

Productivity of MACTLAC Colleges

<u>College Number</u>	<u>PhD's 60-66 (a)</u> <u>1/5 x 1960 en-</u> <u>rollment x 6</u>	<u>Chem.Majors (b)</u> <u>1968, 69, 70 (b)</u> <u>1/5 x 1967 en-</u> <u>rollment x 3</u>	<u>Salary (c)</u> <u>Rating</u> <u>Prof. -</u> <u>Assoc.</u>
38	2.6	---	5-7
27	2.2	4.2	2-3
49	2.2	6.5	3-5
44	1.8	7.4	3-3
10	1.7	---	8-9
20	1.6	5.6	4-4
24	1.5	5.3	8-7
11	1.4	---	4-4
36	1.3	3.6	4-3
7	1.2	5.6	3-4
6	1.2	3.6	6-5
28	1.1	3.9	1-2
3	1.1	3.0	6-7
47	1.1	2.7	7-6
12	1.1	1.7	3-3
30	1.1	---	9-9
5	1.1	---	---
17	0.9	6.2	5-5
43	0.9	---	8-7
29	0.8	3.7	3-3
8	0.8	3.4	3-7
4	0.7	3.3	3-5
22	0.7	2.0	2-3
25	0.7	---	7-8
40	0.6	6.5	2-6
14	0.6	5.4	4-5
52	0.6	5.2	8-8
21	0.6	3.4	3-5
1	0.6	3.0	4-4
2	0.6	2.0	3-2
34	0.6	---	6-7
37	0.6	---	8-6
51	0.6	---	---
53	0.6	---	---
15	0.5	1.4	3-3
39	0.5	---	---
9	0.5	---	7-8
31	0.4	3.3	5-5
35	0.4	---	7-6
19	0.4	---	10-9
45	0.4	---	---5
50	0.3	---	8-7
46	0.3	---	---
26	0.3	---	6-6
32	0.2	3.1	1-1
13	0.2	3.0	8-7
48	0.2	2.8	9-8
18	0.2	0.8	7-8

(over)

<u>College Number</u>	PhD's 60-66 (a) <u>1/5 x 1960 en- rollment x 6</u>	Chem.Majors (b) <u>1968, 69, 70</u> <u>1/5 x 1967 en- rollment x 3</u>	Salary (c) Rating Prof.- <u>Assoc.</u>
23	0.2	----	3-4
33	0.2	----	6-3
42	0.2	----	5-4
41	0.1	----	6--
16	0.1	0.5	4-4

- (a) Doctorate Recipients from U.S. Universities, 1958-1966, National Academy of Science Publication 1489, Washington, D.C. (1967)
- (b) Reports of Committee on Professional Training.
- (c) AAUP, 57, No. 2, pp. 247-283.

Percentiles	Productivity 60-66	Productivity of Majors 68-70
>90	1.7-2.6 Wabash Park Central St. Olaf Kalamazoo	6.5-7.4 Wabash Ripon St. Olaf
80-90	1.2-1.6 Cent. Meth. Carleton Calvin Grinnell Monmouth Hope	5.6-6.2 Earlham Carleton Grinnell
70-80	1.1 Blackburn Augustana Coe Knox Loras St. Thomas	5.2-5.4 Cornell Hope Wheaton
		3.7-4.2 Kalamazoo Knox Lawrence

Over 3.0

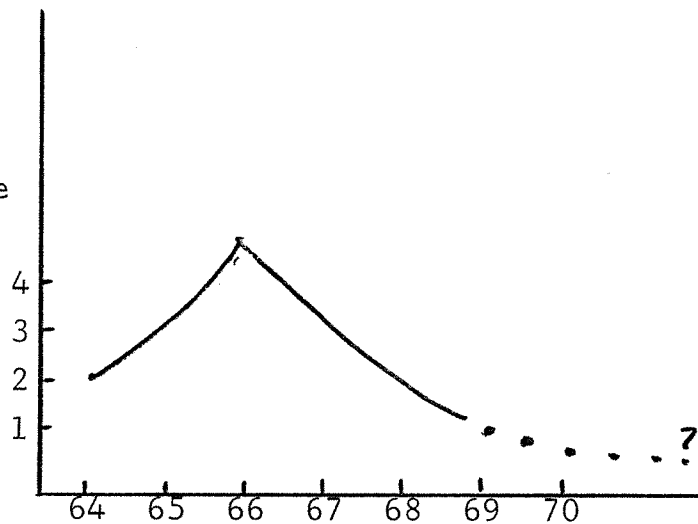
Monmouth, Calvin, Carroll, Gust. Adolph., Luther,
Beloit, Macalaster, Albion, Augustana, Concordia.

Ratings of a few other schools:

Oberlin	3.6
Reed	3.6
Cal. Tech.	4.5
Mt. Holyoke	4.6

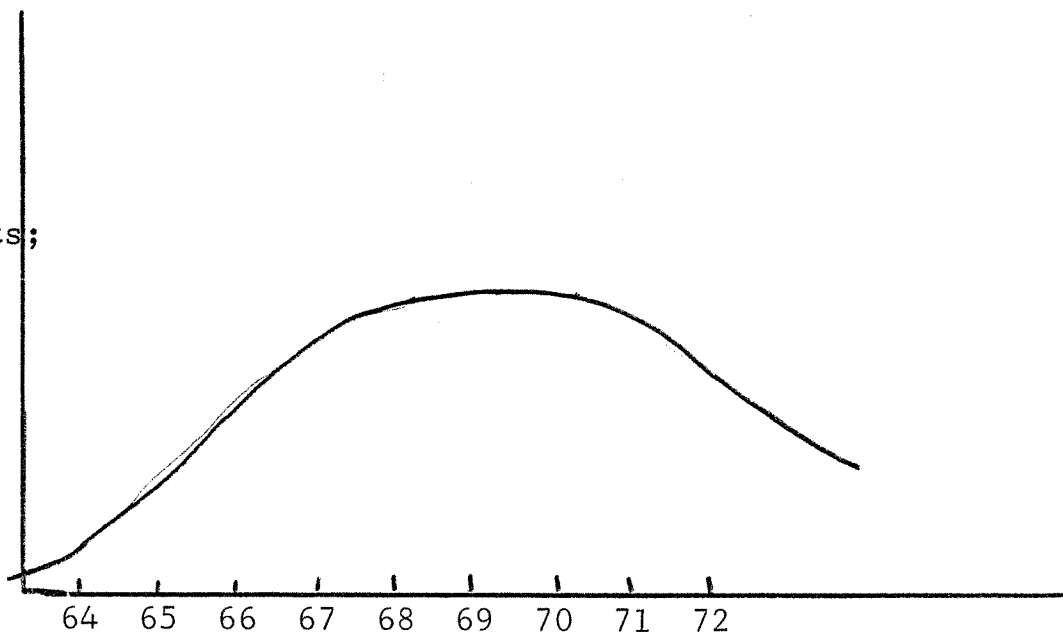
Martin Paul - Toronto Meeting

Job offers per
Ph.D. graduate



30
100
1000
10000
100000
1000000

Money for Research;
Real Dollars for
Operating Dept.;
Students Planning
to be Ph.D. Chemists;
etc.



he Structure of Chemistry

"Various new methods of the organization of chemistry both for teaching and publication should be investigated (e.g. Structure, Dynamics, and Synthesis)."

"Chemical Education must be continuously reviewed in the light of the developments of science to ensure that students learn what the real challenges now are rather than what they were some time ago."

"We note that chemists have a strong tendency to play trivial games, dwelling for too long on what are essentially loose ends in fashionable areas."

"Having emphasized the crucial role of models in shaping science, we would risk sabotaging any value of this discussion if we created the impression that the model is the final goal.... .. the model has no value except in the context of facts that it correlates."

"To attract good people into chemistry the first course should expose the student to exciting problems studied by chemists today, and the likely nature of future problems."

reparing Chemists to Meet Society's Future Needs

"Chemistry Departments in colleges and universities must broaden their curricula to include efforts to make chemistry students aware of chemists' role in society and to sensitize them to society's needs. This simple recommendation implies the need for many specific programs. It implies more consideration of society's problems in elementary chemistry courses."

Chemistry for the Citizen

"In colleges and universities, experimentation should be encouraged toward the development of humanistic, in-depth science courses much less committed to complete coverage of chemistry than has been the case in the past. Courses should be developed that deal with the philosophical and ethical implications of science, as well as with its practical implications, and these courses should be intended for all students in their last years of college."

