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# Careers in Engineering Mathematics Science and Related Fields

## *A Selected Bibliography*

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## Foreword

**B**ECAUSE OF THE GROWING IMPORTANCE of the sciences in our society and the increasing interest of young people in pursuing scientific careers, the Congress of the United States enacted Public Law 85-875. One purpose of the law as stated in Section 2(a)(4) is "to develop an awareness of the satisfactions to be derived through a career devoted to science."

On September 2, 1958, President Eisenhower signed into law both the National Defense Education Act (Public Law 85-864) and Public Law 85-875. Here again the Congress recognized, in Title V of this Act, the need for better guidance and counseling in the public secondary schools.

This bibliography of 385 titles was designed to suggest sources from which counselors, teachers, secondary school students, and others concerned with vocational guidance decisions can obtain free and inexpensive career information.

No attempt was made to separate the technical from the professional fields, although emphasis was placed on those requiring professional training.

All publications included in this bibliography are available from the sources listed rather than from the U.S. Office of Education. In some cases, the supply may be limited.

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# Careers in Engineering, Mathematics, Science, and Related Fields

## A Selected Bibliography

### AGRICULTURE

#### Agronomy

*Agronomist.* Largo, Fla.: Careers, 1960. 16¢.

The importance of agronomy is discussed in this summary, which gives brief descriptions of duties, working conditions, outlook, earnings, hours, preparation, and other similar information.

#### Dairy Husbandry

*This Is the Dairy Industry.* Chicago 6 (20 North Wacker Drive): American Dairy Association. 14 pp. Free.

Facts about the dairy industry make up most of this pamphlet. Pictures are used to show aspects of this expanding industry. A list of careers in the dairy industry is added.

#### Farm Management

*Out on the Range.* Corvallis, Oreg.: American Society of Range Management and Oregon State College. 11 pp. Free.

Of a rather general nature, the information included in this pamphlet emphasizes some of the opportunities available in range management, what a student needs in high school, and the type of college subjects required. Photographs included are interesting and informative.

*Should You Be a Farmer?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1960. 11 pp. Free.

An introduction to the role of the farmer accompanies specific information on today's

average farm, the income which can be expected, education needed, and special aptitudes which assure success as a farmer. This is one of a series of career publications.

#### Horticulture

*Horticulture . . . A Challenging Career.* East Lansing, Mich. (Department of Horticulture, Michigan State University): American Society for Horticultural Sciences. 8 pp. Free.

Presented in this folder are brief comments on horticulture as a way of life, the variety of jobs in horticulture, numerous positions available in production, marketing, research, teaching, industries, inspection, communications, and the rewards of the profession.

#### Poultry Husbandry

*Find Your Career in the Poultry Industry.* College Station, Tex. (Texas A. & M. College): Poultry Science Association. 47 pp. Free.

In addition to a general discussion of the vast and expanding nature of the poultry industry, the opportunities in the poultry industry are described in this book in terms of the personnel and preparation needed. Detailed information on careers in several different phases of the poultry industry is also given.

#### Soils (Conservation, Soil Management, Soil Science)

*Careers in Soil Conservation Services.* Washington 25: U.S. Department of Agriculture, Soil Conservation Service, 1966.

12 pp. Free. (Miscellaneous Publication No. 717.)

Briefly outlined in this folder-pamphlet are facts about what the Soil Conservation Service does, the opportunities for soil conservationists, range conservationists, soil scientists, engineers, agronomists, biologists, woodland conservationists, geologists, agricultural economists, and engineering aids. Employment information on work locations, training, advancements, and benefits is added.

*A Soil Science Career for You in the Soil Conservation Service.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, rev. 1960. 8 pp. 5¢.

What soil scientists do, their qualifications, and educational requirements are briefly discussed in this career folder. A list of employment facts about the U.S. Government is included.

### General

*Careers in Professional Agriculture.* Bucks County, Pa.: National Agricultural College, 1952. 8 pp. Free.

Job prospects, the four branches of agriculture (animal science, poultry husbandry, food science, and soil science), sources of employment, personal qualifications, educational qualifications, approximate college expenses, and earnings in agriculture are described in this career bulletin.

*Dynamic Careers Through Agriculture.* FILM. Washington (1731 I Street NW): Farm Film Foundation, 1960. 16mm. 28 minutes, sound and color. Free loan on request.

This film shows how new techniques have revolutionized the Nation's largest industry, agriculture, and how this change has created thousands of new opportunities for American youth. The film describes many of these new careers in agriculture, including the fields of science, education, and industry.

*I've Found My Future... in Agriculture.* Washington (1785 Massachusetts Avenue NW.): American Association of Land Grant Colleges & State Universities, 1958. 18 pp. Free.

Emphasized in this booklet are the many opportunities open to students of agriculture in the areas of research, industry, business, education, communications, conservation, conservation services, farming, and ranching. Much of the booklet consists of very good photographic illustrations.

*New Horizons in Agriculture.* Columbus 10, Ohio (2120 Fyffe Road): College of Agriculture & Home Economics, The Ohio State University. 4 pp. Free.

Highlighted in this folder is a listing of occupational titles representative to the many opportunities open to graduates of agriculture. Career horizons in agriculture are briefly outlined.

*Open Door to Opportunities for Agricultural Research Scientists.* Washington: U.S. Civil Service Commission, 1958. 8 pp. Free.

An outlined list of the fields of specialization for agricultural research scientists is given along with general comments about what is needed to qualify for these positions. All of these positions are with the U.S. Government.

*A Science Career for You in Agriculture.* Atlanta 13, Ga. (130 Sixth Street NW.): Southern Regional Education Board, 1960. 16 pp. Free.

This brochure is addressed to prospective students in order to emphasize the importance of the sciences related to agriculture and to describe the variety of opportunities which they offer for a useful and attractive career. The urgent need for specialists is discussed in terms of the amount of undergraduate and graduate training required. Short comments on the programs offered by several southern universities are included.

*There is a Career for You in Agriculture.* Columbus 10, Ohio: College of Agriculture & Home Economics, The Ohio State University, 1959. 6 pp. Free.

Agriculture in the future is discussed in terms of the growing opportunities being made available for agricultural graduates in the fields of agricultural services, marketing, suppliers to farmers, education, conservation, processing, research, communication, and production.

## BIOLOGICAL SCIENCES

### Anatomy and Histology

*Careers in Anatomy.* Philadelphia 4: Department of Anatomy, School of Medicine, University of Pennsylvania. 2 pp. Free.

The outlook of the field of anatomy today, methods of research, training, and oppor-

tunities are generally described in this brief report.

*Histology Technician.* Largo, Fla.: Careers, 1959. 15¢.

Presented in this summary are the duties, working conditions, qualifications, training, employment prospects, and earnings of the histology technician. The information included is timely and well presented.

### **Bacteriology, Mycology, Parasitology, Virology**

*A Career in Bacteriology.* Detroit 36, Mich. (19875 Mack Avenue): Society of American Bacteriologists, 1960 (rev.). 11 pp. Free.

In addition to employment outlook, professional grades and salaries, and educational requirements, this booklet gives a comprehensive discussion of the various areas of the study of bacteriology. These include the type of work done by a person in general bacteriology, agricultural and soil bacteriology, industrial bacteriology, medical bacteriology, veterinary bacteriology, virology, immunology and serology, and public health bacteriology.

*Bacteriologists.* Largo, Fla.: Careers, 1960. 15¢.

Of special benefit to guidance counselors and students is this career summary which presents the duties, working conditions, personal qualifications, training, employment outlook, earnings, and working hours of the bacteriologist.

*A Career in Mycology.* East Lansing, Mich. (Michigan State University): Mycological Society of America. 6 pp. Free.

What the field of mycology encompasses, the kind of training required to become a mycologist, and opportunities for mycologists in teaching, industry, medicine, and agriculture are highlighted in this brochure.

*U.S. Civil Service Examination Announcement for Medical Microbiologist, Bacteriologist, Immuno-Serologist, Parasitologist, Mycologist, and Virologist.* Washington 25: U.S. Department of Health, Education, and Welfare, 1956. 15 pp. Free.

Prepared for those interested in Government service, this pamphlet gives a description of work, educational requirements, experience needed, and physical requirements of each of the above mentioned professions. The salary scale given is now outdated, but other information is still helpful and applicable.

### **Biochemistry**

*Opportunities in Biochemistry.* Durham, N. C. (Duke University School of Medicine): American Society of Biological Chemists 4 pp. Free.

Many pertinent questions about the biochemical profession are answered in this pamphlet. These questions deal with the work of the biochemists, how their work is accomplished, their training, where they work, and the opportunities in the field.

### **Biology**

*Biologist.* Largo, Fla.: Careers, 1958. 8 pp. 25¢.

Very adequately covered in this pamphlet are the history of the field of biology, the duties of the biologist, working conditions, training requirements, training opportunities, personal qualifications, outlook, opportunities for women, hours, earnings, where biologists work, and a suggested high school program for a student interested in this as a future profession.

*Biology as a Career.* New York 71 (Riverdale): Manhattan College, 1959. 6 pp. Free. (Guidance Publication No. 13)

Biology as a career is discussed generally in the introduction of this career folder. Additional, more specific, information on the scope of biological science, variety of occupations available within the field, qualifications, professional preparation, and salary prospects is presented also.

*Careers in the U.S. Department of the Interior,* Washington 25: Superintendent of Documents, U.S. Printing Office, 1957. 56 pp. 25¢.

Prepared for guidance purposes, this booklet outlines the work of the U.S. Department of Interior and the employment opportunities in the Department. Descriptions of specialized jobs in the field of biology are outlined, and the advantages of a Government career are explained.

*New Careers in the Health Sciences.* New York 19 (1790 Broadway): National Health Council, 1960. 21 pp. Free.

The purpose of this pamphlet is to highlight the many changes that are creating new roles and new relationships in the health field for all of the sciences. These advances are opening up new opportunities in physics, chemistry, mathematics, and engineering, as well as in biology and medicine.



*U.S. Civil Examination Announcement for Biologist, Medical Technologist, and Chemist.* Washington 25: U.S. Department of Health, Education, and Welfare, Public Health Service, 1956. 19 pp. Free.

Prepared for those interested in Government service, this pamphlet gives a description of work, educational requirements, experience needed, and physical requirements of each of the above-mentioned professions. The salary scales quoted are now outdated, but other information is still helpful and applicable.

*What Is a Biologist?* Kalamazoo, Mich.: Employment Office, The Upjohn Company, 1959. 4 pp. Free.

Several good photographs showing the work of a biologist form a good part of this career pamphlet, which further contains the varied types of work done by biologists, general comments on salaries, and a discussion of the rewards of the profession.

## Botany

*A Career in Botany.* Chicago 5 (Roosevelt Road and Lake Shore Drive): Chicago Natural History Museum, 1959. 2 pp. Free.

What the science of botany deals with, the main fields of botanical investigation, best preparation for a career, and career opportunities are presented in this brief report.

*Careers in Botany.* Nashville, Tenn. (Box 1501): Vanderbilt University, Botanical Society of America. 10 pp. Free.

Of special interest to a student interested in botany as a career would be the outline of types of botanists and what each specializes in (example—pathologist, studies plant diseases). The variety of jobs found in industry, government, and academic positions are given, along with suggestions of courses needed for a good background for further study of this field.

*Plants, Botany, and You.* Iowa City, Iowa: State University of Iowa, 1958. 22 pp. Free.

This attractive booklet discusses what the field of botany entails, the future of the field, what a botanist must know, the opportunities for the botanist as determined by various educational degrees, and the abilities one must have to be successful in botany. Of special help is an alphabetical listing of the professions for which a thorough botanical education is basic.

## Entomology

*Entomologist.* Largo, Fla.: Careers, 1960. 15¢.

An informative summary of the duties, personal requirements, training, earnings, outlook, places of employment, and criteria for determining one's interest and ability in entomology.

*Opportunities in Professional Entomology.* College Park, Md. (4603 Calvert Road): Entomological Society of America, 1960. 13 pp. 25¢.

A definition of entomology, the value of economic entomology, the organizations in which positions are available, and prospects of employment are combined in this career pamphlet along with a discussion of professional entomology in research, regulatory services, large scale control programs, extension work, commercial entomology, entomology abroad, teaching, and administration. Entomological training required for each of the above is also discussed.

## Plant Pathology

*Careers in Plant Pathology.* Madison, Wis. (University of Wisconsin): American Phytopathological Society, 1959. 12 pp. Free.

A discussion of plant pathology as a career with a purpose is introduced in this folder-pamphlet. Included also are facts about plant diseases, qualifications of a good plant pathologist, salary, how to prepare for a career in plant pathology, and the areas open to plant pathologists.

## Plant Physiology

*Plant Physiology as a Career.* Gainesville, Fla. (Department of Botany, University of Florida): American Society of Plant Physiologists. 8 pp. Free.

Answered in this bulletin are questions dealing with plant physiology, the importance of this science, what plant physiologists do, where they work, how much they earn, and the educational background needed. General advice to students contemplating a career as a plant physiologist is also included.

## Zoology

*Careers in Animal Biology.* Baltimore 4 (Goucher College): American Society of Zoologists. 16 pp. 25¢.

Opportunities in basic biology in the fields of museum work, teaching, and research are

discussed along with opportunities in applied biology with government agencies and industry. Special areas for women are highlighted.

*Zoologist.* Largo, Fla.: Careers, 1960. 15¢.

The work of the zoologist, his working conditions, salaries, educational requirements, educational opportunities, outlook, and possible places of employment are concisely but well presented on this file-card summary.

### Other Fields

*Employment Opportunities in the Bureau of Sports Fisheries and Wildlife.* Washington 6 (1418 16th Street NW.): National Wildlife Federation, 1959. 14 pp. Free.

Of special interest to a student interested in wildlife conservation work would be the employment information on appointments, salary, workweek, types of positions filled, minimum qualifications, locations, physical ability, opportunities for women, opportunities in trades and crafts, and summer employment opportunities.

*Ichthyologist.* Largo, Fla.: Careers, 1960. 15¢.

What the science of ichthyology involves, the duties of the ichthyologists, his qualifications, training requirements, training opportunities, employment opportunities, earnings, where employed, and necessary interests and abilities are briefly but adequately presented in this summary.

*Opportunities for the Ichthyologist and Fishery Biologist.* Philadelphia 4 (34th Street and Girard Avenue): American Society of Ichthyologists & Herpetologists. 5 pp. Free.

In response to many student requests, this publication was prepared to outline the scope of the field of ichthyology, the qualifications and training needed, opportunities for employment, and the psychological and monetary rewards of a career in this profession.

*Opportunities for the Herpetologist.* Philadelphia 4 (Philadelphia Zoological Garden, 34th Street and Girard Avenue): American Society of Ichthyologists & Herpetologists. 3 pp. Free.

This report was prepared for the use of guidance counselors and students to describe the scope of the profession of herpetology, the educational background required, the income which can be expected, and the opportunities for employment. Interesting statements made

by men representing some of the fields that offer opportunities for herpetologists are included in the report.

*The Tree Expert.* Boston: Research Publishing Co., 1956. 33 pp. \$1.

Presented in this booklet are an introduction giving a general definition of the tree expert, a brief history of the tree expert profession, his contribution to society, the tree expert profession as a growing occupation, trends in the profession, aptitudes, skills and educational requirements, training centers, salaries and other returns, advantages and disadvantages, and other related information.

*Your Opportunity in the National Park System.* Washington 25: National Park Service, Department of the Interior. 12 pp. Free.

Depending on the training and interest, one may start his career with the National Park Service in one of several positions, including that of park ranger, park naturalist, park historian, or park archeologist. Each of these is discussed, along with general opportunities with the Park Service, salaries, training opportunities, advancement, living conditions, travel and transfers, and other benefits.

*Wildlife Training and Employment.* Washington 6 (1418 16th Street NW.): National Wildlife Federation, 1955. 10 pp. Free.

Contained in this leaflet is information on how to prepare for wildlife work in the fields of research, administration and management, teaching and extension, outdoor writing and wildlife photography and art work; training offered on the undergraduate and graduate levels; and employment opportunities. A partial list of colleges and universities offering wildlife training is included.

### General

*Career Opportunities in the Biological Sciences.* Chicago: University of Chicago, 1957. 15 pp. Free. (Write to the University's Office of Vocational Guidance and Placement.)

The type of work, opportunities, and outlook are discussed for each of several of the fields within the biological sciences. Those presented are anatomy, biochemistry, botany, microbiology, pharmacology, physiology, radiology, and zoology.

*Career Service Opportunities With the U.S. Department of Agriculture.* Washington 25: Superintendent of Documents,



U.S. Government Printing Office, 1959.  
63 pp. 55¢. (Agricultural Handbook  
No. 45.)

Intended for the use of guidance counselors and students, this publication describes many specialized jobs in the fields of the biological sciences, and tells about working conditions, employment opportunities, salaries, and special benefits that apply to employees of the Department of Agriculture. Those specialized jobs included are agriculturist, agronomist, bacteriologist, biologist, biological aid, botanist, entomologist, geneticist, home economist, horticulturist, husbandryman, medical biological technician, microbiologist, mycologist, nematologist, parasitologist, plant pathologist, plant pest-control worker, plant physiologist, and plant-quarantine inspector.

*Careers in Biological Sciences.* Washington 6 (1640 Rhode Island Avenue NW.): B'nai B'rith Vocational Service, 1957. 17 pp. 35¢. Order No. 505.)

Discussed in this occupational brief are what the field of biological sciences includes, the nature of the work, number of workers, employment opportunities, educational requirements, personal requirements, sources of employment, entry into occupations, women biologists, earnings, hours, and working conditions.

*Employment Outlook for Biological Scientists.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1959. 12 pp. 10¢. (Reprint from the Occupational Outlook Handbook.)

The nature of the work of a general biologist is discussed along with the type of work done by field specialists such as botanists, microbiologists, zoologists, agronomists, anatomists, biophysicists, embryologists, entomologists, geneticists, horticulturists, husbandry specialists, nutritionists, pathologists, pharmacologists, physiologists, and phytopathologists. Where biologists are employed, their training and other qualifications, the employment outlook, earnings, and working conditions are included.

*Preparation for Careers.* Miami, Fla. (Coral Gables): University of Miami, 1959. 56 pp. Free.

Although written mainly as a school recruitment bulletin, this attractive illustrated booklet gives brief descriptions of vocational opportunities in the biological sciences.

## ENGINEERING

### Aeronautical

*The Aeronautical Engineering Technician.* Washington (1507 M Street NW.): National Council of Technical Schools, 1960. 2 pp. 5¢.

Information presented in this monograph includes a description of the aeronautical engineering industry, the working conditions in the field, advantages, employment opportunities ahead, the critical need, and suggestions about how to enter the profession.

*Should Your Child Be an Aeronautical Engineer?* New York (51 Madison Avenue): New York Life Insurance Co., 1955. 7 pp. Free.

This booklet describes the qualifications for success as an aeronautical engineer, the opportunities, development of the field, nature of the work, training requirements, salaries, and outlooks.

*Your Career as an Aero Space Engineer.* New York 21 (2 East 64th Street): Institute of the Aeronautical Sciences, 1960. 24 pp. Free.

A brief summary of the aerospace industry introduces this booklet, which further describes the challenge of the industry, the aerospace engineer, his education, personal qualities and opportunities, and the first 10 years as an aero space engineer. A list of engineering colleges in 50 States which offer degrees in this field is included.

### Agricultural

*Agricultural Engineering . . . A Challenging Career.* St. Joseph, Mich.: American Society of Agricultural Engineers. 6 pp. Free.

Described briefly in this folder are the role of the agricultural engineer in the areas of power and machinery, soil and water management, agricultural processing, rural electrification, and farm structures; the course of study which will prepare a student for this field; qualifications; and opportunities in the profession.

*Agricultural Engineering As a Professional Career.* St. Joseph, Mich.: American Society of Agricultural Engineers. 16 pp. Free.

Written primarily for students interested in engineering as a career, this pamphlet dis-

cusses the relationship of agricultural engineering to engineering in general. The opportunities for agricultural engineers in public service, industry, management, and finance are included, along with information about the salaries and training of engineers in the field.

*Agricultural Engineering... The Profession With a Future.* FILM. Produced in 1960 by the American Society of Agricultural Engineers in cooperation with the U.S. Department of Agriculture. 14 minutes, 16 mm., sound and color. Obtainable from Cooperative Film Libraries in each State.

This film was made to inform young people of the opportunities in agricultural engineering careers, to help students plan basic courses of study preparatory to college agricultural engineering training, and to supplement high school and college career-day programs.

### Ceramic

*Ceramic Engineering.* Rolla, Mo.: Missouri School of Mines & Metallurgy, University of Missouri, 1958. 4 pp. Free.

The history of ceramics, the work of the ceramic engineer, and the prospects of a career in ceramic engineering are highlighted in this recruitment booklet.

*For Career Opportunities, Explore the Wonder World of Ceramics.* Columbus 14, Ohio (4055 North High Street): American Ceramics Society. 15 pp. Free.

Of special interest to the student interested in ceramic engineering as a profession is the discussion of what the field includes, the opportunities in ceramic engineering, where the graduates go, and the types of subjects which will be studied in collegiate training. The additional background information on ceramics which has been included should be helpful to a greater understanding of the broad field.

### Chemical

*Career Opportunities for Chemists and Chemical Engineers.* Washington 6 (1155 16th Street NW.): American Chemical Society, 1960. 54 pp. Free.

Career development facts (finding a place in the chemical profession, understanding the profession, professional attitudes, and how to increase earning power) are combined with career opportunities with specific companies or industries in this *Chemical and Engineering News* reprint.

*Careers for Chemical Engineers.* New York 17 (50 East 42d Street): World Trade Academy Press, Inc., 1960. 30 pp. \$1.25.

Provided in this 12,000-word monograph are a complete description of careers for chemical engineers, including opportunities, educational background, areas of specialization and employment, advantages, disadvantages, financing an education in this field, remuneration, and where employment is found.

*Careers in Agricultural Chemicals.* Washington (1145 19th Street NW., Suite 603-604): National Agricultural Chemicals Association, 1957. 4 pp. Free.

This magazine article, written in question and answer form, deals with the agricultural chemicals industry, the kinds of scientists in the greatest demand, the types of jobs done by the scientifically trained personnel, starting and top salaries, opportunities for advancement, job security benefits offered by agricultural chemical companies, personal and educational requirements, high school and college subjects which would prove most valuable, kinds of summer or part-time jobs which would be most helpful, and the special advantages of a career in agricultural chemicals.

*Careers in Chemistry and Chemical Engineering.* Washington 6 (1155 16th Street NW.): American Chemical Society, 1955. 93 pp. \$1.50.

This 93-page booklet is composed of a series of 29 articles which deal with different phases of choosing a career in chemistry and chemical engineering. Prerequisites for such careers, training required, different fields of chemistry in which a student may be interested, professional relations, and suggestions for jobseekers are discussed. A comprehensive review of the profession is presented.

*Chemical Engineer.* Peapack, N.J.: Personnel Services, Inc., 1951. 6 pp. 25¢.

Rather thoroughly discussed in this folder pamphlet are the nature of the work of a chemical engineer, future prospects, opportunities for service, qualifications, preparation, entrance and advancement, earnings (outdated), number and distribution, advantages, disadvantages, and related occupations.

*Chemical Engineering.* Rolla, Mo.: Missouri School of Mines & Metallurgy, University of Missouri, 1956. 3 pp. Free.

Described in this school recruitment pamphlet are the work of the chemical engineer, per-



sonal qualifications, educational qualifications, employment possibilities, and earnings.

*Chemical Engineering as a Career.* Potsdam, N.Y.: Clarkson College of Technology, 1953. 18 pp. Free.

In this career pamphlet, detailed answers are given for such questions as the following: How does chemical engineering differ from other branches of engineering? What sort of work do chemical engineers do? What kind of people will I work with in chemical engineering? Is the study of chemical engineering difficult? What will it cost to become a chemical engineer? Are there opportunities for girls in chemical engineering? Other similar questions are included, along with a description of the chemical engineering curriculum at the Clarkson College of Technology.

*Chemical Engineers at Du Pont.* Wilmington, Del.: Personnel Division, E. I. du Pont de Nemours & Co. 25 pp. Free.

Emphasis in this beautifully illustrated booklet is placed on the various types of jobs available to a chemical engineer in a big industrial corporation such as Du Pont. These jobs are ones in the areas of research, development, production, and sales.

## Civil

*Careers in the U.S. Department of the Interior.* Washington: Superintendent of Documents, U.S. Government Printing Office, 1957. 56 pp. 25¢.

Prepared mainly for guidance purposes, this booklet outlines the work of the U.S. Department of the Interior and gives the employment opportunities in the Department. Descriptions of specialized jobs in the field of civil engineering are outlined, and the disadvantages of a Government career are explained.

*Cartography.* Cambridge 38, Mass.: Bellman Publishing Co., 1957. 32 pp. \$1.

Written by an experienced cartographer, this monograph describes the nature and scope of cartography, present cartographic trends, the relation of cartography to civil engineering and the sciences, qualifications and scholastic requirements, training facilities, employment opportunities, classifications, remuneration, opportunities for women, advantages, and disadvantages to a career in cartography.

*Civil Engineering.* Rolla, Mo.: Missouri School of Mines & Metallurgy, University of Missouri, 1956. 4 pp. Free.

Civil engineering as a broad and general field is first discussed in this recruitment leaflet,

which goes on to give the specialized fields of training in railway, highway, hydraulic, sanitary, and structural engineering.

*Civil Engineering . . . A Career.* New York 18 (33 West 39th Street): American Society of Civil Engineers, 1955. 2 pp. Free. (Magazine reprint from *Civil Engineer*, March, 1955.)

Prepared originally as a speech before a national convention of civil engineers, this article describes the three stages in the career of a civil engineer, the services performed by men in this field, the wide diversity of services, abilities required, and a few causes of failure.

*Civil Engineering as a Career.* Potsdam, N.Y.: Clarkson College of Technology, 1954. 17 pp. Free.

Included in this career pamphlet are an introduction to the field of engineering, branches of civil engineering, education for civil engineering, the future outlook, and what a person in this field can expect from such a profession.

*The Civil Engineering Technician.* Washington 6 (1507 M Street NW.): National Council of Technical Schools, 1954. 2 pp. 5¢.

The work of the engineering technician, the industry itself, working conditions, advantages, employment opportunities ahead, and suggestions of how to enter the industry are discussed in this monograph.

*You Can Be a Civil Engineer.* New York 18 (33 West 39th Street): American Society of Civil Engineers, Committee on Engineering Education, 1957. 17 pp. Free.

Some of the specific work of civil engineers in today's world is given. Their importance in building bridges, buildings, cities, highways, railroads, aviation, dams, and the part they play in the increasing field of atomic power are discussed.

*Your Career in Civil Engineering.* New York 18 (33 West 39th Street): American Society of Civil Engineers, 1957. 6 pp. Free.

Reprinted from *Mechanics Illustrated*, this article discusses many facts about a career in civil engineering, such as the unparalleled opportunities for men in this field, the duties and work of the civil engineer, demand and competition within the field, outlook, approximate salaries, and satisfactions.

*Your Future in Civil Engineering.* New York 18 (33 West 39th Street): Ameri-

can Society of Civil Engineers. 18 pp. Free.

Prepared especially for the engineering or high school student who seeks to learn more about civil engineering as a career and profession, this booklet points out many characteristics and interests of civil engineering, and the numerous subdivisions which further emphasize the breadth, depth, and challenges of the field.

## Electrical

*Electrical Engineer.* Peapack, N.J.: Personnel Services, Inc., 1954. 6 pp. 25¢.

The importance of electrical engineers in the American way of life, the nature of the work, future prospects, opportunities for servicemen, opportunities for women, qualifications, preparation, entrance and advancement, earnings, number and distribution, advantages and disadvantages, and some related occupations are all comprehensively presented in this folder-pamphlet.

*Electrical Engineering.* Rolla, Mo.: Missouri School of Mines & Metallurgy, University of Missouri, 1956. 4 pp. Free.

The three divisions (power, electronics, and automatic control) of the field of electrical engineering are described, along with the types of services done by each division. Job opportunities in the electrical engineering field are included in the discussion.

*Electrical Engineering as a Career.* Potsdam, N.Y.: Clarkson College of Technology, 1954. 10 pp. Free.

Along with a general introduction to an engineering career, this pamphlet contains specific information on the scope of electrical engineering, the types of work in electrical engineering, location and environment of the work, the characteristics of the electrical engineer, and information on the electrical engineering curriculum at the Clarkson College of Technology.

*Electrical Engineers: Make Your Professional Training Count.* Washington 25: U.S. Department of Agriculture, Rural Electrification Administration, 1960. 11 pp. Free. (Miscellaneous Publication No. 736.)

Written primarily for students who have already decided to make a career of electrical engineering, this pamphlet gives many good ideas on the job opportunities available with Government agencies such as the Rural Electrification Administration.

*The Electronics Engineering Technician.* Washington 6 (1507 M Street NW.): National Council of Technical Schools, 1959. 2 pp. 5¢.

Given in this monograph are a description of the industry, the working conditions, advantages, employment opportunities ahead, critical need, and suggestions about how to enter the profession.

*Illuminating Engineer.* New York 23 (1860 Broadway): Illuminating Engineering Society. 4 pp. Free.

Taken as an excerpt from the Handbook of Descriptions of Specialized Fields of Electrical Engineering, this occupational summary describes the many facets of the field of illuminating engineering. The things for which this type of engineer is responsible in our modern society are emphasized.

*The Indispensable Man . . . The Electrical Engineer.* New York 18 (33 West 39th Street): American Institute of Electrical Engineers. 22 pp. Free.

Addressed to the high school student with aptitudes for science and mathematics, this booklet presents a broad picture of what an engineer is, his work, his opportunities, the background of his profession, what goes into his education, the training required, and the future of electrical engineering.

*Instrument and Control Engineering.* Cambridge 38, Mass. (Box 172): Bellman Publishing Co., 1958. 46 pp. \$1.

Written in professional monograph form, this publication gives helpful and interesting information about this phase of electrical engineering. Included in this discussion are the history of the field, status today, duties in the field, general qualifications, and depth of study required.

*The Scientific Instrument Industry.* Cambridge 38, Mass. (Box 172): Bellman Publishing Co., 1958. 60 pp. \$1.

Containing excellent background information for a student interested in mechanical or electrical engineering, this vocational and professional monograph describes the vast scope of the scientific instrument industry and the many opportunities afforded to engineers within the industry.

*Should You Be an Electronic Engineer?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1955. 8 pp. Free.

What the field of electrical engineering covers is established in the introduction to this pam-



phlet. Further information is then given on the demand for electronic engineers, opportunities for advancement, rewards of the profession, possible drawbacks, qualifications which should be considered, the engineering education, and opportunities for women in electronic engineering.

*Your Opportunities in Industry as a Technician.* New York 17 (2 East 48th Street): National Association of Manufacturers, 1957. 31 pp. Free.

This booklet tells how some of the recent scientific miracles of our day came about, and describes how a student can begin to prepare while in high school for any one of 50 different technical occupations, ranging from aircraft design and construction to nuclear laboratory work. Aptitude and ability tests are included for many of these occupations. (Several of the careers described concern electrical engineering.)

### Highway

*A Career for You in Highway Engineering.* Washington (National Press Bldg.): American Association of State Highway Officials, 1960. 25 pp. Free.

Background information about the field of highway engineering and the future of highways is given along with specific information on possible areas of work (planning, location, design, construction, maintenance, traffic operations, or research), opportunities for employment, and the educational requirements which must be met.

*Careers in Highway Traffic Safety Engineering.* Washington 6 (1201 16th Street NW.): National Educational Association, 1958. 61 pp. \$1.

Written to give the student an idea about some of the different occupations connected with highway traffic safety engineering, this book emphasizes such aspects as nature of the work, qualifications, education and training, employment outlook, earnings, and working conditions of each occupation described.

### Industrial

*Career as an Industrial Designer.* Washington 6 (1640 Rhode Island Avenue N.W.): B'nai B'rith Vocational Service, 1954. 8 pp. 35¢. (Order No. 701.)

The relationship of the field of industrial design to that of industrial engineering is highlighted in this occupational brief, which also gives information on the outlook, nature of the work, three basic abilities needed, beginning jobs, personal qualifications, training require-

ments, suggested college program, earnings and hours, and advantages and disadvantages of such a career.

*Careers in Industrial Engineering.* New York 17 (50 East 42d Street): World Trade Academy Press, Inc., 1958. 26 pp. \$1.25.

Thoroughly described in this monograph are the field of industrial engineering in general, personal and general educational backgrounds needed, opportunities, fields of specialization, remuneration, where employment is found, women in the field of industrial engineering, advantages and disadvantages of the field, colleges and universities with accredited curricula, and scholarships and fellowships offered by private organizations and foundations in engineering.

*The Constructors.* FILM. Washington 6 (20th and E Streets NW.): Associated General Contractors of America, Inc., 1960. 16 mm., 17 minutes, color and sound. Free loan.

This film, which gives senior high school students a realistic introduction to the field of engineering in construction, was produced primarily as a guidance vehicle for high school students. Write to the above address for a list of local chapters of the organization which have the film for loan purposes.

*The Industrial Engineering Technician.* Washington 5 (1507 M Street NW.): National Council of Technical Schools, 1959. 2 pp. 5¢.

Written in monograph form, this publication gives descriptions of the work of the industrial engineering technician, the preparation required, opportunities ahead, and advantages, in addition to other similar information.

*Opportunities for the Engineer.* Minneapolis 8, Minn. (2747 Fourth Avenue South): Honeywell Corp., 1959. Set of three pamphlets, 2-4 pages each. Free.

This set of pamphlets describes the work, position, training, work association, and growth opportunity for the industrial engineer at Honeywell. Although confined only to this company in the information given, these publications could give students an idea of what the field of industrial engineering entails.

*Where Do Engineers Work in Industry?* Detroit 38 (10700 Puritan Avenue): American Society of Tool Engineers. 11 pp. Free.

As the title implies, this pamphlet deals mostly with the types of jobs available to engineers in industry. Much of the information is based on surveys taken of industrial engineering



graduates. Tables show the percentage of engineers employed in various areas, as well as other such statistics.

*Your Career in Industry as a Scientist or Engineer.* New York 17 (2 East 48th Street): National Association of Manufacturers, 1959. 24 pp. Free.

This booklet tells something about the importance of the scientific and engineering professions in our society, economy, and the manufacturing industries. What scientists and engineers in industry do, why a student should consider a career in this field, and the advantages and disadvantages of such a career are included.

### Marine

*Naval Architecture and Marine Engineering.* Cambridge 30, Mass.: Office of Publications, Massachusetts Institute of Technology, 1958. 31 pp. Free.

The importance of marine engineering and naval architecture to the shipbuilding industry is emphasized in this booklet. Many excellent photographs add much to the understanding of what the field entails.

### Mechanical

*Adventures Into Tomorrow Through Tool Engineering.* Detroit 38 (10700 Puritan Avenue): American Society of Tool Engineers. 15 pp. Free.

The importance of tool engineers in the automated age is described in this pamphlet along with typical job titles of tool engineers, opportunities unlimited, salaries, women in tool engineering, aptitude check, high school preparation, and suggested college curricula.

*Instrument and Control Engineering.* Cambridge 39, Mass. (Box 172): Bellman Publishing Co., 1958. 46 pp. \$1.

Written in professional monograph form, this publication gives helpful and interesting information about this phase of mechanical engineering. Included in the discussion are the history of the field, status today, duties in the field, general qualifications, and depth of study required.

*Mechanical Engineer.* Peapack, N.J.: Personnel Services, Inc., 1958. 6 pp. 25¢.

The significance of mechanical engineering in our modern world, the nature of the work of a mechanical engineer, future prospects, opportunities for servicemen, qualifications, preparation, entrance and advancement, earn-

ings, number and distribution, advantages and disadvantages, related occupations, and sources of further information are all thoroughly discussed in this folder pamphlet.

*Mechanical Engineers at Du Pont.* Wilmington, Del.: Personnel Division, E. I. du Pont de Nemours & Co. 17 pp. Free.

In addition to advancement opportunities, emphasis in this beautifully illustrated booklet is placed on the various types of jobs available to a mechanical engineer in big industrial corporations such as Du Pont. These jobs are those in the areas of research and development, design, plant engineering, production supervision, sales, and construction.

*Mechanical Engineering and You.* New York 18 (29 West 39th Street): American Society of Mechanical Engineers, 1960. 21 pp. Free.

The roles of the mechanical engineer in the fields of aviation, air conditioning, automation, chemical industries, fuels, heating, instrumentation and control, machines, nuclear energy, power, safety, and transportation are highlighted in this booklet. Briefly and generally discussed are the necessary requirements to become a mechanical engineer, and the rewards of the profession.

*The Scientific Instrument Industry.* Cambridge 38, Mass. (Box 172): Bellman Publishing Co., 1958. 60 pp. \$1.

(Of excellent background information for a student interested in mechanical or electrical engineering, this vocational and professional monograph describes the vast scope of the scientific instrument industry and the many opportunities afforded to engineers.

*Your Opportunities in Industry as a Technician.* New York 17 (2 East 48th Street): National Association of Manufacturers, 1957. 31 pp. Free.

This booklet tells how some of the recent scientific miracles of our day came about, and describes how a student can begin to prepare, while in high school, for any one of 50 different technical occupations, ranging from aircraft design and construction to nuclear laboratory work. Aptitude and ability tests are included for many of these occupations. Several of the careers described concern mechanical engineering.

### Metallurgical

*Careers in Metallurgy and Metallurgical Engineering.* New York 18 (29 W. 39th Street): American Institute of Min-

ing & Metallurgical Engineers. 12 pp. Free.

What the science of metallurgy entails, what the metallurgist or metallurgical engineer does, what the profession has to offer, what it takes to be a metallurgical engineer, and student preparation are thoroughly discussed in this comprehensive report.

*Metallurgical Engineering.* Golden, Colo.: Director of Admissions, Colorado School of Mines. 5 pp. Free.

Given in this recruitment pamphlet are a definition of the field of metallurgical engineering, the importance of the field, what the metallurgist does, the prospects and opportunities in the field, and what the future holds for metallurgical engineers being educated today.

### Mining

*Geological Engineering.* Golden, Colo.: Director of Admissions, Colorado School of Mines. 5 pp. Free.

Included in this school recruitment pamphlet are a definition of the geological engineering field, what the geological engineer does, the various branches of the field, opportunities for advancement, and what the future holds for the engineer in this profession.

*Mineral Engineering at Mines.* Golden, Colo.: Director of Admissions, Colorado School of Mines. 28 pp. Free.

Written primarily as a school recruitment bulletin, this publication gives information on the fields of geological, geophysical, mining, metallurgical, and petroleum engineering, and discusses what each of these entails.

*Mining Engineering.* Golden, Colo.: Director of Admissions, Colorado School of Mines. 5 pp. Free.

What the field of mining engineering encompasses, the opportunities available, what the mining engineer does, and future prospects are presented in this school recruitment pamphlet.

*Mining Engineering . . . A Career in Coal.* Washington 5 (Southern Building): The National Coal Association, 1959. 13 pp. Free.

The coal-mining engineer's contact with machines, men, and ideas is discussed in addition to the opportunities open to him, the future of the industry, places, and types of employment. A suggested college curriculum is given also.

*Mining Engineering and Mining Engineering Geology.* Rolla, Mo.: Missouri

School of Mines & Metallurgy, University of Missouri, 1956. 4 pp. Free.

What the field of mining engineering entails is combined with the work of the mining engineer, personal and educational requirements, job opportunities, and other similar information in this recruitment bulletin.

### Petroleum

*Careers in Petroleum Engineering.* Dallas, Tex. (300 Fidelity Union Bldg.): Society of Petroleum Engineers of AIME, 1959. 15 pp. Free.

A discussion of the unlimited future in the petroleum industry introduces this pamphlet, which further describes the types of work done by petroleum engineers, the rewards of the profession, the present need, salaries, and education required.

*Petroleum Engineering.* Cambridge 38, Mass.: Bellman Publishing Co., 1958. 24 pp. \$1.

Contained in this monograph are discussions of the history and development of petroleum engineering, the education and training required, scholarship assistance, employment opportunities, remuneration and advancement, advantages and disadvantages, trends, and the organization and structure of the profession.

*Petroleum Engineering.* Golden, Colo.: Director of Admissions, Colorado School of Mines. 5 pp. Free.

What the field of petroleum engineering deals with, the opportunities for both office and field duties, what the petroleum engineer does, and what the future holds for petroleum engineers are described in this recruitment bulletin.

*Petroleum Engineering and Petroleum Engineering Geology.* Rolla, Mo.: Missouri School of Mines & Metallurgy, University of Missouri, 1956. 4 pp. Free.

What the field of petroleum engineering entails is combined in this recruitment pamphlet with the work of the petroleum engineer, personal and some educational requirements, and job opportunities available to graduates with degrees in this field.

*Petroleum Refining Engineering.* Golden, Colo.: Director of Admissions, Colorado School of Mines. 5 pp. Free.

Written as a school recruitment pamphlet, this folder describes the profession of petroleum engineering, education, physical, and personal requirements, prospects of a career in the field, and the petroleum engineering curriculum at the Colorado School of Mines.



*There's a Place for You in the Oil Industry.* New York 20 (1271 Avenue of the Americas): American Petroleum Industry, 1969. 15 pp. Free.

Many different types of jobs in the oil industry are described in this booklet. Covered are those in the areas of science, mathematics, operational control, mechanical trades, and public relations. Regarding one's future in this industry, salary prospects, additional benefits, and chances for advancement are noted. The profession of petroleum engineering is emphasized.

### Safety

*Safety Engineer.* Peapack, N. J.: Personnel Services, Inc., 1968. 6 pp. 25¢.

Well summarized in this folder-pamphlet are the nature of the work of a safety engineer, future prospects, qualifications, preparation, entrance and advancement, earnings, number and distribution, organizations of the profession, and related occupations.

### Sanitary

*Educational Requirements of Sanitary Engineers Engaged in the Field of Public Health.* New York (1790 Broadway): American Public Health Association, Inc., 1965. 9 pp. Free.

Appearing originally as a magazine report, this article highlights the general scope of engineers in the public health programs, the activities and functions of engineers in public health, educational background of sanitary engineers, classifications of the profession, and the personal and experience qualifications needed to become a sanitary engineer.

*Engineering Your Health—A Career in Sanitary Engineering.* FILM. Atlanta 23, Ga. (50 Seventh Street NE.): CDC Film Library. 16 mm., sound and color, 13½ minutes. Available on free loan.

Prepared for high school or college students interested in sanitary engineering, this film describes problems in atmospheric pollution, water resources and pollution, radiological health, and modern food technology, in addition to specific information about careers in research, operations, consulting, teaching, industry, administration, foreign trade, and design.

*The Engineer in the U.S. Public Health Service (Sanitary Engineer).* Washington 25: Public Health Service, Department of Health, Education, and Welfare, 1967. 18 pp. Free.

The opportunities for different types of engineers in the public health service is broadly discussed in this booklet, but emphasis is placed on the role of the sanitary engineer.

*Toward a Healthier World—Your Career in Sanitary Engineering.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1958. 16 pp. 25¢.

This pamphlet describes salaries, where sanitary engineers work, what they do, the high school and college courses which help a student qualify, and the present and future opportunities in the field of sanitary engineering.

### Traffic

*Traffic Engineer.* Jaffrey, N.H.: Personnel Services, Inc., 1960. 6 pp. 25¢.

This folder-pamphlet comprehensively defines traffic engineering, gives the nature of the work, future prospects, qualifications, preparation, entrance and advancement, and approximate earnings of an engineer in this field.

### General

*After High School, What? Does Science or Engineering Offer a Career for You?* New York 18 (29 West 39th Street): Engineers' Council for Professional Development. 5 pp. Free.

This folder-pamphlet offers a brief summary of the work of the scientist or engineer, qualifications, and training needed. It explains how a career in engineering differs from a career in science.

*Careers in Engineering.* Lafayette, Ind. Purdue University Press, Purdue University, 1959. 37 pp. Free.

Just what an engineer is and what he does are thoroughly discussed in this booklet, which also tells about the different branches of engineering, the qualifications for a successful engineer, and his educational requirements. The aim is to give the student information about the various fields of engineering so that he can decide for himself whether or not he would like to prepare for a career in this profession.

*Careers in Engineering.* New York 17 (50 East 42d Street): World Trade Academy Press, Inc., 1959. 30 pp. \$1.25.

Described in this 14,000-word monograph are specializations in the fields of engineering, nature of the work, historical background, training, opportunities, remunerations, advantages, disadvantages, where employment is found,

scholarships, fellowships, loans, and other financial aids available to students.

*Careers in Engineering and Science.* Brooklyn 1 (333 Jay Street): Vocational Consulting and Testing Division, Polytechnic Institute of Brooklyn, 1960. 5 pp. Free.

In the foreword to this booklet, the questions, "Who Should Study Engineering?" and "What Aptitudes Are Needed?" are amply answered. The booklet itself describes the aeronautical, chemical, civil, electrical, mechanical, and metallurgical engineer, telling what he does, the characteristics and qualifications he must possess, and the future for him in engineering.

*Can I Be an Engineer? Let's Find Out.* Detroit: Department of Public Relations, General Motors Corp., 1955. 22 pp. Free.

Brief definitions of the civil, mechanical, electrical, metallurgical, and chemical engineers are given in this pamphlet, along with the opportunities. Especially helpful is the chart of typical requirements for admission to engineering colleges, and a typical program for freshmen engineers.

*Career Opportunities.* Socorro, N. Mex.: Campus Station, New Mexico Institute of Mining & Technology. 8 pp. Free.

A school recruitment folder, this publication gives general comments on careers in several fields, among them metallurgical, mining, and petroleum engineering.

*Career Service Opportunities With the U.S. Department of Agriculture.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1959. 63 pp. 55¢.

Intended for the use of guidance counselors and students, this publication describes many specialized jobs in engineering, and tells about working conditions, employment opportunities, salaries and special benefits that apply to employees of the Department of Agriculture. These fields of engineering included are agricultural, chemical, civil, construction, electrical, hydraulic, industrial, and mechanical.

*Design for Tomorrow.* Washington 25: Bureau of Ships, Department of the Navy. 17 pp. Free.

The work done by the civil, architectural, marine, mechanical, electrical, electronic, chemical, and metallurgical engineers with the Bureau of Ships is described and illustrated in this attractive booklet. The training program and other employment benefits are discussed.

*Doorways to Science and Engineering Careers.* Detroit 2 (P.O. Box 177, North

End Station): General Motors Corp. Educational Relations Section. 2 p chart. Free.

This chart is intended as supplementary information for use by educators concerned with the counseling and guidance of students who may be thinking about careers in science or engineering. The chart shows the typical secondary school preparation needed, the higher educational steps required to assume positions in either industry or education, and some typical jobs available.

*Employment Opportunities for Women in Professional Engineering.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1954. 38 pp. 20¢.

A report on current trends and attitudes relating to women's prospects for an engineering career, this book includes the number of women classified as engineers, early indications of aptitude, high school preparation, engineering training, and fields of specialization for women. A bibliography of additional sources is added.

*Employment Outlook in Engineering.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1950. 13 pp. 15¢.

An introduction to engineering in general presents the nature of the work, where engineers are employed, training and other qualifications, employment outlook, and earnings. The same categories are outlined individually for the specific fields of aeronautical, ceramic, civil, electrical, industrial, mechanical, metallurgical, and mining engineering.

*Engineering.* Cambridge 38, Mass.: Bellman Publishing Co., 1959. 36 pp. \$1.

Outlined in this professional and vocational monograph are the history of engineering, nature of the work, types of work done by engineers, employment in the profession, personal and licensing qualifications necessary to enter the profession, education and training in high school and college, methods of entry into the engineering profession, opportunities for technicians, and earnings of the engineer. The statistical tables dealing with different aspects of the profession are helpful in gaining an overall picture.

*Engineering—A Career of Opportunity.* Washington 6 (2029 K Street NW.): The National Society of Professional Engineers, 1960. 15 pp. Free.

The broad term "engineer" is defined in the introduction of this booklet, which goes on to discuss the growth of the engineering profes-



tion; the functions of various types of engineers in administration and management, research, development and design, sales, consulting, teaching, production, and construction; the fields of specialization; preparing for a career in engineering; work-study cooperative programs; possible incomes and future job prospects; and women in engineering.

*Engineering—A Creative Profession.* New York 18 (29 West 39th Street): Engineers' Council for Professional Development, 1956. 81 pp. 25¢.

What engineering is, common patterns of all fields of engineering, the interrelationship of engineering with other fields, what an engineer must know to work in his profession, where they are educated, and how an engineer progresses from college to full responsibility in his work are discussed. Specific information on mechanical, civil, mining, metallurgical, petroleum, electrical, and chemical engineering contributions to our modern society is given, along with suggestions about choosing a college, and scholarships available.

*Engineering as a Career.* New York 71 (Riverdale): Manhattan College, 1959. 14 pp. Free. (Guidance Bulletin No. 16)

Engineering as a career, nature and scope of engineering, requirements for the practice of professional engineering, current and future employment prospects in engineering, salaries and rewards, and qualities deemed essential in the study of engineering are described in this booklet. Specific information on the phases of civil engineering, electrical engineering, mechanical engineering, and chemical engineering is given in the section on scope and nature of the engineering field.

*An Engineering Career for You in the Soil Conservation Service.* Washington 25: Soil Conservation Service, U.S. Department of Agriculture, 1960 (rev.). 12 pp. Free. (Miscellaneous Publication No. 715)

The jobs of Soil Conservation engineers are highlighted in this brief career folder. These jobs include the areas of structural design, hydrology, hydraulics, construction irrigation, drainage, erosion control and water conservation, soil mechanics, and cartography. Government employment facts are also listed.

*An Engineering Career for Your School-Age Child.* New York 16 (318 East 32d Street): Alumni Publications, Inc., 1956. 15 pp. Free.

Aimed primarily at parents, this booklet discusses reasons why engineering is a desirable profession, today's shortage of engineers, the

different types of engineering, the future of the field, and suggestions for precollegiate preparation for interested students.

*The Engineering Field.* Rolla, Mo. (Box 250): The Missouri School of Mines, 1960. 82 pp. Free.

Remarks on engineering and the future, choosing a career in engineering, and general engineering educations are given in the introduction of this school recruitment bulletin. In addition, the many different phases of engineering (mining, petroleum, metallurgical, civil, chemical, mechanical, etc.) are described.

*The Engineering Technician.* Urbana, Ill.: University of Illinois, American Society for Engineering Education. 21 pp. Free.

This booklet describes the engineering technician, his qualifications, preparation, training, what he studies, the degrees he earns, the employment outlook, and where he is employed. In addition are comprehensive descriptions of the different areas of employment for engineering technicians.

*Engineers Needed . . . Career Opportunities With the Federal Government.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1959. 8 pp. 15¢.

If a student is interested in going into engineering with the Federal Government, this pamphlet, which describes the basis of rating, evidence of attainments, physical requirements, citizenship and age requirements, restrictions of certification for certain positions, and nature of appointments, would be of great interest.

*A Guide to Engineering Education.* New York 27 (525 West 120th Street): Bureau of Publications, Teachers College, Columbia University, 1958. 56 pp. \$1.

The author suggests in this monograph the criteria for identifying potential engineers, describes the major branches in engineering, and outlines typical programs of study for each branch. Also included is an exhaustive list of engineering colleges, with notes about the special types of educations they offer.

*A Guide to Vocations in Engineering and Related Fields.* Santa Monica, Calif. (907 14th Street): Ralya and Ralya, 1959. 42 pp. \$1.25.

Useful to counselors, teachers, librarians, students and others concerned in various ways with educational and vocational problems, this publication presents comprehensive information carefully selected from the objective



rather than the recruitment point of view. The guide devotes major attention to engineering vocations, presenting them not only as related to each other, but also as related to vocations in mathematics and science and to vocations at the technical and craft levels. Selected publications from which additional and more detailed information may be obtained are listed with each phase of the engineering profession described.

*How To Choose Your Technical Institute.* Cambridge, 38, Mass.: Bellman Publishing Co., 1960. 30 pp. \$1.

A considerable portion of this professional monograph has been devoted to a careful description of the functions of the relatively new field of engineering technology and its contributions to the rapid technological advancements in American industry. Ways of selecting the best technical institute are emphasized.

*How To Get Into Science and Engineering.* Washington 6 (1719 N Street NW.): Science Service, 1957. 6 pp. Free.

What secondary school students can do now to prepare themselves for future careers in science or engineering is discussed. Fields of specialization in science and technology are listed.

*New Careers in the Health Sciences.* New York 19 (1790 Broadway): National Health Council, 1960. 21 pp. Free.

The purpose of this pamphlet is to highlight the many changes that are creating new roles and new relationships in the health field for all the sciences. These advances are opening up new opportunities in physics, chemistry, mathematics, and engineering, as well as in biology and medicine.

*Occupational Education for Men and Women.* San Luis Obispo, Calif.: California State Polytechnic College, Associate Dean of Admissions. 12 pp. Free.

Although written primarily as a school recruitment bulletin, this career publication gives a brief description of several different phases of engineering, all of which are offered at the California State Polytechnic College. These include air conditioning and refrigeration, architectural, electrical, electronic, industrial, mechanical, and metallurgical engineering.

*Opportunities in Engineering.* New York 1 (234 Fifth Avenue): The American Society of Heating, Refrigerating & Air Conditioning Engineers, 1959. 19 pp. Free.

This booklet outlines how a student may prepare himself for entrance into an institute, college, or university engineering program. It emphasizes throughout the opportunities, breadth of interest, and importance of refrigeration and air-conditioning engineering.

*Preparation for Careers.* Miami, Fla. (Coral Gables): University of Miami, 1959. 56 pp. Free.

Although written mainly as a school recruitment bulletin, this illustrated booklet gives brief descriptions of the many vocational opportunities in engineering.

*Should You Be an Engineer?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1957. 7 pp. Free.

Criteria for consideration of an engineering career are discussed in this short pamphlet. The importance of engineering in our modern society, general comments on the broad variety of types of engineers, some discussion of salaries, and the increasing opportunities for women engineers are included. The information is of a general rather than a specific nature.

*So You'd Like To Be an Engineer.* Lancaster, Pa.: Educators Mutual Life Insurance Co., Committee on Education, 1960. 1 p. Free.

Brief and general facts about the engineering field are given in this flier. Some information on the different types of engineering is included.

*So You Want To Be an Engineer.* Dearborn, Mich. (The American Road): Educational Affairs Department, Ford Motor Co., 1959. 6 pp. Free.

This career guide, one in a series, outlines the opportunities for engineering careers in the world today and tomorrow, the areas of work in the field of engineering, and the rewards and satisfactions of the career. Included also is a list of typical requirements for admission to engineering colleges.

*So You Want To Be an Engineer.* New York (29 West 39th Street): Engineers' Council for Professional Development, 1953. 2 pp. Free.

A long letter from an uncle to his nephew containing advice about the engineering field is accompanied by a chart giving preparation and background needed in general skills, special skills, field experience (summer work), and college studies.

*What Is Engineering School Like?* Ithaca, N.Y.: Cornell University School

of Engineering, 1959. 4 pp. Free. (Reprint from *The Cornell Engineer*.)

The author discusses what a student can expect when he enrolls in an engineering school or college. Professional training, engineering curriculums, program flexibility, class load, activities, motivation, and the choice of a field of concentration are highlighted.

*What's Engineering? What's an Engineer?* Hoboken, N.J.: Stevens Institute of Technology, 1958. 16 pp. Free.

Definitive comments on engineering as a broad field and the engineer as an individual begin this short pamphlet. Questions concerned with the engineering process, the engineer at work, and the future of an engineer are answered.

*Why Look Into Engineering?* Schenectady 5, N.Y. (One River Road): Publications for Schools Department, General Electric Co., 1959. 4 pp. Free.

In addition to giving a good general discussion of the field of engineering, this article points out the opportunities for engineers and the increasing need for men in this profession.

*Take Your Pick.* Washington 25 (Office of Naval Research): Department of the Navy. 32 pp. Free.

Presented in this attractive illustrated booklet are the many opportunities open to scientists and engineers with the Naval Research Laboratories of the Department of the Navy.

*Target . . . Civilian Careers.* Washington 25: Personnel Division PE-20, Bureau of Aeronautics, Department of the Navy. 16 pp. Free.

In this illustrated booklet are highlighted the opportunities available for scientists and engineers in the Bureau of Aeronautics of the Navy Department. The types of jobs done by each of several types of engineers and scientists are described.

*The Technician and the Engineer.* Washington 5 (1507 M Street NW.): National Council of Technical Schools, 1953. 2 pp. 5¢.

Used originally as a delivered address, this article distinguishes between the technician and the engineer, describing the work for which each is responsible, the educational requirement differences, and the dependence of one upon the other in almost any project.

*What Is an Engineer?* Kalamazoo, Mich.: Employment Office, The Upjohn Company, 1960. 6 pp. Free.

Engineering as a good lifetime profession, the significance of the present shortage of engineers, the wide opportunities available, the salaries, preparations which should be made and when they should be started, and the rewards of the profession are discussed in this magazine reprint.

*You and Your Career.* New York 19 (640 Fifth Avenue): Library and Educational Division, Collier's Encyclopedia, 1960. 30 pp. 50¢.

Written specifically for guidance purposes, this book provides interested students with vital information about 113 careers in science, mathematics, and engineering. This information, published in chart form, includes the nature of the work, employment trends, qualifications, preparation, entrance requirements, chances for advancement, earnings, and competition in the various occupational fields.

*Your Opportunities in Science and Engineering.* New York 17 (2 East 48th Street): National Association of Manufacturers, 1957. 30 pp. Free.

New frontiers in science (biology, physics, chemistry), special opportunities today, and science for defense are combined with job descriptions of the research director, fundamental research scientist, development scientist or engineer, laboratory assistant, technical salesman, production engineer, technical writer, and technical librarian. Also described are the interrelationships between the fields of science and engineering.

## FORESTRY

*A Job With the Forestry Service?* Washington 25: Forest Service, U.S. Department of Agriculture, 1957. 11 pp. Free.

Contained in this leaflet is information about the many permanent and temporary jobs available with the U.S. Forest Service.

*Career in Forestry.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1959. 22 pp. 20¢.

This publication deals primarily with careers in technical forestry, the practice of which calls for professional training. Pertinent information on women in forestry, the nature of forestry work, variety of tasks, requisites for success, the field of work, and forestry in the future is also given.

*Career Service Opportunities With the U.S. Department of Agriculture.* Wash-



ington 25: Superintendent of Documents, U.S. Government Printing Office, 1959. 63 pp. 55¢. (Agricultural Handbook No. 45.)

Intended for the use of counselors and students, this publication describes several specialized jobs in the field of forestry, and tells about working conditions, employment opportunities, salaries, and special benefits that apply to employees of the Department of Agriculture. These specialized jobs included forest economist, forest pathologist, technologist, woodland conservationist, forestry aids, and fire control aids.

*Foresters Needed.* Washington 25: U.S. Civil Service Commission, 1960. 4 pp. Free. (Announcement No. 218B.)

This leaflet deals exclusively with requirements and positions available for foresters with the U.S. Government. Some of the agencies included would be the Department of the Interior, Department of Agriculture, and other Federal agencies.

*Forestry: Outdoor Career With a Future.* Washington 6 (1816 N Street NW.): American Forest Products Industries, Inc., 1955. 4 pp. Free.

Discussed are the foresters and their jobs, the work, salaries, preparing for the job, and how the future looks for foresters. The increasing opportunities in private industry are emphasized.

*Forestry Schools in the United States.* Washington 25: Forest Service, U.S. Department of Agriculture, 1959. 14 pp. Free.

This annotated list of colleges and universities offering curricula in forestry is based on information and data submitted by the individual schools. The information is condensed into a concise review of the degrees given and information about summer sessions, etc.

*Is Forestry Your Future?* Washington 6 (1816 N Street NW.): American Forest Products Industries, Inc., 1955. 4 pp. Free.

What the field of forestry entails, the duties of a forester, the types of jobs available in the forest field, approximate salaries, requirements, and suggested colleges are contained in this magazine reprint.

*Men Wanted.* Washington 6 (919 17th Street NW.): American Forestry Association, 1957. 46 pp. Free.

This career reprint for prospective foresters includes several excellent articles from the *American Forests* magazine. Titles of these articles "Men Wanted," "The Manpower Shortage in Forestry," "Forestry as a Career," "Can He Grow Without Organization," and "The Big Step." Included also is a detailed list of forestry scholarships available in forestry schools.

*Professional Forestry.* Salem, Oreg.: Occupational Information and Guidance Service, State Division of Vocational Education, 1957. 6 pp. Free.

Presented in this professional monograph are a definition of the title of professional forester, the main classifications of the occupation, physical and educational requirements, employment outlook, earnings, advancement, advantages, and disadvantages.

## HEALTH PROFESSIONS

### Dentistry

*Be a Dental Assistant.* La Porte, Ind. (410 First National Bank Bldg.): American Dental Assistants Association. 6 pp. Free.

Briefly outlined in this career pamphlet are the "musts" for dental assistants, the duties of one in this occupation, what a person might expect to earn, education required for certification, and information about colleges offering courses for dental assistants.

*Career as a Dental Hygienist.* Washington 6 (1940 Rhode Island Avenue NW.): B'nai B'rith Vocational Service, 1956. 7 pp. 85¢ (Order No. 457.)

For any student interested in a career as a dental hygienist, this career series pamphlet gives detailed and accurate information on the training required, personal qualifications, entry and advancement, salaries, working conditions, advantages, and disadvantages, plus other similar items of interest.

*Careers in Dentistry.* Chicago (222 East Superior Street): American Dental Association, Council on Dental Education, 1958. 8 pp. Free.

Written for the prospective dental student and for the counselor who advises students interested in a career in the health field, this booklet discusses career opportunities in dentistry, the dental aptitude testing program, the school program, and financing a dental education.

*Careers in Dentistry.* Washington 6 (1640 Rhode Island Avenue NW.): B'nai B'rith Vocational Service, 1957. 16 pp. 35¢. (Order No. 403.)

Written as one of a series, this occupational brief accurately and thoroughly describes the nature of the work of a dentist, personal qualifications, educational requirements, cost of a dental education, licensure, earnings, women in dentistry, advantages, and disadvantages of a career in this profession.

*Dear Jill.* La Porte, Ind. (410 First National Bank Bldg.): American Dental Assistants Association, 1960. 8 pp. Free.

Written in a letter form, this folder-pamphlet gives information such as the duties of the dental assistant, qualifications, educational background needed, salaries, and the rewards of a profession as a dental assistant.

*A New Day in Dentistry.* FILM. New York (118 East 25th Street): Luxene, Inc. 16 mm., 13 minutes, sound and color. Available on free loan.

This film dramatizes a day in the life of a dentist and his emergency hospital treatment of an accident case. Several other aspects of dentistry are introduced.

*Pattern of a Profession.* Chicago 11 (222 East Superior Street): American Dental Association Film Library. 16mm, sound and color, 51 minutes or 28 minutes (two versions). Available on free loan.

This film dramatizes the importance of the mouth as a vital organ of the body. The importance of the profession behind the man who treats the mouth is a theme that makes the film valuable in career guidance. The education of the dentist, research, the practice, public health dentistry, and the cleft-palate team are depicted.

*Should You Be a Dentist?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1955. 8 pp. Free.

The growth and rewards of this profession, general nature of the work, incomes, supply and demand, personal and educational qualifications, training costs, women as dentists, working conditions and outlook or prospects are presented in this booklet.

### Dietetics

*Careers in Dietetics.* Washington 6 (1640 Rhode Island Avenue NW.): B'nai B'rith Vocational Service, 1957. 11 pp. 35¢. (Order No. 406.)

Outlook, nature of the work, education required, scholarships, personal qualifications, sources of employment, earnings, working conditions, professional organizations, and advantages and disadvantages of a career in dietetics are discussed in this occupational brief.

*Dietitians in Demand.* Chicago 11 (620 North Michigan Avenue): American Dietetic Association, 1958. 8 pp. Free.

Highlighted in this folder-pamphlet are the need for dietitians today, the many types of positions a dietitian can fill, and how an interested student can pursue a career in dietetics.

*Dietitians in the U.S. Army Medical Specialists Corps.* Washington 25: U.S. Army Medical Corps, Department of the Army, 1959. 8 pp. Free.

Written in a very general manner, this folder gives information on the qualifications, financial rewards and basic salary, allowances, promotions, and obligations of dietitians in the Army Medical Specialists Corps.

### Medical Doctor

*I Am a Doctor.* FILM. New York 23 (43 West 61st Street): Sterling Movies, 1960. 16 mm., 25 minutes, sound and color. Free loan on request (except for return shipping charges).

"I Am a Doctor" is a dramatic and inspiring survey of the variety of careers now available to every qualified student in general practice, specialization, research, teaching, and administration. It is a moving, true story of a young physician who, shortly before his death from leukemia, reflects on the great satisfactions, and sacrifices, which medicine has brought into his life.

*Medicine as a Career.* Chicago 10 (535 North Dearborn Street): American Medical Association, 1959. 24 pp. Free.

Thoroughly discussed in this pamphlet are the opportunities and rewards of medicine, guideposts for the high school student, qualities of a physician, choosing a college of arts and sciences curriculum, how to get into medical school, trials and tribulations which will be faced in medical school, types of practice, and licensure.

*Medicine as a Career.* New York 71 (Riverdale): Manhattan College. 8 pp. Free.

This folder-pamphlet was written mainly as a school recruitment publication which gives a



brief discussion of medicine as a career, and describes a somewhat typical premedical curriculum.

*The Opportunities and Rewards of Medicine Can Be Yours.* Chicago 10 (535 North Dearborn Street): American Medical Association. 8 pp. Free.

Discussed in this folder are the meanings of the initials "M.D.," the brilliant future which medicine promises, the variety of physicians created by the versatility of medicine, suggested prerequisite high school subjects, length of study after high school, cost of medical study, and the rewards of a career in medicine.

*Physician.* Largo, Fla.: Careers, 1959. 8 pp. 25¢.

Written for the high school student, this booklet is introduced by a definition and history of the profession. In addition to valuable information about the duties of the physician, working conditions, training requirements, training opportunities, personal qualifications, outlook, opportunities for women, advantages and disadvantages, hours, earnings, related careers, and necessary interests and aptitudes are also reviewed.

*Should You Be a Doctor?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1959. 8 pp. Free.

Outlined in this booklet are the personal qualifications for a student interested in becoming a doctor, required training and cost of training, places of employment, incomes, women in this profession, and gratification rewards.

*So You'd Like To Be a Doctor.* Lancaster, Pa.: Educators Mutual Life Insurance Co., 1960. 1 p. Free.

Prerequisites, requirements, rewards, opportunities, and need are described in general terms in this flier.

### Medical Technology

*A Challenging Profession for Young Men and Young Women . . . Medical Technology.* Enid, Okla. (Suite 5-A, Bass Bldg.): Accrediting Commission for Medical Technology Schools. 8 pp. Free.

Medical technology as a challenging profession is presented in this folder, which highlights specialized professional school training.

*Choose Medical Technology.* Muncie, Ind. (Box 1209): Registry of Medical Technologists, 1959. 8 pp. Free.

What a medical technologist does, special aptitudes required, training needed, and what the

field has to offer are presented in this short booklet.

*The Medical Technologist.* Cambridge 38, Mass.: Bellman Publishing Co., 1958. 36 pp. \$1.

Adequately described in this booklet are the beginnings of medical technology, the shortage of medical technologists today, nature of the work, qualifications, training, certification, approved schools of medical technology, future training requirements, opportunities for advancement, research opportunities, working conditions, and future trends. The summary includes a list of professional organizations for medical technologists.

*Medical Technologist.* Largo, Fla.: Careers, 1958. 8 pp. 25¢.

Comprehensively covered in this career pamphlet are the history and background of the profession. Duties, working conditions, training, requirements, training opportunities, personal qualifications, opportunities for men, outlook, advantages and disadvantages, hours, and earnings of the medical technologist are also presented.

*Medical Technology as a Vocation for Young Men and Women.* Enid, Okla. (Suite 5-A, Bass Bldg.): American Society of Medical Technologists. 6 pp. Free.

The role of the medical technologist in medicine, the duties, where employed, future, age or sex preferences, working conditions, necessary education, starting and prospective salaries, and the steps one should take to become a medical technologist are described in this illustrated pamphlet.

*The Profession of Medical Technology.* Muncie, Ind. (Box 1209): Registry of Medical Technologists. 8 pp. Free.

Prepared for counselors, science teachers, and students, this booklet outlines medical technology as a career of promise, some of the specialized fields of medical technology, college courses required, technical training, cost of training, certification, advancement opportunities, research opportunities, job stability and salaries, job satisfactions, professional growth, and approach to employment.

*Should You Be a Medical Technologist?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1957. 12 pp. Free.

Discussed in this pamphlet are a brief history of the field of medical technology, the variety of work of the medical technologist, its appeal to young women, training requirements, cost of training, the financial future, requirements



for success, and the satisfactions beyond the many tangible rewards.

*Three Years Plus One.* Muncie, Ind. (Box 44): Registry of Medical Technologists, 1960. 2 pp. Free.

This leaflet announces the new academic training requirements for the profession of medical technology which will be in effect as of 1962. These requirements have been established by the American Medical Association.

*U.S. Civil Service Examination Announcement for Public Health Biologists, Medical Technologists, and Chemists.* Washington 25: U.S. Department of Health, Education, and Welfare, Public Health Service, 1956. 19 pp. 20¢.

Prepared for those interested in Government service, this pamphlet gives a description of work, educational requirements, experience needed, and physical requirements of each of the three professions named. The salary scales are now outdated, but other information is still helpful and applicable.

*What Is a Medical Technologist?* Kalamazoo, Mich.: The Upjohn Company, 1959. 4 pp. Free.

Some of the responsibilities of medical technologists in industry, the variety of job opportunities in this field, a list of qualifications for medical technology as a life's work, what an interested high school student can do to prepare for later training in this field, and what a medical technologist can expect salarywise are reviewed in this magazine reprint.

## Nursing

*Accent on You.* Washington 25: U.S. Army Medical Service, Department of the Army, 1959. 37 pp. Free.

Discussed in this attractive illustrated booklet are the field of Army nursing today, the types of work available in Army nursing, brief descriptions of the clinical specialties, additional schooling offered by the Army Nurse Corps, opportunities for travel, and other similar information.

*Anesthesia—An Art, a Science.* Chicago (3010 Prudential Plaza): American Association of Nurse Anesthetists. 15 pp. Free.

In response to the requests of high school students, this booklet was prepared to tell which high school subjects would prove the most valuable to a student planning to enter the field of anesthesiology. The reason for taking various subjects is discussed, along with

a given brief description of the challenge of a career as an anesthesiologist.

*Anesthesia—A Special Type of Nursing.* Chicago 1 (Prudential Plaza): American Association of Nurse Anesthetists. 12 pp. Free.

Qualifications, development of the work, training, satisfactions, and future outlook of a career in anesthesiology are outlined in this career booklet.

*Approved Schools for Nurse Anesthetists.* Chicago 1 (Suite 3010 Prudential Plaza): American Association of Nurse Anesthetists, 1960. 7 pp. Free.

An up-to-date list of colleges offering courses for nurse anesthetists is given in this pamphlet. It is a comprehensive listing by States.

*The Army Student Nurse Program.* Washington 25: Department of the Army, The Surgeon General. 6 pp. Free.

Rather general information included in this short pamphlet deals with the grade determination, selection, enlistment, benefits as an Army student nurse; preparation, prerequisites for selection, obligations, and qualifications needed for entrance into the Army student nurse program.

*Books on Careers in Nursing.* New York 19 (10 Columbus Circle): Committee on Careers in Nursing, National League for Nursing. 10 pp. 3¢.

This annotated list contains 65 selected books about nursing as a profession. Included are career guides, personal narratives, biographies, history, and general information.

*The College Way to a Nursing Career.* New York 19 (10 Columbus Circle): Committee on Careers, National League for Nursing, 1956. 20 pp. 15¢.

This brochure describes the advantages of preparation for nursing in basic programs leading to a bachelor's degree. Many pictures and sketches showing the opportunities available for one in the nursing profession are informative and interesting.

*Facts About the Army Nurse Corps.* Washington, 25: U.S. Army Medical Service, Department of the Army, 1960. 11 pp. Free.

Along with a brief summary of the requirements for and opportunities in the Army Nurse Corps, this booklet answers specific questions about ranks, orientation, types of assignments which can be expected, salaries, living provisions, leave allowances, overseas duty, and other similar information.

*Facts and Figures About Nursing Personnel.* New York 19 (10 Columbus Circle): Committee on Careers, National League for Nursing, 1959. 4 pp. Free.

Concise presented on this fact sheet is pertinent information dealing with a career in nursing. The need for nursing personnel is stressed, along with leadership needs, and educational routes to nursing.

*Let's Be Practical About a Nursing Career.* New York 19 (10 Columbus Circle): Committee on Careers, National League for Nursing, 1959. 36 pp. 10¢.

This booklet tells how to become a licensed practical nurse and describes career opportunities in practical nursing. A list of the 580 State-approved schools of practical nursing, together with pre-nursing academic requirements for licensure in each State and admission requirements, is given.

*Look to Your Future in Public Health Nursing.* New York 19 (10 Columbus Circle): Committee on Careers, National League for Nursing, 1958. 6 pp. 8¢.

Duties of a public health nurse, variety in the job, preparation, personal qualifications, and rewards and opportunities are described in this picture folder.

*Men Working for a Career in Nursing.* New York 19 (10 Columbus Circle): Committee on Careers, National League for Nursing, 1958. 6 pp. 4¢.

This folder depicts the opportunities and preparation in professional nursing for men.

*Nurse Anesthetist.* Largo, Fla.: Careers, 1959. 2 pp. 15¢.

Published in convenient filecard form, this publication summarizes the duties, working conditions, personal qualifications, hours and earnings, training, and professional outlook of the nurse anesthetist.

*Nurse, General.* Largo, Fla.: Careers, 1959. 8 pp. 25¢.

The history of the profession, the duties of general nursing, working conditions, training requirements and opportunities, licensing, personal qualifications, outlook, opportunities for men, advantages and disadvantages, hours, earnings, advancement prospects, and related careers are comprehensively covered in this career pamphlet.

*Nursing . . . Profession for You!* New York 19 (10 Columbus Circle): Committee on Careers, National League for Nursing, 1960. 20 pp. 5¢.

Interesting photographs add a great deal to this illustrated booklet which describes preparation, career opportunities, monetary, and psychological rewards, responsibilities, satisfactions, and steps toward a career in professional nursing.

*Practical Nurse.* Largo, Fla.: Careers, 1960. 8 pp. 25¢.

Introduced by brief comments on the history of the practical nursing profession, this booklet presents the duties of a person in the field, the working conditions, training requirements, training opportunities, personal qualifications, outlook, advantages, disadvantages, hours, earnings, advancement prospects, opportunities for men, and similar additional information of help and interest.

*Professional Nurse . . . Practical Nurse.* Washington 25: U.S. Department of Health, Education, and Welfare, Office of Education, 1960. 7 pp. Free.

The difference between professional and practical nursing is emphasized in this brief pamphlet, which gives the State regulations of the practice of nursing, education for nursing, approved schools of nursing, job opportunities, need, and opportunities for continued study and advancement for the professional or practical nurse.

*Schools of Professional Nursing.* New York 19 (10 Columbus Circle): Committee on Careers, National League for Nursing, 1960. 39 pp. 10¢.

Once a student decides upon nursing as a career, this list of State-approved schools of professional nursing coded for national accreditation, type of program, admission requirements and other information would be invaluable.

*Should You Be a Nurse?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1955. 12 pp. Free.

Attractive features of the nurses's career, training, earnings, qualifications, and outlook are presented in this pamphlet. The gratification and importance of this work is also discussed.

*So You'd Like To Be a Nurse.* Lancaster, Pa.: Educators Mutual Life Insurance Co., 1960. 1 page. Free.

Educational requirements and personal qualifications needed for practical nursing and registered nursing are briefly and generally discussed. The increasing need for women in this field is emphasized.

*Teammates.* New York 16 (10 Columbus Circle): Committee on Careers, Na-



tional League for Nursing, 1957. 4 pp. Free.

This is a concise statement of education and career opportunities in both practical and professional nursing for men and women.

### Occupational Therapy

*Facts About Occupational Therapy.* New York 19 (250 West 57th Street): American Occupational Therapy Association, 1959. 1 page. Free.

Carefully outlined here are the facts about the field of occupational therapy, the objectives of the field, education (type of course, entrance requirements, and length of course), usual basic tuition in schools offering occupational therapy, scholarship information, and salary information.

*Occupational Therapists in the U.S. Army Medical Specialists Corps.* Washington 25: U.S. Army Medical Specialist Corps. 8 pp. Free.

The requirements for careers for occupational therapists in the U.S. Army are outlined in this folder. Facts about required courses, qualifications, travel experiences and opportunities, financial rewards, and service obligations are also given.

*Occupational Therapy.* Washington 25: Guidance and Student Personnel Section, Office of Education, U.S. Department of Health, Education, and Welfare, 1957. 4 pp. Free.

A brief outlook summary, nature of the work, where employed, qualifications (educational and personal), and a list of approved schools on occupational therapy are given in this concise pamphlet.

*Play on the Recovery Team . . . Be an Occupational Therapist.* New York 19 (250 West 57th Street): American Occupational Therapy Association, 1960. 6 pp. Free.

Good illustrations showing the types of therapy and explanations of each picture accompany a general discussion of the field of work, educational requirements, personal qualifications, opportunities, salaries, registration, and a list of occupational therapy colleges.

### Optometry

*Career as an Optometrist.* Washington 6 (1640 Rhode Island Avenue NW.): B'nai B'rith Vocational Service, 1955. 6 pp. 35¢. (Order No. 405.)

Given in this series pamphlet is information concerning the development of the field of optometry—what it entails, outlook, branches of the profession, educational requirements, nature of the work, earnings, personal qualifications, and advantages and disadvantages of the profession.

*Optometry.* St. Louis 10, Mo. (4030 Chouteau Avenue): American Optometric Association. 4 pp. Free.

A general review of the field of optometry, the satisfactions gained, financial returns and a list of college level subjects in which an interested student should become adapt are combined in this pamphlet with a list of colleges which prepare student for optometric careers.

### Orthoptics

*A Profession in Orthoptics.* Detroit 26 (414 David Whitney Bldg.): American Orthoptic Council, 1959. 6 pp. Free.

Discussed in this brief folder are the work of the orthoptist, the personal qualifications and educational background required, prospects and earnings, training, and cost of training.

### Osteopathy

*Careers in Osteopathy.* Washington 6 (1640 Rhode Island Avenue NW.): B'nai B'rith Vocational Service, 1957. 11 pp. 35¢. (Order No. 407.)

A discussion of what the practice of osteopathy includes introduces this occupational brief. Included also is information on outlook, women in the field, income, working conditions, and advantages and disadvantages of a career in osteopathy.

*The Osteopathic Profession and Its Colleges.* Chicago 11 (212 East Ohio Street): American Osteopathic Association, 1959. 36 pp. Free.

Reviewed is the osteopathic school of medicine, including its history, the growth and recognition of osteopathy, the need for physicians, personal qualifications, preprofessional requirements, professional training, osteopathic college, geographical distribution of osteopathic physicians, and additional literature available.

### Pharmacy

*A Career in Pharmacology.* Washington 14 (9640 Wisconsin Avenue NW.): Committee on Educational Affairs, American Society for Pharmacology and

**Experimental Therapeutics, 1959.** 33 pp. Free.

A definition of pharmacology, applications of the field in research, teaching, industry and public health, what a pharmacologist does, and what the very broad field of pharmacology has to offer are all discussed in this illustrated booklet. A conclusive summary is given.

**Careers in Pharmacy.** New York: Columbia University, College of Pharmacy, 1959. 14 pp. Free.

Of special interest in this recruitment booklet for students of pharmacy are the many illustrations showing the pharmacist at work. General comments about the field accompany the illustrations.

**Careers in Pharmacy.** Washington 6 (1640 Rhode Island Avenue NW.): B'nai B'rith Vocational Service, 1957. 16 pp. 35¢. (Order No. 402.)

Written especially for high school students, this occupational brief contains detailed information on the nature of the work of a pharmacist, outlook, preparation and entry into the field, qualifications, earnings and advancement, physical requirements, working conditions, advantages, and disadvantages.

**Get Ready for Tomorrow . . . Pharmacy.** New York 16 (34th and Park Avenues, Vanderbilt Hotel): National Association of Chain Drug Stores, 1959. 10 pp. Free.

The variety of opportunities in the field of pharmacy, the pharmacist's role, the expanding field, income advancement, and limitless areas of activity available are outlined herein. A list of colleges of pharmacy is added.

**Full Take Pharmacy.** New York 15 (155 East 44th Street): McKesson & Robbins, Inc., 1959. 8 pp. Free.

This article, written in an informal style by a practicing pharmacist, describes pharmacy as a steady position, the many facets of the profession, nonretail possibilities in the field, and gives suggestions for choosing a school of pharmacy. A list of colleges of pharmacy is added.

**The Pharmaceutical Industry.** Cambridge 38, Mass.: Bellman Publishing Co., 1956. 28 pp. \$1.

The author of this vocational and professional monograph gives an introduction to the ethical pharmaceutical industry, how the industry developed, operation of the industry, career opportunities, opportunities for women, wages and salaries, and advantages and disadvantages of a pharmaceutical career.

**Pharmacist.** Largo, Fla.: Careers, 1958. 8 pp. 25¢.

In addition to background information on pharmacy, the duties, working conditions, earnings, hours, outlook, personal qualifications, training requirements, training opportunities, opportunities for women, licensing, and advantages and disadvantages of the pharmacist are presented. Of special interest is a list of approximately 90 colleges and universities that offer degrees in pharmacy.

**Pharmacists.** Detroit 2, Mich. (7310 Woodward Avenue): Employment Service Division, Michigan Employment Security Commission, 1955. 20 pp. 25¢.

Given in this illustrated pamphlet are an introduction, nature of the work of the pharmacist, location of jobs, employment prospects, earnings, qualifications for entry, working conditions, organizations, disadvantages and advantages.

**Pharmacy.** Cambridge 38, Mass.: Bellman Publishing Co., 1959. 24 pp. \$1.

Interesting illustrations are included in this booklet, which gives the history of pharmacy, the future of the profession, possibilities for women or men, vocational opportunities for graduates of colleges of pharmacy, remuneration, personal qualifications, scholastic training needed, student aid, as well as disadvantages and advantages of the pharmacy profession.

**Seniors Are Interested . . .** Columbus 15 (40 South Third Street): Ohio State Pharmaceutical Association. 3 pp. Free.

Discussed in this pamphlet are the things a student entering the pharmaceutical field can expect from such a profession. Some information about salaries is included.

**See Your Future in Pharmacy.** Washington 7 (2215 Constitution Avenue NW.): American Pharmaceutical Association, 1957. 16 pp. Free.

Comments on the pharmaceutical profession in general begin this pamphlet. The work of the pharmacist, personal qualifications, education, scholarships, licensing and registration, opportunities, prospects, and a list of accredited colleges of pharmacy in the United States are included also.

**Shall I Study Pharmacy?** Chicago 12 (108 South Wood Street): American Association of Colleges of Pharmacy, 1960. 23 pp. Free.

Many questions asked yearly by thousands of high school students about the pharmaceutical field are answered in this pamphlet telling what a pharmacist does, how many



hours a week he works, average pay scales, chances for advancement, opportunities outside of pharmacy, additional study required, and preliminary preparation. A complete list of names and addresses of member and accredited colleges of pharmacy is given.

*Should You Be a Pharmacist?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1955. 12 pp. Free.

The pharmacist's position as a respected authority, the opportunities and incomes, seven requisites for success, training required, and a list of pharmacy colleges are included in this booklet.

*What Is a Pharmacist?* Kalamazoo, Mich.: The Upjohn Company, 1960. 6 pp. Free.

Several good illustrations of the pharmacist at work are included in this very short leaflet, which briefly describes the various challenges in research, pharmacists in production and industry, pharmacists as salesmen, what a pharmacy student studies, and pharmacy as a life-long education.

*Why Should a Girl Become a Pharmacist?* New York 15 (155 East 44th Street): McKesson & Robbins, 1959. 24 pp. Free.

A high school senior girl's interest in pharmacy is followed through in this pamphlet, which tells of her conversations with many women pharmacists who give personal examples of the role pharmacy has played in their lives. Interviews with several women professors of pharmacy reveal the educational requirements, while discussions with practicing women pharmacists tell more about the applications of the education today.

*Your Career Opportunities in Pharmacy.* Brooklyn 6 (630 Flushing Avenue): Charles Pfizer & Co., Inc., 1960. 31 pp. Free.

Highlighted in this booklet are detailed discussions of the various types of pharmacists, including retail pharmacists, hospital, industrial, teachers of pharmacy, and pharmacists in government service. More briefly are described the requirements for a career in pharmacy, compensation, getting started, average hours, and the necessary steps which should be taken for a student interested in this field.

### Physical Therapy

*Physical Therapists in the U.S. Army Medical Specialists Corps.* Washington 25: U.S. Army Medical Specialists Corps, 1959. 8 pp. Free.

The rather strict requirements for careers for physical therapists in the U.S. Army are outlined in this folder. Facts about required courses, qualifications, travel experiences and opportunities, financial rewards, and service obligations are given.

*Physical Therapy.* Washington 25: Office of Education, U.S. Department of Health, Education, and Welfare, 1957. 7 pp. Free.

In this brief bulletin, the duties of the physical therapist are presented along with the qualifications, opportunities, preparation, and a list of directors in specific schools from whom entrance requirement information can be obtained.

*Physical Therapy—A Career of Science and Service.* FILM. New York 19 (1790 Broadway): American Physical Therapy Association, 1959. 35 mm., 45 frames. Free on loan.

The film graphically answers such questions as, "What does a physical therapist do?" "How do you prepare for this profession?" and "Where does a physical therapist work?" It centers around a high school football player who breaks his leg. As a result of his treatment, his friend Mary becomes very interested in physical therapy as a career.

*The Return.* FILM. New York 19 (1790 Broadway): American Physical Therapy Association. 16 mm., 38 minutes, sound, black and white. Free on loan.

*The Return* is the story of how physical therapy helped to return a disabled young man to active life.

*There's Work To Be Done . . . A Career To Be Built . . . In Physical Therapy.* New York 19 (1790 Broadway): American Physical Therapy Association. 2 pp. Free.

Definitive comments on the profession, the need, the future, personal requirements, educational requirements, rewards and satisfactions, and how to begin are included in this flier. A long list of schools offering courses in physical therapy is contained.

*Within Your Hands.* FILM. New York 19 (1790 Broadway): American Physical Therapy Association. 16 mm., sound and color, 17½ minutes. Free on loan.

Narrated by Douglas Edwards, this film takes a look at the opportunities in physical

therapy, and shows the kinds of careers the trained physical therapist can look forward to in hospitals, clinics, home services, or the armed services.

### Podiatry and Chiropody

*A Career in Health—Podiatry (Chiropody).* Washington 10 (3301 16th Street NW.): American Podiatry Association, 1960. 6 pp. Free.

Discussed in this pamphlet are the history of chiropody (care of the feet), opportunities within the field, qualifications, schooling and training, specialties, how to start out, earnings, and satisfactions.

*Careers in Chiropody.* Washington 6 (1640 Rhode Island Avenue NW.): B'nai B'rith Vocational Service, 1957. 11 pp. 35¢. (Order No. 408.)

In this occupational brief is contained detailed and accurate information on outlook, duties, preparation and entry, qualifications, earnings and advancement, physical requirements, working conditions, advantages, and disadvantages of this relatively new and uncrowded profession.

*If You're Planning a Professional Career . . .* Washington 10 (3301 16th Street NW.): American Podiatry Association, 1960. 4 pp. Free.

Concise presented in this publication is information on what podiatrists (chiropodists) are; the growing need for personnel in the profession; the earnings, hours, and satisfactions of a career in podiatry; a list of colleges of podiatry (chiropody); the work opportunities; and requirements for a degree.

*Podiatry-Chiropody as a Career.* FILM. Washington 10 (3301 16th Street NW.): American Podiatry Association. 16 mm., sound and color, 14 minutes. Free loan, but postage must be paid both ways.

This film acquaints students and the public at large with the opportunities that exist in podiatry-chiropody as a career. A 30-60-day advance booking notice is required.

*The Winged Foot.* FILM. Washington 10 (3301 16th Street NW.): American Podiatry Association, 1960. 16 mm., sound and color, 13½ minutes. Free loan, but postage must be paid both ways.

Graphically designed to tell what and who the doctor of podiatry (chiropody) is, this film shows how, as a member of a health team, he is the specialist—the foot doctor—who

serves millions of persons in the Nation suffering from foot troubles. A 30-60-day advance booking is necessary.

### Psychiatry and Psychology

*Psychiatry as a Career.* Washington 9 (1700 18th Street NW.): The American Psychiatric Association, 1957. 8 pp. Free.

Detailed qualifications of a good psychiatrist are outlined and the many areas and specialties within psychiatry are described in this article. The various types of psychiatric practice, such as State hospitals, community clinics, teaching and research, and private practice are all discussed.

*Psychologists in Action.* New York 16 (22 East 38th Street): Public Affairs Pamphlets, 1959. 30 pp. 25¢.

The actual work of a psychologist on the social scene, in the school, in the laboratory and other such fields is emphasized in this pamphlet.

### Veterinary Medicine

*Career Service Opportunities With the U.S. Department of Agriculture.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1960. 68 pp. 55¢. (Agricultural Handbook No. 45.)

Intended for the use of guidance counselors and students, this publication describes many specialized jobs, and tells about working conditions, employment opportunities, salaries, and special benefits that apply to employees of the Department. Veterinary medicine is included as one of these specialized professions.

*Veterinarian.* Largo, Fla.: Careers, 1958. 8 pp. 25¢.

What is involved in a career in veterinary medicine is described in this vocational and professional monograph along with the history of the profession, working conditions, training requirements, training opportunities, personal qualifications, advantages and disadvantages, employment prospects, hours, earnings, where employed, and related careers.

*Veterinary Medicine as a Career.* Chicago 5 (600 South Michigan Avenue): American Veterinary Medical Association, 1960. 18 pp. Free.

Discussed in this attractive pamphlet are the history of veterinary medicine, veterinary education today, veterinary medicine at work, horizons in veterinary medicine, the financial



side of this field, personal and physical qualifications, and steps toward a career in veterinary medicine. Colleges of veterinary medicine in the United States and Canada are listed.

### X-Ray Technology

*Career as a Medical X-Ray Technician.* Washington 6 (1640 Rhode Island Avenue): B'nai B'rith Vocational Service, 1957. 11 pp. 35¢. (Order No. 458.)

In addition to detailed descriptions of the work of a medical x-ray technician, this booklet gives specific information on other phases of the field, such as the personal qualifications, preparation, job opportunities, earnings, working conditions, and advantages and disadvantages.

*Careers in X-Ray Technology.* Fond du Lac, Wis. (16 14th Street): The American Society of X-Ray Technicians, 1958. 6 pp. Free.

Contained in this career folder is information about the opportunities in x-ray technology, duties of the x-ray technologist, qualifications for admission into the field, types of employment in institutions, industry, government, public health, technology education, and other similar information.

*Medical X-Ray Technicians.* Largo, Fla.: Careers, 1959. 7 pp. 25¢.

One in a series of career briefs, this monograph gives a definition of the x-ray technician, the history of the profession, duties, working conditions, training requirements and opportunities, personal qualifications, outlook, advantages, disadvantages, hours, earnings, advancement prospects, where work is done, related careers, and information about how to enter the profession.

*Your Career in X-Ray.* Fond du Lac, Wis. (16 14th Street): The American Society of X-Ray Technicians. 6 pp. Free.

Briefly presented in this folder is information dealing with the jobs of the x-ray technician, outlook of a career in this field, salaries, and training required.

### Other Fields

*Career as a Medical Social Worker.* Washington 6 (1640 Rhode Island Avenue): B'nai B'rith Vocational Service, 1955. 5 pp. 35¢. (Order No. 553.)

The importance of the medical social worker in the field of medicine is emphasized in this booklet, which also gives specific information

about outlook, development of the field, nature of the work, educational preparation, getting started in the profession, advancement, and advantages of such a profession.

*Should You Be a Hospital Administrator?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1960. 11 pp. Free.

The abilities needed for hospital administration, special demands, wide range of duties, educational requirements, rewards of the career, earnings, and opportunities are described in this professional career booklet.

### General

*Careers in Medicine.* Washington 6 (1640 Rhode Island Avenue NW.): B'nai B'rith Vocational Service, 1957. 19 pp. 35¢. (Order No. 401.)

Included as one in a series, this occupational brief contains detailed and accurate information on outlook, duties, preparation and entry, qualifications, earnings and advancement, physical requirements, working conditions, advantages and disadvantages, and sources of further information.

*Careers That Count.* Chicago 11 (840 North Lake Shore Drive): American Hospital Association, 1960. 3 pp. Free.

Although no specific vocational information is given in this folder, helpful to students interested in health careers would be the listing of over 200 job classifications within the medical field.

*A Guide to Vocations in the Medical and Related Areas.* Santa Monica, Calif. (907 14th Street): Ralya and Ralya, 1955. 35 pp. \$1.

Perhaps of special help and interest to guidance counselors, this publication was prepared to serve the needs of all young people who are considering education and training for occupations in the medical and related areas. It is characterized by (1) brief discussions of careers in the many areas of the medical field, and (2) references to carefully selected publications which contain additional information.

*Health Careers Guidebook.* New York 19 (1790 Broadway): National Health Council, 1955. 156 pp. Free to secondary schools and junior colleges.

Prepared for teachers, counselors, and students, this book presents a preview of health careers, describes the teamwork aspects of the work performed in this field, suggests some pointers on post-high-school planning, illus-

trates by way of a health careers calendar the length of time required for training for miscellaneous health occupations, and includes a section of health career briefings which highlights 156 such careers in the health field.

*Health Education as a Career.* New York 19 (1790 Broadway): American Public Health Association, 1955. 7 pp. Free.

In this folder are discussed in very general terms the health education field, what health educators do, criteria for entrance into the field, where health educators work, and salaries and employment benefits.

*Health Education as Your Career.* Washington (1201 16th Street NW.): American Association for Health, Physical Education, and Recreation. 8 pp. Free.

What the field of health education encompasses, the opportunities and where one would work, what a health educator might do, the salary he could expect to receive, advantages of the profession, and an included aptitude test are given in this career flier.

*New Careers in the Health Sciences.* New York (1790 Broadway): National Health Council, 1960. 21 pp. Free.

The purpose of this pamphlet is to highlight the many changes that are creating new roles and new relationships in the health field for all the sciences. These advances are opening up new opportunities in physics, chemistry, mathematics, and engineering, as well as in biology and medicine itself.

*Partners for Health.* New York (1790 Broadway): National Health Council, 1955. 40 pp. Free to secondary schools and junior colleges.

Lacking only the section on health career briefings, this booklet consists of the first forty pages of the Health Careers Guidebook, published also by the National Health Council.

## MATHEMATICS

### Actuary

*Actuary.* Peapack, N.J.: Personnel Service, Inc., 1958. 6 pp. 25¢. (Occupational Abstract No. 210.)

The nature of the work of an actuary, future prospects, qualifications, preparation, entrance and advancement, earnings, number and distribution, related occupations, advantages and

disadvantages, and women in the field are discussed in this occupational abstract.

*A Career With a Future—Actuary.* New York 10 (1 Madison Avenue): Metropolitan Life Insurance Co. 2 pp. Free.

Information on what an actuary is, and what he does is given as an introduction to this brief career publication. The advantages of an actuarial career, the qualifications required, and information on how to enter the field is further presented.

*Mathematics in Action—An Actuarial Career.* Newark, N.J.: Educational Relations Department, The Prudential Insurance Company of America. 10 pp. Free.

What an actuarial career entails, the opportunities made available, background for success, the rewards of the profession, and how one becomes an actuary are presented in this booklet.

### Statistics

*Career Service Opportunities With the U.S. Department of Agriculture.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1959. 63 pp. 55¢. (Agricultural Handbook No. 45.)

Intended for the use of counselors and students, this publication describes several specialized jobs in the field of statistics, and tells about working conditions, employment opportunities, salaries and special benefits that apply to employees of the Department of Agriculture. Those specialized fields included are the statistician and actuary.

*Statistics as a Career.* Washington 6 (1757 K Street NW.): American Statistical Association, 1952. 5 pp. Free.

The objective of this article is to give a concise statement of the field of statistics and the career opportunities made available to interested students. Where statistics is applied, what statisticians do, the qualifications required, and the rewards, financial and otherwise, are discussed.

### General

*Are You Interested in Mathematics as a Career?* Buffalo 14: University of Buffalo, Mathematical Association of America, 1958. 4 pp. Free.

How an interested student can earn a living in mathematics as a teacher, statistician, actuary, engineer, or EDP programmer is discussed in this pamphlet.



*Career Opportunities.* Socorro, N. Mex. (Campus Station): New Mexico Institute of Mining and Technology. 8 pp. Free.

Published mainly as a school recruitment folder, this publication gives general comments on careers in mathematics, along with those in engineering and the physical sciences.

*Careers for Majors in Mathematics.* New York 17 (50 East 42d Street): World Trade Academy Press, Inc., 1959. 30 pp. \$1.

This monograph describes professions in mathematics, nature of the work, historical background, training, opportunities, advantages, disadvantages, where employment is found, scholarships, fellowships, and other financial aid available to students.

*Employment Opportunity for Women Mathematicians and Statisticians.* Washington 25: Women's Bureau, U.S. Department of Labor, 1956. 37 pp. 25¢.

The findings of survey groups, number of women mathematicians and statisticians, characteristics of surveyed groups, demand for women mathematicians and statisticians in 1955, the future demand and supply, preparation needed, personal characteristics, how to obtain employment, advancement, earnings, working conditions, organizations and helpful tables are all given in this comprehensive booklet.

*Employment Outlook for Mathematicians, Statisticians, and Programers.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1959. 10 pp. 10¢.

The nature of the work, where employed, training and other qualifications, employment outlook, earnings, and working conditions are reviewed for each of the three fields given in the title.

*Is Math in the Stars for You?* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1957. 6 pp. 5¢.

Opportunities for women mathematicians in teaching, the computing field, scientific fields, research, statistics, actuarial work, accounting, and pure mathematics are reviewed in this leaflet. Prospects for the present and the future are discussed.

*Mathematician.* Largo, Fla.: Careers, 1958. 8 pp. 25¢.

A very good picture of the mathematician is given in this pamphlet. Emphasized are the duties, working conditions, hours, earnings,

personal qualifications, training, outlook, where employed, opportunities for women, related careers, and a suggested high school program for those interested in mathematics as a profession.

*Mathematics and You.* New Brunswick, N.J.: Mathematics Department, Rutgers, The State University. 14 pp. Free.

Of special interest to a student interested in mathematics as a career are descriptions of the position of mathematics in our modern society, opportunities for specialists in mathematics, and general background information concerning the profession.

*Mathematics and Your Career.* Washington 25: Bureau of Labor Statistics, U.S. Department of Labor, 1960. 9 pp. 20¢.

The purpose of this pamphlet is to bring the facts about the mathematics training required for employment in different occupations to the attention of high school students interested in planning their occupations. Many occupations which require some mathematical training are listed.

*Mathematics as a Career.* New York 71 (Riverdale): Manhattan College, 6 pp. Free. (Guidance Bulletin No. 23).

Briefly presented in this career folder are the values of mathematics, good reasons for specializing in mathematics, some career opportunities, possible related fields of interest, earnings, and basic qualifications needed.

*New Careers in the Health Sciences.* New York 19 (1790 Broadway): National Health Council, 1960. 21 pp. Free.

The purpose of this pamphlet is to highlight the many changes that are creating new roles and new relationships in the health field for all the sciences. These advances are opening up new opportunities in the field of mathematics, many of which are discussed in this publication.

*Opportunities for Women in the Field of Mathematics.* Boston 15: Simmons College, 1959. 2 pp. Free.

How one can prepare to become a mathematician, the aptitudes or personality traits needed, opportunities for women in this field, salaries, and suggested books for the ambitious student to read are given in this pamphlet.

*Preparations for Careers.* Miami, Fla. (Coral Gables): The University of Miami, 1959. 59 pp. Free.

Although written mainly as a school recruitment bulletin, this illustrated booklet gives

brief descriptions of the many vocational opportunities in the field of mathematics.

*Professional Opportunities in Mathematics.* Buffalo 14: University of Buffalo, The Mathematical Association of America, 1959. 24 pp. 25¢.

Contents of this booklet include the teacher of mathematics, opportunities in mathematics and applied statistics, the mathematician in industry, mathematicians in government, opportunities in the actuarial profession, non-academic employment of mathematicians, and references for further reading.

*Should You Be a Mathematician?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1958. 15 pp. Free.

Included in this booklet are a general introduction to mathematics, the acute shortage in the field, specialties in mathematics, financial rewards, drawbacks, qualifications, and education required.

*Why Study Math?* Schenectady 5 (1 River Road): General Electric Co., Publications for Schools, 1959. 4 pp. Free.

This article gives very good background discussion on the importance of mathematics in our modern society. Opportunities for mathematicians are highlighted. It is one section of a general career information booklet on science, math, and engineering.

*You and Your Career.* New York 19 (640 Fifth Avenue): Library and Educational Division, Collier's Encyclopedia, 1960. 30 pp. 50¢.

Written specifically for guidance purposes, this book provides interested students with vital information about 113 careers in the fields of science, mathematics, and engineering. This information, given in chart form, includes the nature of the work, employment trends, qualifications, preparation, entrance requirements, chances for advancement, earnings, and competition in the various fields. Special coverage is given to careers in science.

## PHYSICAL SCIENCES

### Aeronautics, Air Science and Services, and Astrophysics

*Careers in Astronautics and Space Exploration.* New York 17 (50 East 42d Street): The World Trade Academy Press, Inc., 1960. 50 pp. \$1.50.

This monograph, one in a series, describes the field of astronautics and space exploration, specializations required, nature of the work, historical background, training, opportunities, remuneration, advantages, disadvantages, where employment is found, and how to finance an education in the field.

*Careers in Space Communications.* Washington 25: U.S. Naval Research Laboratory, Department of the Navy. 7 pp. Free.

Emphasis in this booklet is placed on the work done at the U.S. Naval Radio Research Station in Sugar Grove, W. Va. Although not too much specific career information in space communications is given, the pictures and information included will give the student an idea of what the field entails.

*Career Opportunities in the Aircraft Industry.* Washington (610 Shoreham Bldg.): Aircraft Industries Association. 34 pp. Free.

Highlighted in this book are the various types of engineering careers made available in the aircraft industry. These include the electronics, aerodynamics, design, production, and nuclear engineers. Technical occupations within the industry are also described.

*Career Opportunities With the Airlines.* Washington 6 (1000 Connecticut Avenue NW.): Air Transportation Association of America, 1957. 12 pp. Free.

This folder pamphlet relates the impact of air transportation, airlines and airline jobs, flight operations, airline communications jobs, and the outlook for the future. Personal and educational requirements, duties, salaries, benefits, and opportunities are given for each of the positions described.

*Employment in the Aircraft, Missile, and Spacecraft Fields.* Washington: Bureau of Labor Statistics, U.S. Department of Labor, 1959. 4 pp. Free.

The onset of the space age has focused attention on production and employment in the aircraft, missile, and spacecraft field. Various types of vehicles and engines manufactured, employment trends, geographic and occupational employment distribution, and anticipated outlook for careers in this field are highlighted in this report.

*Missiles—From Concept To Countdown.* Azusa, Calif. (Box 296): Aerojet General Corp. 83 pp. Free.

Although no specific career information facts are given in this booklet, it consists of much background information which would prove both interesting and helpful to a student con-



templating a career in astrophysics. A history of rockets and missiles, components of the missile, types of missiles, and the role of the missile in today's world are discussed.

*Occupations in Space Exploration.* New York 1 (341 Ninth Avenue): Bureau of Labor Statistics, U.S. Department of Labor, 1959. 3 pp. Free.

An explanation of the space exploration program is given in this report, along with detailed presentation of the types of jobs available in the field.

*So You'd Like To Be a Space Scientist.* Lancaster, Pa.: Educators Mutual Life Insurance Company, 1960. 1 p. Free.

General comments on the role of the physicist, engineer and technician are given on this brief flier.

*The Space Frontier.* Washington 6 (1025 Connecticut Avenue NW.): National Aviation Education Council, 1958. 19 pp. 25¢.

Although no specific career information in the space field is given in this illustrated booklet, it will help the spaceman of tomorrow understand more about the medium in which he will be operating if he should enter this field. Much detailed information about outer space is given, including an astronautics glossary.

*Your Career as an Aerospace Engineer.* New York 21 (2 East 64th Street): Institute of the Aeronautical Sciences, 1960. 24 pp. Free.

A brief summary of the aerospace industry introduces this booklet, which further describes the challenge of the industry, the aerospace engineer, his education, personal qualities and opportunities, and the first 10 years as an aerospace engineer. A list of engineering colleges in 50 States which offer degrees in this field is included.

## Astronomy

*Astronomer.* Largo, Fla.: Careers, 1960. 15¢.

Timely and well prepared, this summary gives the duties, working conditions, preparation, qualifications, earnings, hours, and outlook of the astronomer. Especially helpful is a list of colleges which offer undergraduate degrees in astronomy.

*Astronomy.* Cambridge 38, Mass.: Bellman Publishing Co., 1955. 32 pp. \$1.

Background information on the field of astronomy, the organization and work of an

observatory today, the attraction of an astronomical career, personal qualifications desirable in an astronomer, scholastic training required, employment opportunities for professional astronomers, advantages and disadvantages of an astronomical career, and the types of astronomical organizations for those in the profession are given.

*A Career in Astronomy.* Cambridge 38, Mass. (60 Garden Street, Smithsonian Astrophysical Observatory): American Astronomical Society, 1957. 12 pp. Free.

This short pamphlet contains comments directed to high school students concerning an introduction to astronomy, qualifications for a career in astronomy, a list of colleges and universities which offer an undergraduate major, and opportunities for a career in this profession.

*Chart Your Future as an Astronomer in Scientific Laboratories of the Federal Service.* Washington 25: Board of U.S. Civil Service Examiners for Scientific and Technical Personnel of the Potomac River Naval Command, U.S. Civil Service Commission, 1957. 20 pp. Free.

Any student desiring to work as an astronomer with the Federal Government would be interested in this pamphlet, which gives locations of positions, descriptions of the work, education and experience requirements, bases of rating, registers and certification, salary and workweek, nature of appointments, citizenship, age and physical requirements, and information on how to apply. Interesting illustrations are included in this pamphlet.

## Atomic Energy

*Careers in Atomic Energy.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1957. 36 pp. 25¢.

A discussion of the broad field of atomic energy; important applications of atomic energy in biology, medicine, agriculture, manufacturing, mining, nuclear power, research, and laboratories; Government control of atomic energy; schools, colleges, and training opportunities; and selected references are given in this booklet.

*Careers in the Atomic Energy Industry.* Cambridge 38, Mass.: Bellman Publishing Co., 1958. 32 pp. \$1.

Outlined are the origin, development and future of the atomic energy industry; the implications, challenges, and responsibilities of the profession; nature of the work; training

and educational requirements; opportunities for education and training; personal qualifications; and advantages and disadvantages of employment in the atomic energy industry. A thorough review of the field is given.

*Should You Be an Atomic Scientist?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1956. 12 pp. Free.

Attractive illustrations are included in this booklet, which contains information on the growth of atomic science and its importance to society; nature of the work of an atomic scientist; future prospects; places of employment; personal and educational qualifications; financial rewards; advantages and disadvantages.

*Youth's Opportunities in the Atomic Industry.* New York 22 (3 East 54th Street): Atomic Industrial Forum, Inc., 1958. 40 pp. 25¢.

Based on the proceedings of a 1-day conference on career guidance for high school students, this booklet discusses fully the importance of atomic development, who should work in atomic energy, where to study nuclear engineering, types of work in the field and what each entails, the need for continuing study, and opportunities in atomic energy.

## Chemistry

*Assistant Chemist.* Largo, Fla.: Careers, 1960. 15¢.

Of special interest to guidance counselors and students is this career summary, which presents the duties, qualifications, working conditions, outlook, related jobs, training, promotional possibilities, earnings, and hours of the assistant chemist. It is briefly but adequately summarized.

*Career Opportunities for Chemists and Chemical Engineers.* Washington 6 (1155 16th Street NW.): American Chemical Society, 1960. 54 pp. Free.

Career development (finding a place in the chemical profession, understanding the profession, professional attitudes, and how to increase earning power) are combined with career opportunities with specific companies or industries in this long magazine article. It is a reprint from the *Chemical and Engineering News*, January 1960.

*Careers in Chemistry.* Socorro, N. Mex.: Registrar, Campus Station, New Mexico Institute of Mining & Technology. 6 pp. Free.

Written especially for those interested in chemistry as a possible profession, this

pamphlet answers some of the questions thoughtful high school students ask concerning the requirements and opportunities of a career in this science.

*Careers in Chemistry and Chemical Engineering.* Washington (1155) 16th Street, NW.): American Chemical Society, 1960. 98 pp. \$1.50.

This 98-page booklet is composed of a series of 29 articles which deal with different phases of choosing a career in chemistry. Prerequisites for such a career, training required, different fields of chemistry in which a student may be interested, professional relations, and suggestions for jobseekers are presented. A comprehensive review of the profession is given.

*The Chemical Profession.* Washington 6 (1155 Sixteenth Street NW.): American Chemical Society, 1956. 40 pp. 25¢.

A picture of what comprises the work of those trained in the chemical profession is presented in this pamphlet. Work done by chemists and chemical engineers in research, industry, executive and administrative work, public and private institutes and foundations, patent work, government service, writing and library work, consulting and testing services, and teaching are discussed in detail. Professional training, salaries, personal qualifications, and the role of the woman chemist are also included.

*Chemist.* Jaffrey, N.H.: Personnel Services, Inc., 1959. 6 pp. 25¢.

Reviewed in this occupational abstract are the need for chemists in our modern world, future prospects, opportunities for women, nature of the work, qualifications, preparation, entrance and advancement, earnings, number and distribution, advantages and disadvantages, and related occupations. Sources of further information for the ambitious student are also included.

*Chemist.* Largo, Fla.: Careers, 1959. 8 pp. Free.

The history and importance of the chemical profession are discussed in this pamphlet, along with the working conditions, training requirements, training opportunities, outlook, personal qualifications, advantages and disadvantages, hours, earnings, and advancement prospects for the chemists.

*Chemistry as a Career.* New York 71 (Riverdale): Manhattan College, 1959. 8 pp. Free. (Guidance Bulletin No. 14.)

Chemistry as a career, contributions of modern chemistry, the nature of chemistry, fields



of specialization, employment opportunities, salaries and rewards, and qualifications for success in this profession are briefly discussed in this career folder.

*Chemistry as a Career.* Potsdam, N.Y.: Clarkson School of Technology, 1955. 8 pp. Free.

In this career pamphlet, detailed answers are given to such questions as the following: What is chemistry? Why study chemistry? What does a chemist do? Where does a chemist work? What personal characteristics are necessary? How is the pay? What is the employment outlook? Is the work dangerous? What high school preparation is needed?

Information is also given about the chemistry curriculum at the Clarkson School of Technology.

*Chemistry as a Profession.* Cambridge 38, Mass.: Bellman Publishing Co., 1959. 20 pp. \$1.

An introduction to the field of chemistry, history of the profession, training and education required, employment opportunities available according to the amount of training, remuneration, opportunities for advancement, advantages, disadvantages, and trends today are discussed in this comprehensive review. A list of professional organizations within the profession is included.

*Employment Outlook for Chemists.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1959. 4 pp. 5¢.

The nature of the work, where employed, training and other qualifications, employment outlook, earnings, and working conditions for chemists are highlighted in this bulletin.

*Frontiersmen of the Future.* Washington 6 (1625 I Street NW.): Manufacturing Chemists' Association, Inc. 16 pp. Free.

General remarks about the chemical profession introduce this illustrated pamphlet, which emphasizes the type of person who should consider a chemistry career, the different types of jobs available in chemistry, and how a student can prepare for a career in chemistry. A list of books on this profession is added as supplemental information.

*New Careers in the Health Sciences.* New York 19 (1790 Broadway): National Health Council, 1960. 21 pp. Free.

The purpose of this pamphlet is to highlight the many changes that are creating new roles

and new relationships in the health field for all the sciences. These advances are opening up new opportunities in physics, chemistry, mathematics, and engineering, as well as in biology and medicine itself.

*Opportunities in Chemistry.* New York 17 (60 East 42d Street): American Institute of Chemists, 1951. 6 pp. Free.

Prepared originally as a speech before a science vocational conference, this article emphasizes the industrial aspect of opportunities in chemistry. The types of jobs available in research, development and technical services, the trainee and job rotation, and the future outlook are thoroughly described.

*Preparation for Careers.* Miami, Fla. (Coral Gables): University of Miami, 1959. 56 pp. Free.

Although written mainly as a school recruitment bulletin, this illustrated booklet gives brief descriptions of the many vocational opportunities in the field of chemistry.

*Shall I Study Chemistry?* Washington 6 (1155 Sixteenth Street, NW.): American Chemical Society, 1958. 16 pp. Free.

This pamphlet, written especially for high school students, gives a brief but fairly complete discussion of what chemistry is; what chemists and chemical engineers do; information about salaries, job opportunities, and working conditions; personal characteristics that favor success; and other similar points of interest to young people. It is artistically and attractively illustrated.

*Should You Be a Chemist?* New York 10 (51 Madison Avenue): New York Life Insurance Co. 1955. 8 pp. Free.

Summarized in this booklet are the importance of chemistry and chemists in our modern society, qualities needed for success, specialization in the field, opportunities, training and preparation, and future outlook.

*U.S. Civil Service Examination Announcement for Public Health Biologists, Medical Technologists, and Chemists.* Washington 25: U.S. Department of Health, Education, and Welfare, Public Health Service, 1956. 19 pp. Free.

Prepared for those interested in Government service, this pamphlet gives a description of work, educational requirements, experience needed, and physical requirements of each of the above mentioned professions. The salary scales given are now out-dated, but other information is still helpful and applicable.

*What Is a Chemist?* Kalamazoo, Mich.: The Upjohn Company, 1950. 4 pp. Free.

Pointed out in this magazine reprint are the high school subjects as well as suggested college curricula for anyone interested in chemistry as a profession. Various types of chemists (the biochemist, physical and analytical chemist) are discussed, as well as the unlimited opportunities available in this field of industry.

*Your Opportunities in Industry as a Technician.* New York 17 (2 East 48th Street): National Association of Manufacturers, 1957. 31 pp. Free.

This booklet tells how some of the recent scientific miracles of our day came about, and describes how a student can begin to prepare, while in high school, for any one of 50 different technical occupations, ranging from aircraft design and construction to nuclear laboratory work. Aptitude and ability tests are included for many of these occupations. Many of the careers discussed concern the chemical profession.

### Earth Sciences (Geography, Geology, Geophysics)

*A Career in Geography.* Washington 6 (1785 Massachusetts Avenue NW.): Committee on Careers, Association of American Geographers, 1954. 20 pp. Free.

This booklet provides a guide to students who might be considering making geography their chosen profession by outlining what geography is, what geographers do, where they work, and the remuneration one may expect to receive. The program for professional training, and what should be included in a geographic curriculum is also discussed.

*A Career in Geology and Paleontology.* Chicago 5 (Roosevelt Road and Lake Shore Drive): Chicago Natural History Museum, 1959. 8 pp. Free.

Definitive comments on the field of geology and the relationship of paleontology to it; the preparation, professional and technical, needed for a career in the field; opportunities and financial returns are given in this report.

*Career Service Opportunities with the U.S. Department of Agriculture.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1959. 68 pp. 55¢. (Agricultural Handbook No. 45)

Intended for the use of guidance counselors and students, this publication describes many specialized jobs in the field of physical sciences, and tells about working conditions, employment opportunities, salaries, and special benefits that apply to employees of the Department of Agriculture. Those specialized jobs included are chemist, geologist, physicist, physical scientist, air scientist, and several types of technologist.

*Careers in Geology.* Washington 6 (1640 Rhode Island Avenue NW.): B'nai B'rith Vocational Service, 1957. 16 pp. 35¢. (Order No. 507)

A general discussion of the study of geology, the largest of the group of earth sciences, is accompanied in this booklet by specific information dealing with careers in this field. This information concerns outlook, nature of the work, places of employment, personal qualifications, training requirements, sources of employment, beginning jobs, earnings, hours, working conditions, number of workers, and opportunities for advancement in the field.

*Careers in Geophysics.* Washington 6 (1640 Rhode Island Avenue NW.): B'nai B'rith Vocational Service, 1955. 6 pp. 35¢. (Order No. 508)

Published as one of a series, this vocational guidance booklet contains detailed information on outlook, duties, preparation and entry, qualifications, earnings, advancement, physical requirements, working conditions, and advantages and disadvantages of a career in geology.

*Careers in the U.S. Department of the Interior.* Washington 25: U.S. Government Printing Office, Superintendent of Documents, 1957. 56 pp. 25¢

Prepared mainly for guidance purposes, this booklet outlines the work of the U.S. Department of the Interior and the employment opportunities in the Department. Descriptions of specialized jobs in the field of geology are outlined, and the advantages of a Government career are explained.

*Geological Engineering.* Golden, Colo.: Director of Admissions, Colorado School of Mines. 5 pp. Free.

Included in this school recruitment pamphlet are a definition of geological engineering, what a geological engineer does, the various branches of the field, opportunities for advancement, and what the future holds for the engineer in this field.



*Geologist.* Largo, Fla.: Careers, 1960. 15¢.

The duties of the geologist, the outlook for the profession, training required, earnings, hours, personal requirements, where employed and criteria for measuring one's interest and ability in the profession are concisely presented in this summary.

*Geophysics.* Rolla, Mo.: Missouri School of Mines & Metallurgy, University of Missouri, 1956. 4 pp. Free.

Presented in this recruitment pamphlet are definitive comments on all of the various areas of geophysics. The primary tasks of the exploration and field geophysicist are discussed, as well as a suggested background for the study of geophysics.

*Should You Go Into the Mineral Industry?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1956. 11 pp. Free.

One in a series of career guidance pamphlets, this publication, written in interview form, answers the title query.

*There's a Place for You in the Oil Industry.* New York 20 (1271 Avenue of the Americas): American Petroleum Institute, 1959. 15 pp. Free.

Many different types of jobs in the oil industry are described in this pamphlet. These cover the areas of science, mathematics, operational control, mechanical trades, and public relations. Regarding one's future in this industry, salary prospects, additional benefits, and chances for advancement are noted.

*Preparation for Careers.* Miami, Fla. (Coral Gables): University of Miami, 1959. 56 pp. Free.

Although written mainly as a school recruitment bulletin, this illustrated booklet gives brief descriptions of the many vocational opportunities in the field of geology.

*Shall I Study Geological Sciences? Career Opportunities in Geology and Geophysics.* Washington 25 (2101 Constitution Avenue NW.): American Geological Institute. 14 pp. Free.

General comments concerning the dependence on geology of the industrial growth of the United States, the work of the geologist, the different fields of specialization offered in geology, choice of employers, personal traits and interests important to such a career, careers for women in geology, the amount of education needed, employment prospects, how an interested student can secure employment, salaries, and opportunities for advancement are given in this illustrated booklet.

## Metallurgy

*Metallurgy.* Cambridge 38, Mass.: Bellman Publishing Co., 1955. 20 pp. \$1.

This comprehensive booklet, one in a series of vocational and professional monographs, contains information on the history and development of metallurgy, organization and structure (extractive and physical metallurgy) training and education, description of the work, employment opportunities, remuneration and chances for advancement, advantages and disadvantages, trends, and professional organizations made available for membership for the metallurgist.

*One Man—The Metallurgist—Holds the Key to Tomorrow.* Cleveland 3, Ohio (7301 Euclid Avenue): American Society for Metals. 7 pp. Free.

This article, a magazine reprint, presents general information on the field of metallurgy and the important work of the metallurgist. The good photographs showing the metallurgist at work should be helpful to interested students.

*Your Career in the Metallurgical Profession.* Cleveland 3 Ohio (7301 Euclid Avenue): American Society for Metals, 1960. 95 pp. Free.

This illustrated book describes the future of metallurgy, metallurgy in action, the metallurgist at work, opportunities in the field, frontiers of metallurgy, industrial training, salaries, and schools offering first degrees in metallurgy. The book also gives a series of case histories of representative metallurgists and how they first became interested in this field and then pursued their interests.

## Meteorology

*Meteorologist.* Largo, Fla.: Careers, 1960. 15¢.

Of great benefit to guidance counselors and students, this career summary, prepared on easily handled file cards, presents the duties, outlook, places of employment, personal qualifications, training, earnings, related careers, etc., of the meteorologist. Comments on suggested preparation while a student is still in high school should be helpful.

*Preparing for College Training in Meteorology.* Boston, Mass. (3 Joy Street): American Meteorological Society, 1954. 2 pp. Free.

To the high school student who feels a growing interest in meteorology, advice is given in this magazine reprint about the types of courses which should be emphasized in his high school curriculum.

*What Is Meteorology?* Boston, Mass. (3 Joy Street): American Meteorological Society, 1954. 2 pp. Free.

Reprinted from the magazine *Weatherwise*, this article highlights the aims and importance of the field of meteorology; the types of studies conducted by meteorologists; the work of the physical meteorologist; dynamic meteorologist, synoptic meteorologist, and climatologist; and the challenges which are presented to men in this field.

## Physics

*Careers in Physics.* Washington 6 (1640 Rhode Island Avenue NW.): B'nai B'rith Vocational Service, 1957. 15 pp. 35¢. (Order No. 506.)

Prepared with the cooperation of a committee of professional physicists, this occupational series brief describes the outlook, nature of the work, educational requirements, employment opportunities for men and women, beginning jobs, salaries, working conditions, personal requirements, advantages, and disadvantages of entering the field. A list of additional sources is also added.

*Employment Outlook for Physicists.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1960. 4 pp. 5¢. (Prepared by the U.S. Department of Labor.)

Nature of the work, where employed, training and other qualifications, employment outlook, earnings, and working conditions for physicists are discussed in this pamphlet:

*A Future for Physicists in Industry.* Schenectady, N.Y.: General Electric Research Laboratory, 1956. 4 pp. Free. (Reprint from *Physics Today*.)

Highlighted in this magazine article are good discussions of the industrial market for physicists, the climate of industrial research, and the areas of opportunity made available to students interested in this field.

*New Careers in the Health Sciences.* New York 19 (1790 Broadway): National Health Council, 1960. 21 pp. Free.

The purpose of this pamphlet is to highlight the many changes that are creating new roles and new relationships in the health field for all the sciences. These advances are opening up new opportunities in physics, chemistry, mathematics, and engineering, as well as in biology and medicine.

*Physicist.* Largo, Fla.: Careers, 1958. 8 pp. 25¢.

Covered in this pamphlet are the duties, working conditions, training requirements, training opportunities, personal qualifications, employment prospects, hours, and earnings of a physicist. The types of subjects one should take in high school are highlighted.

*Physicist.* Peapack, N.J.: Personnel Services, Inc., 1958. 6 pp. 25¢.

This folder-pamphlet reviews the nature of the work of a physicist, future prospects, qualifications, preparation, entrance and advancement, earnings, number and distribution, related occupations, and sources of further information.

*Physics.* New York 17 (Riverdale): Manhattan College, 15 pp. Free.

The nature and scope of the science of physics, recent advances in the field, opportunities, and different phases of the field are presented in this school recruitment publication.

*Physics as a Career.* New York 22 (57 East 55th Street): American Institute of Physics, 1959. 17 pp. Free.

Physics is introduced as a basic science. The pamphlet discusses physics as a profession, physics in industry and in the Federal Government, necessary training, and organizations and publications in physics.

*Physics as a Career.* Rolla, Mo.: Missouri School of Mines & Metallurgy, University of Missouri, 1956. 4 pp. Free.

The science of physics, types of careers found in the field, and the requirements for a career in physics are discussed in this recruiting pamphlet.

*Preparation for Careers.* Miami, Fla. (Coral Gables): University of Miami, 1959. 56 pp. Free.

Although written mainly as a school recruitment bulletin, this illustrated booklet gives brief descriptions of the many vocational opportunities in this field of physics.

*Why Should You Study Physics in High School?* New York 17 (335 East 45th Street): American Institute of Physics, 1959. 14 pp. Free.

Written for secondary school students, this booklet emphasizes the importance of the study of physics, and how general interest in this science can lead to a very rewarding and satisfying career. The interrelationship of physics to other careers is shown through a series of "case histories."



*Your Career in Physics.* New Brunswick, N.J.: Rutgers, The State University, 1960. 14 pp. Free.

What a physicist does, the qualifications and aptitudes needed to be a successful physicist, the training needed, and jobs available are outlined in this illustrated publication.

#### General

*After High School, What? Does Science or Engineering Offer a Career for You?* New York 18 (29 West 39th Street): Engineers Council for Professional Development. 5 pp. Free.

This folder-pamphlet offers a brief summary of the nature of the work of a scientist or engineer, the qualifications needed, and training required. It explains how a career in engineering differs from one in science.

*Can I Be a Scientist or an Engineer? Let's Find Out.* Detroit 2, Mich.: Department of Public Relations, General Motors, 1955. 22 pp. Free.

Brief definitions of the various types of engineers and scientists, along with opportunities for advancement in the professions are discussed. Especially helpful also is the chart of typical requirements for admission to colleges offering courses in engineering or the specialized sciences.

*Career Opportunities.* Socorro, N. Mex.: Campus Station, New Mexico Institute of Mining & Technology. 8 pp. Free.

Published mainly as a school recruitment folder, this publication gives general comments on careers in several of the physical sciences, among them chemistry, geology, geophysics, and physics.

*Career Opportunities in the Physical Sciences.* Chicago: University of Chicago, 1957. 19 pp. Free.

Several of the physical sciences are presented in this booklet in general discussion. Those included are agronomy and astrophysics, chemistry, geography, geology, mathematics, meteorology, and physics. Introductions to each of these sciences, vocational opportunities within the field, and the type of work done within each field are given.

*Careers in Engineering and Science.* Brooklyn 1 (83 Jay Street): Vocational Consulting and Testing Division, Polytechnic Institute of Brooklyn, 1960. 5 pp. Free.

Although most of the emphasis in this booklet is placed on engineering, information about careers in chemistry and physics is included. What the chemist or physicist does, abilities and aptitudes needed, opportunities available in private industry and State and Federal governments, and the rewards of the profession are briefly presented.

*Careers in Science.* Washington 25: Personnel Officer, National Bureau of Standards, 1957. 25 pp. Free.

This booklet describes the many scientific careers available with the National Bureau of Standards in the areas of physics, mathematics, electronics, chemistry and metallurgy. Specific facts about the opportunities for promotion, leave, and retirement benefits in the U.S. Government are included.

*Careers in Science.* Washington 25: U.S. Atomic Energy Commission, 1955. 10 pp. Free.

Prepared as a report to the Conference on Frontiers and Careers in Science, this speech discusses the growing importance to our national security of various careers in the scientific field. It is excellent background information of a general nature for any student interested in pursuing science as a profession.

*Careers in Science Teaching.* Washington 6 (1201 16th Street NW.): National Science Teachers Association, 1959. 18 pp. Free.

Presented in this booklet are the areas of science teaching, the science teacher's work, job opportunities, financial return, intellectual qualities, personal qualities, the training needed, choosing a school, special opportunities, personal benefits, and professional responsibilities.

*Careers in the Scientific Fields.* New York (3 East 48th Street): World Trade Academy Press, Inc., 1959. 46 pp. \$1.25.

Contained in this monograph are a general discussion of the scientific fields (natural and biological sciences), historical background of science, personal qualifications required of a scientist, possible financial aid for undergraduate and graduate scientists of the future, opportunities for men and women in science, educational background, major fields of scientific specializations, remuneration, advantages, and disadvantages.

*Careers for Women in the Physical Sciences.* Washington 25: Superintendent of Documents, U.S. Government Printing Office, 1959. 78 pp. 35¢.

A general discussion of women in the field of science and of the growing need for them in-

roduces this booklet, which further contains specific information on specialties, earnings, demand, job possibilities, importance, and preparation for each of the following sciences: Chemistry, physics, geology, astronomy, meteorology, and biology.

*Decision for Research.* New York 10 (44 East 23d Street): American Heart Association, 1960. 8 pp. Free.

This booklet urges science-minded teenagers to take stock now and consider whether they are cut out for research careers. A unique feature is a pullout chart showing the recommended progress of a research-minded student through high school, college, graduate, or medical school. It also contains a listing of sources of information on scholarships and career guidance.

*Doorways to Science and Engineering Careers.* Detroit 2, Mich. (Box 177, North End Station): Educational Relations Division, General Motors Corp. 2 pp. Free.

This chart is intended as supplemental information for use by educators concerned with the counseling and guidance of students who may be thinking about careers in science or engineering. The chart shows the typical secondary school preparation needed, the higher educational steps required to assume positions in either industry or education, and some typical jobs.

*How To Get Into Science and Engineering.* Washington 6 (1719 N Street NW.): Science Service, 1957. 6 pp. Free.

What secondary school students can do to prepare themselves for future careers in science or engineering is discussed. Fields of specialization in science and technology are listed.

*Science Futures for Girls.* Washington 25: Women's Bureau, U.S. Department of Labor, 1950. 7 pp. 5¢.

Briefly reviewed in this pamphlet are comments on a girl's future in chemistry, physics, geology, astronomy, meteorology; the kinds of work women scientist do; and when a young girl should start preparing for a future scientific career.

*Science Teacher. High School.* Largo, Fla.: Careers, 1960. 15¢.

Adequately presented in this filecard summary are the duties, working conditions, outlook, qualifications, training, and earnings of the high school science teacher.

*Should You Be a Scientist?* New York 10 (51 Madison Avenue): New York Life Insurance Co., 1958. 12 pp. Free.

Recent achievements in science, choosing a scientific career, the need for scientists, the world of science, requisites for a good scientist, and advantages and disadvantages of a career in this broad field are presented.

*Should Your Child Choose a Career in Science.* Philadelphia 8 (1608 Walnut Street): The Sun Oil Co., 1955. 7 pp. Free.

While pointing out the need for trained scientists, this booklet states the qualifications, aptitudes, earnings, and opportunities for scientists. Nine attractive photographic illustrations are included.

*Take Your Pick.* Washington 25: Office of Naval Research, Department of the Navy. 32 pp. Free.

Outlined in this attractive illustrated booklet are the many opportunities open to scientists and engineers with the Naval Research Laboratories of the Department of Navy.

*Target . . . Civilian Careers.* Washington 25: Personnel Division PE-20, Bureau of Aeronautics, Department of the Navy. 16 pp. Free.

Highlighted in this illustrated booklet are the opportunities available for scientists and engineers in the Bureau of Aeronautics of the Department of the Navy. The types of jobs done by each of several types of engineers and scientists are described.

*There's a Place for You in the Oil Industry.* New York 20 (1271 Avenue of the Americas): American Petroleum Institute, 1950. 15 pp. Free.

Many different types of jobs in the oil industry are described in this pamphlet. These cover the areas of science, mathematics, operational control, mechanical trades, and public relations. Regarding one's future in this industry, salary prospects, additional benefits, and chances for advancement are noted.

*Why Study Science?* Schenectady 5, N.Y. (1 River Road): General Electric Co., Publications for Schools, 1950. 2 pp. Free.

Important to a student interested in science as a career in this article which gives a very good discussion of the significance of science in our modern society.



*You and Your Career.* New York 19 (640 Fifth Avenue): Library and Educational Division, Collier's Encyclopedia, 1960. 30 pp. 50¢.

Written specifically for guidance purposes, this book provides interested students with vital information about 118 careers in the fields of science, mathematics, and engineering. The information, given in chart form, includes the nature of the work, employment trends, qualifications, preparation, entrance requirements, chances for advancement, earnings, and competition in the various occupational fields.

*Your Career in Industry as a Scientist or Engineer.* New York 17 (2 East 48th Street): Education Department, National Association of Manufacturers, 1959. 24 pp. Free.

This booklet tells something about the importance of the scientific and engineering professions in our society and our economy, particularly in the manufacturing industries. What scientists and engineers in industry do, why a student should consider a career in this field, and the advantages and disadvantages of such a career are included.

*Your Opportunities in Science.* New York 17 (2 East 48th Street); National Association of Manufacturers, 1956. 30 pp. Free.

Outlined in this well-illustrated booklet are the new frontiers available in scientific work, the nature of the work of various scientific personnel, qualifications and preparation for a student interested in science, techniques for developing success qualities, and future prospects.

