STABLE AND Chemical Engineers

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1985 SURVEY REPORT

STARTING SALARIES AND EMPLOYMENT STATUS OF CHEMISTRY AND CHEMICAL ENGINEERING GRADUATES

This report was prepared by ACS Statistical Services

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CONTENTS

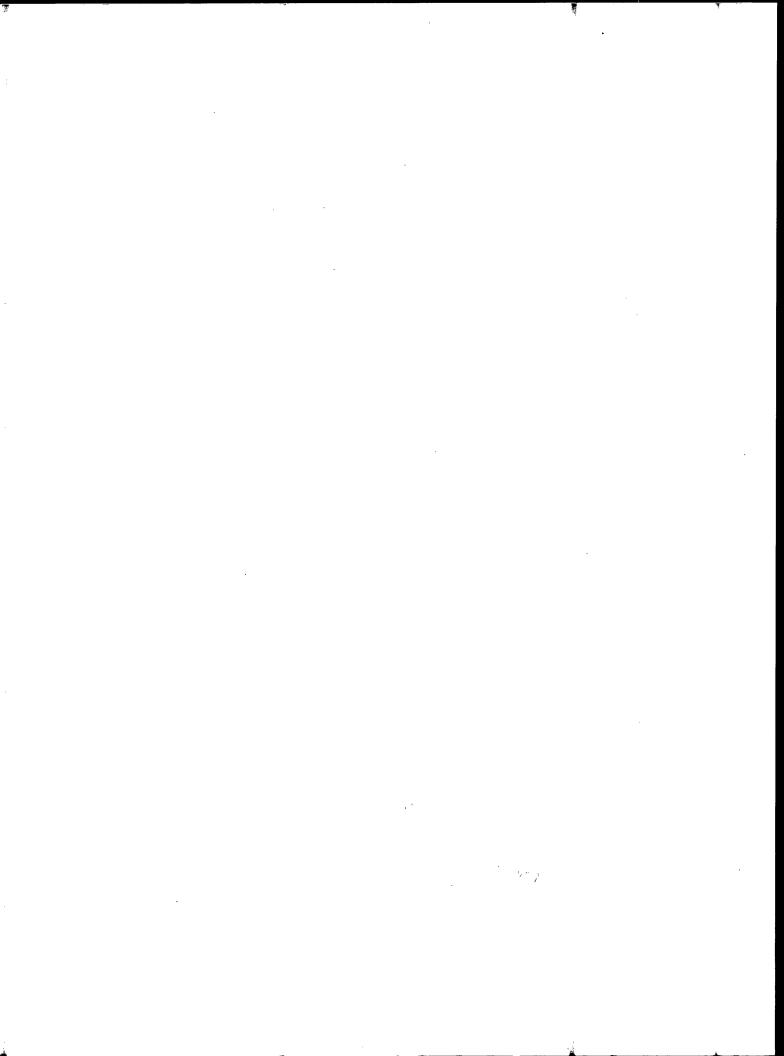
	Page
Acknowledgments	v
Summary of findings Salaries Postgraduation Status Advanced Study Plans and Postdoctoral Fellowships Graduates of ACS Approved Programs Schools and Employers	1
Scope and Methods Objectives Methods of Collection and Timing of Survey Extent of Coverage Definitions Geographic Regions	9
Technical Notes Discrepancies Among Tables Estimates of Median Salaries Comparing Salaries Estimating Sampling Error for Percents	13
List of Tables	15
Tables	19
Survey Questionnaire and Cover Letter	77

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ACKNOWLEDGMENTS

Each year at the direction of its Joint Board-Council Committee on Economic Status, the American Chemical Society surveys chemistry and chemical engineering graduates to determine trends in starting salaries and employment status. Terrence Russell, Nguyen Bailey and Joan Burrelli of ACS Statistical Services, managed by John Robert Jones, conducted this year's survey and prepared this report.

Robert K. Neuman, Head Department of Professional Services



SUMMARY OF FINDINGS

SALARIES

Reported salaries for inexperienced chemists and chemical engineers are moderately higher in 1985 than in 1984 in current dollars. After adjusting for inflation, salary gains for chemists were slightly higher than those for chemical engineers.

The gain or loss in constant dollars also varies according to type of degree. Salaries of inexperienced B.S. chemists rose 5.5% over the 1984 figure or 1.8% after adjusting for inflation. This increase is smaller than in previous years: in 1984, salaries for inexperienced B.S. chemists rose 5.5% in constant dollars. Salaries of inexperienced chemists with masters degrees showed the largest gains: up 11.1% over 1984, or an increase of 9.8% after adjusting for inflation. Ph.D. salaries rose slightly, but did not keep pace with inflation.

Table 1 shows average starting salaries paid to inexperienced chemistry graduates for 1984 and 1985, and gives additional information concerning the variation among individual salaries within each group. Table 2 presents corresponding information for chemical engineering graduates.

For inexperienced chemists, 1985 mean starting salaries were:

```
\$19,708 for the BS, up 5.5\%, or in constant dollars up 1.8\% \$26.432 for the MS, up 11.1\%, or in constant dollars up 9.8\% \$33,096 for the PhD, up 3.2\%, or in constant dollars down 0.5\%
```

Chemical engineers continue to receive larger starting salaries than do chemists with similar degrees. Among chemical engineers the 1985 mean starting salaries were:

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\$27,099 for the BS, up 3.2\%, or in constant dollars down 0.5\% \$30,742 for the MS, up 0.4\%, or in constant dollars down 3.3\% \$40,993 for the PhD, up 5.2\%, or in constant dollars up 1.5\%
```

POST-GRADUATION EMPLOYMENT STATUS

Unemployment rates for B.S. chemists and chemical engineers were lower in 1985 than in 1984. The extent of unemployment for M.S. and Ph.D. graduates, however, was slightly higher.

Unemployment of recent BS graduates is less severe in chemistry this year than it is in chemical engineering, but even in chemistry the problem is worse than the figures in Table 3 seem to indicate. To understand the extent of unemployment among new chemistry graduates requires an additional calculation. Because unemployment is defined as a fraction of the labor force, persons not seeking work (the majority of BS chemistry graduates) are neither employed nor unemployed. An accurate reading of unemployment requires removing two groups not seeking employment from the denominator of the unemployment rate: graduates who plan to attend graduate school and those not seeking full-time employment, most of whom plan to attend medical or other professional schools. Performing the calculation in this way yields larger unemployment rates among

STARTING YEARLY SALARIES OF INEXPERIENCED FULL-TIME EMPLOYED CHEMISTRY GRADUATES

by Degree: Summer 1984 and Summer 1985

			DEGREE	LEVEL			
Salaries	Bachelor's		Maste		Ph.D.		
	1984	1985	1984 /	1985	1984	1985	
90th Percentile	\$24,000	\$24,772	\$30,,760	\$32,100	\$36,504	\$38,880	
75th Percentile	21,600	22,800	28,550	30,000	35,500	37,725	
50th Percentile	18,800	19,500	26,000	27,000	34,200	35,850	
25th Percentile	16,000	17,000	18,300	23,500	31,000	30,000	
10th Percentile	13,000	14,000	15,600	17,720	20,800	21,300	
Me an	18,681	19,708	23,796	26,432	32,075	33,096	
Count	274	296	25	45	107	92	
Standard Deviation	4,435	4,200	5,906	5,886	5,824	6,977	

STARTING YEARLY SALARIES OF INEXPERIENCED FULL-TIME EMPLOYED CHEMICAL ENGINEERING GRADUATES

Table 2

by Degree: Summer 1984 and Summer 1985

			DEGREE	LEVEL		
Salaries	Bachelor's		Maste	er's	Ph	.D.
	1984	1985	1984	1985	1984	1985
90th Percentile	\$29,100	\$30,000	\$32,420	\$33,532	\$40,400	\$45,000
75th Percentile	28,200	29,100	31,400	32,000	41,875	43,000
50th Percentile	27,000	28,020	30,300	31,400	39,950	40,000
25th Percentile	25,500	26,000	30,000	30,000	38,000	39,480
10th Percentile	21,488	22,100	28,900	26,000	30,300	38,000
Mean	26,259	27,099	30,619	30,742	38,947	40,993
Count	473	481	47	48	20	47
Standard Deviation	3,417	3,340	3,002	4,285	3,926	3,101

recipients of the bachelor's degree: 23% in chemistry and 22% in chemical engineering.

The recent history for unemployment calculated in this way is:

	1985	1984	1983	1982	1981
Chemical Engineering	22%	24%	42%	26%	8%
Chemistry	23	27	31	21	23

PLANS FOR ADVANCED STUDY and POSTDOCTORAL FELLOWSHIPS

In chemistry, postdoctoral fellows as a percent of new PhDs provides a rough indicator of demand. Because some of the new doctoral chemists who accept postdoctoral fellowships would have preferred full-time employment, an increase in the fraction accepting such fellowships indicates insufficient full-time employment. This year this measure of demand indicates that the climate is slightly more hospitable than it was last year: 30.6% accepted postdoctoral positions in 1985 as compared with 37.9% in 1984.

Bachelor's degree recipients' plans for advanced study are little different from those of last year's graduates. A summary of these plans appears in Tables 4 and 5.

CHEMISTRY GRADUATES WHO HAVE COMPLETED ACS APPROVED PROGRAMS

Graduates completing undergraduate chemistry programs approved by the ACS's Committee on Professional Training, generally received higher starting salaries than graduates not completing approved programs (see Table A-10). One third of all BS chemistry graduates responding to the survey planned to study medicine. More than 73 percent of those studying medicine were in non-approved programs (see table C-5). The unemployment rate for graduates of approved programs was somewhat lower (11% versus 12%) than that for graduates of non-approved programs.

CHARACTERISTICS OF DEGREE GRANTING INSTITUTIONS AND EMPLOYERS

The type and size of the school from which new B.S. graduates received their degrees was more variable for chemists than for chemical engineers. Generally speaking, salaries were not found to be dependent on type of school (public versus private) or type of degree granted by the school (B.S., M.S., or Ph.D.). This may be due to the small sample size. Only in the case of chemists from private schools did type of degree granted make a difference. Chemists from private schools granting graduate degrees made higher salaries than chemists from private schools granting only B.S. degrees. On the other hand, size of school was found to greatly influence salaries of both chemists and chemical engineers. For the most part, salaries were higher for graduates of larger schools (greater than 1500 students) than for graduates of smaller schools (less than 1500 students.)

Table 3

POSTGRADUATION STATUS OF CHEMISTRY AND CHEMICAL ENGINEERING GRADUATES: SUMMER 1985

Major and Employment Status	Bachelor's		
CHEMISTRY			
Full-time employed:			
In chemistry or chemical engineering	29.1%	47.3%	57.6%
Outside chemistry or chemical engineering	8.9	5•4	2 • 0
Postdoctoral/grad. asst./other fellowship	20.5	24.7	30.6
Unemployed and seeking full-time employment	11.7	6.5	4.9
Unemployed and not seeking full-time employment	27.8	13.4	0.8
No response	2.0	2.7	4.1
Total	100.0	100.0	100.0
Number of responses	1,432	186	245
CHEMICAL ENGINEERING			
Full-time employed:			
In chemistry or chemical engineering	47.5	50.6	81.5
Outside chemistry or chemical engineering	15.0	7.8	5.4
Postdoctoral/grad. asst./other fellowship	6.9	20.0	5.4
Unemployed and seeking full-time employment	18.5	9.4	3.3
Unemployed and not seeking full-time employment	9.7	8.3	1.1
No response	2.3	3.9	3.3
Total	100.0	100.0	100.0
Number of responses	1,357	180	92

Table 4

PLANS FOR FURTHER STUDY OF B.S. CHEMISTRY
AND CHEMICAL ENGINEERING GRADUATES: FALL 1985

Plans	Chemistry	Chemical Engineering
Further studies Full-time Part-time	58.1% (48.3) (9.8)	30.8% (17.8) (13.0)
Have no plans or no response	41.3	68.5
Total	100.0	100.0
Number of responses	1,432	1,357

Table 5

FIELDS OF STUDY OF B.S. CHEMISTRY AND

CHEMICAL ENGINEERING GRADUATES WHO PLAN FURTHER STUDIES

Fall 1985

Field of Study	Chemistry	Chemical Engineering	
Full-time			
Chemistry or biochemistry	49.3%	4.6%	
Chemical engineering	1.9	51.9	
Medicine or dentistry	33.3	7•9	
Business or management	2.5	8.3	
All others	13.0	27.3	
Total	100.0	100.0	
Number of responses	691	241	
Part-time			
Chemistry or biochemistry	54.6%	5.1%	
Chemical engineering	1.4	22.0	
Medicine or dentistry	2.8	0.6	
Business or management	11.3	39.5	
All others	29.9	32.8	
Total	100.0	100.0	
Number of responses	141	177	

The greater variability among chemists' median salaries is also seen in comparisons of employing firms ranked by the number of employees. The range of chemists' median salaries was 22% compared to a 12% range for the chemical engineers. Proportionally more chemists than chemical engineers took employment in firms with less than 500 employees (38.5% of chemists compared to 14.8% of chemical engineers). Because those firms offered a lower median starting salary than larger ones, proportionally more chemists were clustered at the lower end of the salary range.

We suggest that these differences ought to be taken into account, along with more obvious ones, when comparing salaries.

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SCOPE AND METHOD

OBJECTIVES

The 1985 Starting Salary Survey is the 34th in the series of annual surveys now conducted by Statistical Services of the American Chemical Society. Summaries of the results of these surveys appear annually in the "Chemical Careers" edition of the <u>Chemical and Engineering News</u>, this year published on October 14.

The primary objective of the survey is to gather data on the starting salaries and occupational status of new chemists and chemical engineers who graduated during the 1984-85 academic year. The survey covers bachelor's, master's, and doctoral degree recipients. In addition, the survey provides information on graduates' sex, citizenship, and ethnicity.

METHOD OF COLLECTION AND TIMING OF SURVEY

Chemistry departments approved by the ACS and chemical engineering departments approved by the American Institute of Chemical Engineers and the Engineer's Council for Professional Development provided names and addresses of students that had graduated between September, 1984 and June, 1985. During the summer of 1985, ACS Statistical Services mailed questionnaires to those graduates who had U.S. addresses. Summer 1984 graduates were excluded from the mailing because many of them had twelve months' experience by the time the survey was conducted.

EXTENT OF COVERAGE

Survey questionnaires were mailed between July and September to approximately 13,000 graduates. By the cutoff date of October 21, Statistical Services had received 3,751 usable responses.

The survey respondents represent about one-eighth of all 1984-85 chemistry graduates and about one-sixth of the chemical engineering graduates. No attempt was made to examine the characteristics of graduates from departments that did not participate in the survey or of those graduates who did not mail back completed questionnaires.

DEFINITIONS

The questionnaire appears at the end of this report. Responses to questions on post-graduation status were edited to eliminate multiple responses and to reflect as accurately as possible the employment status of the respondent.

The term "inexperienced" as used in the tables refers to those who have 12 months or less of prior professional work experience. The term "chemist" refers to one who received a degree in chemistry and is working full-time in chemistry or chemical engineering. The term "chemical engineer" refers to one who received a degree in chemical engineering and is working full-time in chemistry of chemical engineering. Salary tables are based only on salaries of those who found full-time employment in chemistry or chemical engineering. Postdoctoral salaries are analyzed separately. Salaries are reported in U.S. dollars.

The Technical Notes present methods for estimating sampling error and also explain certain discrepancies among some of the tables.

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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

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TECHNICAL NOTES

DISCREPANCIES AMONG TABLES

Because not all individuals responded to all of the questionnaire items, some pairs of tables contain totals that should be identical but are not. For example, one table may group PhDs according to sex and another according to geographic region. The totals will differ unless the number who did not indicate their sex is the same as the number who did not indicate their geographic region.

ESTIMATES OF MEDIAN SALARIES

Median salaries displayed within the cells of the salary tables are sample medians and are therefore subject to sampling error. This error may be quite large, especially when the number of respondents in the corresponding cell is small. Therefore, median salaries in cells with fewer than 15 respondents should not be used to estimate their corresponding population medians. Similarly, tables showing the 25th and 75th salary percentiles, and those showing the 10th and 90th salary percentiles, should have at least 25 respondents and 40 respondents respectively.

COMPARING SALARIES

The Dark State

Often questions arise concerning women's salaries as compared with men's, or chemists' salaries as compared with chemical engineers'. These and similar comparisons require caution.

Statistical tests should be performed to determine whether observed differences in salaries of various sample groups could be mere chance occurrences resulting from peculiarities of the samples. Whether a difference in salaries is "statistically significant" depends not only on the magnitude of the difference but also on the sample sizes and the magnitudes of the sample standard deviations.

Statistical tests of significance may be found in <u>Numerical and Statistical Techniques</u>, by J. H. Pollard, <u>Handbook of Tables for Probability and Statistics</u>, published by the Chemical Rubber Company, and in other similar texts.

ESTIMATING SAMPLING ERROR FOR PERCENTS

Percents in this report are derived from the sample. If the entire population had received and returned questionnaires, most estimates would be somewhat different. How much different? Although this question does not have an exact answer, the table below does provide some guidance. To use the table, find the column headed by the percent (p) derived from the sample, and find the row appropriate for the sample size (n). (Approximations for p and n may be used.) Note the number in that column and that row of the table.

This number from the body of the table measures the precision with which the sample percent estimates the percent of the entire population. Specifically, if this procedure is applied repeatedly, about 95 times out of 100, the population percent will differ from the sample percent by no more than the amount shown in the table.

Approximate Sampling Errors for Percents

n	p= 10% or 90%		p= 30% or 70%		p= 50%
50	8.3%	11.1%	12.7%	13.6%	13.9%
100	5.9	7.8	9.0	9.6	9.8
200	4.2	5.5	6.4	6.8	6.9
500	2.6	3.5	4.0	4.3	4.4
1000	1.9	2.5	2.8	3.0	3.1
2000	1.3	1.8	2.0	2.1	2.2
5000	0.8	1.1	1.3	1.4	1.4
0000	0.6	0.8	0.9	1.0	1.0

In Table B-la for example, 141 respondents classified as chemists indicated their highest degree as PhD, and their employment status as employed full-time in chemistry or chemical engineering. The percent of this group who are women is listed at 19.9 percent (p=19.9). A "95% confidence interval" for this percent may be approximately by taking n and p to be about 100 and 20%. The table shows an approximate sampling error of 7.8%. Hence, the 95% confidence interval is 12.1% to 27.7%. If 100 similar estimates were made at this "level of confidence," about 95 of the true population percents would be contained in their respective intervals.

LIST OF TABLES

	Table	Page
CALADIEC OF DECRONDENES		
SALARIES OF RESPONDENTS		
Full-time Chemists		
DegreeExperience	A-1	19
Full-time Chemical Engineers		
DegreeExperience		
Twhen telles and a second and a	A-2	20
Full-time Inexperienced Chemists in Private Industry		
DegreeSexSex	A-3	21
	A-3	21
Full-time Inexperienced Chemical Engineers in Private Industry		
DegreeSexSex	A-4	22
	4	44
Full-time Employed Inexperienced Chemists		
DegreeSexSex	A-5	23
Employer	A-6	24
Men	A-7	25
Women	A-8	26
DegreeGeographic Region	A-9	27
EmployerACS Approved Curriculum - BS	A-10	28
Degree MS and PhD	A-11	29
To 11 mt m m m m m m m m m m m m m m m m m		
Full-Time Employed Inexperienced Chemical Engineers		
Degree Sex	A-12	30
Employer	A-13	31
Men	A-14	32
Women	A-15	33
DegreeGeographic Region	A-16	34
Full-time Employed Incompation 1 Cl. 1		
Full-time Employed Inexperienced Chemists and Chemical Engineers		
School TypeBS		
School SizeBSBS	A-17	35
Employer SizeBSBS	A-18	36
	A-19	37
EMPLOYMENT STATUS		
All Chemists		
Employment StatusDegreeSexSex	D 1.	20
Plans for Advanced StudyDegreeSex	B-1a B-1b	38
Employment StatusDegreeCitizenship	B-16	39
Plans for Advanced StudyDegreeCitizenship		40
Employment StatusEthnicityDegree	B-2b	41
Plans for Advanced StudyEthnicityDegree	B-3a	42
Employment StatusACS Approved Curriculum BS	B-3b	43
Plans for Advanced StudyACS Approved Curriculum BS	B-4a	44
Employment StatusDegree SpecialtyMS	B-4b B-5	45
PhD	B-6	46 47
	D-0	4/

	Table	Page
All Chemical Engineers		
Employment StatusDegreeSex	В-7а	48
Plans for Advanced StudyDegreeSex	B-7b	49
Employment StatusDegreeCitizenship	В-8а	50
Plans for Advanced StudyDegreeCitizenship		51
Employment StatusDegreeEthnicity		52
Plans for Advanced StudyDegreeEthnicity		53
ADVANCED FURTHER STUDIES		
Part-time Study		
Chemistry Graduates		,
Field of Advanced StudyDegreeSex	C-1	54
ACS Approved Curriculum - BS		55
Chemical Engineering Graduates Field of Advanced StudyBS and MSSex	C-3	56
rield of Advanced Studybs and MSsex	(_)	50
Full-time Study		
Chemistry Graduates		
Field of Advanced StudyDegreeSex	C-4	57
ACS Approved Curriculum - BS	C-5	58
Chemical Engineering Graduates		
Field of Advanced StudyBS and MSSex	C-6	59
BS Chemistry and Chemical Engineering Graduates Not Employed	and	
Not Seeking Employment		
Chemistry Graduates		
SexPlans for Further Studies	C-7	60
Chemical Engineering Graduates		
SexPlans for Further Studies	C-8	61
AGE DISTRIBUTION OF RESPONDENTS		
All Chamistry and Chamical Engineering Craduates		
All Chemistry and Chemical Engineering Graduates Age BS BS	D-1	62
MS		63
PhD		64
	. U-3	04
Postdoctoral Chemists		*
AgeSex	D-4	65
	· ·	
NUMBER OF JOB OFFERS		
Full-time Employed Inexperienced Chemists	177 1	6.6
Number of OffersDegreeSex	E-1	66
Full-time Employed Experienced Chemists		-
Full-time Employed Experienced Chemists Number of OffersDegreeSex	E-2	67
	_	- 1
Full-time Employed Inexperienced Chemical Engineers		
Number of OffersDegreeSex	E-3	68
Full-time Employed Experienced Chemical Engineers	- '	
Number of Offers	E-4	69

		Table	Page
ETHNIC CLASSIFICATION AND CITIZENSHIP			
All Chemistry Graduates			
CitizenshipDegree	Ethnicity	F-1	70
0	Sex	F-2	71
Minority Chemistry Graduates			
Minority ClassificationDegree	Sex	F-3	72
All Chemical Engineering Graduates			
CitizenshipDegree	Ethnicity	F-4	73
	Sex	F-5	74
Minority Chemical Engineering Graduates	·		
Minority ClassificationDegree	Sex	F-6	75

			8	8 0
,				
		¥		
:				
			,	
4 - (- -),				
			1	

SALARIES of CHEMISTS employed FULL-TIME according to DEGREE and EXPERIENCE 1985 Starting Salary Survey

TABLE A-1

		DEGREE			
WORK EXPERIENCE	B.S.	M.S.	Ph.D.		
Less than	19,500	27,000	35,850	-	Median
12 months	19,708	26,432	33,096	-	Mean
	4,200	5,886	6,977	-	Std Dev
	296	45	92	-	Count
12-36 Months	20,400	27,500	35,250		
	20,564	26,523	33,815		
		5,687			
	67	17	2 4		
More than	22,900	30,500	36,350		
36 months	23,661	30,223	31,091		
	5,422	5,994	10,805		
	4 4	22	22		
No Response	9,100	9,000	32,000		
	9,100	9,000	32,000		
			11,314		
	1	1	2		
ALL LEVELS OF		27,600	•		
EXPERIENCE		27,226	-	•	
	4,502	6,327	7,601		
	408	85	140		

TABLE A-2

SALARIES of CHEMICAL ENGINEERS employed FULL-TIME according to DEGREE and EXPERIENCE 1985 Starting Salary Survey

		DEGREE			
WORK EXPERIENCE	B.S.	M.S.	Ph.D.		
Less than	28,020	31,400	40,000		Median
12 months	27,099	30,742	40,993		Mean
	3,340	4,285	3,101	-	Std Dev
	481	48	47	-	Count
12-36 Months	28,800	31,500	41,400		
	27,730	30,004	40,909		
	3,366	5,073	3,433		
	137	27	15		
More than	29,000	38,500	34,500		
36 months	28,023	36,623	36,658		
	2,803	5,957	6,628		
	1 7	12	12		
No Response	28,200				
•	28,200				
	1	0	0		
			40.400		
ALL LEVELS OF	28,200	31,500	40,400		
EXPERIENCE	27,261	31,324	40,273		
	3,338	5,197	4,184		
	636	87	7 4		

TABLE A-3

SALARIES of INEXPERIENCED CHEMISTS employed FULL-TIME in PRIVATE INDUSTRY according to DEGREE and SEX 1985 Starting Salary Survey

		DEGREE			
SEX	B.S.	M.S.	Ph.D.		
Men	21,100	27,720	36,500	_	Median
	21,326	27,657	36,526	-	Mean
	3,943	4,247	2,877	-	Std Dev
	108	25	53	-	Count
Women	20,000	28,000	37,400		
	20,324	29,900	37,056		
	3,745	4,626	2,043		
	87	11	9		
BOTH SEXES	21,000	27,900	36,550		
	20,879	28,342	36,603		
	3,879	4,425	2,763		
	195	36	62		

TABLE A-4

SALARIES of INEXPERIENCED CHEMICAL ENGINEERS employed FULL-TIME in PRIVATE INDUSTRY

according to DEGREE and SEX 1985 Starting Salary Survey

		DEGREE			
SEX	B.S.	M.S.	Ph.D.		
Men	28,200	31,800	41,000	-	Median
	27,597	31,872	41,203	-	Mean
	3,022	3,739	2,271	-	Std Dev
	285	31	25	-	Count
Women	28,990	32,000	40,000		
	27,584	31,600			
	3,172	851	-		
	1 2 4	6	7		
BOTH SEXES	28,380	31,800	40,500		
	27,593	31,828			
	3,065				
	409	37	32		
	3,022 285 28,990 27,584 3,172 124 28,380 27,593 3,065	3,739 31 32,000 31,600 851 6 31,800 31,828 3,430	2,271 25 40,000 41,543 2,374 7 40,500 41,278 2,259	-	Std [

TABLE A-5

SALARIES of INEXPERIENCED CHEMISTS employed FULL-TIME according to DEGREE and SEX 1985 Starting Salary Survey

		DEGREE			
SEX	В.S.	M.S.	Ph.D.		
Men	20,000	27,600	36,000	-	Median
	20,188	27,341	33,249	-	Mean
	4,429	4,352	6,853	-	Std Dev
	158	. 27	76	-	Count
Women	19,000	26,750	35,550		
	19,159	25,067	32,366		
	3,865	7,578	7,731		
	138	18	16		
20711 2711					
BOTH SEXES	19,500	27,000	35,850		
	19,708	26,432	33,096		
	4,200	5,886	6,977		
	296	45	92		

TABLE A-6

SALARIES of INEXPERIENCED CHEMISTS employed FULL-TIME according to DEGREE and EMPLOYER
1985 Starting Salary Survey

	•	DEGREE			
EMPLOYER	B.S.	M.S.	Ph.D.		
Private	21,000	27,900	36,550	-	Median
industry	20,879	28,342	36,603	-	Mean
	3,879	4,425	2,763	-	Std Dev
	195	36	62	-	Count
College or	15,250	17,300	22,250		
university	14,406	16,460	21,889		
	2,917	4,051	4,020		
	8	5	18		
High school	15,300				
	15,780				
	3,249				
	1 2	0	0		
Government	17,824	21,400	33,000		
dovernment	18,281	21,400	31,310		
	4,326	2,263	4,739		
	17	2	6		
Military	25,200				
•	25,200				
	1	0	0		
Hospita ,	17,054	17,000	12,500		
labora .	17,202	17,000	12,500		
	3,676				
	36	1	1		
Other	18,250	27,000	36,500		
	18,673	27,000	35,775		
	3,657		4,382		
	26	1	4		
No Response	17,000		38,000		
	17,000		38,000		
	1	0	1		
ALL EMPLOYERS	19,500	27,000	35,850		
ALL CHPLUTERS	19,708	26,432	33,096		
	4,200	5,886	6,977		
	296	45	92		
	290	73	, ,		

TABLE A-7

SALARIES of INEXPERIENCED CHEMISTS employed FULL-TIME - MEN only according to DEGREE and EMPLOYER

1985 Starting Salary Survey

		DEGREE			
EMPLOYER	B.S.	M.S.	Ph.D.		
Private	21,100	27,720	36,500	-	Median
industry	21,326	27,657	36,526	-	Mean
	3,943	4,247	2,877	-	Std Dev
	108	25	53	-	Count
College or	15,000		22,250		
university	13,810		21,500		
	3,672		3,838		
	5	0	16		
High school	14,000				٠
	15,207				
	3,360				
	5	0	0		
Government	18,000	19,800	35,000		
dover niment	19,435	19,800	34,667		
	5,779		1,528		
	7	1	3		
	,	1	3		
Military	25,200				
,,,,,,,,,	25,200				
	1	. 0	0		
Hospital or	17,000				
laboratory	17,369				
	4,425				
	17	0	. 0		
Other	19,250	27,000	36,500		
	19,136	27,000	35,7,75		
	3,353		4,382		
	14	1	4		
No Response	17,000				
·	17,000				
	1	. 0	0		
ALL EMPLOYERS	20,000	27,600	36,000		
	20,,188	27,341	33,249		
	4,429	4,352	6,853		
	158	27	76		

TABLE A-8

SALARIES of INEXPERIENCED CHEMISTS employed FULL-TIME - WOMEN only according to DEGREE and EMPLOYER
1985 Starting Salary Survey

		DEGREE		
EMPLOYER	B.S.	M.S.	Ph.D.	
Private industry	20,000 20,324 3,745 87	28,000 29,900 4,626 11	37,400 37,056 2,043	- Median - Mean - Std Dev - Count
College or university	15,500 15,400 656 3	17,300 16,460 4,051 5	25,000 25,000 5,657 2	
High school	16,600 16,190 3,370	 0	 0	
Government	17,662 17,473 3,039 10	23,000 23,000 1	26,381 27,954 4,472 3	
Military	 0	 0	 0	
Hospital or laboratory	17,108 17,051 2,971	17,000 17,000 	12,500 12,500 	
Other	18,000 18,133 4,064 12	 0	 0	
No Response			38,000 38,000 1	
ALL EMPLOYERS :	19,000 19,159 3,865 138	26,750 25,067 7,578 18	35,550 32,366 7,731 16	

TABLE A-9

SALARIES of INEXPERIENCED CHEMISTS employed FULL-TIME according to DEGREE and GEOGRAPHIC REGION 1985 Starting Salary Survey

		DEGREE		
GEOGRAPHIC REGION	B.S.	M.S.	Ph.D.	
Pacific	21,000 20,604 3,834 19	30,000 30,000 0 2	35,100 35,100 141 2	- Median - Mean - Std Dev - Count
Mountain	22,200 20,671 6,024 15		35,000 27,833 13,288 3	
West North Central	19,000 19,765 4,670 23	24,950 24,925 4,811 4	24,480 27,626 8,585 7	
West South Central	20,592 21,677 3,253 25	25,750 23,783 4,880 6	29,500 29,463 7,065 8	
East North Central	19,750 19,845 4,188 62	30,000 29,367 5,747 9	36,000 34,054 7,520 24	
East South Central	17,700 17,700 3,130	12,000	29,800 29,800 9,617 2	
Middle Atlantic	20,000 19,837 3,775 75	27,000 26,860 7,404 12	35,400 33,698 6,462 26	
South Atlantic	18,000 17,924 3,458 40	27,500 27,200 3,516 7	36,120 35,070 3,477 12	
New England	17,108 18,256 5,046 25	25,000 25,000 2,000 3	37,200 36,020 4,476 8	
No Response	24,200 22,229 3,729 7	23,000 23,000		
ALL REGIONS	19,500 19,708 4,200 296	27,000 26,432 5,886 45	35,850 33,096 6,977 92	

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TABLE A-10

SALARIES of INEXPERIENCED B.S. CHEMISTS employed FULL-TIME according to EMPLOYER and whether graduate completed ACS APPROVED CURRICULUM 1985 Starting Salary Survey

CURRICULUM APPROVED?

EMPLOYER	No	Yes	ALL		
Private	20,000	21,500	21,000	- Median	
industry	20,673	21,031	20,879	- Mean	
,,,,,,,,	4,029	3,774	3,879	- Std De	v
	83	112	195	- Count	•
	03	112	173	Counc	
College or	16,000	15,000	15,250		
university	15,733	13,610	14,406		
	929	3,513	2,917		
	3	5	8		
High school	15,900	15,300	15,300		
	15,741	15,859	15,780		
	3,695	2,614	3,249		
	8	4	12		
Government	17,500	19,403	17,824		
	16,021	19,863	18,281		
	2,377	4,769	4,326		
	7	10	17		
Military		25,200	25,200		
		25,200	25,200		
	0	1	1	•	
		-	•		
Hospital or	17,874	16,600	17,054		
laboratory	18,134	16,608	17,202		
,	3,650	3,651	3,676		
	14	22	36		
	• •		33		
Other	19,000	18,000	18,250		
	19,064	18,387	18,673		
	3,726	3,709	3,657		
	11	15	26		
				,	
No Response	17,000		17,000		
	17,000		17,000		
	1	0	1		
ALL EMPLOYERS	19,000	20,000	19,500		
	19,541	19,834	19,708		
	4,144	4,250	4,200		
	127	169	296		
	1 4 /	109	230		

TABLE A-11

chemistry

Non-chemistry,

ALL SPECIALTIES

other

SALARIES of INEXPERIENCED M.S. and Ph.D. CHEMISTS employed FULL-TIME according to DEGREE and DEGREE SPECIALTY 1985 Starting Salary Survey

	DE	GREE		
DEGREE SPECIALTY	м.s.	Ph.D.		
Chemistry	27,350			Median
	25,675			Mean
	5,606 4			Std De Count
•	4	U	_	Count
Analytical	26,500	36,000		
chemistry	26,854	35,588		
	6,964	5,019		
	13	19		
Inorganic	13,000	34,500		
chemistry	13,000	32,070		
		6,951		•
	1	23		
Organic	27,000	35,200		
chemistry	25,848	32,772		
•	3,335	6,485		
	17	29		
Daluman	05 000	20 050		
Polymer chemistry	25,000 25,000	39,050 34,650		
chemistry	23,000	11,251		
	1	. 4		
Pharmaceutical chemistry	•••			
Chemistry				
	0	0		
M-41-11				
Medicinal/ clinical chemistry				
ccar chem.scry				
	0	0		
Theresh 1 - 1		27 200		
Theoretical chemistry		37,300 37,300		
C11 C11 1 3 C1 3		990		
	0	2		
Fautasant 1				
Environmental chemistry				
CH CH I S C I Y				
	0	0		
Agricultural/				
Agricultural/ food chemistry				
, , , , , , , , , , , , , , , , , , , ,				
	0	0		
Dhysteal	27 000	22 000		
Physical chemistry	27,000 27.000	32,000 30,343		
	27,000 9,721	9,302		
	5	13		
Other	31,550	36,500		
chemistry	31,550	36,500		

31,300 36,500 1,010

27,000 35,850 26,432 33,096

5,886

45

2,121 2

0

6,977

92

TABLE A-12

SALARIES of INEXPERIENCED CHEMICAL ENGINEERS employed FULL-TIME according to DEGREE and SEX
1985 Starting Salary Survey

		DEGREE			
SEX	В.S.	M.S.	Ph.D.		
Men	28,000	31,000	41,000	-	Median
	27,124	30,733			Mean
	3,271	4,562	-		Std Dev
	336	41	38		Count
Women	28,200	32,000	39,900		
	27,042	30,800			
	3,507	2,255	2,400		
	145	7	9		
2271 25752					
BOTH SEXES	28,020	31,400	-		
	27,099		•		
	3,340	4,285	3,101		
	481	48	47		

TABLE A-13

SALARIES OF INEXPERIENCED CHEMICAL ENGINEERS employed FULL-TIME according to DEGREE and EMPLOYER
1985 Starting Salary Survey

		DEGREE			
EMPLOYER	B.S.	M.S.	Ph.D.		
Private	28,380	31,800	40,500	-	Median
industry	27,593	31,828	41,278	-	Mean
	3,065	3,430	2,259	-	Std Dev
	4 0 9	37	32	-	Count
College or		14,000	40,950		
university		14,000	40,370		
			5,136		
	0	1	10		
High school	17,000				
	17,000				•
	·				
	1	0	0		
Government	23,170	28,000	42,550		
	23,049	27,875	42,550		
	2,949	3,473	4,172		
	33	4	2		
Military	24,085	26,000			
	23,068	26,000			
•	4,352				
	4	1	0		
Hospital or	20,000				
laboratory	20,000				
	1	0	0		
Other	26,500	30,000	39,500		
	25,784	29,300	39,500		
	2,942	1,857	2,121		
	31	5	2		
No Response	30,050		38,000		
	30,050		38,000		
	7 1				
	2	0	1		
ALL EMPLOYERS	00 000	21 400	40.000		
MEE EMPEUIEKS	28,020	31,400	40,000		
	27,099	30,742	40,993		
	3,340	4,285	3,101		
	481	48	47		

TABLE A-14

SALARIES OF INEXPERIENCED CHEMICAL ENGINEERS employed FULL-TIME - MEN only

1985 Starting Salary Survey

according to DEGREE and EMPLOYER

		DEGREE		
EMPL OYER	В.S.	M.S.	Ph.D.	
Private industry	28,200 27,597 3,022 285	31,800 31,872 3,739 31	41,000 41,203 2,271 25	- Median - Mean - Std Dev - Count
College or university		14,000 14,000 1	42,000 40,423 5,445 9	
High school		 0	 0	
Government	23,170 23,482 2,774 26	28,000 27,875 3,473 4	42,550 42,550 4,172 2	·
Military	24,085 23,068 4,352 4	26,000 26,000 1	 0	
Hospital or laboratory	20,000 20,000 1	 0	 0	
Other	27,000 26,093 3,221 19	30,000 30,125 250 4	41,000 41,000	4
No Response	30,000 30,000	 0	38,000 38,000 1	
ALL EMPLOYERS	28,000 27,124 3,271 336	31,000 30,733 4,562 41	41,000 41,000 3,272 38	

TABLE A-15

SALARIES of INEXPERIENCED CHEMICAL ENGINEERS employed FULL-TIME - WOMEN only according to DEGREE and EMPLOYER
1985 Starting Salary Survey

		DEGREE		
EMPLOYER	B.S.	M.S.	Ph.D.	
Private	28,990	32,000	40,000	- Median
industry	27,584	31,600	41,543	- Mean
	3,172	851	2,374	- Std Dev
	1 2 4	6	7	- Count
College or			39,900	
university			39,900	
	0	0	, 1	
High school	17,000			
	17,000			
				•
	1	0	0	·
Government	21,000			
	21,440			
	3,236			
	7	. 0	0	•
Military				
	0	0	0	
Hospital or				
laboratory				
				4
	0	0	0	
Other	26,000	26,000	38,000	•
	25,295	26,000	38,000	
	2,490			
	1 2	1	1	
No Response	30,100			
	30,100			
				•
	1	0	. 0	
ALL EMPLOYERS	28,200	32,000	39,900	
	27,042	30,800	40,967	
	3,507	2,255	, 2,400	
	1 4 5	. 7	9	

TABLE A-16

SALARIES OF INEXPERIENCED CHEMICAL ENGINEERS employed FULL-TIME according to DEGREE and GEOGRAPHIC REGION
1985 Starting Salary Survey

		DEGREE		
GEOGRAPHIC REGION	в.S.	M.S.	Ph.D.	
Pacific	26,500 25,863 3,465 31	30,000	40,300	- Median - Mean - Std Dev - Count
Mountain	28,125 28,064 2,005	30,258 30,258 1,756	38,000 40,500 4,330	
West North Central	28,560 27,690 2,846 33	31,400 31,655 1,589	38,500 39,076 5,600 4	
West South Central	29,130 28,777 2,259 50	30,500 30,750 775 10	43,000 42,075 1,917 4	
East North Central	28,200 27,252 2,880 116	31,750 30,725 2,871 8	42,000 40,696 5,382	
East South Central	27,087 26,364 3,286 16	32,000 32,000 1	39,600 39,600 	
Middle Atlantic	28,000 26,934 3,561 106	32,100 30,840 7,282 15	42,000 42,120 3,073 10	
South Atlantic	27,036 26,297 3,513 88	30,800 29,520 2,816 5	39,800 40,529 1,695 14	
New England	28,500 27,356 4,964 24		45,000 45,000 1	
No Response	28,900 27,450 3,345 9	31,500 31,500 707 2	41,500 41,500 707 2	
ALL REGIONS	28,020 27,099 3,340 481	31,400 30,742 4,285 48	40,000 40,993 3,101 47	

Table A-17

SALARIES of <u>INEXPERIENCED</u> FULL-TIME Recipients of BACHELORS DEGREES according to DEGREE TYPE and EMPLOYER SIZE 1985 Starting Salary Survey

DEGREE TYPE

	Chemical		
EMPLOYER SIZE	Engineers	Chemist	
	,	· · · · · · · · · · · · · · · · · · ·	
Less than 500	27,000	20,021	- 75th %-ile
	23,500	18,000	- 50th %-ile
	21,500	15,000	- 25th %-ile
	24,085	17,926	- Mean
	4,557	4,097	- Std Dev
	71	114	- Count
500-2,499	28,725	21,000	
	27,000	18,000	
	24,000	16,500	
	26,142	18,880	
	3,507	3,222	
	84	59	
2,500-10,000	28,980	24,000	
•	28,000	21,800	
	26,100	18,715	
	27,264	21,157	
	2,484	3,963	
	7 9	42	
10-24,999	29,075	24,000	
	28,430	22,500	
	27,000	20,000	
	27,877	21,990	
	2,189	3,532	
•	64	25	
More than 25,000	29,500	24 000	
7701 C THEN 25,000	29,000	24,800	
	28,000	22,878 20,000	
	28,364	22,695	
	2,406	3,531	
•	177	49	
		40	
. No Response	30,075	21,000	
	28,750	17,300	
	26,900	15,000	
	28,367	17,971	
·	2,174	3,755	
	6	7	
ALL SIZES	29,100	22,800	
	28,020	19,500	
	26,000	17,000	
	27,099	19,708	
	3,340	4,200	
	481	296	

SALARIES of INEXPERIENCED FULL-TIME recipients of BACHELORS DEGREES according to DEGREE TYPE and SCHOOL TYPE
1985 Starting Salary Survey

DEGREE TYPE

	Chemical		
SCHOOL TYPE	Engineers	Chemist	
Public	29,100	21,500 -	75th %-ile
Bachelors	28,800	•	50th %-11e
granting	25,400	16,950 -	25th %-ile
•	27,880		Mean
	2,735	3,731 -	Std Dev
	11 .	34 -	Count
Bublio	29,100	21,000	
Public Masters	27,300	18,000	
granting	22,000	15,600	
grundring	25,368	18,805	
	4,784	4,572	
	19	47	
D., b.14a	29,100	23,000	
Public Doctorate	28,080	20,000	
granting	26,000	17,912	
grunting	27,069	19,943	
	3,455	3,900	
	333	105	
Private	28,920	22,500	
Bachelors	27,800	18,500	
granting	24,950	16,000	
granting	26,730	19,359	
	3,152	4,651	
	16	63	
Private	30,000	22,000	•
Masters	29,500	20,600	
granting	23,200	16,250	
3	27,900	20,150	
	3,667	4,239	
	15	12	
Private	29,100	24,000	
Doctorate	28,000	22,000	
granting	26,575	19,500	
g	27,398	21,514	
	2,374	4,009	
	86	31	
No Response		21,525	
	29,500	19,100	
		17,710	
	29,500	19,445	
		2,089	
	1	4	
ALL TYPES	29,100	22,800	
	28,020	19,500	
	26,000	17,000	
	27,099 3,340	19,708 4,200	
	481	296	
	401	230	

TABLE A-19

SALARIES of <u>INEXPERIENCED</u> FULL-TIME Recipients of BACHELORS DEGREES according to DEGREE TYPE and EMPLOYER SIZE 1985 Starting Salary Survey

DEGREE'TYPE

	Chamical		
SCHOOL SIZE	Chemical Engineers	Chemist	•
3011002 3122	Lingtineers	CHEMISC	
Less than	28,010	23,000	- 75th %-ile
1,500	23,950		- 50th %-ile
	20,475	16,000	- 25th %-ile
	24,145	19,924	- Mean
	3,925	•	- Std Dev
	4	31	- Count
1,500-4,999	29,200	22,125	
	28,000 24,550	18,750 16,000	
	26,882	19,082	
	3,278	4,117	
	73	62	
5,000-9,999	29,000	23,000	
	28,000	19,020	
	26,000	15,500	
	27,036	19,218	
	2,849	4,739	
	61	51	
10-20,000	29,280	22,850	
·	28,000	19,750	
•	26,050	17,825	
	27,557	20,169	
	3,561	3,680	
	85	82	
More than	29,100	23,125	
20,000	28,200	20,000	
•	26,000	17,956	
	27,094	20,109	
	3,376	4,141	
	255	66	
No Response	28,700	21,300	
no nosponso	23,500	17,750	
	23,000	14,800	
	25,067	17,950	
	3,156	3,426	
	3	. 4	
•	•	•	
ALL SIZES	29,100	22 000	
WEE SIVES	28,020	22,800 19,500	
	26,000	17,000	
	27,099	19,708	
	3,340	4,200	13
	481	296	•
			

TABLE 8-1a

CHEMISTRY GRADUATES according to EMPLOYMENT STATUS, DEGREE. 1985 Starting Salary Survey

and SEX	
UEGREE,	
NI SIAIUS,	Survey
EMPLOYMEN	g Salary Survey
ording to	5 Starting

Bachelors

Doctorate

Masters

			-Count	-% of Row	-% of Col																		
	BOTH	SEXES	12	100.0%	4.9%	2	100.0%	.8%	141	100.0%	57.6%	2	100.0%	2.0%	7.5			10	100.0%	4.1%	245	100.0%	100.0%
	N O	Response	0	0.0%	* * *	0	0.0%	* * *	0	0.0%	* * *		0.0%	*			* * *	0	0.0%	* * *	c	0 0	* * *
		Мошел	4	33.3%	8.5%		50.0%	2.1%	28		59.6%	2	40.0%	4.3%	11	14.7%	23.4%	1	10.0%	2.1%	7.4	19.2%	100.0%
		æ e e	8	66.7%	4.0%	-	50.0%	0.5%	113	80.1%	57.1%	က	80.09	1.5%	64	85.3%	32.3%	6	80.06	4.5%		200	100.0%
	ВОТН	SEXES		100.0%			100.0%	13.4%	88	100.0%	47.3%	10	100.0%	5.4%	46	100.0%	24.7%	S	100.0%	2.7%	781	100.0%	100.0%
	N O	Response	0	0.0%	* * *	0	0.0%	* * *			* *	0	0.0%	* *	0		* * *	0	0.0%	* *	c	, c	* *
		Vomen	m	25.0%	5.1%	12	48.0%	20.3%	29	33.0%	49.2%	m	30.0%	5.1%	10	21.7%	16.9%	2	40.0%	3.4%	ŭ	21 7%	100.0%
		Œ ⊕	ģ	75.0%	7.1%	13	52.0%	10.2%	59	67.0%	46.5%	7	70.0%	5.5%	36	78.3%	28.3%	٣	80.09	2.4%		771	100.0%
	вотн	SEXES	168	100.0%	11.7%	398	100.0%	27.8%	416	100.0%	29.1%	128	100.0%	8.9%	294	100.0%	20.5%	28	100			100 04	100.0%
	0 2	Response	0	0.0%	0.0%	0	0.0%	0.0%		0.0%		0	0.0%	0.0%	0	0.0%	0.0%	2	7.1%	100.0%	c	7 0	100.0%
		Мошел	69	41.1%	12.1%	139	34.9%	24.3%	183	44.0%	32.0%	54	42.2%	9.4%	118	40.1%	20.6%	6	32.1%			3/6	100.0%
SEX		A e n	66	58.9%	11.5%	259	65.1%	30.2%	233	56.0%	27.2%	7.4	57.8%	8.6%	176	59.9%	20.5%	17	80.7%	2.0%	0	9000	100.0%
		EMPLOYMENT STATUS	Unemployed and	seeking employment		Unemployed and	not seeking	employment	Full-time in	chemistry		Full-time in	non-chemistry		Assistantship,	postdoctoral, or	other fellowship	No Response				1	

TABLE 8-1b

CHEMISTRY GRADUATES according to PLANS FOR FURTHER STUDIES IN FALL 1985, DEGREE, and SEX 1985 Starting Salary Survey

			-Count -% of Row -% of Col				
		BOTH SEXES	219 100.0% 89.4%	16 100.0%	100.0%	100.0%	245 100.0% 100.0%
Doctorate		N o Response	% 0 ° % * *	80°* 0°* 0°* **	00 % 00 % 4 %	%0°0 ***	* * 0 0 % * * * %
Doct		Мотеп	44 20.1% 93.6%	2 12.5% 4.3%	20.0%	00.0	47 19.2% 100.0%
		Men	175 79.9% 88.4%	14 87.5% 7.1%	80°0% 2°0%	5 100.0% 2.5%	198 80.8% 100.0%
		BOTH SEXES	102 100.0% 54.8%	71 100.0% 38.2%		3 100.0% 1.6%	186 100.0% 100.0%
ers		No Response	0 % 0 * * * *	0°0** *******	% % % % * * * *	* * * * * * * * * * * * * * * * * * *	% 0 · 0 · * *
Masters		Women	36 35.3% 61.0%	19 26.8% 32.2%	4 40.04 6.8%	0.0%	59 31.7% 100.0%
		æ	66 64.7% 52.0%	52 73.2% 40.9%	6 60.0% 4.7%	3 100.0% 2.4%	127 68.3% 100.0%
		BOTH SEXES	591 100.0% 41.3%	691 100.0% 48.3%	141 100.0% 9.8%	9 100.0% 0.6%	1,432 100.0%
Bachelors		No Response	1 0.2% 50.0%	0.1% 50.0%	0 0.0 %0.0	0 %0.0 %0.0	2 0.1% 100.0%
Bach		Vomen	254 43.0% 44.4%	256 37.0% 44.8%	57 40.4% 10.0%	55.6% 0.9%	572 39.9% 100.0%
	SEX	Mea	336 56.9% 39.2%	434 62.8% 50.6%	84 59.6% 9.8%	44.4% 0.5%	858 59.9% 100.0%
		FURTHER STUDIES	No plans	Full-time	Part-time	No Response	ALL

TABLE B-2a

according to EMPLOYMENT STATUS, DEGREE, and CITIZENSHIP 1985 Starting Salary Survey CHEMISTRY GRADUATES

Bachelors

% of Row % of Col Count - 0.0% Response 0.0% 0.0% * * * * 17 22.7% 58.6% 29 11.8% 100.0% Other 1 20.0% 3.4% 2 16.7% 6.9% 1 50.0% 3.4% 5.0% 1 10.0% Visa Natural- Permanent 3 2.1% 42.9% Resident 0.0% 0.0% 0.0% 2 2.7% 28.6% 7 2.9% 1 10.0% 3 2.1% 60.0% 1 1.3% 20.0% 0.0% 0.0% 5 2.0% 100.0% ized 55 73.3% 27.0% 128 90.8% 90.8% 62.7% 204 83.3% 100.0% Native 4 80.0% 2.0% 8 80.0% 1 50.0% 0.5% 0 · 0 * * * * Response 0.0% ** * ** 5 41.7% 26.3% 4 16.0% 21.1% 0.0% 1 1.1% 5.3% 0.0 0.0 0.0 19 10.2% 100.0% Other 19.6% Visa 1 8.3% 33.3% Natural- Permanent Resident 0.0% 0.0% 0.0% 86.7% 100.0% 0.0% 0.0% 1 4.0% 14.3% 7 3.8% 100.0% 3.4% 2.2% 2 40.0% ized U.S. Native 84 95.5% 53.5% 73.9% 84.4% 6 50.0% 3.8% 20 80.0% 12.7% 100.0% 6.4% 1 0.2% 16.7% 0.0% 0.0% %0°0 %0°0 1.6% 10.7% Response 3 1.0% 27.3% 1 0.2% 9.1% 0.0% 4 1.0% 36.4% $\frac{11}{0.8}$ Other Visa 4 1.0% 25.0% Natural- Permanent 1 0.8% 6.3% 2 0.7% 12.5% $\begin{array}{c} 16 \\ 1.13 \\ 100.03 \end{array}$ 1.7% 0.0% Resident 0.0% 0.0% 46 3.2% 100.0% 16 4.0% 34.8% 2.6% 3.1% 19.6% 11 U.S. Natural . Native lized CITIZENSHIP 396 95.2% 29.3% 374 94.0% 27.6% 125 97.7% 9.2% 95.2% 85.7% 1.8% 280 24 seeking employment postdoctoral, or other fellowship EMPLOYMENT STATUS Assistantship, Unemployed and Unemployed and non-chemistry not seeking Full-time in Full-time in No Response employment chemistry ALL

100.0%

100.0%

100.0%

20.00

100.0%

6 0.4% 100.0%

11 0.8% 100.0%

 $\begin{array}{c} 16 \\ 1.18 \\ 100.08 \end{array}$

46 3.2% 100.0%

94.5%

ALL

TABLE 8-2b

according to PLANS FOR FURTHER STUDIES IN FALL 1985, DEGREE, and CITIZENSHIP CHEMISTRY GRADUATES

No Response 0 · 0 * * * 0.0** 0.0% 0.0% 0 0 * * 0.0 0.0 0.0% Natural- Permanent Other 25 11.4% 86.2% .18.8% 10.3% 20.0% 29 11.8% Visa Doctorate Resident 0.0% 0.0% 7 2.9% 0.0% 1.8% 0.0% 0.0% 0.0% 0.0% 20.0% 5 2.0% U.S. Natur Native ized 204 83.3% 100.0% 183 83.6% 89.7% 5 100.0% 2.5% 13 81.3% 6.4% 3 60.0% 1.5% 0 0 0 * * * * 0 * 0 * % % Response %*.*** 0.0% 16 22.5% 84.2% 19 10.2% 100.0% 0 · 0 % Natural- Permanent Other ilized Resident Visa 3 2.9% 15.8% 0.0% 0.0% 1 10.0% 33.3% 0.0% 1 1.4% 33.3% Masters 3 1.6% 100.0% 1 1.0% 33.3% 2 2.8% 28.6% 33.3% 14.3% 4 3.9% 57.1% 3.8% 100.0% 0.0% U.S. Native 52 73.2% 33.1% 157 84.4% 100.0% 9 90.0% 5.7% 94 92.2% 59.9% 2 66.7% 1.3% No Response 0.1% 16.7% 0.7% 3 0.5% 50.0% 9 1.3% 81.8% 0.0% 1 0.2% 9.1% 0.7% 9.1% Other Visa Bachelors 8 1.2% 50.0% Natural- Permanent 1 0.7% 6.3% Resident 0.0% 2 1.4% 4.3% 27 3.9% 58.7% 17 2.9 37.00.0% ized CITIZENSHIP 563 95.3% 41.6% 646 93.5% 47.7% 136 96.5% 10.1% U.S. Native 8 88.9% 0.6% 1985 Starting Salary Survey FURTHER STUDIES No Response Full-time Part-time No Plans

- % of Row - % of Col

- Count

TABLE B-3a

CHEMISTRY GRADUATES
according to EMPLOYMENT STATUS, ETHNICITY, and DEGREE
1985 Starting Salary Survey

		DEGREE		
EMPLOYMENT STATUS	B.S.	M.S.	Ph.D.	
Unemployed and	168	12	12 -	Count
seeking employment	87.5%	6.3%		% of Row
	11.8%	6.5%	4.9% -	% of Col
Unemployed and	396	25	2	•
not seeking	93.6%	5.9%	0.5%	
employment	27.8%	13.5%	0.8%	
Full-time in	414	87	141	
chemistry	64.5%	13.6%	22.0%	
·	29.1%	47.0%	57.6%	
Full-time in	127	10	5	
non-chemistry	89.4%	7.0%	3.5%	
•	8.9%	5.4%	2.0%	
Assistantship,	291	46	75	
Postdoctoral or	70.5%	11.1%	18.2%	
other fellowship	20.5%	24.9%	30.6%	
No Response	26	5	10	
•	63.4%	12.2%	24.4%	
	1.8%	2.7%	4.1%	
ALL	1,422	185	2 4 5	
ALL	76.7%	10.0%		
	100.0%			

TABLE B-3b

CHEMISTRY GRADUATES

according to PLANS FOR FURTHER STUDIES IN FALL 1985, ETHNICITY, and DEGREE 1985 Starting Salary Survey

		DEGREE			
FURTHER STUDIES	B.S.	M.S.	Ph.D.		
No plans	588	101	219	-	Count
					% of Row
	41.4%	54.6%	89.4%	-	% of Col
Full-time	687	7 1	16		
		9.2%			
		38.4%			
Part-time	139	10	5		
	90.3%	6.5%	3.2%		
	9.8%	5.4%	2.0%		
No Response	8	3	5		
	50.0%	18.8%	31.3%		
	0.6%	1.6%	2.0%		
ALL		185			
		10.0%			
	100.0%	100.0%	100.0%		

TABLE B-4a

BACHELORS CHEMISTRY GRADUATES according to EMPLOYMENT STATUS

and whether graduate completed ACS APPROVED CURRICULUM 1985 Starting Salary Survey

CURR	TCILL	II M	A D D	D O V	E D 2
LUKK	1606	UM	APP	KU V	EU!

EMPLOYMENT STATUS	No	Yes	ALL	
Unemployed and	85	83	168 -	Count
seeking employment	50.6% 12.1%	49.4% 11.4%		% of Row % of Col
Unemployed and not seeking employment	252 63.3% 35.7%	146 36.7% 20.1%	398 100.0% 27.8%	
Full-time in chemistry	190 45.7% 27.0%	226 54.3% 31.1%	416 100.0% 29.1%	
Full-time in non-chemistry	78 60.9% 11.1%	50 39.1% 6.9%	128 100.0% 8.9%	
Assistantship, postdoctoral or other fellowship	85 28.9% 12.1%	209 71.1% 28.7%	294 100.0% 20.5%	
No Response	15 53.6% 2.1%	13 46.4% 1.8%	28 100.0% 2.0%	
ALL	705 49.2% 100.0%	727 50.8% 100.0%	1,432 100.0% 100.0%	

TABLE B-4b

BACHELORS CHEMISTRY GRADUATES
according to PLANS FOR FURTHER STUDIES IN FALL 1985
and whether graduate completed ACS APPROVED CURRICULUM
1985 Starting Salary Survey

CURRICULUM APPROVED?

FURTHER STUDIES	No	Yes	ALL	
No plans	294	297	591	- Count
•	49.7%	50.3%	100.0%	- % of Row
	41.7%	40.9%	41.3%	- % of Col
Full-time	346	3 4 5	691	
	50.1%	49.9%	100.0%	
	49.1%	47.5%	48.3%	
Part-time	60	81	141	
	42.6%	57.4%	100.0%	
*	8.5%	11.1%	9.8%	•
No Response	5 .		9	
	55.6%	44.4%	100.0%	
	0.7%	0.6%	0.6%	
				€
ALL	7 0 5	727	1,432	•
	49.2%	50.8%	100.0%	
	100.0%	100.0%	100.0%	

TABLE B-5

MASTERS CHEMISTRY GRADUATES
according to EMPLOYMENT STATUS and DEGREE SPECIALTY
1985 Starting Salary Survey

EMPLOYMENT STATUS

			2111 20 1112					
DEGREE SPECIALTY	Unempl. and seek. empl.	Unempl. and not seeking empl.	Full- time in chem.		Asst. post. or other fellow.	No Response	ALL	
General chemistry	3 13.0% 25.0%	2 8.7% 8.0%	12 52.2% 13.6%	2 8.7% 20.0%	2 8.7% 4.3%	2 8.7% 40.0%	23 - 100.0% - 12.4% -	Count % of Row % of Col
Analytical chemistry	2 4.5% 16.7%	5 11.4% 20.0%	28 63.6% 31.8%	1 2.3% 10.0%	7 15.9% 15.2%	1 2.3% 20.0%	44 100.0% 23.7%	
Inorganic chemistry	0 0.0% 0.0%	4 21.1% 16.0%	2 10.5% 2.3%	0 0.0% 0.0%	11 57.9% 23.9%	2 10.5% 40.0%	19 100.0% 10.2%	
Organic chemistry	4 7.1% 33.3%	6 10.7% 24.0%	28 50.0% 31.8%	3 5.4% 30.0%	15 26.8% 32.6%	0 0.0% 0.0%	56 100.0% 30.1%	
Polymer chemistry	0 0.0% 0.0%	1 16.7% 4.0%	4 66.7% 4.5%	0 0.0% 0.0%	1 16.7% 2.2%	0 0.0% 0.0%	6 100.0% 3.2%	
Pharmaceutical chemistry	0 0.0% 0.0%	0 0.0% 0.0%	1 100.0% 1.1%	0 0.0% 0.0%	0 0.0% 0.0%	0 0.0% 0.0%	1 100.0% 0.5%	
Medicinal/ clinical chemistry	0 0.0% 0.0%	1 50.0% 4.0%	1 50.0% 1.1%	0 0.0% 0.0%	0 0.0% 0.0%	0 0.0% 0.0%	2 100.0% 1.1%	
Theoretical chemistry	0 0.0% 0.0%	0 0.0% 0.0%	0 0.0% 0.0%	0 0.0% 0.0%	2 100.0% 4.3%	0 0.0% 0.0%	2 100.0% 1.1%	
Environmental chemistry	0 0.0% 0.0%	1 50.0% 4.0%	1 50.0% 1.1%	0 0.0% 0.0%	0 0.0% 0.0%	0 0.0% 0.0%	2 100.0% 1.1%	
Agricultural/ food chemistry	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	
Physical chemistry	3 12.0% 25.0%	5 20.0% 20.0%	6 24.0% 6.8%	3 12.0% 30.0%	8 32.0% 17.4%	0 0.0% 0.0%	25 100.0% 13.4%	
Other chemistry	0 0.0% 0.0%	0 0.0% 0.0%	5 83.3% 5.7%	1 16.7% 10.0%	0 0.0% 0.0%	0 0.0% 0.0%	6 100.0% 3.2%	
ALL SPECIALTIES	12 6.5% 100.0%	25 13.4% 100.0%	88 47.3% 100.0%	10 5.4% 100.0%	46 24.7% 100.0%	5 2.7% 100.0%	186 100.0% 100.0%	

Ph.D CHEMISTRY GRADUATES
according to EMPLOYMENT STATUS and DEGREE SPECIALTY
1985 Starting Salary Survey

TABLE B-6

EMPLOYMENT STATUS

		Unemp1.			Asst.			
	Unempl.	and not						
		seeking	time ir	n time in				
DEGREE SPECIALTY	emp1.	emp1.	chem.	non-chei	m. fellow.	Response	ALL	
Conoral	•							
General chemistrry	0 *** _* *%	0 ***.*%	0 ***.*%	0	0	0	0 -	Count
CHEMISTRY	0.0%	0.0%		***.*%	***.*%	***.*%	***.*% -	% of Row
	0.06	0.0%	0.0%	0.0%	0.0%	0.0%	0.0% -	% of Col
Analytical	1	0	34	0	11	4	50	
chemistry	2.0%	0.0%		0.0%	22.0%	8.0%	100.0%	
	8.3%	0.0%	24.1%	0.0%	14.7%	40.0%	20.4%	
Inorganic	1	1	26	1	14	1	44	
chemistry	2.3%	2.3%	59.1%	2.3%	31.8%	2.3%	100.0%	
J	8.3%	50.0%	18.4%		18.7%	10.0%	18.0%	
Organic	-	•		_				
chemistry	5 6.4%	0	41	1	28	3	78	
Chemistry	41.7%	0.0%	52.6%	1.3%	35.9%	3.8%	100.0%	
	41.7%	0.0%	29.1%	20.0%	37.3%	30.0%	31.8%	
Polymer	1	0	8	0	4	0	13	
chemistry	7.7%	0.0%	61.5%	0.0%	30.8%	0.0%	100.0%	
	8.3%	0.0%	5.7%	0.0%	5.3%	0.0%	5.3%	
Pharmaceutical	0	0	0	0	0	0	0	
chemistry	***.*%	***.*%	***.*%	***.*%	***.*%	*** * %	*** * * %	
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Medicinal/	0	0	0	0	0	0	0	
clinical	***.*%	***.*%	***.*%	***.*%	***.*%	***.*%	***.*%	
chemistry	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Theoretical	0	0	,	•	_			
chemistry	0.0%	0.0%	3 50.0%	2	1	0	6	
· · · · · · · · · · · · · · · · · · ·	0.0%	0.0%	2.1%	33.3% 40.0%	16.7% 1.3%	0.0%	100.0%	
	0.0%	0.0%	2.1%	40.0%	1.3%	0.0%	2.4%	
Environmental	0	0	1	1	0	0	2	
chemistry	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%	100.0%	
	0.0%	0.0%	0.7%	20.0%	0.0%	0.0%	0.8%	
Agricultural/	0	0	0	0	0	0	0	
food chemistry	***.*%	***.*%	***.*%	***.*%	***.*%	***.*%	***.*%	
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Physical	4	1	24	0	16	2	47	
chemistry	8.5%	2.1%	51.1%	0.0%	34.0%	4.3%	100.0%	
•	33.3%	50.0%	17.0%	0.0%	21.3%	20.0%	19.2%	
Other	0			•	_			
chemistry	0 0.0%	0 0.0%	4	0	1	0	5	
circuits cry	0.0%		80.0%	0.0%	20.0%	0.0%	100.0%	
	0.0%	0.0%	2.8%	0.0%	1.3%	0.0%	2.0%	
ALL SPECIALTIES	1 2	n	141	_	7.5			
OF COTACTIES		0.8%		5 2.0%	75 30.6%	10	245	
			100.0%	100 0%		4.1%	100.0%	
			100.08	100.06	100.06	100.0%	100.0%	

TABLE 8-7a

CHEMICAL ENGINEERING GRADUATES according to EMPLOYMENT STATUS, DEGREE, and SEX 1985 Starting Salary Survey

		Bach	Bachelors			Masters	ers			Doct	Doctorate	
	SEX											
EMPLOYMENT STATUS	A e n	Women	No Response	BOTH SEXES	Men	Women	No Response	BOTH SEXES	Men	Women	No Response	BOTH SEXES
		,	,	, u	-	u	c	1.7	m	c	0	3 - Count
Unemployed and	1/5	٤/ ع	ກ ເ	107	71 04		2 0	100	100.0%	0.0%	%O O	100.0% - % of Row
seeking employment	69.7% 17.9%	29.1% 19.6%	1.2%	100.0% 18.5%	8.6%	29.48 12.5%	* * * * * *	9.4%	3 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	%0°0	* *	1 24 0 7
T (106	25	-	132	13	2	0	15		0	0	
Unemployed and	100	18 94	, & C	100.0%	86.7%	13.3%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%
not seeking employment	10.8%	6.7%	20.02	9.7%	9.3%	5.0%	***	8.3%	1.3%	0.0%	%* · **	1.1%
6 T C E T C C C C C C C C C C C C C C C C	9449	19.		645	7.1	. 20	0	91	6.4	11	. 0	7.5
	644	30 2%	0.2%	100.0%	78.0%	22.0%	0.0%	100.0%	85.3%	14.7%	0.0%	100.0%
, L. J	45.9%	52.3%	20.02	47.5%	50.7%	50.0%	***	50.6%	80.0%	91.7%	***	81.5%
F.: 1] - + + mo in	153	51	0	204	10	4	0	14		0.	0	2
2 - 1	75.0%	25 0%	70.0	100.0%	71.4%	28.6%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%
() () ()	15.6%	13.7%	%0.0	15.0%	7.1%	10.0%	***	7.8%	6.3%	0.0%	* *	5.4%
	7.2	23	c	94	. 29	7	0	36	4	1	0	വ
ssistantsaip,	76.6%	23.4%	% 0.0	100.0%	80.6%	19.4%	0.0%	100.0%	80.0%	20.0%	0.0%	100.0%
other fellowship	7.4%	5.9%	0.0%	26.9	20.7%	17.5%	**	20.0%	5.0%	8.3%	6° * * * *	5.4%
0	2.4	7	c	31	ß	2	0	7	, ,	0	0	. 8
מס בחלקטע סע	77.4%	22.6%	%0°0	100.0%	71.4%	28.6%	0.0%	100.0%	100.0%	0.0%	0.0%	100.0%
	2.5%	1.9%	0.0%	2.3%	3.6%	5.0%	* * *	3.9%	3.8%	0.0%	* *	3.3%
	979	373	ហ	1,357	140	40	0	180		12	, o	. 26
	72.1%	27.5%	0.4%	100.0%	77.8%	22.2%	0.0%	100.0%	87.0%	13.0%	0.0%	100.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	* * *	100.0%	100.0%	100.0%	* * *	100.0%

CHEMICAL ENGINEERING GRADUATES according to PLANS FNP FIFT 1985 Story

1985 Starting Salary Survey	ry Survey											
	•	Bacl	Bachelors			Mast	Masters			D 0 C	Doctorate	
	SEX	. ,			,							
FURTHER STUDIES	æ æ	₩omen	No Response	BOTH SEXES	æ .	Women	No Response	BOTH SEXES	₩ en	Мошеп	No Response	BOTH SEXES
No plans	661 71.2% 67.5%	265 28.5% 71.0%	3 0.3% 60.0%	929 100.0% 68.5%	73 74.5% 52.1%	25 25.5% 62.5%	% 0 · · · · · · · · · · · · · · · · · ·	98 100.0% 54.4%	76 87.4% 95.0%	11 12.6% 91.7%	% % % * * * * *	87 - Count 100.0% - % of Row 94.6% - % of Col
Full-time	190 78.8% 19.4%	50 20.7% 13.4%	0.4% 20.0%	241 100.0% 17.8%	50 86.2% 35.7%	8 13.8% 20.0%	0 · 0 * * * *	58 100.0% 32.2%	0 * * * * 0 • 0 • 0	0 * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *	* 0 * 0 * %
Part-time	120 67.8% 12.3%	56 31.6% 15.0%	1 0.6% 20.0%	177 100.0% 13.0%	17 70.8% 12.1%	7 29.2% 17.5%	% 0 % * 0 * * * * *	24 100.0% 13.3%	2 66.7% 2.5%	33.38 8.3%	% % 0 * * 0 * * *	3 100.0% 3.3%
No Response	8 80.08 0.8%	2 20.0% 0.5%	0.00	10 100.0% 0.7%	0 * 0 * * 0 * 7	 0 * % 0 * 0 * 0	* * * * * * * * * * * * * * * * * * *	* % * % * % * %	2 100.0% 2.5%	0.0%	0 · 0 · * * * *	2 100.0% 2.2%
ALL	979 72.1% 100.0%	373 27.5% 100.0%	5 0.4% 100.0%	1,357 100.0% 100.0%	140 77.8% 100.0%	40 22.2% 100.0%	0 * 0 * 0 %	180 100.0% 100.0%	80 87.0% 100.0%	12 13.0% 100.0%	0 · 0 * * * *	92 100.0% 100.0%

TABLE B-8a

CHEMICAL ENGINEERING GRADUATES according to EMPLOYMENT STATUS, DEGREE, and CITIZENSHIP 1985 Starting Salary Survey

Bachelors

Doctorate

Masters

	CITIZENSHIP	SHIP														
EMPLOYMENT STATUS	U.S. Native	U.S. Natural- ized	U.S. Natural- Permanent ized Resident	. Other Visa	N o Response	U.S. Native	U.S. Natural- ized	Permanent Resident	Other Visa	N o Response	U.S. Native	U.S. Natural- ized	Permanent Resident	Other Visa	N o Response	
Unemployed and seeking employment	233 92.8% 18.0%	11 4.4% 31.4%	4 1.6% 25.0%	0.4%	2 0.8% 100.0%	8 47.1% 5.6%	1 5.9% 14.3%	2 11.8% 33.3%	6 35.3% 26.1%	0 · · · * * *	0 %0.0 %0.0	0.0 %0.0	2 66.7% 22.2%	33.3% 5.3%	1 1 80 0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Count % of Row % of Col
Unemployed and not seeking employment	122 92.4% 9.4%	6 4.5% 17.1%	0.8% 6.3%	2.3% 30.0%	0.0 %0.0 %0.0	6 6 6 3 8 6	0 0.0% 0.0%	0.0 %0.0	6 40.0% 26.1%	% % 0 * *	0.0% %0.0%	0.0%	0.0%	1 100.0% 5.3%	% % % % * * * *	
Full-time in chemistry	625 96.9% 48.3%	12 1.9% 34.3%	6 0.9% 37.5%	2 0.3% 20.0%	0.0%	81 89.0% 56.3%	4.4% 57.1%	4 4.4% 66.7%	2.2% 8.7%	84 0 .* 0 . * *	49 65.3% 87.5%	9.3% 87.5%	7 9.3% 77.8%	12 16.0% 63.2%	% % % % % % % % % % % % % % % % % % %	
Full-time in non-chemistry	198 97.1% 15.3%	2 1.0% 5.7%	3 1.5% 18.8%	1 0.5% 10.0%	0.0%	14 100.0% 9.7%	0 %0.0 %0.0	0 0.0 %0.0	0.0% 0.0%	% % 0 · 0 * *	4 80.0% 7.1%	0.0%	0°0°0 %0°0	1 20.0% 5.3%	· 0 · 0 · * *	
Assistantship, postdoctoral, or other fellowship	87 92.6% 6.7%	3.2% 8.6%	1 1.1% 6.3%	3.2% 30.0%	0.0%	27 75.0% 18.8%	2 5.6% 28.6%	0.0	7 19.4% 30.4%	0 0 % 0 0 * * *	1 20.0% 1.8%	1 20.0% 12.5%	0 20.0 20.0	3 60.0% 15.8%	0 0 % * * *	
No Response	29 93.5% 2.2%	3.2% 2.9%	3.2% 6.3%	0.0%	0.0	71.4% 3.5%	0.0%	0 0.0 %0.0	28.6% 8.7%	0 0 4 4 4 4	2 66.7% 3.6%	0.0%0.0	0.0 20.0	33.3% 5.3%	0 ° 0 * * * * * * * * * * * * * * * * *	
ALL	1,294 95.4% 100.0%	35 2.6% 100.0%	16 1.2% 100.0%	10 0.7% 100.0%	2 0.1% 100.0%	144 80.0% 100.0%	7 3.9% 100.0%	6 3.3% 100.0%	23 12.8% 100.0%	* * * * * * * * * * * * * * * * * * *	56 60.9% 100.0%	8 8.7% 100.0%	9 8.6 100.01	19 20.7% 100.0%	0 ** ** % %	

100.01

TABLE B-8b

CHEMICAL ENGINEERING GRADUATES according to PLANS FOR FURTHER STUDIES IN FALL 1985, DEGREE, and CITIZENSHIP 1985 Starting Salary Survey

Bachelors

Masters

% of Row % of Col Count Response 0.0% *** 0 *. ** 0.0% 0.0% ** * ** 8* *** 17 19.5% 89.5% Other ** * * * * 0 · 0 % Visa 19 20.7% 100.0% 1 33.3% 50.0% 5.3% 5.3% J Doctorate Natural- Permanent Resident 0.0% 0.0% 0 * * * 50.0% 9.8% 8 8.7% 100.0% 0 0.0% 0.0% 0.0% 0.0% 2*. *** 0.0% ized U.S. Native 0 ** 0 0 0 % 0.02 62.1% 96.4% 2 66.7% 3.6% 56 60.9% 100.0% Response 0.0% 0.0% 0.0% ** * * *** ** *** ٥ 19 32.8% 82.6% Other Permanent Other Resident Visa 23 12.8% 100.0% 16.7% * * * * 17.4% 0.0% 3 3.1% 50.0% 2 8.3% 0 100.0% Natural-2 2.0% 28.6% 5.2% 2 8.3% 2* *** 3.9% 28.6% 0.0% 100.0% ized 93 94.9% 64.6% 35 60.3% 24.3% 16 66.7% 11.1% U.S. Native 144 80.0% 100.0% ***.** 2 0.1% Response 0.4% 50.0% 0.0% 0.0% 2.5% 10 0.7% 100.0% 0.0% 30.0% 10.0% Visa Natural- Permanent Resident 2 0.8% 12.5% 16 1.2% 100.0% 3.4% 1 10.0% 6.3% 37.5% 0.0% 0.0% 35 2.6% 100.0% 4.6% 4.0% 31.4% 48.6% 1 z e d CITIZENSHIP 901 97.0% 69.6% 221 91.7% 17.1% U.S. Native 92.1% 90.0% 163 20.00 FURTHER STUDIES No Response Full-time Part-time No.plans ALL

TABLE B-9a

CHEMICAL ENGINEERING GRADUATES
according to EMPLOYMENT STATUS, DEGREE, and ETHNICITY
1985 Starting Salary Survey

DEGREE

~				No	
EMPLOYMENT STATUS	B.S.	M.S.	Ph.D.	Response	
Unemployed and	249	17	3	0 -	Count
seeking employment	92.6% 18.5%	6.3% 9.6%	1.1%	0.0% - 0.0% -	% of Row % of Col
Unemployed and	131	15	1	0	
not seeking employment	89.1% 9.7%	10.2% 8.4%	0.7% 1.1%	0.0% 0.0%	
Full-time in	640	89	7 4	1	
chemistry	79.6% 47.5%	11.1% 50.0%	9.2% 81.3%	0.1% 50.0%	
Full-time in	203	14	5	1	
non-chemistry	91.0% 15.1%	6.3% 7.9%	2.2% 5.5%		
Assistantship,	93	36	5	0	
postdoctoral, or other fellowship	69.4%	26.9% 20.2%	3.7% 5.5%	0.0%	
No Response	30	7	3	0	
	75.0% 2.2%	17.5% 3.9%	7.5% 3.3%	0.0%	
ALL	83.2%	178 11.0%	5.6%	2 0.1%	
	100.0%	100.0%	100.0%	100.0%	

TABLE B-9b

CHEMICAL ENGINEERING GRADUATES according to PLANS FOR FURTHER STUDIES IN FALL 1985, DEGREE, and ETHNICITY 1985 Starting Salary Survey

DEGREE

				No	
FURTHER STUDIES	B.S.	M.S.	Ph.D.	Response	
No sloss	. 0.2.4		86	2 -	Count
No plans	924	96		2 -	
				0.2% -	
	68.6%	53.9%	94.5%	100.0% -	% of Col
Full-time	238	58	0	0	
	80.4%	19.6%	0.0%	0.0%	
•	17.7%	32.6%	0.0%	0.0%	
Part-time	174	24	. 3	0	
	86.6%	11.9%	1.5%	0.0%	
	12.9%	13.5%	3.3%	0.0%	
No Response	10	0	2	0	
	83.3%	0.0%	16.7%	0.0%	
	0.7%		2.2%	0.0%	
ALL	1,346	178	91	2	
	83.2%	11.0%	5.6%	0.1%	
	100.0%	100.0%	100.0%	100.0%	

1985 Starting Sala	ary Survey									
		Bachelor	s		Masters			Doctora	te	
	SEX									
STUDY FIELD	Men	Women	BOTH SEXES	Men	Women	BOTH SEXES	Men	Women	BOTH SEXES	
Chemistry	43 63.2% 51.2%	25 36.8% 43.9%	68 100.0% 48.2%	3 50.0% 50.0%	3 50.0% 75.0%	6 100.0% 60.0%	1 100.0% 25.0%	0 0.0% 0.0%	1 - 100.0% - 20.0% -	% of Ro
Other physical sciece	7 70.0% 8.3%	3 30.0% 5.3%	10 100.0% 7.1%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0	0 0.0% 0.0%	1 100.0% 100.0%	1 100.0% 20.0%	
Chemical engineerig	1 50.0% 1.2%	1 50.0% 1.8%	2 100.0% 1.4%	1 100.0% 16.7%	0 0.0% 0.0%	1 100.0% 10.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	
Other engineering	7 58.3% 8.3%	5 41.7% 8.8%	12 100.0% 8.5%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	
Biochemistry	3 33.3% 3.6%	6 66.7% 10.5%	9 100.0% 6.4%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	1 100.0% 25.0%	0 0.0% 0.0%	1 100.0% 20.0%	
Life science	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	1 100.0% 25.0%	0 0.0% 0.0%	1 100.0% 20.0%	
Medicine	2 50.0% 2.4%	2 50.0% 3.5%	4 100.0% 2.8%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	
Dentistry	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	
Pharmacy, pharmacology	2 50.0% 2.4%	2 50.0% 3.5%	4 100.0% 2.8%	1 100,0% 16.7%	0 0.0% 0.0%	1 100.0% 10.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	
Business management	12 75.0% 14.3%	4 25.0% 7.0%	16 100.0% 11.3%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	1 100.0% 25.0%	0 0.0% 0.0%	1 100.0% 20.0%	
Education	2 28.6% 2.4%	5 71.4% 8.8%	7 100.0% 5.0%	50.0%	1 50.0% 25.0%	2 100.0% 20.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.* 0.0%	
Law	1 100.0% 1.2%	0 0.0% 0.0%	1 100.0% 0.7%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***,*% 0.0%	0 ***.*% 0.0%	
Social science	1 100.0% 1.2%	0 0.0% 0.0%	1 100.0% 0.7%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***,*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	
Other	2 33.3% 2.4%	4 66.7% 7.0%	6 100.0% 4.3%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	
No Response	1 100.0% 1.2%	0 0.0% 0.0%	1 100.0% 0.7%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%		0 ***.*% 0.0%	
ALL	84 59.6% 100.0%	57 40.4% 100.0%	141 100.0% 100.0%		40.0%	10 100.0% 100.0%	4 80.0% 100.0%	1 20.0% 100.0%	100.0%	

BACHELORS CHEMISTRY GRADUATES WHO PLAN PART-TIME STUDIES IN FALL 1985 according to FIELD OF ADVANCED STUDIES and whether graduate completed ACS APPROVED CURRICULUM
1985 Starting Salary Survey

TABLE C-2

	CURI	RICULUM AI	PPROVED?	
STUDY FIELD	No	Yes	ALL	
Chemistry	26 38.2% 43.3%		68 100.0% 48.2%	- % of Row
Other physical science	6 60.0% 10.0%	4	10	- % of Col
Chemical engineering	1 50.0% 1.7%	1 50.0% 1.2%	2 100.0% 1.4%	
Other engineering	3 25.0% 5.0%		12 100.0% 8.5%	
Biochemistry	5 55.6% 8.3%	4 44.4% 4.9%	9 100.0% 6.4%	
Life science	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	
Medicine	3 75.0% 5.0%	1 25.0% 1.2%	4 100.0% 2.8%	
Dentistry	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	, 3e
Pharmacy, pharmacology	2 50.0% 3.3%	2 50.0% 2.5%	4 100.0% 2.8%	
Business management	9 56.3% 15.0%			
Education	1 14.3% 1.7%	6 85.7% 7.4%	7 100.0% 5.0%	
Law	0 0.0% 0.0%		1 100.0% 0.7%	
Social science	1 100.0% 1.7%	0.0% 0.0% 0.0%	1 100.0% 0.7%	
Other	3 50.0% 5.0%	3 50.0% 3.7%	6 100.0% 4.3%	
No Response	0 0.0% 0.0%	1 100.0%	1 100.0% 0.7%	
LL	60 42.6% 100.0%	81 57.4% 100.0%	141 100.0% 100.0%	

TABLE C-3

CHEMICAL ENGINEERING GRADUATES WHO PLAN PART-TIME STUDIES IN FALL 1985 according to FIELD OF ADVANCED STUDIES, DEGREE, and SEX 1985 Starting Salary Survey

		Bachel	ors			Maste	ers	
	SEX							
STUDY FIELD	Men	Women	N o R e s p o n s e	BOTH SEXES	Men	Women	N o R e s p o n s e	BOTH SEXES
Chemistry	3 50.0% 2.5%	3 50.0% 5.4%	0 0.0% 0.0%	6 100.0% 3.4%	1 100.0% 5.9%	0 0.0% 0.0%	0 0.0% ***.*%	1 - Count 100.0% - % of Row 4.2% - % of Col
Other physical science	3 100.0% 2.5%	0 0.0% 0.0%	0 0.0% 0.0%	3 100.0% 1.7%	0 0.0% 0.0%	2 100.0% 28.6%	0 0.0% ***.*%	2 100.0% 8.3%
Chemical engineering	21 53.8% 17.5%	17 43.6% 30.4%	1 2.6% 100.0%	39 100.0% 22.0%	8 80.0% 47.1%	2 20.0% 28.6%	0 0.0% ***.*%	10 100.0% 41.7%
Other engineering	23 76.7% 19.2%	7 23.3% 12.5%	0 0.0% 0.0%	30 100.0% 16.9%	1 25.0% 5.9%	3 75.0% 42.9%	•	4 100.0% 16.7%
Biochemistry	3 100.0% 2.5%	0 0.0% 0.0%	0 0.0% 0.0%	3 100.0% 1.7%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% ***.*%	0 ***.*% 0.0%
Life science	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	1 100.0% 5.9%	0.0% 0.0% 0.0%	0 0.0% ***.*%	1 100.0% 4.2%
Medicine	0 0.0% 0.0%	1 100.0% 1.8%	0 0.0% 0.0%	1 100.0% 0.6%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% ***.*%	0 ***.*% 0.0%
Dentistry	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% ***.*%	0 ***.*% 0.0%
Pharmacy, pharmacology	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 *** *% 0.0%	***.*%	0 *** *% 0.0%
Business management	49 70.0% 40.8%	21 30.0% 37.5%	0 0.0% 0.0%	70 100.0% 39.5%	5 100.0% 29.4%		0 0.0% ***.*%	5 100.0% 20.8%
Education	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0.0%	***.*% 0.0%	0 ***.*% ***.*%	0 ***.*% 0.0%
Law	2 100.0% 1.7%	0.0%	0 0.0% 0.0%	2 100.0% 1.1%	0 ***.*% 0.0%	0.0%		0 ***.*% 0.0%
Social science	1 50.0% 0.8%	50.0%	0 0.0% 0.0%	100.0%	0 ***.*% 0.0%	0.0%	***.*% ***.*%	0 ***.*% 0.0%
Other	13 72.2% 10.8%	5 27.8% 8.9%	0 0.0% 0.0%	18 100.0% 10.2%	1 100.0% 5.9%	0.0%	0 0.0% ***.*%	1 100.0% 4.2%
No Response	2 66.7% 1.7%	1 33.3% 1.8%		3 100.0% 1.7%			0 ***.*% ***.*%	0 ***.*% 0.0%
ALL	120 67.8% 100.0%	56 31.6% 100.0%	1 0.6% 100.0%	177 100.0% 100.0%	17 70.8% 100.0%	29.2%	0 0.0% ***.*%	24 100.0% 100.0%

TABLE C-4 CHEMISTRY GRADUATES WHO PLAN FULL-TIME STUDIES IN FALL 1985 according to FIELD OF ADVANCED STUDIES, DEGREE, and SEX 1985 Starting Salary Survey

100.0%

100.0%

100.0%

100.0%

100.0%

100.0%

100.0%

100.0%

100.0%

100.0%

Bachelors Masters Doctorate SEX вотн BOTH Νo BOTH STUDY FIELD Men Men Women Response SEXES Women Response SEXES Response SEXES Chemistry 196 105 302 12 60 11 12 - Count 0.0% 64.9% 34.8% 0 3% 100.0% 80.0% 20.0% 100.0% 91.7% 8.3% 100.0% - % of Row 0.0% 45.2% 41.0% 100.0% 92.3% 43.7% 63.2% 84.5% 50.0% 75.0% - % of Col Other physical 12 ***.*% 41.7% 58.3% 0.0% ***.** 100.0% 0.0% 100.0% 0.0% ***.*% ***.*% 100.0% 1.2% 2.7% 0.0% 1.7% 0.0% 5.3% 1.4% 0.0% 0.0% 0.0% Chemical . 0 ***.*% 0 13 ***.** 0 0 engineering 69.2% ***.*% 30.8% 0.0% *** ** ***.*% ***.** 100.0% ***.*% 2.1% 1.6% 0.0% 1.9% 0.0% 0.0% 0.0% *** ** 0.0% 0.0% 0.0% Other engineering 71.4% 28.6% 0.0% 0.0% 100 0% በ በ % 100.0% 100.0% 100.0% 0.0% 0.0% 100.0% ***.*% 1.2% 0.8% 0.0% 1.0% 0.0% 5.3% 1.4% 7.1% 0.0% 6.3% Biochemistry 18 21 0 39 0 46.2% 53.8% 0.0% 0.0% 100.0% 0.0% 100.0% 100.0% 100.0% 100.0% 0.0% 0.0% ***.*% 4.1% 8.2% 0.0% 5.6% 0.0% 5.3% 1.4% 14.3% 0.0% 12.5% Life science 3 0 0 ***.*% 0 1 0 60.0% 40.0% 0.0% 100.0% 100.0% 0.0% 0.0% 100.0% ***.*% ***.** 0.7% 0.8% 0.0% *** * * 2 0.7% 1.9% 0.0% 1.4% 0.0% 0.0% 0.0% Medicine 208 64.9% 35.1% 0.0% 100.0% 33.3% 66.7% 0.0% 100.0% 0.0% 100.0% 0.0% 100.0% 31.1% 28.5% ***.** 0.0% 30.1% 3.8% 21.1% 8.5% 0.0% 50.0% 6.3% Dentistry 16 ***.** . 0 ***.** n 22 0 0 0 72.7% 27.3% 0.0% 100.0% ***.*% *** ** ***.** *** ** 3.7% 2.3% 0.0% 3.2% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Pharmacy, 0 0 ***.*% ***.*% 0.0% ***.*% ***.** ***.*% pharmacology 53.8% 46.2% 0.0% 100.0% 100.0% 100.0% 0.0% 0.0% 1.6% 1.9% 1.9% 0.0% 1.4% 0.0% 0.0% 0 ***.*% ***.*% ^% ***.*% Business 12 17 0 0 n ***.** ***.*% 70.6% management 29.4% 0 0% 100.0% ***.*% ***.*% *** ** 2.8% 2.0% 0.0% 2.5% 0.0% 0.0% *** ** 0.0% 0.0% 0.0% Education ***.*% 10 0 0 ٥ . 0 0 ***.*% ***.*% 0 ***.*% 40.0% 60.0% 0.0% 100.0% *** *% 0.9% 2.3% 0.0% 1.4% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0 u ***.** ***.** . ^* ***.** Law 0 0 ***.*** ***.** 0 0% ***.** ***.*% 85.7% 14.3% ***.*% 0.0% 100.0% ***.*% 1.4% 0.4% 0.0% 0.0% 0.0% 0 0 % 0.0% Social science 0 ***.** 0 ***.*% 0 0 0 0 0 0 ***.*% 100.0% 0.0% 0.0% 100.0% ***.*% 0.7% 0.0% 0.0% 0.4% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Other ***.** 14 21 0 ***.*% ***.*% ***.*% ***.** 33.3% 66.7% 0.0% 100.0% ***.*% ***.** 1.6% 5.5% 0 0% 3.0% 0.0% 0.0% ***.*% 0.0% ***.*% 0.0% 0.0% 0.0% 0 ***.*% No Response 0 12 0 0 66.7% *** ** ***.*% ***.** ***.*% 33.3% 100.0% 0.0% ***.*% ***.*% 0.0% ***.*% ***.*% 1.8% 1.6% 0.0% 1.7% 0.0% 0.0% 0.0% 0.0% 0.0% ALL 434 256 1 691 52 71 14 16 0.1% 0.0% 62.8% 37.0% 73.2% 100.0% 26.8% 100.0% 87.5% 12.5% 0.0% 100.0%

TABLE C-5

BACHELORS CHEMISTRY GRADUATES WHO PLAN FULL-TIME STUDIES IN FALL 1985 according to Field of Advanced Studies and whether graduate completed ACS APPROVED CURRICULUM 1985 Starting Salary Survey

	CURR	ICULUM APF	ROVED?	
STUDY-, FIELD	No	Y e s	ALL	
Chemistry	80 26.5%	222 73.5%	100.0% -	
Other physical	23.1%	5	12	% of Col
science	58.3% 2.0%	41.7%	100.0%	
Chemical	5	8	13	
engineering	38.5% 1.4%	61.5%	100.0%	
Other	2	5	7	
engineering	28.6% 0.6%	71.4%	100.0%	
Biochemistry	22	17	39	
	56.4% 6.4%	43.6% 4.9%	100.0%	
Life science	2	3	5	
	40.0%	60.0% 0.9%	100.0%	
Medicine	153	55	208	
	73.6% 44.2%	26.4% 15.9%	100.0%	
Dentistry	18	4	22	
	81.8% 5.2%	18.2%	100.0%	
Pharmacy,	8	5	13	
pharmacology	61.5%	38.5%	100.0%	
Business	13	4	17	
management	76.5% 3.8%	23.5%	100.0%	
Education	8	2	10	
	80.0%	20.0% 0.6%	100.0%	
Law	6	1	7	
	85.7% 1.7%	14.3%	100.0%	
Social science	2	1	3	
	66.7% 0.6%	33.3%	100.0%	
Other	16	5	21 100.0%	
	76.2% 4.6%	23.8%	3.0%	
No Response	4	8	12	
	33.3%	66.7% 2.3%	100.0%	
A11	346	345	691	
ALL	50.1%	49.9%	100.0%	

100.0% 100.0% 100.0%

TABLE C-6

CHEMICAL ENGINEERING GRADUATES WHO PLAN FULL-TIME STUDIES IN FALL 1985 according to FIELD OF ADVANCED STUDIES, DEGREE, and SEX 1985 Starting Salary Survey

		Bach	elors	•		Mast	ers	
	SEX							
STUDY FIELD	Men	Women	N o R esponse	BOTH SEXES	Men	Women	No Response	BOTH SEXES
Chemistry	10 90.9% 5.3%	1 9.1% 2.0%	0 0.0% 0.0%	11 100.0% 4.6%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% ***.*%	0 - Count ***.*% - % of Row 0.0% - % of Col
Other physical science	3 75.0% 1.6%	1 25.0% 2.0%	0 0.0% 0.0%	4 100.0% 1.7%	0 ***.*% 0.0%	0 ***.*% 0.0%		0 ***.*% 0.0%
Chemical engineering	94 75.2% 49.5%	31 24.8% 62.0%		125 100.0% 51.9%	41 85.4% 82.0%	14.6%		48 100.0% 82.8%
Other engineering	26 78.8% 13.7%	6 18.2% 12.0%		33 100.0% 13.7%	5 100.0% 10.0%	0.0%	0.0%	5 100.0% 8.6%
Biochemistry	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% ***.*%	0 ***.*% 0.0%
Life science	1 100.0% 0.5%	0 0.0% 0.0%	0 0.0% 0.0%	1 100.0% 0.4%	0 ***.*% 0.0%		0 ***.*% ***.*%	0 ***.*% 0.0%
Medicine	15 83.3% 7.9%	3 16.7% 6.0%	0 0.0% 0.0%	18 100.0% 7.5%	2 100.0% 4.0%	0.0%		2 100.0% 3.4%
Dentistry	1 100.0% 0.5%	0.0%	0 0.0% 0.0%	1 100.0% 0.4%	0 ***.*% 0.0%		0 ***.*% ***.*%	0 *** *% 0.0%
Pharmacy, pharmacology	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%		0 ***.*% ***.*%	0 ***.*% 0.0%
Business management	17 85.0% 8.9%		0.0%	20 100.0% 8.3%	0 0.0% 0.0%		0.0%	1 100.0% 1.7%
Education	1 33.3% 0.5%		0.0%	3 100.0% 1.2%		***.*%	0 ***.*% ***.*%	0 ***.*% 0.0%
Law	11 100.0% 5.8%	0 0.0% 0.0%		11 100.0% 4.6%	0 ***.*% 7.0%	0 ***.*% 0.0%	0 ***.*% ***.*%	0 ***.*% 0.0%
Social science	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 '**.*% 0.0%	0 ***.*% 0.0%	0 ***.*% ***.*%	0 ***.*% 0.0%
Other	7 100.0% 3.7%	0 0.0% 0.0%	0 0.0% 0.0%	7 100.0% 2.9%	0 ***.*% 0.0%	0 ***.*% 0.0%	0 ***.*% ***.*%	0 ***.*% 0.0%
No Response	4 57.1% 2.1%	42.9%	0.0%	7 100.0% 2.9%	2 \ 100.0% \ 4.0%	0.0%	0 0.0% ***.*%	2 100.0% 3.4%
ALL	190 78.8% 100.0%	50 20.7% 100.0%		241 100.0% 100.0%	50 86.2% 100.0%	13.8%	0.0%	58 100.0% 100.0%

TABLE C-7

CHEMISTRY BACHELOR'S DEGREE RECIPIENTS NOT EMPLOYED and NOT SEEKING EMPLOYMENT according to SEX and PLANS FOR FURTHER STUDIES
1985 Starting Salary Survey

0	_	v	
`	-	x	

			вотн	
FURTHER STUDIES	Men	Women	SEXES	
•				., ·
No plans	1 4	9	23 -	- Count
·	60.9%	39.1%	100.0% -	- % of Row
	5.4%	6.5%	5.8%	- % of Col
Full-time	239	123	362	
	66.0%	34.0%	100.0%	
·	92.3%	88.5%	91.0%	
Part-time	5	5	10	
·	50.0%	50.0%	100.0%	
	1.9%	3.6%	2.5%	
No Response	1	2	3	
	33.3%	66.7%	100.0%	
	0.4%	1.4%	0.8%	
ALL	່ 259	139	398	
	65.1%	34.9%	100.0%	
	100.0%	100.0%	100.0%	

TABLE C-8

CHEMICAL ENGINEERING BACHELOR'S DEGREE RECIPIENTS NOT EMPLOYED and NOT SEEKING EMPLOYMENT according to SEX and PLANS FOR FURTHER STUDIES 1985 Starting Salary Survey

SEX

			N o	вотн	
FURTHER STUDIES	Men	Women	Response	SEXES	
_			_	,	
No plans	2	0	1		- Count
	66.7%		33.3%	100.0%	% of Row
. *	1.9%	0.0%	100.0%	2.3%	- % of Col
Full-time	100	22	0	122	
•	82.0%	18.0%	0.0%	100.0%	
·	94.3%		0.0%	92.4%	
Part-time	4	3	0	7	
	57.1%	42.9%	0.0%	100.0%	
	3.8%	12.0%	0.0%	5.3%	

No Response	0	0	0 ^	. 0	
·	***.*%	***.*%	***.*%	***.*%	
	0.0%	0.0%	0.0%	0.0%	
			•	•	
ALL	106	25	1	132	
	80.3%	18.9%		100.0%	
	100.0%	100.0%	100.0%	100.0%	

TABLE D-1 CHEMISTRY and CHEMICAL ENGINEERING BACHELOR'S DEGREE RECIPIENTS according to AGE and SEX 1985 Starting Salary Survey

100.0%

100.0%

100.0%

Chemical Engineering Chemistry SEX BOTH BOTH Νo Νo Women Response SEXES SEXES Men Men Women Response AGE 0 5 - Count 2 0 8 3 2 20 100.0% - % of Row 60.0% 40.0% 0.0% 0.0% 100.0% 75.0% 25.0% 0.4% - % of Col 0.5% 0.0% 0.2% 1.0% 0.0% 0.6% 0.3% 9.0 48 0 138 108 81 0 189 21 34.8% 65.2% 0.0% 100.0% 42.9% 0.0% 100.0% 57.1% 12.9% 0.0% 10.2% 9.2% 12.6% 14.2% 0.0% 13.2% 539 371 167 1 0 727 421 306 22 . 0.0% 100.0% 68.8% 31.0% 0.2% 100.0% 57.9% 42.1% 37.9% 44.8% 20.0% 39.7% 53.5% 0.0% 50.8% 49.1% 105 2 416 309 133 75 0 208 23 100.0% 74.3% 25.2% 0.5% 36.1% 0.0% 100.0% 63.9% 31.6% 28.2% 40.0% 30.7% 15.5% 13.1% 0.0% 14.5% 97 31 7 A 50 24 0 24 0.0% 100.0% 75.8% 24.2% 0.0% 100.0% 67.6% 32.4% 9.9% 8.3% 0.0% 9.4% 5.8% 4.2% 0.0% 5.2% 9 1 43 33 31 21 0 5.2 25 59.6% 76.7% 20.9% 2.3% 100.0% 100.0% 40.4% 0.0% 3.4% 2.4% 20.0% 3.2% 3.6% 3.7% 0.0% 3.6% 0 24 24 12 0 36 2.3 1 26 4.2% 100.0% 95.8% 0.0% 0.0% 100.0% 66.7% 33.3% 0.3% 0.0% 1.8% 2.3% 2.1% 0.0% 2.5% 2.8% . 0 1 19 18 14 0 19 27 100.0% 100.0% 94.7% 5.3% 0.0% 26.3% 0.0% 73.7% 1.8% 0.3% 0.0% 1.4% 1.6% 0.9% 0.0% 1.3% 0 9 2 28 13 6 0 19 100.0% 77.8% 22.2% 0.0% 100.0% 68.4% 31.6% 0.0% 0.7% 0.5% 0.0% 0.7% 1.5% 1.0% 0.0% 1.3% 10 0 0 10 24 7 0 17 29 0.0% 100.0% 100.0% 0.0% 70.8% 29.2% 0.0% 100.0% 1.7% 1.0% 0.0% 0.0% 0.7% 0.0% 2.0% 1.2% 40 10 5 0 15 0 30-34 25 15 33.3% 0.0% 100.0% 66.7% 37.5% 0.0% 100.0% 62.5% 1.0% 1.3% 0.0% 1.1% 2.6% 0.0% 2.8% 2.9% 0 1 35-39 12 4 0 16 50.0% 0.0% 100.0% 50.0% 25.0% 0.0% 100.0% 75.0% 0.1% 0.3% 0.0% 0.1% 0.7% 0.0% 1.1% 1.4% 0 0 9 2 7 0 40-49 0.0% 100.0% 0.0% 100.0% 77.8% 0.0% 100.0% 22.2% 0.0% 0.0% 0.3% 0.0% 0.1% 0.6% 0.2% 1.2% 0 0 0 n 0 0 50-64 0 0 ***.*% ***.*% ***.*% ***.*% ***.*% ***.*% ***.*% ***.*% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0 7 1 6 3 2 11 No Response 87.5% 0.0% 12,5% 100.0% 100.0% 54.5% 27.3% 18.2% 0.0% 0.7% 20.0% 0.6% 100.0% 0.8% 0.7% 0.5% 979 373 5 1,357 1,432 ALL AGES 858 572 2 0.1% 100.0% 72.1% 27.5% 0.4% 100.0% 39.9% 59.9% 100.0% 100.0% 100.0% 100.0% 100.0%

Chemical Engineering

100.0%

100.0%

100.0% 100.0% ***.*%

TABLE D-2 CHEMISTRY and CHEMICAL ENGINEERING MASTER'S DEGREE RECIPIENTS according to AGE and SEX 1985 Starting Salary Survey

Chemistry

31.7% 0.0%

100.0% 100.0% ***.*%

100.0%

100.0%

68.3%

SEX No BOTH Nο BOTH AGE Men Women Response SEXES Men Women Response SEXES 21 0 0 0 0.0% . 0 0 2 0 2 - Count ***.*% ***.*% 100.0% 0.0% 100.0% - % of Row 0.0% 0.0% ***.*% 0.0% 1.4% 0.0% ***.*% 1.1% - % of Col 22 0 1 0 1 0 0 100.0% 0.0% ***.*% 0.0% 100.0% ***.*% ***.*% ***.*% 1.7% ***.*% 0.0% 0.5% 0.0% 0.0% *** . *% 0.0% 23 13 1 0 4 5 0 18 25.0% 0.0% 1.7% ***.*% 5 0 27.8% 0.0% 75.0% 100.0% 72.2% 100.0% 2.4% 12.5% ***.*% 2.2% 9.3% 10.0% 24 20 9 0 29 n 0.0% 31.0% 13.8% 0.0% 69.0% 100.0% 86.2% 100.0% 15.3% ***.*% 15.7% 15.6% 17.9% 10.0% ***.*% 16.1% 25 28 15 0 4.3 31 34.9% 0.0% 16.2% 0.0% 15.0% ***.*% 65.1% 100.0% 83.8% 100.0% ***.*% 22.0% 25.4% 23.1% 22.1% 20.6% 16 3 0 19 21 10 0 31 15.8% 0.0% 84.2% 32.3% 0.0% 25.0% ***.*% 100.0% 67.7% 100.0% 12.6% 5.1% ***.*% 10.2% 15.0% 17.2% 27 13 9 22 15 0 19 40.9% 0.0% 59.1% 21.1% 0.0% 100.0% 78.9% 100.0% 15.3% ***.*% 10.2% 11.8% 10.7% 10.0% *** *% 10.6% 28 8 6 -0 14 9 1.3 30.8% 0.0% 57.1% 42.9% 0.0% 100.0% 69.2% 100.0% 6.3% 10.2% ***.*% 6.4% 7.5% 7.2% 29 5 0 12 8 1 0 1 0 11.1% 0.0% 58.3% 0.0% 41.7% 88.9% 100.0% 100.0% ***.*% 3.9% 2.5% ***.*% 11.9% 6.5% 5.7% 5.0% 30 - 3421 6 0 27 12 5 0 17 22.2% 0.0% 77.8% 100.0% 70.6% 29.4% 0.0% 100.0% 16.5% 10.2% ***.*% 8.6% 14.5% 12.5% ***.*% 9.4% 35-39 7 0 12.5% 0.0% 87.5% 25.0% 0.0% 100.0% 75.0% 100.0% 1.7% ***.*% 5.5% 2.5% ***.*% 4.3% 2.1% 2.2% 40-49 0 . 1 0 3 ο 0 33.3% 0.0% 66.7% ***.*% ***.*% 100.0% *** ** 1.6% 1.7% ***.*% 0.0% 0.0% ***.*% 1.6% 0.0% 50-64 0 0 n 0 0 100.0% 0.0% 0.0% ***.*% 100.0% ***.*% 0.8% ***.*% 0.0% 0.0% ***.*% 0.5% 0.0% 0.0% No Response . 0 O Λ 0.0% 0.0% 100.0% 100.0% 100.0% 0.0% 0.0% 100.0% 2.4% 1.6% 0.7% *** * * 0.0% 0.6% ALL AGES 127 59 0 186 140 40 140 40 0 77.8% 22.2% 0.0% 0 180

TABLE D-3

CHEMISTRY and CHEMICAL ENGINEERING DOCTORATE'S DEGREE RECIPIENTS according to AGE and SEX 1985 Starting Salary Survey

		., .,	; 5 4			o i med J	Chemical Fngineering	ja
		cnemistry	stry					D.
	SEX			-				
AGE	Men	Women	No Response	BOTH SEXES	Men	Women	No Response	BOTH SEXES
2.4	1 100.0% 0.5%	0 0 0 %0.0	0 0 0 ** ** **	1 100.0% 0.4%	1 100.0% 1.3%	0 %0.0 %0.0	0 0 ***	1 - Count 100.0% - % of Row 1.1% - % of Col
25	3 75.0% 1.5%	1 25.0% 2.1%	0.00.0	100.0%	1 50.0% 1.3%	1 50.0% 8.3%	% % 0 · * · * *	2 100.0% 2.2%
26	7 63.6% 3.5%	36.8 8.5%	% % % * * * * *	11 100.0% 4.5%	7 100.0% 8.8%	0.0%	% % 0 . * . % % * *	7 100.0% 7.6%
2.7	47 83.9% 23.7%	9 16.1% 19.1%	0.0 ****	56 100.0% 22.9%	10 71.4% 12.5%	4 28.6% 33.3%	0.0%**	14 100.0% 15.2%
. 78	47 82.5% 23.7%	10 17.5% 21.3%	0 . * 0 . * * *	57 100.0% 23.3%	16 88.9% 20.0%	2 11.1% 16.7%	% % % ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °	18 100.0% 19.6%
2.9	29 85.3% 14.6%	5 14.7% 10.6%	0.0	34 100.0% 13.9%	16 88.9% 20.0%	2 11.1% 16.7%	% % 0 · 0 * * * *	18 100.0% 19.6%
30-34	51 82.3%	11 17.7% 23.4%	0 0 0 **	62 100.0% 25.3%	23 88.5% 28.8%	3 11.5% 25.0%	%0°0 %0°0 ***	26 100.0% 28.3%
35-39	10 83.3% 5.1%	2 16.7% 4.3%	%0°0 0°0 **	12 100.0% 4.9%	4 100.0% 5.0%	0.0%	% 0 * 0 * * * *	100.0% 4.3%
40-49	1 25.0% 0.5%	3 75.0% 6.4%	0 · * 0 · * * *	4 100.0% 1.6%	1 100.0% 1.3%	0.0%	. 0 ° 0 * * * * *	100.0
No Response	2 50.0% 1.0%	2 50.0% 4.3%	0 · * * * *	4 100.0% 1.6%	1 100.0% 1.3%	%0°0 %0°0	0 0 * * * %0 %	1 100.0% 1.1%
ALL AGES	198 80.8% 100.0%	47 19.2% 100.0%	0 · 0 * * * * *	245 100.0% 100.0%	80 87.0% 100.0%	12 13.0% 100.0%	% 0 % * 0 0 * * *	92 100.0% 100.0%

TABLE D-4

CHEMISTRY POSTDOCTORAL RECIPIENTS according to AGE and SEX
1985 Starting Salary Survey

SEX

	•		BOTH	
AGE	Men	Women	SEXES	

25	2	. 0	2 - Count	
÷	100.0%		100.0% - % of R	
	3.1%	0.0%	2.7% - % of C	01
26	2	2	. 4	
20	50.0%	50.0%	100.0%	
	3.1%	18.2%	5.3%	
	3.1%	10.2%	5.3%	
27	16	1	17	
	94.1%	÷ 5.9%	100.0%	
	25.0%	.9.1%	22.7%	
28	12	1	13	
	92.3%	7.7%	100.0%	
	18.8%	9.1%	17.3%	
•.		* -		
29	1 4	2	16	
·	87.5%	12.5%	100.0%	
	21.9%	18.2%	21.3%	
			•	
30-34	13	3	16	
	81.3%	18.8%	100.0%	
	20.3%	27.3%	21.3%	
•				
35-39	3	0	. 3	
	100.0%	0.0%	100.0%	
	4.7%	0.0%	4.0%	
•	•		•	
No. December	2	•		
No Response	2	2	4	
	50.0%	50.0%	100.0%	
	3.1%	18.2%	5.3%	
			. 1	
ALL AGES	64	11	7 5	
	85.3%	14.7%	100.0%	
	100.0%			
	100.0%	100.00	100.00	

TABLE E-1

FULL-TIME EMPLOYED INEXPERIENCED CHEMISTS according to NUMBER of JOB OFFERS, DEGREE, and SEX 1985 Starting Salary Survey

95		Bachelors	s r o		Masters	ý		Doctorate	ate	
908 Men Women SEKES Men Women SEKES Hen Women SEKES 908 66 65 129 15 10 25 35 8 8 43 - Count 9074 49.6 50.4 100.0 5 60.0 5 55.6 5 55.6 7 55.6 7 50.0 7 46.2 7 - 7 of 90.6 50.4 100.0 5 60.0 5 55.6 5 55.6 7 55.6 7 50.0 7 46.2 7 - 7 of 90.6 50.4 1.3 100.0 5 60.0 7 11.1 2 2.2 2 2.4 25.0 7 100.0 7 40.2 1 90.6 50.4 1.3 100.0 7 50.0 1 11.1 2 2.2 2 2.4 25.0 7 100.0 7 40.2 1 90.6 50.4 1.3 100.0 7 50.0 1 100.0 7 81.3 18.3 100.0 7 1	SEX									
65 129 15 10 0.05 81.4% 110.0% 181.4% 180.0% - % of the following of the f	M G G	Vomen	BOTH SEXES	₩ U	Можел	BOTH SEXES	æ e u	Мошел	BOTH SEXES	
50.4% 100.0% 60.0% 40.0% 100.0% 81.4% 18.6% 100.0% -% of 46.1% 42.7% 55.6% 55.6% 45.5% 45.5% 50.0% 46.2% -% of 41.7% 100.0% 80.0% 20.0% 100.0% 81.8% 100.0% 46.2% -% of 29.4% 31.6% 20.0% 11.1% 22.2% 23.4% 25.0% 46.2% 17.2% 100.0% 19.1% 11.0% 20.0% 11.1% 22.2% 23.4% 25.0% 100.0% 19.1% 11.1% 16.7% 1100.0% 81.3% 10.0% 17.2% 19.1% 11.0% 10.0%	64	65	129	15	10	25	35	80	•	
46.1% 42.7% 55.6% 55.6% 45.5% 50.0% 46.2% - 7.0% 10 18 4 22 4 22 4 10 0.0% 20.0% 100.0% 81.8% 18.2% 100.0% 20.0% 20.0% 100.0% 81.8% 18.2% 100.0% 20.0% 20.0% 100.0% 81.3% 18.8% 100.0% 20.0% 20.0% 100.0% 81.3% 18.8% 100.0% 20.0% 100.0%	49.6%	50.4%	100.0%	60.0%	40.0%	100.0%	81.4%	18.6%	- % - %	
40 96 8 2 10 10 18 18.2	39.8%	46.1%	42.7%	55.6%	55.6%	55.6%	45.5%	50.0%	- 80 -	
28.4% 31.8% 20.0% 11.1% 22.2% 23.4% 25.0%	y	•	90	œ	^	0.0	18	4	22	
28.4% 31.8% 29.6% 11.1% 22.2% 23.4% 25.0% 25 28.4% 31.8% 31.8% 3 3 3 3 3 6 6 13% 18.8% 18.8% 19.1% 17.5% 11.1% 16.7% 13.3% 16.9% 18.8% 18.8% 19.1% 17.5% 11.1% 16.7% 13.3% 16.9% 18.8% 18.8% 19.1% 17.5% 11.1% 16.7% 13.3% 16.9% 18.8% 18.8% 19.1% 10.0% 1	30	41 40	100.04	80.08	20.0%	100.0%	81.8%	18.2%	100.0%	
27 53 3 3 6 13 3 19.1% 17.5% 11.1% 16.7% 13.3% 16.9% 18.8% 1 19.1% 17.5% 11.1% 16.7% 13.3% 16.9% 18.8% 1 36.8% 100.0% 2 1 1 3 4 3 0 0 5.0% 6.3% 3.7% 16.7% 8.9% 3.9% 0.0% 0 0 0.0% 100.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 1.4% 1.0% 0.0% 0.0% 0.0% 1.3% 0.0% 0.0% 0.0% 0.0% 0.0% 1.3% 0.0% 0.0% 0.0% 0.0% 0.0% 1.3% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% <td< td=""><td>34.8%</td><td>28.4%</td><td>31.8%</td><td>29.6%</td><td>11.1%</td><td>22.2%</td><td>23.4%</td><td>25.0%</td><td>23.7%</td><td></td></td<>	34.8%	28.4%	31.8%	29.6%	11.1%	22.2%	23.4%	25.0%	23.7%	
50.9% 100.0% 50.0% 50.0% 100.0% 81.3% 18.8% 1 19.1% 17.5% 11.1% 16.7% 13.3% 16.9% 18.8% 1 36.8% 100.0% 25.0% 75.0% 100.0% 100.0% 0.0% 1 5.0% 6.3% 3.7% 16.7% 8.9% 3.9% 0.0% 0.0% 100.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 1.4% 1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 141 302 27 18 45 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%	36	7.6		ო	က	9	13	က	16	
19.15	49 1%	50 9%	100.0%	50.0%	50.0%	100.0%	81.3%	18.8%	100.0%	
36.8% 100.0% 11.3% 100.0% 100.0% 11.3% 100.0% 11.3% 100.0% 11.2% 100.0% 11.3% 100.0% 11.3% 100.0% 11.3% 100.0% 10.0%	16.1%	19.1%	17.5%	11.1%	16.7%	13.3%	16.9%	18.8%	17.2%	
36.88 100.08 25.08 75.08 100.08 0.08 0.08 5.08 6.38 3.78 16.78 8.98 3.98 0.08 0.08 100.08 ******* ****** 8.98 3.98 0.08 0.08 100.08 0.08 0.08 20.08 20.08 0.08 0.08 0.08 0.08 0.08 0.08 141 302 ****** ****** ****** 0.08 0.08 141 302 0.08 0.08 0.08 0.08 0.08 0.08 100.08 100.08 0.08 0.08 0.08 0.08 0.08 0.08 100.08 0.08 0.08 0.08 0.08 0.08 0.08 0.08 100.08 100.08 100.08 100.08 100.08 100.08 100.08 100.08		7	10	-	m	4	က	0	8	
5.0% 5.0% 3.7% 16.7% 8.9% 3.9% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0	37	36 8%	100.0%	25.0%	75.0%	100.0%	100.0%	0.0%	100.0%	
0.0% 100.0% ***.*% ***.*% ***.*% 80.0% 20.0% 10.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	7.5%	5.0%	6.3%	3.7%	16.7%	8.9%	3.9%	0.0%	3.2%	
0.0% 100.0% ***.*% ***.*% ***.*% 80.0% 20.0% 10.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	^	c	^	0	0	0	4	1	ĸ	
2 3 ********************************** 0	100 0%	* C	100.0%	***	** ***	* * *	80.0%	20.0%	100.0%	
66.7% 100.0% ***.*% ***.*% ***.*% 100.0% 0.0% 1.4% 1.0% 0.0% 0.0% 0.0% 1.3% 0.0% 1.3% 0.0% 1.3% 0.0% 0.0% 0.0% 0.0% 1.3% 0.0% 0.0% 0.0% 0.0% 0.0% 1.3% 0.0% 0.0% 0.0% 0.0% 0.0% 1.3% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0	1.2%	0.0%	0.7%	0.0%	0.0%	0.0%	5.2%	6.3%	5.4%	
66.7% 100.0% ***.*% ***.*% ***.*% 100.0% 0.0% 1.3% 0.0% 1.4% 1.0% 0.0% 0.0% 0.0% 0.0% 1.3% 0.0% 0.0% 0.0% 0.0% 0.0% 1.3% 0.0% 0.0% 0.0% 0.0% 1.3% 0.0% 0.0% 0.0% 0.0% 1.3% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0	•	r	~	c	o	0		0	1	
1.4\$ 1.0\$ 0.0\$ 0.0\$ 0.0\$ 1.3\$ 0.0\$ **********************************	36 EE	7 74	100.0%	***	***	* * *	100.0%	0.0%	100.0%	
0 0 0 0 0 0 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 1.3% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 1.00.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 141 302 27 18 45 77 16 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 1	0.6%	1.4%	1.0%	0.0%	0.0%	0.0%	1.3%	0.0%	1.1%	
******* ******* ****** ******* 0.0%	c	c	c	0	0	0	1	0	1	
0.0% 0.0% 0.0% 0.0% 0.0% 1.3% 0.0% 1.3% 0.0% *********************************	* *	* *	**	****	***	* * *	100.0%	0.0%	100.0%	
0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	o	.0.0	20.0	0.0%	0.0%	0.0%	1.3%	0.0%	1.1%	
**************************************	ć	c	c	c	c	c	2	0	2	
0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 2.6% 0.0% 141 302 27 18 45 77 16 46.7% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 1	0 # # #	0 * * *	* * *	* * *	***	* *	100.0%	0.0%	100.0%	
141 302 27 18 45 77 16 46.7% 100.0% 60.0% 40.0% 100.0% 82.8% 17.2% 100.0% 100.0% 100.0% 100.0% 1	% 0.0	%0.0	%0°0	0.0%	0.0%	0.0%	2.6%	0.0%	2.2%	
141 302 27 18 45 77 16 16 46.7% 100.0% 60.0% 40.0% 100.0% 82.8% 17.2% 100.0% 100.0% 100.0% 100.0% 100.0% 1										
; 46.7% 100.0% 60.0% 40.0% 100.0% 82.8% 17.2% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 1	161	141	302	27	18	45	7.7	16	93	
	53.3%	100 0%	100.0%	60.0%	40.0%	100.0%	82.8% 100.0%	17.2% 100.0%	100.0% 100.0%	

TABLE E-2

1985 Starting Salary Survey	· · · · · · · · · · · · · · · · · · ·									
		Bache	elors		Masters	۲S		Doctorat	ate	
	SEX									
			ВОТН			BOTH			ВОТН	
NUMBER OF JOB Offers	Men	Мошел	SEXES	Men	Momen	SEXES	Men	Момел	SEXES	
1	44	20	64	13	9	19	12	က	15 -	Count
	68.8%	31.3%	100.0%	68.4%	31.6%	100.0%	80.0%	20.0%	100.0% -	
	62.0%	47.6%	56.6%	41.9%	54.5%	45.2%	35.3%	25.0%	32.6% -	% of Col
2	16	15	31	6	2	11	14	٣	17	
	51.6%	48.4%	100.0%	81.8%	18.2%	100.0%	82.4%	17.6%	100.0%	
	22.5%	35.7%	27.4%	29.0%	18.2%	26.2%	41.2%	25.0%	37.0%	
8	9	7	13	9	2	∞	က	0	m	
	46.2%	53.8%	100.0%	75.0%	25.0%	100.0%	100.0%	0.0%	100.0%	
	8.5%	16.7%	11.5%	19.4%	18.2%	19.0%	8.8%	0.0%	6.5%	
4	4	0	4		0		4	2	9	
	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	86.7%	33.3%	100.0%	
	5.6%	0.0%	3.5%	3.2%	0.0%	2.4%	11.8%	16.7%	13.0%	
ĸ	0	0	0					0	- -4	
	* * *	8***	** **	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	
	%0.0	0.0%	0.0%	3.2%	0.0%	2.4%	2.9%	0.0%	2.2%	
2-9	-1	0	1	-	1	2	0	က	т	
	100.0%	0.0%	100.0%	50.0%	50.0%	100.0%	0.0%	100.0%	100.0%	
	1.4%	0.0%	86.0	3.2%	9.1%	4.8%	%0.0	25.0%	6.5%	
8-9	0	0	0	0	0	0	0	-	1	
	* * *	* * * *	* * *	***	* * *	***	0.0%	100.0%	100.0%	
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	2.2%	
10+	0	0	0	0	0	0	0	0	0	
	* * * *	***	***	* * * *	* * *	***	* * *	***	64 · * *	
	%0.0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
ALL	7.1	42	113	31	11	42	34	12	46	i.
	62.8%	37.2%	100.0%	73.8%	26.2%	100.0%	73.9%	26.1%	100.0%	
	100.0%	1.00.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

TABLE E-3

FULL-TIME EMPLOYED <u>INEXPERIENCED</u> CHEMICAL ENGINEERS according to NUMBER of JOB OFFERS, DEGREE, and SEX 1985 Starting Salary Survey

			Count	% of Row	% of Col													ą										
rate te		BOTH SEXES	- 11	1	23.4% -	13	100.0%	27.7%	7	100.0%	14.9%	S	100.0%	10.6%	4	100.0%	8.5%	4	100.0%	8.5%		100.0%	2.1%	2	100.0%	4.3%	47	100.0% 100.0%
Doctorate		Women	т	27.3%	33.3%	2	15.4%	22.2%		14.3%	11.1%	1	20.0%	11.1%	0	0.0%	0.0%	2	50.0%	22.2%		0.0%	0.0%	0	0.0%	0.0%	6	19.1% 100.0%
		Men	80	72.7%	21.1%	11	84.6%	28.9%	9	85.7%	15.8%	4	80.0%	10.5%	4	100.0%	10.5%	2	50.0%	5.3%	1	100.0%	2.6%	2	100.0%	5.3%	38	80.9%
S		BOTH SEXES	19	100.0%	38.8%	13	100.0%	26.5%	13	100.0%	26.5%	2	100.0%	4.1%	0	****	0.0%		100.0%	2.0%	0	* * *	0.0%		100.0%	2.0%	49	100.0% 100.0%
Masters		Women	4	21.1%	57.1%	0	0.0%	0.0%	æ	23.1%	42.9%	0	0.0%	0.0%	0	%* ***	0.0%	0	0.0%	0.0%	0	** * *	0.0%	0	0.0%	0.0%	7	14.3% 100.0%
		M e n	15	78.9%	35.7%	13	100.0%	31.0%	10	76.9%	23.8%	2	100.0%	4.8%	0	***	0.0%		100.0%	2.4%	0	* * * *	0.0%	•	100.0%	2.4%	42	85.7% 100.0%
ors		BOTH SEXES	250	100.0%	51.1%	119	100.0%	24.3%	7.1	100.0%	14.5%	24	100.0%	4.9%	14	100.0%	2.9%	œ	100.0%	1.6%	1	100.0%	0.2%	2	100.0%	0.4%	489	100.0% 100.0%
Bachel		Vomen	69	27.6%	47.3%	33	27.7%	22.6%	22	31.0%	15.1%	11	45.8%	7.5%	7	50.0%	4.8%	ო	37.5%	2.1%	0	0.0%	0.0%	1	50.0%	0.7%	146	29.9% 100.0%
	SEX	Æ	181	72.4%	52.8%	86	72.3%	25.1%	49	80.69	14.3%	. 61	54.2%	3.8%	7	50.0%	2.0%	ĸ	62.5%	1.5%		100.0%	0.3%		50.0%	0.3%	343	70.1%
, , , , , , , , , , , , , , , , , , ,		NUMBER OF JOB OFFERS				2			m			V	•		LC.	,		2-9			6-8	•		10+			ALL	

TABLE E-4

FULL-TIME EMPLOYED EXPERIENCED CHEMICAL ENGINEERS according to NUMBER of JOB OFFERS, DEGREE, and SEX 1985 Starting Salary Survey

		Bachelor	lors			Masters	S			Doctorate	rate	
	SEX											
NUMBER OF JOB Offers	Men	Women	No Response	BOTH SEXES	₩ u	Мошел	No Response	BOTH SEXES	æ e	Women	No Response	BOTH SEXES
1	45 69.2% 42.9%	19 29.2% 38.8%	1 1.5% 100.0%	65 100.0% 41.9%	17 73.9% 58.6%	6 26.1% 46.2%	%0°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°	23 100.0% 54.8%	8 80.0% 30.8%	2 20.0% 100.0%	0.0	10 - Count 100.0% - % of Row 35.7% - % of Col
2	26 63.4% 24.8%	15 36.6% 30.6%	0.0%0.0	41 100.0% 26.5%	2 50.0% 6.9%	2 50.0% 15.4%	%0°0 ***	4 100.0% 9.5%	8 100.0% 30.8%	0 %0.0 %0.0	%0°0 %0°0 ****	8 100.0% 28.6%
б	17 70.8% 16.2%	29.2% 14.3%	0.0	24 100.0% 15.5%	3 50.0% 10.3%	3 50.0% 23.1%	%0°0 *****	6 100.0% 14.3%	2 100.0% 7.7%	0.0	% % * * * * *	2 100.0% 7.1%
덕	5 62.5% 4.8%	3 37.5% 6.1%	0.0	8 100.0% 5.2%	2 66.7% 6.9%	1 33.3% 7.7%	%0°0 0°0 **	3 100.0% 7.1%	5 100.0% 19.2%	0.0	% 0 .* 0 .* * *	5 100.0% 17.9%
.a	5 71.4% 4.8%	2 28.6% 4.1%	0.0%	7 100.0% 4.5%	2 100.0% 6.9%	0.0%	% % 0 * *	2 100.0% 4.8%	* * * 0 * * %	* * * 0 * * * 0 * * % 0	* * * * * * * * * * * * * * * * * * * *	0 * % 0 * % * 0 *
6 - 7	3 100.0% 2.9%	0.0%	%0°0 %0°0	3 100.0% 1.9%	1 100.0% 3.4%	0.0	% % 0 .* * * *	1 100.0% 2.4%	2 100.0% 7.7%	0.0%	% % 0 . 0 * * *	2 100.0% 7.1%
6 - 8	2 66.7% 1.9%	33.3% 2.0%	0.0	3 100.0% 1.9%	1 100.0% 3.4%	0.0%	% 0 % . * . * * *	1 100.0% 2.4%	1 100.0% 3.8%	0.0%	%0°0 *** ***	100.0% 3.6%
10+	2 50.0% 1.9%	2 50.0% 4.1%	0.0%	4 100.0% 2.6%	50.0% 3.4%	1 50.0% 7.7%	0 · * · · · · · · · · · · · · · · · · ·	2 100.0% 4.8%	0 * * * 0 . 0 * *	* * ° 0 * * ° 0 * * % 0	* * * * * * * * * * * * * * * * * * * *	% % % % % % % % % % % % % % % % % % %
ALL	105 67.7% 100.0%	49 31.6% 100.0%	$\begin{matrix}1\\0.6\\100.0\\\end{matrix}$	155 100.0% 100.0%	29 69.0% 100.0%	13 31.0% 100.0%	0 · 0 * * * *	42 100.0% 100.0%	26 92.9% 100.0%	2 7.1% 100.0%	0 · 0 * * * * * * * * * * * * * * * * *	28 100.0% 100.0%

Table F-1

CHEMISTRY GRADUATES according to CITIZENSHIP, DEGREE, and ETHNICITY 1985 Starting Salary Survey

Bachelors

ETHNICITY	
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			American			Other		
CITIZENSHIP	Black	Hispanic			White	Race	ALL	
U.S.	35	20	3	30	1,254	5	1,347	- Count
Native	2.6% 87.5%	1.5% 74.1%	0.2% 100.0%			0.4% 71.4%		- % of Row - % of Col
u.s.	2	4	0	2 4	15	1	46	
Naturalized	4.3% 5.0%	8.7% 14.8%				2.2% 14.3%	100.0% 3.2%	
U.S. Permanent visa	1 6.3% 2.5%	1 6.3% 3.7%		4 25.0% 6.5%		1 6.3% 14.3%		
Other Visa	2.5%	3.7*	0.0*	4			10	
	20.0% 5.0%		0.0%	40.0% 6.5%		0.0%	100.0% 0.7%	
No Response	0 0.0% 0.0%	2 66.7% 7.4%		0.0% 0.0%	33.3%	0 0.0% 0.0%		
ALL	40 2.8%	27 1.9% 100.0%	0.2%	4.4%	90.2%	7 0.5%	1,422 100.0%	

Masters

U.S.	6	0	0	3	146	1	156
Native	3.8%						
			***.*%				
U.S.	0	1	0	2	4	0	7
Naturalized	0.0%	14.3%	0.0%	28.6%	57.1%	0.0%	100.0%
	0.0%	50.0%	***.*%	11.1%	2.6%	0.0%	3.8%
U.S.	1	0	0	0	2	0	3
Permanent Visa	33.3%	0.0%	0.0%	0.0%	66.7%	0.0%	100.0%
	12.5%	0.0%	***.*%	0.0%	1.3%	0.0%	1.6%
Other Visa	1	1	0	13	4	0	19
	5.3%	5.3%	0.0%	68.4%	21.1%	0.0%	100.0%
	12.5%	50.0%	***.*%	72.2%	2.6%	0.0%	10.3%
No Response	0	0	0	0	0	0	0
·	***.*%	***.*%	***.*%	***.*%	***.*%	***.*%	***.*%
	0.0%	0.0%	***.*%	0.0%	0.0%	0.0%	0.0%
		,	0	10	156	,	105
ALL							
			0.0%				
	100.0%	100.0%	***.*%	100.0%	100.07	100.0%	100.0%

Doctorate

U.S.	1	2	1	5	193	2	204
Native	0.5%		0.5%				
Native	50.0%		100.0%				
	50.0%	30.0%	100.0%	17.52	,,,,,	00.7%	00.00
U.S.	1	1	0	0	3	0	5
Naturalized	20.0%	20.0%	0.0%	0.0%	60.0%	0.0%	100.0%
	50.0%	25.0%	0.0%	0.0%	1.4%	0.0%	2.0%
U.S.	0	0	0	3	4	0	7
Permanent Visa			0.0%			0.0%	100.0%
			0.0%		1.9%	0.0%	2.9%
Other Visa	0	1	0	20	7	1	29
	0.0%	3.4%	0.0%	69.0%	24.1%	3.4%	100.0%
	0.0%		0.0%				
No Response	0	0	0	0	0	0	0
	*** **	*** **	*** **	*** **	***.**	***.**	***.*%
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ALL	2	4			207		
	0.8%		0.4%				
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

rable F-2

CHEMISTRY GRADUATES according to CITIZENSHIP, DEGREE, and SEX 1985 Starting Salary Survey

		. Count - % of Row - % of Col				
	BOTH SEXES	204 - 100.0% - 83.3% -	5 100.0% 2.0%	7 100.0% 2.9%	29 100.0% 11.8%	245 100.0% 100.0%
Doctorate	Women	39 19.1% 83.0%	20.0%	2 8 2 2 3 % 6 %	5 17.2% 10.6%	47 19.2% 100.0%
	æ	165 80.9% 83.3%	80.0% 2.0%	5 71.4% 2.5%	24 82.8% 12.1%	198 80.8% 100.0%
	BOTH Sexes	157 100.0% 84.4%	7 100.0% 3.8%	3 100.0% 1.6%	19 100.0% 10.2%	186 100.0% 100.0%
Masters	¥omen	48 30.6% 81.4%	3 42.9% 5.1%	2 66.7% 3.4%	6 31.6% 10.2%	59 31.7% 100.0%
	Men	109 69.4% 85.8%	57.1% 3.1%	33.3% 0.8%	13 68.4% 10.2%	127 68.3% 100.0%
s	BOTH SEXES	1,353 100.0% 94.9%	46 100.0% 3.2%	16 100.0% 1.1%	11 100.0% 0.8%	1,426 100.0% 100.0%
Bachelors	Момел	541 40.0% 94.9%	20 43.5% 3.5%	31.3% 0.9%	36.4% 0.7%	570 40.0% 100.0%
	S EX Men	812 60.0% 94.9%	26 56.5% 3.0%	11 68.8% 1.3%	7 63.6% 0.8%	856 60.0% 100.0%
	CITIZENSHIP	U.S. Native	U.S. Naturalized	U.S. Permanent Visa	Other Visa	ALL

Table F-3

CHEMISTRY GRADUATES according to MINORITY CLASSIFICATION, DEGREE, and SEX 1985 Starting Salary Survey

		Bachelors			Masters			Doctorate	
	SEX								
MINORITY CLASSIFICATION	Men	Мошел	BOTH SEXES	Men	Women	BOTH SEXES	Men	Women	BOTH SEXES
	-	α 6	0.4	m	ഹ	∞	2	0	1
B-ack	30 08	70.0%	100.0%	37.5%	62.5%	100.0%	100.0%	0.0%	5 - % of
	16.0%	43.8%	28.8%	18.8%	38.5%	27.6%	6.3%	0.0%	5.3% - % of Col
	16	11	2.7	2	0	2	4	0	4
: :	59.3%	40.7%	100.0%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%
	21.3%	17.2%	19.4%	12.5%	0.0%	%6.9	12.5%	0.0%	10.5%
	^	-	m	. 0	0	0	-	0	1
ביידער ביידער	66 7%	33. 3	100.0%	* * * *	* * *	% * * * *	100.0%	0.0%	100.0%
5	2.7%	1.6%	2.2%	0.0%	0.0%	0.0%	3.1%	%0.0	2.6%
	6	23	62	10	∞	18	23	ഹ	28
= 0 - 0 C	%6' 29	37.1%	100.0%	55.6%	44.4%	100.0%	82.1%	17.9%	100.0%
	52.0%	35.9%	44.6%	62.5%	61.5%	62.1%	71.9%	83.3%	73.7%
0 x 0 4 + 0	vc	•	7	-	0		2	1	8
	85.7%	14.3%	100.0%	100.0%	0.0%	100.0%	66.7%	33.3%	100.0%
	8.0%	1.6%	2.0%	6.3%	0.0%	3.4%	6.3%	16.7%	7.9%
-	7.5	4	139	16	13	29	32	9	38
ALL	7.0 2.0%	46.0%	100.0%	55.2%	44.8%	100.0%	84.2%	15.8%	100.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table F-4

CHEMICAL ENGINEERING GRADUATES according to CITIZENSHIP, DEGREE, and ETHNICITY 1985 Starting Salary Survey

Bachelors

	ETHNIC	ITY							
CITIZENSHIP	Black	Hispanic	Americar Indian		White	Other Race		ALL	
U.S. Native	27 2.1% 90.0%	1.0%	0.1% 100.0%	1.9%	93.7%		10 0.8% 100.0%	1,294 - Cou 100.0% - % c 95.5% - % c	of Row
U.S. Naturalized	2 5.7% 6.7%	5.7%	0 0.0% 0.0%	21 60.0% 36.2%	28.6%		0.0%	35 100.0% 2.6%	
U.S. Permanent Visa	1 6.3% 3.3%	6.3%	0.0%	11 68.8% 19.0%	18.8%		0.0%	16 100.0% 1.2%	
Other Visa		3 30.0% 15.8%			50.0%		0.0%	10 100.0% 0.7%	
ALL	30 2.2% 100.0%	19 1.4% 100.0%	1 0.1% 100.0%	4.3%	1,231 90.8% 100.0%	6 0.4% 100.0%	10 0.7% 100.0%	1,355 100.0% 100.0%	
			Mast	ers					
U.S. Native	3 2.1% 100.0%			4 2.8% 13.3%		0.7%	2 1.4% 100.0%	144 100.0% 80.0%	
U.S. Naturalized	0 0.0% 0.0%	0 0.0% ***.*%		5 71.4% 16.7%	28.6%	0.0%		7 100.0% 3.9%	
U.S. Permanent Visa	0 0.0% 0.0%		0.0% 0.0%		1 16.7% 0.7%	0.0%	0.0%	6 100.0% 3.3%	
Other Visa	0 0.0% 0.0%	0.0%	1 4.3% 100.0%	16 69.6% 53.3%	21.7%	4.3%	0.0%	23 100.0% 12.8%	
ALL	3 1.7% 100.0%	0.0%		16.7%	78.9%	2 1.1% 100.0%	1.1%	180 100.0% 100.0%	
			Doct	orate					
U.S. Native	1 1.8% 50.0%	1 1.8% 100.0%	0 0.0% ***.*%	2 3.6% 7.1%	51 91.1% 87.9%	0 0.0% 0.0%	1.8%	56 100.0% 60.9%	
U.S. Naturalized	12.5%		0.0%	50.0% 14.3%	37.5% 5.2%	0.0%	0.0%	8 100.0% 8.7%	
U.S. Permanent Visa	0.0% 0.0%	0 0.0% 0.0%	0 0.0% ***.*%	66.7% 21.4%	1 11.1% 1.7%	2 22.2% 100.0%	0 0.0% 0.0%	9 100.0% 9.8%	
Other Visa	0.0%	0.0%	0.0%	84.2% 57.1%	15.8% 5.2%	0 0.0% 0.0%	0 0.0% 0.0%	19 100.0% 20.7%	
ALL	2.2%	1 1.1% 100.0%	0.0%	30.4%	63.0%	2.2%	1 1.1% 100.0%	92 100.0% 100.0%	

Table F-5

CHEMICAL ENGINEERING GRADUATES according to CITIZENSHIP, DEGREE, and SEX 1985 Starting Salary Survey

	,	Bachelors	ors			Masters	v			Doctorate	a te	
	SEX											
CITIZENSHIP	Men	Можел	No Response	BOTH SEXES	₩ en	Мошел	No Response	BOTH SEXES	æ e	Women	N o Response	BOTH SEXES
				•						ı	•	
u.s.	936			1,294	109		0	144	49	7	0	٥,
	72.3%			100.0%	75.7%		0.0%	100.0%	87.5%	12.5%	0.0%	6 - % of
)	95.7%	94.9%	100.0%	95.5%	77.9%	87.5%	**	80.0%	61.3%	58.3%	* * *	60.9% - % of Col
<i>U</i>	- 19		0	35	7	0	0	7	m	S.	0	
S.S.	54.3%	45.7%	%0.0	100.0%	100.0%	0.0%	0.0%	100.0%	37.5%	62.5%	0.0%	_
3 4 - - - - - - - - - - - - - - - - - -	1.9%	4.3%	0.0%	2.6%	5.0%	0.0%	***	3.9%	3.8%	41.7%	* *	8.7%
=	13	m	0	16	S.		0	9	6	0	0	6
Dermanent Visa	81.3%	18.8%	0.0	100.0%	83.3%	16.7%	0.0%	100.0%	100.0%	0.0%		100.0%
	1.3%	0.8%	0.0%	1.2%	3.6%	2.5%	***	3.3%	11.3%	0.0%		9.8%
	0.5	c	c	10	19	4		23	19	0	0	19
5	100.0%	0.0%	% 0°0	100.0%	82.6%	17.4%		100.0%	100.0%	0.0%	0.0%	100.0%
	1.0%	0.0%	0.0%	0.7%	13.6%	10.0%	* * *	12.8%	23.8%	0.0%	* * *	20.7%
-	978	373		1,355	140		0	180	80		0	
1	72.2%	27.5%	38	100.0%	77.8%		20.0	100.0%	87.0%	13.0%	0.0%	10
	100.0%	100.0%	10	100.0%	100.0%	100.0%	8***	100.0%	100.0%	1	***	

Table F-6

CHEMICAL ENGINEERING GRADUATES according to MINORITY CLASSIFICATION, DEGREE, and SEX 1985 Starting Salary Survey

		- Count - % of Row - % of Col				,	
a t e	BOTH SEXES	2 100.0% 6.1%	1 100.0% 3.0%	0 * * * 0 • 0 * 0 * *	28 100.0% 84.8%	2 100.0% 6.1%	33 100.0% 100.0%
Doctorate	Мошеп	1 50.0% 20.0%	0.0%	* * * 0 * * % 0 * * %	4 14.3% 80.0%	0°0 0°0 0°0	5 15.2% 100.0%
	M en	50.0%	1 100.0% 3.6%	* % * * 0 * * 0	24 85.7% 85.7%	2 100.0% 7.1%	28 84.8% 100.0%
	BOTH SEXES	3 100.0% 8.3%	% * % 0 * * * 0 0 • 0 * *	1 100.0% 2.8%	30 100.0% 83.3%	2 100.0% 5.6%	36 100.0% 100.0%
Masters	Мотеп	1 33.3% 14.3%	**************************************	1 100.0% 14.3%	4 13.3% 57.1%	1 50.0% 14.3%	7 19.4% 100.0%
	Men	2 66.7% 6.9%	% * % * 0 * * %	0.0%0.0	26 86.7% 89.7%	1 50.0% 3.4%	29 80.6% 100.0%
v E	BOTH SEXES	30 100.0% 26.3%	19 100.0% 16.7%	$\begin{matrix}1\\100.0\%\\0.9\%\end{matrix}$	58 100.0% 50.9%	6 100.0% 5.3%	114 100.0% 100.0%
Bachelors	Women	13 43.3% 31.7%	4 21.1% 9.8%	1 100.0% 2.4%	22 37.9% 53.7%	1 16.7% 2.4%	41 36.0% 100.0%
, <u>u</u>	o M	17 56.7% 23.3%	15 78.9% 20.5%	0.0	36 62.1% 49.3%	o o o o o o s s s	73 64.0% 100.0%
,	MINORITY CLASSIFICATION	Black	Hispanic	American Indian	Asian	Other Race	ALL

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OFFICE OF THE EXECUTIVE DIRECTOR

American Chemical Society

1155 SIXTEENTH STREET, N.W. WASHINGTON, D.C. 20036 Phone (202) 872-4600

Summer 1985

Dear Colleague:

The American Chemical Society has gathered information for many years about starting salaries in chemistry and chemical engineering. This information has gained a reputation for reliability and usefulness.

Every year, the Society makes a mail survey of both ACS member and nonmember graduates. The data collected from these surveys have been very useful to chemists and chemical engineers, particularly as they start their careers. We believe the publication of such data has had a beneficial effect on salary levels. The published survey results also include information on the employment status of recent graduates.

We would appreciate it very much if you would participate in this year's survey. It would clearly be a service to your colleagues and profession. Would you please take a few minutes now to fill out the enclosed questionnaire. No personal identification—either on the questionnaire or return envelope—is required or requested.

Upon completing as many items in the questionnaire as possible, please return it promptly to us, whether or not you have already accepted employment. For your convenience, we have enclosed a self-addressed, postage-paid envelope.

Preliminary results of this survey will be published this fall in CHEMICAL AND ENGINEERING NEWS' Career Issue. Later in the year, the Society will publish a complete report.

Thank you for your assistance with this survey. We extend our best wishes for every success in your professional pursuits.

Sincerely,

John K Crum

Enclosures

Survey of Starting Salaries and Employment Status of 1985 Chemistry and Chemical Engineering Graduates

1.	Highest degree earned (Check one):		8.	Age at last birthday:
	Bachelor's			vooro old
	Master's	□ 2		years old
	Doctorate	□ 3		
			9.	Sex:
2.	Field of highest degree (Check one):			Male
	Chemical engineering	□ 01		Female
	Biochemistry			
	General chemistry			
			10.	Citizenship or visa status (Check one):
	Analytical chemistry			U.S. native
	Inorganic chemistry			U.S. naturalized
	Organic chemistry			U.S. permanent resident visa
	Polymer chemistry	□ 07		Other visa
	Pharmaceutical chemistry	□ 08		
	Medicinal/clinical chemistry	□ 09		
	Theoretical chemistry		11.	Racial or ethnic group:
	Environmental chemistry			Black (not of Hispanic origin)
	Agricultural/food chemistry			Hispanic
	•			American Indian or Alaskan Native
	Physical chemistry			Asian or Pacific Islander
	Other chemical science			White
	Non-chemistry	□ 15		Other race or ethnic group
_				Other race of enfinc group
3.	Please describe the school that granted your degre			
	Public		12.	Current employment status (Check one):
	Private	□ 2		Not employed, employed part-time or employed for the summer only:
4.	Number of students:			and seeking full-time employment
	Less than 1,500	п,		and not seeking full-time employment
	1,500 to 4,999			IF YOU CHECKED NUMBER 1 OR 2, PLEASE STOP HERE
	5,000 to 9,999			AND RETURN THE QUESTIONNAIRE IN THE ENVELOPE
				PROVIDED.
	10,000 to 20,000			Accepted or continuing full-time employment (excluding summer
	Over 20,000	□ 5		only employment):
_				in a field of chemistry or chemical engineering a
5.	The highest degree offered by your department is:			in a field other than chemistry or chemical engineering
	BS			Accepted a graduate assistantship or fellowship or a
	MS	□ 2		postdoctoral fellowship
	PhD	□ 3		•
			10	Vous empuel colonia
6.	Do you plan further advanced studies in the fall of		13.	Your annual salary:
	1985? (Check one below):			\$ per year
	No	ION 8.		For your
	Yes, full time 2			
	Yes, part-time			Check the one work function that best describes your
	, , , , , , , , , , , , , , , , , , ,			job:
7.	Field of further studies (Check one):			Teaching
•	Chemistry	— •		Management or administration □ 0
	•			Basic research 🗆 o
	Other physical science or math			Applied research, development, design
	Chemical engineering			Production, quality control
	Other engineering			Forensic analysis, other laboratory analysis □ 0
	Biochemistry	□ 05		
	Life science	□ 06		Marketing, sales, purchasing, technical service, economic evaluation
	Medicine	□ 07		
	Dentistry			Writing, abstracting, information services, software development
	Pharmacy, pharmacology			Consulting
	Business management			
				Other
	Education			
	Law			IF YOU HOLD AN ASSISTANTSHIP OR FELLOWSHIP.
	Social science or humanities			PLEASE STOP HERE AND RETURN THE QUESTIONNAIRE IN
	Other	□ 14		THE ENVELOPE PROVIDED.

	,
15. How many firm offers of employment did you receive in a field of chemistry or chemical engineering?	19. Check the one category which best describes your employer:
Specify number	Manufacturing:
Specify fluffiber	Chemicals
•	Coatings 🗆 02
16. Professional or technical work experience prior to	Food
graduation (Check one):	Metals, minerals 🗆 04
Less than 12 months (or none)	Paper
12 to 36 months	Petroleum 🗀 06
More than 36 months	Pharmaceutical, personal care
	Rubber
	Other manufacturing
17. How long have your been working for your current	Non-manufacturing (e.g., mining, utilities, construction,
employer?	etc.)
12 months or less	University granting a doctorate in chemical science
More than 12 months	Other college or university
	High school or other school.
18. Check the one chemistry specialty most closely related	Federal government (civilians only)
to your job:	Military 15
Chemical engineering	State and local government 16
Biochemistry	Hospital or independent laboratory
Analytical chemistry	Other non-profit organization or research institute
Inorganic chemistry	Other
Organic chemistry	20. Employers' approximate number of employees (total
Polymer chemistry 🗆 6	for the whole organization):
Non-chemical	Less than 500
	500 to 2,499 🗆 2
	2,500 to 9,999
	10,000 to 24,999
	Over 25,000
	21. Geographic location of employment:
	State:

Please return the questionnaire within 7 days to the American Chemical Society Room 202, 1155 16th Street, N.W., Washington, D.C. 20036

Thank you.

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