

been ambivalent. The Royal Society for the Prevention of Cruelty to Animals said that "the minister had, in making his proposals, consulted the best veterinary opinion in the country, and . . . we can only accept the regulations", although "since quarantine represents a hardship for animals, we find it disturbing that the period should increase from eight to twelve months". The secretary of the Canine Defence League, Mr A. H. Roosmalecocq, thought the ban might be justified as a temporary measure, although he considered twelve months' quarantine "unnecessarily drastic" and suspected the minister's advisers were "covering up while they do their sums again". Taken at face value the prohibition covers laboratory animals just as much as pets, although when the order is actually made it may allow some exceptions for research; at the time of his announcement Mr Hughes was not able to say what would happen. The Medical Research Council, at least, is not worried by any potential loss, for it either breeds its own cats and dogs or buys them from accredited British breeders, and says it "certainly wouldn't import them under any circumstances".

One obstacle to complete safety remains, however, and that is smuggling. The maximum fine for smuggling an animal into Britain is £200—increased from £50 in 1967—and may well prove too small to deter a really desperate dog-lover. In practice, fines have been nowhere near the maximum, and some magistrates have been known to impose derisory penalties of £5 or so. Here, it seems, the committee of enquiry might find one of its priorities.

UNIVERSITIES

Teaching of Physics

Few physicists can feel indifferent to the way physics is taught and a lively audience arrived last week at the physics exhibition in Alexandra Palace, London, to hear Professor E. J. Burge, of the Chelsea College of Science and Technology, proclaim there are at present far too many examinations. He thought that some more continuous form of assessment should be introduced, including oral tests. But he was against attempts to dismember physics as a subject. "I believe that physics is an academic discipline that holds together as a whole, and efforts to turn it into a series of service courses will be vigorously opposed."

Professor E. H. S. Burhop of University College, London, took a rather different view. He foresaw the emergence of a new subject comprised of topics from both physics and chemistry. University College has recently introduced a joint chemistry and physics course, which is no soft option, he said. But the pattern of education is changing rapidly. If the proposed Qualifying and Further examinations (intended to replace O and A level) come into being, physics will only be taught at school as part of the physical sciences, Professor Burhop said. With the government eager to keep down the cost per head of education, there could be a lot of wisdom in introducing four year courses for bright students and teaching the less academically inclined for only two years.

On postgraduate teaching, Professor Burhop thought there was value in the present emphasis laid on teaching postgraduates to dissect a specific problem, to scan and assess literature and perform specific functions like

data analysis, but conceded that a lack of general technique was proving a handicap to those going into industry. A physicist might now finish his PhD as an expert in, say, bubble chambers or counters and with considerable incentive to continue working in the same field. This would have to change, he said. But industry for its part was still too ready to treat physicists as technicians.

Professor Burhop also criticized the Institute of Physics and the Physical Society which, he said, was far too timid in creating a dialogue between industrial and academic physicists. He also thought the Science Research Council was wrong to increase the proportion of postgraduate grants given for advanced studentships rather than for MSc and PhD courses. For one thing, staff was short and these courses often turned out to be very uninspiring. But the SRC's CAPS awards (Co-operative Awards in Pure Science) which give a student one supervisor in industry and one at university were proving a success in providing more "industry oriented" physicists.

UNIVERSITIES

Revamping the Vets

THE way in which veterinary science is taught in Britain needs a thorough overhaul—this, at least, was the conclusion of a two-day conference held last week by the Royal College of Veterinary Surgeons. The college, which officially supervises university veterinary courses, has asked the government to set up an interdepartmental inquiry into the education and future role of the veterinary profession, a request which is being urgently considered.

The chief disadvantage of the present system, it seems, is that the universities are failing to produce the flexible, well-educated type of veterinary scientist who is needed. The system, which has remained largely unchanged for the past thirty years, is becoming increasingly inappropriate in view of the widening range of veterinary activities. On the clinical side, general practitioners are being expected to cope with the problems of large herds, and particularly the problems of disease prevention in intensive animal production systems. There is a growing demand for clinical species specialists but as yet very few opportunities for specialist training. Commercial activities such as the development and testing of new medicines, food additives and agricultural sprays are becoming increasingly important. More graduates are needed in research, particularly in new fields such as veterinary epidemiology, but here also there are no facilities for postgraduate teaching. This point did not escape the attention of the Swann committee, which in its report on the use of antibiotics in veterinary medicine recommended that university departments of veterinary epidemiology should be set up.

Most of the speakers at the conference agreed that the universities or research establishments should offer many more postgraduate courses. Dr J. T. Stamp from the Moredun Research Institute in Edinburgh suggested that, following the normal five-year undergraduate course, all students intending to go into practice or other clinical fields should have to take an extra year of postgraduate professional training. For research scientists, Dr K. N. Burns from the Agri-