Questionnaires (translated)

Confidential

Fundamental Statistics

This survey is conducted under the auspices of the Statistics Act. This Act ensures confidentiality, you are therefore requested to furnish valid information.

2020 Survey of Research and Development

Questionnaire B
(for non-profit institutions and public organizations)

As of March 31st, 2020

Statistics Bureau
Ministry of Internal Affairs and Communications

Location and name of the organization

[＊] Enter the Corporate Number (13 digits)

	Not specified ○

Person representing the organization	(Title) (Name)
Person responding to the questionnaire	(Section name) (Name)
Telephone	

○ Please refer to the instruction when you fill in the questionnaire.

○ Even if your organization is not conducting any research activities, please answer question [1] (yes/no of R&D activities).

○ Give information as of March 31st, 2020 about employees, and for the year ending on the latest settling day prior to March 31st, 2020 about financial status.

○ Please return this questionnaire to the Statistics Bureau no later than July 15th.

[1] Yes/no of R&D activities

301
(Fill in the circle for the appropriate choice below)

1. Intramural R&D ····· ○ → to [2]～[14]
   (Choose this number, if you have employees who are conducting R&D outside the organization although your organization itself is not conducting any R&D.
   In this case however, you need not answer questions from [7] through [9].)
2. Extramural R&D only ····· ○ → to [13], [14]
3. Not conducting R&D ····· ○ →End of the questionnaire

[2] Fill in the total number of persons employed (as of March 31st)

302 (persons)

[3] Enter the total expenditure

303 (10 thousand yen)

[4] Enter, in a way easy to understand, the main operations and R&D activities, if any, that your organization conducted in fiscal 2019

304

[5] Enter the name and location of the branches or attached research facilities.

305 Name	Location

[6] Mark all the fields of science that your organization is conducting R&D in. Among these, mark the main field (only one) that your organization is conducting R&D in. (Fill in the circle for the appropriate choice below.)

306 Field of science	1 Literature	2 Economics	3 Sociology	4 Other social sciences and humanities	5 Physical sciences	6 Engineering	7 Agricultural sciences	Health sciences: 8 Medicine, dentistry and pharmacy	Health sciences: 9 Others	10 Education	11 Others
Conducting R&D in:	○	○	○	○	○	○	○	○	○	○	○
Main field (check only one):	○	○	○	○	○	○	○	○	○	○	○

[7] Fill in number of persons employed in R&D (as of March 31st)

○ Include transferees, etc., from outside and who are engaged in R&D at the organization.

	Head-counts*5 (persons)		Ratio of persons engaged in R&D*5 (persons)
		Female	
Total (308, 311～313) (315, 318～320)	307	314	—
Researchers*1	308	315	—
Researchers*1 — Persons solely engaged in R&D	309	316	—
Researchers*1 — Persons partly engaged in R&D	310	317	321
Assistant research workers*2	311	318	322
Technicians*3	312	319	323
Clerical and other supporting personnel*4	313	320	324

Researchers who hold a Ph.D.	325	326

Permanent researchers*6	327	329
Under forty years old	328	330

*1.**Researchers**: Persons who hold a university degree (or persons who have equivalent or greater knowledge of speciality), who are engaged in research activities of their own chosen subject.
"Persons solely engaged in R&D" mean those engaged in R&D activities all of the time.
"Persons partly engaged in R&D" mean those engaged in R&D activities, but not all of the time.
*2.**Assistant research workers**: Persons who assist researchers and who are engaged in research activities under their direction.
*3.**Technicians**: Persons, other than researchers and assistant research workers, who are engaged in technical services related to research activities under the guidance and supervision of researchers and assistant research workers.
*4.**Clerical and other supporting personnel**: Persons other than the above but who are engaged in clerical work, accounting, etc., related to the research activities as defined in this Questionnaire. As for the persons engaged in the administration of such activities, those having research experiences are categorized as “researchers” (as defined in *1), and those not having research experiences, as “clerical and other supporting personnel” (i.e., this category).
*5.For "Head-counts", enter the number of persons engaged in R&D. For "Ratio of persons engaged in R&D", enter the figure obtained by multiplying "Head-counts" by the hourly ratio of those who engaged in R&D
*6.**Permanent researchers**: Researchers who are under an indefinite term of employment contract, including those who are allowed to work until the retirement age.

[8] Enter the number of researchers who joined or left the organization

○Cover the period from April 1 of last year to March 31 of this year.

○"The number of researchers who joined the organization" means "researchers" as defined in question [7] (persons employed in R&D) who joined from outside the organization.

○Enter the number of newly hired researchers who were assigned to a department which conducts research on natural sciences and engineering according to the contents of their research.

○Enter the number of researchers who joined from outside your organization by their previous job according to the table of "classification of organizations" provided in the instruction

○"The number of researchers who left the organization" means "researchers" as defined in question [7] and who left the organization.

○Include transferees.

	Total (persons)	Female (persons)
Newly hired	331	347
Natural sciences and engineering	332	348
Physical science	333	349
Engineering and technology	334	350
Agricultural science	335	351
Medical sciences	336	352
Medical science	337	353
Dentistry	338	354
Pharmacy	339	355
Joined from:	340	356
Companies	341	—
Non-profit institutions	342	—
Public organizations	343	—
Universities and colleges	344	—
Others	345	—
Number of researchers who left the organization	346	357

Newly hired researchers who hold a Ph.D.	358	360
Researchers who joined from outside and hold a Ph.D.	359	361

[9] Fill in the number of researchers by specialty (as of March 31st)

○As for the breakdown by field of specialty, write the number of "researchers" as defined in question [7] (persons employed in R&D, boxes 308 and 315) by field of specialty.

Total (363～388) (390～415)			Total (persons)	Female (persons)					
			362	389					
Social sciences and humanities	Humanities	Literature	363	390	Natural sciences and engineering (continued)	Engineering and technology (continued)	Civil engineering and architecture	376	403
		Others	364	391			Material	377	404
	Social sciences	Commerce and economics	365	392			Textile technology	378	405
		Sociology	366	393			Others	379	406
		Others	367	394		Agricultural sciences	Agricultural and forestry	380	407
Natural sciences and engineering	Physical sciences	Mathematics and physics	368	395			Veterinary science and animal husbandry	381	408
		Information science	369	396			Fishery	382	409
		Chemistry	370	397			Others	383	410
		Biology	371	398		Medical sciences	Medical science and dentistry	384	411
		Geology	372	399			Pharmacy	385	412
		Others	373	400			Others	386	413
	Engineering and technology	Machinery, ship engineering and aeronautics	374	401	Other Sciences		Psychology	387	414
		Electricity and communications	375	402			Others (Education, etc.)	388	415

As for research expenses, even if an expense is not booked as research expense, enter such expenses separately from the booked research expenses.
Incomes and expenditures in kind: include the relevant expenses as R&D expenses in market price.

[10] Enter the intramural expenditure on R&D.

○ Enter the R&D expenditures by the institution during the one year period, including those financed by outside funds.
If it is difficult to calculate the R&D expenses by dividing them into those spent by the R&D and other divisions, enter them separately.

Total (417～419, 423, 425,426)	(10 thousand yen) 416
Labour costs*1	417
Materials*2	418
Expenditure on tangible fixed assets*3	419
Land, buildings, etc.	420
Machinery, utensils, equipment, etc.	421
Other tangible fixed assets	422
Expenditure on intangible fixed assets*4	423
Software	424
Lease fees*5	425
Other expenses*6	426

*1.**Labour costs**: The following expenses that became necessary for R&D purposes and paid to persons engaged in R&D during the one year period: the total amount of salaries, etc. (basic salaries, allowances, bonuses, etc., paid regularly or as extras), retirement allowances, social insurance premiums paid on behalf of the insured, and others. The "salaries, etc." are before subtracting the income tax, local taxes, insurance premiums, etc. That is, it is not "take-home pay".
If employees are working extramurally, also include their salaries, etc.

*2.**Material**: Expenses on main raw materials, processed materials, auxiliary materials, parts and so on needed for R&D.

*3.**Expenditure on tangible fixed assets**: "Tangible fixed assets" here mean all such assets required for R&D.

・**Land, building, etc.:** Land, buildings including ancillary structures, construction, ships, aircraft

・**Machinery, utensils, equipment, etc.**: Machinery, equipments and fixtures which are durable for one year or more and valued at 100,000 yen or more.

・**Other tangible fixed assets**: Suspense account of construction, animals and plants which are treated as fixed assets .

*4. **Expenditure on intangible fixed assets**: "Intangible fixed assets" here mean all such assets required for R&D.

・**Software**: Within expenditure on intangible fixed assets, the amount paid for software which is used for one year or more and valued at 100,000 yen or more.

*5.**Lease fees**: The amount paid based on lease contracts for R&D purposes, but excluding land and buildings rent, short-term leases, charters, etc.

*6.**Other expenses**: Expenses for books and other publications, electricity, fuel and water, expendables and supplies, etc.

[11] Enter the total R&D expenditures by type of R&D in the fields of physical sciences, engineering and technology, agricultural sciences, and medical sciences.

○ Of the "Total" in question [10] (intramural expenditure on R&D), categorize and enter the R&D expenditures related to the fields of natural sciences and engineering namely physical sciences, engineering and technology, agricultural sciences, and medical sciences. The expenditures should be categorized by research theme. If this is not possible, either use the categories provided in the table below, or categorize by researcher or research unit.

	(10 thousand yen)
Total (428～430)	427
Basic research*1	428
Applied research*2	429
Development*3	430

*1.**Basic research**: This refers to theoretical or experimental research undertaken for the formulation of hypothesis and theories, or for the acquisition of new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view.

*2.**Applied research**: This refers to research undertaken in order to determine possible uses with a specific, practical objective or to explore a new form of application different from the existing one.

*3.**Development**: This refers to research directed to producing new products, services, systems, equipment, materials and processes, etc. or to improving the existing ones, drawing on knowledge gained from basic and applied research and/or practical experience and producing additional knowledge.

[12] Enter the expenditure on R&D by selected objective.

○ If your organization is conducting any R&D in the following fields, enter the respective disbursements among the "Total" in question [10] (intramural expenditure on R&D).

In case the contents of research overlap with more than one field, enter the amount of R&D expenditure into each related field.

In the case previously stated, any overlap through these fields is acceptable.

Field of life sciences	431	Field of nanotechnology	435
Field of information technology	432	Field of energy	436
Field of environmental science and technology	433	Field of space exploration	437
Field of materials	434	Field of oceanology	438

[Expenditures on R&D by selected objective]

*1.**Field of life sciences**: This refers to research on improvement and development of living by clarifying life related phenomena and various functions of organisms, and by applying the results to a variety of disciplines including medical, agricultural, industrial, environmental protection, energy development and so on.

*2.**Field of information technology (IT)**: In addition to R&D on hardware and software, that for the upgrading of networks and the development of high-speed computing technologies that enable high-speed processing, analysis and storage of massive quantities of information.

*3.**Field of environmental science and technology**: This refers to research concerning the infection of polluted natural environments, life cycle and property, protection of natural environments from pollution and destruction, achievement of non-polluted environments, etc.

*4.**Field of materials**: This means researches on 1) investigation and control of the structure, etc., of substances on the level of atoms and molecules which become the bases of IT, medical sciences, etc., and 2) development of the materials for the high value added energy and environment-related substances that can meet the needs to save energy and natural resources and recycle natural and other resources.

*5.**Field of nanotechnology**: R&D for the achievement of functions utilizing nanosize material/substance characteristics.

*6.**Field of energy**: This refers to research relating to exploration, production, conversion, transportation, consumption, safety etc., in relation to the development and reasonable use of energy resources.

*7.**Field of space exploration**: This includes research on rockets and artificial satellites and also research on tracing or communication stations.

*8.**Field of oceanology**: This means oceanic research and technical development relating to culture of bio-resources, development of mineral resources, research on ocean space, utilization of seawater, etc.

NOTE: If you have selected item 2 (extramural R&D only) in question [1] (yes/no of R&D activities), answer the following questions [13] and [14].

[13] Enter the R&D funds received from outside.

○ Enter the total of all funds on R&D received from others, whatever the type of finance such as trust money, subsidies, allocations, etc. Record intramural expenditures, that is, all funds used for the performance of R&D within your organization in the right columns.

		R&D funds received (Total) (10 thousand yen)	Intramural expenditure of R&D funds received
Total (440～451) (453～464)		439	452
Public organizations	From government	440	453
	From local government	441	454
	From national and public universities and colleges	442	455
	From national and public research institutions and independent administrative institutions	443	456
	From public corporations and enterprises, which are based on self-supporting accounting systems	444	457
	From others	445	458
From companies		446	459
From private universities and colleges		447	460
From other non-profit institutions		448	461
The rest of the world	From companies	449	462
	From universities and colleges	450	463
	From others	451	464

[14] Enter the R&D funds paid outside.

○ Enter all funds on R&D paid outside for the performance of R&D, whatever the type of payment (trust, dues, etc.). Record those paid from own funds in the right columns.

		R&D funds received (Total) (10 thousand yen)	Extramural expenditure of R&D funds (self-financed)
Total (466～475) (477～486)		465	476
Public organizations	To national and public universities and colleges	466	477
	To national and public research institutions and independent administrative institutions	467	478
	To public corporations and enterprises, which are based on self-supporting accounting systems	468	479
	To others	469	480
To companies		470	481
To private universities and colleges		471	482
To other non-profit institutions		472	483
The rest of the world	To companies	473	484
	To universities and colleges	474	485
	To others	475	486

Remarks column	(In addition to changing the location and name of the organization, description of business, etc., enter any special notes relevant to what you have filled in.)