

Coverage of Scientific Personnel in *American Men of Science*, Eighth Edition

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WITH THE TERMINATION of the activities of the National Roster of Scientific and Specialized Personnel following World War II, no active register of scientific personnel was available. Partly to fill the gap, the Office of Naval Research entered into a contract with the National Research Council to secure information on scientists with more advanced training, through cooperation with the publishers of *American Men of Science*. As a result of this effort, registration in *American Men of Science* was sharply increased beyond the number registered in the seventh edition. Approximately 52,600 scientists were registered, and information about them is available. The National Security Resources Board has now taken steps to circularize additional scientists through cooperation with scientific societies, and it is anticipated that this effort will get under way in the next few weeks. The new registration will be integrated with the existing files of persons registered in connection with the publication of *American Men of Science*.

The extent to which the registration in *American Men of Science* covers the scientific population has been of much interest. In general, the editors of *American Men of Science* accept for registration those persons whose training or experience is the equivalent of the attainment of a doctorate in one of the scientific fields.

To determine the extent of coverage, the Office of Naval Research requested the Office of Scientific Personnel, of the National Academy of Sciences-National Research Council, to make a study of various appropriate groups to determine in each case the percentage of coverage. The membership rolls of the American Mathematical Society (November, 1948), American Physical Society (October, 1948), Geological Society of America (December, 1948), American Psychological Association (August, 1949), Botanical Society of America (March, 1950), and Genetics Society of

America (March, 1950) were obtained and studied. These cover various segments of the scientific population only, but it was felt that they would furnish a reasonably satisfactory basis for estimation of coverage in other fields. In those cases where membership might include numbers of people whose level of training or experience was below the level used by the editors of *American Men of Science*, selected lists were developed with the aid of officers of the societies. In the case of the American Psychological Association, which includes branches of psychology where registration in *American Men of Science* is not general, certain specialties were selected. Of these various lists an adequate sample was selected, and the names checked against registration in *American Men of Science*.

J. R. Kline, secretary of the American Mathematical Society, very kindly checked its membership list to show those who might be expected to be included in *American Men of Science*. Approximately each fifth name was checked. In the case of the Geological Society of America, members of fellowship grade were checked for inclusion. Every tenth name was checked. In the case of the American Physical Society, out of a total membership of 7,238, the list of 992 Fellows was used as a base. About one in eight was checked. In the case of the American Psychological Association, the Fellows in the following fields were included: general psychology, teaching, theoretical-experimental, evaluation and measurement, physiological and comparative, childhood and adolescent, clinical and abnormal, military, and maturity and old-age psychology. Approximately each tenth name was checked. In the case of the Botanical Society of America, out of the total of 1,279 members, 200 were selected who were clearly indicated as professional botanists. The total membership list of 1,198 of the Geological Society of America was used, and a 10 percent sample checked. Table 1 indicates

TABLE 1
A. M. S. COVERAGE

Society	No. names	Names checked	Listed in A. M. S.	Total percentage found
American Mathematical Society, doctorates only	1,779	356	270	76
American Physical Society	7,238	992	905	91
American Psychological Association, Fellows in natural sciences	1,234	119	103	87
Botanical Society of America	1,279	200	166	83
Genetics Society of America	647	647	538	83
Geological Society of America	1,198	118	99	84

the membership on the lists selected, number of names that were checked in each list, and the number of those listed in *American Men of Science*; resulting percentages are also shown.

The Office of Scientific Personnel has on file the names and a certain amount of personnel data about all the individuals who have received the doctorate in the natural sciences from 1936 to date. Individuals receiving their doctorate in the fields of biochemistry, chemistry, geology, metallurgy, paleontology, physics, and psychology, for the period 1936-45, inclusive, have been listed separately. Each of these subject matter lists was sampled, giving the results listed in Table 2.

In addition, the file of those receiving the doctorate in 1936-45 in all subject matter fields—14,240 in all—was checked, using every twentieth name. This showed that 75 percent of the individuals receiving the doctorate in the natural sciences during the ten-year period were listed in *American Men of Science*. A similar check made of the over-all group re-

TABLE 2
A. M. S. COVERAGE

	No. names	Names checked	Listed in A. M. S.	Total percentage found
Biochemistry	870	100	76	76
Chemistry	4,905	200	153	76
Geology	398	100	73	73
Metallurgy	118	59	38	64
Paleontology	68	34	28	82
Physics	1,220	124	106	85
Psychology	920	100	58	58
1935-45	14,240	726	553	76
1946-47	1,656	207	169	81
1948-49	4,381	346	117	30

ceiving the doctorate in the natural sciences in 1946-47, inclusive, yielded 81 percent. Those receiving the doctorate in 1948 and 1949, inclusive, however, yielded a coverage of only 30 percent, owing largely to the fact that not all the 1948, and practically none of the 1949, doctorates had an opportunity to be included in *American Men of Science*.

It will be noted from a comparison of Tables 1 and 2 that registration of younger scientists is somewhat less than that of the membership in the comparable groups of members in societies. The coverage in both cases is substantial and represents the preponderance of personnel trained to this level. Some of the failure to achieve a higher percentage of registration resulted from lack of addresses for some persons whose names were known. This was particularly true of more recent holders of a doctorate in which the files of the Office of Scientific Personnel were virtually complete, but for which the most recent addresses were not available. If the present emergency results in a need for a registry of information, the present file will obviously furnish a very important resource of information in dealing with persons of advanced training in the various sciences.

