

Program Report

[PROF 1 Employment agreements from an ACS member's perspective](#)

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Chemists work under a variety of formal employment agreements, from simple non-disclosure agreements, to non-compete provisions (e.g., limitations on future work by geographic area, chemical subject area, or both), to full union contracts. Part time or temporary employment agreements, in industry and academia, may also be formal, written contracts. This panel will discuss benefits and disadvantages of employment agreements, from a variety of perspectives -- attorney, corporate manager, union official, and university professor. (The discussion is aimed at non-lawyers).

[PROF 2 Employment agreements from an attorneys' perspective](#)

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Abstract text not available.

[PROF 3 Employment agreements from a university professor's perspective](#)

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Abstract text not available.

[PROF 4 Employment agreements from a senior manager's perspective](#)

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Abstract text not available.

[PROF 5 Employment agreements from a union official's perspective](#)

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Abstract text not available.

[PROF 6 Career survival strategies in a new decade](#)

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In today's employment world, corporate restructuring seems to be a continuous process. This has led to continuously changing career paths in many companies. Opportunities can develop for jobs that didn't exist a month ago. You must be prepared to take advantage of these opportunities. R&D chemists, engineers and technicians can no longer expect to spend most of their careers working in one type of job, for a single employer or in one area of technology. These changes in career environment require that chemical professionals devote more effort to career management whether or not they plan to change jobs in the near future. This poster will describe career tactics professionals can take to enjoy more rewarding chemistry careers. Ideas and information presented in this poster are drawn in part from the presenter's book "Career Management for Scientists and Engineers" published this year by Oxford University Press - USA/ACS Books.

[PROF 7 Chemistry in electronics: A non-traditional career](#)

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Chemists tend to think only in terms of chemical companies and chemically oriented businesses when they look for employment. This poster describes chemical work in the electronics industry and the job opportunities to be found within a variety of electronic businesses.

PROF 8 Data mining a chemistry career

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Today's reality is that chemists work across a broad spectrum of occupations for an ever-increasingly broad spectrum of employers. The rapid changes in professional chemical employment over the past decade are only harbingers of more change to come. Therefore, chemists need to be aware of the many sources available to them to look at where they have been working and where they are headed in the near future.

Many sources on current employment and employment trends are available for chemists that aid them in managing their own careers. From data-gathering to Web presentations, ACS offers a wide range of information on the employment of chemists. In addition, federal statistics on chemistry degrees, current status, and future employment are better than ever with coordination between federal agencies high. Even more data is available to chemists who know where to look and how to look for changes in professional chemistry employment.

PROF 9 What will the chemistry professional of tomorrow be expected to do?

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The employment of chemical professionals has changed dramatically during the past decade. Traditional employers of chemical professionals have given way to new fields, new types of employers, and new enterprises, both within and beyond chemical research. The same technologies that have changed the American economy in a myriad of ways have significantly changed the ways chemists and their employers do business.

New skills, not historically developed in science programs, will be required for success. Large-scale trends toward team endeavors, the flattening of management, and broader job responsibilities will require new skills and abilities. The only sure constant in tomorrow's careers will be constant change. Chemists will need to apply all the ingenuity and intelligence that they use in their study of chemistry to managing their careers as professionals. Chemistry departments and their faculty can play an important role in preparing these graduates to face the new realities.

PROF 10 Chemistry - Present at the creation

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Abstract text not available.

PROF 11 NSF's education programming: Past, present, and future

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From its inception in 1950, the National Science Foundation has devoted attention to both research and

education. The organic Act authorizes undergraduate scholarships and graduate fellowships. In 1972 the Congress further authorized and directed the Foundation to strengthen science education programs at all levels. The Foundation currently has more than 30 programs within the Directorate for Education and Human Resources as well as education-focused programs in other directorates. This talk will provide a brief history of the educational activities of the Foundation with a focus on the pivotal undergraduate level. Future trends will also be discussed.

PROF 12 From URP to REU: Four decades of educating undergraduates in research

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Abstract text not available.

PROF 13 Example of a research program supported by the NSF

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With the passage of HR 3007 in late 1998, there is a renewed focus on the advancement of women and minorities in science. Two concerns of the overall problem are that (1)the pool of scientists in the US must be increased and (2)the number of women and minorities has increased only slightly over the last two decades, much less than expected. With the latter so low, there remains about half of our population as an untapped source of scientists. Therefore, a logical solution to both problems is to increase women and minority scientists. One way NSF helps to accomplish this is by funding research of women and minority graduate students and faculty at critical career stages so they can succeed and serve as role models for junior women and minority students. However, in order for this interaction to be successful it is essential to have an appropriate environment, or junior women and minorities may be influenced to choose different careers which promise more hospitable surroundings.

Research in organic chemistry which was supported by NSF at critical career stages will be presented.

PROF 14 Experimental program to stimulate competitive research (EPSCoR)

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Abstract text not available.

PROF 15 Planting the seed for future generations: The role of the National Science Foundation in educating pre-service teachers

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Abstract text not available.

PROF 16 Chemical Instrumentation Program at the National Science Foundation

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Abstract text not available.

PROF 17 National Science Foundation's response to Sputnik

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In 1957 following Russia's launch of Sputnik, the United States was stunned into increasing emphasis on science and research. One way to accomplish this was by increasing the available pool of scientists and engineers. The National Science Foundation responded to this national thrust by initiating new programs designed to attract more high school students into entering the fields of science and engineering. One of these programs, the National Science Foundation Highschool Institutes had a dramatic effect on career decisions for those students who participated in the program. One such program, the 1959 Oklahoma Highschool Institute was particularly successful. The format and follow-up of this program will be discussed.

PROF 18 NSF and ACS: Partners in educational progress

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Abstract text not available.

PROF 19 Community colleges and the NSF, an early support plan

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Abstract text not available.

PROF 20 How NSF has influenced my professional career

M. Elizabeth Derrick, Chemistry Department, Valdosta State University, Valdosta, GA 31698, Fax: 912-333-7389, bderrick@valdosta.edu

The influence of NSF on my professional career from my days as the daughter of college professors, who received NSF grants, through graduate school to professor and recipient of an NSF Visiting Professorship for Women Grant will be discussed. As a professional chemist at small to modest sized state institutions these influences have been significant.
