Editorial

SCIENCE AND SOCIETY

The impact of science on economic growth and the community at large is a factor of vital importance in science policy today. Addressing a group of scientists and engineers, a politician in the U.S.A. has recently stated that the bright vision of the promise of technology is clouded with doubt, and that the social problems posed by the industrialized society of the present time should be tackled by technological and political means. The President of a scientific society has pointed out that " whether we like it or not, we in Britain today are dependent on the scientist and technologist." The stress is on the view that science ought to play a more effective role in day-to-day affairs. There is an urgent need to foster among younger scientists an appreciation of the universal and philosophical implications of science, since the scientist of today is becoming more and more a specialist and has little understanding of the significance of his work in a global sense and its relation to man's aspirations.

The academic institutions should promote technology as well as pure science. Technologists have to take more positive steps to interpret and explain their achievements to the community. This requires greater co-ordination amongst scientific and professional institutions, including merger where necessary. In the U. S. A. two well known institutions have been merged—the Mellon Institute and the Carnegie Institute of Technology.

The financial supporters for research and development are, of course, interested in securing the best return from the projects backed by them. In the U. K. the expenditure for research and development during 1964-65 was £ 770 million, one third of which was for defence. The breakdown for research was : private industry 65 and government 25 per cent, the remainder going to universities etc. It is felt that for maximum benefit as much research as possible should be carried out by private industry which is most concerned with the applications as well as the profitability of the work undertaken. At the same time industry must be attuned to the wider use of technologists in all its affairs right up to the top. The government, on its part ought to encourage industry to do more research.

Some of the figures are quite revealing. In the U. S. A. $ 20 million were made available from private foundations for basic research each year, being 1 per cent of government's budget. It has been estimated that a 5 per cent decrease in NASA's overall budget could easily result in a 35 per cent decrease in scientific results. In 1962 the business sector provided 35 and 36 per cent funds for research but did 71 and 63 per cent of the work in the U.S.A. and U.K. respectively. The per capital investment in research in West Germany and India is reported to be Rs. 100 and 1. 10 respectively.

It is obvious that science and scientific research have an important role to play in the future years. This is possible with a better realization of the implications of science, together with proper co-ordination between pure and applied research on the one hand and between the public and private sectors on the other. (Chemistry in Britain, October 1967; Bulletin of the Institute of Physics and the Physical Society, June 1967 ; Scientific Research, July and September 1967 ; Materials Research and Standards, October 1967).

—T. L. R.