

He surmised that an honours degree in industrial technology and management would be the "Greats" course of the future.

Dr C. G. Williams of Ricardo Company outlined the assumptions needed to arrive at any sort of manpower forecast. He enumerated four main conditions: that the talent exists, that the talent can be induced to follow a given path, that education can change, and finally that predictions are inherently possible. Although these questions were not discussed as fully as they might have been, it appeared that there was a considerable spread of views among the participants on all of them. Professor P. J. Garner, of the University of Birmingham, pointed out that engineers must see the point of what they are doing if they are to be led to a satisfactory job, and he referred to the fact that many engineers are attracted to American companies because they are given specific projects to do and not offered vague training schemes.

#### US NATIONAL ACADEMY

## One New President

At its meeting at the California Institute of Technology this week, the National Academy of Sciences will have been asked to approve the nomination of Dr Philip Handler as president in succession to Dr Frederick Seitz, now translated to the Rockefeller University in New York. There is unlikely to be open dissent from the nomination, as on the occasion in 1954 when the nomination of Dr E. Conant was overriden in favour of that of Dr D. Bronk. In the past few years, Dr Handler has made friends and has won respect in his role as chairman of the National Science Board which guides the operations of the National Science Foundation. It seems to be acknowledged that Dr Handler has frequently helped to strengthen the NSF's bargaining position with Congress, and it is certainly the case that he has frequently appeared alongside the director, Dr L. Haworth, in the presentation of evidence to congressional committees. His biggest disadvantage, in the eyes of many professional scientists, is that he is now pre-eminently a committee man, not a scientist. People are asking, for example, whether he will be able to emphasize the distinction between the academy and the administration which present circumstances require. The next six years, no doubt, will tell.

Dr Handler began his career as a nutritional biochemist working for his doctorate at a US Department of Agriculture regional soya bean laboratory in Illinois from 1937-39. He then moved to the medical school of Duke University in 1939 as an instructor in physiology and nutrition and there rose through the hierarchy of professorships to become the professor and chairman of the department of biochemistry and nutrition in 1950. His public committee work began in the late 1950s; he was a member of the US Public Health Service's National Advisory Health Council from 1958-62, chairman of the National Institutes of Health biochemical study section from 1955-58, and a member of the National Science Foundation's biological and medical research panel in 1959. In 1962 he was appointed to the National Science Board and became vice-chairman in 1964. In the same year he became a

member of the president's Scientific Advisory Committee and a member of the president's Commission on Heart Disease, Cancer and Strokes. He has also been a consultant for the Veterans Administration, the Atomic Energy Commission, the National Research Council and the National Institutes of Health. This is by no means an exhaustive list; in the past fifteen years Dr Handler has served on more than a dozen advisory committees, panels, boards and sections of one sort or another.

#### ARCHAEOLOGY

## Neolithic House in Ulster

from our Archaeology Correspondent

THE first neolithic house to be found in Ulster, and one of very few in the British Isles as a whole, has been uncovered in the past two seasons during rescue excavations at Ballynagilly in County Tyrone, directed by Mr ApSimon of Southampton University (formerly of Queen's University, Belfast) on behalf of the Ancient Monuments Branch, Ministry of Finance of Northern Ireland. This summer's excavation at the site, on a hill of glacial gravel and sand rising 50 feet above the surrounding bog, revealed that the house, first discovered last year, had been walled on two sides with thin split planks of oak, remains of which have been preserved in the wall trenches as sheets of charcoal about 1 cm thick and about 20 cm high, with the grain running vertically.

The house, a rectangular structure 7 by 6 m, had an earth floor and its end walls may have been finished with wattle and daub. But it is the planking which is so significant, for this type of building occurs on central European neolithic sites. Thus the discovery at Ballynagilly strongly supports the suggestion, previously based chiefly on analysis of pottery styles, that the neolithic colonizers of Ulster came ultimately from central Europe, by way of northern England, rather than from Spain and western France by the Atlantic seaways. Apart from the house, the site has yielded polished stone axes, leaf-shaped arrowheads and a typical flint industry, as well as pottery of what is thought to be the earliest neolithic style found in Ireland, which suggests that the site was occupied around 3000 BC.

Close to this neolithic site there is an early Bronze Age Bell Beaker habitation site overlying traces of neolithic occupation, which has yielded much pottery, a typical flint industry including barbed-and-tanged arrowheads, as well as reworked fragments of neolithic axes, but no certain traces of buildings. The absence of metal finds is not surprising, because although metal axes and knives may have been in general use they were too valuable to lose and could be melted down again when worn out. This group of settlers had probably migrated to Ulster from the Low Countries by way of Scotland and Northern England not long after 2000 BC. One particularly interesting feature of the Bronze Age habitation is the occurrence of a cooking site. An intensely burnt hearth surrounded by a dense scatter of habitation refuse was found about 3 m from a long pit (3 m by 1 m by about 0.8 m deep) filled with heat fractured stones, charcoal and ash, which probably