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FEB 5 1968

U.C.C. CHEM. & PLASTICS

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may have been... candidates for... boards have been... obstacles to return should be... diminish the rate of emigration in... for career guidance of trainees... and that more opportunities should... for academic careers. The Minister of Health... studying these recommendations.

The loss of 300 doctors a year is indeed serious, but should be seen in proportion to the numbers Britain gains from other countries. Last year almost 2,000 doctors from the Commonwealth alone applied to enter Britain. In 1965, the most recent year for which figures are available, there were 6,000 doctors working in National Health hospitals who had been born abroad—about 30 per cent of the total. Of general practitioners 2,600, or 12 per cent of the total, were born abroad. If every doctor were to practise in the country of his birth, Britain would not be the gainer. But this is not to decry any efforts that the ministry may now make to encourage the return of expatriates, and to allay the discontent of those who would follow them.

More on Asbestosis

THAT there are risks associated with asbestos is not now disputed. A review of the problem as it occurs in Britain has just been published as a memorandum by the Advisory Panel on Problems Arising from the Use of Asbestos (HMSO, 3s. 9d.). The advisory panel, set up in 1965 by HM Factory Inspectorate, is responsible for considering the use of asbestos in relation to the health of those directly or indirectly exposed to asbestos in their occupations. Over the whole country the panel estimates that about 20,000 persons are exposed to asbestos in the use or handling of the fibres. The figure is probably higher than this; people can easily be put at risk by working near to where asbestos is handled. The present Asbestos Industry Regulations, 1931, are applied to some 300 registered factories, but the report says that there are many other factories which use asbestos products and which do not come within the regulations. The Ministry of Labour is at present drawing up new regulations to cover a wider range of factories.

It was in the 1920s that it was first clearly recognized that asbestosis, a fibrotic condition of the lungs, is caused by occupational exposure to asbestos. Within a few years it was suggested that the disease might be complicated by the development of carcinoma of the lung, but an association was not generally accepted until the 1950s. Recently, there has been concern over the occurrence of mesothelial tumours of the pleura or peritoneum which appear to be causally related to asbestos exposure in many cases. Since 1966 mesothelioma has been a scheduled industrial disease.

The advisory panel concludes that there is an increasing incidence of asbestosis in the country. The most likely explanation for this increase is the greater use of asbestos and the greater numbers of people employed in the industry over the past 20 years. But the panel says that "there is no evidence that the overall attack rate has decreased in the industry over this period, although it has in some textile mills in which the dust conditions have been greatly

NATURE, VOL. 217, JANUARY 13, 1968

improved". It appears that if the regulations are more widely and more stringently applied than at present, the number of cases should inevitably fall.

The panel indicates that crocidolite has a special significance in relation to mesothelial tumours. It recommends that other types of fibre should be substituted for crocidolite wherever possible, and, where this is impossible, special precautions should be taken to reduce the risks of inhaling the material. The panel admits that at the moment the level of exposure below which the risk may be negligible is not known. The quantity of crocidolite (blue asbestos) imported into the country is much less than the other varieties of asbestos, and it has remained at about 7,500 tons per year for the last few years. But time may show that other fibres are also implicated in the development of mesothelial tumours.

Finally, the report suggests that action should be taken to control the discharge of dust-laden air from asbestos factories and the dispersal of dust from waste dumps. It emphasizes, however, that the problem of mesothelioma in association with asbestos exposure should be kept in a proper perspective. Even though the incidence is increasing, the total number of cases of mesothelioma in Britain over several years is very small when compared with the annual total of deaths from cancers of the trachea, bronchus and lung.

CIGARETTE, ANYONE? Recording Weather

AN automatic weather recording station which can operate unmanned for at least three months has been produced by the Plessey Company Ltd. This station, which can make and record more than 82,500 measurements in a three month period, is available from the Marine Systems Division of the Plessey Electronics Group at Ilford. The value of automatic weather stations was recognized by a recent report from the World Meteorological Organization (*Nature*, 215, 1924, 1967). They are important because modern developments in weather forecasting require information about climate from all over the world—sometimes from uninhabited areas—and it is becoming increasingly hard to persuade amateur meteorologists to provide accurate data day by day. Professionals cost money, and so there should be a real market for automatic stations which can do the job reliably for long periods without attention.

The Plessey station is virtually self-contained and can monitor parameters such as rainfall, humidity, wind speed and direction, air, soil and water temperatures, barometric pressure, pH, solar radiation and water level and flow. The basic design was evolved in co-operation with the British Water Resources Board, the Meteorological Office and the National Physical Laboratory. By adding various instruments to the basic design, it has been possible to produce a family of stations including hydrometeorological, climatological, water level, water quality and recording rainfall stations. Each can be arranged for automatic operation, and the recorded data can be sent by telemetry to a control centre on demand.

Each station is supplied as a complete system with sensors, recorder, power supply, 'Stevenson' screen and a stayed aluminium mast which supports the sensors. The memory of the station samples up to eight sensors in turn, recording their outputs in ten-bit

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