



# EMPLOYMENT OUTLOOK 2002

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**L**AST YEAR AT THIS TIME, C&EN REPORTED IN EMPLOYMENT Outlook 2001: "The job outlook for 2001 is as good as it gets. Barring an unforeseen disaster in the U.S. economy that would reduce demand, chemists and chemical engineers graduating in 2001 will have a wide choice of exciting and rewarding jobs."

When those words were being written in November 2000, employed chemists and chemical engineers—whether they were veteran employees or among those who had just joined the ranks of the employed—were having a banner year.

As shown in the two annual, long-established American Chemical Society surveys of the salaries and employment status of its members, 2000 was a very good year indeed. At 1.5%, the unemployment



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work—analyzing evidence such as blood stains and performing firearm identification. One forensic scientist tells C&EN: “It’s the most satisfying work you can ever do.” Another says: “The knowledge that the person who has killed someone’s daughter has been brought to justice—you can’t put a price tag on that.”

A disabled chemist or chemical engineer has a harder time than most, even in the best of times, in pursuing a scientific career. But many can and do enjoy successful, productive careers. C&EN looks at how chemists successfully cope with both their own physical limitations and the uninformed expectations of others, and outlines the resources available specifically for scientists with disabilities.

Rounding out this year’s edition of C&EN’s annual employment outlook issue is a summary of the self-assessment and job-hunting tools that are designed to help the new graduate as well as the seasoned chemical professional in the chemical sciences find or build a rewarding career. ■

## DEMAND

The year ahead is shaping up as a tough one for new as well as experienced chemical scientists. But jobs are available, if you know where to look. **Page 41**

## SALARIES & EMPLOYMENT

Recent surveys show chemists’ salaries growing and unemployment low, but how long can the good times last in the face of a dim economic outlook? **Page 47**

## FORENSIC SCIENCE

Chemists are in demand as state and local officials face a “tsunami” of DNA evidence that needs to be analyzed; scientists are also needed for crime-scene investigations. **Page 51**

## DISABLED AND GETTING AHEAD

Chemists with disabilities profit from a mix of pragmatism and assertiveness on the job; strategies for getting the job that fits their talents. **Page 55**

## CAREER-PLANNING RESOURCES

A guide to sources of job and career information best suited to chemical scientists seeking industrial, academic, or government positions or looking to change careers. Some of the most comprehensive resources can be found at the American Chemical Society. **Page 60**



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didates, where before we would have taken very good to excellent ones.”

Caution may be a watchword, but despair is not. Small companies, particularly small drug discovery and biotech firms, are still hiring, though at a somewhat reduced rate, as are petrochemical companies. And chemists who have the skills that big pharmaceutical employers are looking for are still likely to be very much in demand. Still, it is unlikely that these companies will be hiring at the same level as in recent years.

Summing up the situation, R. Douglas Bounds, Eastman Chemical manager of staffing, says: “Next year is not going to be the best year ever to be seeking a job, but it certainly won’t be the worst year ever. The chemical industry is in a bit of a trough right now, but the projections are that next year will look better.”

The situation already looks better for those seeking to join the ranks of academia. From California to Massachusetts and Wisconsin to Texas, departments of chemistry, biochemistry, and chemical engineering are looking for junior faculty. A recent Council for Chemical Research survey shows that as of early September, 69 chemistry departments were seeking to fill 89 full-time tenure-track positions. Many of the positions are open because of faculty retirements, but a few schools are seeking to expand their departments.

One field on the verge of explosive growth is that of forensic chemistry, particularly DNA analysis. Experts predict that more than 10,000 new forensic scientists will be needed over the next decade to address an exponentially expanding backlog of DNA evidence. Most such work will be done in private laboratories, under contract with state and local government agencies, and on-the-job training is available. But governmental bodies are also in need of forensic scientists for crime-scene

rate for chemical scientists was the lowest it had been in a decade, and salaries were increasing at a rate that more than kept up with inflation. The job market was good, and starting salaries were up sharply for the fourth year in a row.

But disaster did strike, more than once. By spring of 2001, the high-flying dot-com sector had collapsed, taking the U.S. stock market and a number of chemical e-business ventures down with it. Chemical companies were well embarked on an earnings slide that is still ongoing. Then came the horrific events of Sept. 11.

So it’s no wonder that “caution” is a watchword for the 2002 recruiting and hiring season, as is “quality.” A spokesman for one major chemical company says, “The number we hire will depend on the business environment ahead, and that can turn at the drop of a hat.”

Says another: “This year, the bar has been raised significantly higher than before. We are now looking for the best can-