2007 Salaries Survey

Analysis of the American Chemical Society's 2007 Comprehensive Salary and Employment Status Survey

American Chemical Society
Committee on Economic and Professional Affairs

Salaries 2007

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2007 Comprehensive Salary and
Employment Status Survey

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Washington, DC 20036

Available from the ACS Office of Society Services

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Acknowledgements

This report presents detailed results of the 2007 ACS Comprehensive Salary and Employment Status Survey. The ACS Committee on Economic and Professional Affairs and its Subcommittee on Surveys planned and provided general oversight of the survey and its analysis. The committee extends its heartfelt appreciation to those who agreed to participate in this survey. The committee would also like to extend its appreciation to the development team. Jeffrey Allum, research manager, and Gareth Edwards, research associate in ACS's Department of Member Research and Technology led the survey design process and produced the detailed tables. Paul Nentwig and his team at Intelliscan, Inc. implemented the survey. This report was written by Gareth Edwards. Blake Stenning of Pittny Creative designed the report. Eric Stewart provided copyediting services.

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and Technology

Summary and Comments

Results from the annual ACS Comprehensive Salary and Employment Status Survey indicate that salaries for chemists have leveled off after several years of moderate growth. In 2007, reported salaries for chemists rose at or below inflation. Unemployment dropped to 2.4 percent – the lowest reported rate since 2001. This indicates improving employment and perhaps an uptick in demand for chemists in recent years.

ALL CHEMISTS

The median salary for all chemists responding to the ACS 2007 membership survey was $89,000 in 2007. While this represents an increase of $2,500 from 2006 salaries ($86,500), it barely compensates for the inflation rate of 2.8%. In constant dollar terms, the salaries of all chemists only rose by 0.1% during the year. So while unemployment seems to be on the decline, the purchasing power of chemists is struggling to keep par with inflation, a fact reflected in Michael Heylin's in *Chemical & Engineering News* regarding the 2007 salary data. At best, increased employment paired with stagnating wages creates a mixed message regarding the economy for chemists.

As Table 1 shows, there was almost no difference in the percentage of salary change by level of degree in 2007. Almost all degree levels saw real wage increases of about 2.6%. But this only serves as a possible indicator of a trend towards wage stagnation, or possibly the resurgence of stagflation. Not every respondent indicated his or her degree. So, although wages increased by an average of 2.9 among all chemists responding to the survey, the reported salary increases among only those who reported degrees were slightly lower, averaging 2.6 for each degree category. The median doctorate salary was $98,500 in 2007 compared to $96,000 in the preceding year, representing a decrease of 0.2% after adjusting for inflation. Chemists at other degree levels all saw similar wage changes. Those whose highest degree is a bachelor's reported a median salary of $68,000. This is 2.6% higher than last year but about 0.2% lower than inflation. Master's recipients earned $80,000 in 2007, an increase from $78,000.

TABLE 1. CHANGE IN ALL CHEMISTS' SALARIES, 2006–2007

Degree	Median Salary 2007 (2006)		% Change from 2006 In Current Dollars	% Change from 2006 In Constant Dollars (2.8% rate of inflation)
Total	$89,000	(86,500)	up 2.9	up 0.1
Bachelor's	$68,000	(66,300)	up 2.6	down 0.2
Master's	$80,000	(78,000)	up 2.6	down 0.2
Doctorate	$98,500	(96,000)	up 2.6	down 0.2

INDUSTRIAL/PRIVATE SECTOR CHEMISTS

In addition to level of education, sector of employment is a major factor determining the salaries of chemists. Those working in the private sector typically have the highest salaries.

Table 2 shows the reported median salaries of private sector chemists by degree level for 2006 and 2007. For all degree levels, salaries increased between $2,000 and $5,000 in the industrial sector. Proportionate to salary, this increase had the greatest impact for master's recipients and the smallest impact for holders of bachelor's and Ph.D.s. In particular, chemists sporting master's degrees received a real wage increase of 2.7%, growing from a median of $82,560 to $87,100.

TABLE 2. CHANGE IN INDUSTRIAL/PRIVATE SECTOR CHEMISTS' SALARIES, 2006–2007

Degree	Median Salary 2007 (2006)	% Change from 2005 In Constant Dollars	% Change from 2005 In Current Dollars (2.8% rate of inflation)
Bachelor's	$70,000 (67,966)	up 3.0	up 0.2
Master's	$87,100 (82,560)	up 5.5	up 2.7
Doctorate	$110,000 (108,000)	up 1.9	down 0.9

FIGURE 1. 2007 INDUSTRIAL CHEMISTS' SALARIES BY YEARS SINCE B.S./B.A. AND BY HIGHEST DEGREE

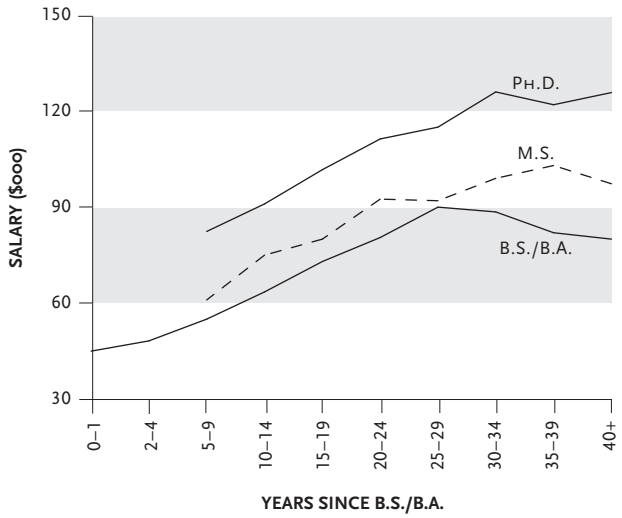


Figure 1 introduces another factor with a bearing on salary: amount of experience. As the number of years since earning a degree increases, salary generally rises as well. The pattern is similar for all levels of degrees. Master's salaries are slightly higher than bachelor's salaries. Ph.D. salaries are substantially higher; however, 30 years after earning a Ph.D., holders of doctorate degrees appear to reach their maximum earning potential, either falling or reaching a plateau.

ACADEMIC CHEMISTS

How do academic salaries compare with those of private sector employees? Table 3 shows the median salaries of Ph.D. chemists by faculty rank. Compared to private sector chemists, salary changes in academia were very erratic and ranged anywhere from rising 8.3% to dropping almost six percent. In particular, 9-to-10 month associate professors saw a wage increase of almost 8.3% from $60,000 to $65,000. This accounts for a real wage increase of 5.5%, a relatively large increase for one year. At the same time, these salaries for 11-to-12 month associate professors continued to drop. These salaries posted the biggest salary decrease among academics: from $82,000 in 2006 to $76,800 in 2007 (a 6.3% drop). Assistant professors at the 9-to-10 month level, on the other hand, experienced a wage increase from $52,045 to $53,000, a modest increase of 1.8%, but a real wage decrease of 1.0%. Meanwhile, salaries for those assistant professors at the 11-to-12 month level rose 3.2% to $65,000 (slightly above inflation).

Chemists with full professorships had a negative change in salaries at the 11-to-12 month employment level. While those paid by the academic year (9-to-10 months) earned more than the preceding year ($89,000 in current dollars, 0.1% greater than the rate of inflation), those paid for the entire calendar year reported a decrease to $119,200 in current dollars, or a decrease of 4.2%. The reason for this seeming discrepancy is not clear, although it could be due to a survey sampling, or a recent trend toward part-time professorship over full-time, or some unknown factor.

OTHER FACTORS INFLUENCING SALARY

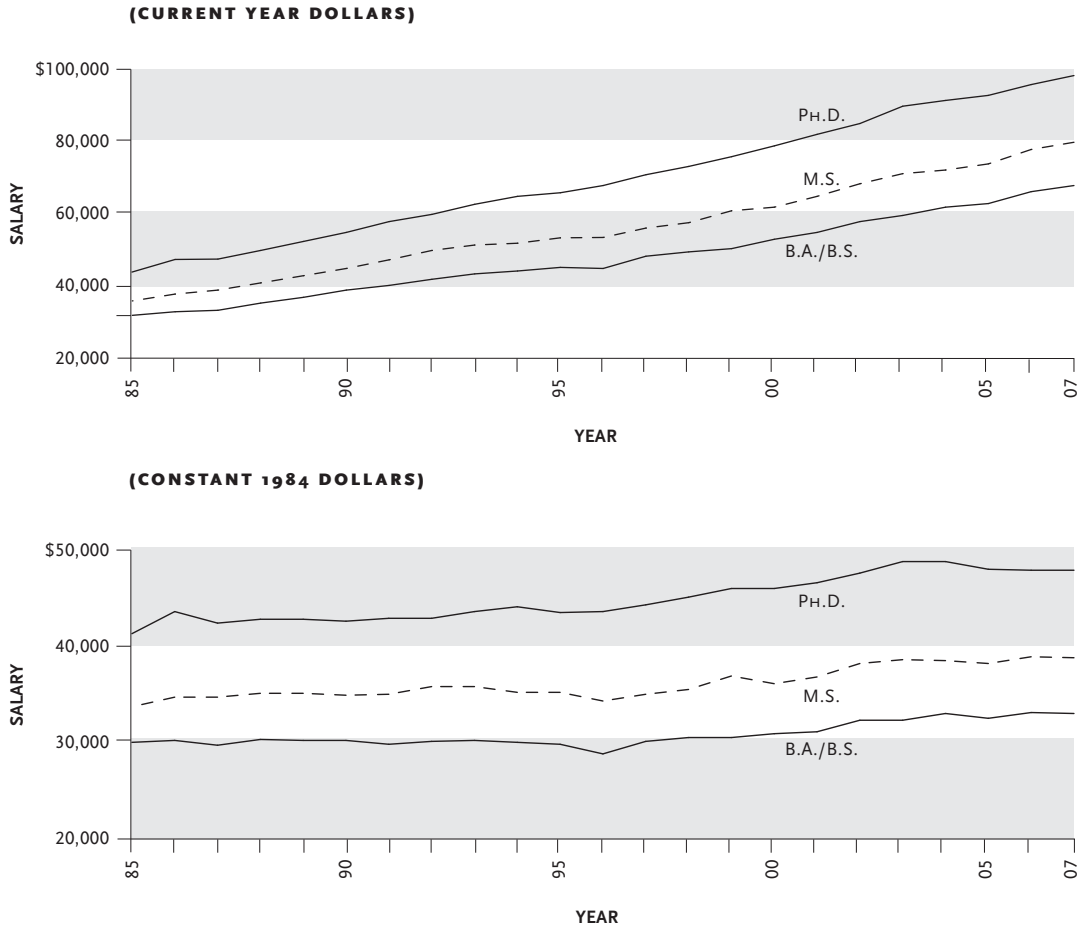
Tables 1, 2, and 3 offer an overview of salaries by degree level and employment sector. While these may be the most influential correlates of salary, a variety of other factors should also be considered.

TABLE 3. CHANGE IN PH.D. ACADEMIC CHEMISTS' SALARIES, 2006–2007

Rank/ Contract	Median Salary 2007 (2006)	% Change from 2006 In Current Dollars	% Change from 2006 In Constant Dollars (2.8% rate of inflation)
FULL 9/10	$89,000 (86,460)	UP 2.9	UP 0.1
FULL 11/12	$119,200 (124,477)	DOWN 4.2	DOWN 7.0
ASSOC 9/10	$65,000 (60,000)	UP 8.3	UP 5.5
ASSOC 11/12	$76,800 (82,000)	DOWN 6.3	DOWN 9.1
ASST 9/10	$53,000 (52,045)	UP 1.8	DOWN 1.0
ASST 11/12	$65,000 (63,000)	UP 3.2	UP 6.0

As Figure 1 shows, years of experience is particularly important. The tables in the appendix of this report offer a detailed breakdown of the current salary ranges for chemists by amount of experience within each degree level and employment sector (See Tables 1.1.1 to 1.1.3 in the Appendix). The appendix tables also compare salaries by the type of work performed. For instance, Table 2.3.1 shows that private sector chemists with master's degrees who worked as managers earned substantially more ($104,664 median) when compared to those performing analytical services ($80,000). Similar tables are available for other degree levels and employment sectors. These detailed data can be useful in evaluating one's current salary.

FIGURE 2. CHEMISTS' MEDIAN SALARIES IN CURRENT AND CONSTANT DOLLARS



TRENDS IN CHEMISTS' SALARIES

The median salaries of chemists have generally increased every year in constant dollars since 1984. Figure 2 displays the amount of the increase by degree level. As shown in the top half of this figure, salaries for chemists in current dollars have more than doubled over the last two decades. Within these increases, the differences between degree levels appear to have widened.

However, the lower half of Figure 2 puts the increases into context by showing median salaries in 1984 dollars, and indicates that chemist salaries have held relatively constant with inflation since 1985. For the past six to eight years, salaries have tended to beat inflation; now they appear to be stabilizing. This graph also shows that as time passes, salaries are not becoming particularly divergent according to levels of education. The salaries of master's recipients follow a very similar pattern to that of bachelor's.

Non-Salary Income

CONSULTING

Salary data do not provide a complete picture of the earning potential of chemists. A significant number of employers provide employees with yearly bonuses to supplement their salaries. Some chemists also seek freelance work outside of their primary employment. This section of the survey examines the additional income received by chemists in 2006.

Overall, 10.1% of chemists surveyed reported earning some income from consulting in 2006; this figure has risen since 2005, when only 8% of chemists did consulting. This freelance work contributed a median value of $8,430 to a worker's income. These additional funds may be particularly important to academics, many of whom do not receive paychecks during the summer. It is interesting to note that while more chemists are consulting, they are receiving less money than their 2005 counterparts (a median of $9,000). Over one in five (20.3%) college and university employees reported doing some consulting in 2006. The academic consultants charged a median of $125 an hour and earned $5,000 last year. While academia is the profession in which the greatest proportion of employees performs freelance work, it is not the sector that allows for the most profit. Private sector employees reported the largest income from contract work. Manufacturing chemists who freelanced in 2006 typically earned $8,100 doing so. Non-manufacturing private sector chemists earned a median of $50,000.

The hourly consulting rate appears to be determined by degree level and number of years of experience. Those whose highest degree is a bachelor's charged a median hourly rate of $100, while Ph.D.s charged $125; surprisingly, master's recipients charged a median of only $80. Ph.D.s were most likely to do consulting: 12.2% reported additional income in 2006. Age also appears to be correlated with hourly rate. The 2.1% of chemists in their twenties only charged about $50 an hour for the work performed. By comparison, those over age 60 charged $150 an hour.

TABLE 4. CONSULTING DONE IN 2006

	% Who Consult	Median Hourly Rate	Median Income from Consulting
All chemists	10.1	$110	$8,430
Degree			
B.S.	5.6	$100	$15,000
M.S.	7.1	$80	$6,250
Ph.D.	12.2	$125	$7,960
Employer			
Industry–mfg.	3.7	$100	$8,100
Industry–non mfg.	10.2	$125	$50,000
Government	4.8	$75	$5,750
College or univ.	20.3	$125	$5,000
Sex			
Men	11.2	$125	$10,000
Women	6.8	$92	$4,250
Age			
20–29	2.1	$50	$10,000
30–39	5.4	$100	$5,000
40–49	8.3	$100	$9,625
50–59	13.1	$120	$7,000
60–69	18.3	$150	$13,300

Note: 2007 survey respondents were asked to report on income they received from consulting during 2006.

BONUSES Not all employers offer employee bonuses every year or to every employee. Last year, just over half of chemists reported that they were eligible to receive a bonus. Of those eligible, 84.0% received a bonus with a median value of $8,000. The amount of the bonus appears to be related to the employee's education level and amount of experience, as well as the sector of employment. Among those who earned a bonus, the typical amount for chemists with a bachelor's degree was $5,000. Typically, master's recipients earned $6,170, and Ph.D.s earned $10,000. While the amount of the bonus was higher for doctorates compared to other degree levels, fewer were eligible to receive a bonus (46.1% of Ph.D.s compared to 55.8% of master's and 59.9% of bachelor's). This is consistent with the findings by employment sector, where college and university employees are far less likely to be eligible for (10.9%) and receive (47.4%) a bonus. Ph.D.s are overwhelmingly represented in academia.

TABLE 5. BONUSES RECEIVED IN 2006

	% Eligible	% of Eligible Received	Median Bonus
All Chemists	50.4	84.0	$8,000
Degree			
B.S.	59.9	87.2	$5,000
M.S.	55.8	84.2	$6,170
Ph.D.	46.1	82.8	$10,000
Employer			
Industry–mfg.	75.5	91.5	$10,000
Industry–non mfg.	60.8	83.1	$5,000
Government	37.7	67.9	$1,930
College or univ.	10.9	47.4	$3,550
Sex			
Men	51.3	83.2	$10,000
Women	47.4	86.7	$5,000
Age			
20–29	46.5	86.6	$3,000
30–39	48.7	87.7	$5,400
40–49	57.3	87.2	$10,000
50–59	52.8	83.1	$11,620
60–69	35.2	69.5	$10,000

Note: 2007 survey respondents were asked to report on bonuses they received in 2006.

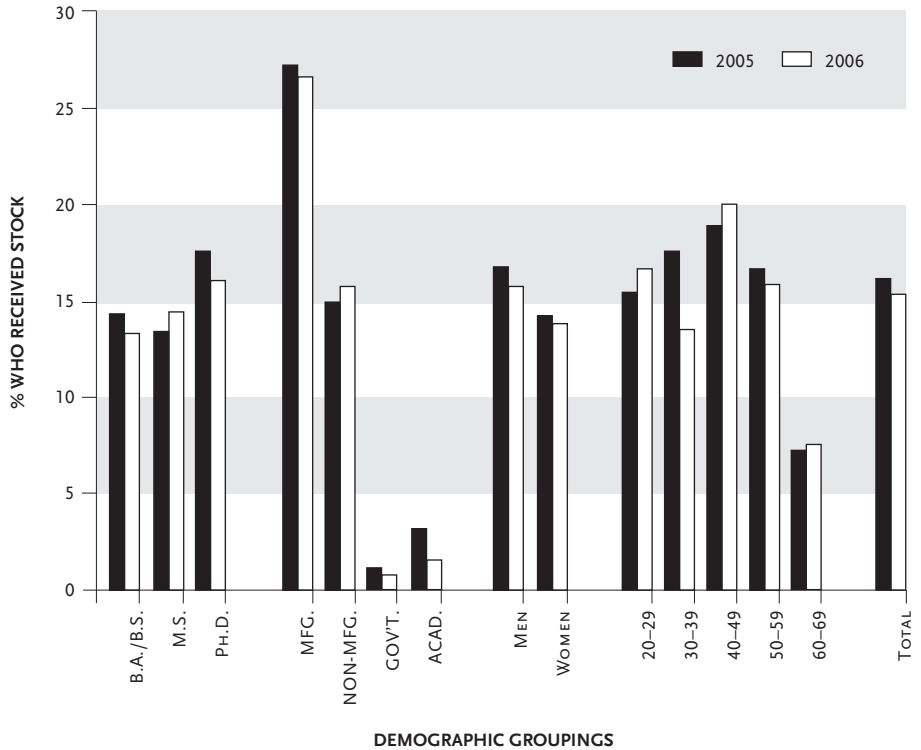
Bonuses for chemists are also less common in government. Only 37.7% of government employees said that they could receive a bonus in 2006. Of those who did receive a bonus, its typical value was only about $1,930. In general, bonuses are utilized most often in the private sector, where employers must be competitive. Non-manufacturing industries awarded a median of $5,000 in bonuses to their chemists. Manufacturing companies were even more generous. Almost 76% of chemists in this field were eligible for a bonus, and nearly all of these individuals (91.5%) received one. The typical amount of the bonus was $10,000. Age may be used as a proxy measure for level of experience. As age (and therefore, number of years experience) increases, so does the amount of the bonus awarded. For each 10-year increase up to the age of 50, the bonus amount tends to increase approximately $3,000. Those aged 20–29 typically earned a bonus of $3,000. Chemists in their fifties reported bonuses around $11,620. After age 59, fewer chemists are eligible for bonuses (35.2%) and the amount of the bonus typically awarded drops.

The median bonus awarded to female chemists was half the value ($5,000) of that provided to male chemists ($10,000). This is likely attributable to women's greater representation among some of the less-compensated categories (degree level, employment sector, and age).

STOCK AS PART OF PROFESSIONAL INCOME

Another method of compensating employees is to offer company stock. In the 2001 survey, ACS began asking members about stock options they received. Since then, the proportion reporting this type of remuneration has decreased subtly but consistently until this year. In 2002, 17.1% of chemists received stock options from their employers; by 2003, the figure had dropped to 16.5%, and by 2005, it had fallen to 15.2%. In 2006, however, 15.3% reported receiving stock, indicating that perhaps the decline has stabilized. Figure 3 shows the proportion of chemists who received stock options in 2006 and 2007 by a variety of characteristics. In general, stock offerings decreased for the majority of the workforce. Ph.D.s were more likely than other degree levels to receive stock as part of their overall compensation (16.0% compared to 13.3% for bachelor's and 14.4% for master's). As might be expected, almost all of those receiving stock worked for private companies. However, a small proportion of government (0.6%) and academic (1.5%) employees received this benefit. Within the private sector, stock options were most prevalent in manufacturing, where over a quarter (26.4%) of chemists received them.

FIGURE 3. RECEIPT OF STOCK AS PART OF PROFESSIONAL INCOME FOR CHEMISTS: 2006 & 2007



Note: 2007 survey respondents were asked to report on stock they received in 2006.

Employment and Unemployment

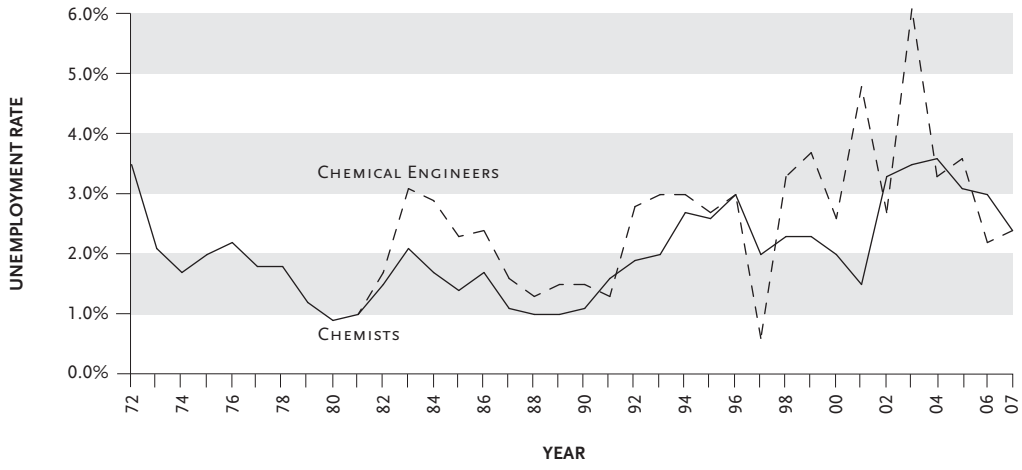
EMPLOYMENT STATUS

In 2007 87.4% of chemists surveyed were employed in full-time positions. This is an improvement over the past couple of years, but is 3.1% lower than the proportion working full time a decade ago (90.5% in 1997). This drop can be partially explained by the slight increase in unemployment over the past decade, and the 1.3% rise in the part-time workers over the same period. This year 3.4% worked fewer than 35 hours a week, while in 1997 only 2.1% did. In 2007 the proportion of chemists employed in temporary postdoctorate positions was 1.6%, similar to the past few years. Around 4.0% of chemists surveyed were outside of the labor force, either through retirement or by choosing not to work.

UNEMPLOYMENT TRENDS

While income is one way of measuring the climate of the workforce for chemical scientists, the trend in unemployment is another important way of understanding the situation. Figure 4 shows the proportion of all chemists and chemical engineers in the workforce who were seeking employment at the time of our study. The unemployment rate among chemists dropped from 3% in 2006 to 2.4% in 2007. However, within the most recent five years, we saw unemployment peak at 3.6% in 2004. In 2007 the unemployment rate of chemists matched that of chemical engineers.

FIGURE 4. UNEMPLOYMENT RATES FOR CHEMISTS AND CHEMICAL ENGINEERS, 1972–2007



Historically speaking, the employment rates of chemists and chemical engineers have roughly paralleled one another. The wider disparity seen between 1997 and 2003 seems to have corrected itself. Between 2005 and 2006, unemployment among chemical engineers was falling faster than chemists, but in the following year, the situation reversed.

The chemical engineering unemployment rate has been somewhat inconsistent over the past few years: very high in 2003 (6.1%), but only around 3% the year before and after. This may be because the ACS survey population consists mainly of chemists, making the estimates for chemical engineers somewhat less representative of their population.

Technical Notes

THE SAMPLE

The target population of the 2007 ACS Comprehensive Salary and Employment Status Survey was ACS regular members under the age of 70 who have U.S. mailing addresses and have neither student, retired, nor emeritus membership status. For the 2007 survey, a general sample was drawn from a database consisting of all members meeting the above criteria. A notification postcard with the Web address of the survey was mailed to 21,000 members during the spring of 2007. Ultimately, 7,173 usable responses were received, for a 34.1% response rate.

DEFINITIONS

For the purposes of the survey analysis, the following definitions were used:

Chemist: A respondent who indicated a work specialty of chemistry or biochemistry (categories 2 through 16 of Part 1, Question 3 of the questionnaire) or, if a non-chemistry work specialty (categories 17 through 20 of the same question), a degree field of chemistry or biochemistry.

Chemical Engineer: A respondent who indicated a work specialty of chemical engineering (category 1 of Part 1, Question 3 of the questionnaire).

Nonchemist: A respondent whose work specialty category is other than chemistry or chemical engineering, or if non-chemistry work specialty, no degree field of chemistry or biochemistry.

Academic: Pertaining to a Ph.D. working in a college or university, i.e., a private or public institution that awards a degree of associate or higher.

Unemployed: A respondent who was not employed and was seeking employment (category 4 of Part 1, Question 4 of the questionnaire). The unemployment rate, calculated to compare with the national rate, omits those "not seeking" or "fully retired" from the labor force.

Respondents indicated their employment status, base annual salaries, and ages as of March 1, 2007. The respondent's place of employment (current or most recent) determines geographic region. The listing of states by geographic regions follows this section.

DISCREPANCIES AMONG TABLES

Some pairs of tables contain totals that should be identical but are not. For example, two tables that represent information about Ph.D. respondents might show different total numbers of respondents. This phenomenon is generally caused by missing response items in a survey. Not every respondent answers all questions all of the time. To illustrate, if one table groups the Ph.D.s according to specialty and another groups them according to work function, the totals will differ unless the number who did not indicate their specialty is the same number (or even the same respondents) who did not indicate their work function.

COMPARING SALARIES

Questions arise frequently about salary comparisons, such as those between men and women based on their degrees. All such comparisons require caution. The salaries here represent the medians and means of ACS members. Most of the statistics in this report are descriptive in nature, not analytical. Tests of significance should be performed on any salary discrepancies to see whether the observed salary differences between groups are mere chance resulting from some peculiarity of the sample itself. The significance of a difference between subpopulations depends on multiple factors. These factors include, among other things, the magnitude of the difference within the sample and between sample groups, as well as sample size.

List of Abbreviations Used in Tables

	Abbreviation	Degree
DEGREES	B.A.	Bachelor of Arts
	B.S.	Bachelor of Science or all bachelor's degrees
	M.S.	Master of Sciences
	Ph.D.	Doctor of Philosophy
FIELDS OF DEGREE AND WORK SPECIALTIES	Chem eng	Chemical engineering
	Ag chem	Agricultural/food chemistry
	Analyt chem	Analytical chemistry
	Biochem	Biochemistry
	Biotech	Biotechnology
	Chem ed	Chemical education
	Clinical chem	Clinical chemistry
	Environ chem	Environmental chemistry
	Gen chem	General chemistry
	Inorg chem	Inorganic chemistry
	Material sci	Materials science
	Med/pharma	Medicinal/pharmaceutical chemistry
	Organic chem	Organic chemistry
	Physical chem	Physical chemistry
	Polymer chem	Polymer chemistry
	Other chem	Other chemical sciences
	Bus admin	Business administration
	Computer sci	Computer science
	Othr non-chem	Other non-chemistry
	Abbreviation	**Region**
REGIONS	Pacific	—
	Mountain	—
	WN Central	West North Central
	WS Central	West South Central
	EN Central	East North Central
	ES Central	East South Central
	Mid-Atlantic	Middle Atlantic
	So-Atlantic	South Atlantic
	New England	—

EMPLOYERS

Abbreviation	Employer
Mfg	**Manufacturing**
Aero/auto	Aerospace/auto/transportation
Ag chem	Agricultural chemicals
Basic chem	Basic commodity chemicals
Biochem prods	Biochemical products
Building mats	Building materials
Coating/ink	Coatings/ink/paints
Electronics	Electronics/computers/semiconductors
Food	—
Instruments	—
Med products	Medical devices/diagnostic products
Metals	Metals/minerals
Paper	—
Personal care	—
Petroleum	Petroleum/natural gas
Pharma prods	Pharmaceutical products
Plastics	—
Rubber	—
Soaps	Soaps/detergents/surfactants
Spec chem	Specialty/fine chemicals
Textiles	—
Othr mfg	Other manufacturing
Non-mfg	**Non-manufacturing**
Analyt lab	Analytical service/testing laboratory
Biotech resrch	Biotech research firm
Indep research	Independent or contract research firm
Hospital lab	Hospital or clinical laboratory
Non-profit	Non-profit organization
Private utility	Private utility company
Profl services	Professional services-scientific/engineering/law
Research inst	Research institution
Science temp	Scientific temporary or personnel agency
Othr non-mfg	Other non-manufacturing
Government	—
Federal	Federal (civilian)
Military	—
State or local	—
Othr govmt	Other government
Self-employed	—

WORK FUNCTIONS

Abbreviation	Employer
Analyt svcs	Analytical services, other than forensics
Chem info	Chemical information services
Computer	Computer programming, analysis, design
Consulting	—
Forensic	Forensic analysis
Gen mgmt	General management or administration, other than R&D
Health/safety	Health and safety/regulatory affairs
Marketing	Marketing, sales, purchasing, technical service, economic evaluation
Patents	Patents, licensing, trademarks
Production QC	Production, quality control
R&D-applied	R&D-applied research, development, design
R&D-basic	R&D-basic research
R&D-mgmt	R&D-management or administration of R&D
Training	Training or teaching
Other	—

Geographic Regions

Pacific
- Alaska
- California
- Hawaii
- Oregon
- Washington

Mountain
- Arizona
- Colorado
- Idaho
- Montana
- Nevada
- New Mexico
- Utah
- Wyoming

West North Central
- Iowa
- Kansas
- Minnesota
- Missouri
- Nebraska
- North Dakota
- South Dakota

West South Central
- Arkansas
- Louisiana
- Oklahoma
- Texas

East North Central
- Illinois
- Indiana
- Michigan
- Ohio
- Wisconsin

East South Central
- Alabama
- Kentucky
- Mississippi
- Tennessee

Middle Atlantic
- New Jersey
- New York
- Pennsylvania

South Atlantic
- Delaware
- District of Columbia
- Florida
- Georgia
- Maryland
- North Carolina
- South Carolina
- Virginia
- West Virginia

New England
- Connecticut
- Maine
- Massachusetts
- New Hampshire
- Rhode Island
- Vermont

List of Tables

ACS Career Services: Workforce Publications

SALARIES ACS annually surveys its membership, gathering detailed employment and salary information on member chemists and chemical engineers living in the U.S. The reports describe the respondents' employment status, employer, work function, specialization, salary, and demographic characteristics. Reports are available each year from 1973 through the current year.

STARTING SALARIES The ACS surveys new graduates in chemistry and chemical engineering each year and publishes reports detailing the graduates' employment status, post-graduate plans, starting salaries, and other employment and demographic characteristics. Reports are available for each year from 1975.

MILLENNIUM SERIES A series of reports drawn from special studies that detail members' employment characteristics at the turn of the millennium.

ChemCensus 2005: An analysis of the 2005 ChemCensus, looking at over 25 years of the chemistry workforce.

Industrial Chemists 2005: An analysis of the 2005 ChemCensus, focusing on 25 years of the industrial chemistry workforce.

Academic Chemists 2005: An analysis of the 2005 ChemCensus, focusing on 25 years of the academic chemistry workforce.

Lifetimes in Chemistry 1999–2000: A report drawn from the 1999 study of ACS members aged 50 through 69.

Early Careers of Chemists 2001: A detailed look at the education and early careers of ACS members under age 40, drawn from a survey conducted in 2001.

For prices and ordering information, please call or write:

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