

Evaluating the Top-50 Graduate Programs in Chemistry
A New, Comprehensive Ranking by David Fraley that includes the Top-10 Listings in 7 Specialties

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School	Overall Rank	Organic	Physical	Biochemistry	Inorganic	Analytical	Theoretical	Polymer
		2006/1996	2006/1996	2006/1996	2006/1996	2006/1996	2006 only	1996 only
UC-Berkeley	1	2	1	2	3	10.6	1	
MIT	2	5	3	5	1		5	9
Caltech	2	3	2	4	2	10.4	2	3
Harvard	4	1	5	1	9		4	
Stanford	5	4	4	7	7		7	10
Illinois	6	7	7	10.6	5	3	10	
Wisconsin	7	8	8	6	8	4	9	
Columbia	7	6	10	10.4			3	
Northwestern	9		10.6		4		5	
Cornell	10	10.2	10.2		10.4	10.6		6
Texas	10	10	10.4		10.4	7	10	
North Carolina	12				9	1		
Chicago	13	10.6	6		10.6		7	
UCLA	14	10.2	10.4	9	10.4			
Yale	15	10.4	10.6	10				
UC-San Diego	16	10.6		7				
Texas A&M	17				6	10.6		
Purdue	18				10.4	2		
Indiana	19	10.4			10.2	6		
Princeton	20		10.4	10.6				
Pennsylvania	21	10.4	10.4	10.6	10.6			
Michigan	22	10.6				8		
Minnesota	23	10.6	10.6	10.4	9	10.4		
UC-San Francisco	23			3				
Penn State	25	10.6	10.6	10.4	10.6	10.4		
UC-Irvine	26	9						
Ohio State	27	10.6				10.2		
Johns Hopkins	28			10				
Washington	29		10.6	10.4		10		
Colorado	30		9	10.2				
Arizona	31					4		
Iowa State	32				10.4	9		
Rice	33		10.4					

The Overall Ranking is based on 4 Ranking Parameters:
2007 US News, 1995 NRC (Scholarly Quality and Effectiveness), and the Top-10 List of 7 Specialties

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Utah	34									10.6			
Florida	35									10.2			
UC-Santa Barbara	36												
Pittsburgh	37												
Georgia Tech.	38												
Duke	39		10.6										
UC-Davis	40												
Michigan State	41									10.6			
Emory	42												
Colorado State	43		10.6							10.6			
Washington (St. Louis)	44						10.4						
Virginia	45												
Southern California	46												
Maryland	50												
Florida State	51												
Schools in the Top-50 in 1996, but not 2006:													
Rochester	47												
SUNY-Stony Brook	48												
Georgia	52												
Polymer Chemistry Programs listed in 1996													
Massachusetts													1
Case Western Reserve													5
Virginia Tech													8
Carnegie Mellon													10
Akron													2
Polytechnic (NY)													6
Southern Mississippi													3

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Top-10 Adj. Score	Top-10 Rank	US News 2007	NRC (1995)		Overall		Big Changes
			Quality	Effectiveness	Score	Rank	
Low=Best	30%	50%	10%	10%	Weighted		96 to 06
3.6	1	1	1	2	1.1	1	
5.0	3	1	5	3	2.2	2	
3.8	2	3	2	1	2.4	2	
5.1	4	3	3.5	4.5	3.5	4	
6.5	5	3	3.5	4.5	3.8	5	
7.2	6	6	8	7	6.3	6	
7.2	6	7	10	10	7.3	7	
9.3	8	7	7	8	7.4	7	
9.5	11	9	14	11.5	10.4	9	
10.3	20	9	6	6	11.7	10	
10.0	14	9	13	19	11.9	10	▲
9.3	8	14	17	14	12.5	12	
9.7	13	14	10	11.5	13.1	13	
10.2	19	12	10	13	14.0	14	
10.6	25	12	12	9	15.6	15	
10.1	16	18	18.5	18	17.5	16	
10.1	16	18	15	26.5	18.0	17	
9.6	12	22	24	16.5	18.7	18	
10.1	16	24	16	22	20.6	19	▼
10.8	34	14	20	16.5	20.9	20	
10.6	25	18	25	23	21.3	21	
10.5	23	17	35	26.5	21.6	22	
10.3	20	24	21	21	22.2	23	
9.4	10	31	23	15	22.3	23	
10.6	25	22	18.5	24	22.8	25	
10.6	25	18	36	43.5	24.5	26	▲
10.8	34	24	22	20	26.4	27	
10.8	34	24	27	29	27.8	28	
10.7	32	24	28.5	35	28.0	29	
10.4	22	24	42	55	28.3	30	
10.0	14	38	N/A	N/A	29.0	31	
10.6	25	38	26	25	31.6	32	▼
10.9	38	31	28.5	30	32.8	33	

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10.9	38	34	31.5	28	34.4	34			
10.9	38	34	30	39.5	35.4	35			
11.0	46	31	33	43.5	37.0	36			
11.0	46	34	34	32	37.4	37			
11.0	46	24	64	56	37.8	38	▲▲		
10.9	38	38	44	37.5	38.6	39			
11.0	46	34	47.5	37.5	39.3	40			
10.9	38	42	39	33.5	39.7	41	▼		
11.0	46	38	38	36	40.2	42			
10.9	38	45	37	33.5	41.0	43	▼▼		
10.9	38	42	55	51	43.0	44			
11.0	46	42	43	41	43.2	45			
11.0	46	45	40	45	44.8	46			
11.0	46	45	52.5	63.5	47.9	50			
11.0	46	45	51	72.5	48.7	51			
11.0	46	50	31.5	31	45.1	47	▼▼		
11.0	46	50	46	42	47.6	48			
11.0	46	50	49	65	50.2	52			
10.5	23	60	58	47	47.4				
10.7	32	60	71	60.5	52.8				
10.9	38	60	67	53.5	53.5				
11.0	46	80	74	72.5	68.5				
10.6	25	100	116	110.5	80.2				
10.8	34	100	109	110.5	82.2				
10.6	25	120	154	157	98.6				

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Comments on the Six Top-10 Specialties in 2006 (thus omit Polymer)	Rational for this New Ranking System Sources of the Data, and Ranking Criteria	School	Overall Rank
A perennial Top-5 school - in 5 Top-10 specialties	<p>The Rational for this new Ranking System is to combine:</p> <p>(1) the current, well-known, overall results from <i>US News</i>, (2) their current Top-10 rankings in various specialties, (3) older Top-20 rankings from the 1998 <i>US News</i> issue, with (4) the very thorough (but indeed older) results from the 1995 NRC study. The weighting ratios were developed by Dr. David Fraley, Georgetown College, who is responsible for all content. Contact him at dfraley@georgetowncollege.edu with your thoughts.</p> <p>The <i>US News America's Best Graduate Schools, 2007 Ed.</i>, is the source for the <i>US News</i> Top-50 Chemistry graduate schools and for their Top-10 rankings in 6 specialties. That data was collected in 2006 as part of their biennial survey of the sciences.</p> <p>The <i>US News America's Best Graduate Schools, 1998 Ed.</i>, is the source for (1) the Polymer rankings and (2) the lower (11-20) rankings for 5 other specialties, because that year <i>US News</i> listed <u>20 schools</u> per specialty. Using that older data (acquired in 1996) enables the rankings to give a small benefit to schools that were in the 11-20 range. Thus, if a school was in the Top-10 in 1996, but not in 2006, it earned a 10.2. If it was 11-15, it earned a 10.4. If it was in the 16-20 range, it earned a 10.6 on a <i>10 point scale</i>. (Yes, the math does work!) This helped delineate some schools in the rankings and helped flag those schools that are particularly good in a specialty.</p> <p>The National Research Council's landmark book, <i>Research-Doctorate Programs in the United States, 1995</i>, is the source of the data for 2 rankings: (1) the Scholarly Quality of the Faculty and (2) the Program Effectiveness in Educating Research Scientists.</p>	UC-Berkeley	1
A perennial Top-5 school - in 5 Top-10 specialties		MIT	2
A perennial Top-5 school - in 5 Top-10 specialties		Caltech	2
A perennial Top-5 school - in 5 Top-10 specialties		Harvard	4
A perennial Top-5 school - in 5 Top-10 specialties		Stanford	5
In 5 of the 6 Top-10 specialties		Illinois	6
The Only school in <u>all 6</u> of the Top-10 specialties		Wisconsin	7
In 3 of the 6 Top-10 specialties		Columbia	7
In 2 of the 6 Top-10 specialties		Northwestern	9
Not listed in <i>any</i> of the Top-10 specialties		Cornell	10
In 3 of the 6 Top-10 specialties		Texas	10
In 2 of the 6 Top-10 specialties		North Carolina	12
In 2 of the 6 Top-10 specialties		Chicago	13
On 1 Top-10 list.		UCLA	14
On 1 Top-10 list.		Yale	15
On 1 Top-10 list.		UC-San Diego	16
On 1 Top-10 list.		Texas A&M	17
On 1 Top-10 list.		Purdue	18
On 1 Top-10 list.		Indiana	19
Not listed in <i>any</i> of the Top-10 specialties		Princeton	20
Not listed in <i>any</i> of the Top-10 specialties	Pennsylvania	21	
On 1 Top-10 list.	Michigan	22	
On 1 Top-10 list.	Minnesota	23	
UC-SF was not ranked in 1996 by <i>US News</i> ; Grad.program only	UC-San Francisco	23	
Not listed in <i>any</i> of the Top-10 specialties	Penn State	25	
On 1 Top-10 list.	UC-Irvine	26	
Not listed in <i>any</i> of the Top-10 specialties	Ohio State	27	
On 1 Top-10 list.	Johns Hopkins	28	
On 1 Top-10 list.	Washington	29	
On 1 Top-10 list.	Colorado	30	
No 1995 NRC results, thus their weighted score is approximate	Arizona	31	
Not listed in <i>any</i> of the Top-10 specialties	Iowa State	32	
Not listed in <i>any</i> of the Top-10 specialties	Rice	33	

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	28	34	-6		Mountain West	
	32	34	-2		SEC	
	37	31	6		Big West	
	40	34	6		Big East	
	40	24	16	▲▲	ACC	
	32	38	-6		ACC	
	40	34	6		Big West	
	32	42	-10	▼	Big-10	
	40	38	2		University	3
	32	45	-13	▼▼	Mountain West	
	46	42	4		University	3
	40	42	-2		ACC	
	40	45	-5		Pac-10	
	46	45	1		ACC	
	46	45	1		ACC	
	37	>50		▼▼	University	3
	46	>50			America East	
	46	>50			SEC	
			-0.32	Average		
			5.34	Std. Dev.		
					Atlantic-10	
					University	3
					ACC	
					University	3
					Mid-America	
					Skyline	3
					C-USA	