

TABLE 38

## U.S. residing employed minority doctoral scientists and engineers, by occupation, ethnicity, race, and sex: 2019

(Number and SE)

Occupation	All employed minority <sup>a</sup>						Hispanic or Latino <sup>b</sup>						Not Hispanic or Latino <sup>c</sup>																	
													American Indian or Alaska Native						Black or African American						Native Hawaiian or Other Pacific Islander					
	Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female	
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE
All occupations	81,500	850	44,250	700	37,300	525	37,250	550	21,200	450	16,050	400	1,300	125	750	100	550	75	31,100	400	15,750	375	15,350	375	900	100	500	100	400	75
Science occupations	46,600	725	24,600	575	22,000	475	22,750	475	12,300	375	10,400	350	600	100	350	100	300	75	16,350	400	8,300	325	8,000	275	450	75	250	75	250	50
Biological, agricultural, and other life scientist	14,350	325	7,200	275	7,150	225	7,300	300	3,800	250	3,500	175	100	25	50	25	50	25	4,450	225	2,150	175	2,350	150	200	50	100	50	100	50
Agricultural, food scientist	1,400	125	950	125	450	75	800	100	450	75	350	75	D	D	D	D	D	D	550	100	450	100	100	25	D	D	D	D	D	D
Biochemists, biophysicist	750	100	400	75	350	75	400	75	200	75	200	50	D	D	D	D	D	D	200	50	50	25	100	50	D	D	D	D	D	D
Biological scientist	2,550	175	1,150	150	1,400	150	1,350	125	700	100	650	100	D	D	D	D	D	D	550	100	250	75	350	75	100	50	S	S	50	50
Forestry, conservation scientist	150	50	100	25	50	25	50	25	50	25	50	25	D	D	D	D	D	D	*	*	D	D	D	D	D	D	D	D	D	D
Medical scientist	3,500	200	1,600	150	1,950	150	1,600	150	800	125	800	100	D	D	D	D	D	D	1,300	125	500	100	800	100	S	S	D	D	D	D
Postsecondary teachers, agricultural, other natural sciences	700	100	450	100	250	50	350	75	250	75	100	50	D	D	D	D	D	D	300	75	200	75	100	50	D	D	D	D	D	D
Postsecondary teachers, biological sciences	3,400	200	1,700	150	1,700	150	1,800	175	950	150	900	100	*	*	D	D	D	D	1,000	125	500	100	500	100	50	25	D	D	D	D
Other biological, agricultural, life scientist	1,900	175	900	150	1,000	100	900	125	450	100	450	75	D	D	D	D	D	D	550	75	200	50	350	75	D	D	D	D	D	D
Computer and information scientist	3,350	225	2,600	175	750	125	1,700	150	1,400	125	300	75	D	D	D	D	D	D	1,050	125	650	100	400	100	100	50	100	50	D	D
Computer and information scientist	2,650	200	2,100	150	550	100	1,400	150	1,200	125	250	75	D	D	D	D	D	D	750	100	450	75	250	75	100	50	100	50	D	D
Postsecondary teachers, computer science	700	100	500	100	200	50	250	50	200	50	50	25	D	D	D	D	D	D	300	75	200	50	100	50	D	D	D	D	D	D
Mathematical scientist	3,200	200	2,400	200	850	100	1,650	150	1,300	150	350	50	D	D	D	D	D	D	1,100	125	800	100	300	75	50	50	D	D	S	S
Mathematical scientist	1,650	175	1,200	150	500	75	750	125	550	125	150	50	D	D	D	D	D	D	600	100	400	75	200	75	50	50	D	D	D	D
Postsecondary teachers, mathematics, statistics	1,550	125	1,200	125	350	75	900	125	750	125	150	50	D	D	D	D	D	D	500	75	400	75	100	50	D	D	D	D	D	D
Physical scientist	6,650	275	4,600	275	2,050	150	3,250	200	2,150	175	1,100	125	50	25	50	25	D	D	2,300	200	1,700	175	600	75	50	25	D	D	50	25
Chemists, except biochemist	1,850	175	1,200	150	650	100	800	125	500	100	300	75	50	25	D	D	D	D	750	125	500	100	300	75	D	D	D	D	D	D
Earth, atmospheric, ocean scientist	750	100	500	75	200	50	400	75	250	50	150	50	D	D	D	D	D	D	150	50	100	50	*	*	D	D	D	D	D	D
Physicists, astronomers	900	150	750	150	150	50	500	100	400	100	100	50	D	D	D	D	D	D	200	100	200	100	D	D	D	D	D	D	D	D
Postsecondary teachers, chemistry	1,650	150	1,000	125	650	100	750	100	400	75	350	75	D	D	D	D	D	D	750	100	550	75	200	50	D	D	D	D	D	D
Postsecondary teachers, physics	850	125	650	100	150	75	500	100	400	75	S	S	D	D	D	D	D	D	200	50	200	50	*	*	D	D	D	D	D	D
Postsecondary teachers, other physical science	500	75	300	75	150	50	250	50	150	50	100	25	D	D	D	D	D	D	150	50	100	50	50	25	D	D	D	D	D	D
Other physical scientist	200	50	150	50	50	25	150	50	100	50	50	25	D	D	D	D	D	D	50	25	50	25	*	*	D	D	D	D	D	D
Psychologist	9,350	325	2,600	175	6,750	300	4,550	225	1,350	125	3,200	200	200	75	D	D	150	50	3,450	225	850	125	2,550	200	50	25	D	D	50	25
Psychologist	6,650	300	1,750	150	4,900	275	3,450	225	900	125	2,550	225	150	75	D	D	100	50	2,150	200	550	125	1,650	175	D	D	D	D	D	D
Postsecondary teachers, psychology	2,750	200	900	125	1,850	175	1,100	125	450	100	650	100	50	25	D	D	50	25	1,250	150	350	75	900	125	50	25	D	D	D	D
Social scientist	9,650	375	5,150	325	4,500	225	4,300	250	2,300	225	2,000	175	250	75	150	75	100	25	4,050	250	2,150	200	1,850	150	D	D	D	D	D	D
Economist	950	125	600	100	300	75	600	100	450	100	100	50	D	D	D	D	D	D	250	75	100	50	150	50	D	D	D	D	D	D
Political scientist	200	50	150	50	50	50	100	50	S	S	D	D	D	D	D	D	D	D	100	50	50	50	D	D	D	D	D	D	D	D
Postsecondary teachers, economics	1,150	150	850	150	250	50	550	100	400	100	200	50	D	D	D	D	D	D	500	100	450	100	50	50	D	D	D	D	D	D
Postsecondary teachers, political science	1,850	250	1,300	225	550	125	600	125	400	125	200	75	D	D	D	D	D	D	1,000	200	750	175	250	100	D	D	D	D	D	D

TABLE 38

U.S. residing employed minority doctoral scientists and engineers, by occupation, ethnicity, race, and sex: 2019

(Number and SE)

Occupation	All employed minority <sup>a</sup>						Hispanic or Latino <sup>b</sup>						Not Hispanic or Latino <sup>c</sup>																	
	Total		Male		Female		Total		Male		Female		American Indian or Alaska Native			Black or African American						Native Hawaiian or Other Pacific Islander								
	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE	Number	SE		
Postsecondary teachers, sociology	1,400	125	700	100	700	100	600	100	300	75	300	75	D	D	D	D	D	D	550	100	300	75	300	75	D	D	D	D	D	D
Postsecondary teachers, other social sciences	2,400	175	1,100	150	1,300	100	1,200	125	550	100	650	100	150	50	S	S	50	25	800	100	400	75	400	50	D	D	D	D	D	D
Sociologist, anthropologist	450	100	100	50	350	100	250	75	50	25	200	75	D	D	D	D	D	D	150	50	D	D	100	50	D	D	D	D	D	D
Other social scientist	1,250	125	300	75	950	125	400	50	100	50	300	50	D	D	D	D	D	D	700	125	100	50	550	100	D	D	D	D	D	D
Engineering occupations	9,150	375	7,350	375	1,800	125	4,700	275	3,850	225	850	100	100	50	100	25	D	D	2,900	175	2,350	175	600	75	S	S	S	S	D	D
Aerospace, aeronautical, astronautical engineer	450	100	400	100	50	25	300	100	300	100	50	25	D	D	D	D	D	D	100	25	50	25	D	D	D	D	D	D	D	D
Chemical engineer	600	100	400	100	150	50	250	75	250	75	50	25	D	D	D	D	D	D	200	75	100	50	50	50	D	D	D	D	D	D
Civil, architectural, sanitary engineer	850	150	750	150	100	50	450	125	350	100	100	50	D	D	D	D	D	D	350	100	350	100	D	D	D	D	D	D	D	D
Electrical engineer	1,600	150	1,500	150	100	50	800	100	750	100	50	25	D	D	D	D	D	D	550	100	500	100	50	25	D	D	D	D	D	D
Industrial engineers	250	50	200	50	50	25	150	50	100	25	50	25	D	D	D	D	D	D	100	50	100	50	D	D	D	D	D	D	D	D
Mechanical engineer	900	150	750	150	150	50	450	100	400	100	S	S	*	*	D	D	D	D	200	50	150	50	50	50	D	D	D	D	D	D
Postsecondary teacher, engineering	2,100	200	1,700	175	400	75	1,100	150	900	150	200	50	D	D	D	D	D	D	750	125	600	100	150	50	D	D	D	D	D	D
Other engineer	2,400	175	1,650	150	750	100	1,200	125	850	100	350	75	*	*	*	*	D	D	700	100	450	75	250	50	50	25	D	D	D	D
S&E-related occupations	9,350	350	4,350	275	5,050	225	3,700	225	1,850	150	1,900	150	200	50	100	50	100	50	4,150	225	1,700	175	2,500	175	150	50	100	50	50	50
Health occupations, except postsecondary teachers and managers	3,650	225	1,550	200	2,050	150	1,400	150	650	125	750	100	50	25	D	D	D	D	1,750	175	700	150	1,050	125	D	D	D	D	D	D
Postsecondary teacher, health and related science	2,650	175	800	100	1,850	150	900	125	350	75	550	100	100	50	S	S	50	25	1,350	125	350	75	1,000	100	S	S	D	D	D	D
S&E managers, including health	2,000	175	1,300	150	700	100	950	125	550	100	400	75	50	25	50	25	D	D	650	125	450	100	200	75	S	S	D	D	D	D
S&E precollege teachers	700	100	350	75	350	75	250	50	150	50	100	50	D	D	D	D	D	D	350	75	150	50	200	50	D	D	D	D	D	D
S&E technicians/ technologists	350	75	300	50	50	25	200	50	150	50	S	S	D	D	D	D	D	D	50	25	50	25	D	D	D	D	D	D	D	D
Other S&E-related occupation	50	50	50	50	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Non-S&E occupations	16,450	475	7,950	350	8,450	325	6,050	300	3,150	225	2,900	175	400	75	200	50	150	50	7,650	350	3,400	250	4,250	250	150	50	100	50	50	25
Arts, humanities-related occupation	700	100	200	75	500	75	200	75	50	25	200	75	D	D	D	D	D	D	250	75	150	50	150	50	D	D	D	D	D	D
Management-related occupation	4,050	325	2,000	250	2,000	175	1,600	150	900	150	650	75	50	25	D	D	D	D	1,850	200	800	150	1,050	125	D	D	D	D	D	D
Non-S&E managers	5,200	250	2,800	200	2,450	200	1,850	150	1,200	150	700	100	150	50	100	50	50	25	2,600	225	1,100	125	1,450	175	50	50	D	D	50	25
Non-S&E postsecondary teachers	2,650	175	1,200	125	1,450	125	1,100	100	500	75	600	75	50	50	S	S	S	S	1,200	150	550	125	650	100	*	*	D	D	D	D
Non-S&E precollege/ other teachers	600	100	200	50	400	75	250	75	50	50	150	50	D	D	D	D	D	D	250	50	100	50	150	50	D	D	D	D	D	D
Sales, marketing occupation	800	125	500	125	300	75	300	75	150	50	150	50	D	D	D	D	D	D	250	50	150	50	100	50	D	D	D	D	D	D
Social service-related occupation	1,200	150	350	125	850	100	350	75	50	25	300	75	S	S	D	D	D	D	750	150	250	125	450	75	D	D	D	D	D	D
Other non-S&E occupation	1,250	175	750	125	500	100	400	75	250	75	150	50	D	D	D	D	D	D	550	125	300	75	250	100	D	D	D	D	D	D

\* = suppressed when population estimate < 25. D = suppressed to avoid disclosure of confidential information. S = suppressed for reliability; coefficient of variation exceeds publication standards.

S&E = science and engineering; SE = standard error.

<sup>a</sup> In this table, all employed minorities includes Hispanic or Latino; non-Hispanic or Latino American Indian or Alaska Native, Black or African American, and Native Hawaiian or Other Pacific Islander; and 10,950 respondents reporting more than one race (data not shown). Because of the large number of Asians among the doctoral population, they are shown separately in table 37.

<sup>b</sup> Hispanic or Latino may be of any race.

<sup>c</sup> American Indian or Alaska Native, Black or African American, and Native Hawaiian or Other Pacific Islander are single race.

**Note(s):**  
Numbers are rounded to the nearest 50. Standard errors are rounded up to the nearest 25. Detail may not add to total because of rounding. Residence location is based on reported living location on 1 February 2019.

**Source(s):**  
National Center for Science and Engineering Statistics, Survey of Doctorate Recipients: 2019.