TABLE 50. Worldwide R&D employment, by occupation, industry, and company size: 2014 (Thousands)

	NAIOC		R&D scientists and engineers	R&D technicians and	R&D support staff (clerical
Industry and company size	NAICS code	Total	and their managers	technologists	and others)
All industries 21–2	23, 31–33, 42–81	2,167	1,535	410	222
Manufacturing industries	31–33	1,317	962	215	140
Food	311	36	22 i	8	6
Beverages and tobacco products	312	6	3	3	1
Textiles, apparel, and leather products	313–16	8	4	3	1 i
Wood products	321	4 i	2 i	1 i	1 i
Paper	322	9	4	4 i	*
Printing and related support activities	323	4	2	1	1 i
Petroleum and coal products	324	2	1	1	* <b>i</b>
Chemicals	325	234	158	39	36
Basic chemicals	3251	22	12	7	3
Resins, synthetic rubber, and artificial synthetic fibers					
and filaments	3252	12	8	3	1
Pesticides, fertilizers, and other agricultural chemicals	3253	8 i	5 i	2 i	1 i
Pharmaceuticals and medicines	3254	158	108	21	28
Soaps, cleaning compounds, and toilet preparations	3256	17	14	2	1
Paints, coatings, adhesives, and other chemicals	3255, 3259	17	11	4	2
Plastics and rubber products	326	31	18	9 i	4
Nonmetallic mineral products	327	10	5 i	3 i	2 i
Primary metals	331	8	3	3	2
Fabricated metal products	332	34	16 i	10 i	8 i
Machinery	333	103	75	20	8
Agricultural implements	33311	14	11	3	1
Semiconductor machinery	333295	11	9	1 i	*
Engines, turbines, and power transmission equipment	3336	18	15	2	2
Other machinery	other 333	60	40 i	14 i	5 i
Computer and electronic products	334	445	360	50 i	35 i
Communications equipment	3342	94	80	9	5
Semiconductor and other electronic components	3344	181	154	14 i	13 i
Navigational, measuring, electromedical, and control					
instruments	3345	101	74	19	8
Electromedical, electrotherapeutic, and irradiation					
apparatus	334510, 334517	21	14 i	5 i	2 i
Search, detection, navigation, guidance, aeronautical,					
and nautical systems and instruments	334511	36	28	6	3
Other measuring and controlling devices	other 3345	44	32 i	8	3 i
Other computer and electronic products	other 334	69	52 i	8 i	9 i
Electrical equipment, appliances, and components	335	54	37	13 i	3
Transportation equipment	336	239	188	29	22
Automobiles, bodies, trailers, and parts	3361-63	142	112	18	12
Aerospace products and parts	3364	84	69	8	7

TABLE 50. Worldwide R&D employment, by occupation, industry, and company size: 2014 (Thousands)

Industry and company size	NAICS code	Total	R&D scientists and engineers and their managers	R&D technicians and technologists	R&D support staff (clerical and others)
Aircraft, aircraft engines, and aircraft parts	336411–13	79	65	8	7
Guided missiles, space vehicles, and related parts	336414-15, 336419	5 i	4 i	1	*
Military armored vehicles, tanks, and tank components	336992	* i	* <b>i</b>	* i	*
Other transportation	other 336	13 i	8 i	3 i	3 i
Furniture and related products	337	6	3 i	2 i	1 i
Miscellaneous manufacturing	339	84	59	16	10
Medical equipment and supplies	3391	58	41	11	6
Other miscellaneous manufacturing	3399	27	18 i	5	4
Nonmanufacturing industries	21–23, 42–81	850	574	194	82
Mining, extraction, and support activities	21	19	12	5 i	3
Utilities	22	2	1	1	*
Wholesale trade	42	8	4 i	D	D
Electronic shopping and electronic auctions	454111–12	D	5	D	D
Transportation and warehousing	48–49	3 i	1 i	* i	1 i
Information	51	438	327	75	37
Publishing	511	276	221	27	29
Newspaper, periodical, book, and directory					
publishers	5111	1	* <b>i</b>	1 i	* i
Software publishers	5112	275	221	26	29
Telecommunications	517	31	21 i	9 i	1
Data processing, hosting, and related services	518	74	43	25	6 i
Other information	other 51	57	42	14	1
Finance and insurance	52	28	7	16	5
Real estate and rental and leasing	53	2	1	* i	* i
Lessors of nonfinancial intangible assets (except					
copyrighted works)	533	*	*	* i	*
Other real estate and rental and leasing	other 53	2	1	* i	* i
Professional, scientific, and technical services	54	318	205 i	85 i	28 i
Architectural, engineering, and related services	5413	51	36 i	10 i	6 i
Computer systems design and related services	5415	113	83 i	23 i	7 i
Scientific R&D services	5417	112	59	42	11 i
Biotechnology R&D	541711	25	19	5	1 i
Physical, engineering, and life sciences (except					
biotechnology) R&D	541712	81	39	34	8
Social sciences and humanities R&D	541720	6	* i	3 i	2 i
Other professional, scientific, and technical services	other 54	42	27 i	11 i	4 i
Health care services	621–23	6	2 i	3 i	*
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56, 624, 71–72, 81	D	8 i	D	4 i

TABLE 50. Worldwide R&D employment, by occupation, industry, and company size: 2014 (Thousands)

Industry and company size	NAICS code	Total	R&D scientists and engineers and their managers	R&D technicians and technologists	R&D support staff (clerical and others)
All companies (number of domestic employees)	-	2,167	1,535	410	222
Small companies <sup>a</sup>		_,	1,555		
5–499	_	486	319 i	113 i	53 i
5–99	_	274	183 i	62 i	30 i
5–49	-	182	125 i	38 i	20 i
5–9	-	33	23 i	6 i	4 i
10–24	-	73	50 i	15 i	8 i
25–49	-	77	52 i	17 i	8 i
50–99	-	92	58 i	24 i	10 i
100–249	-	119	77	29	13 i
250–499	-	92	59	23	10
Medium and large companies					
500–999	-	97	64	25	8
1,000–4,999	-	386	274	74	38
5,000-9,999	-	259	173	60	26
10,000–24,999	-	301	207	60	34
25,000 or more	-	638	498	77	63

<sup>\* =</sup> amount < 500; D = data withheld to avoid disclosing operations of individual companies; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

NOTES: Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2014.

<sup>&</sup>lt;sup>a</sup> Upper bound is based on the U.S. Small Business Administration's definition of a small business; the Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.