

Identifying job opportunities

Speaker: Dr. H.N. Cheng, Hercules Incorporated

Technicians, like most professionals, can expect to change jobs several times over the course of their careers. Some of these changes will be by choice and some will not. The key to navigating these changes is to see which way the wind is blowing and hoist the sails to take advantage of it.

Current trends: Good news and bad news*

The bad news is that over the past decade, the number of jobs in chemical manufacturing has dropped 12%. Overall, the number of jobs for chemical technicians in manufacturing is projected to drop almost 17%. Technicians who stay in traditional chemical manufacturing businesses, such as basic chemicals, petrochemicals, and polymers, should expect fierce competition for jobs.

The good news is, across all industries, technician hiring is projected to *grow* by around 5% over the next decade. Part of the growth will come from an aging workforce, a large segment of which is due to retire. Additionally, pharmaceutical manufacturing and analytical testing are projected to grow 20-30% in the coming decade.

Moreover, the amount of funding for research in the life sciences, which is correlated with industrial growth, is increasing much more dramatically than funding in other fields. At a time when the U.S. is granting just 19% of the world's science degrees (Europe grants 47%, while Asia grants 24%)[†], chemical professionals should have an edge in the job market.

Opportunities abound in small (<500 employees) companies. While large companies are reorganizing, downsizing, rightsizing, and sometimes capsizing, small companies are growing. Since 2002, small companies have been employing more U.S. chemical professionals than large companies.

The growth of small companies complicates the hiring process. Since small companies do not garner the same level of publicity as large companies, or the same presence at job fairs, it can be difficult to identify the small companies in a given region.

Seeking opportunities

According to the ACS 2005 Starting Salary Survey, the three most common methods of finding a job were through networking, job placement agencies, and on-line postings.

In networking, job applicants use their personal and professional contacts to gather information on professions that interest them. Contacts know trends in their companies, required technical skills, and people to contact for more information. Contacts can also be useful for resume reviews and insight on professional interests. The key is to always ask for information but never for a job. (See [Building and nurturing networks](#).)

* Unless otherwise noted, all employment data was obtained from the U.S. Bureau of Labor Statistics, for the year 2004. Projected data is for 2004—2014. See www.bls.gov.

[†] Source: Science and Engineering Indicators 2004

Job placement agencies can be particularly useful in finding opportunities for technicians. Some agencies identify candidates for temporary or full-time positions. Other agencies hire the candidates themselves and send them to employers on a contract basis. (See [Understanding the hiring process.](#))

CEN-ChemJobs

In addition to the well-known Monster and CareerBuilder website, chemical professionals can take advantage of CEN-ChemJobs for on-line postings. Free to ACS members, CEN-Chemjobs (www.cen-chemjobs.org), allows users to

- Search job postings
- Apply for jobs
- Read employment articles from Chemical & Engineering News
- Set up a job seeker account with up to 3 resumes and cover letters, customized job alerts, resume posting, and application tracking
- Access ACS Department of Career Management and Development Services

CEN-ChemJobs is also active at ACS National Meetings, where it hosts career development workshops, resume reviews, mock interviews, employment interviews, and career counseling sessions. Workshops include Resume Preparation, Finding Jobs in Small Companies, Career Transitions, and the First Year on the Job.

Career Management and Development

The ACS Department of Career Management and Development (CMD) works with the Committee on Economic and Professional Affairs to provide chemical professionals with the tools to manage their careers. Their website (www.chemistry.org/careers) offers a wide variety of ACS resources, which are free to all ACS members.

One resource is the career consultant program. The program matches members with consultants in their specialty and geographical area. The consultants provide career advice and insight.

The Online Book Club features monthly reviews of career development books and online discussions. The discussions are held once a month and facilitated by Dorothy Rodmann, an ACS Career Consultant and Workshop Presenter.

CMD has also developed a line of career materials especially for chemists. Topics include resume preparation, interviewing skills, and job-search strategies. “What a Technician Should Consider Before Accepting an Industrial Position” is being added to the line of “What a Chemist Should Consider...” brochures, and other materials are being updated with technician-specific features.

All ACS members have complete access to ACS career resources, regardless of background and position. However, it should be noted that the ACS Salary Comparator (an online tool for predicting salaries in a given area) cannot be used for chemical professionals with an associate’s degree. The data used for the Comparator is collected from the annual ACS salary survey, and there have not been enough respondents with associate’s degrees for a statistically significant sample.[‡]

[‡] Blake Aronson, ACS Technician Education Associate, has compiled a wide variety of technician salary and employment data. Contact 202-872-6108, b_aronson@acs.org for more information.

For more information on these and other ACS resources, contact:

William Shepherd, CEN-Chemjobs Manager, (202) 872-8065

Matthew McCloskey, CEN-Chemjobs Classified Advertising Manager, (610) 964-8061

David Harwell, Career Management and Development Assistant Director, (202) 872-6359

H. N. Cheng, Committee on Economic and Professional Affairs Chair, (302) 995-3505

Follow-up Activities

- Contact Dave Harwell or H.N. Cheng to have an ACS career resources presentation at your next meeting.
- Set up a career development workshop for students and/or mid-career chemical professionals.
- Using ACS career development literature as templates, collaborate on adapting the materials to match the industry requirements of your region.
- Support an update of the ACS Salary Comparator by encouraging chemical professionals with associate's degrees to complete the ACS salary survey.