for the enzyme catalase, and thus permits the demonstration of the related enzyme peroxidase in such tissues as the liver, where its presence is normally masked by the preponderance of catalase.

By the time he returned to Australia, Goldacre had become keenly aware that many important questions in biology were not ready for investigation by classical biochemical techniques. He made the important and difficult decision to shift his research emphasis to the mechanism underlying differentiation of plant cells. His experiments on the auxin-induced initiation of lateral roots in cultured excised flax roots convinced him of the existence of a cell division inducer (kinin) elaborated by the inhibited, pre-existing lateral root primordia. His search for rich sources of kinin-like materials in tissues undergoing cell division led to the discovery of 'Kineapple' (*Nature*, 184, 555; 1959), a yet uncharacterized, highly active inducer of cell division from young apple fruitlets. In collaboration with several colleagues in Canberra, he was attempting the isolation of this material from three-quarters of a ton of apple fruitlets at the time of his death.

Peter Goldacre's outstanding characteristics were his honesty and easy-going informality, together with his impatience with pretension and sham. He loved camping and the outdoor life; he had a powerful physique and excelled at swimming and other sports. Six months before his fatal illness, he had attended the Fourth International Congress on Plant Growth Regulation at Yonkers, N.Y., and appeared in vigorous good health. The sudden knowledge of his impending death did not materially alter his essentially humorous and compassionate outlook on life.

He leaves his wife and three young children, the youngest born only a few months before his death. To those privileged few who knew him well, he will be remembered as one of Nature's noblemen. The tragedy of his early death lies in the fact that he had so much to give to many who had not yet come to know him.

Arthur W. Galston

NEWS and VIEWS

Education in Industry

The British Association for Commercial and Industrial Education has issued reports on two of its recent conferences. The first, "Education for Survival", contains the papers presented at the proceedings of the East Midland Group and is noteworthy for a stimulating account of technological education in Britain by Dr. B. V. Bowden, principal of the Manchester College of Science and Technology. The list of members attending indicates that speakers on subjects like the training of non-apprentices and the attitude of trade unions to apprenticeships were preaching mainly to the converted. The Association would perform a valuable service to industry if it could persuade recalcitrant managing directors of the need for training apprentices and others. The second conference dealt with "The Implications of the Crowther Report", and the speakers, who included the Minister of Education, underlined its main findings and recommendations. The value of what might have been a useful report is diminished by its appearance some five months after the Conference. Information about both reports may be obtained from the Director, British Association for Commercial and Industrial Education, 26*a* Buckingham Palace Road, London, S.W.1.

British Rubber Producers' Research Association

The current report of the British Rubber Producers' Research Association gives an account of the progress made during 1959, both in the fundamental study of the structure and properties of natural rubber and in the application of scientific knowledge acquired in recent years to the problems of the industry (Twenty-second Annual Report. Pp. 53. 1960). On the fundamental side, work on the biosynthesis of rubber in the tree has been made possible by the installation of a tropical greenhouse at Welwyn Garden City. The attack on this elusive problem includes the study of the structure of the latex vessels by the electron microscope, and the chemical examination of cell constituents. The chemical processes of vulcanization, that is, of the formation of a network of long-chain molecules, and the converse processes of ageing or network breakdown continue to be the subject of intensive study; progress in this field, though necessarily slow, is continuous. Of particular interest is the elucidation of the mechanism of surface cracking by ozone and the role of anti-ozonants. It is well known that this type of degradation is dependent on the state of stressing of the rubber, and it has now been shown that the effect of the anti-ozonant is to raise the critical stress for crack growth, while leaving the rate of growth above this critical stress unchanged. The somewhat related problem of fatigue failure has been shown to be associated with the growth of flaws having dimensions of the order of 0·01 mm. The report gives examples of the application of the knowledge obtained from these fundamental investigations to the production of rubbers and rubber compounds having more desirable physical and chemical properties. This work is designed to ensure that natural rubber is not left behind in the competition with the synthetic materials now available. The report is available from the Association, 19 Fenchurch Street, London, E.C.3.

Comparative Efficiency of Indexing Systems

A report by Mr. C. W. Cleverdon on the first stage of an investigation into the comparative efficiency of indexing systems, an investigation supported by a grant to the Association of Special Libraries and Information Bureaux by the National Science Foundation, has now been issued by the College of Aeronautics, Cranfield, on behalf of Aslib (Pp. v+166. Cranfield: The College of Aeronautics, 1960). The grant of £10,000 was made in July 1957 for a study of the comparative efficiency of the Universal Decimal Classification, the alphabetical subject catalogue, a faceted classification system, and the Unitern system of co-ordinate indexing, which in this first stage involved the indexing of 18,000 research reports and periodicals in the general field of aeronautical engineering, about half of which dealt with high-speed aerodynamics. The present