

TABLE 9. Employed doctoral scientists and engineers, by field of doctorate, race/ethnicity, and sex: 2003

| Field | Total | | | American Indian/ Alaska Native | | | Asian | | | Black | | | Hispanic | | | White | | | Other/unknown race/ethnicity ^a | | |
|--|---------|---------|---------|-----------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|----------|--------|--------|---------|---------|---------|--|------|--------|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| | Number | | | | | | | | | | | | | | | | | | | | |
| All fields | 593,300 | 432,150 | 161,150 | 3,950 | 2,790 | 1,170 | 98,170 | 75,340 | 22,830 | 17,480 | 10,560 | 6,930 | 15,650 | 10,130 | 5,520 | 457,040 | 332,650 | 124,390 | 1,010 | 700 | 310 |
| Sciences | 468,570 | 329,810 | 138,760 | 3,400 | 2,390 | 1,010 | 61,890 | 43,410 | 18,490 | 13,930 | 7,980 | 5,940 | 12,970 | 8,100 | 4,870 | 375,590 | 267,420 | 108,170 | 800 | 520 | 280 |
| Biological, agricultural, and environmental life sciences | 145,760 | 101,180 | 44,580 | 1,010 | 770 | 240 | 22,560 | 13,970 | 8,580 | 3,550 | 2,130 | 1,410 | 3,820 | 2,480 | 1,350 | 114,550 | 81,630 | 32,920 | 270 | 190 | 80 |
| Agricultural/food sciences | 16,890 | 13,910 | 2,980 | 160 | 130 | S | 2,700 | 1,960 | 740 | 500 | 430 | 60 | 640 | 490 | 150 | 12,910 | 10,900 | 2,010 | S | S | S |
| Biochemistry/biophysics | 22,850 | 16,220 | 6,630 | 150 | 150 | S | 4,660 | 2,730 | 1,930 | 450 | 240 | 210 | 460 | 350 | 100 | 17,100 | 12,720 | 4,390 | S | S | S |
| Cell/molecular biology | 15,180 | 8,840 | 6,340 | S | S | S | 3,860 | 2,070 | 1,780 | 300 | 190 | 110 | 330 | 170 | 160 | 10,670 | 6,410 | 4,260 | S | S | S |
| Environmental life sciences | 5,620 | 4,600 | 1,010 | S | S | S | 490 | 350 | 140 | 80 | 60 | S | 180 | 130 | S | 4,830 | 4,030 | 800 | S | S | S |
| Microbiology | 10,970 | 7,250 | 3,720 | S | S | S | 1,680 | 1,070 | 600 | 300 | 130 | 170 | 330 | 230 | 110 | 8,590 | 5,790 | 2,800 | 50 | S | S |
| Zoology | 12,070 | 9,460 | 2,610 | 70 | S | S | 820 | 580 | 240 | 290 | 190 | 100 | 240 | 190 | S | 10,600 | 8,400 | 2,200 | S | S | S |
| Other biological sciences | 62,190 | 40,900 | 21,290 | 540 | 410 | 140 | 8,370 | 5,220 | 3,150 | 1,630 | 890 | 740 | 1,660 | 920 | 740 | 49,860 | 33,370 | 16,480 | 140 | 90 | 50 |
| Computer and information sciences | 11,960 | 10,120 | 1,840 | S | S | S | 3,900 | 3,360 | 540 | 370 | 290 | 80 | 250 | 220 | S | 7,400 | 6,230 | 1,170 | S | S | S |
| Mathematics and statistics | 28,330 | 23,770 | 4,560 | 160 | 150 | S | 5,750 | 4,610 | 1,140 | 600 | 490 | 120 | 660 | 560 | 90 | 21,110 | 17,910 | 3,200 | S | S | S |
| Physical sciences | 112,670 | 95,780 | 16,890 | 560 | 480 | 80 | 20,230 | 15,840 | 4,390 | 1,740 | 1,370 | 370 | 2,450 | 1,960 | 490 | 87,460 | 75,980 | 11,470 | 240 | 140 | 90 |
| Astronomy/astrophysics | 3,820 | 3,220 | 590 | 50 | S | S | 480 | 410 | 70 | S | S | S | 60 | S | S | 3,180 | 2,720 | 460 | S | S | S |
| Chemistry, except biochemistry | 57,040 | 46,340 | 10,690 | 270 | 230 | S | 11,040 | 8,090 | 2,960 | 1,290 | 990 | 290 | 1,370 | 1,040 | 330 | 42,910 | 35,910 | 7,000 | 160 | 80 | 80 |
| Earth/atmospheric/ ocean sciences | 17,050 | 14,230 | 2,820 | 130 | 120 | S | 1,850 | 1,500 | 350 | 90 | 70 | S | 420 | 360 | 60 | 14,530 | 12,140 | 2,390 | S | S | S |
| Physics | 34,760 | 31,980 | 2,780 | 110 | 110 | S | 6,850 | 5,850 | 1,010 | 330 | 280 | 50 | 600 | 520 | 80 | 26,840 | 25,210 | 1,630 | S | S | S |
| Psychology | 91,410 | 46,030 | 45,380 | 860 | 490 | 370 | 2,500 | 770 | 1,730 | 3,760 | 1,280 | 2,490 | 3,260 | 1,210 | 2,050 | 80,890 | 42,210 | 38,680 | 140 | 80 | 60 |
| Social sciences | 78,450 | 52,940 | 25,510 | 770 | 470 | 300 | 6,960 | 4,860 | 2,100 | 3,910 | 2,430 | 1,480 | 2,530 | 1,660 | 860 | 64,180 | 43,450 | 20,730 | 110 | 70 | S |
| Economics | 22,060 | 17,980 | 4,080 | 80 | 80 | S | 3,240 | 2,410 | 830 | 660 | 550 | 110 | 610 | 540 | 70 | 17,460 | 14,390 | 3,070 | S | S | S |
| Political sciences | 17,730 | 12,980 | 4,750 | 120 | 70 | 50 | 1,000 | 700 | 300 | 1,200 | 800 | 390 | 490 | 340 | 150 | 14,910 | 11,080 | 3,840 | S | S | S |
| Sociology | 14,250 | 8,010 | 6,230 | 120 | 70 | S | 820 | 500 | 310 | 920 | 530 | 390 | 510 | 300 | 220 | 11,860 | 6,610 | 5,250 | S | S | S |
| Other social sciences | 24,410 | 13,950 | 10,450 | 460 | 260 | 200 | 1,900 | 1,240 | 660 | 1,130 | 540 | 580 | 910 | 490 | 430 | 19,950 | 11,370 | 8,570 | 60 | S | S |
| Engineering | 101,500 | 92,690 | 8,820 | 360 | 350 | S | 33,520 | 30,390 | 3,130 | 2,380 | 2,110 | 270 | 2,050 | 1,810 | 240 | 63,000 | 57,850 | 5,150 | 190 | 180 | S |
| Aerospace/aeronautical/ aeronautical engineering | 4,150 | 3,930 | 220 | S | S | S | 1,010 | 930 | 70 | 90 | 90 | S | 70 | S | S | 2,960 | 2,850 | 120 | S | S | S |
| Chemical engineering | 13,460 | 12,110 | 1,350 | 80 | 80 | S | 4,280 | 3,830 | 450 | 280 | 220 | # | 280 | 260 | S | 8,540 | 7,730 | 810 | S | S | S |
| Civil engineering | 9,170 | 8,480 | 690 | S | S | S | 2,440 | 2,250 | 190 | 360 | 360 | S | 260 | 250 | S | 6,020 | 5,550 | 470 | S | S | S |
| Electrical/computer engineering | 28,480 | 26,460 | 2,030 | 100 | 100 | S | 10,490 | 9,600 | 890 | 670 | 630 | S | 550 | 480 | 70 | 16,660 | 15,630 | 1,030 | S | S | S |
| Materials/metallurgical engineering | 10,820 | 9,530 | 1,290 | S | S | S | 3,780 | 3,350 | 430 | 170 | 150 | S | 200 | 180 | S | 6,580 | 5,760 | 810 | S | S | S |
| Mechanical engineering | 13,920 | 13,160 | 760 | S | S | S | 5,250 | 4,800 | 440 | 240 | 230 | S | 210 | 190 | S | 8,180 | 7,890 | 280 | S | S | S |

TABLE 9. Employed doctoral scientists and engineers, by field of doctorate, race/ethnicity, and sex: 2003

| Field | Total | | | American Indian/ Alaska Native | | | Asian | | | Black | | | Hispanic | | | White | | | Other/unknown race/ethnicity ^a | | |
|--|---------|--------|--------|-----------------------------------|-------|--------|-------|-------|--------|-------|------|--------|----------|------|--------|--------|--------|--------|--|------|--------|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Other engineering | 21,480 | 19,020 | 2,460 | S | S | S | 6,280 | 5,620 | 660 | 570 | 450 | 110 | 480 | 410 | 60 | 14,070 | 12,440 | 1,630 | 50 | 50 | S |
| Health | 23,230 | 9,660 | 13,570 | 200 | S | 150 | 2,750 | 1,540 | 1,210 | 1,180 | 460 | 720 | 620 | 220 | 410 | 18,450 | 7,390 | 11,070 | S | S | S |
| | Percent | | | | | | | | | | | | | | | | | | | | |
| All fields | 100.0 | 72.8 | 27.2 | 100.0 | 70.4 | 29.6 | 100.0 | 76.7 | 23.3 | 100.0 | 60.4 | 39.6 | 100.0 | 64.7 | 35.3 | 100.0 | 72.8 | 27.2 | 100.0 | 69.5 | 30.5 |
| Science | 100.0 | 70.4 | 29.6 | 100.0 | 70.4 | 29.6 | 100.0 | 70.1 | 29.9 | 100.0 | 57.3 | 42.7 | 100.0 | 62.4 | 37.6 | 100.0 | 71.2 | 28.8 | 100.0 | 64.8 | 35.2 |
| Biological, agricultural, and environmental life sciences | 100.0 | 69.4 | 30.6 | 100.0 | 76.3 | 23.7 | 100.0 | 61.9 | 38.1 | 100.0 | 60.2 | 39.8 | 100.0 | 64.8 | 35.2 | 100.0 | 71.3 | 28.7 | 100.0 | 70.3 | 29.7 |
| Agricultural/food sciences | 100.0 | 82.3 | 17.7 | 100.0 | 83.8 | S | 100.0 | 72.6 | 27.4 | 100.0 | 87.2 | 12.8 | 100.0 | 76.6 | 23.4 | 100.0 | 84.5 | 15.5 | 100.0 | S | S |
| Biochemistry/biophysics | 100.0 | 71.0 | 29.0 | 100.0 | 100.0 | S | 100.0 | 58.5 | 41.5 | 100.0 | 53.9 | 46.1 | 100.0 | 77.3 | 22.7 | 100.0 | 74.4 | 25.6 | 100.0 | S | S |
| Cell/molecular biology | 100.0 | 58.2 | 41.8 | 100.0 | S | S | 100.0 | 53.7 | 46.3 | 100.0 | 62.8 | 37.2 | 100.0 | 51.6 | 48.4 | 100.0 | 60.1 | 39.9 | 100.0 | S | S |
| Environmental life sciences | 100.0 | 82.0 | 18.0 | 100.0 | S | S | 100.0 | 70.6 | 29.4 | 100.0 | 71.1 | S | 100.0 | 74.1 | S | 100.0 | 83.5 | 16.5 | 100.0 | S | S |
| Microbiology | 100.0 | 66.1 | 33.9 | 100.0 | S | S | 100.0 | 64.0 | 36.0 | 100.0 | 44.2 | 55.8 | 100.0 | 68.1 | 31.9 | 100.0 | 67.4 | 32.6 | 100.0 | S | S |
| Zoology | 100.0 | 78.4 | 21.6 | 100.0 | S | S | 100.0 | 71.1 | 28.9 | 100.0 | 65.1 | 34.9 | 100.0 | 81.1 | S | 100.0 | 79.3 | 20.7 | 100.0 | S | S |
| Other biological sciences | 100.0 | 65.8 | 34.2 | 100.0 | 74.8 | 25.2 | 100.0 | 62.4 | 37.6 | 100.0 | 54.7 | 45.3 | 100.0 | 55.5 | 44.5 | 100.0 | 66.9 | 33.1 | 100.0 | 63.0 | 37.0 |
| Computer and information sciences | 100.0 | 84.6 | 15.4 | 100.0 | S | S | 100.0 | 86.1 | 13.9 | 100.0 | 77.4 | 22.6 | 100.0 | 86.6 | S | 100.0 | 84.2 | 15.8 | 100.0 | S | S |
| Mathematics and statistics | 100.0 | 83.9 | 16.1 | 100.0 | 97.1 | S | 100.0 | 80.2 | 19.8 | 100.0 | 80.7 | 19.3 | 100.0 | 86.0 | 14.0 | 100.0 | 84.9 | 15.1 | 100.0 | S | S |
| Physical sciences | 100.0 | 85.0 | 15.0 | 100.0 | 86.1 | 13.9 | 100.0 | 78.3 | 21.7 | 100.0 | 78.8 | 21.2 | 100.0 | 80.0 | 20.0 | 100.0 | 86.9 | 13.1 | 100.0 | 61.5 | 38.5 |
| Astronomy/astrophysics | 100.0 | 84.5 | 15.5 | 100.0 | S | S | 100.0 | 84.6 | 15.4 | 100.0 | S | S | 100.0 | S | S | 100.0 | 85.5 | 14.5 | 100.0 | S | S |
| Chemistry, except biochemistry | 100.0 | 81.2 | 18.8 | 100.0 | 85.2 | S | 100.0 | 73.2 | 26.8 | 100.0 | 77.1 | 22.9 | 100.0 | 75.9 | 24.1 | 100.0 | 83.7 | 16.3 | 100.0 | 50.5 | 49.5 |
| Earth/atmospheric/ ocean sciences | 100.0 | 83.5 | 16.5 | 100.0 | 93.0 | S | 100.0 | 81.0 | 19.0 | 100.0 | 78.9 | S | 100.0 | 86.7 | 13.3 | 100.0 | 83.6 | 16.4 | 100.0 | S | S |
| Physics | 100.0 | 92.0 | 8.0 | 100.0 | 100.0 | S | 100.0 | 85.3 | 14.7 | 100.0 | 84.6 | 15.4 | 100.0 | 86.6 | 13.4 | 100.0 | 93.9 | 6.1 | 100.0 | S | S |
| Psychology | 100.0 | 50.4 | 49.6 | 100.0 | 56.7 | 43.3 | 100.0 | 30.6 | 69.4 | 100.0 | 34.0 | 66.0 | 100.0 | 37.2 | 62.8 | 100.0 | 52.2 | 47.8 | 100.0 | 56.4 | 43.6 |
| Social sciences | 100.0 | 67.5 | 32.5 | 100.0 | 61.2 | 38.8 | 100.0 | 69.8 | 30.2 | 100.0 | 62.2 | 37.8 | 100.0 | 65.8 | 34.2 | 100.0 | 67.7 | 32.3 | 100.0 | 62.0 | S |
| Economics | 100.0 | 81.5 | 18.5 | 100.0 | 100.0 | S | 100.0 | 74.5 | 25.5 | 100.0 | 83.4 | 16.6 | 100.0 | 88.5 | 11.5 | 100.0 | 82.4 | 17.6 | 100.0 | S | S |
| Political sciences | 100.0 | 73.2 | 26.8 | 100.0 | 55.8 | 44.2 | 100.0 | 69.7 | 30.3 | 100.0 | 67.2 | 32.8 | 100.0 | 69.4 | 30.6 | 100.0 | 74.3 | 25.7 | 100.0 | S | S |
| Sociology | 100.0 | 56.2 | 43.8 | 100.0 | 60.5 | S | 100.0 | 61.7 | 38.3 | 100.0 | 57.4 | 42.6 | 100.0 | 57.4 | 42.6 | 100.0 | 55.7 | 44.3 | 100.0 | S | S |
| Other social sciences | 100.0 | 57.2 | 42.8 | 100.0 | 56.5 | 43.5 | 100.0 | 65.3 | 34.7 | 100.0 | 48.3 | 51.7 | 100.0 | 53.4 | 46.6 | 100.0 | 57.0 | 43.0 | 100.0 | S | S |
| Engineering | 100.0 | 91.3 | 8.7 | 100.0 | 96.2 | S | 100.0 | 90.6 | 9.4 | 100.0 | 88.8 | 11.2 | 100.0 | 88.1 | 11.9 | 100.0 | 91.8 | 8.2 | 100.0 | 97.2 | S |
| Aerospace/aeronautical/ aeronautical engineering | 100.0 | 94.6 | 5.4 | 100.0 | S | S | 100.0 | 92.8 | 7.2 | 100.0 | 94.3 | S | 100.0 | S | S | 100.0 | 96.1 | 3.9 | 100.0 | S | S |
| Chemical engineering | 100.0 | 89.9 | 10.1 | 100.0 | 89.3 | S | 100.0 | 89.5 | 10.5 | 100.0 | 77.2 | 22.8 | 100.0 | 90.9 | S | 100.0 | 90.5 | 9.5 | 100.0 | S | S |
| Civil engineering | 100.0 | 92.5 | 7.5 | 100.0 | S | S | 100.0 | 92.1 | 7.9 | 100.0 | 98.3 | S | 100.0 | 95.6 | S | 100.0 | 92.2 | 7.8 | 100.0 | S | S |
| Electrical/computer engineering | 100.0 | 92.9 | 7.1 | 100.0 | 100.0 | S | 100.0 | 91.5 | 8.5 | 100.0 | 93.8 | S | 100.0 | 87.5 | 12.5 | 100.0 | 93.8 | 6.2 | 100.0 | S | S |

TABLE 9. Employed doctoral scientists and engineers, by field of doctorate, race/ethnicity, and sex: 2003

| Field | Total | | | American Indian/ Alaska Native | | | Asian | | | Black | | | Hispanic | | | White | | | Other/unknown race/ethnicity ^a | | |
|--|-------|------|--------|-----------------------------------|------|--------|-------|------|--------|-------|------|--------|----------|------|--------|-------|------|--------|--|-------|--------|
| | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Materials/metallurgical engineering | 100.0 | 88.0 | 12.0 | 100.0 | S | S | 100.0 | 88.5 | 11.5 | 100.0 | 86.0 | S | 100.0 | 88.9 | S | 100.0 | 87.6 | 12.4 | 100.0 | S | S |
| Mechanical engineering | 100.0 | 94.5 | 5.5 | 100.0 | S | S | 100.0 | 91.6 | 8.4 | 100.0 | 95.6 | S | 100.0 | 89.4 | S | 100.0 | 96.5 | 3.5 | 100.0 | S | S |
| Other engineering | 100.0 | 88.5 | 11.5 | 100.0 | S | S | 100.0 | 89.6 | 10.4 | 100.0 | 79.8 | 20.2 | 100.0 | 86.6 | 13.4 | 100.0 | 88.4 | 11.6 | 100.0 | 100.0 | S |
| Health | 100.0 | 41.6 | 58.4 | 100.0 | S | 76.1 | 100.0 | 56.0 | 44.0 | 100.0 | 39.2 | 60.8 | 100.0 | 35.1 | 64.9 | 100.0 | 40.0 | 60.0 | 100.0 | S | S |

S = suppressed due to too few cases (fewer than 50 weighted cases).

^a Includes Native Hawaiians/other Pacific Islanders and respondents choosing multiple races (excluding those selecting an Hispanic ethnicity).

NOTES: Race/ethnicity data are for all doctorate recipients, including temporary residents. Numbers are rounded to nearest 10. Detail may not add to total because of rounding.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 2003 Survey of Doctorate Recipients.