

Unemployment among engineers has halved to 0.52% over the two years since the CEI's last survey, while the general distribution of engineers throughout industry has not changed much. The massive recession in machine tool manufacture in 1971 has halted, although there has been no appreciable recovery, and the percentage of engineers employed in electrical equipment manufacture and in electricity generation or distribution has dropped. Since 1971, consultancy has taken over from electronics as the largest single employer of engineers (about 10%).

The survey also reveals that engineers who earn more than £3,000 a year also on average receive the equivalent of a further 20% of their salaries in fringe benefits.

## Short Notes

### Alternative to Hexachlorophane

A NEW disinfectant-detergent preparation for use as a surgical scrub in place of hexachlorophane has passed its first reported independent field trial with flying colours. Hibiscrub, a chlorhexidine detergent solution, marketed by ICI, has been tested by an operating team in the professorial surgical unit at Aberdeen Royal Infirmary, and its findings are reported in a recent issue of the *British Medical Journal* (4, 586; 1973). The unit had previously used the hexachlorophane preparation PhisoHex successfully for many years, but this disinfectant is not entirely satisfactory as it has a fairly narrow range of activity and there is accumulating evidence of the possibility of its toxic absorption. The trials showed that Hibiscrub was just as effective as PhisoHex in maintaining low levels of bacteria on the hands during operations and as an added bonus was more pleasant to use and also cheaper.

The members of the Aberdeen team have acted on their findings and now use Hibiscrub as their routine surgical scrub.

### Name Dropping

QUEEN'S University, Belfast, is sometimes embarrassed by the 'Queen's' part of its title and often drops the word from its advertising copy. But there is no sinister motive behind this. The true explanation is more mundane. A spokesman for the university said recently that "when our advertisements are classified alphabetically under 'Q' our prospective applicants sometimes get tired before they get to us". This alteration to the name applies only to publications outside Northern Ireland.

At home they stick loyally to the full title.

## BRITISH COUNCIL

### Looking East

CONSOLIDATION was the keyword in 1972 as far as the British Council was concerned. The council's annual report published recently (available from 65 Davies Street, London W1Y 2AA) emphasises that the purpose of the council has remained unchanged since it was established forty years ago. It is still in existence to "make the life and thought of the British peoples more widely known abroad . . . to enable students from overseas to undertake courses of education or industrial training in the United Kingdom . . . to bring other peoples into closer touch with British ideals and practice in education, industry and government . . . to make available to them the benefits of British contributions to the sciences and to technology . . ."

The latest people to benefit from the attention of the council are the Chinese from the People's Republic. During 1972-73 there was a marked increase in the council's contacts in China and many Chinese came to Britain last year to study English. Recently, the council has, acting as an agent for the British Government, placed sixty Chinese post-

graduates in science, technology and medicine in one-year posts in Britain. These people are mostly between the ages of thirty and forty-five. The first few have already arrived and are in the process of learning English. They will start their scientific work in January.

The council's budget for 1972-73 was £20.51 million, of which £18.98 million was covered by a parliamentary grant. The remainder came from earnings and private donations. For 1973-74 the budget has only increased by a modest £234,000. About 20% to 25% of the budget is spent on science although the accounts do not allow a direct extraction of this sum.

The council at present employs eighty-one scientifically qualified officers but not all of them are in posts directly associated with science. Fifty-seven of them are abroad and twenty-four are in Britain, most of them in London at the head office.

In the past two years the number of science officers in Europe has doubled. Until 1972 the council had science officers in Spain, Italy and Germany. During 1972-73 a science officer was assigned to the Paris office and recently one science officer has been appointed to Scandinavia and another to the Benelux countries.

## DEAFNESS

### Wiring for Sound

STUDIES are in progress at the Institute of Sound and Vibration Research at the University of Southampton on the possibility of implanting electrodes into the inner ear to restore hearing in cases of deafness where the auditory nerve is undamaged but the cochlea no longer works.

A feasibility study has been carried out for the Medical Research Council (MRC) by Dr A. R. D. Thornton and Mr N. V. Morgan, both members of the institute.

A number of electrode implants have been carried out in the United States. These have only picked up low frequency sounds and have not helped much in the hearing of speech. But lip reading has been made easier.

The Southampton studies will assess the possibility of plugging a number of electrodes into the cochlea so that a fuller range of hearing can be restored. Dr Thornton says that the operation is already possible with existing technology, although many questions have to be answered before it is certain that the technique can be used.

Operations in the United States have been suspended until better devices are available for implantation, and because there are fears that the silvered electrodes could lead to heavy metal poisoning in the brain. The MRC team will

also be examining the possible long term effects of implanting the electrodes in the cochlea as well as the effects of repeatedly stimulating the auditory nerve with an electrode.

If the technique proves to be workable it is estimated that 20% of deaf people could benefit. But it is far from certain that the research will be successful. Dr Thornton says that "even if I had a patient with a good auditory nerve I would do everything in my power to dissuade him from having one of these operations at the present time". Mr Morgan warns that for people who have been deaf for a long time the technique may create as many problems as it solves. Patients will not just wake up and be able to hear. They will have to get used to interpreting the changed speech patterns that they will hear with the aid of the electrodes.

The institute is also about to start work on a programme of hearing conservation with the help of a £13,000 grant for a three-year period from ICI and Amplivox. Under the leadership of Dr Alan Martin the institute intends to examine why the majority of workers in noisy industries refuse to wear protective clothing.

Dr Martin points out that one company spent £18,000 over eighteen months on hearing protection for its employees, most of it on protective clothing, only to find that only 2% of staff were wearing it.