

Table 59**Statistical profile of postgraduation plans of doctorate recipients in physical sciences and earth sciences fields, by sex and field of study: 2019**

(Number and percent)

Characteristic	All physical sciences and earth sciences fields	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy
All doctorate recipients (number) ^a	6,585	2,941	1,274	2,370
Postgraduation status (number) ^b				
Definite postgraduation study	2,385	982	482	921
Definite employment	1,753	788	341	624
Seeking employment or study	1,857	878	351	628
Other ^c	137	63	25	49
Definite postgraduation study (%) ^d				
Postdoc fellowship or research associateship	97.5	96.9	98.5	97.6
Other or unknown ^e	2.5	3.1	1.5	2.4
Definite employment (%) ^f				
Academe	18.8	16.2	27.0	17.5
Government	9.2	4.4	23.5	7.4
Industry or business ^g	67.1	75.8	41.3	70.2
Nonprofit organization	2.4	1.0	5.0	2.7
Other or unknown ^h	2.6	2.5	3.2	2.2
Primary activity ⁱ				
R&D	65.8	70.4	51.1	68.1
Teaching	14.6	14.0	17.1	13.9
Management or administration	4.0	3.7	10.1	1.0
Professional services	14.5	11.2	20.2	15.5
Other	1.1	0.7	1.5	1.5
Secondary activity ^j				
R&D	13.8	10.2	22.3	13.6
Teaching	2.8	2.0	6.4	1.8
Management or administration	12.9	15.5	13.8	9.2
Professional services	4.8	3.8	6.1	5.4
Other	0.7	0.8	0.9	0.5
No secondary activity	65.0	67.8	50.5	69.4
Activity unknown	4.2	3.9	4.1	4.6
Postgraduation location (%) ^k				
United States ^l	88.7	92.2	85.9	86.1
New England	10.7	12.9	7.8	9.8
Middle Atlantic	11.1	13.6	5.7	11.2
East North Central	10.9	14.0	5.8	10.2
West North Central	3.6	4.5	4.0	2.2
South Atlantic	13.0	12.7	13.7	12.9
East South Central	2.5	2.7	2.8	2.3
West South Central	6.1	5.6	11.4	3.8
Mountain	6.9	4.8	11.4	6.9
Pacific and insular	23.2	20.7	22.5	26.3
Not in United States	11.2	7.6	14.1	13.8
Location unknown	0.1	0.2	0.0	0.1
Male doctorate recipients (number)	4,368	1,790	740	1,838
Postgraduation status (number) ^b				

Table 59**Statistical profile of postgraduation plans of doctorate recipients in physical sciences and earth sciences fields, by sex and field of study: 2019**

(Number and percent)

Characteristic	All physical sciences and earth sciences fields	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy
Definite postgraduation study	1,629	650	275	704
Definite employment	1,143	451	188	504
Seeking employment or study	1,215	510	208	497
Other ^c	82	37	18	27
Definite postgraduation study (%) ^d				
Postdoc fellowship or research associateship	97.7	97.5	98.5	97.6
Other or unknown ^e	2.3	2.5	1.5	2.4
Definite employment (%) ^f				
Academe	16.2	D	26.1	D
Government	8.0	3.5	19.7	7.7
Industry or business ^g	71.0	79.6	47.3	72.0
Nonprofit organization	2.2	D	4.3	D
Other or unknown ^h	2.6	2.9	2.7	2.4
Primary activity ⁱ				
R&D	68.6	74.5	50.5	70.2
Teaching	12.8	9.9	19.2	12.8
Management or administration	2.8	D	8.8	D
Professional services	14.7	D	20.9	D
Other	1.1	1.2	0.5	1.2
Secondary activity ^j				
R&D	13.4	D	24.2	D
Teaching	2.8	D	6.6	D
Management or administration	12.3	15.3	15.9	8.3
Professional services	5.0	3.5	6.6	5.6
Other	0.6	0.7	0.5	0.6
No secondary activity	65.8	69.1	46.2	70.4
Activity unknown	4.7	6.0	3.2	4.2
Postgraduation location (%) ^k				
United States ^l	87.9	91.9	83.4	85.9
New England	10.8	13.0	7.1	10.1
Middle Atlantic	10.9	13.2	5.2	11.0
East North Central	10.8	14.2	6.7	9.3
West North Central	3.4	4.6	3.5	2.3
South Atlantic	12.8	11.7	13.0	13.8
East South Central	2.4	2.5	2.6	2.3
West South Central	6.0	5.5	12.7	3.9
Mountain	6.9	4.9	11.0	7.1
Pacific and insular	23.1	21.3	21.0	25.4
Not in United States	12.0	7.8	16.6	14.0
Location unknown	0.1	0.3	0.0	0.1
Female doctorate recipients (number)	2,213	1,151	533	529
Postgraduation status (number) ^b				
Definite postgraduation study	756	332	207	217

Table 59**Statistical profile of postgraduation plans of doctorate recipients in physical sciences and earth sciences fields, by sex and field of study: 2019**

(Number and percent)

Characteristic	All physical sciences and earth sciences fields	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy
Definite employment	610	337	153	120
Seeking employment or study	642	368	143	131
Other ^c	55	26	7	22
Definite postgraduation study (%) ^d				
Postdoc fellowship or research associateship	97.1	95.8	98.6	97.7
Other or unknown ^e	2.9	4.2	1.4	2.3
Definite employment (%) ^f				
Academe	23.6	D	28.1	D
Government	11.3	5.6	28.1	5.8
Industry or business ^g	59.8	70.6	34.0	62.5
Nonprofit organization	2.8	D	5.9	D
Other or unknown ^h	2.5	2.1	3.9	1.7
Primary activity ⁱ				
R&D	60.7	65.2	51.7	58.9
Teaching	18.0	19.2	14.5	18.8
Management or administration	6.1	D	11.7	D
Professional services	14.1	D	19.3	D
Other	1.2	0.0	2.8	2.7
Secondary activity ^j				
R&D	14.4	D	20.0	D
Teaching	2.7	D	6.2	D
Management or administration	14.1	15.6	11.0	13.4
Professional services	4.6	4.2	5.5	4.5
Other	0.8	0.9	1.4	0.0
No secondary activity	63.4	66.1	55.9	65.2
Activity unknown	3.3	1.2	5.2	6.7
Postgraduation location (%) ^k				
United States ^l	90.3	92.7	89.2	86.9
New England	10.6	12.7	8.6	8.6
Middle Atlantic	11.6	14.2	6.4	11.9
East North Central	11.3	13.6	4.7	13.6
West North Central	3.8	4.3	4.7	1.8
South Atlantic	13.3	14.2	14.7	9.8
East South Central	2.8	3.0	3.1	2.1
West South Central	6.2	5.8	9.7	3.3
Mountain	7.0	4.6	11.9	6.2
Pacific and insular	23.4	19.7	24.4	29.4
Not in United States	9.7	7.3	10.8	13.1
Location unknown	0.0	0.0	0.0	0.0

D = suppressed to avoid disclosure of confidential information.

^a Includes respondents who did not report sex.^b Includes only respondents who reported postgraduation status.^c Includes respondents who indicated that they did not plan to work or study, respondents who indicated some other type of postgraduation plans, and respondents who indicated definite plans for other full-time degree program.

^d Excludes respondents who indicated plans for other full-time degree program. Percentages based on the number of doctorate recipients reporting definite postgraduation plans for study.

^e Other includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.

^f Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.

^g Includes doctorate recipients who indicated self-employment.

^h Other is mainly composed of elementary and secondary schools.

ⁱ Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and primary work activity.

^j Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.

^k Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.

^l Includes cases with an unknown U.S. region of employment after doctorate; see technical notes for states or territories included in regions.

Note(s):

Due to rounding, percentages may not sum to 100. See table A-6 in the technical notes for a listing of major fields and their constituent subfields.

Source(s):

National Center for Science and Engineering Statistics, Survey of Earned Doctorates.