

## SCHOOL LEAVERS OR PH.D'S

R. A. WALLER

ATKINS RESEARCH AND DEVELOPMENT, EPSOM.

We are progressing towards the time when it may be that the recruitment choice facing a Consultant is either that of a school leaver or Ph.D. This dichotomy is occurring because of the rapid expansion in the numbers of undergraduates and post-graduates at our Universities; this has involved a lowering of standards at the bottom end of the scale. On the other hand, the brighter people feel that they must distinguish themselves from the run-of-the-mill graduate by taking higher degrees. In acoustics, this situation is exaggerated, because, as far as I know, there are no B.Sc. courses which give an adequate grounding in acoustics. If one wants a "trained" man, one has to think in terms of at least an M.Sc., and more often these days in terms of a Ph.D.

A piece of research leading towards a Ph.D., is a relatively inefficient method of gaining a grounding in the fundamentals of acoustics in general and only the really good people are able to take full advantage of the opportunity presented to them. These same people, if they were to join a consultancy immediately after leaving school, would equally be able to take advantage of the opportunities and it is a moot point as to whether they would end up better off at the age of say 25 with rather than without their Ph.D.

Particular methods and techniques for particular problems can be learnt on the job, whereas a fundamental understanding is difficult to pick up. What I am advocating, therefore, is a thorough grounding in first principles and an understanding of what is going on rather than an ability to produce mathematical equations.

In our own consultancy, there is a continuous ladder from the lowest to the highest position and no one is debarred from climbing it because of a lack of academic qualifications. There are certain circumstances such as Public Inquiries where qualifications are given undue weight and people without such qualifications are obviously at some disadvantage. However, even for the academically qualified there is some need for professional acceptance and professional standards. The B.A.S. and its successor the proposed Institute of Acoustics have both, for the time being at least, turned their faces from providing qualifications to their members on the grounds of the difficulty and expense of so doing. In this context, therefore, one looks with interest at the development of I.N.C.E. and to some extent of the Association of Noise Consultants.