Editorially Speaking.....

THANKS to the financial aid of the Central Government, technological institutes all over the country have expanded and therefore, chemical engineers and technologists will be coming out from these institutions in increasing numbers. However, young aspirants, hoping for new avenues of employment or opportunities to utilise their training and knowledge, are bound to be disappointed at the inadequate emphasis on the development of basic chemical industries, if the various schemes suggested under the Second Five Year Plan are likely to materialise. The importance given to agriculture and transport in the First Five Year Plan is understandable in view of the then acute shortage of foodstuffs in the country. Now that the country is well on the way to self-sufficiency with regard to foodstuffs, industries ought to rank very high in the Second Five Year Plan. The question, however, arises as to how many of these industries will be of the engineering type and how many of the chemical type. It is not denied that engineering industry should have the priority since chemical industry in this country stands to gain considerably by the availability of plants, instruments and tools, designed and fabricated here. But it is at the same time necessary to develop the basic chemical industries, lest the industrial progress be one-sided only.

Even if the chemical industries are established, it appears that the prospects for chemical engineers as well as for technologists are none too promising as the emphasis now is on technicians, apprentice-training schemes and basic education. That too many chemical engineers and technologists are being turned out from the various Indian Universities is admitted and it is extremely unlikely that any institution will voluntarily agree to cut down the number of students admitted. In fact, from what we know, barring a few exceptions, most of the institutions have plans for still further expansion.

Another burning question of the day appears to be the medium of instruction, particularly in post-graduate and technological institutions. No one denies the right of every child to be taught in its own mother-tongue, but when it comes to a question of medium of instruction in institutions where the admissions are on an all-India basis, the question naturally arises as to what language should be used. Should the person studying at the Indian Institute of Science, Bangalore, learn in Kannada or the one studying at the Statistical & Nuclear Research Institute in Bengali ? It is unfortunate that the powers that be have failed to recognise the fact that the Indian Union consists of many nationalities. As such, to have a national language sounds as much an anachronism as a national dress or a national food. Language for the purpose of state-craft and inter-state dealings is one thing but to have a language as a medium of instruction should be above petty considerations. Few will admit that the only language which will have an all-India status and which gave a cultural synthesis to India is Sanskrit or in modern times English. While the sentiment may be against the retention of English as a common language—we would not like to call it as a national one—it is obvious that Hindi is unlikely to evoke the same response from the non-Hindi speaking people who are after all the majority. In any case, a time has come when a firm decision has to be taken as the continued instruction through English coupled with a lack of suitable books and journals in Hindi will lead to a complete frustration of the younger generation.

With the possibility of ready availability of atomic energy for peaceful

purposes, scientists and technologists can look forward to a new era of intense activity. Already the uses of radioactive isotopes in the investigational fields is well established, but what is not yet fully recognised is, with the aid of nuclear energy one will be able to carry out seemingly impossible reactions. In the field of polymerisation, for example, reactions can be carried out even in the solid state while in the field of food preservation, radiations from the fission wastes have gone a long way in improving upon the conventional methods of heat sterilisation, giving excellent products with a minimum investment in plant.

Village industries, as against large scale industries, have always provided and still provide a fruitful topic for discussion. Whatever economists or big business might say about this controversy, it has been generally accepted that village industries have a place in the economic and industrial structure of this country. The formation of the All-India Khadi and Village Industries Board under the Central Ministry of Commerce and Industry marks a definite step in the development of village industries. The Board has been functioning for little over a year and it is too early to see the fruits of its activities. However, from what we have read about its policies and its aims and from whatever we know from personal contacts, quite a few things have impressed us, as technologists. The industries which the Board wishes to develop include many chemical industries such as soap-making, tanning, ceramics, honey, paper etc. The Board has laid great emphasis on the utilisation of the scientific and technical knowledge available in the development of these industries and consequently on the employment of a large number of technologists. In addition, a central well-equipped research laboratory and a workshop for the purpose of helping village industries will soon be established. The succcess of such a scheme will naturally depend on the willing cooperation of engineers and chemical technologists who may join in this scheme as organisers, research workers or supervisors. We, as technologists, would certainly watch with keen interest this great experiment.