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SELECTION AND TRAINING OF STUDENTS FOR INDUSTRIAL RESEARCH

By DR. ALBERT W. HULL

RESEARCH LABORATORY, GENERAL ELECTRIC COMPANY

In selecting college graduates for industrial research, certain qualities are sought. Not all these qualities are the product of college training, but many of them might be. The purpose of this discussion is to inquire whether colleges could contribute more to this total training.

The qualities which are needed for success in industrial research may be classed in four groups. They are, in order of importance: character, aptitude for research, attitude toward work and knowledge.

CHARACTER

Character is the most important qualification. It is rated first in the hiring and retaining of personnel.

1 Vice-presidential address before the Section for Physics, American Association for the Advancement of Science, Cleveland, 1944.

I shall not try to define character; the many virtues which it comprises include self-discipline, courage and tolerance, all of which are needed, in industrial research. It also includes honesty and generosity. Honesty is more than the negative virtue of not telling lies. Positive honesty is the quality that enables you to say of a man, "I always know just where to find him." It is the basis of true friendship and teamwork, and hence is an essential requirement in a cooperating group. The honesty of research workers, however, must be even greater than this. They not only must not deceive others but must not deceive themselves, for the greatest scientific sin is wishful interpretation of data. It is more common than is generally realized, and is so serious that it can reduce a research worker's value to the vanishing point. The man who is more anxious to prove that he is right...