



# Science Writers

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## ... Work in a broad-based field

Science writers describe discoveries and commercial developments in all branches of science, engineering, medicine, and environmental science. They explain the impact these discoveries have on the lives of average individuals.

Science writers usually work in one of four career areas: science journalism, public communications, technical writing in industry, and editing. Science journalists write articles for general circulation magazines, science magazines geared to the general public, magazines for scientists and engineers, and newspapers. Some work for television and radio networks. Science writers specializing in public communications prepare press releases and reports for federal and state government agencies, research universities, research institutes, and professional societies. Those working at universities and research institutes often assist researchers in preparing grant proposals. Technical writers in industry prepare technical bulletins, technical advertising, and press releases, and they assist in writing technical papers. Science editors edit articles for science and technology journals, magazines, and books, as well as government reports.

## ... Communicate with the public

Large newspapers employ writers with educational backgrounds in science, technology, health and medicine, and the environment. Magazines such as *Business Week* publish weekly sections on science and technology. Others such as *Fortune* and *U.S. News and World Report* run frequent science and technology stories. These magazines employ science writers with expertise in the technical sciences. Industry trade magazines usually employ several science writers.

In general, science journalists earn their livings by interviewing experts about scientific discoveries and developments and then reporting on what they have learned. The subjects are often intriguing and significant—and the writer's challenge is to convey a complex subject concisely, in language accessible to nonscientists.

Some professional organizations and associations, including the American Chemical Society, hire science writers to help with their publications as well as their public relations efforts. In public relations, science writers create press releases—brief explanations of news stories designed to attract the attention of media and form the basis for subsequent articles or reports.

## ... Provide technical writing for industry

Industry needs technical writers to prepare a variety of written material, including scientific bulletins; technical procedure manuals; press releases; advertisements, and other documents. Industrial organizations often outsource these activities to freelance writers and advertising agencies. Alternatively, a company may turn to one of its own scientists who has strong writing skills for such projects. Science journalism can be an attractive part-time career alternative for scientists who want to gain work experience outside a lab. Although the career has its share of pressure—almost every job comes with a deadline—the personal and intellectual rewards can be significant.

## ... Perform editing

Publishers of science books and journals employ chemists and other scientists as editors. Editors may rely on scientists as reviewers, but editors themselves need a general understanding of the manuscript subject area to edit text for clarity and readability while not changing its meaning.

Science publications also hire executive and senior editors to develop and oversee the editing process in addition to editing draft articles. These editors often manage such processes as identifying authors and commissioning articles, enforcing deadlines, assigning reviewers, and overseeing the manuscript review process. They advise authors about revisions and edit the revised manuscripts for style and format.

## ... May opt for part-time income and employment

Many technical writers are self-employed, providing services for private companies, government agencies, and professional societies on specific projects. Employment ends when the projects are completed. Some salaried writers and editors do freelance work outside their full-time jobs.

Newspapers and magazines publish articles written by freelancers on science, engineering, medical, and environmental subjects. Many freelancers write for corporate websites. Some edit and review technical articles and documents for publishers and private industry.

Science and technical writing also offers many part-time opportunities. In addition to doing research and writing assignments for their full-time employers, some scientists freelance part-time. Examples of freelance writing projects range from chemistry articles for encyclopedias to articles on technical subjects for magazines, newspapers, and books.



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## FACT FILE: Science Writers

**WORK DESCRIPTION** ► Science writers and editors spend most of their time writing or reviewing articles and article proposals. They must keep up-to-date on major scientific and technical developments by reading press releases, articles, and original research papers. They attend science and technology conferences to report on discoveries presented there. They interview scientists and engineers by telephone or in person, often using e-mail correspondence to facilitate the process. They usually conduct their own online literature searches for background information.

Editors often work closely with scientists, editing their manuscripts. They attend science and engineering conferences to meet book authors and prospective authors. Staying abreast of what topics are of interest to the scientific community helps them develop ideas for new books.

**WORKING CONDITIONS** ► Science writers spend most of their time in offices but occasionally travel to conferences, production plants, and the sometimes remote locations where scientists work. Workdays are often much longer than eight hours, and meeting deadlines can be stressful.

**PLACES OF EMPLOYMENT** ► Some writers work for science magazines, major weekly magazines, and big city newspapers. Many large firms employ science writers. Others use freelance science writers on a project-by-project basis. Science writers also work at universities, research institutes, government agencies, and professional societies. Those seeking to start a career as a self-employed writer should compile a track record of writing accomplishments while employed full time for a company or the media.

**PERSONAL CHARACTERISTICS** ► Science writers must be imaginative and able to see the implications of scientific discoveries. They must learn quickly and capitalize on their basic science education to rapidly master the basics of various technical fields and communicate effectively with scientists and engineers. People in this field must manage time well, be organized, and be self-motivated. Good verbal communication skills are essential when conducting interviews. Having good business skills is an asset for freelancers, since they run their own small companies.

**EDUCATION AND TRAINING** ► Science writers need at least a bachelor's degree in science or engineering. They find undergraduate courses in science writing and journalism very helpful. Science magazines and professional societies often offer internships and workshops for beginners. Excellent photography skills are useful.

**JOB OUTLOOK** ► Overall, the employment and career outlook for science and technical writers is good. In addition to the traditional markets for their work—magazines, newspapers, and books—the Internet offers many job opportunities for science writers as companies develop their websites. The number of science writers employed by magazines, newspapers, and books appears to have stabilized after a period of decline. However, science publishing, like many other businesses, can be negatively affected by slowing economies.

**SALARY RANGE** ► The median, full-time, starting salary for science writers in 2002 was \$50,000 per year. The median salary for science writers with a bachelor's degree was \$41,000 per year; \$52,000 per year for writers with a master's degree. Full-time jobs usually provide the standard benefits of health and dental insurance, life and disability insurance, and retirement benefits. Freelancers' incomes range from less than \$10,000 for part-timers to more than \$100,000 per year.

### FOR MORE INFORMATION

National Association of Science Writers  
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516-757-5664  
[www.nasw.org](http://www.nasw.org)

Society for Technical Communication  
901 N. Stuart St., Ste. 904  
Arlington, VA 22203-1822  
703-522-4114  
[www.stc.org](http://www.stc.org)

American Medical Writers Association  
40 W. Gude Dr., Ste. 101  
Rockville, MD 20850-1192  
301-294-5303  
[www.amwa.org](http://www.amwa.org)

Education Writers Association  
2122 P St. NW, Ste. 201  
Washington, DC 20037  
202-452-9830  
[www.ewa.org](http://www.ewa.org)

**WHAT YOU CAN DO NOW** ► If you are interested in science writing, take elective courses in science and technical writing and journalism. You should also seek out opportunities to write about subjects that interest you, even unpaid assignments such as writing articles or reviews for a campus newspaper. These experiences and internships, particularly at science magazines, are the best way to determine whether a writing career appeals to you. Since many scientific advancements involve chemistry, it is important to take all your standard chemistry courses and develop a strong chemistry background. In addition, science writers recommend taking a polymer chemistry course. With the many developments occurring in biotechnology and medicine, biology and biochemistry courses can also be very useful.