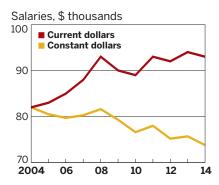
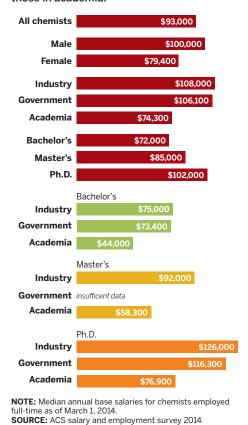
WAGES Salaries adjusted for inflation resumed their long-term downward trend in 2014.



NOTE: Median annual base salaries for chemists employed full-time as of March 1 each year. SOURCES: Annual ACS salary and employment surveys, Bureau of Labor Statistics (Consumer Price Index data)

"Salaries for ACS member chemists in the U.S. have not kept up with inflation and therefore continue to lose ground in terms of buying power."

MEDIAN BASE SALARIES Industry and government salaries are far higher than those in academia.



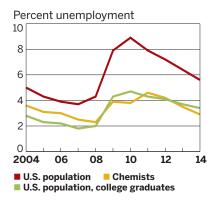
ACS members in the U.S. workforce ...

... who work in industry:

who are female:

UNEMPLOYMENT Chemists

and other college graduates fare significantly better than the broader U.S. population.



NOTE: Data are for March each year and exclude those fully retired or otherwise not seeking employment. U.S. population data are for ages 25 and older. SOURCES: Annual ACS salary and employment surveys, Bureau of Labor Statistics

2014 SALARIES & EMPLOYMENT

Unemployment fell but SALARIES DIDN'T BUDGE, according to survey of ACS members SOPHIE L. ROVNER, C&EN WASHINGTON

UNEMPLOYMENT IS EASING in the U.S. economy as a whole, and that trend is reflected in the chemical sector, according to the latest figures compiled by the American Chemical Society. "The unemployment rate of our domestic chemistry workforce is once again under 3.0%, as it was prior to the economic downturn of 2008-09," notes Elizabeth C. McGaha, assistant director of ACS's Research & Brand Strategy (RBS) department, which collects the data.

"It's good news that the drop in unemployment isn't solely related to people taking part-time or postdoctoral work," says Steven Meyers, assistant director of ACS's Career & Professional Advancement department. Instead, the decrease in the

fraction of ACS member chemists who are actively seeking work is "attributable to growth in full-time employment, which suggests that positions with at least 35 hours of work per week are absorbing those individuals transitioning into the workforce."

Unfortunately, the improving jobs situation hasn't bolstered wages: "Salaries have still not begun to rebound to prerecession levels," McGaha says. Even worse, "salaries for ACS member chemists in the U.S. have not kept up with inflation and therefore continue to lose ground in terms of buying power. While this is not unique to the chemical labor market, it is still a concern."

These findings come from the 2014 Comprehensive Salary & Employment Survey of ACS members in the workforce, which ran from March through early May this year. RBS conducted and analyzed the survey in a project headed by Gareth S. Edwards and guided by the ACS Committee on Economic & Professional Affairs.

The survey was sent to a random sample of almost 37,000 ACS members under the age of 70. The sample excluded student, emeritus, and retired members, as well as members living outside the U.S. The survey recipients returned nearly 8,400 complete responses, for a response rate of 23%.

The survey asked members about their status as of March 1, 2014. Some of the survey results reported in this article are based on answers from all respondents; those

data shed light on the demographics of the ACS membership as a whole. Other reported results focus on ACS members who are in the chemical workforce and exclude members who work in other fields, such as chemical engineering, business adminis-

tration, computer science, and law. In each table in this article. the headline and footnote indicate the group whose data are presented. In some cases, data differ among tables because some respondents didn't answer all the questions.

Some 91.9% of chemists who responded to this year's survey indicated they were employed full-time, the highest level in six years. Over the past decade, full-time employment peaked at 92.5% in 2008—early in the Great Recession-and bottomed out at 88.1% in 2010.

Only 2.8% of chemists were working part-time as of March, compared with 3.9% in 2008 as well as in 2010, the most recent peak year.

The fraction of responding chemists working in postdoctoral positions has also bounced up and down. After topping out at 4.2% in 2010, the fraction dipped to 1.9% in 2011, then rose again before settling at 2.3% this year.

The fraction of chemists who were unemployed but looking for a job maxed out at 4.6% in 2011 and has now receded to 2.9%, the lowest level since 2008, when the rate was 2.3%.

That trend seems reassuring, although "it is certainly possible that small numbers of very longterm unemployed chemical scientists and engineers have given up on the job search or moved into non-chemistry-related fields" and therefore don't show up in the numbers, Meyers says. "Those who have been out of work for a while and have few resources to receive further education or training will eventually take a nonideal position that at least keeps a paycheck coming in, even if it means being underemployed. Once that happens, it becomes more difficult to reenter the chemistry market.

We know that some individuals are unfortunately in this regrettable situation; we just don't have a way to measure how large their numbers are."

For chemists whose data are captured by ACS, the overall unemployment rate

SALARIES OF CHEMISTS

Salaries slipped in several categories

		2013-14		
2013a	2014	\$ CHANGE	% CHANGE	
\$96.0	\$95.0	-\$1.0	-1.0%	
75.0	74.9	-0.1	-0.1	
87.0	85.8	-1.2	-1.4	
104.0	103.0	-1.0	-1.0	
102.0	102.0	0.0	0.0	
80.1	80.4	0.3	0.4	
109.8	110.0	0.2	0.2	
106.4	108.0	1.6	1.5	
75.0	75.0	0.0	0.0	
95.0	93.0	-2.0	-2.1	
109.0	117.0	8.0	7.3	
88.2	94.4	6.2	7.0	
71.0	72.0	1.0	1.4	
94.1	89.5	-4.6	-4.9	
53.5	54.0	0.5	0.9	
75.4	75.8	0.4	0.5	
96.0	96.3	0.3	0.3	
110.0	112.2	2.2	2.0	
111.5	115.0	3.5	3.1	
	95.0 104.0 102.0 80.1 109.8 106.4 75.0 95.0 109.0 88.2 71.0 94.1 53.5 75.4 96.0 110.0	\$96.0 \$95.0 75.0 74.9 87.0 85.8 104.0 103.0 102.0 102.0 80.1 80.4 109.8 110.0 106.4 108.0 75.0 75.0 95.0 93.0 109.0 117.0 88.2 94.4 71.0 72.0 94.1 89.5 53.5 54.0 75.4 75.8 96.0 96.3 110.0 112.2	2013a 2014 \$ CHANGE \$96.0 \$95.0 -\$1.0 75.0 74.9 -0.1 87.0 85.8 -1.2 104.0 103.0 -1.0 102.0 102.0 0.0 80.1 80.4 0.3 109.8 110.0 0.2 106.4 108.0 1.6 75.0 75.0 0.0 95.0 93.0 -2.0 109.0 117.0 8.0 88.2 94.4 6.2 71.0 72.0 1.0 94.1 89.5 -4.6 53.5 54.0 0.5 75.4 75.8 0.4 96.0 96.3 0.3 110.0 112.2 2.2	

NOTE: Median annual base salaries for chemists who were employed full-time as of March 1 of each year and who had not changed jobs over the prior year. **a** Revised. SOURCES: Annual ACS salary and employment surveys

EMPLOYMENT STATUS OF CHEMISTS

Full-time employment reached highest level in six years

		OTHER THAN FULL-TIME EMPLOYMENT							
		UNEMPLOYED/							
				SEEKING					
	FULL-TIME	PART-TIME	POSTDOC	EMPLOYMENT	SUBTOTAL				
2004	90.9%	3.6%	1.9%	3.6%	9.1%				
2005	90.8	4.1	2.0	3.1	9.2				
2006	91.3	3.4	2.3	3.0	8.7				
2007	92.3	3.6	1.7	2.4	7.7				
2008	92.5	3.9	1.3	2.3	7.5				
2009	90.3	3.2	2.5	3.9	9.6				
2010	88.1	3.9	4.2	3.8	11.9				
2011	89.7	3.7	1.9	4.6	10.3				
2012	90.0	3.1	2.6	4.2	10.0				
2013	91.1	2.7	2.7	3.5	8.9				
2014	91.9	2.8	2.3	2.9	8.0				

NOTE: Employment of chemists as of March 1 of each year. Excludes those fully retired or otherwise not seeking employment. Totals may not add to 100% because of rounding. **SOURCES:** Annual ACS salary and employment surveys

obscures wide variability linked to degree level and experience. For example, the society conducts a separate survey of new chemistry graduates that shows that the unemployment rate for students who graduated between July 2012 and June 2013

> has risen to 14.9% (C&EN, June 2, page 28). "As a rule," Meyers says, "those with more experience and additional degrees tend to have better outcomes in any job search."

That statement is borne out by data from the comprehensive survey. Just 2.2% of ACS member chemists with Ph.D.s-who account for roughly two-thirds of survey respondents—are seeking employment, down from 3.0% a year ago. But among chemists with a master's or bachelor's degree (categories that each account for about half of the remaining survey responses), some 4.6% and 4.2%, respectively, are unemployed and looking for a job. Those figures stood at 4.7% and 4.6% last year.

DESPITE THE DISCREPANCY

in the extent of unemployment, Ph.D.s are sharing the same fate as their colleagues in terms of wage increases. For all three degree levels, median wages this March were essentially the same as last year. The median salary for chemists with a doctorate was \$102,000, for those with a master's degree was \$85,000, and for those with a bachelor's degree was \$72,000 (see salary trends table on page 71).

But the story gets worse: These findings are stated in socalled current dollars, and therefore don't account for changes in the cost of living. Calculating salaries in constant dollars—a practice that eliminates the effects of inflation—shows that chemists at all degree levels continue to lose ground with respect to the rising cost of living.

Between 2013 and 2014, salaries adjusted for inflation fell 1.5% for each of the three degree levels. Looking at the data in the longer term highlights stark trends in chemists' purchasing

power. Compared with a decade ago, median salaries have shrunk 11.7% for Ph.D.s, 6.8% for chemists with M.S. degrees, and 7.9% for those with bachelor's degrees, in terms of constant dollars.

Reverting to current dollars, and limiting the pool to chemists working full-time who had not changed jobs during the prior year, median salaries fell 0.1% for bachelor's-level chemists, 1.4% for those with a master's degree, and 1.0% for Ph.D.s between 2013 and 2014. These declines don't mean that salaries of individual chemists are being cut, Edwards explains. Instead, the declines arise because a different of pool of respondents answers the survey each year, and the median salaries of this year's pool are lower than those of last year's respondents, revealing overall salary trends for chemists.

Many other dissimilarities emerge when the ACS survey responses are broken into other subgroups. For instance, the results show that industry and government continue to pay chemists far better than academia, on average. Approximately half of responding member chemists work in industry; their median pay in March was \$108,000. Less than 10% work in government, and they made a median salary of \$106,100. By contrast, the median salary for academics, who account for most of the remainder of the responding chemists, was a mere \$74,300.

Large differences also show up in other subcategories. For example, male chemists reported a median salary of \$100,000 as of March, whereas women reported a median salary of \$79,400.

There's a similarly wide gap between the pay of chemists and chemical engineers. As of this March, the median salary for chemical engineers who are members of ACS was \$114,900—some 23.5% higher than the median salary for chemists. The gulf between engineers and chemists is most striking for the youngest workers. In the 20-29 age group, median pay for chemical engineers was 44.0% higher than that for chemists.

The disparity is also particularly large in academia, where chemical engineers earned 34.6% more than chemists. In industry, the difference was 11.1%, and in the government

& DATA ONLINE

More results from the ACS salary and employment survey-including interactive graphics—can be found at http://cenm.ag/2014salary.

ACS members can obtain further information about salaries and employment at www.acs.org/salary. Resources on the website include the ACS Salary Calculator and the ACS Employment Dashboard. Members can use the calculator to find salary data for specific categories of chemists by using filters such as degree level, years since earning a degree, field, and other factors. The dashboard provides highlights of survey results, including salary; employment status; and demographic data broken down by year, employer category, degree level, and geographic region.

Career resources for unemployed ACS members can be found at www. acs.org/unemployed. The society also offers career consulting and other services for members at www.acs.org/ careernavigator.

sector, engineers made a median salary that was 8.1% above the pay of chemists.

In terms of fields of chemistry, organic, analytical, and physical chemistry are once again the leading sectors in which employed ACS members who responded to the survey earned their highest degree. These subjects accounted for 21.8%, 11.3%, and 11.1%, respectively, of employed respondents' terminal degrees. Men earned the majority of the terminal degrees in most fields, but women members earned 50% or more of the terminal degrees in a few subjects, including chemical education.

Work specialties don't always align with chosen degree field. The most popular work specialties are analytical chemistry, employing 14.5% of ACS members, followed by organic chemistry at 11.0%. Chemical education at 8.2% and medicinal and pharmaceutical chemistry at 8.1% are the other sectors that employ a sizable fraction of members. Chemical education and general chemistry are the only fields in which women members hold more than 40% of the jobs.

OVER THE PAST few years, employment of ACS members has risen in agricultural and food chemistry as well as specialty and fine chemicals and coatings, paints, and inks, Meyers says. "These areas of growth have made up for some of the continued losses in

the pharmaceutical and medical device industries," he adds. "Another area of encouraging outlook is the service sector, where we've seen increases in the year-over-year numbers in analytical testing and other professional services related to science, engineering, and the law."

The ACS survey collects additional information beyond salary and employment status. For instance, responses indicate that 30.8% of members are women. Some 85.6% of members are white, and 9.7% are Asian. And 79.5% are native born, whereas 11.2% are naturalized citizens.

Each year, the survey also includes a group of topical questions; this time, those questions focused on health care benefits. "By and large, ACS members working in the domestic labor market are covered by health insurance,"

ACS MEMBERS BY HIGHEST DEGREE

Apart from gender, diversity increased with degree level

	BACHELOR'S	MASTER'S	PH.D.	TOTAL
BY GENDER				
Men	64.2%	59.5%	72.4%	69.2%
Women	35.8	40.5	27.6	30.8
BY EMPLOYER				
Industry	83.4	67.2	42.2	52.3
Government	7.8	8.2	7.4	7.5
Academia	7.5	22.9	49.2	38.9
Self-employed	1.3	1.7	1.2	1.3
BY CITIZENSHIP				
Native born	94.8	89.1	74.1	79.5
Naturalized	4.1	7.2	13.6	11.2
Permanent resident	0.9	2.8	9.3	7.0
Other visa	0.2	0.9	3.0	2.3
BY RACE				
American Indian	0.3	0.3	0.1	0.2
Asian	2.6	5.9	12.1	9.7
Black	2.8	2.6	2.0	2.2
White	91.0	88.4	83.8	85.6
Other	3.3	2.7	1.9	2.2
BY ETHNICITY				
Hispanic	4.2	3.4	3.5	3.6

NOTE: Data for ACS members as of March 1, 2014. Totals may not add to 100% because of

SOURCE: ACS salary and employment survey 2014

McGaha says. "While that's very good news, about one-third of ACS member chemists have experienced changes in their coverage due to recent legislation, resulting most often in higher costs and less coverage."

LOOKING AHEAD, the employment situation for chemists seems promising. According to the American Chemistry Council, the year-over-year change in the chemistry production outlook for countries in the developed world is 2.4% for 2014 and at least 3.8% for the foreseeable future, after growth of less than a percent in the past three years, Meyers says. "Production ramping up in the chemical enterprise is translating into reductions in the number of job seekers, and if ACC's forecast holds true,

these employment trends should continue."

Meyers suggests that chemists can improve their chances of landing a job by building their networks, improving their CVs, working on their search strategies, and managing their online presence. "Before it becomes possible to showcase your technical prowess, you must first sell yourself to get the hiring manager to pay attention to what you have to say," he explains.

And new graduates can "stand out from among the crowd of job seekers by showing that they have hands-on research or work experience beyond what was assigned in the classroom," Meyers advises.

He also recommends continuing education and training to "remain germane to the careers of the future," as well as working with colleagues across a diverse set of functions. These experiences can help employees do their job better, learn where their institution and industry are headed, and build a portfolio of relevant skills.

"Many employers are also seeking individuals with experience working across borders," Meyers says. "This doesn't mean that a chemist needs to spend time working or schooling abroad—although that may help. It means that experience collaborating with varied cultures and seeing issues from the viewpoints of others is very desirable to employers."

Oftentimes, he adds, "many people have the same base skill set, so it is the small differences in experience and execution that make a candidate stand out." ■

SALARY TRENDS FOR CHEMISTS

Removing the effects of inflation shows that salaries for many chemists are much lower now than they were a decade ago

	BACH	IELOR'S	MAS	TER'S	PH.D.		ALL CHEMISTS	
\$ THOUSANDS	CURRENT \$	CONSTANT \$	CURRENT \$	CONSTANT \$	CURRENT \$	CONSTANT \$	CURRENT \$	CONSTANT \$
2004	\$62.0	\$62.0	\$72.3	\$72.3	\$91.6	\$91.6	\$82.0	\$82.0
2005	63.0	61.1	74.0	71.7	93.0	90.2	83.0	80.5
2006	65.2	61.2	77.5	72.7	95.0	89.1	85.0	79.7
2007	69.7	63.6	80.0	73.0	96.7	88.2	88.0	80.3
2008	73.0	64.1	82.0	72.0	101.0	88.6	93.0	81.6
2009	66.7	58.8	81.0	71.4	100.0	88.1	90.0	79.3
2010	69.8	60.1	80.0	68.9	98.0	84.4	89.0	76.6
2011	72.0	60.4	85.0	71.3	102.0	85.5	93.0	78.0
2012	73.9	60.4	85.0	69.4	100.6	82.2	92.0	75.2
2013	72.0	58.0	85.0	68.4	102.0	82.1	94.0	75.7
2014	72.0	57.1	85.0	67.4	102.0	80.9	93.0	73.8
AVERAGE ANNUAL SALARY CHANGE								
2013-14	0.0%	-1.5%	0.0%	-1.5%	0.0%	-1.5%	-1.1%	-2.5%
2004-14	1.5	-0.8	1.6	-0.7	1.1	-1.2	1.3	-1.1

NOTE: Median annual base salaries for chemists employed full-time as of March 1 of each year. Consumer Price Index rose 1.5% from March 2013 to March 2014 and an average of 2.3% annually from March 2004 to March 2014. Constant dollars are calculated using 2004 as the base year SOURCES: Annual ACS salary and employment surveys, Bureau of Labor Statistics (Consumer Price Index data)

INDUSTRIAL CHEMISTS' SALARIES BY EXPERIENCE AND GENDER

Women's salaries surpassed men's for chemists who earned their bachelor's degree or Ph.D. five to nine years ago

	BACHELOR'S			BACHELOR'S MASTER'S					PH.D.	
YEARS SINCE	(IN THOU	JSANDS)	WOMEN AS %	(IN THOU	JSANDS)	WOMEN AS %	(IN THO	USANDS)	WOMEN AS %	
BACHELOR'S DEGREE	MEN	WOMEN	OF MEN	MEN	WOMEN	OF MEN	MEN	WOMEN	OF MEN	
2–4	\$50.0	\$43.1	86%	id	id	na	na	na	na	
5–9	57.8	60.0	104	\$73.0	\$64.0	88%	\$83.0	\$92.0	111%	
10-14	68.0	63.1	93	81.5	73.0	90	100.0	99.9	100	
15-19	82.0	81.5	99	96.3	82.5	86	118.0	113.5	96	
20-24	85.5	81.1	95	96.0	94.0	98	130.0	133.5	103	
25-29	103.0	87.4	85	113.0	95.5	85	137.8	135.0	98	
30-34	97.8	92.0	94	112.0	101.2	90	143.0	129.2	90	
35–39	105.3	106.5	101	111.5	108.0	97	147.0	139.0	95	
40 or more	106.1	id	na	124.5	id	na	147.8	94.3	64	

NOTE: Median annual base salaries for industrial chemists employed full-time as of March 1, 2014. id = insufficient data. na = not applicable. SOURCE: ACS salary and employment survey 2014

ACS MEMBERS IN THE WORKFORCE

Ph.D.s and those working in academe continued to increase their share of membership

	1995	2000	2005	2010	2012	2013	2014
BY DEGREE							
Bachelor's	24.3%	22.1%	19.9%	17.7%	17.1%	17.0%	15.9%
Master's	16.9	17.4	17.0	17.9	16.6	15.6	14.6
Ph.D.	58.8	60.5	63.1	64.4	66.3	67.3	69.5
BY GENDER							
Men	78.5	75.8	74.9	71.5	70.7	70.2	69.2
Women	21.5	24.2	25.1	28.5	29.3	29.8	30.8
BY EMPLOYER							
Industry	65.5	64.7	62.0	52.7	56.2	54.3	52.3
Government	7.9	6.9	7.4	7.3	7.4	7.6	7.5
Academia	25.1	26.4	28.8	32.1	34.9	36.5	38.9
Self-employed	1.4	2.0	1.8	7.9	1.6	1.6	1.3
BY CITIZENSHIP							
Native born	82.3	79.5	79.8	76.0	78.2	79.9	79.5
Naturalized	8.5	10.2	10.2	13.1	11.4	10.9	11.2
Permanent resident	7.1	6.9	6.5	8.0	7.2	6.9	7.0
Other visa	2.1	3.4	3.5	3.0	3.2	2.4	2.3
BY RACE							
American Indian	0.2	0.2	0.2	0.2	0.3	0.2	0.2
Asian	10.3	11.1	10.9	12.8	10.9	10.1	9.7
Black	1.4	1.9	1.9	2.2	2.4	2.5	2.2
White	85.8	85.5	85.8	81.0	83.4	85.3	85.6
Other	2.3	1.3	1.2	3.8	2.9	1.9	2.2
BY ETHNICITY							
Hispanic	2.3	2.5	2.6	3.3	3.4	3.7	3.6
MEDIAN AGE (YEARS)	43.3	44.7	47.0	49.0	48.0	48.0	48.0

NOTE: Data for ACS members as of March 1 of each year. Totals may not add to 100% because of rounding.

SOURCES: ACS censuses, annual ACS salary and employment surveys

ENGINEERS AND CHEMISTS

Only for Ph.D.s did chemists' salaries come anywhere near engineers'

\$ THOUSANDS	CHEMICAL ENGINEERS	CHEMISTS	CHEMISTS AS % OF CHEMICAL ENGINEERS
ALL	\$114.9	\$93.0	81%
BY DEGREE			
Bachelor's	97.5	72.0	74
Master's	120.0	85.0	71
Ph.D.	118.1	102.0	86
BY EMPLOYER			
Industry	120.0	108.0	90
Government	114.7	106.1	93
Academia	100.0	74.3	74
BY AGE			
20-29	75.0	52.1	69
30-39	97.3	75.1	77
40-49	117.0	96.2	82
50-59	137.1	112.0	82
60-69	136.5	114.0	84

NOTE: Median annual base salaries as of March 1, 2014. **SOURCE:** ACS salary and employment survey 2014

ACADEMIC SALARIES BY GENDER

Salaries of women surpassed those of men in several categories

	NINE- TO 10-MONTH CONTRACTS				
\$ THOUSANDS	MEN	WOMEN	WOMEN AS % OF MEN		
BACHELOR'S DEGREE-GRANTING SCHOOLS	IVIEN	WOWEN	90 OF MEN		
Full professor	\$84.6	\$76.8	91%		
Associate professor	65.6	63.0	96		
Assistant professor	56.0	53.8	96		
MASTER'S DEGREE-GRANTING SCHOOLS					
Full professor	94.9	99.6	105		
Associate professor	70.8	76.5	108		
Assistant professor	64.5	60.0	93		
PH.DGRANTING SCHOOLS					
Full professor	133.0	120.0	90		
Associate professor	86.5	91.3	106		
Assistant professor	77.4	79.0	102		

NOTE: Median salaries for ACS members in academe as of March 1, 2014. **SOURCE:** ACS salary and employment survey 2014

ACS MEMBERS BY DISCIPLINE AND GENDER

Gender balance came closest in education jobs

	BY HIGHE	ST DEGREE	BY WORK SPECIALTY		
DISCIPLINE	TOTAL	% WOMEN	TOTAL	% WOMEN	
Agricultural/food chemistry	0.9%	38.0%	2.6%	30.3%	
Analytical chemistry	11.3	34.3	14.5	34.8	
Biochemistry	8.1	38.6	5.6	39.6	
Biotechnology	0.5	34.2	3.4	28.8	
Chemical education	1.6	51.9	8.2	47.5	
Chemical engineering	6.2	20.0	4.8	17.2	
Environmental chemistry	2.4	33.0	4.9	33.6	
General chemistry	9.5	39.8	3.0	43.0	
Inorganic chemistry	9.7	26.4	3.9	24.9	
Materials science	1.5	31.9	5.9	25.0	
Medicinal/pharmaceutical chemistry	2.1	28.3	8.1	23.9	
Nanochemistry	0.4	31.3	0.9	27.1	
Organic chemistry	21.8	23.8	11.0	24.0	
Physical chemistry	11.1	31.5	5.9	26.3	
Polymer chemistry	3.0	32.4	5.4	22.0	
Other chemical sciences	1.9	34.9	2.6	33.8	
Business administration	1.3	28.7	1.5	19.0	
Computer science	id	id	0.6	id	
Law	id	id	1.0	35.4	
Other nonchemistry	6.2	32.4	5.7	39.1	

HOW TO READ THIS TABLE: Of ACS members employed full- or part-time, 0.9% had their highest degree in agricultural/food chemistry, and 38.0% of those were women; 2.6% worked in agricultural/food chemistry, and 30.3% of those were women. **id** = insufficient data

data. **SOURCE:** ACS salary and employment survey 2014

INDUSTRIAL SALARIES

Chemists working in management and in forensics earned some of the highest salaries

\$ THOUSANDS	BACHELOR'S	MASTER'S	PH.D.
BY WORK FUNCTION			
Analytical services	\$71.6	\$90.0	\$120.0
Chemistry information services	78.0	104.1	109.5
Computer programming, analysis,	118.8	108.0	130.8
design			
Consulting	76.0	128.9	120.4
Forensic analysis	75.0	na	154.8
Health and safety, regulatory affairs	87.0	90.0	134.2
Management: general (non-R&D)	109.0	133.0	174.1
Management: R&D	125.0	116.9	154.0
Marketing/sales	90.5	121.4	120.8
Patents, licensing, trademarks	114.1	88.0	150.0
Production, quality control	71.1	89.5	122.8
Research: applied	75.0	92.0	125.0
Research: basic	68.0	81.0	129.8
Teaching or training	95.3	96.5	97.8
BY SIZE OF EMPLOYER			
Fewer than 50	66.0	77.5	112.0
50 to 99	65.0	103.5	126.5
100 to 499	72.0	89.5	122.0
500 to 2,499	72.9	84.0	120.0
2,500 to 9,999	74.9	98.3	128.0
10,000 to 24,999	79.0	99.8	129.1
25,000 or more	90.0	99.0	135.2
ALL	\$77.5	\$96.2	\$130.0

NOTE: Median annual base salaries for industrial chemists employed full-time as of March 1, 2014. **na** = not applicable. **SOURCE:** ACS salary and employment survey 2014