RECRUITMENT AND SELECTION OF COLLEGE GRADUATES FOR
TECHNICAL POSITIONS IN INDUSTRY*

I. General Surveys and Reports


Includes abstracts of 73 items dealing with selection and training for research and 102 items dealing with testing and evaluation techniques. In selecting materials for this very helpful bibliography, "special emphasis was placed on the more recent literature," although earlier studies still of current interest were included.


Intended as a guide for company executives, this report covers “practices, experience and opinions on various aspects of college recruiting” as well as illustrative material. It includes a chapter on the “special problems of smaller companies,” information on starting salaries and training programs, and a directory of college placement officers.


Verbatim report of a symposium and subsequent audience discussion on "various phases of the interviewing, hiring, assigning, and initial handling of technical people in chemical companies." The participants were chemical engineers from a variety of sizes and types of companies.


Points out the importance of college recruitment programs, especially in view of current shortages of professional personnel. Discusses determination of optimum number to be hired, relations with colleges and universities, recruiting interviews, and types of training programs.

* Items from this list should be ordered directly from the publisher. Addresses are given in connection with each reference.

Report on an opinion survey among 150 engineering graduates regarding the adequacy of information given in employment interviews. A reply to this article, giving employer reactions to student preparation for interviews, was written by Lawrence G. Lindahl and published in the December, 1947 issue of Personnel Journal, pp. 231-232.


Discusses the advantages and disadvantages of different methods of induction. The author favors a “directed work experience plan” and tells how such a plan operated in the American Steel and Wire Company.


Results of a survey made in 1946 by a subcommittee of the Engineers Joint Council’s Committee on the Economic Status of the Engineer covering recruiting, selection, salary, and promotion practices in 125 companies.


Summarizes “the programs developed by 75 companies” in a wide variety of industries and also presents “the campus viewpoint” from 45 educational institutions.


Describes current practices and trends in the field of college training programs as reflected by the experiences of 142 American companies. Also includes information and suggestions contributed by sixty college placement officers.

2. Testing and Evaluation Techniques


Detailed report of a program which has been used by the Shawinigan Water and Power Company over a four-year period. It consists of a battery of tests and a rating scale designed “to improve the process of initial selection” and to provide “an effective method of assessing
graduates during the training period, so that trainees' difficulties would come to light early in the course." Test scores and ratings also assist in placement by distinguishing between candidates suitable for supervisory positions and those likely to succeed as "specialists" only.


This report, first of a series sponsored by the Office of Naval Research, describes the development of a checklist of "critical requirements in terms of behavior for research workers." The study reveals "that there are differences in the requirements for personnel in higher as compared with lower grades; for those in certain fields such as chemistry and electronics; and for those performing various functions such as testing and basic research. These differences were found to be primarily matters of emphasis and the basic list of critical requirements appears to be fairly similar for all groups studied."


The first of these reports applies "to the selection of candidates for advanced training" and "junior professional workers." The second reports research on tests "intended for individuals at the doctoral level . . . or its equivalent in experience, and . . . design to measure proficiency in carrying out independent research."


Outlines the procedure essential to establishing a testing program from a "demonstrated validity" approach. With special reference to experience at the Hamilton Watch Company, reports that a combination of the Stanford Scientific Aptitude Test and the Wonderlic Personnel Test "differentiated between high-rated and low-rated men to a marked degree."


Relates scores of engineering college graduates on certain aptitude and ability tests to subsequent success in an aircraft company.


The supervisor of the General Electric Company's creative engineering program describes a combination interviewing and testing program
developed over a ten-year period and also discusses how the company develops and utilizes the talent so discovered.

Brief outline of a selection program developed by the Professional Development Committee of the Engineers' Society of Milwaukee which includes test batteries, patterned interviewing, a job specification system, and employee rating.

Based on studies of about 400 engineers employed by the federal government, this reports on a test battery found useful in differentiating between superior and inferior engineers.

"Data obtained in a study of about 150 chemists" in the first four professional grades of federal service indicate "that a combination of the Chemistry and Surface Development tests would have high predictive efficiency for the selection of chemists in laboratories similar to the three included in this study."

Describes a testing program in use in the Allis-Chalmers Manufacturing Company and contains several illustrations of test results in specific cases.

Report of a survey made by the Indiana University School of Business which gives data both as to numbers and types of companies using tests and also the titles of tests used.

Included in this account of the company's testing program is a report on a study of an experimental group of 45 research engineers.

A progress report on use of tests and measures of vocational interest in studying the placement of young engineers at the Aluminum Company of Canada.