Diversity in the Minerals, Metals, and Materials Professions The Minerals, Metals and Materials Society

Diversity Throughout Science and Engineering

Mildred Dresselhaus Massachusetts Institute of Technology July 31, 2014





July 29-31, 2014
National Academy of Sciences
Building, Washington, DC



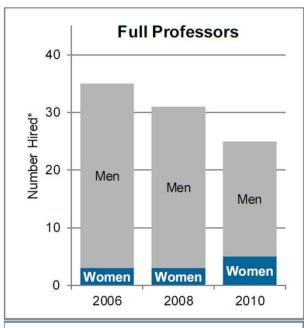
Women physics faculty (%)

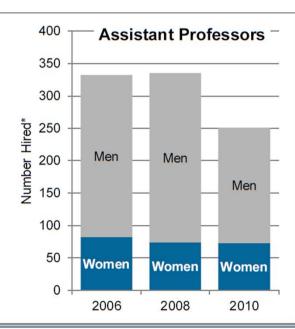
	1998	2002	2006	2010
by rank				
Full prof	3	5	6	8
Assoc prof	10	11	14	15
Asst prof	17	16	17	22
Instructor/adjunct	na	16	19	21
other	13	15	12	18
by highest degree				
offered by dept				
PhD	6	7	10	12
Master's	9	13	14	15
Bachelor's	11	14	15	17
Overall	8	10	12	14

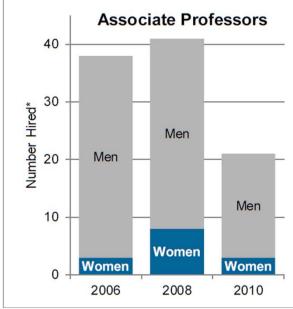
Women new-hires, physics (%)

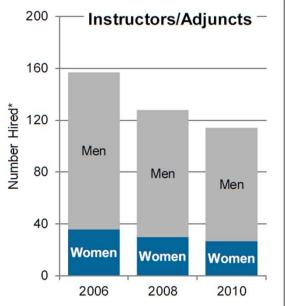
	2006	2008	2010
Full prof	9	10	20
Assoc prof	8	20	14
Asst prof	25	22	29
Instructor/Adjunct	23	23	24
Overall	22	21	26

Physics new-hires

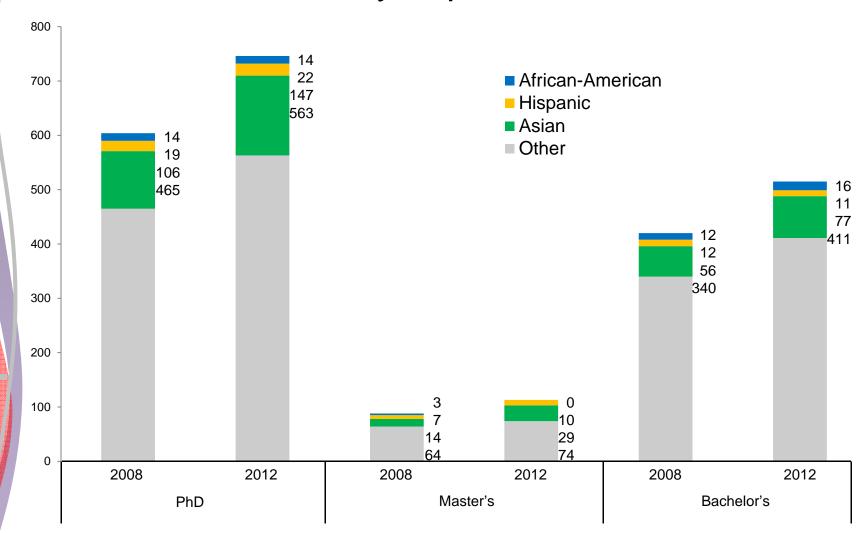








Women faculty in physics & astronomy departments, by highest degree granted by department



Physics department with *any* women faculty, by highest degree granted, 2009-10

PhD 91%

(192)

Master's 63%

(63)

Bachelor's 52%

(503)

Overall 63%

(758)

Percentage of PhD-granting physics departments by number of women faculty

	2006	2010
0	15	8
1	24	21
2	21	20
3	18	21
4	8	14
5+	12	15

Race and ethnicity, physics faculty

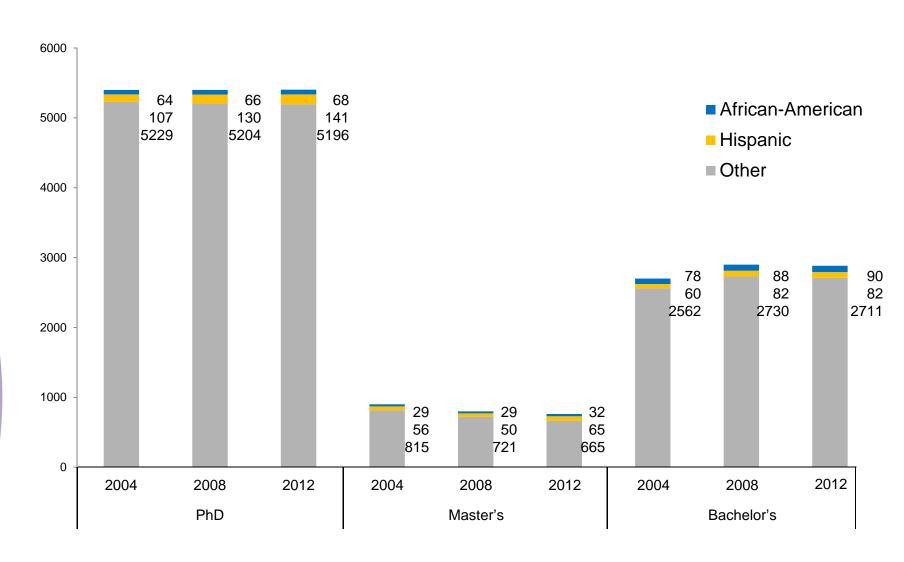
		Physics		All fields
	2004	2008	2012	2009
African-American	2.0	2.2	2.1	6.6
Asian	10.6	13.2	14.3	6.0
Hispanic	2.7	3.1	3.2	4.0
White	82.2	80.0	79.2	74.9
Other	2.2	1.5	1.2	0.5

Physics departments with *any*African-American or Hispanic faculty

	Highest degree			
	PhD	Master's	Bachelor's	Total
both	16	3	9	28
	8%	5%	2%	4%
African-American and no Hispanic	19	11	47	77
	10%	18%	9%	10%
Hispanic and no African-American	79	23	56	158
	41%	38%	11%	21%
neither	78	24	381	483
	40%	39%	75%	65%
total	192	61	511	746

47% of African-American physics faculty work at historically black colleges and universities (which hold 4% of all physics departments)

Physics faculty, highest degree granted by department



Increases at full professor level are strongest, but percentages remain low

Percentage increases are lowest at PhD-granting institutions, but percentages are lowest here

Physics and engineering continue to lag other fields

More encouragement about career opportunities is needed