			Evaluating the Top-50 Graduate Programs in Chemistry								
		A New	, Comprehensi	ve Ranking by David	Fraley that incl	udes the Top-10	Listings in 7 Spec	ialties			
							1				
	Overall	 	<u> </u>			 	1	<u> </u>			
School	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								

Utah	34			T		10.6	1	
Florida	35	+				10.6	+	
UC-Santa Barbara	36					10.2		
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	l l				
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
темперия инсертительный денти								
	+						+	
	+	+					+	
		+ +						

Top-10	Top-10	US News		(1995)		Ove		Big
Adj. Score	Rank	2007	Quality	Effectiveness		Score	Rank	Changes
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	L	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	A
9.3	8	14	17	14		12.5	12	
9.7	13	14	10	11.5	L	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	A
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	

10.9	38	34	24 E	20		34.4	34		
	38		31.5	28 20 F	⊩		35		
10.9		34	30	39.5		35.4			
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	A A	
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		45	52.5	63.5		47.9	50		
11.0		45	51	72.5		48.7	51		
11.0	46	50	31.5	31		45.1	47	▼ ▼	,
11.0		50	46	42		47.6	48	<u> </u>	
11.0		50	49	65		50.2	52		
11.0		30	73			30.2	<u> </u>		
	_								
40.5				47		4= 4			
10.5		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		80	74	72.5		68.5			
10.6		100	116	110.5		80.2			
10.8		100	109	110.5		82.2			
10.6	25	120	154	157		98.6			
								•	

Comments on the Six Ten 40	Dational for this New Danking System		Overell
Comments on the Six Top-10	Rational for this New Ranking System	Cohool	Overall
Specialties in 2006 (thus omit Polymer)	Sources of the Data, and Ranking Criteria	School	Rank
	The Rational for this new Ranking System is to combine:		
A nevernial Ten 5 caheal, in 5 Ten 40 anasiation	(1) the current, well-known, overall results from <i>US News</i> ,	UC-Berkeley	1
A perennial Top-5 school - in 5 Top-10 specialties A perennial Top-5 school - in 5 Top-10 specialties		MIT	2
· · · · · · · · · · · · · · · · · · ·	(2) their current Top-10 rankings in various specialties, (3) older Top-20 rankings from the 1998 <i>US News</i> issue, with	Caltech	2
A perennial Top-5 school - in 5 Top-10 specialties		Harvard	4
A perennial Top-5 school - in 5 Top-10 specialties	(4) the very thorough (but indeed older) results from the 1995 NRC	Stanford	5
A perennial Top-5 school - in 5 Top-10 specialties	study. The weighting ratios were developed by Dr. David		
In 5 of the 6 Top-10 specialties	Fraley, Georgetown College, who is responsible for all content.	Illinois	6
The <i>Only</i> school in <u>all 6</u> of the Top-10 specialties	Contact him at dfraley@georgetowncollege.edu with your thoughts.	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 any of the Top-10 specialties	The US News America's Best Graduate Schools, 2007 Ed., is the	Cornell	10
In 3 of the 6 Top-10 specialties	source for the US News Top-50 Chemistry graduate schools and for	Texas	10
In 2 of the 6 Top-10 specialties	their Top-10 rankings in 6 specialties. That data was collected in	North Carolina	12
In 2 of the 6 Top-10 specialties	2006 as part of their biennial survey of the sciences.	Chicago	13
On 1 Top-10 list.		UCLA	14
On 1 Top-10 list.		Yale	15
On 1 Top-10 list.	The US News America's Best Graduate Schools, 1998 Ed.,	UC-San Diego	16
On 1 Top-10 list.	is the source for (1) the Polymer rankings and	Texas A&M	17
On 1 Top-10 list.	(2) the lower (11-20) rankings for 5 other specialties,	Purdue	18
On 1 Top-10 list.	because that year US News listed 20 schools per specialty.	Indiana	19
Not listed in any of the Top-10 specialties	Using that older data (acquired in 1996) enables the rankings to	Princeton	20
Not listed in any of the Top-10 specialties	give a small benefit to schools that were in the 11-20 range.	Pennsylvania	21
On 1 Top-10 list.	Thus, if a school was in the Top-10 in 1996, but not in 2006, it	Michigan	22
On 1 Top-10 list.	earned a 10.2. If it was 11-15, it earned a 10.4. If it was in the 16-20	Minnesota	23
UC-SF was not ranked in 1996 by US News; Grad.program only	range, it earned a 10.6 on a 10 point scale. (Yes,the math does work!)	UC-San Francisco	23
Not listed in any of the Top-10 specialties	This helped delineate some schools in the rankings and helped	Penn State	25
On 1 Top-10 list.	flag those schools that are particularly good in a specialty.	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.	The National Research Council's landmark book,	Washington	29
On 1 Top-10 list.	Research-Doctorate Programs in the United States, 1995,	Colorado	30
No 1995 NRC results, thus their weighted score is approximate	is the source of the data for 2 rankings:	Arizona	31
Not listed in <i>any</i> of the Top-10 specialties	(1) the Scholarly Quality of the Faculty and	Iowa State	32
Not listed in <i>any</i> of the Top-10 specialties	(2) the Program Effectiveness in Educating Research Scientists.	Rice	33

Not listed in any of the Top-10 specialties	Their data was collected in 1993 , but it is very thorough and accurate.	Utah	34
Not listed in any of the Top-10 specialties	The study is scheduled to be updated in 2007. The new data	Florida	35
Not listed in any of the Top-10 specialties	will be included in this ranking as soon as it's available.	UC-Santa Barbara	36
Not listed in any of the Top-10 specialties		Pittsburgh	37
Big Boost up Not listed in any of the Top-10 specialties		Georgia Tech.	38
Not listed in any of the Top-10 specialties	To determine the influence on Top-10 Rankings , the Big-3:	Duke	39
Not listed in any of the Top-10 specialties	Organic, Physical, and Biochemistry each have a maximum	UC-Davis	40
Not listed in any of the Top-10 specialties	weighted value of 1.0, while Inorganic is 0.8. The less	Michigan State	41
Not listed in any of the Top-10 specialties	prestigious Analytical is dropped to 0.7. Theoretical is weighted at	Emory	42
Big Drop down Not listed in any of the Top-10 specialties	only 0.25 (since it's a part of P.Chem.) and Polymer is also at 0.25	Colorado State	43
Not listed in any of the Top-10 specialties	because the data is older and it's found at only a few schools.	Washington (St. Louis)	44
Not listed in any of the Top-10 specialties	Thus a premium is given to those schools which have a specialty	Virginia	45
Not listed in any of the Top-10 specialties	in the Top-10 in 2006 and a reduced premium for being in the	Southern California	46
Not listed in any of the Top-10 specialties	Top-11 thru 20 in 1996. (Note: a recent Top-20 ranking of specialties	Maryland	50
Not listed in any of the Top-10 specialties	would be most helpful.)	Florida State	51
		Schools in the Top-50	
	The Overall Ranking is thus based on 4 values:	in 1996, but not 2006:	
Rochester took a big drop from 1996 to 2006	50% on the current US News ranking,	Rochester	47
	30% on Top-10 Specialties,	SUNY-Stony Brook	48
	10% on NRC Scholarly Quality, and	Georgia	52
	10% on NRC Educational Effectiveness.		
		Polymer Chemistry	
		Programs listed in 1996	
	The Big Changes note those schools that made a	Massachusetts	
	significant move + or - in the past 10 years (1996 to 2006).	Case Western Reserve	
	This is based only on their US News rankings. It took a move	Virginia Tech	
	of at least +/- 7 places to be noted with ▲ or ▼arrows and a	Carnegie Mellon	
	move of +/- 13 places to be noted with ▲ ▲ or ▼▼ arrows.	Akron	
	(No statistical significance is implied with these changes. A move of	Polytechnic (NY)	
	+/- 5 in the top part of the rankings indicates a much larger relative	Southern Mississippi	
	change than a similar movement in the lower part of the rankings.		
	Thus, the arrows are designed to only show major trends.)		

	US N	ews	Change	Flag	Athletic	Other than
	1996	2006	in Rank	Changes	Conference	Division-I
	1	1	0		Pac-10	
	2	1	1		New England	3
	2	3	-1		SCIAC	3
	2	3	-1		Ivy League	
	2	3	-1		Pac-10	
	8	6	2		Big-10	
	10	7	3		Big-10	
	6	7	-1		Ivy League	
	12	9	3		Big-10	
	6	9	-3		Ivy League	
	16	9	7	A	Big-12	
	15	14	1		ACC	
	8	14	-6		University	3
	10	12	-2		Pac-10	
	12	12	0		Ivy League	
	20	18	2		Calif. Collegiate	2
	19	18	1		Big-12	
	16	22	-6		Big-10	
	16	24	-8	▼	Big-10	
	12	14	-2		Ivy League	
	20	18	2		Ivy League	
	20	17	3		Big-10	
	20	24	-4		Big-10	
		31	N/A		None	No sports
	27	22	5		Big-10	
	28	18	10	A	Big West	
	20	24	-4		Big-10	
	20	24	-4		Centennial	3
1	28	24	4		Pac-10	
	20	24	-4		Big-12	
	37	38	-1		Pac-10	
	28	38	-10	▼	Big-12	
+	32	31	1	·	C-USA	

	28	34		-6			Mountain West	
	32	34		-2		SEC	Wountain Woot	
	37	31		6		0_0	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	\vdash	2			University	3
	32	45		-13			Mountain West	
	46	42	-	4			University	3
	40	42		-2			ACC	
	40	45		-5			Pac-10	
	46	45	\vdash	1			ACC	
	46 46	45		1			ACC	
	40	40		·			ACC	
	+							
	37	>50			▼ ▼		University	3
	46	>50	1		* *		America East	
	4 6	>50					SEC SEC	
	40	/30					SLO	
	+			-U 33	Average			
					Std. Dev.			
				5.54	Old. DCV.		Atlantic-10	
	+						University	3
							ACC	3
	-						University	3
	+		Н				Mid-America	3
	+		\vdash			-		2
						-	Skyline	3
							C-USA	
						-		
	-		\square					
\vdash								
						<u> </u>		