

Table 59

**Statistical profile of postgraduation plans of doctorate recipients in physical sciences and earth sciences fields, by sex and field of study: 2020**

(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) <sup>a</sup>	6,247	2,763	1,243	2,241
Postgraduation status (number) <sup>b</sup>				
Definite postgraduation study	2,374	931	537	906
Definite employment	1,673	761	308	604
Seeking employment or study	1,645	809	301	535
Other <sup>c</sup>	113	55	16	42
Definite postgraduation study (%) <sup>d</sup>				
Postdoc fellowship or research associateship	97.9	98.3	98.1	97.2
Other or unknown <sup>e</sup>	2.1	1.7	1.9	2.8
Definite employment (%) <sup>f</sup>				
Academe	17.9	16.4	26.9	15.1
Government	10.1	5.0	26.6	8.1
Industry or business <sup>g</sup>	67.1	74.6	39.6	71.7
Nonprofit organization	3.0	2.5	3.2	3.6
Other or unknown <sup>h</sup>	1.9	1.4	3.6	1.5
Primary activity <sup>i</sup>				
R&D	70.8	70.3	59.5	77.3
Teaching	12.7	13.3	15.3	10.6
Management or administration	3.7	4.1	6.5	1.6
Professional services	11.9	11.9	16.3	9.7
Other	0.9	0.4	2.4	0.9
Secondary activity <sup>j</sup>				
R&D	12.8	11.0	20.7	10.9
Teaching	3.0	1.9	6.8	2.5
Management or administration	14.1	15.9	14.3	11.6
Professional services	5.4	3.7	7.8	6.2
Other	0.6	0.6	1.7	0.2
No secondary activity	64.1	66.9	48.6	68.7
Activity unknown	5.2	4.9	4.5	6.0
Postgraduation location (%) <sup>k</sup>				
United States <sup>l</sup>	90.1	92.8	87.7	88.5
New England	9.9	12.3	7.7	8.3
Middle Atlantic	11.3	12.9	6.5	12.1
East North Central	9.7	12.2	5.3	9.3
West North Central	3.0	3.8	3.1	2.1
South Atlantic	14.3	14.9	13.8	14.0
East South Central	2.6	2.5	2.8	2.5
West South Central	6.1	4.7	12.7	4.0
Mountain	8.5	5.1	14.1	9.1
Pacific and insular	24.3	23.7	21.3	26.6
Not in United States	9.9	7.2	12.3	11.5
Location unknown	0.0	0.0	0.0	0.0
Male doctorate recipients (number)	4,177	1,669	737	1,771
Postgraduation status (number) <sup>b</sup>				
Definite postgraduation study	1,648	613	322	713
Definite employment	1,102	427	181	494

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(Number and percent)

Characteristic	All physical sciences and earth sciences fields	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy
Seeking employment or study	1,055	475	168	412
Other <sup>c</sup>	67	30	8	29
Definite postgraduation study (%) <sup>d</sup>				
Postdoc fellowship or research associateship	97.9	98.9	98.1	97.1
Other or unknown <sup>e</sup>	2.1	1.1	1.9	2.9
Definite employment (%) <sup>f</sup>				
Academe	16.0	14.3	24.9	14.2
Government	8.6	4.9	D	D
Industry or business <sup>g</sup>	71.2	78.2	48.6	73.5
Nonprofit organization	2.7	1.9	D	D
Other or unknown <sup>h</sup>	1.5	0.7	2.2	1.8
Primary activity <sup>i</sup>				
R&D	74.8	74.6	63.2	79.2
Teaching	10.2	10.9	12.6	8.7
Management or administration	3.1	3.7	D	D
Professional services	11.2	10.7	16.1	9.7
Other	0.8	0.0	D	D
Secondary activity <sup>j</sup>				
R&D	11.7	10.2	19.0	10.2
Teaching	3.1	D	8.0	D
Management or administration	13.8	D	12.1	D
Professional services	5.2	3.7	6.9	5.8
Other	0.4	0.5	1.1	0.0
No secondary activity	65.9	67.9	52.9	69.0
Activity unknown	5.8	5.9	3.9	6.5
Postgraduation location (%) <sup>k</sup>				
United States <sup>l</sup>	89.3	92.4	86.5	87.7
New England	9.4	11.4	6.6	8.9
Middle Atlantic	10.9	13.0	5.6	11.4
East North Central	9.7	12.2	4.6	9.8
West North Central	2.6	3.6	2.2	1.9
South Atlantic	12.9	14.0	10.9	12.8
East South Central	2.6	D	2.4	D
West South Central	6.6	D	15.9	D
Mountain	8.4	4.2	15.5	9.1
Pacific and insular	25.7	25.7	22.7	26.9
Not in United States	10.7	7.6	13.5	12.3
Location unknown	0.0	0.0	0.0	0.0
Female doctorate recipients (number)	2,068	1,092	506	470
Postgraduation status (number) <sup>b</sup>				
Definite postgraduation study	726	318	215	193
Definite employment	571	334	127	110
Seeking employment or study	590	334	133	123
Other <sup>c</sup>	46	25	8	13

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(Number and percent)

Characteristic	All physical sciences and earth sciences fields	Chemistry	Geosciences, atmospheric sciences, and ocean sciences	Physics and astronomy
Definite postgraduation study (%) <sup>d</sup>				
Postdoc fellowship or research associateship	97.7	97.2	98.1	97.9
Other or unknown <sup>e</sup>	2.3	2.8	1.9	2.1
Definite employment (%) <sup>f</sup>				
Academe	21.5	19.2	29.9	19.1
Government	13.0	5.1	D	D
Industry or business <sup>g</sup>	59.2	70.1	26.8	63.6
Nonprofit organization	3.7	3.3	D	D
Other or unknown <sup>h</sup>	2.6	2.4	5.5	0.0
Primary activity <sup>i</sup>				
R&D	63.3	64.9	54.2	68.9
Teaching	17.3	16.1	19.2	18.9
Management or administration	4.7	4.7	D	D
Professional services	13.3	13.4	16.7	9.4
Other	1.3	0.9	D	D
Secondary activity <sup>j</sup>				
R&D	15.0	12.1	23.3	14.2
Teaching	2.9	D	5.0	D
Management or administration	14.6	D	17.5	D
Professional services	5.7	3.7	9.2	7.5
Other	1.1	0.6	2.5	0.9
No secondary activity	60.8	65.5	42.5	67.0
Activity unknown	4.0	3.6	5.5	3.6
Postgraduation location (%) <sup>k</sup>				
United States <sup>l</sup>	92.0	93.6	89.5	91.4
New England	10.8	13.7	9.4	6.3
Middle Atlantic	12.0	12.9	7.9	14.5
East North Central	9.6	12.3	6.4	7.6
West North Central	4.0	4.3	4.4	3.0
South Atlantic	17.3	16.3	18.1	18.5
East South Central	2.5	D	3.5	D
West South Central	5.0	D	7.9	D
Mountain	8.6	6.4	12.0	9.2
Pacific and insular	21.3	20.6	19.3	25.1
Not in United States	8.0	6.4	10.5	8.6
Location unknown	0.0	0.0	0.0	0.0

D = suppressed to avoid disclosure of confidential information.

<sup>a</sup> Includes respondents who did not report sex.<sup>b</sup> Includes only respondents who reported postgraduation status.<sup>c</sup> 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.<sup>d</sup> 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.<sup>e</sup> Other includes respondents who indicated definite postgraduation study plans for traineeship, internship or clinical residency, or other study.<sup>f</sup> Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment.<sup>g</sup> Includes doctorate recipients who indicated self-employment.

<sup>h</sup> Other is mainly composed of elementary and secondary schools.

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

<sup>j</sup> Percentages based on number of doctorate recipients reporting definite postgraduation plans for employment and secondary work activity.

<sup>k</sup> Percentages based on number of doctorate recipients reporting definite postgraduation plans and type of plans.

<sup>l</sup> 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.