENTIFIC co-operation has for too long overlooked unnecessary and inefficient duplication in an area basic to both research and industry—the standardization of methods of analysis. In an attempt to halt some of this duplication, at least within the United Kingdom, the Analytical Methods Committee of the Society for Analytical Chemistry notes in its annual report (*Report of the Analytical Methods Committee 1967*) that it has finally reached an agreement with the British Standards Institution whereby the BSI will in future refer to the committee any requirements it may have for standardized methods of general application required for use in British Standards. Until now nearly all of this work has been carried out by both the BSI and the committee, because of lack of liaison between the two bodies. Since the two organizations often overlap on both objectives and personnel, both depending as they do on volunteer help from analysts and scientists in outside laboratories, this step is long overdue. Welcome as this move is, however, it would be even more valuable if it started a trend towards more co-operation with standardizing bodies in other countries.

Among the work completed by the committee during the past year was the critical review of sedimentation methods carried out by the Particle Size Analysis Subcommittee, due for publication shortly. This review contains a detailed description of the more than 30 methods referred to in the sub-committee's classification published in 1963, but unfortunately it has not yet been able successfully to carry out collaborative tests on all these techniques. A survey of the most widely used techniques suggested that the Andreasen pipette method is one of the most popular, followed by the photosedimentometer. The majority of the remaining techniques seemed to be used primarily by the scientists who devised them.

Industrial Triangle

IF fine words can make any difference, the merger between the Cambridge Instrument Company and George Kent, Ltd, should be a certainty. Both companies talk fondly of each other, and the Industrial Reorganization Corporation supports the merger. But the intervention of a third party—the Rank Organization—which started things off by bidding for Cambridge, has so far upset the plans. The Board of Cambridge has firmly rejected the Rank offers, announcing its preference for Kent. Rank has responded by increasing its offer, and Kent came back with an offer matching that of Rank, together with the moral support of the IRC. The IRC says that "the creation of the Kent/Cambridge group is likely to bring greater benefits to the British instrument industry than if Cambridge Instruments were acquired by Rank". But the IRC offered no financial inducement to Cambridge shareholders, merely promising that if the merger goes through, funds will be made available to support the rationalization of the British instrument industry.

This raises some interesting questions. If the battle shows signs of going Rank's way, will the IRC step in and back its words with hard cash? The Kent offer, which started out to match exactly that of Rank, has begun to look less desirable since the Kent share price fell on the market. Meanwhile, Rank has been buying Cambridge shares, and the continued optimism of Cambridge and Kent seems now to be sustained by the thought that the Cambridge board and its friends control 40 per cent of the shares.

It would be a great pity if the Kent bid fails, or if Rank obtains a sufficiently large minority holding to make itself a nuisance. The Kent–Cambridge merger does make very good sense industrially. The Cambridge Instrument Company, established in 1898 by a son of Charles Darwin, is an efficient company in British industry which is otherwise rather short of them. Its most glamorous product is undoubtedly the 'Stereoscan' scanning electron microscope, but it also makes a comprehensive range of medical and scientific instruments. Its most recent major product is a kidney machine, for which the Ministry of Health has already placed orders. It also makes multi-channel physiological recording machines, electrocardiographs, *p*H meters, water quality monitoring instruments, a range of electrical instruments and industrial indicators, controllers and recorders. Significantly, its weakness in industrial control instruments is George Kent's strength. The combined company would be the biggest scientific instrument manufacturer in Britain.

Rank has already turned down a suggestion by the IRC that it should put its own instrument division, Taylor-Hobson, into a combined company with Cambridge and Kent. If Rank had agreed, the IRC would have been prepared to sponsor the combined company. The Rank refusal was predictable enough—it diversified into scientific instruments in order to widen the basis of the company, and would therefore have been distinctly unwilling to narrow it again. In recent years its hotel, catering and cinema chains have not proved very profitable—most of the money has come from the Rank Xerox division. Cambridge would obviously be a great prize. For the greater benefit of the UK instrument industry, it is to be hoped that Rank does not win it.

IBP in the USSR

THE Soviet national programme for the International Biological Programme (IBP) just published (*USSR Participation in the International Biological Programme*, Leningrad, 1968) opens with two apologia, or, more accurately, one accusation and one explanation. It is, of course, a year late. It points out that the formation of national sub-committees for the seven sections is incomplete because the scope of the UM Section (use and management of natural resources) was only announced in 1967 in the IBP Central Office's publication, *IBP News*, No. 9. "The most difficulties the Soviet National Committee had were with the UM Section", it says simply. Another difficulty was in forming the committee's secretariat. This was only achieved at the beginning of this year (see *Nature*, **218**, 312; 1968).

The most impressive section is that devoted to terrestrial productivity (PT). The aim is not only to define the biological productivity of the wide range of terrains represented in the Soviet Union, but to compare pro-

ductivity of land under cultivation with that of natural communities under the same zonal conditions. Studies of primary production are to be made of tundra, nine types of forest zone, wooded and normal steppe, and in both desert and mountain districts. There is to be a major effort on soil ecology.

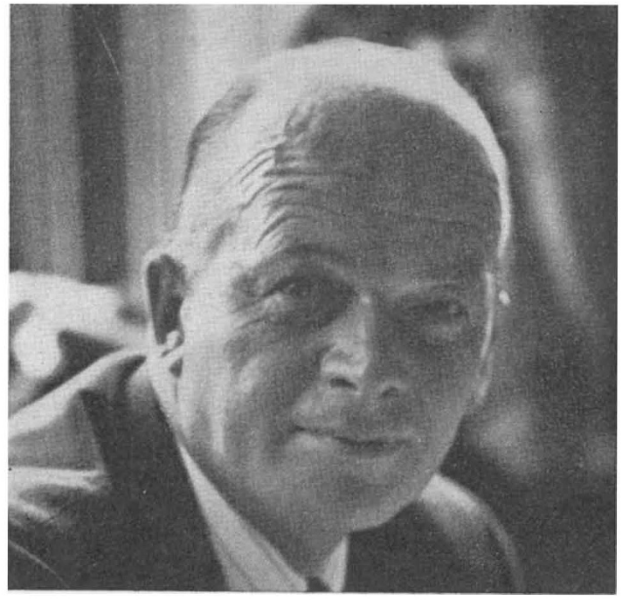
The freshwater productivity (PF) programme is also comprehensive. It appears to be organized largely from research already going on. One series of surveys is concerned with representative waters at all trophic levels to build up an integrated picture of typical freshwater communities. Fourteen sites have been chosen; they include Lake Baikal, Lake Sevan (in Armenia), Lake Fahrakush in Azerbaidjan, several lakes in Byelorussia, others in Karelia, tundra lakes, and also reservoirs on the Volga and Dneiper, and the Irkutsk and Bratsk reservoirs on the Angara river, eastern Siberia. A second group of some 20 sites has been chosen to define particular problems relevant to IBP. Two aspects of pollution receive special prominence: the effects of thermal pollution from power station cooling (to be studied in the Ukraine and Moldavia), and the biological factors governing the self-purification of rivers which is being concentrated on the River Daugava in Lithuania. Several exercises in computer modelling are also in hand.

The marine productivity section (PM) is split up into work on the Soviet Union's inland seas such as the Black Sea, White Sea and Caspian (5), study of the biological structure and productivity of "the World Ocean" (19), and survey of the biological resources of the World Ocean (7). (The number of topics listed under each of these themes is given in brackets.) Soviet oceanographic ships will clearly be covering great distances during the five years of IBP. The least developed section in the programme—apart from the UM section—is terrestrial conservation. The Soviet Union has a rather active and forward-looking conservation policy, but the impression is that the conservation authorities are labouring under the massive inventorial work landed on them by the IBP.

Academics on the Air

In the spring of 1969, Professor Walter Perry, now at Edinburgh, will take charge of the Open University, as its first Vice-Chancellor. Professor Perry faces a considerable task, for, in addition to the problems involved in getting an organization for higher education off the ground, he has the added complication of having to put it on the air. The planning committee has produced an outline of the form the university courses should take (see *Nature*, **217**, 997; 1968), but the detailed planning will be in Professor Perry's hands. In the meantime, the background work in London is continuing. The pilot study for the survey of potential students has now been made and the complete survey will shortly be made in six different areas, with results coming through in the autumn. This would seem to be a vital task as there is otherwise no definite information on the numbers, age and interests of possible students. A crucial factor in the costs of the university—the fees which will have to be paid to the BBC for broadcasting courses—has yet to be settled, but costings are expected this week.

Professor Perry, who is 47, is at present professor of pharmacology at Edinburgh. Since 1967 he has been vice-principal of the university with special responsibility for postgraduate education, and with a hand in both financial planning and broad administrative problems. From 1947 to 1952 Professor Perry was on the staff of the Medical Research Council. The following six years were occupied with the Department of



Professor Walter Perry.

Biological Standards at the National Institute for Medical Research, during which time the Salk Institute vaccine for polio was introduced, and as director of the department Professor Perry was responsible for checking the vaccine. In 1965 the MRC set up a unit of brain metabolism research with Professor Perry as its honorary director.

Glasgow Linac

The University of Glasgow now has the most powerful electron linear accelerator in Britain, a 100 MeV machine at the university's new Kelvin Laboratory, opened on June 10 by Professor P. M. S. Blackett, president of the Royal Society. The linear accelerator is to be used chiefly for research into nuclear structure, where beams of electrons have a number of advantages as probes. Work on the laboratory started in 1963 and was completed in March last year. Since then, the university has developed the instrumentation of the accelerator and carried out a number of experiments with it.

The accelerator itself was built by Vickers Engineering and has three acceleration sections, with provision for a fourth to be added in the future to increase the energy the machine can attain. Radio frequency energy for the accelerator is supplied by three klystrons operating at a peak power of 20 MW, and is transferred to the machine by a number of waveguides. Because of heating of the klystrons and waveguides, the accelerator produces pulses of electrons lasting only a few microseconds, with intervals of several milliseconds