

oxidizers in his algal cultures. It is possible, however, that the small residual contamination may exercise an effect on algal growth by oxidizing extracellular metabolites produced by the alga. This process would depend on the oxygen derived from algal photosynthesis and would produce carbon dioxide for fixation. Other investigators have found that methane fermenting bacteria will grow on methane alone, although here also carbon dioxide may function as a "primer" for the system (Wolnak *et al.*, *Biotech. Bioeng.*, IX, 57; 1967). Unfortunately, Enebo does not record the absolute carbon requirement of his *Chlorella* strains.

It would be premature to dwell on the technical value of this newly discovered methane assimilating system, but, with growth optima established and the selection of suitable strains, several possibilities might be explored. Enebo indicates an application for gas exchange in closed systems where oxygen enrichment is needed and the production of algal mass on a methane-carbonate basis, even under anaerobic conditions. Although sound economically, few attempts have been made to produce food by fermenting methane and in part, to quote Humphrey further, "The arguments against such a process stem from toxicology and consumer-acceptance problems". The algal system may prove to be an attractive proposition to those interested in this technology.

Cows as Subjects

THE National Institute for Research in Dairying at Shinfield near Reading is one of the largest research establishments financed by the Agricultural Research Council, with a staff of about 450, more than 800 acres of farmland and 500 cattle. Since the foundation of the institute in 1912, it has been closely associated with the University of Reading, which provides its governing body.

Although the institute is concerned primarily with helping farmers and dairymen to solve their practical problems, a surprising amount of fundamental research is done there. The chemical microbiology department, for example, is working on the antibiotic nisin, discovered at the institute, in the hope of relating the structure and molecular size of nisin to its antibiotic properties. The molecule of nisin seems to polymerize readily, and it may be that the monomer is the active form. The department has also carried out some work on the activity of rennin, including preliminary work on its structure.

The more practical side of the work of the institute includes fundamental studies of cheese and the cheese-making process. The institute has one of the two sterile cheese vats in the world, and these have made it possible to produce cheese using only rennin and a pure "starter" organism. It seems that the character of a cheese is determined chiefly by the nature of the bacterium used to start the process of fermentation. The other organisms which contaminate the bacteria used commercially are not necessary to the process and probably give rise to the "off-odours" which can mar the quality of cheese.

The two farms belonging to the institute are used for studies of the growth and feeding of cows raised under various controlled regimes. The institute also maintains a herd of pigs, some of which are raised under germ-free conditions.

Parliament in Britain

LORD WINTERBOTTOM, Parliamentary Secretary, Ministry of Public Building and Works, said that progress on the scheme for a National Reference Library for Science and Innovation had suffered a severe set-back because the Greater London Council had discontinued negotiations on the South Bank site for the library, which the council now required for an urgent purpose of their own (undisclosed). The minister was now seeking for a suitable alternative site for the library. The present situation was entirely unsatisfactory, since that part of the library which is in Whiteley's building at Bayswater is thoroughly unsuitable for the work. One or two possibilities in London were being investigated and Lord Winterbottom agreed that the matter is urgent and that good access by public transport and, if possible, a central location of the site selected are important. (Question, House of Lords, June 22.)

LORD BESWICK, the Parliamentary Under-Secretary of State for Commonwealth Affairs, said that there is no evidence, either from research carried out in the United Kingdom or from the study of the results of tests held in the United States, of damage to health from sonic bangs. Damage to buildings varies with the intensity of the bang, but soundly constructed buildings are not affected by bangs of the kind which a supersonic transport aircraft might be expected to make. For operational reasons, the Concord civil aircraft will not reach supersonic speed until at least 100 miles after take-off. (Question, House of Lords, June 19.)

THE Iron Casting Industry (Scientific Research Levy) Order 1967 was approved by the House of Lords on June 19. It imposes levies on the industry to finance scientific research carried out by the British Cast Iron Research Association when the statutory levy introduced under the Iron and Steel Act 1953 ceases with the repeal of that Act on July 28. The levies are expected to yield about £200,000 a year and this will enable the research association to qualify for a grant from the Ministry of Technology of about £80,000 a year. Lord Shackleton, Minister without Portfolio, referred to the initiation by the association of the research which led to the production of spheroidal graphite cast iron, but said that further economic advantages were expected to arise from increased efficiency rather than from innovation, particularly in melting, moulding materials, methods of automatic control, and improvement of working conditions in the foundries.

THE Prime Minister, Mr H. Wilson, declined to appoint a Minister of State in the Ministry of Technology solely concerned with the development of the technology of the sea bed. He did not think that a full-time ministerial appointment could be justified, but agreed that a major marine science programme could be sustained on its own economic merits. Mr Wilson agreed that the time had come for a much wider investigation of marine technology and science and this was one reason for establishing the co-ordinating committee for scientific research. (Question, House of Commons, June 22.)