

these wide subjects is to put him on to some tiny fragment of a worthwhile problem, or to make over to him a mass of existing material that is being studied by a senior man or by a group of men in the particular department. In the larger out-of-door subjects, therefore, the author says it is practically impossible as matters stand to accept, with a clear conscience, candidates for the Ph.D. He goes on to remark that for a man who seeks only training and is not hampered by the restriction implied in the ultimate preparation of a thesis for a degree, two years is a sufficient time to give excellent training to a man interested in grassland problems. His general findings regarding these three degrees may be noted:—

“The agricultural scientist cannot be separated in treatment from other applied scientists, and the applied scientists cannot in equity be separated from the pure scientists, but it would probably be better for all if higher degrees granted on the thesis basis were completely abolished. The Ph.D. has served no really useful national purpose, and has carried with it innumerable psychological effects which have done neither the young doctors nor the universities any good, and should be abolished root and branch. The M.Sc. is perhaps more innocent, despite the fact that it stands for too wide a range of attainment and qualification, and of research training. Because many of the candidates for the M.Sc. already hold research positions, if this degree is to be retained the submission of papers or thesis of joint authorship should be considered as a merit and be definitely encouraged instead of being disallowed, for ability

to collaborate is one of the outstanding necessities of the modern scientists.

The D.Sc. stands in a different category, because it does not influence a man's training. It may, however, influence a man's attitude towards teamwork and collaboration, and may so influence his attitude over a long run of years, during which time he is himself in a senior and influential position, and therefore, capable of considerable psychological mischief to the man himself, and therefore also of considerable mischief to the spirit that should animate a research institution”.

Whether we agree or not with these final conclusions, there are many of us who would echo the remarks regarding the narrowness of training which must perforce be given for the Ph.D. and the consequent inadequacy of men so trained for a broad outlook on research problems. What can be expected, for example, from a candidate who has devoted two years to nothing but the study of the alimentary system of some unimportant insect? Has he been trained in such a way that as a future Agricultural Entomologist his degree is a hall-mark of real usefulness?

It is always difficult for universities to make reforms within their own borders and yet that is the only place from which university reform can start, and if the clear thinking which ought to be associated with universities is applied to this question of post-graduate degrees and their values, then we ought to see some improvement both in the training given for such titles and in their real value.

ANNOUNCEMENT

INTERNATIONAL SYMPOSIUM ON EUROPE IN SPACE — THE MANNED SPACE SYSTEM

Europe faces a new era of technological, scientific and economic challenges. The symposium brings together and encourages a dialogue between confirmed and potential users, the designers, developers, and operators of the future European Manned Space System, politicians, and decision makers; explores the methods of obtaining the best possible results from manned missions and the intervention of man in orbit, as part of the peaceful exploitation of space in such disciplines as space science, remote sensing, life and material sciences. To achieve this, the symposium will provide information on the characteristics and capacities of the elements of the future European orbital infrastructure; present the

utilization scenarios foreseen for the individual orbital elements, together with the associated operational concepts; foster a fruitful exchange of views on the extent that the peaceful utilization of space can be achieved within the framework of international cooperation; discuss the role of Man in space; encourage the emergence of novel ideas and concepts.

The symposium will be held at the Palais de la Musique et des Congres, Strasbourg, France. Details can be had from N. Longdon, ESA Publications Division ESTEC, Postbus 299, 2200 AG, Noordwijk, The Netherlands.
