

Table 11. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes
211	ARTS • HUMANITIES		Philosophy	163	8	5	0	0
212			Chinese Philosophy	35	2	0	0	0
213			Indian Philosophy (inclu. Buddhist Studies)	95	5	2	0	0
214			Religion	118	8	1	1	0
215			Ethics	25	0	0	0	0
216			History of Philosophy	64	3	1	0	0
217			Aesthetics (inclu. Arts)	105	6	0	1	1
218			Art History	48	5	0	0	3
			Philosophy total	653	37	9	2	4
221			Experimental Psychology	281	8	0	2	1
222			Educational and Social	549	29	0	3	1
223			Sociology	347	27	0	2	1
224			Education	339	30	0	4	4
225			Cultural Anthropology (inclu. Ethnology and Folklore)	174	9	0	15	0
			Psychology • Sociology • Education Cultural Anthropology total	1,690	103	0	26	7
231			Japanese History	254	15	5	3	0
232			Oriental History	123	2	3	0	0
233			European History	128	2	2	0	0
234			Archaeology (inclu. Prehistory)	52	2	0	4	3
			History total	557	21	10	7	3
241			Japanese Language	73	6	1	0	1
242			Japanese Literature	205	19	7	3	0
243			Chinese Language and Literature	66	1	0	0	0
244			English Language and Literature	235	13	1	0	0
245			French Language and Literature	130	2	1	0	0
246			German Language and Literature	48	0	1	0	0
247			Other Foreign Languages and Literatures	73	2	1	0	0
248			Linguistics and Phonetics	269	12	0	1	0
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	66	1	0	0	0
			Literature total	1,165	56	12	4	1
			ARTS • HUMANITIES Total	4,065	217	31	39	15
261	LAW		Basic Science of Law	90	2	0	1	0
262			Public Law	82	2	0	0	0
263			International Law	71	0	1	0	0
264			Civil Law	139	1	0	1	0
265			Social Law	30	0	0	0	0
266			Criminal Law	43	0	0	0	0
267			Politics	295	2	1	0	0
			LAW Total	750	7	2	2	0
271	ECONOMICS		General Theory of Economics	372	6	1	0	0
272			Economical Statistics	89	1	0	0	0
273			Economic Policy (inclu. Economic Condition)	366	5	1	1	0
274			Economic History	176	3	0	1	0
275			Public Finance, Money and Banking	163	2	0	0	0
276			Commercial Science	104	4	0	0	0
277			Business Administration	351	13	0	0	0
278			Accounting	177	2	1	0	0
			ECONOMICS Total	1,798	36	3	2	0
301	SCIENCE		Algebra	304	1	21	0	0
302			Geometry	264	2	20	0	0
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	370	6	12	5	0
305			Basic Analysis	271	2	10	0	0
306			Larger-area Analysis	146	1	3	0	0
			Mathematics total	1,355	12	66	5	0
311			Astronomy	115	2	3	23	13
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	530	16	14	63	3

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211	ARTS • HUMANITIES	Philosophy	Philosophy	0	176
212			Chinese Philosophy	0	37
213			Indian Philosophy (inclu. Buddhist Studies)	5	107
214			Religion	0	128
215			Ethics	0	25
216			History of Philosophy	0	68
217			Aesthetics (inclu. Arts)	1	114
218			Art History	0	56
			Philosophy total	6	711
221		Psychology • Sociology • Education	Experimental Psychology	0	292
222			Educational and Social	0	582
223			Sociology	1	378
224			Education	0	377
225			Cultural Anthropology (inclu. Ethnology and Folklore)	0	198
			Psychology • Sociology • Education Cultural Anthropology total	1	1,827
231		History	Japanese History	3	280
232			Oriental History	1	129
233			European History	0	132
234			Archaeology (inclu. Prehistory)	1	62
			History total	5	603
241		Literature	Japanese Language	1	82
242			Japanese Literature	0	234
243			Chinese Language and Literature	0	67
244			English Language and Literature	0	249
245			French Language and Literature	0	133
246			German Language and Literature	0	49
247			Other Foreign Languages and Literatures	0	76
248			Linguistics and Phonetics	1	283
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	0	67
			Literature total	2	1,240
			ARTS • HUMANITIES Total	14	4,381
261	LAW	Basic Science of Law	Basic Science of Law	0	93
262			Public Law	0	84
263			International Law	0	72
264			Civil Law	3	144
265			Social Law	0	30
266			Criminal Law	0	43
267			Politics	0	298
			LAW Total	3	764
271	ECONOMICS	General Theory of Economics	General Theory of Economics	0	379
272			Economical Statistics	0	90
273			Economic Policy (inclu. Economic Condition)	3	376
274			Economic History	0	180
275			Public Finance, Money and Banking	0	165
276			Commercial Science	0	108
277			Business Administration	0	364
278			Accounting	0	180
			ECONOMICS Total	3	1,842
301	SCIENCE	Mathematics	Algebra	0	326
302			Geometry	0	286
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	0	393
305			Basic Analysis	0	283
306			Larger-area Analysis	0	150
			Mathematics total	0	1,438
311		Physics	Astronomy	0	156
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	0	626

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Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	318	3	13	3	0
323			Solid-State Physics II (Magnetism, Metal Physics, Physical Properties in General (inclu. Basic Theories)	349	4	14	3	0
324			Physics in General	219	2	13	7	0
325			Physics total	202	5	9	15	0
			Physics total	1,618	30	63	91	3
331			Physics of Solid Earth	171	1	1	6	6
332			Meteorology, Oceanography and Hydrology	186	0	9	9	1
333			Aeronomy	52	1	1	3	6
334			Geology	132	1	0	0	1
335			Stratigraphy and Paleontology	60	1	0	2	2
336			Mineralogy, Petrology and Study of Mineral Deposit	146	1	0	1	1
337			Geochemistry	95	0	1	1	2
			Earth Science total	842	5	12	22	19
341			Physical Chemistry	434	6	13	17	1
342			Organic Chemistry	354	2	17	4	1
343			Inorganic Chemistry	215	3	6	4	1
344			Function, Properties and Materials in Chemistry	191	1	6	4	0
345			Substance Transformation	49	0	3	1	0
346			Separation, Refining and Identification	130	4	5	2	0
			Chemistry total	1,373	16	50	32	3
351			Genetics	149	5	0	12	1
352			Ecology	300	11	0	6	1
353			Plant Physiology	203	1	0	5	0
354			Morphology, Structure of Organism	103	5	2	7	2
355			Animal Physiology and	120	3	0	1	0
356			Morphology and Taxonomy	150	1	1	1	19
			Biology total	1,025	26	3	32	23
361			Physical Anthropology (inclu. Physiological Anthropology)	79	1	0	1	1
	SCIENCE Total			6,407	92	197	206	62
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	194	1	11	2	1
402			Surface Physics	115	1	7	1	0
403			Applied Optics and Quantum Optics	188	4	14	2	0
404			General Applied Physics	98	2	11	6	0
405			Fundamentals of Engineering	77	2	8	2	0
			Applied Physics-Fundamentals of Engineering total	672	10	51	13	1
411			Materials for Machines and Strength of Materials	328	4	44	2	0
412			Workshop Processes and Production Engineering	225	1	33	1	0
413			Design Engineering, Machine Elements and Tribology	137	5	20	1	0
414			Fluid Mechanics	284	6	46	0	5
415			Heat Engineering	276	5	44	2	0
416			Mechanics and Control Engineering	201	2	40	0	3
417			Intelligent Mechanics and Machine System	254	3	19	2	0
			Machine Engineering total	1,705	26	246	8	8
421			Electric Power Engineering and Electric Machinery	267	6	54	7	0
422			Electronic and Electric Materials Engineering	336	3	31	1	0
423			Electron Devices and Apparatus Engineering	356	2	33	1	1
424			Information and Communication Engineering	645	5	63	9	2

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322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	0	337
323			Solid-State Physics II (Magnetism, Metal Physics,	1	371
324			Physical Properties in General (inclu. Basic Theories)	0	241
325			Physics in General	2	233
			Physics total	3	1,808
331			Physics of Solid Earth	1	186
332			Meteorology, Oceanography and Hydrology	0	205
333			Aeronomy	0	63
334			Geology	2	136
335			Stratigraphy and Paleontology	2	67
336			Mineralogy, Petrology and Study of Mineral Deposit	0	149
337			Geochemistry	0	99
			Earth Science total	5	905
341			Physical Chemistry	0	471
342			Organic Chemistry	6	384
343			Inorganic Chemistry	0	229
344			Function, Properties and Materials in Chemistry	0	202
345			Substance Transformation	0	53
346			Separation, Refining and Identification	0	141
			Chemistry total	6	1,480
351			Genetics	1	168
352			Ecology	2	320
353			Plant Physiology	1	210
354			Morphology, Structure of Organism	0	119
355			Animal Physiology and	1	125
356			Morphology and Taxonomy	2	174
			Biology total	7	1,116
361			Physical Anthropology (inclu. Physiological Anthropology)	0	82
	SCIENCE Total			21	6,985
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	1	210
402			Surface Physics	0	124
403			Applied Optics and Quantum Optics	2	210
404			General Applied Physics	2	119
405			Fundamentals of Engineering	0	89
			Applied Physics·Fundamentals of Engineering total	5	752
411			Materials for Machines and Strength of Materials	2	380
412			Workshop Processes and Production Engineering	0	260
413			Design Engineering, Machine Elements and Tribology	1	164
414			Fluid Mechanics	0	341
415			Heat Engineering	0	327
416			Mechanics and Control Engineering	0	246
417			Intelligent Mechanics and Machine System	0	278
			Machine Engineering total	3	1,996
421			Electric Power Engineering and Electric Machinery	0	334
422			Electronic and Electric Materials Engineering	2	373
423			Electron Devices and Apparatus Engineering	0	393
424			Information and Communication Engineering	1	725

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425	E N G I N E E R I N G	E	System Engineering	146	2	10	1	2
427			Electronic Measurements	230	2	35	1	0
428			Control Engineering	220	1	27	1	0
			Electric and Electronic Engineering	2,200	21	253	21	5
431		C	Construction Materials and Dynamics in General Civil Engineering	123	0	16	0	0
432			Structural Engineering and Seismology	180	6	26	0	0
433			Ground Engineering	178	1	20	1	0
434			Hydraulics and River Engineering	196	1	18	1	0
435			Traffic Engineering and Regional Planning	153	3	11	0	0
436			Civil Environmental System	137	3	13	0	0
			Civil Engineering total	967	14	104	2	0
441		A	Building Structure and Materials	300	5	14	0	1
442			Building Science and Building Equipment	156	6	10	0	0
443			City Planning and Building Planning	363	7	19	1	0
444			Architectural History and Design	128	7	9	0	2
			Architecture total	947	25	52	1	3
451		M	Physical Metallurgy	129	0	12	0	0
452			Inorganic Materials and	217	1	20	1	0
453			Composed Materials and Properties	60	1	5	0	0
454			Structural and Functional Materials	155	1	12	0	0
455		R	Metallurgy and Material	165	4	20	0	1
456			Metal Productive Engineering	80	0	4	0	0
			Material Engineering total	806	7	73	1	1
461		I	Chemical Engineering in General	153	0	11	0	0
462			Reaction and Separation Engineering	96	0	4	0	0
463			Catalyst and Chemical Process	82	2	3	0	0
464			Bioengineering	189	0	11	0	0
465			Industrial Analytical Chemistry	96	1	6	0	0
			Process Engineering total	616	3	35	0	0
471		I	Industrial Physical Chemistry	138	0	4	0	0
472			Industrial Inorganic Chemistry	70	0	7	0	0
473			Industrial Organic Chemistry	58	3	8	0	0
474			Synthetic Chemistry	181	0	10	1	0
475			Polymer Synthesis	143	1	13	1	0
476			Polymer Structure and Property (inclu. Fiber)	153	12	6	1	0
			Industrial Chemistry total	743	16	48	3	0
481		S	Aeronautics	80	0	2	0	17
482			Ship Engineering	62	0	5	0	0
483			Marine Engineering	29	0	2	0	0
484			Resource Development Engineering	73	0	6	0	0
			Synthetic Engineering total	244	0	15	0	17
			ENGINEERING Total	8,900	122	877	49	35
501	A G R I C U L T U R E	P	Plant Breeding	91	4	1	0	0
502			Crop Science	77	3	1	0	0
503			Horticulture and Landscape Architecture	198	19	0	0	1
504			Plant Protection	111	6	0	0	0
505			Sericultural Science and Economic Entomology	42	2	0	0	0
			Agriculture total	519	34	2	0	1
511		F	Plant Fertilizer and Manure and Soil Science	111	5	0	0	1
512			Applied Microbiochemistry and Applied Biochemistry	320	15	11	1	0
513			Biological Productive Chemistry and Bioorganic Chemistry	111	5	1	0	0
514			Food Science and Nutritional Chemistry	291	77	3	0	0

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425	E N G I N E E R I N G		System Engineering	0	161
427			Electronic Measurements	0	268
428			Control Engineering	0	249
			Electric and Electronic Engineering	3	2,503
431			Construction Materials and Dynamics in General Civil Engineering	0	139
432			Structural Engineering and Seismology	0	212
433			Ground Engineering	1	201
434			Hydraulics and River Engineering	2	218
435			Traffic Engineering and Regional Planning	0	167
436			Civil Environmental System	0	153
			Civil Engineering total	3	1,090
441		N	Building Structure and Materials	1	321
442			Building Science and Building Equipment	3	175
443			City Planning and Building Planning	0	390
444			Architectural History and Design	0	146
			Architecture total	4	1,032
451		N	Physical Metallurgy	2	143
452			Inorganic Materials and	0	239
453		E	Composed Materials and Properties	0	66
454			Structural and Functional Materials	3	171
455		R	Metallurgy and Material	1	191
456			Metal Productive Engineering	0	84
			Material Engineering total	6	894
461		I	Chemical Engineering in General	0	164
462			Reaction and Separation Engineering	0	100
463			Catalyst and Chemical Process	0	87
464			Bioengineering	2	202
465			Industrial Analytical Chemistry	0	103
			Process Engineering total	2	656
471			Industrial Physical Chemistry	0	142
472			Industrial Inorganic Chemistry	0	77
473			Industrial Organic Chemistry	0	69
474			Synthetic Chemistry	0	192
475			Polymer Synthesis	1	159
476			Polymer Structure and Property (inclu. Fiber)	0	172
			Industrial Chemistry total	1	811
481			Aeronautics	0	99
482			Ship Engineering	0	67
483			Marine Engineering	0	31
484			Resource Development Engineering	0	79
			Synthetic Engineering total	0	276
			ENGINEERING Total	27	10,010
501	A G R I C U L T U R E		Plant Breeding	2	98
502			Crop Science	0	81
503			Horticulture and Landscape Architecture	1	219
504			Plant Protection	0	117
505			Sericultural Science and Economic Entomology	5	49
			Agriculture total	8	564
511			Plant Fertilizer and Manure and Soil Science	0	117
512			Applied Microbiochemistry and Applied Biochemistry	3	350
513			Biological Productive Chemistry and Bioorganic Chemistry	1	118
514			Food Science and Nutritional Chemistry	1	372

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	A		Agricultural Chemistry total	833	102	15	1	1
521			Forestry	198	3	0	4	0
522	G		Wood Science	117	1	0	0	0
			Forestry total	315	4	0	4	0
531	R		Fisheries in General	209	0	0	1	0
532			Fisheries Chemistry	79	5	2	0	0
			Fisheries total	288	5	2	1	0
541	I		Agricultural Economics	187	7	0	1	0
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	119	11	0	0	0
552	U		Agricultural Machinery	80	6	1	0	0
553	L		Biological Environment	41	1	0	0	0
			Agricultural Engineering total	240	18	1	0	0
561	T		Animal Science and Grassland Science	102	4	0	0	0
562	U		Applied Animal Science	99	4	0	0	0
563	R		Basic Veterinary Medicine and Basic Animal Science	163	3	0	2	1
564			Applied Veterinary Medicine	160	2	0	0	0
	E		Animal Science-Veterinary Medicine total	524	13	0	2	1
571			Biological Resource Science	48	0	0	0	0
572			Applied Molecular Cell Biology	48	0	3	0	0
			Interdisciplinary Agricultural Science total	96	0	3	0	0
			AGRICULTURE Total	3,002	183	23	9	3
601			Anatomy in General (inclu. Histology, Embryology)	253	12	0	1	0
602			Physiology in General	259	7	0	8	1
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	171	10	0	1	0
604			Pharmacology in General	215	6	0	1	0
605			Medical Chemistry in General	197	9	0	0	0
606			Pathological Medical Chemistry	101	2	0	0	0
	M		Physiology total	1,196	46	0	11	1
611			Hominal Pathology	314	6	0	0	0
612	E		Experimental Pathology	139	2	0	0	0
613	D		Parasitology (inclu. Medical Zoology)	109	8	0	0	0
614			Bacteriology (inclu. Eumycetes)	197	11	1	0	0
615	I		Virology	131	1	0	0	0
616			Immunology	226	4	0	0	0
	C		Pathology total	1,116	32	1	0	0
621			Hygiene	163	8	0	0	0
622	I		Public Health and Health Science	401	27	1	0	1
623			Legal Medicine	140	0	0	0	0
	N		Social Medicine total	704	35	1	0	1
631			Internal Medicine in General	317	4	0	0	0
632	E		Gastroenterology	384	2	0	0	0
633			Internal Medicine Respiratory System	189	0	0	0	0
634			Neurological Medicine	240	1	0	1	0
635			Cardioangiolog	434	2	0	0	0
636			Pediatrics	383	2	0	0	0
637			Dermatology	175	1	0	0	0
638			Radiology	402	10	0	1	0
639			Neuropsychiatry	305	5	0	0	1
641			Hematology	284	3	0	0	0
642			Internal Medicine of Kidney	161	3	0	0	0
643			Embryology and Newborn	28	0	0	0	0
644			Endocrinology	139	0	0	0	0
645			Metabolic Science	159	1	0	0	0
			Internal Medicine total	3,600	34	0	2	1
651			Surgery in General	315	2	0	0	0
652			Gastroenterological Surgery	328	0	0	0	0
653			Thoracic Surgery	233	0	0	0	0

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	A		Agricultural Chemistry total	5	957
521			Forestry	0	205
522	G		Wood Science	0	118
			Forestry total	0	323
531	R		Fisheries in General	0	210
532			Fisheries Chemistry	1	87
			Fisheries total	1	297
541	I		Agricultural Economics	1	196
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	0	130
552	U		Agricultural Machinery	0	87
553	L		Biological Environment	1	43
			Agricultural Engineering total	1	260
561	T		Animal Science and Grassland Science	0	106
562	U		Applied Animal Science	1	104
563	R		Basic Veterinary Medicine and Basic Animal Science	8	177
564			Applied Veterinary Medicine	4	166
	E		Animal Science·Veterinary Medicine total	13	553
571			Biological Resource Science	0	48
572			Applied Molecular Cell Biology	0	51
			Interdisciplinary Agricultural Science total	0	99
			AGRICULTURE Total	29	3,249
601			Anatomy in General (inclu. Histology, Embryology)	1	267
602			Physiology in General	0	275
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	0	182
604			Pharmacology in General	0	222
605			Medical Chemistry in General	2	208
606			Pathological Medical Chemistry	1	104
			Physiology total	4	1,258
611	M		Hominal Pathology	4	324
612	E		Experimental Pathology	3	144
613	D		Parasitology (inclu. Medical Zoology)	0	117
614			Bacteriology (inclu. Eumycetes)	2	211
615	I		Virology	3	135
616			Immunology	6	236
			Pathology total	18	1,167
621	C		Hygiene	8	179
622	I		Public Health and Health Science	1	431
623			Legal Medicine	0	140
			Social Medicine total	9	750
631	N		Internal Medicine in General	1	322
632	E		Gastroenterology	2	388
633			Internal Medicine Respiratory System	2	191
634			Neurological Medicine	0	242
635			Cardioangiolog	3	439
636			Pediatrics	1	386
637			Dermatology	0	176
638			Radiology	4	417
639			Neuropsychiatry	0	311
641			Hematology	1	288
642			Internal Medicine of Kidney	2	166
643			Embryology and Newborn	0	28
644			Endocrinology	0	139
645			Metabolic Science	1	161
			Internal Medicine total	17	3,654
651			Surgery in General	1	318
652			Gastroenterological Surgery	3	331
653			Thoracic Surgery	1	234

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654	M		Neurosurgery	261	0	0	0	0	
655			Orthopedic Surgery	396	3	0	0	0	
656			Anesthesiology and Rescue Medicine	325	1	0	0	0	
657			Urology	218	0	0	0	0	
658			Obstetrics and Gynecology	315	3	0	0	0	
659			Oto-rhino-laryngology	196	0	0	1	0	
660			Ophthalmology	213	0	0	0	0	
661			Pediatric Surgery	58	0	0	0	0	
662			Formative Surgery	58	0	0	0	0	
			Surgery total	2,916	9	0	1	0	
671	E		Oral Anatomy and Morphological Basic Dentistry	217	2	0	0	0	
672	D		Functional Basic Dentistry	172	3	0	0	0	
673	I		Morbid Dentistry (inclu. Dental Radiology)	157	0	0	0	0	
674	C		Conservative Dentistry	257	11	0	0	0	
675			Prosthodontics and Dental Technology	358	3	0	0	0	
676	I		Oral Surgery	439	2	0	0	0	
677	N		Orthodontics, Pedodontics and Social Dentistry	385	3	0	0	0	
678			Periodontological Dentistry	87	2	0	0	0	
	E	Dentistry total	2,072	26	0	0	0		
681			Chemical Pharmaceutics	375	1	2	0	0	
682			Physical Pharmaceutics	166	1	0	0	0	
683			Biopharmaceutics	412	3	1	0	0	
684			Molecular Pharmaceutics	119	1	0	0	0	
685			Environmental Pharmaceutics	51	0	1	0	0	
		Pharmaceutics total	1,123	6	4	0	0		
691			Medical Sociology	131	4	0	0	0	
692			Human Genetics	93	2	0	0	0	
693			Applied Pharmacology and Medical Pharmacology	125	0	0	0	0	
694			Pathological Examination	113	9	0	0	0	
696	Science of Basic and Local Nursing		130	8	1	0	0		
697	Science of Clinical Nursing	144	5	0	0	0			
	Medicine in General total	736	28	1	0	0			
	MEDICINE Total			13,463	216	7	14	3	
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	58	0	1	2	2	
703			Physical Education	300	9	1	0	0	
704				Human Geography	130	1	0	1	1
705				Physical Geography	97	0	0	1	0
			Geography total	227	1	0	2	1	
706				Home Science(inclu. Cloth/Living Environments)	161	28	0	0	0
707				Food Culture	122	57	0	0	0
			Domestic Science total	283	85	0	0	0	
708			Science of Cultural Property	10	1	0	3	3	
711				Science Education	104	5	10	0	1
712	Educational Engineering	101		7	8	7	2		
713	Curriculum Studies	116		6	2	0	0		
714	Japanese Language Education	32		0	0	0	1		
	A R E A	Science Education·Curriculum Education total	353	18	20	7	4		
721	I		Statistics	102	0	1	13	0	
731			Computer Science	556	5	29	5	1	
732		Intelligent Informatics	553	11	29	12	1		
733		Study of Information System (Inclu. Library and Information Science)	255	8	7	17	1		
		Information Science total	1,364	24	65	34	3		
741		Social System Engineering	256	4	5	0	0		
751		Natural Disaster Science	36	0	2	0	0		
761		Plasma Science and Technology	139	1	6	23	0		
772		Nuclear Fusion	46	1	1	16	0		

Table 11. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Private Scientific Research Institutes	Total
654	M		Neurosurgery	0	261
655			Orthopedic Surgery	0	399
656			Anesthesiology and Rescue Medicine	1	327
657			Urology	1	219
658			Obstetrics and Gynecology	1	319
659			Oto-rhino-laryngology	1	198
660			Ophthalmology	0	213
661			Pediatric Surgery	0	58
662			Formative Surgery	0	58
			Surgery total	9	2,935
671	E		Oral Anatomy and Morphological Basic Dentistry	0	219
672	D		Functional Basic Dentistry	0	175
673	I		Morbid Dentistry (inclu. Dental Radiology)	0	157
674	C		Conservative Dentistry	0	268
675			Prosthodontics and Dental Technology	0	361
676	I		Oral Surgery	0	441
677	N		Orthodontics, Pedodontics and Social Dentistry	0	388
678			Periodontological Dentistry	0	89
	E		Dentistry total	0	2,098
681				Chemical Pharmaceuticals	5
682		Physical Pharmaceuticals		0	167
683		Biopharmaceutics		3	419
684		Molecular Pharmaceuticals		1	121
685		Environmental Pharmaceuticals		0	52
		Pharmaceutics total	9	1,142	
691			Medical Sociology	1	136
692			Human Genetics	2	97
693			Applied Pharmacology and Medical Pharmacology	0	125
694			Pathological Examination	0	122
696	Science of Basic and Local Nursing		0	139	
697	Science of Clinical Nursing		0	149	
	Medicine in General total	3	768		
	MEDICINE Total			69	13,772
702	INTERDISCIPLINARY AREA		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	0	63
703			Physical Education	0	310
704			Human Geography	1	134
705			Physical Geography	0	98
			Geography total	1	232
706			Home Science(inclu. Cloth/Living Environments)	0	189
707			Food Culture	0	179
			Domestic Science total	0	368
708			Science of Cultural Property	0	17
711			Science Education	0	120
712			Educational Engineering	0	125
713			Curriculum Studies	0	124
714			Japanese Language Education	1	34
			Science Education·Curriculum Education total	1	403
721	Statistics	0	116		
731	I		Computer Science	0	596
732			Intelligent Informatics	0	606
733			Study of Information System (Inclu. Library and Information Science)	1	289
			Information Science total	1	1,491
741			Social System Engineering	1	266
751			Natural Disaster Science	2	40
761			Plasma Science and Technology	2	171
772			Nuclear Fusion	1	65

Table 11. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	60	1	4	0	2
774			Nuclear Power Science	123	0	2	5	0
			Energy total	229	2	7	21	2
801			Environmental Dynamic Analysis	146	4	2	4	0
802			Environmental Influence Assessment (inclu. Radiobiology)	133	4	3	1	0
803			Environmental Preservation	199	4	7	0	0
			Environmental Science total	478	12	12	5	0
811			Biological Organic Chemistry	141	0	3	0	0
812			Structured Biochemistry	133	3	1	3	0
813			Functional Biochemistry	191	8	0	0	0
			Biological Chemistry total	465	11	4	3	0
821			Biophysics	186	1	4	9	0
822			Molecular Biology	424	8	1	12	0
823			Cell Biology	274	2	0	5	1
824			Developmental Biology	141	0	1	9	0
			Basic Biology total	1,025	11	6	35	1
831			Neuroanatomy and Neuropathology	121	2	0	0	0
832			Neurochemistry and Neuropharmacology	120	1	0	0	0
833			Neuro Science in General	235	3	0	11	0
834			Neuro and Muscular Physiology	160	4	0	3	0
			Neuro Science (inclu. Brain Science) total	636	10	0	14	0
841			Laboratory Animal Science	55	0	1	2	0
851			Medical Organism Engineering and Material Science of Organism	284	9	12	0	0
			INTERDISCIPLINARY AREA Total	6,300	198	143	164	16
999			WIDE AREA Total	844	23	9	9	2
			Item n.a. Total	22,940	493	941	364	209
			Grand Total	68,469	1,587	2,233	858	345

Table 11. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Private Scientific Research Institutes	Total
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	0	67
774			Nuclear Power Science	0	130
			Energy total	1	262
801			Environmental Dynamic Analysis	0	156
802			Environmental Influence Assessment (inclu. Radiobiology)	4	145
803			Environmental Preservation	1	211
			Environmental Science total	5	512
811			Biological Organic Chemistry	2	146
812			Structured Biochemistry	1	141
813			Functional Biochemistry	0	199
			Biological Chemistry total	3	486
821	A R E A		Biophysics	0	200
822			Molecular Biology	6	451
823			Cell Biology	10	292
824			Developmental Biology	0	151
			Basic Biology total	16	1,094
831			Neuroanatomy and Neuropathology	0	123
832			Neurochemistry and Neuropharmacology	2	123
833			Neuro Science in General	2	251
834			Neuro and Muscular Physiology	0	167
			Neuro Science (inclu. Brain Science) total	4	664
841			Laboratory Animal Science	5	63
851			Medical Organism Engineering and Material Science of Organism	2	307
			INTERDISCIPLINARY AREA Total	44	6,865
999			WIDE AREA Total	1	888
			Item n.a. Total	174	25,121
			Grand Total	385	73,877

Table 12. Number of Doctorate Degrees by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total	
211	ARTS • HUMANITIES		Philosophy	60	0	3	0	0	63	
212			Chinese Philosophy	13	0	0	0	0	13	
213			Indian Philosophy (inclu. Buddhist Studies)	14	0	2	0	0	16	
214			Religion	17	0	0	1	0	18	
215			Ethics	16	0	0	0	0	16	
216			History of Philosophy	22	0	1	0	0	23	
217			Aesthetics (inclu. Arts)	38	1	0	1	1	41	
218			Art History	19	1	0	0	3	23	
			Philosophy total	199	2	6	2	4	213	
221			Experimental Psychology	132	0	0	2	1	135	
222			Educational and Social	236	0	0	3	1	240	
223			Sociology	72	1	0	2	1	76	
224			Education	181	0	0	4	4	189	
225			Cultural Anthropology (inclu. Ethnology and Folklore)	74	0	0	15	0	89	
		Psychology • Sociology • Education Cultural Anthropology total			695	1	0	26	7	729
231			Japanese History	111	0	4	3	0	118	
232			Oriental History	45	0	3	0	0	48	
233			European History	48	0	2	0	0	50	
234			Archaeology (inclu. Prehistory)	23	0	0	4	3	30	
		History total			227	0	9	7	3	246
241			Japanese Language	32	0	1	0	1	34	
242			Japanese Literature	52	0	7	3	0	62	
243			Chinese Language and Literature	25	0	0	0	0	25	
244			English Language and Literature	75	0	1	0	0	76	
245			French Language and Literature	43	0	1	0	0	44	
246			German Language and Literature	19	0	1	0	0	20	
247			Other Foreign Languages and Literatures	26	0	1	0	0	27	
248			Linguistics and Phonetics	86	0	0	1	0	87	
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	24	0	0	0	0	24	
			Literature total			382	0	12	4	1
	ARTS • HUMANITIES Total			1,503	3	27	39	15	1,587	
261	LAW	Basic Science of Law	30	0	0	1	0	31		
262		Public Law	26	0	0	0	0	26		
263		International Law	11	0	1	0	0	12		
264		Civil Law	51	0	0	1	0	52		
265		Social Law	8	0	0	0	0	8		
266		Criminal Law	15	0	0	0	0	15		
267		Politics	86	0	1	0	0	87		
	LAW Total			227	0	2	2	0	231	
271	ECONOMICS	General Theory of Economics	121	0	1	0	0	122		
272		Economical Statistics	34	0	0	0	0	34		
273		Economic Policy (inclu. Economic Condition)	101	0	1	1	0	103		
274		Economic History	65	0	0	1	0	66		
275		Public Finance, Money and Banking	45	0	0	0	0	45		
276		Commercial Science	14	0	0	0	0	14		
277		Business Administration	72	0	0	0	0	72		
278		Accounting	42	0	1	0	0	43		
	ECONOMICS Total			494	0	3	2	0	499	
301	SCIENCE	Algebra	186	0	21	0	0	207		
302		Geometry	173	0	18	0	0	191		
304		Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	200	0	10	5	0	215		
305		Basic Analysis	162	0	9	0	0	171		
306		Larger-area Analysis	95	0	3	0	0	98		
		Mathematics total			816	0	61	5	0	882
311		Astronomy			88	0	3	23	13	127
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	317	0	11	63	3	394		

Table 12. Number of Doctorate Degrees by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	205	0	11	3	0	219
323			Solid-State Physics II (Magnetism, Metal Physics,	250	0	13	3	0	266
324			Physical Properties in General (inclu. Basic Theories)	132	0	11	7	0	150
325			Physics in General	123	0	7	15	0	145
			Physics total	1,027	0	53	91	3	1,174
331			Physics of Solid Earth	142	0	1	6	6	155
332			Meteorology, Oceanography and Hydrology	139	0	8	9	1	157
333			Aeronomy	37	0	1	3	6	47
334			Geology	99	0	0	0	1	100
335			Stratigraphy and Paleontology	51	0	0	2	2	55
336			Mineralogy, Petrology and Study of Mineral Deposit	125	0	0	1	1	127
337			Geochemistry	71	0	1	1	2	75
			Earth Science total	664	0	11	22	19	716
341			Physical Chemistry	289	0	11	17	1	318
342			Organic Chemistry	230	0	14	4	1	249
343			Inorganic Chemistry	142	0	5	4	1	152
344			Function, Properties and Materials in Chemistry	129	0	6	4	0	139
345			Substance Transformation	35	0	2	1	0	38
346			Separation, Refining and Identification	74	0	5	2	0	81
			Chemistry total	899	0	43	32	3	977
351			Genetics	111	0	0	12	1	124
352			Ecology	211	0	0	6	1	218
353			Plant Physiology	125	0	0	5	0	130
354			Morphology, Structure of Organism	62	0	2	7	2	73
355			Animal Physiology and	81	0	0	1	0	82
356			Morphology and Taxonomy	105	0	1	1	19	126
			Biology total	695	0	3	32	23	753
361			Physical Anthropology (inclu. Physiological Anthropology)	40	0	0	1	1	42
	SCIENCE Total			4,229	0	174	206	62	4,671
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	126	0	8	2	1	137
402			Surface Physics	75	0	7	1	0	83
403			Applied Optics and Quantum Optics	114	0	13	2	0	129
404			General Applied Physics	65	0	9	6	0	80
405			Fundamentals of Engineering	41	0	7	2	0	50
			Applied Physics · Fundamentals of Engineering total	421	0	44	13	1	479
411			Materials for Machines and Strength of Materials	180	0	39	2	0	221
412			Workshop Processes and Production Engineering	129	0	29	1	0	159
413			Design Engineering, Machine Elements and Tribology	78	0	17	1	0	96
414			Fluid Mechanics	159	1	42	0	5	207
415			Heat Engineering	173	1	39	2	0	215
416			Mechanics and Control Engineering	118	0	37	0	3	158
417			Intelligent Mechanics and Machine System	148	0	18	2	0	168
			Machine Engineering total	985	2	221	8	8	1,224
421			Electric Power Engineering and Electric Machinery	125	0	50	7	0	182
422			Electronic and Electric Materials Engineering	201	0	31	1	0	233
423			Electron Devices and Apparatus Engineering	191	0	32	1	1	225
424			Information and Communication Engineering	325	1	55	9	2	392

Table 12. Number of Doctorate Degrees by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
425	E		System Engineering	74	0	10	1	2	87
427			Electronic Measurements	121	0	32	1	0	154
428			Control Engineering	134	0	24	1	0	159
			Electric and Electronic Engineering	1,171	1	234	21	5	1,432
431			Construction Materials and Dynamics in General Civil Engineering	66	0	16	0	0	82
432			Structural Engineering and Seismology	92	0	23	0	0	115
433			Ground Engineering	115	0	20	1	0	136
434			Hydraulics and River Engineering	134	0	15	1	0	150
435			Traffic Engineering and Regional Planning	85	0	11	0	0	96
436			Civil Environmental System	87	0	13	0	0	100
			Civil Engineering total	579	0	98	2	0	679
441		N	Building Structure and Materials	135	0	14	0	1	150
442			Building Science and Building Equipment	65	1	9	0	0	75
443		G	City Planning and Building Planning	137	0	18	1	0	156
444			Architectural History and Design	58	1	9	0	2	70
			Architecture total	395	2	50	1	3	451
451		N	Physical Metallurgy	102	0	12	0	0	114
452			Inorganic Materials and	158	0	19	1	0	178
453		E	Composed Materials and Properties	40	0	5	0	0	45
454			Structural and Functional Materials	120	0	11	0	0	131
455		R	Metallurgy and Material	116	1	17	0	1	135
456			Metal Productive Engineering	64	0	3	0	0	67
			Material Engineering total	600	1	67	1	1	670
461		N	Chemical Engineering in General	117	0	9	0	0	126
462			Reaction and Separation Engineering	76	0	4	0	0	80
463			Catalyst and Chemical Process	62	1	3	0	0	66
464			Bioengineering	133	0	11	0	0	144
465			Industrial Analytical Chemistry	62	0	6	0	0	68
			Process Engineering total	450	1	33	0	0	484
471			Industrial Physical Chemistry	94	0	2	0	0	96
472			Industrial Inorganic Chemistry	51	0	7	0	0	58
473			Industrial Organic Chemistry	39	0	7	0	0	46
474			Synthetic Chemistry	142	0	9	1	0	152
475			Polymer Synthesis	106	0	12	1	0	119
476			Polymer Structure and Property (inclu. Fiber)	107	0	5	1	0	113
			Industrial Chemistry total	539	0	42	3	0	584
481			Aeronautics	54	0	1	0	17	72
482			Ship Engineering	49	0	4	0	0	53
483			Marine Engineering	16	0	2	0	0	18
484			Resource Development Engineering	58	0	4	0	0	62
			Synthetic Engineering total	177	0	11	0	17	205
			ENGINEERING Total	5,317	7	800	49	35	6,208
501	A G R I C U L T U R E		Plant Breeding	63	0	1	0	0	64
502			Crop Science	62	0	1	0	0	63
503			Horticulture and Landscape Architecture	125	0	0	0	1	126
504			Plant Protection	83	0	0	0	0	83
505			Sericultural Science and Economic Entomology	33	0	0	0	0	33
			Agriculture total	366	0	2	0	1	369
511			Plant Fertilizer and Manure and Soil Science	88	0	0	0	1	89
512			Applied Microbiochemistry and Applied Biochemistry	182	0	11	1	0	194
513			Biological Productive Chemistry and Bioorganic Chemistry	73	0	1	0	0	74
514			Food Science and Nutritional Chemistry	131	0	3	0	0	134

Table 12. Number of Doctorate Degrees by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
	A		Agricultural Chemistry total	474	0	15	1	1	491
521			Forestry	169	0	0	4	0	173
522	G		Wood Science	100	1	0	0	0	101
			Forestry total	269	1	0	4	0	274
531	R		Fisheries in General	151	0	0	1	0	152
532			Fisheries Chemistry	59	0	2	0	0	61
			Fisheries total	210	0	2	1	0	213
541	I		Agricultural Economics	103	0	0	1	0	104
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	99	0	0	0	0	99
552	U		Agricultural Machinery	69	0	1	0	0	70
553	L		Biological Environment	31	0	0	0	0	31
			Agricultural Engineering total	199	0	1	0	0	200
561	T		Animal Science and Grassland Science	72	0	0	0	0	72
562	U		Applied Animal Science	76	0	0	0	0	76
563	R		Basic Veterinary Medicine and Basic Animal Science	93	0	0	2	1	96
564			Applied Veterinary Medicine	76	0	0	0	0	76
	E		Animal Science-Veterinary Medicine total	317	0	0	2	1	320
571			Biological Resource Science	36	0	0	0	0	36
572			Applied Molecular Cell Biology	33	0	3	0	0	36
			Interdisciplinary Agricultural Science total	69	0	3	0	0	72
			AGRICULTURE Total	2,007	1	23	9	3	2,043
601			Anatomy in General (inclu. Histology, Embryology)	114	1	0	1	0	116
602			Physiology in General	119	0	0	8	1	128
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	62	0	0	1	0	63
604			Pharmacology in General	89	0	0	1	0	90
605			Medical Chemistry in General	112	1	0	0	0	113
606			Pathological Medical Chemistry	60	0	0	0	0	60
	M		Physiology total	556	2	0	11	1	570
611			Hominal Pathology	144	0	0	0	0	144
612	E		Experimental Pathology	79	0	0	0	0	79
613	D		Parasitology (inclu. Medical Zoology)	57	0	0	0	0	57
614			Bacteriology (inclu. Eumycetes)	90	2	1	0	0	93
615	I		Virology	89	0	0	0	0	89
616			Immunology	124	0	0	0	0	124
	C		Pathology total	583	2	1	0	0	586
621			Hygiene	62	0	0	0	0	62
622	I		Public Health and Health Science	163	0	1	0	1	165
623			Legal Medicine	71	0	0	0	0	71
	N		Social Medicine total	296	0	1	0	1	298
631			Internal Medicine in General	131	1	0	0	0	132
632	E		Gastroenterology	169	1	0	0	0	170
633			Internal Medicine Respiratory System	83	0	0	0	0	83
634			Neurological Medicine	108	1	0	1	0	110
635			Cardioangiolog	179	0	0	0	0	179
636			Pediatrics	179	0	0	0	0	179
637			Dermatology	85	0	0	0	0	85
638			Radiology	210	0	0	1	0	211
639			Neuropsychiatry	136	0	0	0	1	137
641			Hematology	142	0	0	0	0	142
642			Internal Medicine of Kidney	70	1	0	0	0	71
643			Embryology and Newborn	10	0	0	0	0	10
644			Endocrinology	75	0	0	0	0	75
645			Metabolic Science	76	0	0	0	0	76
			Internal Medicine total	1,653	4	0	2	1	1,660
651			Surgery in General	111	0	0	0	0	111
652			Gastroenterological Surgery	143	0	0	0	0	143
653			Thoracic Surgery	95	0	0	0	0	95

Table 12. Number of Doctorate Degrees by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
654	M		Neurosurgery	113	0	0	0	0	113
655			Orthopedic Surgery	177	0	0	0	0	177
656			Anesthesiology and Rescue Medicine	163	0	0	0	0	163
657			Urology	102	0	0	0	0	102
658			Obstetrics and Gynecology	147	0	0	0	0	147
659			Oto-rhino-laryngology	87	0	0	1	0	88
660			Ophthalmology	97	0	0	0	0	97
661			Pediatric Surgery	32	0	0	0	0	32
662			Formative Surgery	18	0	0	0	0	18
			Surgery total	1,285	0	0	1	0	1,286
671	E		Oral Anatomy and Morphological Basic Dentistry	74	0	0	0	0	74
672	D		Functional Basic Dentistry	59	0	0	0	0	59
673	I		Morbid Dentistry (inclu. Dental Radiology)	54	0	0	0	0	54
674	C		Conservative Dentistry	80	0	0	0	0	80
675			Prosthodontics and Dental Technology	140	0	0	0	0	140
676	I		Oral Surgery	195	0	0	0	0	195
677	N		Orthodontics, Pedodontics and Social Dentistry	163	0	0	0	0	163
678			Periodontological Dentistry	43	0	0	0	0	43
	E		Dentistry total	808	0	0	0	0	808
681			Chemical Pharmaceutics	94	0	2	0	0	96
682			Physical Pharmaceutics	45	0	0	0	0	45
683			Biopharmaceutics	114	0	1	0	0	115
684			Molecular Pharmaceutics	41	0	0	0	0	41
685			Environmental Pharmaceutics	12	0	1	0	0	13
			Pharmaceutics total	306	0	4	0	0	310
691			Medical Sociology	52	1	0	0	0	53
692			Human Genetics	57	0	0	0	0	57
693			Applied Pharmacology and Medical Pharmacology	49	0	0	0	0	49
694			Pathological Examination	64	0	0	0	0	64
696			Science of Basic and Local Nursing	60	0	1	0	0	61
697			Science of Clinical Nursing	72	0	0	0	0	72
			Medicine in General total	354	1	1	0	0	356
			MEDICINE Total	5,841	9	7	14	3	5,874
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	22	0	1	2	2	27
703			Physical Education	153	0	1	0	0	154
704			Human Geography	56	0	0	1	1	58
705			Physical Geography	59	0	0	1	0	60
			Geography total	115	0	0	2	1	118
706			Home Science (inclu. Cloth/Living Environments)	71	0	0	0	0	71
707			Food Culture	29	0	0	0	0	29
			Domestic Science total	100	0	0	0	0	100
708			Science of Cultural Property	8	1	0	3	3	15
711			Science Education	71	0	8	0	1	80
712	A R E A		Educational Engineering	37	1	8	7	2	55
713			Curriculum Studies	91	0	2	0	0	93
714			Japanese Language Education	21	0	0	0	1	22
			Science Education·Curriculum Education total	220	1	18	7	4	250
721			Statistics	49	0	1	13	0	63
731			Computer Science	319	2	28	5	1	355
732			Intelligent Informatics	303	2	27	12	1	345
733			Study of Information System (Inclu. Library and Information Science)	113	2	7	17	1	140
			Information Science total	735	6	62	34	3	840
741			Social System Engineering	100	0	5	0	0	105
751	I		Natural Disaster Science	23	0	1	0	0	24
761			Plasma Science and Technology	104	0	6	23	0	133
772			Nuclear Fusion	36	0	1	16	0	53

Table 12. Number of Doctorate Degrees by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
773	N		Energy Science General	41	0	4	0	2	47
774			Nuclear Power Science	104	0	2	5	0	111
	E		Energy total	181	0	7	21	2	211
801	R		Environmental Dynamic Analysis	88	0	2	4	0	94
802			Environmental Influence Assessment (inclu. Radiobiology)	67	0	2	1	0	70
803			Environmental Preservation	106	0	7	0	0	113
			Environmental Science total	261	0	11	5	0	277
811	I		Biological Organic Chemistry	86	0	3	0	0	89
812			Structured Biochemistry	71	0	1	3	0	75
813			Functional Biochemistry	112	0	0	0	0	112
	C		Biological Chemistry total	269	0	4	3	0	276
821	N		Biophysics	117	0	3	9	0	129
822			Molecular Biology	270	0	1	12	0	283
823			Cell Biology	168	0	0	5	1	174
824			Developmental Biology	106	0	1	9	0	116
	Y		Basic Biology total	661	0	5	35	1	702
831	A		Neuroanatomy and Neuropathology	64	1	0	0	0	65
832			Neurochemistry and Neuropharmacology	57	0	0	0	0	57
833			Neuro Science in General	139	0	0	11	0	150
834			Neuro and Muscular Physiology	83	1	0	3	0	87
			Neuro Science (inclu. Brain Science) total	343	2	0	14	0	359
841			Laboratory Animal Science	33	0	1	2	0	36
851			Medical Organism Engineering and Material Science of Organism	150	1	9	0	0	160
	INTERDISCIPLINARY AREA Total			3,527	11	132	164	16	3,850
999	WIDE AREA Total			410	3	9	9	2	433
	Item n.a. Total			11,884	14	881	364	209	13,352
	Grand Total			35,439	48	2,058	858	345	38,748

Table 13. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
211	ARTS • HUMANITIES		Philosophy	7	0	2	9
212			Chinese Philosophy	4	2	0	6
213			Indian Philosophy (inclu. Buddhist Studies)	4	0	0	4
214			Religion	2	0	1	3
215			Ethics	2	0	0	2
216			History of Philosophy	7	0	0	7
217			Aesthetics (inclu. Arts)	10	0	0	10
218			Art History	4	1	0	5
			Philosophy total	40	3	3	46
221			Experimental Psychology	17	0	0	17
222			Educational and Social	19	2	0	21
223			Sociology	41	4	0	45
224			Education	15	1	0	16
225			Cultural Anthropology (inclu. Ethnology and Folklore)	10	1	0	11
			Psychology • Sociology • Education Cultural Anthropology total	102	8	0	110
231			Japanese History	17	2	1	20
232			Oriental History	7	0	0	7
233			European History	13	1	0	14
234			Archaeology (inclu. Prehistory)	0	0	0	0
			History total	37	3	1	41
241			Japanese Language	4	0	0	4
242			Japanese Literature	13	3	0	16
243			Chinese Language and Literature	2	0	0	2
244			English Language and Literature	16	3	0	19
245			French Language and Literature	13	0	0	13
246			German Language and Literature	6	0	0	6
247			Other Foreign Languages and Literatures	6	1	0	7
248			Linguistics and Phonetics	18	2	0	20
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	2	0	0	2
			Literature total	80	9	0	89
			ARTS • HUMANITIES Total	259	23	4	286
261	LAW		Basic Science of Law	5	0	0	5
262			Public Law	5	1	0	6
263			International Law	4	0	0	4
264			Civil Law	6	0	0	6
265			Social Law	1	0	0	1
266			Criminal Law	0	0	0	0
267			Politics	24	1	0	25
			LAW Total	45	2	0	47
271	ECONOMICS		General Theory of Economics	29	2	0	31
272			Economical Statistics	8	0	0	8
273			Economic Policy (inclu. Economic Condition)	35	1	0	36
274			Economic History	13	0	0	13
275			Public Finance, Money and Banking	12	1	0	13
276			Commercial Science	6	1	0	7
277			Business Administration	17	3	0	20
278			Accounting	10	1	0	11
			ECONOMICS Total	130	9	0	139
301	SCIENCE		Algebra	16	0	0	16
302			Geometry	16	0	2	18
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	27	0	1	28
305			Basic Analysis	15	0	1	16
306			Larger-area Analysis	8	0	0	8
			Mathematics total	82	0	4	86
311			Astronomy	2	0	0	2
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	31	1	2	34

Table 13. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	21	1	1	23
323			Solid-State Physics II (Magnetism, Metal Physics,	19	0	1	20
324			Physical Properties in General (inclu. Basic Theories)	11	0	2	13
325			Physics in General	11	0	2	13
			Physics total	93	2	8	103
331			Physics of Solid Earth	4	0	0	4
332			Meteorology, Oceanography and Hydrology	6	0	0	6
333			Aeronomy	1	0	0	1
334			Geology	11	0	0	11
335			Stratigraphy and Paleontology	3	0	0	3
336			Mineralogy, Petrology and Study of Mineral Deposit	6	0	0	6
337			Geochemistry	3	0	0	3
			Earth Science total	34	0	0	34
341			Physical Chemistry	29	1	2	32
342			Organic Chemistry	23	0	3	26
343			Inorganic Chemistry	14	1	1	16
344			Function, Properties and Materials in Chemistry	8	0	0	8
345			Substance Transformation	2	0	1	3
346			Separation, Refining and Identification	12	0	0	12
			Chemistry total	88	2	7	97
351			Genetics	11	0	0	11
352			Ecology	19	1	0	20
353			Plant Physiology	34	0	0	34
354			Morphology, Structure of Organism	7	0	0	7
355			Animal Physiology and	10	1	0	11
356			Morphology and Taxonomy	8	1	0	9
			Biology total	89	3	0	92
361			Physical Anthropology (inclu. Physiological Anthropology)	6	0	0	6
	SCIENCE Total			394	7	19	420
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	16	0	2	18
402			Surface Physics	4	0	0	4
403			Applied Optics and Quantum Optics	10	0	1	11
404			General Applied Physics	4	0	2	6
405			Fundamentals of Engineering	4	0	1	5
			Applied Physics-Fundamentals of Engineering total	38	0	6	44
411			Materials for Machines and Strength of Materials	21	0	4	25
412			Workshop Processes and Production Engineering	10	1	3	14
413			Design Engineering, Machine Elements and Tribology	7	0	2	9
414			Fluid Mechanics	15	1	4	20
415			Heat Engineering	12	0	5	17
416			Mechanics and Control Engineering	6	0	2	8
417			Intelligent Mechanics and Machine System	14	0	1	15
			Machine Engineering total	85	2	21	108
421			Electric Power Engineering and Electric Machinery	10	0	4	14
422			Electronic and Electric Materials Engineering	10	0	0	10
423			Electron Devices and Apparatus Engineering	17	0	1	18
424			Information and Communication Engineering	44	0	6	50

Table 13. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
425	E N G I N E E R I N G	Electric and Electronic Engineering	System Engineering	7	0	0	7
427			Electronic Measurements	6	0	2	8
428			Control Engineering	18	0	2	20
			Electric and Electronic Engineering total	112	0	15	127
431		Civil Engineering	Construction Materials and Dynamics in General Civil Engineering	2	0	0	2
432			Structural Engineering and Seismology	8	0	3	11
433			Ground Engineering	6	0	0	6
434			Hydraulics and River Engineering	4	0	3	7
435			Traffic Engineering and Regional Planning	5	0	0	5
436			Civil Environmental System	7	1	0	8
			Civil Engineering total	32	1	6	39
441		Architecture	Building Structure and Materials	23	0	0	23
442			Building Science and Building Equipment	18	3	1	22
443			City Planning and Building Planning	26	2	1	29
444			Architectural History and Design	7	2	0	9
			Architecture total	74	7	2	83
451		Material Engineering	Physical Metallurgy	6	0	0	6
452			Inorganic Materials and	3	0	1	4
453			Composed Materials and Properties	2	0	0	2
454			Structural and Functional Materials	7	0	1	8
455		Metal Engineering	Metallurgy and Material	5	0	3	8
456			Metal Productive Engineering	0	0	1	1
			Material Engineering total	23	0	6	29
461		Process Engineering	Chemical Engineering in General	6	0	2	8
462			Reaction and Separation Engineering	6	0	0	6
463			Catalyst and Chemical Process	4	0	0	4
464			Bioengineering	12	0	0	12
465			Industrial Analytical Chemistry	5	0	0	5
			Process Engineering total	33	0	2	35
471		Industrial Chemistry	Industrial Physical Chemistry	13	0	2	15
472			Industrial Inorganic Chemistry	3	0	0	3
473			Industrial Organic Chemistry	2	0	1	3
474			Synthetic Chemistry	5	0	1	6
475			Polymer Synthesis	8	0	1	9
476			Polymer Structure and Property (inclu. Fiber)	10	3	1	14
			Industrial Chemistry total	41	3	6	50
481		Synthetic Engineering	Aeronautics	5	0	1	6
482			Ship Engineering	4	0	1	5
483			Marine Engineering	2	0	0	2
484			Resource Development Engineering	2	0	2	4
			Synthetic Engineering total	13	0	4	17
			ENGINEERING Total	451	13	68	532
501	A G R I C U L T U R E	Agriculture	Plant Breeding	11	3	0	14
502			Crop Science	4	2	0	6
503			Horticulture and Landscape Architecture	26	4	0	30
504			Plant Protection	5	4	0	9
505			Sericultural Science and Economic Entomology	1	0	0	1
			Agriculture total	47	13	0	60
511		Food Science and Nutritional Chemistry	Plant Fertilizer and Manure and Soil Science	8	3	0	11
512			Applied Microbiochemistry and Applied Biochemistry	24	2	0	26
513			Biological Productive Chemistry and Bioorganic Chemistry	12	1	0	13
514			Food Science and Nutritional Chemistry	33	12	0	45

Table 13. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
	A		Agricultural Chemistry total	77	18	0	95
521			Forestry	9	1	0	10
522	G		Wood Science	5	0	0	5
			Forestry total	14	1	0	15
531	R		Fisheries in General	7	0	0	7
532			Fisheries Chemistry	0	1	0	1
			Fisheries total	7	1	0	8
541	I		Agricultural Economics	17	3	0	20
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	4	9	0	13
552	U		Agricultural Machinery	3	2	0	5
553	L		Biological Environment	4	1	0	5
			Agricultural Engineering total	11	12	0	23
561	T		Animal Science and Grassland Science	3	3	0	6
562	U		Applied Animal Science	2	4	0	6
563	R		Basic Veterinary Medicine and Basic Animal Science	13	1	0	14
564			Applied Veterinary Medicine	10	1	0	11
	E		Animal Science·Veterinary Medicine total	28	9	0	37
571			Biological Resource Science	3	0	0	3
572			Applied Molecular Cell Biology	5	0	0	5
			Interdisciplinary Agricultural Science total	8	0	0	8
			AGRICULTURE Total	209	57	0	266
601			Anatomy in General (inclu. Histology, Embryology)	21	3	0	24
602			Physiology in General	16	1	0	17
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	23	0	0	23
604			Pharmacology in General	19	0	0	19
605			Medical Chemistry in General	19	0	0	19
606			Pathological Medical Chemistry	10	0	0	10
	M		Physiology total	108	4	0	112
611			Hominal Pathology	22	1	0	23
612	E		Experimental Pathology	18	0	0	18
613	D		Parasitology (inclu. Medical Zoology)	14	2	0	16
614			Bacteriology (inclu. Eumycetes)	15	5	0	20
615	I		Virology	9	0	0	9
616			Immunology	8	1	0	9
	C		Pathology total	86	9	0	95
621			Hygiene	17	0	0	17
622	I		Public Health and Health Science	50	4	0	54
623			Legal Medicine	12	0	0	12
	N		Social Medicine total	79	4	0	83
631			Internal Medicine in General	29	2	0	31
632	E		Gastroenterology	42	0	0	42
633			Internal Medicine Respiratory System	21	0	0	21
634			Neurological Medicine	19	0	0	19
635			Cardioangiolog	37	0	0	37
636			Pediatrics	36	0	0	36
637			Dermatology	19	0	0	19
638			Radiology	28	1	0	29
639			Neuropsychiatry	19	2	0	21
641			Hematology	19	1	0	20
642			Internal Medicine of Kidney	13	0	0	13
643			Embryology and Newborn	4	0	0	4
644			Endocrinology	6	0	0	6
645			Metabolic Science	12	1	0	13
			Internal Medicine total	304	7	0	311
651			Surgery in General	27	2	0	29
652			Gastroenterological Surgery	41	0	0	41
653			Thoracic Surgery	12	0	0	12

Table 13. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subj ect	Subd ivision	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
654	M 						

Table 13. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
773	Nuclear Energy Research Division		Energy Science General	5	0	0	5
774			Nuclear Power Science	1	0	0	1
			Energy total	7	0	0	7
801	Radiation Effects Division		Environmental Dynamic Analysis	9	1	0	10
802			Environmental Influence Assessment (inclu. Radiobiology)	17	1	1	19
803			Environmental Preservation	17	1	0	18
			Environmental Science total	43	3	1	47
811	Life Sciences		Biological Organic Chemistry	12	0	0	12
812			Structured Biochemistry	14	1	0	15
813			Functional Biochemistry	15	3	0	18
			Biological Chemistry total	41	4	0	45
821	Natural Resources		Biophysics	17	0	1	18
822			Molecular Biology	28	2	0	30
823			Cell Biology	24	0	0	24
824			Developmental Biology	10	0	0	10
			Basic Biology total	79	2	1	82
831	Area		Neuroanatomy and Neuropathology	12	0	0	12
832			Neurochemistry and Neuropharmacology	14	0	0	14
833			Neuro Science in General	20	0	0	20
834			Neuro and Muscular Physiology	15	0	0	15
			Neuro Science (inclu. Brain Science) total	61	0	0	61
841			Laboratory Animal Science	5	0	0	5
851			Medical Organism Engineering and Material Science of Organism	14	0	3	17
	INTERDISCIPLINARY AREA Total			470	35	11	516
999	WIDE AREA Total			35	1	0	36
	Item n.a. Total			1,683	90	40	1,813
	Grand Total			4,765	283	142	5,190

Table 14. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Private Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
211	ARTS • HUMANITIES		Philosophy	96	8	0	0	104
212			Chinese Philosophy	18	0	0	0	18
213			Indian Philosophy (inclu. Buddhist Studies)	77	5	0	5	87
214			Religion	99	8	0	0	107
215			Ethics	7	0	0	0	7
216			History of Philosophy	35	3	0	0	38
217			Aesthetics (inclu. Arts)	57	5	0	1	63
218			Art History	25	3	0	0	28
			Philosophy total	414	32	0	6	452
221			Experimental Psychology	132	8	0	0	140
222			Educational and Social	294	27	0	0	321
223			Sociology	234	22	0	1	257
224			Education	143	29	0	0	172
225			Cultural Anthropology (inclu. Ethnology and Folklore)	90	8	0	0	98
			Psychology • Sociology • Education Cultural Anthropology total	893	94	0	1	988
231			Japanese History	126	13	0	3	142
232			Oriental History	71	2	0	1	74
233			European History	67	1	0	0	68
234			Archaeology (inclu. Prehistory)	29	2	0	1	32
			History total	293	18	0	5	316
241			Japanese Language	37	6	0	1	44
242			Japanese Literature	140	16	0	0	156
243			Chinese Language and Literature	39	1	0	0	40
244			English Language and Literature	144	10	0	0	154
245			French Language and Literature	74	2	0	0	76
246			German Language and Literature	23	0	0	0	23
247			Other Foreign Languages and Literatures	41	1	0	0	42
248			Linguistics and Phonetics	165	10	0	1	176
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	40	1	0	0	41
			Literature total	703	47	0	2	752
			ARTS • HUMANITIES Total	2,303	191	0	14	2,508
261	LAW		Basic Science of Law	55	2	0	0	57
262			Public Law	51	1	0	0	52
263			International Law	56	0	0	0	56
264			Civil Law	82	1	0	3	86
265			Social Law	21	0	0	0	21
266			Criminal Law	28	0	0	0	28
267			Politics	185	1	0	0	186
			LAW Total	478	5	0	3	486
271	ECONOMICS		General Theory of Economics	222	4	0	0	226
272			Economical Statistics	47	1	0	0	48
273			Economic Policy (inclu. Economic Condition)	230	4	0	3	237
274			Economic History	98	3	0	0	101
275			Public Finance, Money and Banking	106	1	0	0	107
276			Commercial Science	84	3	0	0	87
277			Business Administration	262	10	0	0	272
278			Accounting	125	1	0	0	126
			ECONOMICS Total	1,174	27	0	3	1,204
301	SCIENCE		Algebra	102	1	0	0	103
302			Geometry	75	2	0	0	77
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	143	6	1	0	150
305			Basic Analysis	94	2	0	0	96
306			Larger-area Analysis	43	1	0	0	44
			Mathematics total	457	12	1	0	470
311			Astronomy	25	2	0	0	27
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	182	15	1	0	198

Table 14. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Private Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	92	2	1	0	95
323			Solid-State Physics II (Magnetism, Metal Physics,	80	4	0	1	85
324			Physical Properties in General (inclu. Basic Theories)	76	2	0	0	78
325			Physics in General	68	5	0	2	75
			Physics total	498	28	2	3	531
331			Physics of Solid Earth	25	1	0	1	27
332			Meteorology, Oceanography and Hydrology	41	0	1	0	42
333			Aeronomy	14	1	0	0	15
334			Geology	22	1	0	2	25
335			Stratigraphy and Paleontology	6	1	0	2	9
336			Mineralogy, Petrology and Study of Mineral Deposit	15	1	0	0	16
337			Geochemistry	21	0	0	0	21
			Earth Science total	144	5	1	5	155
341			Physical Chemistry	116	5	0	0	121
342			Organic Chemistry	101	2	0	6	109
343			Inorganic Chemistry	59	2	0	0	61
344			Function, Properties and Materials in Chemistry	54	1	0	0	55
345			Substance Transformation	12	0	0	0	12
346			Separation, Refining and Identification	44	4	0	0	48
			Chemistry total	386	14	0	6	406
351			Genetics	27	5	0	1	33
352			Ecology	70	10	0	2	82
353			Plant Physiology	44	1	0	1	46
354			Morphology, Structure of Organism	34	5	0	0	39
355			Animal Physiology and	29	2	0	1	32
356			Morphology and Taxonomy	37	0	0	2	39
			Biology total	241	23	0	7	271
361			Physical Anthropology (inclu. Physiological Anthropology)	33	1	0	0	34
			SCIENCE Total	1,784	85	4	21	1,894
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	52	1	1	1	55
402			Surface Physics	36	1	0	0	37
403			Applied Optics and Quantum	64	4	0	2	70
404			General Applied Physics	29	2	0	2	33
405			Fundamentals of Engineering	32	2	0	0	34
			Applied Physics·Fundamentals of Engineering total	213	10	1	5	229
411			Materials for Machines and Strength of Materials	127	4	1	2	134
412			Workshop Processes and Production Engineering	86	0	1	0	87
413			Design Engineering, Machine Elements and Tribology	52	5	1	1	59
414			Fluid Mechanics	110	4	0	0	114
415			Heat Engineering	91	4	0	0	95
416			Mechanics and Control Engineering	77	2	1	0	80
417			Intelligent Mechanics and Machine System	92	3	0	0	95
			Machine Engineering total	635	22	4	3	664
421			Electric Power Engineering and Electric Machinery	132	6	0	0	138
422			Electronic and Electric Materials Engineering	125	3	0	2	130
423			Electron Devices and Apparatus Engineering	148	2	0	0	150
424			Information and Communication Engineering	276	4	2	1	283
425			System Engineering	65	2	0	0	67

Table 14. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Private Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
427	E N G I N E E R I N G	Electric and Electronic Engineering	Electronic Measurements	103	2	1	0	106
428			Control Engineering	68	1	1	0	70
			Electric and Electronic Engineering	917	20	4	3	944
431		Civil Engineering	Construction Materials and Dynamics in General Civil Engineering	55	0	0	0	55
432			Structural Engineering and Seismology	80	6	0	0	86
433			Ground Engineering	57	1	0	1	59
434			Hydraulics and River Engineering	58	1	0	2	61
435			Traffic Engineering and Regional Planning	63	3	0	0	66
436			Civil Environmental System	43	2	0	0	45
			Civil Engineering total	356	13	0	3	372
441		Architecture	Building Structure and Materials	142	5	0	1	148
442			Building Science and Building Equipment	73	2	0	3	78
443			City Planning and Building Planning	200	5	0	0	205
444		Architecture	Architectural History and Design	63	4	0	0	67
			Architecture total	478	16	0	4	498
451		Material Engineering	Physical Metallurgy	21	0	0	2	23
452			Inorganic Materials and Composed Materials and Properties	56	1	0	0	57
453			Structural and Functional Materials	18	1	0	0	19
454		Material Engineering	Metallurgy and Material	28	1	0	3	32
455			Metal Productive Engineering	44	3	0	1	48
456			Metal Productive Engineering	16	0	0	0	16
			Material Engineering total	183	6	0	6	195
461		Process Engineering	Chemical Engineering in General Reaction and Separation Engineering	30	0	0	0	30
462			Catalyst and Chemical Process Bioengineering	14	0	0	0	14
463			Industrial Analytical Chemistry	16	1	0	0	17
464			Industrial Analytical Chemistry	44	0	0	2	46
465			Industrial Analytical Chemistry	29	1	0	0	30
			Process Engineering total	133	2	0	2	137
471		Industrial Chemistry	Industrial Physical Chemistry	31	0	0	0	31
472			Industrial Inorganic Chemistry	16	0	0	0	16
473			Industrial Organic Chemistry	17	3	0	0	20
474			Synthetic Chemistry	34	0	0	0	34
475			Polymer Synthesis	29	1	0	1	31
476			Polymer Structure and Property (inclu. Fiber)	36	9	0	0	45
			Industrial Chemistry total	163	13	0	1	177
481		Synthetic Engineering	Aeronautics	21	0	0	0	21
482			Ship Engineering	9	0	0	0	9
483			Marine Engineering	11	0	0	0	11
484			Resource Development Engineering	13	0	0	0	13
			Synthetic Engineering total	54	0	0	0	54
		ENGINEERING Total		3,132	102	9	27	3,270
501	A G R I C U L T U R E	Agriculture	Plant Breeding	17	1	0	2	20
502			Crop Science	11	1	0	0	12
503			Horticulture and Landscape Architecture	47	15	0	1	63
504			Plant Protection	23	2	0	0	25
505			Sericultural Science and Economic Entomology	8	2	0	5	15
			Agriculture total	106	21	0	8	135
511		Agricultural Chemistry	Plant Fertilizer and Manure and Soil Science	15	2	0	0	17
512			Applied Microbiochemistry and Applied Biochemistry	114	13	0	3	130
513			Biological Productive Chemistry and Bioorganic Chemistry	26	4	0	1	31
514			Food Science and Nutritional Chemistry	127	65	0	1	193
			Agricultural Chemistry total	282	84	0	5	371

Table 14. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Private Institutions)

Code	Subj ect	Subd ivision	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
521	G		Forestry	20	2	0	0	22
522			Wood Science	12	0	0	0	12
			Forestry total	32	2	0	0	34
531	R		Fisheries in General	51	0	0	0	51
532			Fisheries Chemistry	20	4	0	1	25
			Fisheries total	71	4	0	1	76
541	I		Agricultural Economics	67	4	0	1	72
551	C U		Irrigation, Drainage and Reclamation Engineering and Rural Planning	16	2	0	0	18
552			Agricultural Machinery	8	4	0	0	12
553			Biological Environment	6	0	0	1	7
	L		Agricultural Engineering total	30	6	0	1	37
561	T U		Animal Science and Grassland Science	27	1	0	0	28
562			Applied Animal Science	21	0	0	1	22
563			Basic Veterinary Medicine and Basic Animal Science	57	2	0	8	67
564	R E		Applied Veterinary Medicine	74	1	0	4	79
			Animal Science·Veterinary Medicine total	179	4	0	13	196
571			Biological Resource Science	9	0	0	0	9
572		Applied Molecular Cell Biology	10	0	0	0	10	
		Interdisciplinary Agricultural Science total	19	0	0	0	19	
	AGRICULTURE Total			786	125	0	29	940
601	M E D I C I N E		Anatomy in General (inclu. Histology, Embryology)	118	8	0	1	127
602			Physiology in General	124	6	0	0	130
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	86	10	0	0	96
604			Pharmacology in General	107	6	0	0	113
605			Medical Chemistry in General	66	8	0	2	76
606			Pathological Medical Chemistry	31	2	0	1	34
			Physiology total	532	40	0	4	576
611			Hominal Pathology	148	5	0	4	157
612			Experimental Pathology	42	2	0	3	47
613			Parasitology (inclu.Medical Zoology)	38	6	0	0	44
614			Bacteriology (inclu. Eumycetes)	92	4	0	2	98
615			Virology	33	1	0	3	37
616			Immunology	94	3	0	6	103
			Pathology total	447	21	0	18	486
621			Hygiene	84	8	0	8	100
622			Public Health and Health Science	188	23	0	1	212
623			Legal Medicine	57	0	0	0	57
			Social Medicine total	329	31	0	9	369
631	E		Internal Medicine in General	157	1	0	1	159
632			Gastroenterology	173	1	0	2	176
633			Internal Medicine Respiratory System	85	0	0	2	87
634			Neurological Medicine	113	0	0	0	113
635			Cardioangiology	218	2	0	3	223
636			Pediatrics	168	2	0	1	171
637			Dermatology	71	1	0	0	72
638			Radiology	164	9	0	4	177
639			Neuropsychiatry	150	3	0	0	153
641			Hematology	123	2	0	1	126
642			Internal Medicine of Kidney	78	2	0	2	82
643			Embryology and Newborn	14	0	0	0	14
644			Endocrinology	58	0	0	0	58
645			Metabolic Science	71	0	0	1	72
	Internal Medicine total	1,643	23	0	17	1,683		
651			Surgery in General	177	0	0	1	178
652			Gastroenterological Surgery	144	0	0	3	147
653			Thoracic Surgery	126	0	0	1	127
654			Neurosurgery	127	0	0	0	127

Table 14. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Private Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
655	M		Orthopedic Surgery	175	3	0	0	178
656			Anesthesiology and Rescue Medicine	123	1	0	1	125
657			Urology	87	0	0	1	88
658			Obstetrics and Gynecology	136	1	0	1	138
659			Oto-rhino-laryngology	86	0	0	1	87
660			Ophthalmology	100	0	0	0	100
661			Pediatric Surgery	22	0	0	0	22
662			Formative Surgery	39	0	0	0	39
			Surgery total	1,342	5	0	9	1,356
671	E		Oral Anatomy and Morphological Basic Dentistry	136	2	0	0	138
672	D		Functional Basic Dentistry	107	3	0	0	110
673	I		Morbid Dentistry (inclu. Dental Radiology)	98	0	0	0	98
674	C		Conservative Dentistry	171	9	0	0	180
675			Prosthodontics and Dental Technology	213	3	0	0	216
676	I		Oral Surgery	226	2	0	0	228
677	N		Orthodontics, Pedodontics and Social Dentistry	217	2	0	0	219
678			Periodontological Dentistry	43	1	0	0	44
	E		Dentistry total	1,211	22	0	0	1,233
681			Chemical Pharmaceutics	264	1	0	5	270
682			Physical Pharmaceutics	110	1	0	0	111
683			Biopharmaceutics	272	2	0	3	277
684			Molecular Pharmaceutics	74	1	0	1	76
685			Environmental Pharmaceutics	33	0	0	0	33
			Pharmaceutics total	753	5	0	9	767
691			Medical Sociology	69	1	0	1	71
692			Human Genetics	32	2	0	2	36
693			Applied Pharmacology and Medical Pharmacology	73	0	0	0	73
694			Pathological Examination	43	5	0	0	48
696			Science of Basic and Local Nursing	28	5	0	0	33
697			Science of Clinical Nursing	31	1	0	0	32
			Medicine in General total	276	14	0	3	293
	MEDICINE Total		6,533	161	0	69	6,763	
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	30	0	0	0	30
703			Physical Education	119	9	0	0	128
704			Human Geography	67	1	0	1	69
705			Physical Geography	32	0	0	0	32
			Geography total	99	1	0	1	101
706			Home Science(inclu. Cloth/Living Environments)	80	21	0	0	101
707			Food Culture	72	47	0	0	119
			Domestic Science total	152	68	0	0	220
708			Science of Cultural Property	2	0	0	0	2
711				Science Education	33	5	0	0
712	Educational Engineering	56		5	0	0	61	
713	Curriculum Studies	21		5	0	0	26	
714	Japanese Language Education	10		0	0	1	11	
	Science Education·Curriculum Education total	120	15	0	1	136		
721	A R E A		Statistics	47	0	0	0	47
731			Computer Science	206	3	0	0	209
732			Intelligent Informatics	204	7	0	0	211
733			Study of Information System (Inclu. Library and Information Science)	127	3	0	1	131
			Information Science total	537	13	0	1	551
741			Social System Engineering	134	2	0	1	137
751			Natural Disaster Science	8	0	0	2	10
761			Plasma Science and Technology	31	1	0	2	34
772			Nuclear Fusion	9	1	0	1	11
773			Energy Science General	14	1	0	0	15

Table 14. Number of Doctorate Degrees by Field of Specialization / by Institution Type (Private Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
774	T E		Nuclear Power Science	18	0	0	0	18
			Energy total	41	2	0	1	44
801	R D I S C		Environmental Dynamic Analysis	49	3	0	0	52
802			Environmental Influence Assessment (inclu. Radiobiology)	49	3	0	4	56
803			Environmental Preservation	76	3	0	1	80
			Environmental Science total	174	9	0	5	188
811	P I L I		Biological Organic Chemistry	43	0	0	2	45
812			Structured Biochemistry	48	2	0	1	51
813			Functional Biochemistry	64	5	0	0	69
			Biological Chemistry total	155	7	0	3	165
821	N A R Y		Biophysics	52	1	0	0	53
822			Molecular Biology	126	6	0	6	138
823			Cell Biology	82	2	0	10	94
824			Developmental Biology	25	0	0	0	25
			Basic Biology total	285	9	0	16	310
831	A R E A		Neuroanatomy and Neuropathology	45	1	0	0	46
832			Neurochemistry and Neuropharmacology	49	1	0	2	52
833			Neuro Science in General	76	3	0	2	81
834			Neuro and Muscular Physiology	62	3	0	0	65
			Neuro Science (inclu. Brain Science) total	232	8	0	4	244
841			Laboratory Animal Science	17	0	0	5	22
851			Medical Organism Engineering and Material Science of Organism	120	8	0	2	130
	INTERDISCIPLINARY AREA Total			2,303	152	0	44	2,499
999	WIDE AREA Total			399	19	0	1	419
	Item n.a. Total			9,373	389	20	174	9,956
	Grand Total			28,265	1,256	33	385	29,939

Table 15. Number of Research Topics by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
211	ARTS • HUMANITIES		Philosophy	1,007	79	30	0	2	0	1,118
212			Chinese Philosophy	217	13	16	2	0	0	248
213			Indian Philosophy (inclu. Buddhist Studies)	405	63	5	0	0	19	492
214			Religion	515	73	6	3	0	1	598
215			Ethics	290	14	6	0	3	0	313
216			History of Philosophy	449	33	14	0	0	2	498
217			Aesthetics (inclu. Arts)	2,012	505	9	6	29	6	2,567
218			Art History	493	36	0	4	36	10	579
		Philosophy total	5,388	816	86	15	70	38	6,413	
221			Experimental Psychology	1,017	37	3	12	3	3	1,075
222			Educational and Social	3,154	477	6	16	39	2	3,694
223			Sociology	3,349	437	0	11	6	10	3,813
224			Education	2,958	591	36	23	91	21	3,720
225			Cultural Anthropology (inclu. Ethnology and Folklore)	911	85	0	44	8	3	1,051
		Psychology • Sociology • Education Cultural Anthropology total	11,389	1,627	45	106	147	39	13,353	
231			Japanese History	953	76	34	11	6	21	1,101
232			Oriental History	650	18	11	0	2	6	687
233			European History	827	58	12	0	2	3	902
234			Archaeology (inclu. Prehistory)	364	17	3	14	40	14	452
		History total	2,794	169	60	25	50	44	3,142	
241			Japanese Language	629	55	10	0	20	1	715
242			Japanese Literature	1,600	307	92	10	2	0	2,011
243			Chinese Language and Literature	611	30	13	0	0	0	654
244			English Language and Literature	3,577	535	132	0	1	0	4,245
245			French Language and Literature	933	49	17	0	0	0	999
246			German Language and Literature	856	10	11	0	0	0	877
247			Other Foreign Languages and Literatures	769	33	25	0	0	0	827
248			Linguistics and Phonetics	1,686	185	58	4	18	3	1,954
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	503	37	7	0	0	0	547
		Literature total	11,164	1,241	365	14	41	4	12,829	
	ARTS • HUMANITIES Total	30,735	3,853	556	160	308	125	35,737		
261	LAW	Basic Science of Law	557	13	4	3	0	0	577	
262		Public Law	680	30	3	0	0	0	713	
263		International Law	447	6	8	0	0	2	463	
264		Civil Law	1,070	35	0	1	0	5	1,111	
265		Social Law	285	12	2	0	0	0	299	
266		Criminal Law	283	11	0	0	0	3	297	
267		Politics	1,638	38	12	4	3	0	1,695	
	LAW Total	4,960	145	29	8	3	10	5,155		
271	ECONOMICS	General Theory of Economics	1,608	72	14	0	0	3	1,697	
272		Economical Statistics	338	4	0	0	0	0	342	
273		Economic Policy (inclu. Economic Condition)	1,994	75	9	3	0	14	2,095	
274		Economic History	667	25	3	3	3	3	704	
275		Public Finance, Money and Banking	857	34	0	0	0	0	891	
276		Commercial Science	711	61	5	0	0	0	777	
277		Business Administration	1,928	168	6	0	0	0	2,102	
278		Accounting	956	78	1	0	0	0	1,035	
	ECONOMICS Total	9,059	517	38	6	3	20	9,643		
301	SCIENCE	Algebra	550	7	43	0	0	0	600	
302		Geometry	475	8	62	0	0	3	548	
304		Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	773	27	57	14	0	0	871	
305		Basic Analysis	456	4	37	0	0	0	497	
306		Larger-area Analysis	248	1	14	0	0	0	263	
		Mathematics total	2,502	47	213	14	0	3	2,779	
311		Astronomy	279	7	16	54	18	0	374	
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	1,099	38	29	110	5	0	1,281	

Table 15. Number of Research Topics by Field of Specialization / by Institution Type (Japan)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	742	7	35	5	0	0	789
323			Solid-State Physics II (Magnetism, Metal Physics,	700	5	29	3	0	1	738
324			Physical Properties in General (inclu. Basic Theories)	492	5	35	16	0	0	548
325			Physics in General	491	10	21	30	0	1	553
			Physics total	3,524	65	149	164	5	2	3,909
331			Physics of Solid Earth	405	3	3	15	15	2	443
332			Meteorology, Oceanography and Hydrology	491	0	18	23	5	0	537
333			Aeronomy	144	2	6	6	15	0	173
334			Geology	330	2	1	0	4	8	345
335			Stratigraphy and Paleontology	165	3	0	6	5	4	183
336			Mineralogy, Petrology and Study of Mineral Deposit	348	2	0	1	6	0	357
337			Geochemistry	230	3	3	2	3	0	241
			Earth Science total	2,113	15	31	53	53	14	2,279
341			Physical Chemistry	972	15	21	40	3	0	1,051
342			Organic Chemistry	833	5	37	6	2	13	896
343			Inorganic Chemistry	491	7	18	7	3	0	526
344			Function, Properties and Materials in Chemistry	464	5	18	7	0	0	494
345			Substance Transformation	124	0	8	0	0	0	132
346			Separation, Refining and Identification	309	4	13	4	0	0	330
			Chemistry total	3,193	36	115	64	8	13	3,429
351			Genetics	341	7	0	23	3	6	380
352			Ecology	752	32	0	11	10	16	821
353			Plant Physiology	443	6	3	13	0	3	468
354			Morphology, Structure of Organism	263	8	6	13	5	4	299
355			Animal Physiology and	269	12	0	1	0	1	283
356			Morphology and Taxonomy	365	8	1	3	46	9	432
			Biology total	2,433	73	10	64	64	39	2,683
361			Physical Anthropology (inclu. Physiological Anthropology)	198	2	0	2	2	0	204
			SCIENCE Total	14,242	245	534	415	150	71	15,657
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	457	2	28	6	2	1	496
402			Surface Physics	287	2	13	2	0	0	304
403			Applied Optics and Quantum Optics	477	8	36	6	0	6	533
404			General Applied Physics	255	8	27	12	0	14	316
405			Fundamentals of Engineering	183	5	17	4	0	0	209
			Applied Physics·Fundamentals of Engineering total	1,659	25	121	30	2	21	1,858
411			Materials for Machines and Strength of Materials	886	12	120	4	0	3	1,025
412			Workshop Processes and Production Engineering	635	8	107	1	0	0	751
413			Design Engineering, Machine Elements and Tribology	409	26	59	3	0	5	502
414			Fluid Mechanics	792	14	127	0	10	0	943
415			Heat Engineering	778	21	121	8	0	0	928
416			Mechanics and Control Engineering	557	13	122	0	5	0	697
417			Intelligent Mechanics and Machine System	695	11	61	5	2	0	774
			Machine Engineering total	4,752	105	717	21	17	8	5,620
421			Electric Power Engineering and Electric Machinery	716	16	143	10	0	0	885
422			Electronic and Electric Materials Engineering	812	11	85	3	0	5	916
423			Electron Devices and Apparatus Engineering	855	9	81	1	3	0	949
424			Information and Communication Engineering	1,562	35	178	20	6	2	1,803

Table 15. Number of Research Topics by Field of Specialization / by Institution Type (Japan)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total	
425	E N G I N E E R I N G		System Engineering	353	7	18	2	5	0	385	
427			Electronic Measurements	582	8	81	2	0	1	674	
428			Control Engineering	574	8	86	3	0	3	674	
			Electric and Electronic Engineering	5,454	94	672	41	14	11	6,286	
431			Construction Materials and Dynamics in General Civil Engineering	359	0	48	0	0	0	407	
432			Structural Engineering and Seismology	507	16	58	0	0	0	58	
433			Ground Engineering	507	1	54	3	0	2	567	
434			Hydraulics and River Engineering	535	4	58	2	0	4	603	
435			Traffic Engineering and Regional Planning	443	12	40	0	0	0	495	
436			Civil Environmental System	408	6	45	0	0	0	459	
			Civil Engineering total	2,759	39	303	5	0	6	3,112	
441		N		Building Structure and Materials	832	13	36	0	1	2	884
442				Building Science and Building Equipment	463	22	27	0	0	6	518
443				City Planning and Building Planning	1,213	62	65	3	0	2	1,345
444		Architectural History and Design		510	49	23	0	8	0	590	
		Architecture total	3,018	146	151	3	9	10	3,337		
451		N		Physical Metallurgy	331	3	29	0	0	6	369
452				Inorganic Materials and	577	3	45	1	0	0	626
453		E		Composed Materials and Properties	182	3	19	0	1	0	205
454		E		Structural and Functional Materials	428	8	24	0	0	4	464
455		Metallurgy and Material		476	10	47	0	0	1	534	
456		Metal Productive Engineering		223	0	14	0	0	0	237	
		I		Material Engineering total	2,217	27	178	1	1	11	2,435
461		N G		Chemical Engineering in General	395	0	38	0	0	0	433
462				Reaction and Separation Engineering	249	0	7	0	0	0	256
463				Catalyst and Chemical Process	239	4	6	0	0	0	249
464				Bioengineering	471	3	23	0	0	4	501
465				Industrial Analytical Chemistry	236	3	17	0	0	0	256
			Process Engineering total	1,590	10	91	0	0	4	1,695	
471				Industrial Physical Chemistry	348	0	14	0	0	0	362
472	Industrial Inorganic Chemistry			194	1	19	0	0	0	214	
473	Industrial Organic Chemistry			145	7	16	0	0	0	168	
474	Synthetic Chemistry			400	0	24	0	0	0	424	
475	Polymer Synthesis			366	2	24	1	0	1	394	
476	Polymer Structure and Property (inclu. Fiber)			390	32	10	1	2	1	436	
	Industrial Chemistry total	1,843	42	107	2	2	2	1,998			
481			Aeronautics	232	0	9	0	35	0	276	
482			Ship Engineering	199	0	31	0	0	0	230	
483			Marine Engineering	86	0	3	0	0	0	89	
484			Resource Development Engineering	197	0	13	0	0	0	210	
			Synthetic Engineering total	714	0	56	0	35	0	805	
	ENGINEERING Total			24,006	488	2,396	103	80	73	27,146	
501	A G R I C U L T U R E		Plant Breeding	233	9	2	0	0	3	247	
502			Crop Science	221	7	3	0	0	3	234	
503			Horticulture and Landscape Architecture	520	40	1	0	3	3	567	
504			Plant Protection	263	20	0	0	0	1	284	
505			Sericultural Science and Economic Entomology	105	2	0	0	0	14	121	
			Agriculture total	1,342	78	6	0	3	24	1,453	
511				Plant Fertilizer and Manure and Soil Science	264	16	1	0	1	0	282
512				Applied Microbiochemistry and Applied Biochemistry	766	35	18	2	0	7	828
513				Biological Productive Chemistry and Bioorganic Chemistry	244	11	3	0	0	1	259
514				Food Science and Nutritional Chemistry	811	258	8	0	0	4	1,081

Table 15. Number of Research Topics by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
	A		Agricultural Chemistry total	2,085	320	30	2	1	12	2,450
521			Forestry	546	4	0	7	0	0	557
522	G		Wood Science	323	3	2	0	0	0	328
			Forestry total	869	7	2	7	0	0	885
531	R		Fisheries in General	579	0	0	2	0	3	584
532			Fisheries Chemistry	197	7	4	0	0	1	209
			Fisheries total	776	7	4	2	0	4	793
541	I		Agricultural Economics	501	22	0	2	0	3	528
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	345	22	2	1	0	0	370
552	U		Agricultural Machinery	241	19	2	0	0	0	262
553	L		Biological Environment	110	4	2	0	0	1	117
			Agricultural Engineering total	696	45	6	1	0	1	749
561	T		Animal Science and Grassland Science	266	13	0	0	0	0	279
562	U		Applied Animal Science	259	12	0	0	0	2	273
563	R		Basic Veterinary Medicine and Basic Animal Science	402	8	0	2	3	13	428
564			Applied Veterinary Medicine	411	3	0	0	0	10	424
	E		Animal Science·Veterinary Medicine total	1,338	36	0	2	3	25	1,404
571			Biological Resource Science	137	0	0	0	0	0	137
572			Applied Molecular Cell Biology	111	1	8	0	0	0	120
			Interdisciplinary Agricultural Science total	248	1	8	0	0	0	257
			AGRICULTURE Total	7,855	516	56	16	7	69	8,519
601			Anatomy in General (inclu. Histology, Embryology)	624	22	0	2	0	2	650
602			Physiology in General	625	22	0	17	0	0	664
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	451	46	5	2	0	0	504
604			Pharmacology in General	510	13	0	3	0	0	526
605			Medical Chemistry in General	440	14	0	0	0	1	455
606			Pathological Medical Chemistry	253	9	0	0	0	3	265
			Physiology total	2,903	126	5	24	0	6	3,064
611	M		Hominal Pathology	668	18	0	0	0	7	693
612	E		Experimental Pathology	328	7	0	0	0	10	345
613	D		Parasitology (inclu. Medical Zoology)	264	16	0	0	0	0	280
614			Bacteriology (inclu. Eumycetes)	455	26	2	0	0	7	490
615	I		Virology	286	2	0	0	0	12	300
616			Immunology	521	11	0	0	0	13	545
			Pathology total	2,522	80	2	0	0	49	2,653
621	C		Hygiene	438	22	0	0	0	18	478
622	I		Public Health and Health Science	1,212	132	3	0	1	6	1,354
623			Legal Medicine	361	2	0	0	0	0	363
			Social Medicine total	2,011	156	3	0	1	24	2,195
631	N		Internal Medicine in General	762	21	0	0	0	2	785
632	E		Gastroenterology	840	2	0	0	0	6	848
633			Internal Medicine Respiratory System	426	2	0	0	0	4	432
634			Neurological Medicine	558	1	0	3	0	0	562
635			Cardioangiopathy	961	6	0	0	0	2	969
636			Pediatrics	893	16	0	0	0	2	911
637			Dermatology	439	2	0	0	0	0	441
638			Radiology	916	28	0	1	0	8	953
639			Neuropsychiatry	812	21	0	0	3	0	836
641			Hematology	568	6	0	0	0	4	578
642			Internal Medicine of Kidney	358	10	0	0	0	4	372
643			Embryology and Newborn	61	0	0	0	0	0	61
644			Endocrinology	321	0	0	0	0	0	321
645			Metabolic Science	343	1	0	0	0	1	345
			Internal Medicine total	8,258	116	0	4	3	33	8,414
651			Surgery in General	682	4	0	0	0	0	686
652			Gastroenterological Surgery	718	0	0	0	0	7	725
653			Thoracic Surgery	475	0	0	0	0	4	479

Table 15. Number of Research Topics by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
654	M		Neurosurgery	590	0	0	0	0	0	590
655			Orthopedic Surgery	1,066	14	0	0	0	0	1,080
656			Anesthesiology and Rescue Medicine	726	2	0	0	0	2	730
657			Urology	469	0	0	0	0	4	473
658			Obstetrics and Gynecology	662	9	0	0	0	3	674
659			Oto-rhino-laryngology	464	0	0	0	0	1	465
660			Ophthalmology	480	0	0	0	0	2	482
661			Pediatric Surgery	139	1	0	0	0	0	140
662			Formative Surgery	138	0	0	0	0	0	138
			Surgery total	6,609	30	0	0	0	23	6,662
671	E		Oral Anatomy and Morphological Basic Dentistry	517	6	0	0	0	0	523
672	D		Functional Basic Dentistry	382	7	0	0	0	0	389
673	I		Morbid Dentistry (inclu. Dental Radiology)	381	0	0	0	0	0	381
674	C		Conservative Dentistry	598	24	0	0	0	0	622
675			Prosthodontics and Dental Technology	921	12	0	0	0	0	933
676	I		Oral Surgery	1,044	6	0	0	0	2	1,052
677	N		Orthodontics, Pedodontics and Social Dentistry	960	30	0	0	0	0	990
678			Periodontological Dentistry	221	5	0	0	0	0	226
	E		Dentistry total	5,024	90	0	0	0	2	5,116
681			Chemical Pharmaceutics	833	3	1	0	0	9	846
682			Physical Pharmaceutics	393	2	0	0	0	0	395
683			Biopharmaceutics	961	6	3	0	0	7	977
684			Molecular Pharmaceutics	297	3	0	0	0	1	301
685			Environmental Pharmaceutics	121	0	3	0	0	0	124
			Pharmaceutics total	2,605	14	7	0	0	17	2,643
691			Medical Sociology	472	12	3	0	0	2	489
692			Human Genetics	254	15	0	0	0	4	273
693			Applied Pharmacology and Medical Pharmacology	300	0	0	0	0	0	300
694			Pathological Examination	297	33	0	0	0	0	330
696			Science of Basic and Local Nursing	963	185	3	0	0	0	1,151
697			Science of Clinical Nursing	1,121	149	0	0	0	0	1,270
			Medicine in General total	3,407	394	6	0	0	6	3,813
			MEDICINE Total	33,339	1,006	23	28	4	160	34,560
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	248	3	7	6	13	0	277
703			Physical Education	2,387	328	101	0	0	0	2,816
704			Human Geography	483	12	14	2	2	11	524
705			Physical Geography	286	5	4	1	0	0	296
			Geography total	769	17	18	3	2	11	820
706			Home Science (inclu. Cloth/Living Environments)	783	439	3	2	0	0	1,227
707			Food Culture	464	388	0	0	0	0	852
			Domestic Science total	1,247	827	3	2	0	0	2,079
708			Science of Cultural Property	52	2	1	6	6	0	67
711			Science Education	381	40	39	0	17	0	477
712	A R E A		Educational Engineering	544	97	50	28	8	0	727
713			Curriculum Studies	1,588	380	89	0	17	0	2,074
714			Japanese Language Education	428	10	0	0	9	17	464
			Science Education·Curriculum Education total	2,941	527	178	28	51	17	3,742
721			Statistics	266	5	2	36	0	0	309
731			Computer Science	1,448	62	102	12	2	0	1,626
732			Intelligent Informatics	1,419	64	94	30	4	0	1,611
733			Study of Information System (Inclu. Library and Information Science)	1,029	122	32	39	5	11	1,238
			Information Science total	3,896	248	228	81	11	11	4,475
741			Social System Engineering	748	23	12	0	0	1	784
751	I		Natural Disaster Science	101	2	5	0	0	3	111
761			Plasma Science and Technology	353	2	13	47	0	3	418
772			Nuclear Fusion	119	3	3	34	0	3	162

Table 15. Number of Research Topics by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total	
773	N T E		Energy Science General	190	2	10	0	4	0	206	
774			Nuclear Power Science	327	1	4	7	0	0	339	
			Energy total	636	6	17	41	4	3	707	
801	R D I		Environmental Dynamic Analysis	405	14	6	13	0	0	438	
802			Environmental Influence Assessment (inclu. Radiobiology)	366	9	12	3	0	7	397	
803			Environmental Preservation	573	20	18	0	0	4	615	
	S C I		Environmental Science total	1,344	43	36	16	0	11	1,450	
811			Biological Organic Chemistry	316	0	4	0	0	4	324	
812			Structured Biochemistry	302	5	1	2	0	2	312	
813	P L I		Functional Biochemistry	435	16	3	0	0	0	454	
			Biological Chemistry total	1,053	21	8	2	0	6	1,090	
821			Biophysics	401	3	6	18	0	0	428	
822	A R Y		Molecular Biology	886	20	2	23	0	10	941	
823			Cell Biology	569	6	0	7	1	17	600	
824			Developmental Biology	275	0	2	15	0	3	295	
			Basic Biology total	2,131	29	10	63	1	30	2,264	
831			A R E A	Neuroanatomy and Neuropathology	252	2	0	2	0	0	256
832				Neurochemistry and Neuropharmacology	287	1	0	0	0	2	290
833	Neuro Science in General	520		15	0	20	0	1	556		
834	Neuro and Muscular Physiology	361		11	0	7	0	0	379		
	Neuro Science (inclu. Brain Science) total	1,420		29	0	29	0	3	1,481		
841			Laboratory Animal Science	136	0	1	1	0	25	163	
851			Medical Organism Engineering and Material Science of Organism	781	23	36	0	0	4	844	
	INTERDISCIPLINARY AREA Total			20,509	2,135	676	361	88	128	23,897	
999	WIDE AREA Total			2,285	311	41	17	8	11	2,673	
	Item n.a. Total			61,493	3,260	2,505	577	404	348	68,587	
	Grand Total			208,483	12,476	6,854	1,691	1,055	1,015	231,574	

Table 16. Number of Research Topics by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total	
211	ARTS • HUMANITIES		Philosophy	353	0	26	0	2	381	
212			Chinese Philosophy	82	0	13	2	0	97	
213			Indian Philosophy (inclu. Buddhist Studies)	59	0	5	0	0	64	
214			Religion	65	0	5	3	0	73	
215			Ethics	136	0	6	0	3	145	
216			History of Philosophy	123	0	14	0	0	137	
217			Aesthetics (inclu. Arts)	559	16	0	6	29	610	
218			Art History	183	3	0	4	36	226	
			Philosophy total	1,560	19	69	15	70	1,733	
221			Experimental Psychology	425	0	3	12	3	443	
222			Educational and Social	1,053	1	6	16	39	1,115	
223			Sociology	619	3	0	11	6	639	
224			Education	1,307	3	33	23	91	1,457	
225			Cultural Anthropology (inclu. Ethnology and Folklore)	317	0	0	44	8	369	
		Psychology • Sociology • Education Cultural Anthropology total			3,721	7	42	106	147	4,023
231			Japanese History	352	0	27	11	6	396	
232			Oriental History	249	0	9	0	2	260	
233			European History	268	0	12	0	2	282	
234			Archaeology (inclu. Prehistory)	158	0	3	14	40	215	
			History total	1,027	0	51	25	50	1,153	
241			Japanese Language	230	0	10	0	20	260	
242			Japanese Literature	338	0	85	10	2	435	
243			Chinese Language and Literature	190	4	13	0	0	207	
244			English Language and Literature	809	3	123	0	1	936	
245			French Language and Literature	288	0	17	0	0	305	
246			German Language and Literature	308	0	10	0	0	318	
247			Other Foreign Languages and Literatures	266	0	25	0	0	291	
248			Linguistics and Phonetics	505	3	49	4	18	579	
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	152	0	7	0	0	159	
			Literature total	3,086	10	339	14	41	3,490	
	ARTS • HUMANITIES Total			9,394	36	501	160	308	10,399	
261	LAW	Basic Science of Law	191	0	4	3	0	198		
262		Public Law	191	0	3	0	0	194		
263		International Law	82	0	8	0	0	90		
264		Civil Law	318	2	0	1	0	321		
265		Social Law	95	0	2	0	0	97		
266		Criminal Law	78	0	0	0	0	78		
267		Politics	454	0	10	4	3	471		
	LAW Total			1,409	2	27	8	3	1,449	
271	ECONOMICS	General Theory of Economics	451	2	14	0	0	467		
272		Economical Statistics	106	0	0	0	0	106		
273		Economic Policy (inclu. Economic Condition)	492	0	7	3	0	502		
274		Economic History	184	0	0	3	3	190		
275		Public Finance, Money and Banking	189	0	0	0	0	189		
276		Commercial Science	73	0	5	0	0	78		
277		Business Administration	314	3	6	0	0	323		
278		Accounting	166	4	1	0	0	171		
	ECONOMICS Total			1,975	9	33	6	3	2,026	
301	SCIENCE		Algebra	297	0	40	0	0	337	
302			Geometry	316	0	54	0	0	370	
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	395	0	43	14	0	452	
305			Basic Analysis	260	0	35	0	0	295	
306			Larger-area Analysis	153	0	14	0	0	167	
		Mathematics total	1,421	0	186	14	0	1,621		
311		Astronomy		219	0	13	54	18	304	
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	683	0	19	110	5	817		

Table 16. Number of Research Topics by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	477	0	30	5	0	512
323			Solid-State Physics II (Magnetism, Metal Physics,	494	0	25	3	0	522
324			Physical Properties in General (inclu. Basic Theories)	308	0	26	16	0	350
325			Physics in General	296	0	18	30	0	344
			Physics total	2,258	0	118	164	5	2,545
331			Physics of Solid Earth	336	0	3	15	15	369
332			Meteorology, Oceanography and Hydrology	360	0	17	23	5	405
333			Aeronomy	102	0	6	6	15	129
334			Geology	250	0	1	0	4	255
335			Stratigraphy and Paleontology	137	0	0	6	5	148
336			Mineralogy, Petrology and Study of Mineral Deposit	297	0	0	1	6	304
337			Geochemistry	174	0	3	2	3	182
			Earth Science total	1,656	0	30	53	53	1,792
341			Physical Chemistry	648	0	17	40	3	708
342			Organic Chemistry	541	0	30	6	2	579
343			Inorganic Chemistry	312	0	17	7	3	339
344			Function, Properties and Materials in Chemistry	308	0	18	7	0	333
345			Substance Transformation	85	0	6	0	0	91
346			Separation, Refining and Identification	171	0	13	4	0	188
			Chemistry total	2,065	0	101	64	8	2,238
351			Genetics	250	0	0	23	3	276
352			Ecology	515	0	0	11	10	536
353			Plant Physiology	281	0	3	13	0	297
354			Morphology, Structure of Organism	165	0	6	13	5	189
355			Animal Physiology and	181	0	0	1	0	182
356			Morphology and Taxonomy	257	0	1	3	46	307
			Biology total	1,649	0	10	64	64	1,787
361			Physical Anthropology (inclu. Physiological Anthropology)	99	0	0	2	2	103
	SCIENCE Total			9,367	0	458	415	150	10,390
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	302	0	21	6	2	331
402			Surface Physics	194	0	13	2	0	209
403			Applied Optics and Quantum Optics	302	0	35	6	0	343
404			General Applied Physics	169	0	23	12	0	204
405			Fundamentals of Engineering	104	0	15	4	0	123
			Applied Physics-Fundamentals of Engineering total	1,071	0	107	30	2	1,210
411			Materials for Machines and Strength of Materials	498	0	109	4	0	611
412			Workshop Processes and Production Engineering	361	0	86	1	0	448
413			Design Engineering, Machine Elements and Tribology	236	3	47	3	0	289
414			Fluid Mechanics	442	1	119	0	10	572
415			Heat Engineering	502	3	108	8	0	621
416			Mechanics and Control Engineering	322	0	108	0	5	435
417			Intelligent Mechanics and Machine System	425	0	59	5	2	491
			Machine Engineering total	2,786	7	636	21	17	3,467
421			Electric Power Engineering and Electric Machinery	349	0	123	10	0	482
422			Electronic and Electric Materials Engineering	490	0	85	3	0	578
423			Electron Devices and Apparatus Engineering	474	2	78	1	3	558
424			Information and Communication Engineering	816	2	155	20	6	999

Table 16. Number of Research Topics by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
425	E		System Engineering	178	0	18	2	5	203
427			Electronic Measurements	303	0	72	2	0	377
428			Control Engineering	367	0	73	3	0	443
			Electric and Electronic Engineering	2,977	4	604	41	14	3,640
431			Construction Materials and Dynamics in General Civil Engineering	183	0	45	0	0	228
432			Structural Engineering and Seismology	279	0	47	0	0	326
433			Ground Engineering	329	0	54	3	0	386
434			Hydraulics and River Engineering	382	0	50	2	0	434
435			Traffic Engineering and Regional Planning	241	0	37	0	0	278
436			Civil Environmental System	257	0	44	0	0	301
			Civil Engineering total	1,671	0	277	5	0	1,953
441		N	Building Structure and Materials	374	0	36	0	1	411
442			Building Science and Building Equipment	194	3	24	0	0	221
443		G	City Planning and Building Planning	462	1	62	3	0	528
444		I	Architectural History and Design	201	3	23	0	8	235
			Architecture total	1,231	7	145	3	9	1,395
451		N	Physical Metallurgy	263	0	29	0	0	292
452			Inorganic Materials and	421	0	44	1	0	466
453		E	Composed Materials and Properties	120	0	17	0	1	138
454		E	Structural and Functional Materials	324	0	21	0	0	345
455		R	Metallurgy and Material	342	3	43	0	0	388
456			Metal Productive Engineering	174	0	11	0	0	185
			Material Engineering total	1,644	3	165	1	1	1,814
461		N	Chemical Engineering in General	305	0	32	0	0	337
462			Reaction and Separation Engineering	196	0	7	0	0	203
463			Catalyst and Chemical Process	181	1	6	0	0	188
464			Bioengineering	326	0	23	0	0	349
465			Industrial Analytical Chemistry	158	0	17	0	0	175
			Process Engineering total	1,166	1	85	0	0	1,252
471			Industrial Physical Chemistry	237	0	10	0	0	247
472			Industrial Inorganic Chemistry	143	0	16	0	0	159
473			Industrial Organic Chemistry	98	0	13	0	0	111
474			Synthetic Chemistry	310	0	23	0	0	333
475			Polymer Synthesis	270	0	23	1	0	294
476			Polymer Structure and Property (inclu. Fiber)	277	0	9	1	2	289
			Industrial Chemistry total	1,335	0	94	2	2	1,433
481			Aeronautics	157	0	5	0	35	197
482			Ship Engineering	161	0	29	0	0	190
483			Marine Engineering	52	0	3	0	0	55
484			Resource Development Engineering	170	0	8	0	0	178
			Synthetic Engineering total	540	0	45	0	35	620
			ENGINEERING Total	14,421	22	2,158	103	80	16,784
501	A G R I C U L T U R E		Plant Breeding	162	0	2	0	0	164
502			Crop Science	181	0	3	0	0	184
503			Horticulture and Landscape Architecture	300	0	0	0	3	303
504			Plant Protection	202	0	0	0	0	202
505			Sericultural Science and Economic Entomology	80	0	0	0	0	80
			Agriculture total	925	0	5	0	3	933
511			Plant Fertilizer and Manure and Soil Science	215	0	1	0	1	217
512			Applied Microbiochemistry and Applied Biochemistry	456	0	18	2	0	476
513			Biological Productive Chemistry and Bioorganic Chemistry	168	0	3	0	0	171
514			Food Science and Nutritional Chemistry	355	0	8	0	0	363

Table 16. Number of Research Topics by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
	A		Agricultural Chemistry total	1,194	0	30	2	1	1,227
521			Forestry	469	0	0	7	0	476
522	G		Wood Science	278	3	2	0	0	283
			Forestry total	747	3	2	7	0	759
531	R		Fisheries in General	440	0	0	2	0	442
532			Fisheries Chemistry	150	0	4	0	0	154
			Fisheries total	590	0	4	2	0	596
541	I		Agricultural Economics	273	0	0	2	0	275
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	287	0	2	1	0	290
552	U		Agricultural Machinery	207	0	2	0	0	209
553	L		Biological Environment	84	0	0	0	0	84
			Agricultural Engineering total	578	0	4	1	0	583
561	T		Animal Science and Grassland Science	185	0	0	0	0	185
562	U		Applied Animal Science	212	0	0	0	0	212
563	R		Basic Veterinary Medicine and Basic Animal Science	240	0	0	2	3	245
564			Applied Veterinary Medicine	206	0	0	0	0	206
	E		Animal Science-Veterinary Medicine total	843	0	0	2	3	848
571			Biological Resource Science	100	0	0	0	0	100
572			Applied Molecular Cell Biology	83	0	8	0	0	91
			Interdisciplinary Agricultural Science total	183	0	8	0	0	191
			AGRICULTURE Total	5,333	3	53	16	7	5,412
601			Anatomy in General (inclu. Histology, Embryology)	302	2	0	2	0	306
602			Physiology in General	298	0	0	17	0	315
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	164	0	5	2	0	171
604			Pharmacology in General	223	0	0	3	0	226
605			Medical Chemistry in General	240	2	0	0	0	242
606			Pathological Medical Chemistry	143	0	0	0	0	143
	M		Physiology total	1,370	4	5	24	0	1,403
611			Hominal Pathology	313	0	0	0	0	313
612	E		Experimental Pathology	191	0	0	0	0	191
613	D		Parasitology (inclu. Medical Zoology)	142	0	0	0	0	142
614			Bacteriology (inclu. Eumycetes)	219	4	2	0	0	225
615	I		Virology	198	0	0	0	0	198
616			Immunology	274	0	0	0	0	274
	C		Pathology total	1,337	4	2	0	0	1,343
621			Hygiene	168	0	0	0	0	168
622	I		Public Health and Health Science	504	7	3	0	1	515
623			Legal Medicine	172	0	0	0	0	172
	N		Social Medicine total	844	7	3	0	1	855
631			Internal Medicine in General	321	7	0	0	0	328
632	E		Gastroenterology	364	2	0	0	0	366
633			Internal Medicine Respiratory System	190	0	0	0	0	190
634			Neurological Medicine	273	1	0	3	0	277
635			Cardioangiopathy	433	0	0	0	0	433
636			Pediatrics	411	0	0	0	0	411
637			Dermatology	213	0	0	0	0	213
638			Radiology	516	3	0	1	0	520
639			Neuropsychiatry	364	0	0	0	3	367
641			Hematology	293	0	0	0	0	293
642			Internal Medicine of Kidney	147	3	0	0	0	150
643			Embryology and Newborn	23	0	0	0	0	23
644			Endocrinology	175	0	0	0	0	175
645			Metabolic Science	164	0	0	0	0	164
			Internal Medicine total	3,887	16	0	4	3	3,910
651			Surgery in General	272	0	0	0	0	272
652			Gastroenterological Surgery	347	0	0	0	0	347
653			Thoracic Surgery	197	0	0	0	0	197

Table 16. Number of Research Topics by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total	
654	M		Neurosurgery	261	0	0	0	0	261	
655			Orthopedic Surgery	503	0	0	0	0	503	
656			Anesthesiology and Rescue Medicine	387	0	0	0	0	387	
657			Urology	221	0	0	0	0	221	
658			Obstetrics and Gynecology	332	0	0	0	0	332	
659			Oto-rhino-laryngology	215	0	0	0	0	215	
660			Ophthalmology	227	0	0	0	0	227	
661			Pediatric Surgery	84	0	0	0	0	84	
662			Formative Surgery	43	0	0	0	0	43	
			Surgery total	3,089	0	0	0	0	3,089	
671	E		Oral Anatomy and Morphological Basic Dentistry	179	0	0	0	0	179	
672	D		Functional Basic Dentistry	142	0	0	0	0	142	
673	I		Morbid Dentistry (inclu. Dental Radiology)	149	0	0	0	0	149	
674	C		Conservative Dentistry	204	0	0	0	0	204	
675	I		Prosthodontics and Dental Technology	385	0	0	0	0	385	
676	I		Oral Surgery	484	0	0	0	0	484	
677	N		Orthodontics, Pedodontics and Social Dentistry	440	0	0	0	0	440	
678	E		Periodontological Dentistry	116	0	0	0	0	116	
	Dentistry total		2,099	0	0	0	0	2,099		
681			Chemical Pharmaceuticals	222	0	1	0	0	223	
682			Physical Pharmaceuticals	104	0	0	0	0	104	
683			Biopharmaceutics	283	0	3	0	0	286	
684			Molecular Pharmaceuticals	102	0	0	0	0	102	
685			Environmental Pharmaceuticals	26	0	3	0	0	29	
		Pharmaceutics total	737	0	7	0	0	744		
691			Medical Sociology	182	2	3	0	0	187	
692			Human Genetics	130	0	0	0	0	130	
693			Applied Pharmacology and Medical Pharmacology	113	0	0	0	0	113	
694			Pathological Examination	164	0	0	0	0	164	
696	Science of Basic and Local Nursing		376	2	3	0	0	381		
697	Science of Clinical Nursing		506	1	0	0	0	507		
	Medicine in General total	1,471	5	6	0	0	1,482			
	MEDICINE Total	14,834	36	23	28	4	14,925			
702	I N T E R D I S C I P L I N A R Y A R E A		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	98	0	7	6	13	124	
703			Physical Education	918	6	97	0	0	1,021	
704			Human Geography	227	0	12	2	2	243	
705			Physical Geography	163	0	2	1	0	166	
			Geography total	390	0	14	3	2	409	
706			Home Science(inclu. Cloth/Living Environments)	274	0	3	2	0	279	
707			Food Culture	91	0	0	0	0	91	
			Domestic Science total	365	0	3	2	0	370	
708			Science of Cultural Property	27	2	1	6	6	42	
711			Science Education	250	0	32	0	17	299	
712			Educational Engineering	183	3	41	28	8	263	
713			Curriculum Studies	1,030	6	83	0	17	1,136	
714			Japanese Language Education	207	0	0	0	9	216	
			Science Education·Curriculum Education total	1,670	9	156	28	51	1,914	
721			Statistics	115	0	2	36	0	153	
731			Computer Science	796	5	95	12	2	910	
732			Intelligent Informatics	781	5	82	30	4	902	
733			I	Study of Information System (Inclu. Library and Information Science)	353	5	31	39	5	433
				Information Science total	1,930	15	208	81	11	2,245
741	Social System Engineering	282		1	12	0	0	295		
751	Natural Disaster Science	65		0	2	0	0	67		
761	Plasma Science and Technology	271		0	13	47	0	331		
772	Nuclear Fusion	91		0	3	34	0	128		

Table 16. Number of Research Topics by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
773	N		Energy Science General	130	0	10	0	4	144
774			Nuclear Power Science	273	0	4	7	0	284
	E		Energy total	494	0	17	41	4	556
801	R		Environmental Dynamic Analysis	244	0	6	13	0	263
802			Environmental Influence Assessment (inclu. Radiobiology)	180	0	5	3	0	188
803			Environmental Preservation	297	0	18	0	0	315
			Environmental Science total	721	0	29	16	0	766
811	I		Biological Organic Chemistry	200	0	4	0	0	204
812			Structured Biochemistry	160	0	1	2	0	163
813			Functional Biochemistry	264	0	3	0	0	267
			Biological Chemistry total	624	0	8	2	0	634
821	N		Biophysics	247	0	5	18	0	270
822			Molecular Biology	571	0	2	23	0	596
823			Cell Biology	346	0	0	7	1	354
824			Developmental Biology	209	0	2	15	0	226
			Basic Biology total	1,373	0	9	63	1	1,446
831	A		Neuroanatomy and Neuropathology	135	1	0	2	0	138
832			Neurochemistry and Neuropharmacology	132	0	0	0	0	132
833			Neuro Science in General	308	2	0	20	0	330
834			Neuro and Muscular Physiology	184	2	0	7	0	193
			Neuro Science (inclu. Brain Science) total	759	5	0	29	0	793
841			Laboratory Animal Science	81	0	1	1	0	83
851			Medical Organism Engineering and Material Science of Organism	399	5	29	0	0	433
	INTERDISCIPLINARY AREA Total			10,582	43	608	361	88	11,682
999	WIDE AREA Total			871	19	33	17	8	948
	Item n.a. Total			30,429	42	2,320	577	404	33,772
	Grand Total			98,615	212	6,214	1,691	1,055	107,787

Table 17. Number of Research Topics by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
211	ARTS • HUMANITIES		Philosophy	59	5	4	68
212			Chinese Philosophy	13	7	3	23
213			Indian Philosophy (inclu. Buddhist Studies)	6	6	0	12
214			Religion	5	0	1	6
215			Ethics	12	0	0	12
216			History of Philosophy	38	2	0	40
217			Aesthetics (inclu. Arts)	158	31	9	198
218			Art History	37	3	0	40
			Philosophy total	328	54	17	399
221			Experimental Psychology	53	10	0	63
222			Educational and Social	141	36	0	177
223			Sociology	289	39	0	328
224			Education	135	50	2	187
225			Cultural Anthropology (inclu. Ethnology and Folklore)	46	6	0	52
			Psychology • Sociology • Education Cultural Anthropology total	664	141	2	807
231			Japanese History	41	6	4	51
232			Oriental History	32	2	2	36
233			European History	71	11	0	82
234			Archaeology (inclu. Prehistory)	7	0	0	7
			History total	151	19	6	176
241			Japanese Language	25	7	0	32
242			Japanese Literature	80	14	5	99
243			Chinese Language and Literature	32	5	0	37
244			English Language and Literature	187	51	9	247
245			French Language and Literature	59	3	0	62
246			German Language and Literature	51	0	1	52
247			Other Foreign Languages and Literatures	50	6	0	56
248			Linguistics and Phonetics	115	20	9	144
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	10	3	0	13
			Literature total	609	109	24	742
			ARTS • HUMANITIES Total	1,752	323	49	2,124
261	LAW		Basic Science of Law	28	2	0	30
262			Public Law	34	4	0	38
263			International Law	21	3	0	24
264			Civil Law	35	1	0	36
265			Social Law	20	3	0	23
266			Criminal Law	11	0	0	11
267			Politics	87	8	2	97
			LAW Total	236	21	2	259
271	ECONOMICS		General Theory of Economics	138	19	0	157
272			Economical Statistics	27	0	0	27
273			Economic Policy (inclu. Economic Condition)	161	18	2	181
274			Economic History	44	7	0	51
275			Public Finance, Money and Banking	61	8	0	69
276			Commercial Science	33	3	0	36
277			Business Administration	94	14	0	108
278			Accounting	63	6	0	69
			ECONOMICS Total	621	75	2	698
301	SCIENCE		Algebra	27	2	3	32
302			Geometry	23	0	8	31
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	45	2	11	58
305			Basic Analysis	27	0	2	29
306			Larger-area Analysis	15	0	0	15
			Mathematics total	137	4	24	165
311			Astronomy	2	0	3	5
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	60	1	5	66

Table 17. Number of Research Topics by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	51	3	2	56
323			Solid-State Physics II (Magnetism, Metal Physics,	43	0	4	47
324			Physical Properties in General (inclu. Basic Theories)	22	0	9	31
325			Physics in General	30	0	3	33
			Physics total	206	4	23	233
331			Physics of Solid Earth	9	0	0	9
332			Meteorology, Oceanography and Hydrology	18	0	0	18
333			Aeronomy	2	0	0	2
334			Geology	26	0	0	26
335			Stratigraphy and Paleontology	10	0	0	10
336			Mineralogy, Petrology and Study of Mineral Deposit	12	0	0	12
337			Geochemistry	8	0	0	8
			Earth Science total	85	0	0	85
341			Physical Chemistry	67	3	4	74
342			Organic Chemistry	55	0	7	62
343			Inorganic Chemistry	29	3	1	33
344			Function, Properties and Materials in Chemistry	20	1	0	21
345			Substance Transformation	6	0	2	8
346			Separation, Refining and Identification	29	0	0	29
			Chemistry total	206	7	14	227
351			Genetics	30	0	0	30
352			Ecology	46	4	0	50
353			Plant Physiology	77	0	0	77
354			Morphology, Structure of Organism	8	0	0	8
355			Animal Physiology and	16	3	0	19
356			Morphology and Taxonomy	24	3	0	27
			Biology total	201	10	0	211
361			Physical Anthropology (inclu. Physiological Anthropology)	16	0	0	16
			SCIENCE Total	853	25	64	942
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	34	0	6	40
402			Surface Physics	10	0	0	10
403			Applied Optics and Quantum Optics	26	0	1	27
404			General Applied Physics	14	0	4	18
405			Fundamentals of Engineering	8	0	2	10
			Applied Physics-Fundamentals of Engineering total	92	0	13	105
411			Materials for Machines and Strength of Materials	61	0	9	70
412			Workshop Processes and Production Engineering	30	2	16	48
413			Design Engineering, Machine Elements and Tribology	19	0	9	28
414			Fluid Mechanics	45	3	8	56
415			Heat Engineering	36	0	12	48
416			Mechanics and Control Engineering	19	0	11	30
417			Intelligent Mechanics and Machine System	35	0	2	37
			Machine Engineering total	245	5	67	317
421			Electric Power Engineering and Electric Machinery	29	0	17	46
422			Electronic and Electric Materials Engineering	25	0	0	25
423			Electron Devices and Apparatus Engineering	36	0	3	39
424			Information and Communication Engineering	117	1	18	136

Table 17. Number of Research Topics by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
425	E N G I N E E R I N G		System Engineering	16	0	0	16
427			Electronic Measurements	16	0	5	21
428			Control Engineering	49	0	9	58
			Electric and Electronic Engineering	288	1	52	341
431			Construction Materials and Dynamics in General Civil Engineering	11	0	3	14
432			Structural Engineering and Seismology	27	0	11	38
433			Ground Engineering	22	0	0	22
434			Hydraulics and River Engineering	8	0	8	16
435			Traffic Engineering and Regional Planning	17	0	2	19
436			Civil Environmental System	19	4	1	24
			Civil Engineering total	104	4	25	133
441		N	Building Structure and Materials	64	0	0	64
442			Building Science and Building Equipment	56	9	3	68
443			City Planning and Building Planning	81	11	3	95
444			Architectural History and Design	31	7	0	38
			Architecture total	232	27	6	265
451		N	Physical Metallurgy	12	0	0	12
452			Inorganic Materials and	9	0	1	10
453		E	Composed Materials and Properties	6	0	2	8
454			Structural and Functional Materials	16	0	3	19
455		R	Metallurgy and Material	12	0	4	16
456			Metal Productive Engineering	0	0	3	3
			Material Engineering total	55	0	13	68
461		I	Chemical Engineering in General	16	0	6	22
462			Reaction and Separation Engineering	15	0	0	15
463			Catalyst and Chemical Process	11	0	0	11
464			Bioengineering	33	0	0	33
465			Industrial Analytical Chemistry	9	0	0	9
			Process Engineering total	84	0	6	90
471			Industrial Physical Chemistry	33	0	4	37
472			Industrial Inorganic Chemistry	7	0	3	10
473			Industrial Organic Chemistry	4	0	3	7
474			Synthetic Chemistry	11	0	1	12
475			Polymer Synthesis	23	0	1	24
476			Polymer Structure and Property (inclu. Fiber)	23	9	1	33
			Industrial Chemistry total	101	9	13	123
481			Aeronautics	14	0	4	18
482			Ship Engineering	11	0	2	13
483			Marine Engineering	8	0	0	8
484			Resource Development Engineering	3	0	5	8
			Synthetic Engineering total	36	0	11	47
			ENGINEERING Total	1,237	46	206	1,489
501	A G R I C U L T U R E		Plant Breeding	30	9	0	39
502			Crop Science	11	5	0	16
503			Horticulture and Landscape Architecture	77	9	1	87
504			Plant Protection	15	12	0	27
505			Sericultural Science and Economic Entomology	5	0	0	5
			Agriculture total	138	35	1	174
511			Plant Fertilizer and Manure and Soil Science	18	8	0	26
512			Applied Microbiochemistry and Applied Biochemistry	52	5	0	57
513			Biological Productive Chemistry and Bioorganic Chemistry	24	3	0	27
514			Food Science and Nutritional Chemistry	100	25	0	125

Table 17. Number of Research Topics by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
	A		Agricultural Chemistry total	194	41	0	235
521			Forestry	27	1	0	28
522	G		Wood Science	18	0	0	18
			Forestry total	45	1	0	46
531	R		Fisheries in General	13	0	0	13
532			Fisheries Chemistry	0	2	0	2
			Fisheries total	13	2	0	15
541	I		Agricultural Economics	40	6	0	46
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	12	19	0	31
552	U		Agricultural Machinery	10	6	0	16
553	L		Biological Environment	10	3	0	13
			Agricultural Engineering total	32	28	0	60
561	T		Animal Science and Grassland Science	7	9	0	16
562	U		Applied Animal Science	6	12	0	18
563	R		Basic Veterinary Medicine and Basic Animal Science	28	1	0	29
564			Applied Veterinary Medicine	26	2	0	28
	E		Animal Science·Veterinary Medicine total	67	24	0	91
571			Biological Resource Science	9	0	0	9
572			Applied Molecular Cell Biology	6	0	0	6
			Interdisciplinary Agricultural Science total	15	0	0	15
			AGRICULTURE Total	544	137	1	682
601			Anatomy in General (inclu. Histology, Embryology)	52	8	0	60
602			Physiology in General	43	3	0	46
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	61	6	0	67
604			Pharmacology in General	45	0	0	45
605			Medical Chemistry in General	40	0	0	40
606			Pathological Medical Chemistry	28	0	0	28
	M		Physiology total	269	17	0	286
611			Hominal Pathology	52	3	0	55
612	E		Experimental Pathology	36	0	0	36
613	D		Parasitology (inclu. Medical Zoology)	31	4	0	35
614			Bacteriology (inclu. Eumycetes)	39	10	0	49
615	I		Virology	19	0	0	19
616			Immunology	22	4	0	26
			Pathology total	199	21	0	220
621	C		Hygiene	48	0	0	48
622	I		Public Health and Health Science	165	15	0	180
623			Legal Medicine	27	0	0	27
			Social Medicine total	240	15	0	255
631	N		Internal Medicine in General	76	6	0	82
632	E		Gastroenterology	99	0	0	99
633			Internal Medicine Respiratory System	52	0	0	52
634			Neurological Medicine	43	0	0	43
635			Cardioangiopathy	70	0	0	70
636			Pediatrics	91	0	0	91
637			Dermatology	53	0	0	53
638			Radiology	71	2	0	73
639			Neuropsychiatry	57	7	0	64
641			Hematology	33	3	0	36
642			Internal Medicine of Kidney	26	0	0	26
643			Embryology and Newborn	7	0	0	7
644			Endocrinology	15	0	0	15
645			Metabolic Science	28	1	0	29
			Internal Medicine total	721	19	0	740
651			Surgery in General	52	4	0	56
652			Gastroenterological Surgery	89	0	0	89
653			Thoracic Surgery	26	0	0	26

Table 17. Number of Research Topics by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
654	M		Neurosurgery	50	0	0	50
655			Orthopedic Surgery	147	0	0	147
656			Anesthesiology and Rescue Medicine	102	2	0	104
657			Urology	60	0	0	60
658			Obstetrics and Gynecology	61	6	0	67
659			Oto-rhino-laryngology	60	0	0	60
660			Ophthalmology	47	0	0	47
661			Pediatric Surgery	10	0	0	10
662			Formative Surgery	3	0	0	3
			Surgery total	707	12	0	719
671	E		Oral Anatomy and Morphological Basic Dentistry	23	0	0	23
672	D		Functional Basic Dentistry	15	0	0	15
673	I		Morbid Dentistry (inclu. Dental Radiology)	10	0	0	10
674	C		Conservative Dentistry	16	3	0	19
675			Prosthodontics and Dental Technology	12	0	0	12
676	I		Oral Surgery	55	0	0	55
677	N		Orthodontics, Pedodontics and Social Dentistry	11	9	0	20
678	E		Periodontological Dentistry	3	1	0	4
			Dentistry total	145	13	0	158
681			Chemical Pharmaceutics	37	0	0	37
682			Physical Pharmaceutics	25	0	0	25
683			Biopharmaceutics	62	3	0	65
684			Molecular Pharmaceutics	12	0	0	12
685			Environmental Pharmaceutics	15	0	0	15
			Pharmaceutics total	151	3	0	154
691			Medical Sociology	54	6	0	60
692			Human Genetics	17	0	0	17
693			Applied Pharmacology and Medical Pharmacology	5	0	0	5
694			Pathological Examination	16	11	0	27
696			Science of Basic and Local Nursing	306	83	0	389
697			Science of Clinical Nursing	339	87	0	426
			Medicine in General total	737	187	0	924
			MEDICINE Total	3,169	287	0	3,456
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	13	0	0	13
703			Physical Education	142	20	4	166
704			Human Geography	36	0	2	38
705			Physical Geography	10	0	2	12
			Geography total	46	0	4	50
706			Home Science(inclu. Cloth/Living Environments)	29	42	0	71
707			Food Culture	57	41	0	98
			Domestic Science total	86	83	0	169
708			Science of Cultural Property	5	0	0	5
711			Science Education	0	0	6	6
712	A R E A		Educational Engineering	27	4	5	36
713			Curriculum Studies	31	32	4	67
714			Japanese Language Education	7	0	0	7
			Science Education·Curriculum Education total	65	36	15	116
721			Statistics	15	2	0	17
731			Computer Science	78	1	2	81
732			Intelligent Informatics	98	3	7	108
733			Study of Information System (Inclu. Library and Information Science)	53	12	0	65
			Information Science total	229	16	9	254
741	I		Social System Engineering	50	9	0	59
751			Natural Disaster Science	9	0	3	12
761			Plasma Science and Technology	11	0	0	11
772			Nuclear Fusion	2	0	0	2

Table 17. Number of Research Topics by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
773	N T		Energy Science General	12	0	0	12
774			Nuclear Power Science	2	0	0	2
	E		Energy total	16	0	0	16
801	R D I S C		Environmental Dynamic Analysis	21	5	0	26
802			Environmental Influence Assessment (inclu. Radiobiology)	42	2	3	47
803			Environmental Preservation	45	3	0	48
			Environmental Science total	108	10	3	121
811	I P L		Biological Organic Chemistry	30	0	0	30
812			Structured Biochemistry	30	1	0	31
813			Functional Biochemistry	32	6	0	38
			Biological Chemistry total	92	7	0	99
821	N A R Y		Biophysics	38	0	1	39
822			Molecular Biology	57	4	0	61
823			Cell Biology	55	0	0	55
824			Developmental Biology	19	0	0	19
			Basic Biology total	169	4	1	174
831	A R E A		Neuroanatomy and Neuropathology	31	0	0	31
832			Neurochemistry and Neuropharmacology	37	0	0	37
833			Neuro Science in General	42	0	0	42
834			Neuro and Muscular Physiology	35	0	0	35
			Neuro Science (inclu. Brain Science) total	145	0	0	145
841			Laboratory Animal Science	16	0	0	16
851			Medical Organism Engineering and Material Science of Organism	39	1	7	47
			INTERDISCIPLINARY AREA Total	1,256	188	46	1,490
999			WIDE AREA Total	140	20	5	165
			Item n.a. Total	4,287	396	128	4,811
			Grand Total	14,095	1,518	503	16,116

Table 18. Number of Research Topics by Field of Specialization / by Institution Type (Private Institutions)

Code	Subj ect	Subd ivision	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total	
211	ARTS • HUMANITIES		Philosophy	595	74	0	0	669	
212			Chinese Philosophy	122	6	0	0	128	
213			Indian Philosophy (inclu. Buddhist Studies)	340	57	0	19	416	
214			Religion	445	73	0	1	519	
215			Ethics	142	14	0	0	156	
216			History of Philosophy	288	31	0	2	321	
217			Aesthetics (inclu. Arts)	1,295	458	0	6	1,759	
218			Art History	273	30	0	10	313	
		Philosophy total	3,500	743	0	38	4,281		
221			Experimental Psychology	539	27	0	3	569	
222			Educational and Social	1,960	440	0	2	2,402	
223			Sociology	2,441	395	0	10	2,846	
224			Education	1,516	538	1	21	2,076	
225			Cultural Anthropology (inclu. Ethnology and Folklore)	548	79	0	3	630	
		Psychology • Sociology • Education Cultural Anthropology total			7,004	1,479	1	39	8,523
231			Japanese History	560	70	3	21	654	
232			Oriental History	369	16	0	6	391	
233			European History	488	47	0	3	538	
234			Archaeology (inclu. Prehistory)	199	17	0	14	230	
		History total			1,616	150	3	44	1,813
241			Japanese Language	374	48	0	1	423	
242			Japanese Literature	1,182	293	2	0	1,477	
243			Chinese Language and Literature	389	21	0	0	410	
244			English Language and Literature	2,581	481	0	0	3,062	
245			French Language and Literature	586	46	0	0	632	
246			German Language and Literature	497	10	0	0	507	
247			Other Foreign Languages and Literatures	453	27	0	0	480	
248			Linguistics and Phonetics	1,066	162	0	3	1,231	
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	341	34	0	0	375	
		Literature total			7,469	1,122	2	4	8,597
	ARTS•HUMANITIES Total			19,589	3,494	6	125	23,214	
261	LAW		Basic Science of Law	338	11	0	0	349	
262			Public Law	455	26	0	0	481	
263			International Law	344	3	0	2	349	
264			Civil Law	717	32	0	5	754	
265			Social Law	170	9	0	0	179	
266			Criminal Law	194	11	0	3	208	
267			Politics	1,097	30	0	0	1,127	
	LAW Total			3,315	122	0	10	3,447	
271	ECONOMICS		General Theory of Economics	1,019	51	0	3	1,073	
272			Economical Statistics	205	4	0	0	209	
273			Economic Policy (inclu. Economic Condition)	1,341	57	0	14	1,412	
274			Economic History	439	18	3	3	463	
275			Public Finance, Money and Banking	607	26	0	0	633	
276			Commercial Science	605	58	0	0	663	
277			Business Administration	1,520	151	0	0	1,671	
278			Accounting	727	68	0	0	795	
	ECONOMICS Total			6,463	433	3	20	6,919	
301	SCIENCE		Algebra	226	5	0	0	231	
302			Geometry	136	8	0	3	147	
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	333	25	3	0	361	
305			Basic Analysis	169	4	0	0	173	
306			Larger-area Analysis	80	1	0	0	81	
		Mathematics total			944	43	3	3	993
311		Astronomy			58	7	0	0	65
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	356	37	5	0	398	

Table 18. Number of Research Topics by Field of Specialization / by Institution Type (Private Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	214	4	3	0	221
323			Solid-State Physics II (Magnetism, Metal Physics,	163	5	0	1	169
324			Physical Properties in General (inclu. Basic Theories)	162	5	0	0	167
325			Physics in General	165	10	0	1	176
			Physics total	1,060	61	8	2	1,131
331			Physics of Solid Earth	60	3	0	2	65
332			Meteorology, Oceanography and Hydrology	113	0	1	0	114
333			Aeronomy	40	2	0	0	42
334			Geology	54	2	0	8	64
335			Stratigraphy and Paleontology	18	3	0	4	25
336			Mineralogy, Petrology and Study of Mineral Deposit	39	2	0	0	41
337			Geochemistry	48	3	0	0	51
			Earth Science total	372	15	1	14	402
341			Physical Chemistry	257	12	0	0	269
342			Organic Chemistry	237	5	0	13	255
343			Inorganic Chemistry	150	4	0	0	154
344			Function, Properties and Materials in Chemistry	136	4	0	0	140
345			Substance Transformation	33	0	0	0	33
346			Separation, Refining and Identification	109	4	0	0	113
			Chemistry total	922	29	0	13	964
351			Genetics	61	7	0	6	74
352			Ecology	191	28	0	16	235
353			Plant Physiology	85	6	0	3	94
354			Morphology, Structure of Organism	90	8	0	4	102
355			Animal Physiology and	72	9	0	1	82
356			Morphology and Taxonomy	84	5	0	9	98
			Biology total	583	63	0	39	685
361			Physical Anthropology (inclu. Physiological Anthropology)	83	2	0	0	85
	SCIENCE Total			4,022	220	12	71	4,325
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	121	2	1	1	125
402			Surface Physics	83	2	0	0	85
403			Applied Optics and Quantum Optics	149	8	0	6	163
404			General Applied Physics	72	8	0	14	94
405			Fundamentals of Engineering	71	5	0	0	76
			Applied Physics-Fundamentals of Engineering total	496	25	1	21	543
411			Materials for Machines and Strength of Materials	327	12	2	3	344
412			Workshop Processes and Production Engineering	244	6	5	0	255
413			Design Engineering, Machine Elements and Tribology	154	23	3	5	185
414			Fluid Mechanics	305	10	0	0	315
415			Heat Engineering	240	18	1	0	259
416			Mechanics and Control Engineering	216	13	3	0	232
417			Intelligent Mechanics and Machine System	235	11	0	0	246
			Machine Engineering total	1,721	93	14	8	1,836
421			Electric Power Engineering and Electric Machinery	338	16	3	0	357
422			Electronic and Electric Materials Engineering	297	11	0	5	313
423			Electron Devices and Apparatus Engineering	345	7	0	0	352
424			Information and Communication Engineering	629	32	5	2	668

Table 18. Number of Research Topics by Field of Specialization / by Institution Type (Private Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
425	E N G I N E E R I N G		System Engineering	159	7	0	0	166
427			Electronic Measurements	263	8	4	1	276
428			Control Engineering	158	8	4	3	173
			Electric and Electronic Engineering	2,189	89	16	11	2,305
431			Construction Materials and Dynamics in General Civil Engineering	165	0	0	0	165
432			Structural Engineering and Seismology	201	16	0	0	217
433			Ground Engineering	156	1	0	2	159
434			Hydraulics and River Engineering	145	4	0	4	153
435			Traffic Engineering and Regional Planning	185	12	1	0	198
436			Civil Environmental System	132	2	0	0	134
			Civil Engineering total	984	35	1	6	1,026
441		N	Building Structure and Materials	394	13	0	2	409
442			Building Science and Building Equipment	213	10	0	6	229
443			City Planning and Building Planning	670	50	0	2	722
444			Architectural History and Design	278	39	0	0	317
			Architecture total	1,555	112	0	10	1,677
451		N	Physical Metallurgy	56	3	0	6	65
452			Inorganic Materials and	147	3	0	0	150
453			Composed Materials and Properties	56	3	0	0	59
454			Structural and Functional Materials	88	8	0	4	100
455		R	Metallurgy and Material	122	7	0	1	130
456			Metal Productive Engineering	49	0	0	0	49
			Material Engineering total	518	24	0	11	553
461		I	Chemical Engineering in General	74	0	0	0	74
462			Reaction and Separation Engineering	38	0	0	0	38
463			Catalyst and Chemical Process	47	3	0	0	50
464			Bioengineering	112	3	0	4	119
465			Industrial Analytical Chemistry	69	3	0	0	72
			Process Engineering total	340	9	0	4	353
471			Industrial Physical Chemistry	78	0	0	0	78
472			Industrial Inorganic Chemistry	44	1	0	0	45
473			Industrial Organic Chemistry	43	7	0	0	50
474			Synthetic Chemistry	79	0	0	0	79
475			Polymer Synthesis	73	2	0	1	76
476			Polymer Structure and Property (inclu. Fiber)	90	23	0	1	114
			Industrial Chemistry total	407	33	0	2	442
481			Aeronautics	61	0	0	0	61
482			Ship Engineering	27	0	0	0	27
483			Marine Engineering	26	0	0	0	26
484			Resource Development Engineering	24	0	0	0	24
			Synthetic Engineering total	138	0	0	0	138
			ENGINEERING Total	8,348	420	32	73	8,873
501	A G R I C U L T U R E		Plant Breeding	41	0	0	3	44
502			Crop Science	29	2	0	3	34
503			Horticulture and Landscape Architecture	143	31	0	3	177
504			Plant Protection	46	8	0	1	55
505			Sericultural Science and Economic Entomology	20	2	0	14	36
			Agriculture total	279	43	0	24	346
511			Plant Fertilizer and Manure and Soil Science	31	8	0	0	39
512			Applied Microbiochemistry and Applied Biochemistry	258	30	0	7	295
513			Biological Productive Chemistry and Bioorganic Chemistry	52	8	0	1	61
514			Food Science and Nutritional Chemistry	356	233	0	4	593

Table 18. Number of Research Topics by Field of Specialization / by Institution Type (Private Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
	A		Agricultural Chemistry total	697	279	0	12	988
521			Forestry	50	3	0	0	53
522	G		Wood Science	27	0	0	0	27
			Forestry total	77	3	0	0	80
531	R		Fisheries in General	126	0	0	3	129
532			Fisheries Chemistry	47	5	0	1	53
			Fisheries total	173	5	0	4	182
541	I		Agricultural Economics	188	16	0	3	207
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	46	3	0	0	49
552	U		Agricultural Machinery	24	13	0	0	37
553	L		Biological Environment	16	1	2	1	20
			Agricultural Engineering total	86	17	2	1	106
561	T		Animal Science and Grassland Science	74	4	0	0	78
562	U		Applied Animal Science	41	0	0	2	43
563	R		Basic Veterinary Medicine and Basic Animal Science	134	7	0	13	154
564			Applied Veterinary Medicine	179	1	0	10	190
	E		Animal Science-Veterinary Medicine total	428	12	0	25	465
571			Biological Resource Science	28	0	0	0	28
572			Applied Molecular Cell Biology	22	1	0	0	23
			Interdisciplinary Agricultural Science total	50	1	0	0	51
AGRICULTURE Total				1,978	376	2	69	2,425
601			Anatomy in General (inclu. Histology, Embryology)	270	12	0	2	284
602			Physiology in General	284	19	0	0	303
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	226	40	0	0	266
604			Pharmacology in General	242	13	0	0	255
605			Medical Chemistry in General	160	12	0	1	173
606			Pathological Medical Chemistry	82	9	0	3	94
			Physiology total	1,264	105	0	6	1,375
611	M		Hominal Pathology	303	15	0	7	325
612	E		Experimental Pathology	101	7	0	10	118
613	D		Parasitology (inclu. Medical Zoology)	91	12	0	0	103
614			Bacteriology (inclu. Eumycetes)	197	12	0	7	216
615	I		Virology	69	2	0	12	83
616			Immunology	225	7	0	13	245
			Pathology total	986	55	0	49	1,090
621	C		Hygiene	222	22	0	18	262
622	I		Public Health and Health Science	543	110	0	6	659
623			Legal Medicine	162	2	0	0	164
			Social Medicine total	927	134	0	24	1,085
631	N		Internal Medicine in General	365	8	0	2	375
632	E		Gastroenterology	377	0	0	6	383
633			Internal Medicine Respiratory System	184	2	0	4	190
634			Neurological Medicine	242	0	0	0	242
635			Cardioangiopathy	458	6	0	2	466
636			Pediatrics	391	16	0	2	409
637			Dermatology	173	2	0	0	175
638			Radiology	329	23	0	8	360
639			Neuropsychiatry	391	14	0	0	405
641			Hematology	242	3	0	4	249
642			Internal Medicine of Kidney	185	7	0	4	196
643			Embryology and Newborn	31	0	0	0	31
644			Endocrinology	131	0	0	0	131
645			Metabolic Science	151	0	0	1	152
			Internal Medicine total	3,650	81	0	33	3,764
651			Surgery in General	358	0	0	0	358
652			Gastroenterological Surgery	282	0	0	7	289
653			Thoracic Surgery	252	0	0	4	256

Table 18.Number of Research Topics by Field of Specialization / by Institution Type (Private Institutions)

Code	Subj ect	Subd ivision	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
654	M 							

Table 18.Number of Research Topics by Field of Specialization / by Institution Type (Private Institutions)

Code	Subj ect	Subd ivisio n	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	48	2	0	0	50
774			Nuclear Power Science	52	1	0	0	53
		Energy total	126	6	0	3	135	
801			Environmental Dynamic Analysis	140	9	0	0	149
802			Environmental Influence Assessment (inclu. Radiobiology)	144	7	4	7	162
803		Environmental Preservation	231	17	0	4	252	
		Environmental Science total	515	33	4	11	563	
811			Biological Organic Chemistry	86	0	0	4	90
812			Structured Biochemistry	112	4	0	2	118
813		Functional Biochemistry	139	10	0	0	149	
		Biological Chemistry total	337	14	0	6	357	
821			Biophysics	116	3	0	0	119
822			Molecular Biology	258	16	0	10	284
823			Cell Biology	168	6	0	17	191
824			Developmental Biology	47	0	0	3	50
		Basic Biology total	589	25	0	30	644	
831			Neuroanatomy and Neuropathology	86	1	0	0	87
832			Neurochemistry and Neuropharmacology	118	1	0	2	121
833			Neuro Science in General	170	13	0	1	184
834			Neuro and Muscular Physiology	142	9	0	0	151
		Neuro Science (inclu. Brain Science) total	516	24	0	3	543	
841		Laboratory Animal Science	39	0	0	25	64	
851		Medical Organism Engineering and Material Science of Organism	343	17	0	4	364	
	INTERDISCIPLINARY AREA Total			8,671	1,904	22	128	10,725
999	WIDE AREA Total			1,274	272	3	11	1,560
	Item n.a. Total			26,777	2,822	57	348	30,004
	Grand Total			95,773	10,746	137	1,015	107,671

Table 19. Number of Research Topics by Field of Specialization / by Status of Research Topic (Japan)

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
211	A R T S · H U M A N I T I E S		Philosophy	937	38	66	20	57	1,118
212			Chinese Philosophy	204	5	23	5	11	248
213			Indian Philosophy (inclu. Buddhist Studies)	397	29	31	14	21	492
214			Religion	505	23	33	13	24	598
215			Ethics	262	13	17	3	18	313
216			History of Philosophy	425	14	25	15	19	498
217			Aesthetics (inclu. Arts)	2,086	140	138	56	147	2,567
218			Art History	477	18	32	24	28	579
		Philosophy total		5,293	280	365	150	325	6,413
221			Experimental Psychology	623	106	245	59	42	1,075
222			Educational and Social	2,484	310	618	155	127	3,694
223			Sociology	2,616	227	603	182	185	3,813
224			Education	2,694	259	482	133	152	3,720
225			Cultural Anthropology (inclu. Ethnology and Folklore)	718	51	142	98	42	1,051
		Psychology·Sociology·Education Cultural Anthropology total		9,135	953	2,090	627	548	13,353
231			Japanese History	896	46	85	16	58	1,101
232			Oriental History	521	36	54	38	38	687
233			European History	751	31	61	28	31	902
234			Archaeology (inclu. Prehistory)	298	31	63	49	11	452
		History total		2,466	144	263	131	138	3,142
241			Japanese Language	591	25	51	12	36	715
242			Japanese Literature	1,765	43	108	13	82	2,011
243			Chinese Language and Literature	541	20	43	22	28	654
244			English Language and Literature	3,625	156	209	62	193	4,245
245			French Language and Literature	880	31	42	13	33	999
246			German Language and Literature	741	26	48	18	44	877
247			Other Foreign Languages and Literatures	662	33	67	25	40	827
248			Linguistics and Phonetics	1,479	93	175	91	116	1,954
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	465	17	27	10	28	547
			Literature total		10,749	444	770	266	600
	ARTS·HUMANITIES Total		27,643	1,821	3,488	1,174	1,611	35,737	
261	L A W	Basic Science of Law	462	27	51	13	24	577	
262		Public Law	610	24	43	7	29	713	
263		International Law	367	5	49	14	28	463	
264		Civil Law	949	20	69	21	52	1,111	
265		Social Law	238	5	31	10	15	299	
266		Criminal Law	242	5	30	3	17	297	
267		Politics	1,326	65	135	76	93	1,695	
	LAW Total		4,194	151	408	144	258	5,155	
271	E C O N O M I C S	General Theory of Economics	1,289	62	171	88	87	1,697	
272		Economical Statistics	206	19	77	26	14	342	
273		Economic Policy (inclu. Economic Condition)	1,515	106	248	124	102	2,095	
274		Economic History	563	16	81	20	24	704	
275		Public Finance, Money and Banking	695	35	86	28	47	891	
276		Commercial Science	604	39	78	32	24	777	
277		Business Administration	1,553	93	262	91	103	2,102	
278		Accounting	850	28	91	25	41	1,035	
	ECONOMICS Total		7,275	398	1,094	434	442	9,643	
301	S C I E N C E		Algebra	459	36	63	22	20	600
302			Geometry	420	18	50	34	26	548
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	555	53	179	44	40	871
305			Basic Analysis	348	24	62	44	19	497
306			Larger-area Analysis	165	11	51	26	10	263
		Mathematics total		1,947	142	405	170	115	2,779
311		Astronomy		98	57	114	93	12	374
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Phvsics, and Cosmic Physics	247	154	421	393	66	1,281	

Table 19. Number of Research Topics by Field of Specialization / by Status of Research Topic (Japan)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	255	200	260	54	20	789
323			Solid-State Physics II (Magnetism, Metal Physics,	172	206	244	78	38	738
324			Physical Properties in General (inclu. Basic Theories)	236	87	150	57	18	548
325			Physics in General	191	138	138	58	28	553
			Physics total	1,101	785	1,213	640	170	3,909
331			Physics of Solid Earth	133	80	154	62	14	443
332			Meteorology, Oceanography and Hydrology	195	79	174	70	19	537
333			Aeronomy	36	24	57	53	3	173
334			Geology	154	24	93	62	12	345
335			Stratigraphy and Paleontology	91	8	45	36	3	183
336			Mineralogy, Petrology and Study of Mineral Deposit	168	40	86	56	7	357
337			Geochemistry	64	49	86	34	8	241
			Earth Science total	841	304	695	373	66	2,279
341			Physical Chemistry	419	268	244	71	49	1,051
342			Organic Chemistry	382	288	161	34	31	896
343			Inorganic Chemistry	214	119	157	24	12	526
344			Function, Properties and Materials in Chemistry	211	134	116	17	16	494
345			Substance Transformation	48	40	29	7	8	132
346			Separation, Refining and Identification	130	90	85	11	14	330
			Chemistry total	1,404	939	792	164	130	3,429
351			Genetics	148	68	114	31	19	380
352			Ecology	367	108	211	117	18	821
353			Plant Physiology	185	116	100	52	15	468
354			Morphology, Structure of Organism	122	61	68	33	15	299
355			Animal Physiology and	112	48	80	33	10	283
356			Morphology and Taxonomy	202	29	77	106	18	432
			Biology total	1,136	430	650	372	95	2,683
361			Physical Anthropology (inclu. Physiological Anthropology)	77	26	50	44	7	204
	SCIENCE Total			6,604	2,683	3,919	1,856	595	15,657
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	156	157	139	28	16	496
402			Surface Physics	108	92	74	21	9	304
403			Applied Optics and Quantum Optics	220	128	126	26	33	533
404			General Applied Physics	114	79	83	13	27	316
405			Fundamentals of Engineering	99	34	57	10	9	209
			Applied Physics-Fundamentals of Engineering total	697	490	479	98	94	1,858
411			Materials for Machines and Strength of Materials	451	243	266	27	38	1,025
412			Workshop Processes and Production Engineering	311	196	186	21	37	751
413			Design Engineering, Machine Elements and Tribology	214	119	142	10	17	502
414			Fluid Mechanics	420	228	214	41	40	943
415			Heat Engineering	332	290	214	38	54	928
416			Mechanics and Control Engineering	325	156	163	21	32	697
417			Intelligent Mechanics and Machine System	370	165	172	23	44	774
			Machine Engineering total	2,423	1,397	1,357	181	262	5,620
421			Electric Power Engineering and Electric Machinery	370	208	254	16	37	885
422			Electronic and Electric Materials Engineering	321	312	215	30	38	916
423			Electron Devices and Apparatus Engineering	408	229	222	33	57	949
424			Information and Communication Engineering	846	411	393	50	103	1,803

Table 19. Number of Research Topics by Field of Specialization / by Status of Research Topic (Japan)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
425	ENGINEERING		System Engineering	187	85	72	17	24	385
427			Electronic Measurements	273	163	179	29	30	674
428			Control Engineering	325	132	170	21	26	674
			Electric and Electronic Engineering	2,730	1,540	1,505	196	315	6,286
431			Construction Materials and Dynamics in General Civil Engineering	176	81	121	10	19	407
432			Structural Engineering and Seismology	256	105	187	13	20	581
433			Ground Engineering	220	106	172	42	27	567
434			Hydraulics and River Engineering	254	145	147	46	11	603
435			Traffic Engineering and Regional Planning	201	92	146	30	26	495
436			Civil Environmental System	149	121	140	34	15	459
			Civil Engineering total	1,256	650	913	175	118	3,112
441		N	Building Structure and Materials	406	170	229	36	43	884
442			Building Science and Building Equipment	230	86	173	20	9	518
443			City Planning and Building Planning	756	192	265	79	53	1,345
444			Architectural History and Design	411	45	90	22	22	590
			Architecture total	1,803	493	757	157	127	3,337
451		N	Physical Metallurgy	106	134	83	27	19	369
452			Inorganic Materials and	223	188	149	24	42	626
453			Composed Materials and Properties	72	59	60	7	7	205
454			Structural and Functional Materials	148	134	132	26	24	464
455		R	Metallurgy and Material	200	150	145	14	25	534
456			Metal Productive Engineering	88	63	62	11	13	237
			Material Engineering total	837	728	631	109	130	2,435
461		G	Chemical Engineering in General	179	137	92	10	15	433
462			Reaction and Separation Engineering	92	92	43	15	14	256
463			Catalyst and Chemical Process	122	60	51	7	9	249
464			Bioengineering	158	167	130	24	22	501
465			Industrial Analytical Chemistry	99	86	50	10	11	256
			Process Engineering total	650	542	366	66	71	1,695
471			Industrial Physical Chemistry	151	108	66	19	18	362
472			Industrial Inorganic Chemistry	87	57	49	9	12	214
473			Industrial Organic Chemistry	63	51	36	11	7	168
474			Synthetic Chemistry	186	151	59	11	17	424
475			Polymer Synthesis	215	102	54	2	21	394
476			Polymer Structure and Property (inclu. Fiber)	176	114	93	25	28	436
			Industrial Chemistry total	878	583	357	77	103	1,998
481			Aeronautics	110	69	66	19	12	276
482			Ship Engineering	115	63	44	3	5	230
483			Marine Engineering	32	21	33	1	2	89
484			Resource Development Engineering	55	71	55	20	9	210
			Synthetic Engineering total	312	224	198	43	28	805
			ENGINEERING Total	11,586	6,647	6,563	1,102	1,248	27,146
501	AGRICULTURE		Plant Breeding	76	68	68	22	13	247
502			Crop Science	102	64	27	28	13	234
503			Horticulture and Landscape Architecture	311	132	80	18	26	567
504			Plant Protection	113	78	59	18	16	284
505			Sericultural Science and Economic Entomology	40	45	28	4	4	121
			Agriculture total	642	387	262	90	72	1,453
511			Plant Fertilizer and Manure and Soil Science	124	54	48	38	18	282
512			Applied Microbiochemistry and Applied Biochemistry	303	208	196	67	54	828
513			Biological Productive Chemistry and Bioorganic Chemistry	103	60	70	10	16	259
514			Food Science and Nutritional Chemistry	399	270	314	50	48	1,081

Table 19. Number of Research Topics by Field of Specialization / by Status of Research Topic (Japan)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
	A		Agricultural Chemistry total	929	592	628	165	136	2,450
521			Forestry	244	102	124	63	24	557
522	G		Wood Science	113	110	75	12	18	328
			Forestry total	357	212	199	75	42	885
531	R		Fisheries in General	226	114	174	44	26	584
532			Fisheries Chemistry	75	58	54	13	9	209
			Fisheries total	301	172	228	57	35	793
541	I		Agricultural Economics	334	21	92	53	28	528
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	154	67	98	38	13	370
552	U		Agricultural Machinery	78	85	68	13	18	262
553	L		Biological Environment	53	26	18	10	10	117
			Agricultural Engineering total	285	178	184	61	41	749
561	T		Animal Science and Grassland Science	104	89	51	17	18	279
562	U		Applied Animal Science	102	68	58	31	14	273
563	R		Basic Veterinary Medicine and Basic Animal Science	136	142	94	36	20	428
564			Applied Veterinary Medicine	135	121	120	29	19	424
	E		Animal Science·Veterinary Medicine total	477	420	323	113	71	1,404
571			Biological Resource Science	40	28	32	31	6	137
572			Applied Molecular Cell Biology	52	18	31	9	10	120
			Interdisciplinary Agricultural Science total	92	46	63	40	16	257
			AGRICULTURE Total	3,417	2,028	1,979	654	441	8,519
601			Anatomy in General (inclu. Histology, Embryology)	208	247	119	56	20	650
602			Physiology in General	193	269	123	49	30	664
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	166	128	156	38	16	504
604			Pharmacology in General	115	255	101	39	16	526
605			Medical Chemistry in General	114	164	102	52	23	455
606			Pathological Medical Chemistry	68	97	58	28	14	265
	M		Physiology total	864	1,160	659	262	119	3,064
611			Hominal Pathology	225	277	111	49	31	693
612	E		Experimental Pathology	77	159	65	31	13	345
613	D		Parasitology (inclu. Medical Zoology)	53	69	78	71	9	280
614			Bacteriology (inclu. Eumycetes)	112	178	135	47	18	490
615	I		Virology	59	102	96	33	10	300
616			Immunology	125	201	123	57	39	545
	C		Pathology total	651	986	608	288	120	2,653
621			Hygiene	106	158	157	46	11	478
622	I		Public Health and Health Science	400	311	472	95	76	1,354
623			Legal Medicine	115	138	70	20	20	363
	N		Social Medicine total	621	607	699	161	107	2,195
631			Internal Medicine in General	203	338	167	42	35	785
632	E		Gastroenterology	281	411	77	43	36	848
633			Internal Medicine Respiratory System	123	209	62	23	15	432
634			Neurological Medicine	165	231	111	32	23	562
635			Cardioangiopathy	277	467	127	51	47	969
636			Pediatrics	293	341	182	59	36	911
637			Dermatology	152	185	47	22	35	441
638			Radiology	279	422	181	28	43	953
639			Neuropsychiatry	288	305	158	40	45	836
641			Hematology	168	237	112	39	22	578
642			Internal Medicine of Kidney	115	159	60	21	17	372
643			Embryology and Newborn	11	33	11	5	1	61
644			Endocrinology	99	128	59	24	11	321
645			Metabolic Science	101	161	46	17	20	345
			Internal Medicine total	2,555	3,627	1,400	446	386	8,414
651			Surgery in General	209	328	88	12	49	686
652			Gastroenterological Surgery	186	402	71	24	42	725
653			Thoracic Surgery	144	236	51	17	31	479

Table 19. Number of Research Topics by Field of Specialization / by Status of Research Topic (Japan)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
654	M		Neurosurgery	169	285	75	19	42	590
655			Orthopedic Surgery	367	451	162	48	52	1,080
656			Anesthesiology and Rescue Medicine	289	319	58	27	37	730
657			Urology	129	219	54	34	37	473
658			Obstetrics and Gynecology	197	319	97	27	34	674
659			Oto-rhino-laryngology	174	200	48	17	26	465
660			Ophthalmology	142	240	51	32	17	482
661			Pediatric Surgery	37	78	14	3	8	140
662			Formative Surgery	32	77	17	4	8	138
			Surgery total	2,075	3,154	786	264	383	6,662
671	E		Oral Anatomy and Morphological Basic Dentistry	152	229	86	32	24	523
672			Functional Basic Dentistry	93	197	57	21	21	389
673			Morbid Dentistry (inclu. Dental Radiology)	104	196	37	13	31	381
674			Conservative Dentistry	167	344	46	32	33	622
675			Prosthodontics and Dental Technology	233	516	90	46	48	933
676			Oral Surgery	339	528	104	40	41	1,052
677			Orthodontics, Pedodontics and Social Dentistry	295	458	120	63	54	990
678			Periodontological Dentistry	47	121	22	16	20	226
			Dentistry total	1,430	2,589	562	263	272	5,116
681	E		Chemical Pharmaceuticals	212	327	205	67	35	846
682			Physical Pharmaceuticals	87	182	81	32	13	395
683			Biopharmaceuticals	310	310	253	66	38	977
684			Molecular Pharmaceuticals	89	95	94	8	15	301
685			Environmental Pharmaceuticals	32	38	43	10	1	124
			Pharmaceuticals total	730	952	676	183	102	2,643
691			Medical Sociology	163	127	154	20	25	489
692			Human Genetics	80	72	79	31	11	273
693			Applied Pharmacology and Medical Pharmacology	81	122	68	15	14	300
694			Pathological Examination	84	149	72	16	9	330
696	E		Science of Basic and Local Nursing	406	355	308	24	58	1,151
697			Science of Clinical Nursing	502	408	290	25	45	1,270
			Medicine in General total	1,316	1,233	971	131	162	3,813
			MEDICINE Total	10,242	14,308	6,361	1,998	1,651	34,560
702	I		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	204	20	37	8	8	277
703			Physical Education	1,432	455	726	88	115	2,816
704			Human Geography	405	12	52	29	26	524
705			Physical Geography	178	19	56	36	7	296
			Geography total	583	31	108	65	33	820
706			Home Science (inclu. Cloth/Living Environments)	598	194	358	43	34	1,227
707			Food Culture	304	190	300	20	38	852
			Domestic Science total	902	384	658	63	72	2,079
708			Science of Cultural Property	29	6	22	8	2	67
711			Science Education	273	62	107	20	15	477
712	I		Educational Engineering	359	137	172	24	35	727
713			Curriculum Studies	1,541	153	270	37	73	2,074
714			Japanese Language Education	310	50	64	16	24	464
			Science Education·Curriculum Education total	2,483	402	613	97	147	3,742
721			Statistics	178	36	70	15	10	309
731			Computer Science	795	350	364	53	64	1,626
732			Intelligent Informatics	747	349	357	61	97	1,611
733			Study of Information System (Inclu. Library and Information Science)	642	232	236	56	72	1,238
			Information Science total	2,184	931	957	170	233	4,475
741			Social System Engineering	417	105	175	38	49	784
751	I		Natural Disaster Science	40	19	38	10	4	111
761			Plasma Science and Technology	93	158	110	42	15	418
772			Nuclear Fusion	23	63	39	29	8	162

Table 19. Number of Research Topics by Field of Specialization / by Status of Research Topic (Japan)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	93	48	41	19	5	206
774			Nuclear Power Science	82	105	113	28	11	339
			Energy total	198	216	193	76	24	707
801			Environmental Dynamic Analysis	138	78	144	62	16	438
802			Environmental Influence Assessment (inclu. Radiobiology)	126	111	107	39	14	397
803			Environmental Preservation	259	108	162	55	31	615
			Environmental Science total	523	297	413	156	61	1,450
811			Biological Organic Chemistry	99	102	86	29	8	324
812			Structured Biochemistry	71	95	111	27	8	312
813			Functional Biochemistry	148	113	132	46	15	454
			Biological Chemistry total	318	310	329	102	31	1,090
821			Biophysics	132	94	142	43	17	428
822			Molecular Biology	312	277	218	96	38	941
823			Cell Biology	190	191	131	53	35	600
824			Developmental Biology	110	75	67	24	19	295
			Basic Biology total	744	637	558	216	109	2,264
831			Neuroanatomy and Neuropathology	73	88	55	31	9	256
832			Neurochemistry and Neuropharmacology	51	124	79	26	10	290
833			Neuro Science in General	170	178	137	32	39	556
834			Neuro and Muscular Physiology	120	127	83	33	16	379
			Neuro Science (inclu. Brain Science) total	414	517	354	122	74	1,481
841			Laboratory Animal Science	41	49	47	15	11	163
851			Medical Organism Engineering and Material Science of Organism	210	234	307	52	41	844
			INTERDISCIPLINARY AREA Total	10,993	4,807	5,715	1,343	1,039	23,897
999			WIDE AREA Total	1,597	355	436	149	136	2,673
			Item n.a. Total	34,268	15,464	12,209	3,154	3,492	68,587
			Grand Total	117,819	48,662	42,172	12,008	10,913	231,574

Table 20. Number of Research Topics by Field of Specialization / by Status of Research Topic (National Institutions)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
211	ARTS • HUMANITIES		Philosophy	313	17	21	8	22	381
212			Chinese Philosophy	81	1	9	1	5	97
213			Indian Philosophy (inclu. Buddhist Studies)	53	1	4	4	2	64
214			Religion	63	0	4	2	4	73
215			Ethics	125	6	8	3	3	145
216			History of Philosophy	116	2	7	4	8	137
217			Aesthetics (inclu. Arts)	513	20	27	17	33	610
218			Art History	183	9	10	14	10	226
		Philosophy total	1,447	56	90	53	87	1,733	
221			Experimental Psychology	253	53	89	33	15	443
222			Educational and Social	771	111	153	48	32	1,115
223			Sociology	438	21	101	49	30	639
224			Education	1,032	100	212	64	49	1,457
225			Cultural Anthropology (inclu. Ethnology and Folklore)	246	14	54	35	20	369
		Psychology•Sociology•Education Cultural Anthropology total	2,740	299	609	229	146	4,023	
231			Japanese History	313	16	33	8	26	396
232			Oriental History	207	10	22	13	8	260
233			European History	234	7	19	8	14	282
234			Archaeology (inclu. Prehistory)	146	16	29	18	6	215
		History total	900	49	103	47	54	1,153	
241			Japanese Language	212	16	23	4	5	260
242			Japanese Literature	386	8	17	4	20	435
243			Chinese Language and Literature	181	5	13	2	6	207
244			English Language and Literature	825	25	43	16	27	936
245			French Language and Literature	268	13	12	7	5	305
246			German Language and Literature	268	10	17	8	15	318
247			Other Foreign Languages and Literatures	239	11	19	13	9	291
248			Linguistics and Phonetics	432	29	52	32	34	579
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	143	5	6	2	3	159
			Literature total	2,954	122	202	88	124	3,490
	ARTS•HUMANITIES Total	8,041	526	1,004	417	411	10,399		
261	LAW	Basic Science of Law	152	8	24	5	9	198	
262		Public Law	170	7	9	4	4	194	
263		International Law	74	0	10	2	4	90	
264		Civil Law	268	9	28	6	10	321	
265		Social Law	81	1	10	3	2	97	
266		Criminal Law	59	1	10	1	7	78	
267		Politics	367	13	37	22	32	471	
	LAW Total	1,171	39	128	43	68	1,449		
271	ECONOMICS	General Theory of Economics	353	11	48	30	25	467	
272		Economical Statistics	71	5	15	11	4	106	
273		Economic Policy (inclu. Economic Condition)	344	23	79	42	14	502	
274		Economic History	149	3	24	9	5	190	
275		Public Finance, Money and Banking	142	4	26	7	10	189	
276		Commercial Science	62	0	12	3	1	78	
277		Business Administration	220	16	42	27	18	323	
278		Accounting	133	3	21	5	9	171	
	ECONOMICS Total	1,474	65	267	134	86	2,026		
301	SCIENCE		Algebra	269	12	32	13	11	337
302			Geometry	285	8	35	26	16	370
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	280	29	98	27	18	452
305			Basic Analysis	215	10	33	25	12	295
306			Larger-area Analysis	112	8	27	14	6	167
		Mathematics total	1,161	67	225	105	63	1,621	
311		Astronomy	74	49	89	83	9	304	
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	131	115	238	293	40	817	

Table 20. Number of Research Topics by Field of Specialization / by Status of Research Topic (National Institutions)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	158	137	164	39	14	512
323			Solid-State Physics II (Magnetism, Metal Physics,	122	147	161	61	31	522
324			Physical Properties in General (inclu. Basic Theories)	137	60	103	39	11	350
325			Physics in General	113	99	74	42	16	344
			Physics total	661	558	740	474	112	2,545
331			Physics of Solid Earth	109	72	125	55	8	369
332			Meteorology, Oceanography and Hydrology	142	62	130	58	13	405
333			Aeronomy	24	20	39	43	3	129
334			Geology	119	15	67	45	9	255
335			Stratigraphy and Paleontology	73	8	36	29	2	148
336			Mineralogy, Petrology and Study of Mineral Deposit	142	35	71	52	4	304
337			Geochemistry	46	38	65	26	7	182
			Earth Science total	655	250	533	308	46	1,792
341			Physical Chemistry	284	212	139	42	31	708
342			Organic Chemistry	242	205	94	17	21	579
343			Inorganic Chemistry	145	90	86	11	7	339
344			Function, Properties and Materials in Chemistry	131	95	85	14	8	333
345			Substance Transformation	32	25	22	6	6	91
346			Separation, Refining and Identification	78	49	48	4	9	188
			Chemistry total	912	676	474	94	82	2,238
351			Genetics	103	60	73	25	15	276
352			Ecology	240	69	137	78	12	536
353			Plant Physiology	117	78	64	31	7	297
354			Morphology, Structure of Organism	80	44	36	24	5	189
355			Animal Physiology and	85	25	44	23	5	182
356			Morphology and Taxonomy	138	22	58	78	11	307
			Biology total	763	298	412	259	55	1,787
361			Physical Anthropology (inclu. Physiological Anthropology)	36	16	20	27	4	103
	SCIENCE Total			4,262	1,914	2,493	1,350	371	10,390
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	101	110	86	21	13	331
402			Surface Physics	66	75	47	15	6	209
403			Applied Optics and Quantum Optics	146	85	78	12	22	343
404			General Applied Physics	74	52	51	11	16	204
405			Fundamentals of Engineering	51	22	39	6	5	123
			Applied Physics-Fundamentals of Engineering total	438	344	301	65	62	1,210
411			Materials for Machines and Strength of Materials	265	147	157	14	28	611
412			Workshop Processes and Production Engineering	179	124	116	9	20	448
413			Design Engineering, Machine Elements and Tribology	126	65	82	4	12	289
414			Fluid Mechanics	231	158	129	28	26	572
415			Heat Engineering	221	192	147	25	36	621
416			Mechanics and Control Engineering	192	97	110	19	17	435
417			Intelligent Mechanics and Machine System	233	112	108	15	23	491
			Machine Engineering total	1,447	895	849	114	162	3,467
421			Electric Power Engineering and Electric Machinery	197	115	148	6	16	482
422			Electronic and Electric Materials Engineering	209	204	127	15	23	578
423			Electron Devices and Apparatus Engineering	224	148	134	20	32	558
424			Information and Communication Engineering	435	260	213	31	60	999

Table 20. Number of Research Topics by Field of Specialization / by Status of Research Topic (National Institutions)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
425	E N G I N E E R I N G		System Engineering	90	55	34	9	15	203
427			Electronic Measurements	156	86	96	16	23	377
428			Control Engineering	212	78	123	14	16	443
			Electric and Electronic Engineering	1,523	946	875	111	185	3,640
431			Construction Materials and Dynamics in General Civil Engineering	96	43	70	9	10	228
432			Structural Engineering and Seismology	135	68	98	12	13	326
433			Ground Engineering	152	70	109	35	20	386
434			Hydraulics and River Engineering	179	120	90	35	10	434
435			Traffic Engineering and Regional Planning	108	56	85	18	11	278
436			Civil Environmental System	102	81	80	25	13	301
			Civil Engineering total	772	438	532	134	77	1,953
441			Building Structure and Materials	202	79	89	20	21	411
442			Building Science and Building Equipment	92	44	63	14	8	221
443			City Planning and Building Planning	284	88	97	43	16	528
444			Architectural History and Design	158	29	29	8	11	235
			Architecture total	736	240	278	85	56	1,395
451			Physical Metallurgy	77	109	71	21	14	292
452			Inorganic Materials and	168	149	97	19	33	466
453			Composed Materials and Properties	46	37	43	6	6	138
454			Structural and Functional Materials	101	99	103	21	21	345
455			Metallurgy and Material	141	118	102	9	18	388
456			Metal Productive Engineering	67	48	49	8	13	185
			Material Engineering total	600	560	465	84	105	1,814
461			Chemical Engineering in General	143	107	72	6	9	337
462			Reaction and Separation Engineering	75	77	32	11	8	203
463			Catalyst and Chemical Process	91	49	35	5	8	188
464			Bioengineering	109	121	86	18	15	349
465			Industrial Analytical Chemistry	67	55	35	8	10	175
			Process Engineering total	485	409	260	48	50	1,252
471			Industrial Physical Chemistry	89	90	41	14	13	247
472			Industrial Inorganic Chemistry	56	48	39	7	9	159
473			Industrial Organic Chemistry	39	40	22	6	4	111
474			Synthetic Chemistry	146	133	39	6	9	333
475			Polymer Synthesis	157	80	41	2	14	294
476			Polymer Structure and Property (inclu. Fiber)	118	88	46	21	16	289
			Industrial Chemistry total	605	479	228	56	65	1,433
481			Aeronautics	76	55	44	15	7	197
482			Ship Engineering	90	55	39	3	3	190
483			Marine Engineering	18	13	22	1	1	55
484			Resource Development Engineering	46	68	38	17	9	178
			Synthetic Engineering total	230	191	143	36	20	620
			ENGINEERING Total	6,836	4,502	3,931	733	782	16,784
501	A G R I C U L T U R E		Plant Breeding	50	47	41	15	11	164
502			Crop Science	75	49	23	28	9	184
503			Horticulture and Landscape Architecture	159	74	43	13	14	303
504			Plant Protection	85	51	45	8	13	202
505			Sericultural Science and Economic Entomology	27	27	22	2	2	80
			Agriculture total	396	248	174	66	49	933
511			Plant Fertilizer and Manure and Soil Science	94	49	32	32	10	217
512			Applied Microbiochemistry and Applied Biochemistry	166	121	109	47	33	476
513			Biological Productive Chemistry and Bioorganic Chemistry	70	39	49	5	8	171
514			Food Science and Nutritional Chemistry	120	103	99	28	13	363

Table 20. Number of Research Topics by Field of Specialization / by Status of Research Topic (National Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
	A		Agricultural Chemistry total	450	312	289	112	64	1,227
521			Forestry	201	88	108	56	23	476
522	G		Wood Science	99	98	65	10	11	283
			Forestry total	300	186	173	66	34	759
531	R		Fisheries in General	172	75	134	40	21	442
532			Fisheries Chemistry	51	49	36	9	9	154
			Fisheries total	223	124	170	49	30	596
541	I		Agricultural Economics	171	12	47	31	14	275
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	115	58	77	30	10	290
552	U		Agricultural Machinery	62	72	54	8	13	209
553	L		Biological Environment	38	16	13	8	9	84
			Agricultural Engineering total	215	146	144	46	32	583
561	T		Animal Science and Grassland Science	67	68	31	13	6	185
562	U		Applied Animal Science	83	58	39	26	6	212
563	R		Basic Veterinary Medicine and Basic Animal Science	80	82	48	25	10	245
564			Applied Veterinary Medicine	67	51	59	18	11	206
	E		Animal Science·Veterinary Medicine total	297	259	177	82	33	848
571			Biological Resource Science	32	22	16	24	6	100
572			Applied Molecular Cell Biology	34	17	22	9	9	91
			Interdisciplinary Agricultural Science total	66	39	38	33	15	191
			AGRICULTURE Total	2,118	1,326	1,212	485	271	5,412
601			Anatomy in General (inclu. Histology, Embryology)	96	132	50	25	3	306
602			Physiology in General	83	136	59	21	16	315
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	54	47	46	16	8	171
604			Pharmacology in General	48	113	40	20	5	226
605			Medical Chemistry in General	53	90	46	36	17	242
606			Pathological Medical Chemistry	28	58	30	17	10	143
			Physiology total	362	576	271	135	59	1,403
611	M		Hominal Pathology	94	135	39	27	18	313
612	E		Experimental Pathology	43	81	38	22	7	191
613	D		Parasitology (inclu. Medical Zoology)	21	36	38	43	4	142
614			Bacteriology (inclu. Eumycetes)	64	78	53	23	7	225
615	I		Virology	44	62	64	23	5	198
616			Immunology	64	109	50	24	27	274
			Pathology total	330	501	282	162	68	1,343
621	C		Hygiene	40	52	47	26	3	168
622	I		Public Health and Health Science	150	106	170	60	29	515
623			Legal Medicine	67	53	35	12	5	172
			Social Medicine total	257	211	252	98	37	855
631	N		Internal Medicine in General	75	140	67	29	17	328
632	E		Gastroenterology	117	163	43	24	19	366
633			Internal Medicine Respiratory System	59	85	28	14	4	190
634			Neurological Medicine	84	102	56	24	11	277
635			Cardioangiopathy	133	197	60	29	14	433
636			Pediatrics	113	171	79	31	17	411
637			Dermatology	78	82	22	9	22	213
638			Radiology	151	240	98	14	17	520
639			Neuropsychiatry	128	143	63	18	15	367
641			Hematology	80	126	58	20	9	293
642			Internal Medicine of Kidney	35	74	22	9	10	150
643			Embryology and Newborn	3	17	1	1	1	23
644			Endocrinology	55	64	33	16	7	175
645			Metabolic Science	50	70	26	8	10	164
			Internal Medicine total	1,161	1,674	656	246	173	3,910
651			Surgery in General	73	130	40	5	24	272
652			Gastroenterological Surgery	88	200	27	11	21	347
653			Thoracic Surgery	64	89	25	8	11	197

Table 20. Number of Research Topics by Field of Specialization / by Status of Research Topic (National Institutions)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
654	M		Neurosurgery	54	147	36	9	15	261
655			Orthopedic Surgery	156	221	75	26	25	503
656			Anesthesiology and Rescue Medicine	152	166	31	17	21	387
657			Urology	53	104	28	17	19	221
658			Obstetrics and Gynecology	98	160	40	18	16	332
659			Oto-rhino-laryngology	66	114	16	9	10	215
660			Ophthalmology	61	119	19	20	8	227
661			Pediatric Surgery	19	51	7	1	6	84
662			Formative Surgery	10	25	5	1	2	43
			Surgery total	894	1,526	349	142	178	3,089
671	E		Oral Anatomy and Morphological Basic Dentistry	41	81	27	21	9	179
672			Functional Basic Dentistry	34	64	22	12	10	142
673			Morbid Dentistry (inclu. Dental Radiology)	32	91	12	3	11	149
674			Conservative Dentistry	46	121	18	16	3	204
675			Prosthodontics and Dental Technology	75	226	35	28	21	385
676			Oral Surgery	151	244	53	18	18	484
677			Orthodontics, Pedodontics and Social Dentistry	108	218	62	31	21	440
678			Periodontological Dentistry	21	63	13	13	6	116
			Dentistry total	508	1,108	242	142	99	2,099
681	E		Chemical Pharmaceutics	63	81	49	23	7	223
682			Physical Pharmaceutics	20	44	24	15	1	104
683			Biopharmaceutics	85	95	62	27	17	286
684			Molecular Pharmaceutics	26	41	25	3	7	102
685			Environmental Pharmaceutics	4	12	8	5	0	29
			Pharmaceutics total	198	273	168	73	32	744
691			Medical Sociology	56	64	48	10	9	187
692			Human Genetics	33	30	35	24	8	130
693			Applied Pharmacology and Medical Pharmacology	24	54	17	8	10	113
694			Pathological Examination	39	70	38	13	4	164
696	E		Science of Basic and Local Nursing	121	122	107	11	20	381
697			Science of Clinical Nursing	191	178	110	10	18	507
			Medicine in General total	464	518	355	76	69	1,482
			MEDICINE Total	4,174	6,387	2,575	1,074	715	14,925
702	I	N	History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	86	10	17	7	4	124
703			Physical Education	563	142	238	44	34	1,021
704			Human Geography	190	4	23	12	14	243
705			Physical Geography	93	10	33	24	6	166
			Geography total	283	14	56	36	20	409
706			Home Science(inclu. Cloth/Living Environments)	141	20	96	16	6	279
707			Food Culture	32	13	34	6	6	91
			Domestic Science total	173	33	130	22	12	370
708			Science of Cultural Property	18	2	13	7	2	42
711			Science Education	173	37	65	14	10	299
712	I	N	Educational Engineering	122	50	67	9	15	263
713			Curriculum Studies	823	75	170	29	39	1,136
714			Japanese Language Education	132	23	46	7	8	216
			Science Education·Curriculum Education total	1,250	185	348	59	72	1,914
721			Statistics	86	14	37	10	6	153
731			Computer Science	420	226	197	34	33	910
732			Intelligent Informatics	387	219	202	38	56	902
733			Study of Information System (Inclu. Library and Information Science)	171	117	85	34	26	433
			Information Science total	978	562	484	106	115	2,245
741			Social System Engineering	150	51	61	17	16	295
751	I		Natural Disaster Science	24	11	23	5	4	67
761			Plasma Science and Technology	71	131	87	34	8	331
772			Nuclear Fusion	16	47	31	27	7	128

Table 20. Number of Research Topics by Field of Specialization / by Status of Research Topic (National Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	60	38	27	15	4	144
774			Nuclear Power Science	72	95	89	19	9	284
			Energy total	148	180	147	61	20	556
801			Environmental Dynamic Analysis	84	49	75	49	6	263
802			Environmental Influence Assessment (inclu. Radiobiology)	44	56	57	23	8	188
803			Environmental Preservation	131	66	80	28	10	315
			Environmental Science total	259	171	212	100	24	766
811			Biological Organic Chemistry	67	64	50	19	4	204
812			Structured Biochemistry	38	46	58	17	4	163
813			Functional Biochemistry	89	69	75	26	8	267
			Biological Chemistry total	194	179	183	62	16	634
821			Biophysics	83	70	78	27	12	270
822			Molecular Biology	204	186	119	56	31	596
823			Cell Biology	130	106	61	37	20	354
824			Developmental Biology	90	62	44	17	13	226
			Basic Biology total	507	424	302	137	76	1,446
831			Neuroanatomy and Neuropathology	42	38	38	16	4	138
832			Neurochemistry and Neuropharmacology	23	56	34	15	4	132
833			Neuro Science in General	96	110	79	22	23	330
834			Neuro and Muscular Physiology	57	74	34	19	9	193
			Neuro Science (inclu. Brain Science) total	218	278	185	72	40	793
841			Laboratory Animal Science	26	18	24	9	6	83
851			Medical Organism Engineering and Material Science of Organism	101	133	143	31	25	433
			INTERDISCIPLINARY AREA Total	5,135	2,538	2,690	819	500	11,682
999			WIDE AREA Total	505	158	172	75	38	948
			Item n.a. Total	15,039	8,727	6,283	1,933	1,790	33,772
			Grand Total	48,755	26,182	20,755	7,063	5,032	107,787

Table 21. Number of Research Topics by Field of Specialization / by Status of Research Topic (Municipal Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
211	A R T S · H U M A N I T I E S		Philosophy	60	1	6	1	0	68
212			Chinese Philosophy	18	0	3	0	2	23
213			Indian Philosophy (inclu. Buddhist Studies)	6	2	3	1	0	12
214			Religion	5	0	1	0	0	6
215			Ethics	11	1	0	0	0	12
216			History of Philosophy	37	1	1	0	1	40
217			Aesthetics (inclu. Arts)	145	12	16	8	17	198
218			Art History	30	2	4	3	1	40
		Philosophy total	312	19	34	13	21	399	
221			Experimental Psychology	27	6	23	6	1	63
222			Educational and Social	114	10	42	2	9	177
223			Sociology	209	21	71	15	12	328
224			Education	134	20	15	11	7	187
225			Cultural Anthropology (inclu. Ethnology and Folklore)	30	3	9	9	1	52
		Psychology·Sociology·Education Cultural Anthropology total	514	60	160	43	30	807	
231			Japanese History	43	1	4	1	2	51
232			Oriental History	28	0	3	3	2	36
233			European History	73	2	4	0	3	82
234			Archaeology (inclu. Prehistory)	4	1	0	2	0	7
		History total	148	4	11	6	7	176	
241			Japanese Language	29	0	1	0	2	32
242			Japanese Literature	92	0	3	0	4	99
243			Chinese Language and Literature	32	0	4	1	0	37
244			English Language and Literature	219	6	7	3	12	247
245			French Language and Literature	48	0	10	1	3	62
246			German Language and Literature	46	0	3	1	2	52
247			Other Foreign Languages and Literatures	43	0	7	2	4	56
248			Linguistics and Phonetics	107	3	19	10	5	144
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	13	0	0	0	0	13
			Literature total	629	9	54	18	32	742
	ARTS·HUMANITIES Total	1,603	92	259	80	90	2,124		
261	L A W	Basic Science of Law	29	1	0	0	0	30	
262		Public Law	31	1	3	0	3	38	
263		International Law	23	0	1	0	0	24	
264		Civil Law	31	0	3	1	1	36	
265		Social Law	20	1	1	0	1	23	
266		Criminal Law	9	0	2	0	0	11	
267		Politics	74	1	9	7	6	97	
	LAW Total	217	4	19	8	11	259		
271	E C O N O M I C S	General Theory of Economics	106	7	19	9	16	157	
272		Economical Statistics	18	2	3	2	2	27	
273		Economic Policy (inclu. Economic Condition)	118	14	26	11	12	181	
274		Economic History	40	2	8	1	0	51	
275		Public Finance, Money and Banking	51	3	11	1	3	69	
276		Commercial Science	27	3	4	2	0	36	
277		Business Administration	82	2	14	3	7	108	
278		Accounting	55	2	6	5	1	69	
	ECONOMICS Total	497	35	91	34	41	698		
301	S C I E N C E		Algebra	25	3	3	1	0	32
302			Geometry	21	0	4	4	2	31
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	43	4	8	2	1	58
305			Basic Analysis	19	2	4	4	0	29
306			Larger-area Analysis	8	0	5	0	2	15
		Mathematics total	116	9	24	11	5	165	
311		Astronomy	0	0	4	1	0	5	
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Phvsics, and Cosmic Physics	15	5	26	16	4	66	

Table 21. Number of Research Topics by Field of Specialization / by Status of Research Topic (Municipal Institutions)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	16	11	18	7	4	56
323			Solid-State Physics II (Magnetism, Metal Physics,	6	15	18	7	1	47
324			Physical Properties in General (inclu. Basic Theories)	14	2	13	2	0	31
325			Physics in General	9	11	7	4	2	33
			Physics total	60	44	82	36	11	233
331			Physics of Solid Earth	3	1	4	1	0	9
332			Meteorology, Oceanography and Hydrology	5	2	7	4	0	18
333			Aeronomy	0	0	1	1	0	2
334			Geology	9	6	7	4	0	26
335			Stratigraphy and Paleontology	6	0	2	2	0	10
336			Mineralogy, Petrology and Study of Mineral Deposit	6	4	1	0	1	12
337			Geochemistry	0	1	3	3	1	8
			Earth Science total	29	14	25	15	2	85
341			Physical Chemistry	34	11	18	7	4	74
342			Organic Chemistry	37	8	10	6	1	62
343			Inorganic Chemistry	14	6	10	2	1	33
344			Function, Properties and Materials in Chemistry	11	10	0	0	0	21
345			Substance Transformation	4	3	0	0	1	8
346			Separation, Refining and Identification	13	5	8	2	1	29
			Chemistry total	113	43	46	17	8	227
351			Genetics	9	1	15	3	2	30
352			Ecology	20	13	9	8	0	50
353			Plant Physiology	34	20	13	7	3	77
354			Morphology, Structure of Organism	2	0	3	2	1	8
355			Animal Physiology and	3	3	8	4	1	19
356			Morphology and Taxonomy	19	0	1	6	1	27
			Biology total	87	37	49	30	8	211
361			Physical Anthropology (inclu. Physiological Anthropology)	8	1	5	2	0	16
	SCIENCE Total			413	148	235	112	34	942
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	15	8	12	5	0	40
402			Surface Physics	5	3	2	0	0	10
403			Applied Optics and Quantum Optics	7	8	10	1	1	27
404			General Applied Physics	7	7	4	0	0	18
405			Fundamentals of Engineering	5	1	3	0	1	10
			Applied Physics-Fundamentals of Engineering total	39	27	31	6	2	105
411			Materials for Machines and Strength of Materials	20	33	13	2	2	70
412			Workshop Processes and Production Engineering	21	8	16	2	1	48
413			Design Engineering, Machine Elements and Tribology	11	5	9	2	1	28
414			Fluid Mechanics	17	13	17	6	3	56
415			Heat Engineering	9	24	12	3	0	48
416			Mechanics and Control Engineering	15	6	7	0	2	30
417			Intelligent Mechanics and Machine System	15	6	10	0	6	37
			Machine Engineering total	108	95	84	15	15	317
421			Electric Power Engineering and Electric Machinery	13	13	18	2	0	46
422			Electronic and Electric Materials Engineering	9	9	4	3	0	25
423			Electron Devices and Apparatus Engineering	13	11	14	0	1	39
424			Information and Communication Engineering	57	29	40	5	5	136

Table 21. Number of Research Topics by Field of Specialization / by Status of Research Topic (Municipal Institutions)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
425	ENGINEERING		System Engineering	10	4	2	0	0	16
427			Electronic Measurements	11	1	7	1	1	21
428			Control Engineering	21	20	14	2	1	58
			Electric and Electronic Engineering	134	87	99	13	8	341
431			Construction Materials and Dynamics in General Civil Engineering	7	3	4	0	0	14
432			Structural Engineering and Seismology	9	11	15	1	2	38
433			Ground Engineering	6	8	7	0	1	22
434			Hydraulics and River Engineering	8	1	5	2	0	16
435			Traffic Engineering and Regional Planning	7	4	6	1	1	19
436			Civil Environmental System	7	7	9	1	0	24
			Civil Engineering total	44	34	46	5	4	133
441		N	Building Structure and Materials	23	15	20	3	3	64
442			Building Science and Building Equipment	28	8	28	4	0	68
443			City Planning and Building Planning	57	11	19	4	4	95
444			Architectural History and Design	27	1	8	0	2	38
			Architecture total	135	35	75	11	9	265
451		N	Physical Metallurgy	8	2	1	0	1	12
452			Inorganic Materials and	2	4	3	0	1	10
453			Composed Materials and Properties	5	0	3	0	0	8
454			Structural and Functional Materials	5	7	7	0	0	19
455		R	Metallurgy and Material	6	5	2	0	3	16
456			Metal Productive Engineering	0	3	0	0	0	3
			Material Engineering total	26	21	16	0	5	68
461		G	Chemical Engineering in General	5	9	8	0	0	22
462			Reaction and Separation Engineering	5	6	2	0	2	15
463			Catalyst and Chemical Process	6	0	3	2	0	11
464			Bioengineering	11	12	7	1	2	33
465			Industrial Analytical Chemistry	5	3	1	0	0	9
			Process Engineering total	32	30	21	3	4	90
471			Industrial Physical Chemistry	19	6	9	3	0	37
472			Industrial Inorganic Chemistry	7	2	1	0	0	10
473			Industrial Organic Chemistry	3	0	3	1	0	7
474			Synthetic Chemistry	0	6	1	4	1	12
475			Polymer Synthesis	11	9	3	0	1	24
476			Polymer Structure and Property (inclu. Fiber)	5	8	11	1	8	33
			Industrial Chemistry total	45	31	28	9	10	123
481			Aeronautics	5	6	3	2	2	18
482			Ship Engineering	4	6	3	0	0	13
483			Marine Engineering	2	4	2	0	0	8
484			Resource Development Engineering	2	0	6	0	0	8
			Synthetic Engineering total	13	16	14	2	2	47
			ENGINEERING Total	576	376	414	64	59	1,489
501	AGRICULTURE		Plant Breeding	6	12	14	5	2	39
502			Crop Science	8	4	2	0	2	16
503			Horticulture and Landscape Architecture	47	26	12	1	1	87
504			Plant Protection	8	9	5	5	0	27
505			Sericultural Science and Economic Entomology	3	1	1	0	0	5
			Agriculture total	72	52	34	11	5	174
511			Plant Fertilizer and Manure and Soil Science	13	0	7	2	4	26
512			Applied Microbiochemistry and Applied Biochemistry	27	8	12	3	7	57
513			Biological Productive Chemistry and Bioorganic Chemistry	7	11	5	3	1	27
514			Food Science and Nutritional Chemistry	47	33	32	6	7	125

Table 21. Number of Research Topics by Field of Specialization / by Status of Research Topic (Municipal Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
	A		Agricultural Chemistry total	94	52	56	14	19	235
521			Forestry	16	4	4	4	0	28
522	G		Wood Science	7	5	4	1	1	18
			Forestry total	23	9	8	5	1	46
531	R		Fisheries in General	8	3	2	0	0	13
532			Fisheries Chemistry	2	0	0	0	0	2
			Fisheries total	10	3	2	0	0	15
541	I		Agricultural Economics	25	3	8	6	4	46
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	17	2	10	2	0	31
552	U		Agricultural Machinery	4	6	4	0	2	16
553	L		Biological Environment	7	1	3	1	1	13
			Agricultural Engineering total	28	9	17	3	3	60
561	T		Animal Science and Grassland Science	8	3	4	0	1	16
562	U		Applied Animal Science	8	0	8	0	2	18
563	R		Basic Veterinary Medicine and Basic Animal Science	14	4	9	1	1	29
564			Applied Veterinary Medicine	11	9	5	3	0	28
	E		Animal Science·Veterinary Medicine total	41	16	26	4	4	91
571			Biological Resource Science	2	3	4	0	0	9
572			Applied Molecular Cell Biology	3	1	2	0	0	6
			Interdisciplinary Agricultural Science total	5	4	6	0	0	15
			AGRICULTURE Total	298	148	157	43	36	682
601			Anatomy in General (inclu. Histology, Embryology)	19	13	8	12	8	60
602			Physiology in General	10	22	11	3	0	46
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	24	16	20	6	1	67
604			Pharmacology in General	9	26	7	2	1	45
605			Medical Chemistry in General	15	13	7	3	2	40
606			Pathological Medical Chemistry	9	12	4	3	0	28
			Physiology total	86	102	57	29	12	286
611	M		Hominal Pathology	12	26	10	7	0	55
612	E		Experimental Pathology	11	19	4	1	1	36
613	D		Parasitology (inclu. Medical Zoology)	8	14	9	2	2	35
614			Bacteriology (inclu. Eumycetes)	9	9	17	8	6	49
615	I		Virology	2	6	9	1	1	19
616			Immunology	2	9	8	6	1	26
			Pathology total	44	83	57	25	11	220
621	C		Hygiene	9	8	25	6	0	48
622	I		Public Health and Health Science	52	36	66	8	18	180
623			Legal Medicine	11	14	1	1	0	27
			Social Medicine total	72	58	92	15	18	255
631	N		Internal Medicine in General	19	33	24	4	2	82
632	E		Gastroenterology	25	58	6	8	2	99
633			Internal Medicine Respiratory System	14	24	12	1	1	52
634			Neurological Medicine	8	20	14	1	0	43
635			Cardioangiopathy	19	32	10	4	5	70
636			Pediatrics	40	28	13	3	7	91
637			Dermatology	15	24	5	4	5	53
638			Radiology	26	24	16	1	6	73
639			Neuropsychiatry	30	20	8	2	4	64
641			Hematology	9	18	6	3	0	36
642			Internal Medicine of Kidney	8	8	8	2	0	26
643			Embryology and Newborn	0	4	3	0	0	7
644			Endocrinology	5	5	4	1	0	15
645			Metabolic Science	9	15	3	1	1	29
			Internal Medicine total	227	313	132	35	33	740
651			Surgery in General	16	28	4	3	5	56
652			Gastroenterological Surgery	10	61	9	4	5	89
653			Thoracic Surgery	9	12	2	3	0	26

Table 21. Number of Research Topics by Field of Specialization / by Status of Research Topic (Municipal Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
654	M		Neurosurgery	10	19	13	2	6	50
655			Orthopedic Surgery	53	53	27	5	9	147
656			Anesthesiology and Rescue Medicine	28	58	5	7	6	104
657			Urology	18	27	6	5	4	60
658			Obstetrics and Gynecology	21	28	13	2	3	67
659			Oto-rhino-laryngology	22	22	10	3	3	60
660			Ophthalmology	11	29	5	1	1	47
661			Pediatric Surgery	7	3	0	0	0	10
662			Formative Surgery	1	1	0	0	1	3
			Surgery total	206	341	94	35	43	719
671	E		Oral Anatomy and Morphological Basic Dentistry	1	14	6	1	1	23
672	D		Functional Basic Dentistry	7	7	1	0	0	15
673	I		Morbid Dentistry (inclu. Dental Radiology)	1	0	4	0	5	10
674	C		Conservative Dentistry	6	9	4	0	0	19
675			Prosthodontics and Dental Technology	3	7	1	1	0	12
676	I		Oral Surgery	21	22	7	3	2	55
677	N		Orthodontics, Pedodontics and Social Dentistry	9	5	4	0	2	20
678	E		Periodontological Dentistry	0	1	1	0	2	4
			Dentistry total	48	65	28	5	12	158
681			Chemical Pharmaceutics	10	13	13	1	0	37
682			Physical Pharmaceutics	6	11	4	1	3	25
683			Biopharmaceutics	22	19	18	4	2	65
684			Molecular Pharmaceutics	5	3	4	0	0	12
685			Environmental Pharmaceutics	5	0	10	0	0	15
			Pharmaceutics total	48	46	49	6	5	154
691			Medical Sociology	27	8	22	0	3	60
692			Human Genetics	7	1	7	2	0	17
693			Applied Pharmacology and Medical Pharmacology	3	1	1	0	0	5
694			Pathological Examination	9	6	9	1	2	27
696			Science of Basic and Local Nursing	123	131	102	8	25	389
697			Science of Clinical Nursing	163	139	106	6	12	426
			Medicine in General total	332	286	247	17	42	924
			MEDICINE Total	1,063	1,294	756	167	176	3,456
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	10	1	2	0	0	13
703			Physical Education	55	29	68	10	4	166
704			Human Geography	29	0	6	1	2	38
705			Physical Geography	7	0	2	2	1	12
			Geography total	36	0	8	3	3	50
706			Home Science(inclu. Cloth/Living Environments)	28	17	20	4	2	71
707			Food Culture	27	18	44	4	5	98
			Domestic Science total	55	35	64	8	7	169
708			Science of Cultural Property	1	2	2	0	0	5
711			Science Education	1	2	3	0	0	6
712			Educational Engineering	16	7	8	1	4	36
713			Curriculum Studies	48	6	10	1	2	67
714			Japanese Language Education	5	0	1	1	0	7
			Science Education·Curriculum Education total	70	15	22	3	6	116
721	A R E A		Statistics	9	3	5	0	0	17
731			Computer Science	25	23	24	3	6	81
732			Intelligent Informatics	47	36	21	1	3	108
733			Study of Information System (Inclu. Library and Information Science)	26	12	19	5	3	65
			Information Science total	98	71	64	9	12	254
741			Social System Engineering	31	7	14	3	4	59
751			Natural Disaster Science	7	1	3	1	0	12
761			Plasma Science and Technology	3	4	3	1	0	11
772			Nuclear Fusion	1	0	1	0	0	2

Table 21. Number of Research Topics by Field of Specialization / by Status of Research Topic (Municipal Institutions)

Code	Subj ect	Subd ivisio n	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
773	N T E R D I S C I P L I N A R Y		Energy Science General	2	6	4	0	0	12
774			Nuclear Power Science	1	0	1	0	0	2
			Energy total	4	6	6	0	0	16
801			Environmental Dynamic Analysis	6	2	15	1	2	26
802			Environmental Influence Assessment (inclu. Radiobiology)	11	18	14	3	1	47
803			Environmental Preservation	15	9	19	4	1	48
			Environmental Science total	32	29	48	8	4	121
811			Biological Organic Chemistry	8	12	7	3	0	30
812			Structured Biochemistry	11	11	6	2	1	31
813			Functional Biochemistry	19	2	11	4	2	38
			Biological Chemistry total	38	25	24	9	3	99
821	B A S I C		Biophysics	7	8	21	3	0	39
822			Molecular Biology	21	18	16	5	1	61
823			Cell Biology	11	24	13	3	4	55
824			Developmental Biology	3	3	5	4	4	19
			Basic Biology total	42	53	55	15	9	174
831		A R E A		Neuroanatomy and Neuropathology	12	10	6	3	0
832			Neurochemistry and Neuropharmacology	4	16	11	4	2	37
833			Neuro Science in General	6	22	12	2	0	42
834			Neuro and Muscular Physiology	16	9	4	4	2	35
			Neuro Science (inclu. Brain Science) total	38	57	33	13	4	145
841			Laboratory Animal Science	5	4	1	1	5	16
851			Medical Organism Engineering and Material Science of Organism	7	20	16	1	3	47
	INTERDISCIPLINARY AREA Total			541	362	438	85	64	1,490
999	WIDE AREA Total			86	35	35	2	7	165
	Item n.a. Total			2,172	1,215	998	205	221	4,811
	Grand Total			7,466	3,709	3,402	800	739	16,116

Table 22. Number of Research Topics by Field of Specialization / by Status of Research Topic (Private Institutions)

Code	Subj ect	Subd ivisio n	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
211	A R T S · H U M A N I T I E S	Philosophy	Philosophy	564	20	39	11	35	669
212			Chinese Philosophy	105	4	11	4	4	128
213			Indian Philosophy (inclu. Buddhist Studies)	338	26	24	9	19	416
214			Religion	437	23	28	11	20	519
215			Ethics	126	6	9	0	15	156
216			History of Philosophy	272	11	17	11	10	321
217			Aesthetics (inclu. Arts)	1,428	108	95	31	97	1,759
218			Art History	264	7	18	7	17	313
			Philosophy total	3,534	205	241	84	217	4,281
221		Psychology·Sociology·Education	Experimental Psychology	343	47	133	20	26	569
222			Educational and Social	1,599	189	423	105	86	2,402
223			Sociology	1,969	185	431	118	143	2,846
224			Education	1,528	139	255	58	96	2,076
225			Cultural Anthropology (inclu. Ethnology and Folklore)	442	34	79	54	21	630
			Psychology·Sociology·Education Cultural Anthropology total	5,881	594	1,321	355	372	8,523
231		History	Japanese History	540	29	48	7	30	654
232			Oriental History	286	26	29	22	28	391
233			European History	444	22	38	20	14	538
234			Archaeology (inclu. Prehistory)	148	14	34	29	5	230
			History total	1,418	91	149	78	77	1,813
241		Literature	Japanese Language	350	9	27	8	29	423
242			Japanese Literature	1,287	35	88	9	58	1,477
243			Chinese Language and Literature	328	15	26	19	22	410
244			English Language and Literature	2,581	125	159	43	154	3,062
245			French Language and Literature	564	18	20	5	25	632
246			German Language and Literature	427	16	28	9	27	507
247			Other Foreign Languages and Literatures	380	22	41	10	27	480
248			Linguistics and Phonetics	940	61	104	49	77	1,231
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	309	12	21	8	25	375
			Literature total	7,166	313	514	160	444	8,597
			ARTS·HUMANITIES Total	17,999	1,203	2,225	677	1,110	23,214
261	L A W	Basic Science of Law	Basic Science of Law	281	18	27	8	15	349
262			Public Law	409	16	31	3	22	481
263			International Law	270	5	38	12	24	349
264			Civil Law	650	11	38	14	41	754
265			Social Law	137	3	20	7	12	179
266			Criminal Law	174	4	18	2	10	208
267			Politics	885	51	89	47	55	1,127
			LAW Total	2,806	108	261	93	179	3,447
271	E C O N O M I C S	General Theory of Economics	General Theory of Economics	830	44	104	49	46	1,073
272			Economical Statistics	117	12	59	13	8	209
273			Economic Policy (inclu. Economic Condition)	1,053	69	143	71	76	1,412
274			Economic History	374	11	49	10	19	463
275			Public Finance, Money and Banking	502	28	49	20	34	633
276			Commercial Science	515	36	62	27	23	663
277			Business Administration	1,251	75	206	61	78	1,671
278			Accounting	662	23	64	15	31	795
			ECONOMICS Total	5,304	298	736	266	315	6,919
301	S C I E N C E	Mathematics	Algebra	165	21	28	8	9	231
302			Geometry	114	10	11	4	8	147
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	232	20	73	15	21	361
305			Basic Analysis	114	12	25	15	7	173
306			Larger-area Analysis	45	3	19	12	2	81
			Mathematics total	670	66	156	54	47	993
311		Astronomy	Astronomy	24	8	21	9	3	65
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	101	34	157	84	22	398

Table 22. Number of Research Topics by Field of Specialization / by Status of Research Topic (Private Institutions)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	81	52	78	8	2	221
323			Solid-State Physics II (Magnetism, Metal Physics,	44	44	65	10	6	169
324			Physical Properties in General (inclu. Basic Theories)	85	25	34	16	7	167
325			Physics in General	69	28	57	12	10	176
			Physics total	380	183	391	130	47	1,131
331			Physics of Solid Earth	21	7	25	6	6	65
332			Meteorology, Oceanography and Hydrology	48	15	37	8	6	114
333			Aeronomy	12	4	17	9	0	42
334			Geology	26	3	19	13	3	64
335			Stratigraphy and Paleontology	12	0	7	5	1	25
336			Mineralogy, Petrology and Study of Mineral Deposit	20	1	14	4	2	41
337			Geochemistry	18	10	18	5	0	51
			Earth Science total	157	40	137	50	18	402
341			Physical Chemistry	101	45	87	22	14	269
342			Organic Chemistry	103	75	57	11	9	255
343			Inorganic Chemistry	55	23	61	11	4	154
344			Function, Properties and Materials in Chemistry	69	29	31	3	8	140
345			Substance Transformation	12	12	7	1	1	33
346			Separation, Refining and Identification	39	36	29	5	4	113
			Chemistry total	379	220	272	53	40	964
351			Genetics	36	7	26	3	2	74
352			Ecology	107	26	65	31	6	235
353			Plant Physiology	34	18	23	14	5	94
354			Morphology, Structure of Organism	40	17	29	7	9	102
355			Animal Physiology and	24	20	28	6	4	82
356			Morphology and Taxonomy	45	7	18	22	6	98
			Biology total	286	95	189	83	32	685
361			Physical Anthropology (inclu. Physiological Anthropology)	33	9	25	15	3	85
	SCIENCE Total			1,929	621	1,191	394	190	4,325
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	40	39	41	2	3	125
402			Surface Physics	37	14	25	6	3	85
403			Applied Optics and Quantum Optics	67	35	38	13	10	163
404			General Applied Physics	33	20	28	2	11	94
405			Fundamentals of Engineering	43	11	15	4	3	76
			Applied Physics·Fundamentals of Engineering total	220	119	147	27	30	543
411			Materials for Machines and Strength of Materials	166	63	96	11	8	344
412			Workshop Processes and Production Engineering	111	64	54	10	16	255
413			Design Engineering, Machine Elements and Tribology	77	49	51	4	4	185
414			Fluid Mechanics	172	57	68	7	11	315
415			Heat Engineering	102	74	55	10	18	259
416			Mechanics and Control Engineering	118	53	46	2	13	232
417			Intelligent Mechanics and Machine System	122	47	54	8	15	246
			Machine Engineering total	868	407	424	52	85	1,836
421			Electric Power Engineering and Electric Machinery	160	80	88	8	21	357
422			Electronic and Electric Materials Engineering	103	99	84	12	15	313
423			Electron Devices and Apparatus Engineering	171	70	74	13	24	352
424			Information and Communication Engineering	354	122	140	14	38	668

Table 22. Number of Research Topics by Field of Specialization / by Status of Research Topic (Private Institutions)

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
425	ENGINEERING		System Engineering	87	26	36	8	9	166
427			Electronic Measurements	106	76	76	12	6	276
428			Control Engineering	92	34	33	5	9	173
			Electric and Electronic Engineering	1,073	507	531	72	122	2,305
431			Construction Materials and Dynamics in General Civil Engineering	73	35	47	1	9	165
432			Structural Engineering and Seismology	112	26	74	0	5	217
433			Ground Engineering	62	28	56	7	6	159
434			Hydraulics and River Engineering	67	24	52	9	1	153
435			Traffic Engineering and Regional Planning	86	32	55	11	14	198
436			Civil Environmental System	40	33	51	8	2	134
			Civil Engineering total	440	178	335	36	37	1,026
441		N	Building Structure and Materials	181	76	120	13	19	409
442			Building Science and Building Equipment	110	34	82	2	1	229
443			City Planning and Building Planning	415	93	149	32	33	722
444			Architectural History and Design	226	15	53	14	9	317
			Architecture total	932	218	404	61	62	1,677
451		N	Physical Metallurgy	21	23	11	6	4	65
452			Inorganic Materials and	53	35	49	5	8	150
453			Composed Materials and Properties	21	22	14	1	1	59
454			Structural and Functional Materials	42	28	22	5	3	100
455		R	Metallurgy and Material	53	27	41	5	4	130
456			Metal Productive Engineering	21	12	13	3	0	49
			Material Engineering total	211	147	150	25	20	553
461		N	Chemical Engineering in General	31	21	12	4	6	74
462			Reaction and Separation Engineering	12	9	9	4	4	38
463			Catalyst and Chemical Process	25	11	13	0	1	50
464			Bioengineering	38	34	37	5	5	119
465			Industrial Analytical Chemistry	27	28	14	2	1	72
			Process Engineering total	133	103	85	15	17	353
471			Industrial Physical Chemistry	43	12	16	2	5	78
472			Industrial Inorganic Chemistry	24	7	9	2	3	45
473			Industrial Organic Chemistry	21	11	11	4	3	50
474			Synthetic Chemistry	40	12	19	1	7	79
475			Polymer Synthesis	47	13	10	0	6	76
476			Polymer Structure and Property (inclu. Fiber)	53	18	36	3	4	114
			Industrial Chemistry total	228	73	101	12	28	442
481			Aeronautics	29	8	19	2	3	61
482			Ship Engineering	21	2	2	0	2	27
483			Marine Engineering	12	4	9	0	1	26
484			Resource Development Engineering	7	3	11	3	0	24
			Synthetic Engineering total	69	17	41	5	6	138
			ENGINEERING Total	4,174	1,769	2,218	305	407	8,873
501	AGRICULTURE		Plant Breeding	20	9	13	2	0	44
502			Crop Science	19	11	2	0	2	34
503			Horticulture and Landscape Architecture	105	32	25	4	11	177
504			Plant Protection	20	18	9	5	3	55
505			Sericultural Science and Economic Entomology	10	17	5	2	2	36
			Agriculture total	174	87	54	13	18	346
511			Plant Fertilizer and Manure and Soil Science	17	5	9	4	4	39
512			Applied Microbiochemistry and Applied Biochemistry	110	79	75	17	14	295
513			Biological Productive Chemistry and Bioorganic Chemistry	26	10	16	2	7	61
514			Food Science and Nutritional Chemistry	232	134	183	16	28	593

Table 22. Number of Research Topics by Field of Specialization / by Status of Research Topic (Private Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
	A		Agricultural Chemistry total	385	228	283	39	53	988
521			Forestry	27	10	12	3	1	53
522	G		Wood Science	7	7	6	1	6	27
			Forestry total	34	17	18	4	7	80
531	R		Fisheries in General	46	36	38	4	5	129
532			Fisheries Chemistry	22	9	18	4	0	53
			Fisheries total	68	45	56	8	5	182
541	I		Agricultural Economics	138	6	37	16	10	207
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	22	7	11	6	3	49
552	U		Agricultural Machinery	12	7	10	5	3	37
553	L		Biological Environment	8	9	2	1	0	20
			Agricultural Engineering total	42	23	23	12	6	106
561	T		Animal Science and Grassland Science	29	18	16	4	11	78
562	U		Applied Animal Science	11	10	11	5	6	43
563	R		Basic Veterinary Medicine and Basic Animal Science	42	56	37	10	9	154
564			Applied Veterinary Medicine	57	61	56	8	8	190
	E		Animal Science·Veterinary Medicine total	139	145	120	27	34	465
571			Biological Resource Science	6	3	12	7	0	28
572			Applied Molecular Cell Biology	15	0	7	0	1	23
			Interdisciplinary Agricultural Science total	21	3	19	7	1	51
			AGRICULTURE Total	1,001	554	610	126	134	2,425
601			Anatomy in General (inclu. Histology, Embryology)	93	102	61	19	9	284
602			Physiology in General	100	111	53	25	14	303
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	88	65	90	16	7	266
604			Pharmacology in General	58	116	54	17	10	255
605			Medical Chemistry in General	46	61	49	13	4	173
606			Pathological Medical Chemistry	31	27	24	8	4	94
			Physiology total	416	482	331	98	48	1,375
611	M		Hominal Pathology	119	116	62	15	13	325
612	E		Experimental Pathology	23	59	23	8	5	118
613	D		Parasitology (inclu. Medical Zoology)	24	19	31	26	3	103
614			Bacteriology (inclu. Eumycetes)	39	91	65	16	5	216
615	I		Virology	13	34	23	9	4	83
616			Immunology	59	83	65	27	11	245
			Pathology total	277	402	269	101	41	1,090
621	C		Hygiene	57	98	85	14	8	262
622	I		Public Health and Health Science	198	169	236	27	29	659
623			Legal Medicine	37	71	34	7	15	164
			Social Medicine total	292	338	355	48	52	1,085
631	N		Internal Medicine in General	109	165	76	9	16	375
632	E		Gastroenterology	139	190	28	11	15	383
633			Internal Medicine Respiratory System	50	100	22	8	10	190
634			Neurological Medicine	73	109	41	7	12	242
635			Cardioangiopathy	125	238	57	18	28	466
636			Pediatrics	140	142	90	25	12	409
637			Dermatology	59	79	20	9	8	175
638			Radiology	102	158	67	13	20	360
639			Neuropsychiatry	130	142	87	20	26	405
641			Hematology	79	93	48	16	13	249
642			Internal Medicine of Kidney	72	77	30	10	7	196
643			Embryology and Newborn	8	12	7	4	0	31
644			Endocrinology	39	59	22	7	4	131
645			Metabolic Science	42	76	17	8	9	152
			Internal Medicine total	1,167	1,640	612	165	180	3,764
651			Surgery in General	120	170	44	4	20	358
652			Gastroenterological Surgery	88	141	35	9	16	289
653			Thoracic Surgery	71	135	24	6	20	256

Table 22. Number of Research Topics by Field of Specialization / by Status of Research Topic (Private Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total		
654	M		Neurosurgery	105	119	26	8	21	279		
655			Orthopedic Surgery	158	177	60	17	18	430		
656			Anesthesiology and Rescue Medicine	109	95	22	3	10	239		
657			Urology	58	88	20	12	14	192		
658			Obstetrics and Gynecology	78	131	44	7	15	275		
659			Oto-rhino-laryngology	86	64	22	5	13	190		
660			Ophthalmology	70	92	27	11	8	208		
661			Pediatric Surgery	11	24	7	2	2	46		
662			Formative Surgery	21	51	12	3	5	92		
			Surgery total	975	1,287	343	87	162	2,854		
671	E		Oral Anatomy and Morphological Basic Dentistry	110	134	53	10	14	321		
672	D		Functional Basic Dentistry	52	126	34	9	11	232		
673	I		Morbid Dentistry (inclu. Dental Radiology)	71	105	21	10	15	222		
674	C		Conservative Dentistry	115	214	24	16	30	399		
675	I		Prosthodontics and Dental Technology	155	283	54	17	27	536		
676	N		Oral Surgery	167	262	44	19	21	513		
677			Orthodontics, Pedodontics and Social Dentistry	178	235	54	32	31	530		
678	E		Periodontological Dentistry	26	57	8	3	12	106		
	Dentistry total		874	1,416	292	116	161	2,859			
681				Chemical Pharmaceuticals	139	233	143	43	28	586	
682		Physical Pharmaceuticals		61	127	53	16	9	266		
683		Biopharmaceutics		203	196	173	35	19	626		
684		Molecular Pharmaceuticals		58	51	65	5	8	187		
685		Environmental Pharmaceuticals		23	26	25	5	1	80		
		Pharmaceutics total		484	633	459	104	65	1,745		
691					Medical Sociology	80	55	84	10	13	242
692					Human Genetics	40	41	37	5	3	126
693					Applied Pharmacology and Medical Pharmacology	54	67	50	7	4	182
694					Pathological Examination	36	73	25	2	3	139
696	Science of Basic and Local Nursing		162		102	99	5	13	381		
697	Science of Clinical Nursing		148		91	74	9	15	337		
	Medicine in General total		520		429	369	38	51	1,407		
	MEDICINE Total			5,005	6,627	3,030	757	760	16,179		
702	I N T E R D I S C I P L I N A R Y A R E A		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	108	9	18	1	4	140		
703			Physical Education	814	284	420	34	77	1,629		
704			Human Geography	186	8	23	16	10	243		
705			Physical Geography	78	9	21	10	0	118		
			Geography total	264	17	44	26	10	361		
706			Home Science(inclu. Cloth/Living Environments)	429	157	242	23	26	877		
707			Food Culture	245	159	222	10	27	663		
			Domestic Science total	674	316	464	33	53	1,540		
708			Science of Cultural Property	10	2	7	1	0	20		
711			Science Education	99	23	39	6	5	172		
712			Educational Engineering	221	80	97	14	16	428		
713			Curriculum Studies	670	72	90	7	32	871		
714			Japanese Language Education	173	27	17	8	16	241		
			Science Education·Curriculum Education total	1,163	202	243	35	69	1,712		
721	I		Statistics	83	19	28	5	4	139		
731			Computer Science	350	101	143	16	25	635		
732			Intelligent Informatics	313	94	134	22	38	601		
733			Study of Information System (Inclu. Library and Information Science)	445	103	132	17	43	740		
			Information Science total	1,108	298	409	55	106	1,976		
741			Social System Engineering	236	47	100	18	29	430		
751			Natural Disaster Science	9	7	12	4	0	32		
761			Plasma Science and Technology	19	23	20	7	7	76		
772			Nuclear Fusion	6	16	7	2	1	32		

Table 22. Number of Research Topics by Field of Specialization / by Status of Research Topic (Private Institutions)

Code	Subj ect	Subd ivisio n	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
773	N T E R D I S C I P L I N A R Y		Energy Science General	31	4	10	4	1	50
774			Nuclear Power Science	9	10	23	9	2	53
			Energy total	46	30	40	15	4	135
801			Environmental Dynamic Analysis	48	27	54	12	8	149
802			Environmental Influence Assessment (inclu. Radiobiology)	71	37	36	13	5	162
803			Environmental Preservation	113	33	63	23	20	252
			Environmental Science total	232	97	153	48	33	563
811			Biological Organic Chemistry	24	26	29	7	4	90
812			Structured Biochemistry	22	38	47	8	3	118
813			Functional Biochemistry	40	42	46	16	5	149
			Biological Chemistry total	86	106	122	31	12	357
821	B A S I C		Biophysics	42	16	43	13	5	119
822			Molecular Biology	87	73	83	35	6	284
823			Cell Biology	49	61	57	13	11	191
824			Developmental Biology	17	10	18	3	2	50
			Basic Biology total	195	160	201	64	24	644
831		A R E A		Neuroanatomy and Neuropathology	19	40	11	12	5
832			Neurochemistry and Neuropharmacology	24	52	34	7	4	121
833			Neuro Science in General	68	46	46	8	16	184
834			Neuro and Muscular Physiology	47	44	45	10	5	151
			Neuro Science (inclu. Brain Science) total	158	182	136	37	30	543
841			Laboratory Animal Science	10	27	22	5	0	64
851			Medical Organism Engineering and Material Science of Organism	102	81	148	20	13	364
	INTERDISCIPLINARY AREA Total			5,317	1,907	2,587	439	475	10,725
999	WIDE AREA Total			1,006	162	229	72	91	1,560
	Item n.a. Total			17,057	5,522	4,928	1,016	1,481	30,004
	Grand Total			61,598	18,771	18,015	4,145	5,142	107,671

Table 23. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total		
211	ARTS • HUMANITIES		Philosophy	48	5	2	0	0	0	55		
212			Chinese Philosophy	12	1	0	0	0	0	13		
213			Indian Philosophy (inclu. Buddhist Studies)	26	2	1	0	0	1	30		
214			Religion	39	3	0	2	0	1	45		
215			Ethics	14	1	0	0	0	0	15		
216			History of Philosophy	32	3	1	0	0	0	36		
217			Aesthetics (inclu. Arts)	179	34	0	2	4	1	220		
218			Art History	36	2	0	0	1	1	40		
			Philosophy total	386	51	4	4	5	4	454		
221				Experimental Psychology	37	2	0	1	0	0	40	
222				Educational and Social	100	9	0	0	0	0	109	
223				Sociology	169	11	0	1	0	0	181	
224				Education	133	18	2	4	1	0	158	
225				Cultural Anthropology (inclu. Ethnology and Folklore)	113	4	0	11	0	0	128	
		Psychology•Sociology•Education Cultural Anthropology total			552	44	2	17	1	0	616	
231				Japanese History	25	1	2	1	0	0	29	
232				Oriental History	67	1	1	0	0	3	72	
233				European History	102	5	1	0	0	1	109	
234				Archaeology (inclu. Prehistory)	29	3	0	3	3	1	39	
			History total			223	10	4	4	3	5	249
241					Japanese Language	14	1	0	0	0	0	15
242					Japanese Literature	36	7	0	3	0	0	46
243					Chinese Language and Literature	41	2	1	0	0	0	44
244					English Language and Literature	203	27	10	0	0	0	240
245		French Language and Literature			86	5	0	0	0	0	91	
246		German Language and Literature			63	0	1	0	0	0	64	
247		Other Foreign Languages and Literatures			95	3	1	0	0	0	99	
248		Linguistics and Phonetics			131	12	4	1	0	0	148	
249		Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics			28	2	0	0	0	0	30	
		Literature total			697	59	17	4	0	0	777	
	ARTS•HUMANITIES Total			1,858	164	27	29	9	9	2,096		
261	LAW		Basic Science of Law	27	3	0	0	0	0	30		
262			Public Law	30	0	0	0	0	0	30		
263			International Law	37	0	0	0	0	0	37		
264			Civil Law	44	2	0	0	0	0	46		
265			Social Law	12	0	0	0	0	0	12		
266			Criminal Law	21	0	0	0	0	1	22		
267			Politics	111	0	0	2	0	0	113		
	LAW Total			282	5	0	2	0	1	290		
271	ECONOMICS		General Theory of Economics	81	3	0	0	0	0	84		
272			Economical Statistics	20	0	0	0	0	0	20		
273			Economic Policy (inclu. Economic Condition)	124	4	1	0	0	1	130		
274			Economic History	50	1	1	0	0	0	52		
275			Public Finance, Money and Banking	26	2	0	0	0	0	28		
276			Commercial Science	25	0	0	0	0	0	25		
277			Business Administration	84	3	0	0	0	0	87		
278			Accounting	32	2	0	0	0	0	34		
	ECONOMICS Total			442	15	2	0	0	1	460		
301	SCIENCE		Algebra	43	1	0	0	0	0	44		
302			Geometry	31	0	2	0	0	0	33		
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	32	1	2	0	0	0	35		
305			Basic Analysis	34	0	2	0	0	0	36		
306			Larger-area Analysis	20	0	0	0	0	0	20		
			Mathematics total			160	2	6	0	0	168	
311		Astronomy		15	0	2	4	2	0	23		
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	95	1	1	10	2	0	109		

Table 23. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	35	0	1	0	0	0	36
323			Solid-State Physics II (Magnetism, Metal Physics,	40	0	1	0	0	1	42
324			Physical Properties in General (inclu. Basic Theories)	33	0	3	2	0	0	38
325			Physics in General	21	0	2	2	0	0	25
			Physics total	224	1	8	14	2	1	250
331			Physics of Solid Earth	25	0	0	1	0	0	26
332			Meteorology, Oceanography and Hydrology	31	0	1	3	0	0	35
333			Aeronomy	5	0	2	0	0	0	7
334			Geology	31	0	0	0	0	1	32
335			Stratigraphy and Paleontology	18	0	0	0	1	0	19
336			Mineralogy, Petrology and Study of Mineral Deposit	32	0	0	0	0	0	32
337			Geochemistry	22	0	0	0	0	0	22
			Earth Science total	164	0	3	4	1	1	173
341			Physical Chemistry	37	2	0	2	0	0	41
342			Organic Chemistry	25	0	2	1	0	0	28
343			Inorganic Chemistry	15	2	0	0	0	0	17
344			Function, Properties and Materials in Chemistry	24	0	1	0	0	0	25
345			Substance Transformation	4	0	0	0	0	0	4
346			Separation, Refining and Identification	20	0	0	0	0	0	20
			Chemistry total	125	4	3	3	0	0	135
351			Genetics	19	0	0	1	0	0	20
352			Ecology	63	2	0	1	1	1	68
353			Plant Physiology	22	2	0	0	0	0	24
354			Morphology, Structure of Organism	13	0	0	1	1	1	16
355			Animal Physiology and	12	0	0	0	0	0	12
356			Morphology and Taxonomy	40	0	0	0	8	1	49
			Biology total	169	4	0	3	10	3	189
361			Physical Anthropology (inclu. Physiological Anthropology)	24	0	0	1	0	0	25
	SCIENCE Total			881	11	22	29	15	5	963
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	14	0	1	2	0	0	17
402			Surface Physics	13	0	1	0	0	0	14
403			Applied Optics and Quantum Optics	21	0	0	1	0	0	22
404			General Applied Physics	3	0	2	0	0	0	5
405			Fundamentals of Engineering	2	0	0	1	0	0	3
			Applied Physics·Fundamentals of Engineering total	53	0	4	4	0	0	61
411			Materials for Machines and Strength of Materials	24	0	2	0	0	0	26
412			Workshop Processes and Production Engineering	16	0	4	0	0	0	20
413			Design Engineering, Machine Elements and Tribology	11	0	0	0	0	0	11
414			Fluid Mechanics	32	0	4	0	1	0	37
415			Heat Engineering	25	1	3	0	0	0	29
416			Mechanics and Control Engineering	18	0	4	0	2	0	24
417			Intelligent Mechanics and Machine System	25	0	0	0	0	0	25
			Machine Engineering total	151	1	17	0	3	0	172
421			Electric Power Engineering and Electric Machinery	21	0	7	3	0	0	31
422			Electronic and Electric Materials Engineering	32	2	3	0	0	0	37
423			Electron Devices and Apparatus Engineering	27	0	1	0	0	0	28
424			Information and Communication Engineering	48	0	7	1	0	0	56

Table 23. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
425	E		System Engineering	11	0	1	0	1	0	13
427			Electronic Measurements	20	0	4	0	0	0	24
428			Control Engineering	18	0	1	0	0	0	19
			Electric and Electronic Engineering	177	2	24	4	1	0	208
431			Construction Materials and Dynamics in General Civil Engineering	10	0	1	0	0	0	11
432			Structural Engineering and Seismology	23	1	1	0	0	0	25
433			Ground Engineering	18	0	0	0	0	0	18
434			Hydraulics and River Engineering	26	0	4	1	0	0	31
435			Traffic Engineering and Regional Planning	14	0	1	0	0	0	15
436			Civil Environmental System	20	0	1	0	0	0	21
			Civil Engineering total	111	1	8	1	0	0	121
441		N	Building Structure and Materials	27	0	2	0	1	0	30
442			Building Science and Building Equipment	17	1	2	0	0	0	20
443			City Planning and Building Planning	78	3	3	0	0	0	84
444			Architectural History and Design	40	3	4	0	2	0	49
			Architecture total	162	7	11	0	3	0	183
451		N	Physical Metallurgy	10	0	2	0	0	0	12
452			Inorganic Materials and	14	1	1	0	0	0	16
453			Composed Materials and Properties	8	0	1	0	0	0	9
454			Structural and Functional Materials	14	0	0	0	0	0	14
455	R		Metallurgy and Material	19	0	1	0	0	0	20
456			Metal Productive Engineering	5	0	1	0	0	0	6
			Material Engineering total	70	1	6	0	0	0	77
461		N	Chemical Engineering in General	16	0	0	0	0	0	16
462			Reaction and Separation Engineering	9	0	0	0	0	0	9
463			Catalyst and Chemical Process	8	0	0	0	0	0	8
464			Bioengineering	17	0	1	0	0	0	18
465			Industrial Analytical Chemistry	13	0	0	0	0	0	13
			Process Engineering total	63	0	1	0	0	0	64
471			Industrial Physical Chemistry	12	0	0	0	0	0	12
472			Industrial Inorganic Chemistry	5	0	0	0	0	0	5
473			Industrial Organic Chemistry	5	0	0	0	0	0	5
474			Synthetic Chemistry	22	0	1	0	0	0	23
475			Polymer Synthesis	11	0	0	0	0	0	11
476			Polymer Structure and Property (inclu. Fiber)	23	0	0	0	0	0	23
			Industrial Chemistry total	78	0	1	0	0	0	79
481			Aeronautics	12	0	0	0	1	0	13
482			Ship Engineering	6	0	0	0	0	0	6
483			Marine Engineering	3	0	0	0	0	0	3
484			Resource Development Engineering	11	0	1	0	0	0	12
			Synthetic Engineering total	32	0	1	0	1	0	34
			ENGINEERING Total	897	12	73	9	8	0	999
501	A		Plant Breeding	15	0	0	0	0	0	15
502			Crop Science	14	0	1	0	0	0	15
503			Horticulture and Landscape Architecture	37	2	0	0	0	0	39
504			Plant Protection	20	0	0	0	0	0	20
505			Sericultural Science and Economic Entomology	3	0	0	0	0	1	4
			Agriculture total	89	2	1	0	0	1	93
511			Plant Fertilizer and Manure and Soil Science	24	0	0	0	0	0	24
512			Applied Microbiochemistry and Applied Biochemistry	35	1	2	0	0	0	38
513			Biological Productive Chemistry and Bioorganic Chemistry	13	1	0	0	0	0	14
514			Food Science and Nutritional Chemistry	39	1	0	0	0	0	40

Table 23. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Japan)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
	A		Agricultural Chemistry total	111	3	2	0	0	0	116
521			Forestry	44	0	0	1	0	0	45
522	G		Wood Science	23	0	0	0	0	0	23
			Forestry total	67	0	0	1	0	0	68
531	R		Fisheries in General	39	0	0	0	0	0	39
532			Fisheries Chemistry	11	1	1	0	0	0	13
			Fisheries total	50	1	1	0	0	0	52
541	I		Agricultural Economics	46	0	0	1	0	0	47
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	29	0	0	1	0	0	30
552	U		Agricultural Machinery	7	1	0	0	0	0	8
553	L		Biological Environment	7	0	0	0	0	0	7
			Agricultural Engineering total	43	1	0	1	0	0	45
561	T		Animal Science and Grassland Science	12	0	0	0	0	0	12
562	U		Applied Animal Science	15	0	0	0	0	0	15
563	R		Basic Veterinary Medicine and Basic Animal Science	36	0	0	1	0	0	37
564			Applied Veterinary Medicine	26	0	0	0	0	0	26
	E		Animal Science·Veterinary Medicine total	89	0	0	1	0	0	90
571			Biological Resource Science	16	0	0	0	0	0	16
572			Applied Molecular Cell Biology	6	0	0	0	0	0	6
			Interdisciplinary Agricultural Science total	22	0	0	0	0	0	22
			AGRICULTURE Total	517	7	4	4	0	1	533
601			Anatomy in General (inclu. Histology, Embryology)	29	1	0	0	0	0	30
602			Physiology in General	26	1	0	0	0	0	27
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	25	2	0	0	0	0	27
604			Pharmacology in General	26	1	0	0	0	0	27
605			Medical Chemistry in General	13	0	0	0	0	0	13
606			Pathological Medical Chemistry	10	0	0	0	0	0	10
	M		Physiology total	129	5	0	0	0	0	134
611			Hominal Pathology	16	0	0	0	0	0	16
612	E		Experimental Pathology	12	1	0	0	0	0	13
613	D		Parasitology (inclu. Medical Zoology)	25	0	0	0	0	0	25
614			Bacteriology (inclu. Eumycetes)	12	0	0	0	0	0	12
615	I		Virology	12	0	0	0	0	1	13
616			Immunology	21	0	0	0	0	0	21
	C		Pathology total	98	1	0	0	0	1	100
621			Hygiene	16	0	0	0	0	0	16
622	I		Public Health and Health Science	52	3	0	0	0	0	55
623			Legal Medicine	9	0	0	0	0	0	9
	N		Social Medicine total	77	3	0	0	0	0	80
631			Internal Medicine in General	19	1	0	0	0	0	20
632	E		Gastroenterology	27	0	0	0	0	0	27
633			Internal Medicine Respiratory System	14	0	0	0	0	0	14
634			Neurological Medicine	22	0	0	0	0	0	22
635			Cardioangiopathy	19	0	0	0	0	1	20
636			Pediatrics	23	0	0	0	0	0	23
637			Dermatology	7	0	0	0	0	0	7
638			Radiology	24	1	0	0	0	0	25
639			Neuropsychiatry	19	0	0	0	0	0	19
641			Hematology	13	0	0	0	0	0	13
642			Internal Medicine of Kidney	7	1	0	0	0	0	8
643			Embryology and Newborn	2	0	0	0	0	0	2
644			Endocrinology	7	0	0	0	0	0	7
645			Metabolic Science	8	0	0	0	0	0	8
			Internal Medicine total	211	3	0	0	0	1	215
651			Surgery in General	13	0	0	0	0	0	13
652			Gastroenterological Surgery	13	0	0	0	0	0	13
653			Thoracic Surgery	14	0	0	0	0	0	14

Table 23. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total		
654	M		Neurosurgery	15	0	0	0	0	0	15		
655			Orthopedic Surgery	31	0	0	0	0	0	31		
656			Anesthesiology and Rescue Medicine	19	0	0	0	0	0	19		
657			Urology	24	0	0	0	0	0	24		
658			Obstetrics and Gynecology	23	0	0	0	0	0	23		
659			Oto-rhino-laryngology	13	0	0	0	0	0	13		
660			Ophthalmology	17	0	0	0	0	0	17		
661			Pediatric Surgery	5	0	0	0	0	0	5		
662			Formative Surgery	2	0	0	0	0	0	2		
			Surgery total	189	0	0	0	0	0	189		
671	E		Oral Anatomy and Morphological Basic Dentistry	19	0	0	0	0	0	19		
672	D		Functional Basic Dentistry	21	0	0	0	0	0	21		
673	I		Morbid Dentistry (inclu. Dental Radiology)	8	0	0	0	0	0	8		
674	C		Conservative Dentistry	7	0	0	0	0	0	7		
675	I		Prosthodontics and Dental Technology	34	0	0	0	0	0	34		
676	I		Oral Surgery	33	0	0	0	0	0	33		
677	N		Orthodontics, Pedodontics and Social Dentistry	35	0	0	0	0	0	35		
678	E		Periodontological Dentistry	10	0	0	0	0	0	10		
	Dentistry total		167	0	0	0	0	0	167			
681				Chemical Pharmaceutics	28	0	0	0	0	0	28	
682		Physical Pharmaceutics		18	1	0	0	0	0	19		
683		Biopharmaceutics		31	1	0	0	0	0	32		
684		Molecular Pharmaceutics		14	0	0	0	0	0	14		
685		Environmental Pharmaceutics		13	0	0	0	0	0	13		
		Pharmaceutics total	104	2	0	0	0	0	106			
691			Medical Sociology	15	1	0	0	0	0	16		
692			Human Genetics	13	0	0	0	0	0	13		
693			Applied Pharmacology and Medical Pharmacology	9	0	0	0	0	0	9		
694			Pathological Examination	15	0	0	0	0	0	15		
696	Science of Basic and Local Nursing		22	3	0	0	0	0	25			
697	Science of Clinical Nursing		29	4	0	0	0	0	33			
	Medicine in General total	103	8	0	0	0	0	111				
	MEDICINE Total			1,078	22	0	0	0	2	1,102		
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	9	0	0	1	1	0	11		
703			Physical Education	102	8	2	0	0	0	112		
704			Human Geography	47	0	0	0	0	0	47		
705			Physical Geography	37	0	0	0	0	0	37		
			Geography total	84	0	0	0	0	0	84		
706			Home Science(inclu. Cloth/Living Environments)	38	7	0	0	0	0	45		
707			Food Culture	6	2	0	0	0	0	8		
			Domestic Science total	44	9	0	0	0	0	53		
708			Science of Cultural Property	4	1	0	1	1	0	7		
711			Science Education	18	1	0	0	0	0	19		
712			Educational Engineering	29	2	5	1	0	0	37		
713			Curriculum Studies	70	14	5	0	0	0	89		
714			Japanese Language Education	14	0	0	0	0	0	14		
			Science Education·Curriculum Education total	131	17	10	1	0	0	159		
721			Statistics	18	0	0	0	0	0	18		
731			Computer Science	54	2	3	1	0	0	60		
732			Intelligent Informatics	57	0	2	3	0	0	62		
733			I		Study of Information System (Inclu. Library and Information Science)	39	4	0	3	2	0	48
					Information Science total	150	6	5	7	2	0	170
741	Social System Engineering	42			0	0	0	0	0	42		
751	Natural Disaster Science	9			1	0	0	0	0	10		
761	Plasma Science and Technology	19			0	1	7	0	0	27		
772	Nuclear Fusion	4			0	0	0	0	0	4		

Table 23. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
773	N T		Energy Science General	5	0	0	0	1	0	6
774			Nuclear Power Science	14	0	0	3	0	0	17
	E		Energy total	23	0	0	3	1	0	27
801	R D I S C		Environmental Dynamic Analysis	31	0	0	1	0	0	32
802			Environmental Influence Assessment (inclu. Radiobiology)	15	1	0	1	0	2	19
803			Environmental Preservation	42	1	1	0	0	0	44
			Environmental Science total	88	2	1	2	0	2	95
811	I P L		Biological Organic Chemistry	17	0	0	0	0	1	18
812			Structured Biochemistry	19	1	0	0	0	0	20
813			Functional Biochemistry	16	1	0	0	0	0	17
			Biological Chemistry total	52	2	0	0	0	1	55
821	N A R Y		Biophysics	13	0	1	0	0	0	14
822			Molecular Biology	42	0	0	1	0	1	44
823			Cell Biology	26	0	0	1	0	1	28
824			Developmental Biology	10	0	1	0	0	0	11
			Basic Biology total	91	0	2	2	0	2	97
831	A R E A		Neuroanatomy and Neuropathology	13	0	0	0	0	0	13
832			Neurochemistry and Neuropharmacology	15	0	0	0	0	0	15
833			Neuro Science in General	32	0	0	0	0	0	32
834			Neuro and Muscular Physiology	13	1	0	0	0	0	14
			Neuro Science (inclu. Brain Science) total	73	1	0	0	0	0	74
841			Laboratory Animal Science	5	0	0	0	0	0	5
851			Medical Organism Engineering and Material Science of Organism	36	1	1	0	0	1	39
			INTERDISCIPLINARY AREA Total	980	48	22	24	5	6	1,085
999			WIDE AREA Total	148	23	1	1	1	0	174
			Item n.a. Total	3,846	111	80	62	41	25	4,165
			Grand Total	10,929	418	231	160	79	50	11,867

Table 24. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
211	ARTS • HUMANITIES		Philosophy	14	0	1	0	0	15
212			Chinese Philosophy	4	0	0	0	0	4
213			Indian Philosophy (inclu. Buddhist Studies)	6	0	1	0	0	7
214			Religion	5	0	0	2	0	7
215			Ethics	7	0	0	0	0	7
216			History of Philosophy	7	0	1	0	0	8
217			Aesthetics (inclu. Arts)	45	2	0	2	4	53
218			Art History	12	0	0	0	1	13
		Philosophy total	100	2	3	4	5	114	
221			Experimental Psychology	17	0	0	1	0	18
222			Educational and Social	34	0	0	0	0	34
223			Sociology	48	0	0	1	0	49
224			Education	68	1	2	4	1	76
225			Cultural Anthropology (inclu. Ethnology and Folklore)	40	0	0	11	0	51
		Psychology • Sociology • Education Cultural Anthropology total	207	1	2	17	1	228	
231			Japanese History	11	0	2	1	0	14
232			Oriental History	31	0	1	0	0	32
233			European History	35	0	1	0	0	36
234			Archaeology (inclu. Prehistory)	14	0	0	3	3	20
		History total	91	0	4	4	3	102	
241			Japanese Language	5	0	0	0	0	5
242			Japanese Literature	6	0	0	3	0	9
243			Chinese Language and Literature	15	2	1	0	0	18
244			English Language and Literature	44	0	10	0	0	54
245			French Language and Literature	26	0	0	0	0	26
246			German Language and Literature	20	0	1	0	0	21
247			Other Foreign Languages and Literatures	35	0	1	0	0	36
248			Linguistics and Phonetics	44	0	4	1	0	49
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	12	0	0	0	0	12
		Literature total	207	2	17	4	0	230	
	ARTS • HUMANITIES Total			605	5	26	29	9	674
261	LAW	Basic Science of Law	9	0	0	0	0	0	9
262		Public Law	7	0	0	0	0	0	7
263		International Law	5	0	0	0	0	0	5
264		Civil Law	11	0	0	0	0	0	11
265		Social Law	8	0	0	0	0	0	8
266		Criminal Law	8	0	0	0	0	0	8
267		Politics	23	0	0	2	0	25	
	LAW Total			71	0	0	2	0	73
271	ECONOMICS	General Theory of Economics	26	0	0	0	0	0	26
272		Economical Statistics	11	0	0	0	0	0	11
273		Economic Policy (inclu. Economic Condition)	33	0	1	0	0	34	
274		Economic History	13	0	0	0	0	13	
275		Public Finance, Money and Banking	6	0	0	0	0	6	
276		Commercial Science	4	0	0	0	0	4	
277		Business Administration	17	0	0	0	0	17	
278		Accounting	3	0	0	0	0	3	
	ECONOMICS Total			113	0	1	0	0	114
301	SCIENCE		Algebra	21	0	0	0	0	21
302			Geometry	24	0	2	0	0	26
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	15	0	2	0	0	17
305			Basic Analysis	19	0	2	0	0	21
306			Larger-area Analysis	12	0	0	0	0	12
		Mathematics total	91	0	6	0	0	97	
311		Astronomy	12	0	2	4	2	20	
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	67	0	1	10	2	80	

Table 24. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	24	0	1	0	0	25
323			Solid-State Physics II (Magnetism, Metal Physics,	28	0	1	0	0	29
324			Physical Properties in General (inclu. Basic Theories)	20	0	3	2	0	25
325			Physics in General	14	0	1	2	0	17
			Physics total	153	0	7	14	2	176
331			Physics of Solid Earth	23	0	0	1	0	24
332			Meteorology, Oceanography and Hydrology	26	0	1	3	0	30
333			Aeronomy	3	0	2	0	0	5
334			Geology	26	0	0	0	0	26
335			Stratigraphy and Paleontology	13	0	0	0	1	14
336			Mineralogy, Petrology and Study of Mineral Deposit	30	0	0	0	0	30
337			Geochemistry	16	0	0	0	0	16
			Earth Science total	137	0	3	4	1	145
341			Physical Chemistry	23	0	0	2	0	25
342			Organic Chemistry	18	0	2	1	0	21
343			Inorganic Chemistry	11	0	0	0	0	11
344			Function, Properties and Materials in Chemistry	20	0	1	0	0	21
345			Substance Transformation	3	0	0	0	0	3
346			Separation, Refining and Identification	12	0	0	0	0	12
			Chemistry total	87	0	3	3	0	93
351			Genetics	15	0	0	1	0	16
352			Ecology	40	0	0	1	1	42
353			Plant Physiology	11	0	0	0	0	11
354			Morphology, Structure of Organism	9	0	0	1	1	11
355			Animal Physiology and	10	0	0	0	0	10
356			Morphology and Taxonomy	29	0	0	0	8	37
			Biology total	114	0	0	3	10	127
361			Physical Anthropology (inclu. Physiological Anthropology)	17	0	0	1	0	18
			SCIENCE Total	611	0	21	29	15	676
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	9	0	1	2	0	12
402			Surface Physics	8	0	1	0	0	9
403			Applied Optics and Quantum Optics	16	0	0	1	0	17
404			General Applied Physics	1	0	2	0	0	3
405			Fundamentals of Engineering	2	0	0	1	0	3
			Applied Physics-Fundamentals of Engineering total	36	0	4	4	0	44
411			Materials for Machines and Strength of Materials	12	0	2	0	0	14
412			Workshop Processes and Production Engineering	5	0	4	0	0	9
413			Design Engineering, Machine Elements and Tribology	6	0	0	0	0	6
414			Fluid Mechanics	16	0	4	0	1	21
415			Heat Engineering	17	0	3	0	0	20
416			Mechanics and Control Engineering	14	0	3	0	2	19
417			Intelligent Mechanics and Machine System	18	0	0	0	0	18
			Machine Engineering total	88	0	16	0	3	107
421			Electric Power Engineering and Electric Machinery	10	0	6	3	0	19
422			Electronic and Electric Materials Engineering	19	0	3	0	0	22
423			Electron Devices and Apparatus Engineering	8	0	1	0	0	9
424			Information and Communication Engineering	26	0	7	1	0	34

Table 24. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
425	E		System Engineering	8	0	1	0	1	10
427			Electronic Measurements	8	0	4	0	0	12
428			Control Engineering	11	0	1	0	0	12
			Electric and Electronic Engineering	90	0	23	4	1	118
431			Construction Materials and Dynamics in General Civil Engineering	4	0	1	0	0	5
432			Structural Engineering and Seismology	12	0	1	0	0	13
433			Ground Engineering	16	0	0	0	0	16
434			Hydraulics and River Engineering	20	0	3	1	0	24
435			Traffic Engineering and Regional Planning	6	0	1	0	0	7
436			Civil Environmental System	16	0	1	0	0	17
			Civil Engineering total	74	0	7	1	0	82
441		N	Building Structure and Materials	17	0	2	0	1	20
442			Building Science and Building Equipment	9	0	1	0	0	10
443		G	City Planning and Building Planning	35	0	3	0	0	38
444		I	Architectural History and Design	15	0	4	0	2	21
			Architecture total	76	0	10	0	3	89
451		N	Physical Metallurgy	7	0	2	0	0	9
452			Inorganic Materials and	9	0	1	0	0	10
453		E	Composed Materials and Properties	7	0	1	0	0	8
454		E	Structural and Functional Materials	12	0	0	0	0	12
455		R	Metallurgy and Material	13	0	1	0	0	14
456			Metal Productive Engineering	3	0	1	0	0	4
			Material Engineering total	51	0	6	0	0	57
461		G	Chemical Engineering in General	11	0	0	0	0	11
462			Reaction and Separation Engineering	5	0	0	0	0	5
463			Catalyst and Chemical Process	8	0	0	0	0	8
464			Bioengineering	14	0	1	0	0	15
465			Industrial Analytical Chemistry	9	0	0	0	0	9
			Process Engineering total	47	0	1	0	0	48
471			Industrial Physical Chemistry	7	0	0	0	0	7
472			Industrial Inorganic Chemistry	5	0	0	0	0	5
473			Industrial Organic Chemistry	5	0	0	0	0	5
474			Synthetic Chemistry	16	0	1	0	0	17
475			Polymer Synthesis	8	0	0	0	0	8
476			Polymer Structure and Property (inclu. Fiber)	17	0	0	0	0	17
			Industrial Chemistry total	58	0	1	0	0	59
481			Aeronautics	8	0	0	0	1	9
482			Ship Engineering	4	0	0	0	0	4
483			Marine Engineering	1	0	0	0	0	1
484			Resource Development Engineering	8	0	1	0	0	9
			Synthetic Engineering total	21	0	1	0	1	23
			ENGINEERING Total	541	0	69	9	8	627
501	A G R I C U L T U R E		Plant Breeding	12	0	0	0	0	12
502			Crop Science	14	0	1	0	0	15
503			Horticulture and Landscape Architecture	22	0	0	0	0	22
504			Plant Protection	18	0	0	0	0	18
505			Sericultural Science and Economic Entomology	3	0	0	0	0	3
			Agriculture total	69	0	1	0	0	70
511			Plant Fertilizer and Manure and Soil Science	20	0	0	0	0	20
512			Applied Microbiochemistry and Applied Biochemistry	23	0	2	0	0	25
513			Biological Productive Chemistry and Bioorganic Chemistry	9	0	0	0	0	9
514			Food Science and Nutritional Chemistry	25	0	0	0	0	25

Table 24. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
	A		Agricultural Chemistry total	77	0	2	0	0	79
521			Forestry	36	0	0	1	0	37
522	G		Wood Science	21	0	0	0	0	21
			Forestry total	57	0	0	1	0	58
531	R		Fisheries in General	31	0	0	0	0	31
532			Fisheries Chemistry	8	0	1	0	0	9
			Fisheries total	39	0	1	0	0	40
541	I		Agricultural Economics	30	0	0	1	0	31
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	21	0	0	1	0	22
552	U		Agricultural Machinery	7	0	0	0	0	7
553	L		Biological Environment	4	0	0	0	0	4
			Agricultural Engineering total	32	0	0	1	0	33
561	T		Animal Science and Grassland Science	7	0	0	0	0	7
562	U		Applied Animal Science	9	0	0	0	0	9
563	R		Basic Veterinary Medicine and Basic Animal Science	23	0	0	1	0	24
564			Applied Veterinary Medicine	18	0	0	0	0	18
	E		Animal Science-Veterinary Medicine total	57	0	0	1	0	58
571			Biological Resource Science	12	0	0	0	0	12
572			Applied Molecular Cell Biology	3	0	0	0	0	3
			Interdisciplinary Agricultural Science total	15	0	0	0	0	15
			AGRICULTURE Total	376	0	4	4	0	384
601			Anatomy in General (inclu. Histology, Embryology)	21	0	0	0	0	21
602			Physiology in General	16	0	0	0	0	16
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	10	0	0	0	0	10
604			Pharmacology in General	12	0	0	0	0	12
605			Medical Chemistry in General	9	0	0	0	0	9
606			Pathological Medical Chemistry	6	0	0	0	0	6
	M		Physiology total	74	0	0	0	0	74
611			Hominal Pathology	8	0	0	0	0	8
612	E		Experimental Pathology	7	0	0	0	0	7
613	D		Parasitology (inclu. Medical Zoology)	21	0	0	0	0	21
614			Bacteriology (inclu. Eumycetes)	5	0	0	0	0	5
615	I		Virology	10	0	0	0	0	10
616			Immunology	13	0	0	0	0	13
			Pathology total	64	0	0	0	0	64
621	C		Hygiene	6	0	0	0	0	6
622	I		Public Health and Health Science	29	0	0	0	0	29
623			Legal Medicine	6	0	0	0	0	6
			Social Medicine total	41	0	0	0	0	41
631	N		Internal Medicine in General	9	1	0	0	0	10
632	E		Gastroenterology	16	0	0	0	0	16
633			Internal Medicine Respiratory System	8	0	0	0	0	8
634			Neurological Medicine	16	0	0	0	0	16
635			Cardioangiopathy	9	0	0	0	0	9
636			Pediatrics	11	0	0	0	0	11
637			Dermatology	3	0	0	0	0	3
638			Radiology	13	0	0	0	0	13
639			Neuropsychiatry	7	0	0	0	0	7
641			Hematology	8	0	0	0	0	8
642			Internal Medicine of Kidney	3	0	0	0	0	3
643			Embryology and Newborn	5	0	0	0	0	5
644			Endocrinology	6	0	0	0	0	6
645			Metabolic Science	1	0	0	0	0	1
			Internal Medicine total	115	1	0	0	0	116
651			Surgery in General	4	0	0	0	0	4
652			Gastroenterological Surgery	5	0	0	0	0	5
653			Thoracic Surgery	9	0	0	0	0	9

Table 24. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
654	M		Neurosurgery	7	0	0	0	0	7
655			Orthopedic Surgery	16	0	0	0	0	16
656			Anesthesiology and Rescue Medicine	9	0	0	0	0	9
657			Urology	16	0	0	0	0	16
658			Obstetrics and Gynecology	16	0	0	0	0	16
659			Oto-rhino-laryngology	10	0	0	0	0	10
660			Ophthalmology	8	0	0	0	0	8
661			Pediatric Surgery	4	0	0	0	0	4
662			Formative Surgery	0	0	0	0	0	0
			Surgery total	104	0	0	0	0	104
671	E		Oral Anatomy and Morphological Basic Dentistry	10	0	0	0	0	10
672	D		Functional Basic Dentistry	16	0	0	0	0	16
673	I		Morbid Dentistry (inclu. Dental Radiology)	3	0	0	0	0	3
674	C		Conservative Dentistry	3	0	0	0	0	3
675	I		Prosthodontics and Dental Technology	20	0	0	0	0	20
676	I		Oral Surgery	21	0	0	0	0	21
677	N		Orthodontics, Pedodontics and Social Dentistry	20	0	0	0	0	20
678	E		Periodontological Dentistry	4	0	0	0	0	4
	Dentistry total		97	0	0	0	0	97	
681			Chemical Pharmaceutics	10	0	0	0	0	10
682			Physical Pharmaceutics	6	0	0	0	0	6
683			Biopharmaceutics	9	0	0	0	0	9
684			Molecular Pharmaceutics	5	0	0	0	0	5
685			Environmental Pharmaceutics	4	0	0	0	0	4
		Pharmaceutics total	34	0	0	0	0	34	
691			Medical Sociology	6	0	0	0	0	6
692			Human Genetics	7	0	0	0	0	7
693			Applied Pharmacology and Medical Pharmacology	3	0	0	0	0	3
694			Pathological Examination	8	0	0	0	0	8
696			Science of Basic and Local Nursing	11	1	0	0	0	12
697			Science of Clinical Nursing	13	0	0	0	0	13
			Medicine in General total	48	1	0	0	0	49
		MEDICINE Total	577	2	0	0	0	579	
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	3	0	0	1	1	5
703			Physical Education	47	0	2	0	0	49
704			Human Geography	24	0	0	0	0	24
705			Physical Geography	21	0	0	0	0	21
			Geography total	45	0	0	0	0	45
706			Home Science(inclu. Cloth/Living Environments)	14	0	0	0	0	14
707			Food Culture	2	0	0	0	0	2
			Domestic Science total	16	0	0	0	0	16
708			Science of Cultural Property	2	1	0	1	1	5
711			Science Education	10	0	0	0	0	10
712		Educational Engineering	12	0	5	1	0	18	
713		Curriculum Studies	43	1	5	0	0	49	
714		Japanese Language Education	10	0	0	0	0	10	
		Science Education·Curriculum Education total	75	1	10	1	0	87	
721	A R E A		Statistics	8	0	0	0	0	8
731			Computer Science	23	1	1	1	0	26
732			Intelligent Informatics	31	0	2	3	0	36
733			Study of Information System (Inclu. Library and Information Science)	13	1	0	3	2	19
			Information Science total	67	2	3	7	2	81
741			Social System Engineering	16	0	0	0	0	16
751			Natural Disaster Science	7	0	0	0	0	7
761			Plasma Science and Technology	18	0	1	7	0	26
772			Nuclear Fusion	3	0	0	0	0	3

Table 24. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
773	N T E		Energy Science General	3	0	0	0	1	4
774			Nuclear Power Science	12	0	0	3	0	15
			Energy total	18	0	0	3	1	22
801	R D I		Environmental Dynamic Analysis	16	0	0	1	0	17
802			Environmental Influence Assessment (inclu. Radiobiology)	7	0	0	1	0	8
803			Environmental Preservation	22	0	1	0	0	23
	C I P		Environmental Science total	45	0	1	2	0	48
811			Biological Organic Chemistry	11	0	0	0	0	11
812			Structured Biochemistry	15	0	0	0	0	15
813	L I N		Functional Biochemistry	6	0	0	0	0	6
			Biological Chemistry total	32	0	0	0	0	32
821			Biophysics	7	0	1	0	0	8
822	A R Y		Molecular Biology	23	0	0	1	0	24
823			Cell Biology	19	0	0	1	0	20
824			Developmental Biology	7	0	1	0	0	8
	A R E		Basic Biology total	56	0	2	2	0	60
831			Neuroanatomy and Neuropathology	6	0	0	0	0	6
832			Neurochemistry and Neuropharmacology	8	0	0	0	0	8
833			Neuro Science in General	18	0	0	0	0	18
834			Neuro and Muscular Physiology	10	0	0	0	0	10
			Neuro Science (inclu. Brain Science) total	42	0	0	0	0	42
841			Laboratory Animal Science	4	0	0	0	0	4
851			Medical Organism Engineering and Material Science of Organism	23	0	1	0	0	24
	INTERDISCIPLINARY AREA Total			524	4	20	24	5	577
999	WIDE AREA Total			46	4	1	1	1	53
	Item n.a. Total			2,077	2	77	62	41	2,259
	Grand Total			5,541	17	219	160	79	6,016

Table 25. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total	
211	ARTS • HUMANITIES		Philosophy	0	0	1	1	
212			Chinese Philosophy	1	1	0	2	
213			Indian Philosophy (inclu. Buddhist Studies)	1	1	0	2	
214			Religion	1	0	0	1	
215			Ethics	1	0	0	1	
216			History of Philosophy	4	0	0	4	
217			Aesthetics (inclu. Arts)	20	2	0	22	
218			Art History	1	1	0	2	
			Philosophy total	29	5	1	35	
221			Experimental Psychology	1	2	0	3	
222			Educational and Social	6	1	0	7	
223			Sociology	14	2	0	16	
224			Education	6	2	0	8	
225			Cultural Anthropology (inclu. Ethnology and Folklore)	7	0	0	7	
		Psychology • Sociology • Education Cultural Anthropology total			34	7	0	41
231			Japanese History	3	0	0	3	
232			Oriental History	3	0	0	3	
233			European History	6	1	0	7	
234			Archaeology (inclu. Prehistory)	1	0	0	1	
			History total	13	1	0	14	
241			Japanese Language	0	0	0	0	
242			Japanese Literature	0	1	0	1	
243			Chinese Language and Literature	0	0	0	0	
244			English Language and Literature	8	1	0	9	
245			French Language and Literature	4	0	0	4	
246			German Language and Literature	3	0	0	3	
247			Other Foreign Languages and Literatures	3	1	0	4	
248			Linguistics and Phonetics	10	1	0	11	
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	0	0	0	0	
			Literature total	28	4	0	32	
	ARTS • HUMANITIES Total			104	17	1	122	
261	LAW		Basic Science of Law	0	1	0	1	
262			Public Law	0	0	0	0	
263			International Law	3	0	0	3	
264			Civil Law	2	1	0	3	
265			Social Law	0	0	0	0	
266			Criminal Law	1	0	0	1	
267			Politics	6	0	0	6	
	LAW Total			12	2	0	14	
271	ECONOMICS		General Theory of Economics	9	0	0	9	
272			Economical Statistics	2	0	0	2	
273			Economic Policy (inclu. Economic Condition)	7	3	0	10	
274			Economic History	4	1	0	5	
275			Public Finance, Money and Banking	2	1	0	3	
276			Commercial Science	2	0	0	2	
277			Business Administration	5	0	0	5	
278			Accounting	1	1	0	2	
	ECONOMICS Total			32	6	0	38	
301	SCIENCE		Algebra	6	0	0	6	
302			Geometry	1	0	0	1	
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	2	0	0	2	
305			Basic Analysis	2	0	0	2	
306			Larger-area Analysis	0	0	0	0	
		Mathematics total	11	0	0	11		
311		Astronomy		0	0	0	0	
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	6	1	0	7		

Table 25. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	3	0	0	3
323			Solid-State Physics II (Magnetism, Metal Physics,	3	0	0	3
324			Physical Properties in General (inclu. Basic Theories)	2	0	0	2
325			Physics in General	1	0	1	2
			Physics total	15	1	1	17
331			Physics of Solid Earth	1	0	0	1
332			Meteorology, Oceanography and Hydrology	2	0	0	2
333			Aeronomy	0	0	0	0
334			Geology	2	0	0	2
335			Stratigraphy and Paleontology	3	0	0	3
336			Mineralogy, Petrology and Study of Mineral Deposit	1	0	0	1
337			Geochemistry	1	0	0	1
			Earth Science total	10	0	0	10
341			Physical Chemistry	7	1	0	8
342			Organic Chemistry	0	0	0	0
343			Inorganic Chemistry	2	1	0	3
344			Function, Properties and Materials in Chemistry	1	0	0	1
345			Substance Transformation	0	0	0	0
346			Separation, Refining and Identification	3	0	0	3
			Chemistry total	13	2	0	15
351			Genetics	2	0	0	2
352			Ecology	2	0	0	2
353			Plant Physiology	6	1	0	7
354			Morphology, Structure of Organism	2	0	0	2
355			Animal Physiology and	0	0	0	0
356			Morphology and Taxonomy	5	0	0	5
			Biology total	17	1	0	18
361			Physical Anthropology (inclu. Physiological Anthropology)	2	0	0	2
			SCIENCE Total	68	4	1	73
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	3	0	0	3
402			Surface Physics	0	0	0	0
403			Applied Optics and Quantum Optics	1	0	0	1
404			General Applied Physics	0	0	0	0
405			Fundamentals of Engineering	0	0	0	0
			Applied Physics-Fundamentals of Engineering total	4	0	0	4
411			Materials for Machines and Strength of Materials	4	0	0	4
412			Workshop Processes and Production Engineering	4	0	0	4
413			Design Engineering, Machine Elements and Tribology	0	0	0	0
414			Fluid Mechanics	2	0	0	2
415			Heat Engineering	2	0	0	2
416			Mechanics and Control Engineering	0	0	1	1
417			Intelligent Mechanics and Machine System	1	0	0	1
			Machine Engineering total	13	0	1	14
421	G		Electric Power Engineering and Electric Machinery	3	0	0	3
422			Electronic and Electric Materials Engineering	2	0	0	2
423			Electron Devices and Apparatus Engineering	2	0	0	2
424			Information and Communication Engineering	4	0	0	4

Table 25. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
425	E		System Engineering	0	0	0	0
427			Electronic Measurements	2	0	0	2
428			Control Engineering	1	0	0	1
			Electric and Electronic Engineering	14	0	0	14
431			Construction Materials and Dynamics in General Civil Engineering	0	0	0	0
432			Structural Engineering and Seismology	0	0	0	0
433			Ground Engineering	1	0	0	1
434			Hydraulics and River Engineering	0	0	1	1
435			Traffic Engineering and Regional Planning	0	0	0	0
436			Civil Environmental System	1	0	0	1
			Civil Engineering total	2	0	1	3
441	N		Building Structure and Materials	1	0	0	1
442			Building Science and Building Equipment	1	1	1	3
443	G		City Planning and Building Planning	4	0	0	4
444	I		Architectural History and Design	1	1	0	2
			Architecture total	7	2	1	10
451	N		Physical Metallurgy	1	0	0	1
452			Inorganic Materials and	0	0	0	0
453	E		Composed Materials and Properties	1	0	0	1
454	E		Structural and Functional Materials	1	0	0	1
455	R		Metallurgy and Material	1	0	0	1
456			Metal Productive Engineering	0	0	0	0
	I		Material Engineering total	4	0	0	4
461	N		Chemical Engineering in General	1	0	0	1
462			Reaction and Separation Engineering	2	0	0	2
463			Catalyst and Chemical Process	0	0	0	0
464			Bioengineering	2	0	0	2
465			Industrial Analytical Chemistry	2	0	0	2
			Process Engineering total	7	0	0	7
471			Industrial Physical Chemistry	2	0	0	2
472			Industrial Inorganic Chemistry	0	0	0	0
473			Industrial Organic Chemistry	0	0	0	0
474			Synthetic Chemistry	0	0	0	0
475			Polymer Synthesis	1	0	0	1
476			Polymer Structure and Property (inclu. Fiber)	1	0	0	1
			Industrial Chemistry total	4	0	0	4
481			Aeronautics	0	0	0	0
482			Ship Engineering	2	0	0	2
483			Marine Engineering	1	0	0	1
484			Resource Development Engineering	0	0	0	0
			Synthetic Engineering total	3	0	0	3
	ENGINEERING Total			58	2	3	63
501	A G R I C U L T U R E		Plant Breeding	2	0	0	2
502			Crop Science	0	0	0	0
503			Horticulture and Landscape Architecture	8	0	0	8
504			Plant Protection	0	0	0	0
505			Sericultural Science and Economic Entomology	0	0	0	0
			Agriculture total	10	0	0	10
511			Plant Fertilizer and Manure and Soil Science	0	0	0	0
512			Applied Microbiochemistry and Applied Biochemistry	2	1	0	3
513			Biological Productive Chemistry and Bioorganic Chemistry	0	0	0	0
514			Food Science and Nutritional Chemistry	7	0	0	7

Table 25. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
	A		Agricultural Chemistry total	9	1	0	10
521			Forestry	3	0	0	3
522	G		Wood Science	1	0	0	1
			Forestry total	4	0	0	4
531	R		Fisheries in General	2	0	0	2
532			Fisheries Chemistry	0	1	0	1
			Fisheries total	2	1	0	3
541	I		Agricultural Economics	4	0	0	4
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	1	0	0	1
552	U		Agricultural Machinery	0	0	0	0
553	L		Biological Environment	1	0	0	1
			Agricultural Engineering total	2	0	0	2
561	T		Animal Science and Grassland Science	0	0	0	0
562	U		Applied Animal Science	1	0	0	1
563	R		Basic Veterinary Medicine and Basic Animal Science	1	0	0	1
564			Applied Veterinary Medicine	2	0	0	2
	E		Animal Science·Veterinary Medicine total	4	0	0	4
571			Biological Resource Science	2	0	0	2
572			Applied Molecular Cell Biology	0	0	0	0
			Interdisciplinary Agricultural Science total	2	0	0	2
			AGRICULTURE Total	37	2	0	39
601			Anatomy in General (inclu. Histology, Embryology)	2	1	0	3
602			Physiology in General	1	0	0	1
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	2	1	0	3
604			Pharmacology in General	2	0	0	2
605			Medical Chemistry in General	0	0	0	0
606			Pathological Medical Chemistry	0	0	0	0
	M		Physiology total	7	2	0	9
611			Hominal Pathology	0	0	0	0
612	E		Experimental Pathology	3	0	0	3
613	D		Parasitology (inclu. Medical Zoology)	0	0	0	0
614			Bacteriology (inclu. Eumycetes)	0	0	0	0
615	I		Virology	0	0	0	0
616			Immunology	0	0	0	0
	C		Pathology total	3	0	0	3
621			Hygiene	3	0	0	3
622	I		Public Health and Health Science	7	1	0	8
623			Legal Medicine	1	0	0	1
	N		Social Medicine total	11	1	0	12
631	E		Internal Medicine in General	2	0	0	2
632			Gastroenterology	3	0	0	3
633			Internal Medicine Respiratory System	1	0	0	1
634			Neurological Medicine	0	0	0	0
635			Cardioangiopathy	1	0	0	1
636			Pediatrics	3	0	0	3
637			Dermatology	1	0	0	1
638			Radiology	1	0	0	1
639			Neuropsychiatry	3	0	0	3
641			Hematology	2	0	0	2
642			Internal Medicine of Kidney	1	0	0	1
643			Embryology and Newborn	0	0	0	0
644			Endocrinology	0	0	0	0
645			Metabolic Science	0	0	0	0
			Internal Medicine total	18	0	0	18
651			Surgery in General	0	0	0	0
652			Gastroenterological Surgery	3	0	0	3
653			Thoracic Surgery	3	0	0	3

Table 25. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total	
654	M		Neurosurgery	0	0	0	0	
655			Orthopedic Surgery	5	0	0	5	
656			Anesthesiology and Rescue Medicine	7	0	0	7	
657			Urology	2	0	0	2	
658			Obstetrics and Gynecology	2	0	0	2	
659			Oto-rhino-laryngology	2	0	0	2	
660			Ophthalmology	1	0	0	1	
661			Pediatric Surgery	0	0	0	0	
662			Formative Surgery	0	0	0	0	
			Surgery total	25	0	0	25	
671		E		Oral Anatomy and Morphological Basic Dentistry	2	0	0	2
672		D		Functional Basic Dentistry	0	0	0	0
673		I		Morbid Dentistry (inclu. Dental Radiology)	0	0	0	0
674		C		Conservative Dentistry	0	0	0	0
675				Prosthodontics and Dental Technology	0	0	0	0
676		I		Oral Surgery	5	0	0	5
677		N		Orthodontics, Pedodontics and Social Dentistry	0	0	0	0
678				Periodontological Dentistry	0	0	0	0
		E		Dentistry total	7	0	0	7
681				Chemical Pharmaceutics	0	0	0	0
682				Physical Pharmaceutics	2	0	0	2
683	Biopharmaceutics			2	1	0	3	
684	Molecular Pharmaceutics			0	0	0	0	
685	Environmental Pharmaceutics			1	0	0	1	
	Pharmaceutics total		5	1	0	6		
691			Medical Sociology	1	1	0	2	
692			Human Genetics	0	0	0	0	
693			Applied Pharmacology and Medical Pharmacology	0	0	0	0	
694			Pathological Examination	0	0	0	0	
696			Science of Basic and Local Nursing	6	0	0	6	
697			Science of Clinical Nursing	9	4	0	13	
			Medicine in General total	16	5	0	21	
	MEDICINE Total			92	9	0	101	
702	I N T E R D I S C I P L I N A R Y A R E A		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	1	0	0	1	
703			Physical Education	6	0	0	6	
704				Human Geography	2	0	0	2
705				Physical Geography	4	0	0	4
			Geography total	6	0	0	6	
706			Home Science(inclu. Cloth/Living Environments)	0	0	0	0	
707			Food Culture	1	0	0	1	
		Domestic Science total	1	0	0	1		
708		Science of Cultural Property	0	0	0	0		
711			Science Education	0	0	0	0	
712			Educational Engineering	2	0	0	2	
713			Curriculum Studies	3	2	0	5	
714			Japanese Language Education	0	0	0	0	
		Science Education·Curriculum Education total	5	2	0	7		
721		Statistics	1	0	0	1		
731			Computer Science	7	0	1	8	
732			Intelligent Informatics	1	0	0	1	
733	I		Study of Information System (Inclu. Library and Information Science)	3	0	0	3	
			Information Science total	11	0	1	12	
741		Social System Engineering	5	0	0	5		
751		Natural Disaster Science	1	0	0	1		
761		Plasma Science and Technology	0	0	0	0		
772		Nuclear Fusion	0	0	0	0		

Table 25. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	0	0	0	0
774			Nuclear Power Science	0	0	0	0
			Energy total	0	0	0	0
801			Environmental Dynamic Analysis	3	0	0	3
802			Environmental Influence Assessment (inclu. Radiobiology)	3	0	0	3
803			Environmental Preservation	5	0	0	5
		Environmental Science total	11	0	0	11	
811			Biological Organic Chemistry	0	0	0	0
812			Structured Biochemistry	0	0	0	0
813			Functional Biochemistry	2	1	0	3
		Biological Chemistry total	2	1	0	3	
821			Biophysics	0	0	0	0
822			Molecular Biology	3	0	0	3
823			Cell Biology	1	0	0	1
824			Developmental Biology	2	0	0	2
	Basic Biology total	6	0	0	6		
831			Neuroanatomy and Neuropathology	1	0	0	1
832			Neurochemistry and Neuropharmacology	1	0	0	1
833			Neuro Science in General	1	0	0	1
834			Neuro and Muscular Physiology	1	0	0	1
		Neuro Science (inclu. Brain Science) total	4	0	0	4	
841		Laboratory Animal Science	1	0	0	1	
851		Medical Organism Engineering and Material Science of Organism	0	0	0	0	
	INTERDISCIPLINARY AREA Total			61	3	1	65
999	WIDE AREA Total			10	1	0	11
	Item n.a. Total			262	20	2	284
	Grand Total			736	66	8	810

Table 26. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Private Institutions)

Code	Subj ect	Subd ivision	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
211	ARTS • HUMANITIES		Philosophy	34	5	0	0	39
212			Chinese Philosophy	7	0	0	0	7
213			Indian Philosophy (inclu. Buddhist Studies)	19	1	0	1	21
214			Religion	33	3	0	1	37
215			Ethics	6	1	0	0	7
216			History of Philosophy	21	3	0	0	24
217			Aesthetics (inclu. Arts)	114	30	0	1	145
218			Art History	23	1	0	1	25
		Philosophy total	257	44	0	4	305	
221			Experimental Psychology	19	0	0	0	19
222			Educational and Social	60	8	0	0	68
223			Sociology	107	9	0	0	116
224			Education	59	15	0	0	74
225			Cultural Anthropology (inclu. Ethnology and Folklore)	66	4	0	0	70
		Psychology • Sociology • Education Cultural Anthropology total	311	36	0	0	347	
231			Japanese History	11	1	0	0	12
232			Oriental History	33	1	0	3	37
233			European History	61	4	0	1	66
234			Archaeology (inclu. Prehistory)	14	3	0	1	18
		History total	119	9	0	5	133	
241			Japanese Language	9	1	0	0	10
242			Japanese Literature	30	6	0	0	36
243			Chinese Language and Literature	26	0	0	0	26
244			English Language and Literature	151	26	0	0	177
245			French Language and Literature	56	5	0	0	61
246			German Language and Literature	40	0	0	0	40
247			Other Foreign Languages and Literatures	57	2	0	0	59
248			Linguistics and Phonetics	77	11	0	0	88
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	16	2	0	0	18
		Literature total	462	53	0	0	515	
	ARTS • HUMANITIES Total		1,149	142	0	9	1,300	
261	LAW		Basic Science of Law	18	2	0	0	20
262			Public Law	23	0	0	0	23
263			International Law	29	0	0	0	29
264			Civil Law	31	1	0	0	32
265			Social Law	4	0	0	0	4
266			Criminal Law	12	0	0	1	13
267			Politics	82	0	0	0	82
	LAW Total		199	3	0	1	203	
271	ECONOMICS		General Theory of Economics	46	3	0	0	49
272			Economical Statistics	7	0	0	0	7
273			Economic Policy (inclu. Economic Condition)	84	1	0	1	86
274			Economic History	33	0	1	0	34
275			Public Finance, Money and Banking	18	1	0	0	19
276			Commercial Science	19	0	0	0	19
277			Business Administration	62	3	0	0	65
278			Accounting	28	1	0	0	29
	ECONOMICS Total		297	9	1	1	308	
301	SCIENCE		Algebra	16	1	0	0	17
302			Geometry	6	0	0	0	6
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	15	1	0	0	16
305			Basic Analysis	13	0	0	0	13
306			Larger-area Analysis	8	0	0	0	8
		Mathematics total	58	2	0	0	60	
311		Astronomy	3	0	0	0	3	
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	22	0	0	0	22	

Table 26. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Private Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	8	0	0	0	8
323			Solid-State Physics II (Magnetism, Metal Physics,	9	0	0	1	10
324			Physical Properties in General (inclu. Basic Theories)	11	0	0	0	11
325			Physics in General	6	0	0	0	6
			Physics total	56	0	0	1	57
331			Physics of Solid Earth	1	0	0	0	1
332			Meteorology, Oceanography and Hydrology	3	0	0	0	3
333			Aeronomy	2	0	0	0	2
334			Geology	3	0	0	1	4
335			Stratigraphy and Paleontology	2	0	0	0	2
336			Mineralogy, Petrology and Study of Mineral Deposit	1	0	0	0	1
337			Geochemistry	5	0	0	0	5
			Earth Science total	17	0	0	1	18
341			Physical Chemistry	7	1	0	0	8
342			Organic Chemistry	7	0	0	0	7
343			Inorganic Chemistry	2	1	0	0	3
344			Function, Properties and Materials in Chemistry	3	0	0	0	3
345			Substance Transformation	1	0	0	0	1
346			Separation, Refining and Identification	5	0	0	0	5
			Chemistry total	25	2	0	0	27
351			Genetics	2	0	0	0	2
352			Ecology	21	2	0	1	24
353			Plant Physiology	5	1	0	0	6
354			Morphology, Structure of Organism	2	0	0	1	3
355			Animal Physiology and	2	0	0	0	2
356			Morphology and Taxonomy	6	0	0	1	7
			Biology total	38	3	0	3	44
361			Physical Anthropology (inclu. Physiological Anthropology)	5	0	0	0	5
			SCIENCE Total	202	7	0	5	214
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	2	0	0	0	2
402			Surface Physics	5	0	0	0	5
403			Applied Optics and Quantum Optics	4	0	0	0	4
404			General Applied Physics	2	0	0	0	2
405			Fundamentals of Engineering	0	0	0	0	0
			Applied Physics-Fundamentals of Engineering total	13	0	0	0	13
411			Materials for Machines and Strength of Materials	8	0	0	0	8
412			Workshop Processes and Production Engineering	7	0	0	0	7
413			Design Engineering, Machine Elements and Tribology	5	0	0	0	5
414			Fluid Mechanics	14	0	0	0	14
415			Heat Engineering	6	1	0	0	7
416			Mechanics and Control Engineering	4	0	0	0	4
417			Intelligent Mechanics and Machine System	6	0	0	0	6
			Machine Engineering total	50	1	0	0	51
421			Electric Power Engineering and Electric Machinery	8	0	1	0	9
422			Electronic and Electric Materials Engineering	11	2	0	0	13
423			Electron Devices and Apparatus Engineering	17	0	0	0	17
424			Information and Communication Engineering	18	0	0	0	18

Table 26. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Private Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
425	E N G I N E E R I N G	System Engineering	System Engineering	3	0	0	0	3
427			Electronic Measurements	10	0	0	0	10
428			Control Engineering	6	0	0	0	6
		Electric and Electronic Engineering		73	2	1	0	76
431		Construction Materials and Dynamics in General Civil Engineering	Construction Materials and Dynamics in General Civil Engineering	6	0	0	0	6
432			Structural Engineering and Seismology	11	1	0	0	12
433			Ground Engineering	1	0	0	0	1
434			Hydraulics and River Engineering	6	0	0	0	6
435			Traffic Engineering and Regional Planning	8	0	0	0	8
436			Civil Environmental System	3	0	0	0	3
		Civil Engineering total		35	1	0	0	36
441		Building Structure and Materials	Building Structure and Materials	9	0	0	0	9
442			Building Science and Building Equipment	7	0	0	0	7
443			City Planning and Building Planning	39	3	0	0	42
444			Architectural History and Design	24	2	0	0	26
		Architecture total		79	5	0	0	84
451		Physical Metallurgy	Physical Metallurgy	2	0	0	0	2
452			Inorganic Materials and	5	1	0	0	6
453			Composed Materials and Properties	0	0	0	0	0
454			Structural and Functional Materials	1	0	0	0	1
455		Metallurgy and Material	Metallurgy and Material	5	0	0	0	5
456			Metal Productive Engineering	2	0	0	0	2
		Material Engineering total		15	1	0	0	16
461		Chemical Engineering in General Reaction and Separation Engineering	Chemical Engineering in General Reaction and Separation Engineering	4	0	0	0	4
462			Reaction and Separation Engineering	2	0	0	0	2
463			Catalyst and Chemical Process	0	0	0	0	0
464			Bioengineering	1	0	0	0	1
465			Industrial Analytical Chemistry	2	0	0	0	2
		Process Engineering total		9	0	0	0	9
471		Industrial Physical Chemistry	Industrial Physical Chemistry	3	0	0	0	3
472			Industrial Inorganic Chemistry	0	0	0	0	0
473			Industrial Organic Chemistry	0	0	0	0	0
474			Synthetic Chemistry	6	0	0	0	6
475			Polymer Synthesis	2	0	0	0	2
476			Polymer Structure and Property (inclu. Fiber)	5	0	0	0	5
		Industrial Chemistry total		16	0	0	0	16
481		Aeronautics	Aeronautics	4	0	0	0	4
482			Ship Engineering	0	0	0	0	0
483			Marine Engineering	1	0	0	0	1
484			Resource Development Engineering	3	0	0	0	3
		Synthetic Engineering total		8	0	0	0	8
		ENGINEERING Total		298	10	1	0	309
501	A G R I C U L T U R E	Plant Breeding	Plant Breeding	1	0	0	0	1
502			Crop Science	0	0	0	0	0
503			Horticulture and Landscape Architecture	7	2	0	0	9
504			Plant Protection	2	0	0	0	2
505			Sericultural Science and Economic Entomology	0	0	0	1	1
		Agriculture total		10	2	0	1	13
511		Plant Fertilizer and Manure and Soil Science	Plant Fertilizer and Manure and Soil Science	4	0	0	0	4
512			Applied Microbiochemistry and Applied Biochemistry	10	0	0	0	10
513			Biological Productive Chemistry and Bioorganic Chemistry	4	1	0	0	5
514			Food Science and Nutritional Chemistry	7	1	0	0	8

Table 26. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Private Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
	A		Agricultural Chemistry total	25	2	0	0	27
521			Forestry	5	0	0	0	5
522	G		Wood Science	1	0	0	0	1
			Forestry total	6	0	0	0	6
531	R		Fisheries in General	6	0	0	0	6
532			Fisheries Chemistry	3	0	0	0	3
			Fisheries total	9	0	0	0	9
541	I		Agricultural Economics	12	0	0	0	12
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	7	0	0	0	7
552	U		Agricultural Machinery	0	1	0	0	1
553	L		Biological Environment	2	0	0	0	2
			Agricultural Engineering total	9	1	0	0	10
561	T		Animal Science and Grassland Science	5	0	0	0	5
562	U		Applied Animal Science	5	0	0	0	5
563	R		Basic Veterinary Medicine and Basic Animal Science	12	0	0	0	12
564			Applied Veterinary Medicine	6	0	0	0	6
	E		Animal Science·Veterinary Medicine total	28	0	0	0	28
571			Biological Resource Science	2	0	0	0	2
572			Applied Molecular Cell Biology	3	0	0	0	3
			Interdisciplinary Agricultural Science total	5	0	0	0	5
			AGRICULTURE Total	104	5	0	1	110
601			Anatomy in General (inclu. Histology, Embryology)	6	0	0	0	6
602			Physiology in General	9	1	0	0	10
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	13	1	0	0	14
604			Pharmacology in General	12	1	0	0	13
605			Medical Chemistry in General	4	0	0	0	4
606			Pathological Medical Chemistry	4	0	0	0	4
	M		Physiology total	48	3	0	0	51
611			Hominal Pathology	8	0	0	0	8
612	E		Experimental Pathology	2	1	0	0	3
613	D		Parasitology (inclu. Medical Zoology)	4	0	0	0	4
614			Bacteriology (inclu. Eumycetes)	7	0	0	0	7
615	I		Virology	2	0	0	1	3
616			Immunology	8	0	0	0	8
			Pathology total	31	1	0	1	33
621	C		Hygiene	7	0	0	0	7
622	I		Public Health and Health Science	16	2	0	0	18
623			Legal Medicine	2	0	0	0	2
			Social Medicine total	25	2	0	0	27
631	N		Internal Medicine in General	8	0	0	0	8
632	E		Gastroenterology	8	0	0	0	8
633			Internal Medicine Respiratory System	5	0	0	0	5
634			Neurological Medicine	6	0	0	0	6
635			Cardioangiopathy	9	0	0	1	10
636			Pediatrics	9	0	0	0	9
637			Dermatology	3	0	0	0	3
638			Radiology	10	1	0	0	11
639			Neuropsychiatry	9	0	0	0	9
641			Hematology	3	0	0	0	3
642			Internal Medicine of Kidney	3	1	0	0	4
643			Embryology and Newborn	1	0	0	0	1
644			Endocrinology	2	0	0	0	2
645			Metabolic Science	2	0	0	0	2
			Internal Medicine total	78	2	0	1	81
651			Surgery in General	9	0	0	0	9
652			Gastroenterological Surgery	5	0	0	0	5
653			Thoracic Surgery	2	0	0	0	2

Table 26. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Private Institutions)

Code	Subj ect	Subd ivision	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
654	M 							

Table 26. Number of Researchers Who Have Traveled Abroad by Field of Specialization / by Institution Type (Private Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
773	N T E R R E S T R I C T I P L I N A R Y		Energy Science General	2	0	0	0	2
774			Nuclear Power Science	2	0	0	0	2
		Energy total	5	0	0	0	5	
801			Environmental Dynamic Analysis	12	0	0	0	12
802			Environmental Influence Assessment (inclu. Radiobiology)	5	1	0	2	8
803			Environmental Preservation	15	1	0	0	16
		Environmental Science total	32	2	0	2	36	
811			Biological Organic Chemistry	6	0	0	1	7
812			Structured Biochemistry	4	1	0	0	5
813			Functional Biochemistry	8	0	0	0	8
	Biological Chemistry total	18	1	0	1	20		
821	B I O L O G Y		Biophysics	6	0	0	0	6
822			Molecular Biology	16	0	0	1	17
823			Cell Biology	6	0	0	1	7
824			Developmental Biology	1	0	0	0	1
		Basic Biology total	29	0	0	2	31	
831	A R E A		Neuroanatomy and Neuropathology	6	0	0	0	6
832			Neurochemistry and Neuropharmacology	6	0	0	0	6
833			Neuro Science in General	13	0	0	0	13
834			Neuro and Muscular Physiology	2	1	0	0	3
		Neuro Science (inclu. Brain Science) total	27	1	0	0	28	
841		Laboratory Animal Science	0	0	0	0	0	
851		Medical Organism Engineering and Material Science of Organism	13	1	0	1	15	
		INTERDISCIPLINARY AREA Total			395	41	1	6
999	WIDE AREA Total			92	18	0	0	110
	Item n.a. Total			1,507	89	1	25	1,622
	Grand Total			4,652	335	4	50	5,041

Table 27. Number of Researchers Who Have Participated in International Conference, Etc., Overseas by Field of Specialization / by Institution Type (Japan)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total	
211	ARTS • HUMANITIES		Philosophy	58	4	2	0	0	0	64	
212			Chinese Philosophy	21	3	0	0	0	0	24	
213			Indian Philosophy (inclu. Buddhist Studies)	50	6	1	0	0	2	59	
214			Religion	54	1	1	0	0	0	56	
215			Ethics	21	0	0	0	0	0	21	
216			History of Philosophy	38	1	1	0	0	0	40	
217			Aesthetics (inclu. Arts)	129	17	0	1	6	1	154	
218			Art History	21	1	0	1	1	1	25	
			Philosophy total	392	33	5	2	7	4	443	
221				Experimental Psychology	107	3	0	3	1	0	114
222				Educational and Social	233	17	0	2	0	0	252
223				Sociology	192	17	0	0	0	0	209
224				Education	196	17	0	5	0	0	218
225				Cultural Anthropology (inclu. Ethnology and Folklore)	77	2	0	7	1	0	87
			Psychology • Sociology • Education Cultural Anthropology total		805	56	0	17	2	0	880
231				Japanese History	41	1	1	1	0	0	44
232				Oriental History	70	1	2	0	1	1	75
233				European History	48	1	1	0	0	1	51
234		Archaeology (inclu. Prehistory)		37	0	0	2	1	1	41	
		History total		196	3	4	3	2	3	211	
241				Japanese Language	36	1	0	0	2	0	39
242				Japanese Literature	74	6	4	3	0	0	87
243				Chinese Language and Literature	79	2	1	0	0	0	82
244				English Language and Literature	209	19	4	0	0	0	232
245				French Language and Literature	61	3	0	0	0	0	64
246				German Language and Literature	37	0	0	0	0	0	37
247				Other Foreign Languages and Literatures	90	7	1	0	0	0	98
248				Linguistics and Phonetics	179	13	4	1	1	0	198
249				Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	39	3	0	0	0	0	42
		Literature total		804	54	14	4	3	0	879	
	ARTS • HUMANITIES Total			2,197	146	23	26	14	7	2,413	
261	LAW		Basic Science of Law	32	2	0	1	0	0	35	
262			Public Law	32	0	0	0	0	0	32	
263			International Law	45	2	0	0	0	0	47	
264			Civil Law	44	1	0	0	0	1	46	
265			Social Law	17	1	0	0	0	0	18	
266			Criminal Law	15	0	0	0	0	1	16	
267			Politics	110	2	1	0	0	0	113	
	LAW Total		295	8	1	1	0	2	307		
271	ECONOMICS		General Theory of Economics	103	4	0	0	0	0	107	
272			Economical Statistics	29	0	0	0	0	0	29	
273			Economic Policy (inclu. Economic Condition)	129	2	0	0	0	1	132	
274			Economic History	34	0	0	0	1	0	35	
275			Public Finance, Money and Banking	48	1	0	0	0	0	49	
276			Commercial Science	34	1	0	0	0	0	35	
277			Business Administration	151	8	0	0	0	0	159	
278			Accounting	43	4	0	0	0	0	47	
	ECONOMICS Total		571	20	0	0	1	1	593		
301	SCIENCE		Algebra	71	2	3	0	0	0	76	
302			Geometry	52	0	3	0	0	0	55	
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	114	1	3	0	0	0	118	
305			Basic Analysis	78	0	2	0	0	0	80	
306			Larger-area Analysis	48	0	0	0	0	0	48	
		Mathematics total		363	3	11	0	0	0	377	
311		Astronomy		37	1	2	10	7	0	57	
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	157	3	2	29	1	0	192	

Table 27. Number of Researchers Who Have Participated in International Conference, Etc., Overseas by Field of Specialization / by Institution Type (Japan)

Code	Subj ect	Subd ivision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Governmen t Research Institutes	Private Scientific Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	104	0	3	0	0	0	107
323			Solid-State Physics II (Magnetism, Metal Physics,	100	1	4	0	0	1	106
324			Physical Properties in General (inclu. Basic Theories)	65	0	1	3	0	0	69
325			Physics in General	54	2	4	5	0	0	65
			Physics total	480	6	14	37	1	1	539
331			Physics of Solid Earth	62	1	0	2	4	0	69
332			Meteorology, Oceanography and Hydrology	69	0	2	4	2	0	77
333			Aeronomy	16	0	2	1	2	0	21
334			Geology	41	0	0	0	0	0	41
335			Stratigraphy and Paleontology	20	0	0	0	0	1	21
336			Mineralogy, Petrology and Study of Mineral Deposit	44	0	0	0	1	0	45
337			Geochemistry	28	0	1	1	2	0	32
			Earth Science total	280	1	5	8	11	1	306
341			Physical Chemistry	119	3	0	4	0	0	126
342			Organic Chemistry	84	0	0	1	0	3	88
343			Inorganic Chemistry	55	1	0	0	0	0	56
344			Function, Properties and Materials in Chemistry	70	1	1	0	0	0	72
345			Substance Transformation	18	0	0	1	0	0	19
346			Separation, Refining and Identification	39	0	2	0	0	0	41
			Chemistry total	385	5	3	6	0	3	402
351			Genetics	53	0	0	3	0	1	57
352			Ecology	82	0	0	2	1	2	87
353			Plant Physiology	59	0	0	0	0	1	60
354			Morphology, Structure of Organism	34	1	1	3	1	1	41
355			Animal Physiology and	37	0	0	0	0	1	38
356			Morphology and Taxonomy	34	0	0	0	6	2	42
			Biology total	299	1	1	8	8	8	325
361			Physical Anthropology (inclu. Physiological Anthropology)	36	0	0	0	0	0	36
	SCIENCE Total			1,880	17	36	69	27	13	2,042
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	65	0	2	2	0	0	69
402			Surface Physics	47	0	1	0	0	0	48
403			Applied Optics and Quantum Optics	83	0	3	2	0	0	88
404			General Applied Physics	34	1	5	4	0	3	47
405			Fundamentals of Engineering	30	0	2	2	0	0	34
			Applied Physics-Fundamentals of Engineering total	259	1	13	10	0	3	286
411			Materials for Machines and Strength of Materials	122	0	12	1	1	0	136
412			Workshop Processes and Production Engineering	80	0	11	0	0	0	91
413			Design Engineering, Machine Elements and Tribology	52	2	5	1	0	1	61
414			Fluid Mechanics	112	2	13	0	2	0	129
415			Heat Engineering	99	2	10	3	0	0	114
416			Mechanics and Control Engineering	72	0	16	0	2	0	90
417			Intelligent Mechanics and Machine System	100	0	6	1	1	0	108
			Machine Engineering total	637	6	73	6	6	1	729
421			Electric Power Engineering and Electric Machinery	118	0	20	4	0	0	142
422			Electronic and Electric Materials Engineering	123	2	9	1	0	0	135
423			Electron Devices and Apparatus Engineering	125	0	14	0	0	0	139
424			Information and Communication Engineering	227	3	23	5	2	0	260

Table 27. Number of Researchers Who Have Participated in International Conference, Etc., Overseas by Field of Specialization / by Institution Type (Japan)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Governmen t Research Institutes	Private Scientific Research Institutes	Total
425	E N G I N E E R I N G		System Engineering	50	0	2	0	1	0	53
427			Electronic Measurements	99	0	12	1	0	0	112
428			Control Engineering	77	0	8	0	0	0	85
			Electric and Electronic Engineering	819	5	88	11	3	0	926
431			Construction Materials and Dynamics in General Civil Engineering	42	0	2	0	0	0	44
432			Structural Engineering and Seismology	69	3	6	0	0	0	78
433			Ground Engineering	69	0	9	0	0	1	79
434			Hydraulics and River Engineering	76	0	10	1	0	1	88
435			Traffic Engineering and Regional Planning	52	0	6	0	0	0	58
436			Civil Environmental System	48	0	5	0	0	0	53
			Civil Engineering total	356	3	38	1	0	2	400
441		N	Building Structure and Materials	86	0	3	0	0	0	89
442			Building Science and Building Equipment	60	1	3	0	0	2	66
443			City Planning and Building Planning	111	5	2	0	0	0	118
444		I	Architectural History and Design	22	2	0	0	1	0	25
			Architecture total	279	8	8	0	1	2	298
451		N	Physical Metallurgy	52	0	5	0	0	0	57
452			Inorganic Materials and	73	1	3	0	0	0	77
453			Composed Materials and Properties	22	0	3	0	1	0	26
454		E	Structural and Functional Materials	51	3	2	0	0	0	56
455		R	Metallurgy and Material	69	3	4	0	1	1	78
456			Metal Productive Engineering	19	0	2	0	0	0	21
			Material Engineering total	286	7	19	0	2	1	315
461		G	Chemical Engineering in General	61	0	2	0	0	0	63
462			Reaction and Separation Engineering	30	0	0	0	0	0	30
463			Catalyst and Chemical Process	25	2	0	0	0	0	27
464			Bioengineering	63	0	5	0	0	2	70
465			Industrial Analytical Chemistry	36	0	1	0	0	0	37
			Process Engineering total	215	2	8	0	0	2	227
471			Industrial Physical Chemistry	41	0	0	0	0	0	41
472			Industrial Inorganic Chemistry	23	0	0	0	0	0	23
473			Industrial Organic Chemistry	17	0	0	0	0	0	17
474			Synthetic Chemistry	45	0	4	0	0	0	49
475			Polymer Synthesis	48	0	1	0	0	0	49
476			Polymer Structure and Property (inclu. Fiber)	55	3	0	1	1	0	60
			Industrial Chemistry total	229	3	5	1	1	0	239
481			Aeronautics	29	0	1	0	10	0	40
482			Ship Engineering	27	0	5	0	0	0	32
483			Marine Engineering	13	0	0	0	0	0	13
484			Resource Development Engineering	35	0	4	0	0	0	39
			Synthetic Engineering total	104	0	10	0	10	0	124
			ENGINEERING Total	3,184	35	262	29	23	11	3,544
501	A G R I C U L T U R E		Plant Breeding	32	1	0	0	0	0	33
502			Crop Science	23	0	1	0	0	1	25
503			Horticulture and Landscape Architecture	59	4	0	0	0	0	63
504			Plant Protection	42	2	0	0	0	0	44
505			Sericultural Science and Economic Entomology	11	0	0	0	0	0	11
			Agriculture total	167	7	1	0	0	1	176
511			Plant Fertilizer and Manure and Soil Science	33	0	0	0	0	0	33
512			Applied Microbiochemistry and Applied Biochemistry	116	0	4	1	0	0	121
513			Biological Productive Chemistry and Bioorganic Chemistry	39	0	0	0	0	0	39
514			Food Science and Nutritional Chemistry	77	14	0	0	0	0	91

Table 27. Number of Researchers Who Have Participated in International Conference, Etc., Overseas by Field of Specialization / by Institution Type (Japan)

Code	Subj ect	Subd ivision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Governmen t Research Institutes	Private Scientific Research Institutes	Total
	A		Agricultural Chemistry total	265	14	4	1	0	0	284
521			Forestry	57	0	0	2	0	0	59
522	G		Wood Science	55	0	0	0	0	0	55
			Forestry total	112	0	0	2	0	0	114
531	R		Fisheries in General	84	0	0	0	0	0	84
532			Fisheries Chemistry	29	0	0	0	0	0	29
			Fisheries total	113	0	0	0	0	0	113
541	I		Agricultural Economics	44	1	0	1	0	0	46
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	50	1	0	1	0	0	52
552	U		Agricultural Machinery	22	1	0	0	0	0	23
553	L		Biological Environment	14	0	0	0	0	0	14
			Agricultural Engineering total	86	2	0	1	0	0	89
561	T		Animal Science and Grassland Science	24	0	0	0	0	0	24
562	U		Applied Animal Science	38	0	0	0	0	0	38
563	R		Basic Veterinary Medicine and Basic Animal Science	39	0	0	0	0	1	40
564			Applied Veterinary Medicine	48	0	0	0	0	1	49
	E		Animal Science·Veterinary Medicine total	149	0	0	0	0	2	151
571			Biological Resource Science	18	0	0	0	0	0	18
572			Applied Molecular Cell Biology	19	0	0	0	0	0	19
			Interdisciplinary Agricultural Science total	37	0	0	0	0	0	37
			AGRICULTURE Total	973	24	5	5	0	3	1,010
601			Anatomy in General (inclu. Histology, Embryology)	70	2	0	0	0	0	72
602			Physiology in General	74	2	0	0	0	0	76
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	50	4	0	0	0	0	54
604			Pharmacology in General	78	0	0	0	0	0	78
605			Medical Chemistry in General	48	0	0	0	0	0	48
606			Pathological Medical Chemistry	33	1	0	0	0	0	34
	M		Physiology total	353	9	0	0	0	0	362
611			Hominal Pathology	77	1	0	0	0	0	78
612	E		Experimental Pathology	41	1	0	0	0	2	44
613	D		Parasitology (inclu. Medical Zoology)	36	3	0	0	0	0	39
614			Bacteriology (inclu. Eumycetes)	57	2	0	0	0	0	59
615	I		Virology	40	0	0	0	0	1	41
616			Immunology	67	1	0	0	0	2	70
	C		Pathology total	318	8	0	0	0	5	331
621			Hygiene	66	1	0	0	0	1	68
622	I		Public Health and Health Science	126	6	0	0	0	1	133
623			Legal Medicine	39	0	0	0	0	0	39
	N		Social Medicine total	231	7	0	0	0	2	240
631			Internal Medicine in General	97	3	0	0	0	1	101
632	E		Gastroenterology	113	0	0	0	0	1	114
633			Internal Medicine Respiratory System	54	0	0	0	0	2	56
634			Neurological Medicine	79	0	0	0	0	0	79
635			Cardioangiopathy	158	1	0	0	0	1	160
636			Pediatrics	113	0	0	0	0	0	113
637			Dermatology	53	0	0	0	0	0	53
638			Radiology	130	3	0	0	0	1	134
639			Neuropsychiatry	70	2	0	0	0	0	72
641			Hematology	83	1	0	0	0	0	84
642			Internal Medicine of Kidney	61	1	0	0	0	0	62
643			Embryology and Newborn	8	0	0	0	0	0	8
644			Endocrinology	38	0	0	0	0	0	38
645			Metabolic Science	54	0	0	0	0	1	55
			Internal Medicine total	1,111	11	0	0	0	7	1,129
651			Surgery in General	94	0	0	0	0	1	95
652			Gastroenterological Surgery	94	0	0	0	0	2	96
653			Thoracic Surgery	59	0	0	0	0	0	59

Table 27. Number of Researchers Who Have Participated in International Conference, Etc., Overseas by Field of Specialization / by Institution Type (Japan)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Governmen t Research Institutes	Private Scientific Research Institutes	Total	
654	M		Neurosurgery	80	0	0	0	0	0	80	
655			Orthopedic Surgery	149	5	0	0	0	0	154	
656			Anesthesiology and Rescue Medicine	97	0	0	0	0	0	97	
657			Urology	85	0	0	0	0	1	86	
658			Obstetrics and Gynecology	80	0	0	0	0	0	80	
659			Oto-rhino-laryngology	61	0	0	0	0	0	61	
660			Ophthalmology	53	0	0	0	0	0	53	
661			Pediatric Surgery	20	0	0	0	0	0	20	
662			Formative Surgery	24	0	0	0	0	0	24	
			Surgery total	896	5	0	0	0	4	905	
671	E		Oral Anatomy and Morphological Basic Dentistry	71	1	0	0	0	0	72	
672	D		Functional Basic Dentistry	54	0	0	0	0	0	54	
673	I		Morbid Dentistry (inclu. Dental Radiology)	47	0	0	0	0	0	47	
674	C		Conservative Dentistry	85	3	0	0	0	0	88	
675	I		Prosthodontics and Dental Technology	152	1	0	0	0	0	153	
676	I		Oral Surgery	138	1	0	0	0	1	140	
677	N		Orthodontics, Pedodontics and Social Dentistry	131	1	0	0	0	0	132	
678	E		Periodontological Dentistry	40	0	0	0	0	0	40	
	Dentistry total		718	7	0	0	0	1	726		
681			Chemical Pharmaceuticals	109	0	0	0	0	0	109	
682			Physical Pharmaceuticals	50	1	0	0	0	0	51	
683			Biopharmaceutics	109	1	0	0	0	1	111	
684			Molecular Pharmaceuticals	45	0	0	0	0	0	45	
685			Environmental Pharmaceuticals	22	0	0	0	0	0	22	
		Pharmaceutics total	335	2	0	0	0	1	338		
691			Medical Sociology	63	2	0	0	0	0	65	
692			Human Genetics	38	0	0	0	0	0	38	
693			Applied Pharmacology and Medical Pharmacology	38	0	0	0	0	0	38	
694			Pathological Examination	36	1	0	0	0	0	37	
696	Science of Basic and Local Nursing		71	5	1	0	0	0	77		
697	Science of Clinical Nursing		88	3	0	0	0	0	91		
	Medicine in General total	334	11	1	0	0	0	346			
	MEDICINE Total	4,296	60	1	0	0	20	4,377			
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	19	0	0	1	2	0	22	
703			Physical Education	198	12	6	0	0	0	216	
704			Human Geography	38	0	0	0	0	0	38	
705			Physical Geography	36	0	0	0	0	0	36	
			Geography total	74	0	0	0	0	0	74	
706			Home Science(inclu. Cloth/Living Environments)	59	19	0	1	0	0	79	
707			Food Culture	38	14	0	0	0	0	52	
			Domestic Science total	97	33	0	1	0	0	131	
708			Science of Cultural Property	6	1	0	1	0	0	8	
711			Science Education	36	2	3	0	1	0	42	
712			Educational Engineering	60	3	8	4	0	0	75	
713			Curriculum Studies	103	12	3	0	0	0	118	
714			Japanese Language Education	40	0	0	0	0	0	40	
			Science Education·Curriculum Education total	239	17	14	4	1	0	275	
721			Statistics	36	0	0	2	0	0	38	
731			Computer Science	189	0	11	1	0	0	201	
732			Intelligent Informatics	233	3	15	6	0	0	257	
733			I	Study of Information System (Inclu. Library and Information Science)	137	5	2	9	1	1	155
				Information Science total	559	8	28	16	1	1	613
741	Social System Engineering	115		2	3	0	0	1	121		
751	Natural Disaster Science	17		1	0	0	0	0	18		
761	Plasma Science and Technology	61		0	1	15	0	0	77		
772	Nuclear Fusion	18		1	1	11	0	0	31		

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Code	Subj ect	Subd ivision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Governmen t Research Institutes	Private Scientific Research Institutes	Total
773	N T		Energy Science General	31	0	1	0	2	0	34
774			Nuclear Power Science	41	0	0	2	0	0	43
	E		Energy total	90	1	2	13	2	0	108
801	R D I S C		Environmental Dynamic Analysis	58	0	1	3	0	0	62
802			Environmental Influence Assessment (inclu. Radiobiology)	52	0	0	1	0	2	55
803			Environmental Preservation	84	0	3	0	0	2	89
			Environmental Science total	194	0	4	4	0	4	206
811	I P L		Biological Organic Chemistry	37	0	1	0	0	1	39
812			Structured Biochemistry	37	1	0	2	0	0	40
813			Functional Biochemistry	54	2	0	0	0	0	56
			Biological Chemistry total	128	3	1	2	0	1	135
821	N A R Y		Biophysics	51	0	0	2	0	0	53
822			Molecular Biology	125	2	0	4	0	2	133
823			Cell Biology	72	0	0	2	0	2	76
824			Developmental Biology	39	0	0	1	0	0	40
			Basic Biology total	287	2	0	9	0	4	302
831	A R E A		Neuroanatomy and Neuropathology	39	0	0	0	0	0	39
832			Neurochemistry and Neuropharmacology	48	0	0	0	0	1	49
833			Neuro Science in General	90	1	0	1	0	0	92
834			Neuro and Muscular Physiology	49	2	0	0	0	0	51
			Neuro Science (inclu. Brain Science) total	226	3	0	1	0	1	231
841			Laboratory Animal Science	13	0	0	0	0	2	15
851			Medical Organism Engineering and Material Science of Organism	138	4	3	0	0	2	147
			INTERDISCIPLINARY AREA Total	2,497	87	62	69	6	16	2,737
999			WIDE AREA Total	245	19	3	5	1	1	274
			Item n.a. Total	9,028	186	248	141	95	49	9,747
			Grand Total	25,166	602	641	345	167	123	27,044

Table 28. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total	
211	ARTS • HUMANITIES		Philosophy	21	0	1	0	0	22	
212			Chinese Philosophy	11	0	0	0	0	11	
213			Indian Philosophy (inclu. Buddhist Studies)	8	0	1	0	0	9	
214			Religion	5	0	0	0	0	5	
215			Ethics	11	0	0	0	0	11	
216			History of Philosophy	10	0	1	0	0	11	
217			Aesthetics (inclu. Arts)	31	1	0	1	6	39	
218			Art History	8	0	0	1	1	10	
		Philosophy total	105	1	3	2	7	118		
221				Experimental Psychology	53	0	0	3	1	57
222				Educational and Social	91	1	0	2	0	94
223				Sociology	42	0	0	0	0	42
224				Education	94	0	0	5	0	99
225				Cultural Anthropology (inclu. Ethnology and Folklore)	25	0	0	7	1	33
		Psychology • Sociology • Education Cultural Anthropology total			305	1	0	17	2	325
231				Japanese History	16	0	1	1	0	18
232				Oriental History	31	0	2	0	1	34
233				European History	9	0	1	0	0	10
234				Archaeology (inclu. Prehistory)	12	0	0	2	1	15
		History total			68	0	4	3	2	77
241				Japanese Language	12	0	0	0	2	14
242				Japanese Literature	21	0	4	3	0	28
243				Chinese Language and Literature	20	1	1	0	0	22
244				English Language and Literature	48	0	4	0	0	52
245				French Language and Literature	25	0	0	0	0	25
246				German Language and Literature	9	0	0	0	0	9
247				Other Foreign Languages and Literatures	26	0	1	0	0	27
248				Linguistics and Phonetics	48	0	4	1	1	54
249				Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	15	0	0	0	0	15
		Literature total			224	1	14	4	3	246
	ARTS • HUMANITIES Total			702	3	21	26	14	766	
261	LAW		Basic Science of Law	9	0	0	1	0	10	
262			Public Law	9	0	0	0	0	9	
263			International Law	10	0	0	0	0	10	
264			Civil Law	13	0	0	0	0	13	
265			Social Law	8	0	0	0	0	8	
266			Criminal Law	4	0	0	0	0	4	
267			Politics	28	0	1	0	0	29	
	LAW Total			81	0	1	1	0	83	
271	ECONOMICS		General Theory of Economics	32	0	0	0	0	32	
272			Economical Statistics	10	0	0	0	0	10	
273			Economic Policy (inclu. Economic Condition)	36	0	0	0	0	36	
274			Economic History	7	0	0	0	1	8	
275			Public Finance, Money and Banking	13	0	0	0	0	13	
276			Commercial Science	3	0	0	0	0	3	
277			Business Administration	27	0	0	0	0	27	
278			Accounting	7	0	0	0	0	7	
	ECONOMICS Total			135	0	0	0	1	136	
301	SCIENCE		Algebra	32	0	3	0	0	35	
302			Geometry	35	0	3	0	0	38	
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	63	0	3	0	0	66	
305			Basic Analysis	45	0	2	0	0	47	
306			Larger-area Analysis	31	0	0	0	0	31	
		Mathematics total			206	0	11	0	0	217
311			Astronomy	29	0	2	10	7	48	
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	106	0	1	29	1	137	

Table 28. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (National Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
322			Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	67	0	3	0	0	70
323			Solid-State Physics II (Magnetism, Metal Physics,	68	0	3	0	0	71
324			Physical Properties in General (inclu. Basic Theories)	42	0	1	3	0	46
325			Physics in General	34	0	4	5	0	43
			Physics total	317	0	12	37	1	367
331			Physics of Solid Earth	52	0	0	2	4	58
332			Meteorology, Oceanography and Hydrology	50	0	2	4	2	58
333	S		Aeronomy	11	0	2	1	2	16
334			Geology	31	0	0	0	0	31
335	C		Stratigraphy and Paleontology	19	0	0	0	0	19
336	I		Mineralogy, Petrology and Study of Mineral Deposit	38	0	0	0	1	39
337			Geochemistry	20	0	1	1	2	24
	E		Earth Science total	221	0	5	8	11	245
341			Physical Chemistry	76	0	0	4	0	80
342	N		Organic Chemistry	57	0	0	1	0	58
343			Inorganic Chemistry	35	0	0	0	0	35
344	C		Function, Properties and Materials in Chemistry	48	0	1	0	0	49
345	E		Substance Transformation	12	0	0	1	0	13
346			Separation, Refining and Identification	22	0	2	0	0	24
			Chemistry total	250	0	3	6	0	259
351			Genetics	43	0	0	3	0	46
352			Ecology	58	0	0	2	1	61
353			Plant Physiology	39	0	0	0	0	39
354			Morphology, Structure of	23	0	1	3	1	28
355			Animal Physiology and	25	0	0	0	0	25
356			Morphology and Taxonomy	24	0	0	0	6	30
			Biology total	212	0	1	8	8	229
361			Physical Anthropology (inclu. Physiological Anthropology)	20	0	0	0	0	20
			SCIENCE Total	1,255	0	34	69	27	1,385
401			Applied Physics of Property and Crystallography	37	0	2	2	0	41
402	E		Surface Physics	31	0	1	0	0	32
403			Applied Optics and Quantum	53	0	3	2	0	58
404	N		General Applied Physics	20	0	3	4	0	27
405			Fundamentals of Engineering	15	0	1	2	0	18
	G		Applied Physics·Fundamentals of Engineering total	156	0	10	10	0	176
411	I		Materials for Machines and Strength of Materials	63	0	12	1	1	77
412	N		Workshop Processes and Production Engineering	45	0	11	0	0	56
413	E		Design Engineering, Machine Elements and Tribology	33	1	5	1	0	40
414	E		Fluid Mechanics	65	1	13	0	2	81
415			Heat Engineering	68	0	9	3	0	80
416	R		Mechanics and Control	46	0	14	0	2	62
417	I		Intelligent Mechanics and Machine System	64	0	6	1	1	72
			Machine Engineering total	384	2	70	6	6	468
421	N		Electric Power Engineering and Electric Machinery	62	0	18	4	0	84
422	G		Electronic and Electric Materials Engineering	73	0	9	1	0	83
423			Electron Devices and Apparatus Engineering	67	0	13	0	0	80
424			Information and Communication Engineering	124	0	20	5	2	151
425			System Engineering	26	0	2	0	1	29
427			Electronic Measurements	50	0	11	1	0	62
428			Control Engineering	45	0	8	0	0	53

Table 28. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (National Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
			Electric and Electronic Engineering	447	0	81	11	3	542
431			Construction Materials and Dynamics in General Civil Engineering	28	0	2	0	0	30
432			Structural Engineering and Seismology	43	0	6	0	0	49
433			Ground Engineering	45	0	9	0	0	54
434			Hydraulics and River Engineering	48	0	8	1	0	57
435			Traffic Engineering and Regional Planning	30	0	6	0	0	36
436			Civil Environmental System	31	0	5	0	0	36
			Civil Engineering total	225	0	36	1	0	262
441			Building Structure and Materials	42	0	3	0	0	45
442			Building Science and Building Equipment	30	0	2	0	0	32
443			City Planning and Building	56	0	2	0	0	58
444			Architectural History and Design	11	0	0	0	1	12
			Architecture total	139	0	7	0	1	147
451			Physical Metallurgy	39	0	5	0	0	44
452			Inorganic Materials and	47	0	3	0	0	50
453			Composed Materials and	13	0	3	0	1	17
454			Structural and Functional	40	0	1	0	0	41
455			Metallurgy and Material	51	1	4	0	1	57
456			Metal Productive Engineering	14	0	2	0	0	16
			Material Engineering total	204	1	18	0	2	225
461			Chemical Engineering in General	44	0	2	0	0	46
462			Reaction and Separation Engineering	22	0	0	0	0	22
463			Catalyst and Chemical Process	20	1	0	0	0	21
464			Bioengineering	47	0	5	0	0	52
465			Industrial Analytical Chemistry	25	0	1	0	0	26
			Process Engineering total	158	1	8	0	0	167
471			Industrial Physical Chemistry	30	0	0	0	0	30
472			Industrial Inorganic Chemistry	16	0	0	0	0	16
473			Industrial Organic Chemistry	15	0	0	0	0	15
474			Synthetic Chemistry	32	0	4	0	0	36
475			Polymer Synthesis	37	0	1	0	0	38
476			Polymer Structure and Property (inclu. Fiber)	39	0	0	1	1	41
			Industrial Chemistry total	169	0	5	1	1	176
481			Aeronautics	23	0	1	0	10	34
482			Ship Engineering	21	0	4	0	0	25
483			Marine Engineering	9	0	0	0	0	9
484			Resource Development	28	0	4	0	0	32
			Synthetic Engineering total	81	0	9	0	10	100
			ENGINEERING Total	1,963	4	244	29	23	2,263
501			Plant Breeding	22	0	0	0	0	22
502			Crop Science	20	0	1	0	0	21
503			Horticulture and Landscape Architecture	39	0	0	0	0	39
504			Plant Protection	33	0	0	0	0	33
505			Sericultural Science and Economic Entomology	10	0	0	0	0	10
			Agriculture total	124	0	1	0	0	125
511			Plant Fertilizer and Manure and Soil Science	26	0	0	0	0	26
512			Applied Microbiochemistry and Applied Biochemistry	70	0	4	1	0	75
513			Biological Productive Chemistry and Bioorganic Chemistry	29	0	0	0	0	29
514			Food Science and Nutritional Chemistry	43	0	0	0	0	43
			Agricultural Chemistry total	168	0	4	1	0	173
521			Forestry	50	0	0	2	0	52
522			Wood Science	50	0	0	0	0	50
			Forestry total	100	0	0	2	0	102
531			Fisheries in General	64	0	0	0	0	64
532			Fisheries Chemistry	22	0	0	0	0	22
			Fisheries total	86	0	0	0	0	86

Table 28. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
541	C U L T U R E E	Agricultural Economics	Agricultural Economics	26	0	0	1	0	27
551			Irrigation, Drainage and Reclamation Engineering and	40	0	0	1	0	41
552			Agricultural Machinery	18	0	0	0	0	18
553			Biological Environment	11	0	0	0	0	11
			Agricultural Engineering total	69	0	0	1	0	70
561		Animal Science and Grassland Science	Animal Science and Grassland Science	19	0	0	0	0	19
562			Applied Animal Science	31	0	0	0	0	31
563			Basic Veterinary Medicine and Basic Animal Science	23	0	0	0	0	23
564			Applied Veterinary Medicine	27	0	0	0	0	27
			Animal Science-Veterinary Medicine total	100	0	0	0	0	100
571		Biological Resource Science	Biological Resource Science	13	0	0	0	0	13
572			Applied Molecular Cell Biology	12	0	0	0	0	12
			Interdisciplinary Agricultural Science total	25	0	0	0	0	25
		AGRICULTURE Total		698	0	5	5	0	708
601	M E D I C I N E	Physiology	Anatomy in General (inclu. Histology, Embryology)	34	0	0	0	0	34
602			Physiology in General	35	0	0	0	0	35
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	18	0	0	0	0	18
604			Pharmacology in General	34	0	0	0	0	34
605			Medical Chemistry in General	27	0	0	0	0	27
606			Pathological Medical Chemistry	18	0	0	0	0	18
		Physiology total		166	0	0	0	0	166
611		Pathology	Hominal Pathology	35	0	0	0	0	35
612			Experimental Pathology	24	0	0	0	0	24
613			Parasitology (inclu. Medical)	23	0	0	0	0	23
614		Bacteriology (inclu. Eumycetes)	Bacteriology (inclu. Eumycetes)	26	1	0	0	0	27
615			Virology	29	0	0	0	0	29
616		Immunology	Immunology	41	0	0	0	0	41
		Pathology total		178	1	0	0	0	179
621		Hygiene	Hygiene	22	0	0	0	0	22
622			Public Health and Health Science	60	2	0	0	0	62
623			Legal Medicine	16	0	0	0	0	16
		Social Medicine total		98	2	0	0	0	100
631		Internal Medicine	Internal Medicine in General	43	2	0	0	0	45
632			Gastroenterology	52	0	0	0	0	52
633			Internal Medicine Respiratory System	25	0	0	0	0	25
634			Neurological Medicine	42	0	0	0	0	42
635			Cardioangiopathy	72	0	0	0	0	72
636			Pediatrics	57	0	0	0	0	57
637			Dermatology	26	0	0	0	0	26
638			Radiology	75	0	0	0	0	75
639			Neuropsychiatry	28	0	0	0	0	28
641			Hematology	41	0	0	0	0	41
642			Internal Medicine of Kidney	30	0	0	0	0	30
643			Embryology and Newborn	4	0	0	0	0	4
644			Endocrinology	22	0	0	0	0	22
645			Metabolic Science	30	0	0	0	0	30
		Internal Medicine total		547	2	0	0	0	549
651	Surgery	Surgery	Surgery in General	36	0	0	0	0	36
652			Gastroenterological Surgery	37	0	0	0	0	37
653			Thoracic Surgery	25	0	0	0	0	25
654			Neurosurgery	40	0	0	0	0	40
655			Orthopedic Surgery	79	0	0	0	0	79
656			Anesthesiology and Rescue Medicine	52	0	0	0	0	52
657			Urology	41	0	0	0	0	41
658			Obstetrics and Gynecology	39	0	0	0	0	39
659			Oto-rhino-laryngology	27	0	0	0	0	27
660			Ophthalmology	31	0	0	0	0	31
661			Pediatric Surgery	13	0	0	0	0	13

Table 28. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (National Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
662	M		Formative Surgery	5	0	0	0	0	5
			Surgery total	425	0	0	0	0	425
671	E		Oral Anatomy and Morphological Basic Dentistry	33	0	0	0	0	33
672	D		Functional Basic Dentistry	25	0	0	0	0	25
673	I		Morbid Dentistry (inclu. Dental Radiology)	17	0	0	0	0	17
674	C		Conservative Dentistry	36	0	0	0	0	36
675			Prosthodontics and Dental Technology	69	0	0	0	0	69
676	I		Oral Surgery	67	0	0	0	0	67
677	N		Orthodontics, Pedodontics and Social Dentistry	64	0	0	0	0	64
678			Periodontological Dentistry	19	0	0	0	0	19
	E		Dentistry total	330	0	0	0	0	330
681			Chemical Pharmaceutics	32	0	0	0	0	32
682			Physical Pharmaceutics	13	0	0	0	0	13
683			Biopharmaceutics	30	0	0	0	0	30
684			Molecular Pharmaceutics	18	0	0	0	0	18
685			Environmental Pharmaceutics	6	0	0	0	0	6
			Pharmaceutics total	99	0	0	0	0	99
691			Medical Sociology	24	1	0	0	0	25
692			Human Genetics	18	0	0	0	0	18
693			Applied Pharmacology and Medical Pharmacology	16	0	0	0	0	16
694			Pathological Examination	21	0	0	0	0	21
696			Science of Basic and Local Nursing	32	0	1	0	0	33
697			Science of Clinical Nursing	43	0	0	0	0	43
			Medicine in General total	154	1	1	0	0	156
			MEDICINE Total	1,997	6	1	0	0	2,004
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	7	0	0	1	2	10
703			Physical Education	91	1	6	0	0	98
704			Human Geography	18	0	0	0	0	18
705			Physical Geography	23	0	0	0	0	23
			Geography total	41	0	0	0	0	41
706			Home Science(inclu. Cloth/Living Environments)	24	0	0	1	0	25
707			Food Culture	7	0	0	0	0	7
			Domestic Science total	31	0	0	1	0	32
708			Science of Cultural Property	4	1	0	1	0	6
711			Science Education	24	0	2	0	1	27
712			Educational Engineering	23	0	8	4	0	35
713			Curriculum Studies	68	1	3	0	0	72
714			Japanese Language Education	17	0	0	0	0	17
			Science Education·Curriculum Education total	132	1	13	4	1	151
721	A R E A		Statistics	16	0	0	2	0	18
731			Computer Science	112	0	10	1	0	123
732			Intelligent Informatics	129	0	13	6	0	148
733			Study of Information System (Inclu. Library and Information)	59	1	2	9	1	72
			Information Science total	300	1	25	16	1	343
741			Social System Engineering	45	0	3	0	0	48
751			Natural Disaster Science	13	0	0	0	0	13
761			Plasma Science and Technology	47	0	1	15	0	63
772	I N T E R D I S C I P L I N A R Y		Nuclear Fusion	13	0	1	11	0	25
773			Energy Science General	23	0	1	0	2	26
774			Nuclear Power Science	36	0	0	2	0	38
			Energy total	72	0	2	13	2	89
801	R E S E A R C H		Environmental Dynamic Analysis	30	0	1	3	0	34
802			Environmental Influence Assessment (inclu. Radiobiology)	30	0	0	1	0	31
803			Environmental Preservation	49	0	3	0	0	52
			Environmental Science total	109	0	4	4	0	117
811	I N T E R D I S C I P L I N A R Y		Biological Organic Chemistry	20	0	1	0	0	21
812			Structured Biochemistry	25	0	0	2	0	27

Table 28. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (National Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
813	L I N A R Y A R E A		Functional Biochemistry	26	0	0	0	0	26
			Biological Chemistry total	71	0	1	2	0	74
821			Biophysics	32	0	0	2	0	34
822			Molecular Biology	83	0	0	4	0	87
823			Cell Biology	44	0	0	2	0	46
824			Developmental Biology	26	0	0	1	0	27
			Basic Biology total	185	0	0	9	0	194
831			Neuroanatomy and	24	0	0	0	0	24
832			Neurochemistry and Neuropharmacology	24	0	0	0	0	24
833			Neuro Science in General	53	0	0	1	0	54
834			Neuro and Muscular Physiology	23	0	0	0	0	23
			Neuro Science (inclu. Brain Science) total	124	0	0	1	0	125
841			Laboratory Animal Science	9	0	0	0	0	9
851			Medical Organism Engineering and Material Science of Organism	77	1	2	0	0	80
			INTERDISCIPLINARY AREA Total	1,374	5	57	69	6	1,511
999	WIDE AREA Total			107	4	3	5	1	120
	Item n.a. Total			5,204	5	233	141	95	5,678
	Grand Total			13,516	27	599	345	167	14,654

Table 29. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
211	ARTS • HUMANITIES		Philosophy	1	0	1	2
212			Chinese Philosophy	1	2	0	3
213			Indian Philosophy (inclu. Buddhist Studies)	1	1	0	2
214			Religion	1	0	1	2
215			Ethics	4	0	0	4
216			History of Philosophy	2	0	0	2
217			Aesthetics (inclu. Arts)	11	1	0	12
218			Art History	2	1	0	3
			Philosophy total	23	5	2	30
221			Experimental Psychology	7	2	0	9
222			Educational and Social	8	1	0	9
223			Sociology	19	1	0	20
224			Education	7	0	0	7
225			Cultural Anthropology (inclu. Ethnology and Folklore)	4	0	0	4
			Psychology • Sociology • Education Cultural Anthropology total	45	4	0	49
231			Japanese History	3	0	0	3
232			Oriental History	2	0	0	2
233			European History	3	0	0	3
234			Archaeology (inclu. Prehistory)	1	0	0	1
			History total	9	0	0	9
241			Japanese Language	0	0	0	0
242			Japanese Literature	1	1	0	2
243			Chinese Language and Literature	3	0	0	3
244			English Language and Literature	9	0	0	9
245			French Language and Literature	2	0	0	2
246			German Language and Literature	5	0	0	5
247			Other Foreign Languages and Literatures	4	1	0	5
248			Linguistics and Phonetics	13	2	0	15
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	0	1	0	1
			Literature total	37	5	0	42
			ARTS • HUMANITIES Total	114	14	2	130
261	LAW		Basic Science of Law	2	0	0	2
262			Public Law	2	0	0	2
263			International Law	4	0	0	4
264			Civil Law	1	0	0	1
265			Social Law	0	0	0	0
266			Criminal Law	1	0	0	1
267			Politics	8	1	0	9
			LAW Total	18	1	0	19
271	ECONOMICS		General Theory of Economics	10	0	0	10
272			Economical Statistics	0	0	0	0
273			Economic Policy (inclu. Economic Condition)	6	1	0	7
274			Economic History	3	0	0	3
275			Public Finance, Money and Banking	1	1	0	2
276			Commercial Science	1	0	0	1
277			Business Administration	8	1	0	9
278			Accounting	3	1	0	4
			ECONOMICS Total	32	4	0	36
301	SCIENCE		Algebra	9	0	0	9
302			Geometry	2	0	0	2
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	6	0	0	6
305			Basic Analysis	6	0	0	6
306			Larger-area Analysis	3	0	0	3
			Mathematics total	26	0	0	26
311			Astronomy	0	0	0	0
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	6	1	1	8

Table 29. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	5	0	0	5
323			Solid-State Physics II (Magnetism, Metal Physics,	6	0	1	7
324			Physical Properties in General (inclu. Basic Theories)	3	0	0	3
325			Physics in General	2	0	0	2
			Physics total	22	1	2	25
331			Physics of Solid Earth	2	0	0	2
332			Meteorology, Oceanography and Hydrology	4	0	0	4
333			Aeronomy	0	0	0	0
334			Geology	2	0	0	2
335			Stratigraphy and Paleontology	0	0	0	0
336			Mineralogy, Petrology and Study of Mineral Deposit	2	0	0	2
337			Geochemistry	0	0	0	0
			Earth Science total	10	0	0	10
341			Physical Chemistry	15	0	0	15
342			Organic Chemistry	8	0	0	8
343			Inorganic Chemistry	4	1	0	5
344			Function, Properties and Materials in Chemistry	5	0	0	5
345			Substance Transformation	1	0	0	1
346			Separation, Refining and Identification	3	0	0	3
			Chemistry total	36	1	0	37
351			Genetics	5	0	0	5
352			Ecology	4	0	0	4
353			Plant Physiology	12	0	0	12
354			Morphology, Structure of Organism	3	0	0	3
355			Animal Physiology and	3	0	0	3
356			Morphology and Taxonomy	2	0	0	2
			Biology total	29	0	0	29
361			Physical Anthropology (inclu. Physiological Anthropology)	3	0	0	3
	SCIENCE Total			126	2	2	130
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	9	0	0	9
402			Surface Physics	2	0	0	2
403			Applied Optics and Quantum Optics	6	0	0	6
404			General Applied Physics	1	0	2	3
405			Fundamentals of Engineering	0	0	1	1
			Applied Physics-Fundamentals of Engineering total	18	0	3	21
411			Materials for Machines and Strength of Materials	11	0	0	11
412			Workshop Processes and Production Engineering	4	0	0	4
413			Design Engineering, Machine Elements and Tribology	1	0	0	1
414			Fluid Mechanics	7	1	0	8
415			Heat Engineering	5	0	1	6
416			Mechanics and Control Engineering	2	0	2	4
417			Intelligent Mechanics and Machine System	4	0	0	4
			Machine Engineering total	34	1	3	38
421			Electric Power Engineering and Electric Machinery	5	0	2	7
422			Electronic and Electric Materials Engineering	3	0	0	3
423			Electron Devices and Apparatus Engineering	5	0	1	6
424			Information and Communication Engineering	19	1	1	21

Table 29. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
425	E		System Engineering	0	0	0	0
427			Electronic Measurements	2	0	0	2
428			Control Engineering	9	0	0	9
			Electric and Electronic Engineering	43	1	4	48
431			Construction Materials and Dynamics in General Civil Engineering	0	0	0	0
432			Structural Engineering and Seismology	4	0	0	4
433			Ground Engineering	4	0	0	4
434			Hydraulics and River Engineering	1	0	2	3
435			Traffic Engineering and Regional Planning	2	0	0	2
436			Civil Environmental System	4	0	0	4
			Civil Engineering total	15	0	2	17
441		N	Building Structure and Materials	8	0	0	8
442			Building Science and Building Equipment	6	1	1	8
443			City Planning and Building Planning	7	1	0	8
444		I	Architectural History and Design	0	1	0	1
			Architecture total	21	3	1	25
451		N	Physical Metallurgy	3	0	0	3
452			Inorganic Materials and	2	0	0	2
453			Composed Materials and Properties	2	0	0	2
454		E	Structural and Functional Materials	2	0	1	3
455		R	Metallurgy and Material	2	0	0	2
456			Metal Productive Engineering	0	0	0	0
			Material Engineering total	11	0	1	12
461	G		Chemical Engineering in General	3	0	0	3
462			Reaction and Separation Engineering	3	0	0	3
463			Catalyst and Chemical Process	2	0	0	2
464			Bioengineering	6	0	0	6
465			Industrial Analytical Chemistry	3	0	0	3
			Process Engineering total	17	0	0	17
471			Industrial Physical Chemistry	3	0	0	3
472			Industrial Inorganic Chemistry	1	0	0	1
473			Industrial Organic Chemistry	0	0	0	0
474			Synthetic Chemistry	1	0	0	1
475			Polymer Synthesis	3	0	0	3
476			Polymer Structure and Property (inclu. Fiber)	3	0	0	3
			Industrial Chemistry total	11	0	0	11
481			Aeronautics	1	0	0	1
482			Ship Engineering	3	0	1	4
483			Marine Engineering	1	0	0	1
484			Resource Development Engineering	0	0	0	0
			Synthetic Engineering total	5	0	1	6
	ENGINEERING Total			175	5	15	195
501	A G R I C U L T U R E		Plant Breeding	5	1	0	6
502			Crop Science	1	0	0	1
503			Horticulture and Landscape Architecture	11	1	0	12
504			Plant Protection	0	1	0	1
505			Sericultural Science and Economic Entomology	0	0	0	0
			Agriculture total	17	3	0	20
511			Plant Fertilizer and Manure and Soil Science	3	0	0	3
512			Applied Microbiochemistry and Applied Biochemistry	11	0	0	11
513			Biological Productive Chemistry and Bioorganic Chemistry	4	0	0	4
514			Food Science and Nutritional Chemistry	11	1	0	12

Table 29. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
	A		Agricultural Chemistry total	29	1	0	30
521			Forestry	3	0	0	3
522	G		Wood Science	3	0	0	3
			Forestry total	6	0	0	6
531	R		Fisheries in General	3	0	0	3
532			Fisheries Chemistry	0	0	0	0
			Fisheries total	3	0	0	3
541	I		Agricultural Economics	2	1	0	3
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	2	1	0	3
552	U		Agricultural Machinery	0	0	0	0
553	L		Biological Environment	1	0	0	1
			Agricultural Engineering total	3	1	0	4
561	T		Animal Science and Grassland Science	0	0	0	0
562	U		Applied Animal Science	0	0	0	0
563	R		Basic Veterinary Medicine and Basic Animal Science	3	0	0	3
564			Applied Veterinary Medicine	5	0	0	5
	E		Animal Science·Veterinary Medicine total	8	0	0	8
571			Biological Resource Science	1	0	0	1
572			Applied Molecular Cell Biology	2	0	0	2
			Interdisciplinary Agricultural Science total	3	0	0	3
			AGRICULTURE Total	71	6	0	77
601			Anatomy in General (inclu. Histology, Embryology)	8	1	0	9
602			Physiology in General	8	0	0	8
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	8	0	0	8
604			Pharmacology in General	4	0	0	4
605			Medical Chemistry in General	3	0	0	3
606			Pathological Medical Chemistry	1	0	0	1
	M		Physiology total	32	1	0	33
611			Hominal Pathology	5	0	0	5
612	E		Experimental Pathology	4	0	0	4
613	D		Parasitology (inclu. Medical Zoology)	4	0	0	4
614			Bacteriology (inclu. Eumycetes)	6	0	0	6
615	I		Virology	3	0	0	3
616			Immunology	1	1	0	2
	C		Pathology total	23	1	0	24
621			Hygiene	8	0	0	8
622	I		Public Health and Health Science	13	0	0	13
623			Legal Medicine	4	0	0	4
	N		Social Medicine total	25	0	0	25
631			Internal Medicine in General	13	0	0	13
632	E		Gastroenterology	15	0	0	15
633			Internal Medicine Respiratory System	4	0	0	4
634			Neurological Medicine	5	0	0	5
635			Cardioangiopathy	18	0	0	18
636			Pediatrics	10	0	0	10
637			Dermatology	8	0	0	8
638			Radiology	6	0	0	6
639			Neuropsychiatry	5	1	0	6
641			Hematology	6	1	0	7
642			Internal Medicine of Kidney	3	0	0	3
643			Embryology and Newborn	2	0	0	2
644			Endocrinology	4	0	0	4
645			Metabolic Science	6	0	0	6
			Internal Medicine total	105	2	0	107
651			Surgery in General	7	0	0	7
652			Gastroenterological Surgery	12	0	0	12
653			Thoracic Surgery	4	0	0	4

Table 29. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
654	M		Neurosurgery	5	0	0	5
655			Orthopedic Surgery	16	1	0	17
656			Anesthesiology and Rescue Medicine	16	0	0	16
657			Urology	11	0	0	11
658			Obstetrics and Gynecology	8	0	0	8
659			Oto-rhino-laryngology	7	0	0	7
660			Ophthalmology	1	0	0	1
661			Pediatric Surgery	1	0	0	1
662			Formative Surgery	0	0	0	0
			Surgery total	88	1	0	89
671	E		Oral Anatomy and Morphological Basic Dentistry	3	0	0	3
672	D		Functional Basic Dentistry	1	0	0	1
673	I		Morbid Dentistry (inclu. Dental Radiology)	1	0	0	1
674	C		Conservative Dentistry	3	1	0	4
675			Prosthodontics and Dental Technology	2	0	0	2
676	I		Oral Surgery	10	0	0	10
677	N		Orthodontics, Pedodontics and Social Dentistry	1	0	0	1
678			Periodontological Dentistry	0	0	0	0
	E		Dentistry total	21	1	0	22
681			Chemical Pharmaceutics	7	0	0	7
682			Physical Pharmaceutics	2	0	0	2
683			Biopharmaceutics	7	0	0	7
684			Molecular Pharmaceutics	1	0	0	1
685			Environmental Pharmaceutics	1	0	0	1
			Pharmaceutics total	18	0	0	18
691			Medical Sociology	9	1	0	10
692			Human Genetics	1	0	0	1
693			Applied Pharmacology and Medical Pharmacology	0	0	0	0
694			Pathological Examination	1	1	0	2
696			Science of Basic and Local Nursing	21	2	0	23
697			Science of Clinical Nursing	28	1	0	29
			Medicine in General total	60	5	0	65
			MEDICINE Total	372	11	0	383
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	1	0	0	1
703			Physical Education	18	2	0	20
704			Human Geography	3	0	0	3
705			Physical Geography	2	0	0	2
			Geography total	5	0	0	5
706			Home Science (inclu. Cloth/Living Environments)	2	4	0	6
707			Food Culture	5	2	0	7
			Domestic Science total	7	6	0	13
708			Science of Cultural Property	0	0	0	0
711			Science Education	0	0	1	1
712	A R E A		Educational Engineering	5	1	0	6
713			Curriculum Studies	4	2	0	6
714			Japanese Language Education	2	0	0	2
			Science Education·Curriculum Education total	11	3	1	15
721			Statistics	3	0	0	3
731			Computer Science	16	0	0	16
732			Intelligent Informatics	16	0	0	16
733			Study of Information System (Inclu. Library and Information Science)	7	1	0	8
			Information Science total	39	1	0	40
741			Social System Engineering	8	2	0	10
751	I		Natural Disaster Science	1	0	0	1
761			Plasma Science and Technology	2	0	0	2
772			Nuclear Fusion	0	0	0	0

Table 29. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (Municipal Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	2	0	0	2
774			Nuclear Power Science	1	0	0	1
			Energy total	3	0	0	3
801			Environmental Dynamic Analysis	5	0	0	5
802			Environmental Influence Assessment (inclu. Radiobiology)	5	0	0	5
803			Environmental Preservation	6	0	0	6
			Environmental Science total	16	0	0	16
811			Biological Organic Chemistry	6	0	0	6
812			Structured Biochemistry	0	0	0	0
813			Functional Biochemistry	4	1	0	5
			Biological Chemistry total	10	1	0	11
821	A R E A		Biophysics	4	0	0	4
822			Molecular Biology	8	1	0	9
823			Cell Biology	6	0	0	6
824			Developmental Biology	5	0	0	5
			Basic Biology total	23	1	0	24
831			Neuroanatomy and Neuropathology	2	0	0	2
832			Neurochemistry and Neuropharmacology	5	0	0	5
833			Neuro Science in General	8	0	0	8
834			Neuro and Muscular Physiology	5	0	0	5
			Neuro Science (inclu. Brain Science) total	20	0	0	20
841			Laboratory Animal Science	2	0	0	2
851			Medical Organism Engineering and Material Science of Organism	3	0	1	4
			INTERDISCIPLINARY AREA Total	172	16	2	190
999			WIDE AREA Total	18	1	0	19
			Item n.a. Total	554	26	7	587
			Grand Total	1,652	86	28	1,766

Table 30. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (Private Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
211	ARTS • HUMANITIES		Philosophy	36	4	0	0	40
212			Chinese Philosophy	9	1	0	0	10
213			Indian Philosophy (inclu. Buddhist Studies)	41	5	0	2	48
214			Religion	48	1	0	0	49
215			Ethics	6	0	0	0	6
216			History of Philosophy	26	1	0	0	27
217			Aesthetics (inclu. Arts)	87	15	0	1	103
218			Art History	11	0	0	1	12
			Philosophy total	264	27	0	4	295
221			Experimental Psychology	47	1	0	0	48
222			Educational and Social	134	15	0	0	149
223			Sociology	131	16	0	0	147
224			Education	95	17	0	0	112
225			Cultural Anthropology (inclu. Ethnology and Folklore)	48	2	0	0	50
			Psychology • Sociology • Education Cultural Anthropology total	455	51	0	0	506
231			Japanese History	22	1	0	0	23
232			Oriental History	37	1	0	1	39
233			European History	36	1	0	1	38
234			Archaeology (inclu. Prehistory)	24	0	0	1	25
			History total	119	3	0	3	125
241			Japanese Language	24	1	0	0	25
242			Japanese Literature	52	5	0	0	57
243			Chinese Language and Literature	56	1	0	0	57
244			English Language and Literature	152	19	0	0	171
245			French Language and Literature	34	3	0	0	37
246			German Language and Literature	23	0	0	0	23
247			Other Foreign Languages and Literatures	60	6	0	0	66
248			Linguistics and Phonetics	118	11	0	0	129
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	24	2	0	0	26
			Literature total	543	48	0	0	591
			ARTS • HUMANITIES Total	1,381	129	0	7	1,517
261	LAW		Basic Science of Law	21	2	0	0	23
262			Public Law	21	0	0	0	21
263			International Law	31	2	0	0	33
264			Civil Law	30	1	0	1	32
265			Social Law	9	1	0	0	10
266			Criminal Law	10	0	0	1	11
267			Politics	74	1	0	0	75
			LAW Total	196	7	0	2	205
271	ECONOMICS		General Theory of Economics	61	4	0	0	65
272			Economical Statistics	19	0	0	0	19
273			Economic Policy (inclu. Economic Condition)	87	1	0	1	89
274			Economic History	24	0	0	0	24
275			Public Finance, Money and Banking	34	0	0	0	34
276			Commercial Science	30	1	0	0	31
277			Business Administration	116	7	0	0	123
278			Accounting	33	3	0	0	36
			ECONOMICS Total	404	16	0	1	421
301	SCIENCE		Algebra	30	2	0	0	32
302			Geometry	15	0	0	0	15
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	45	1	0	0	46
305			Basic Analysis	27	0	0	0	27
306			Larger-area Analysis	14	0	0	0	14
			Mathematics total	131	3	0	0	134
311			Astronomy	8	1	0	0	9
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	45	2	0	0	47

Table 30. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (Private Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	32	0	0	0	32
323			Solid-State Physics II (Magnetism, Metal Physics,	26	1	0	1	28
324			Physical Properties in General (inclu. Basic Theories)	20	0	0	0	20
325			Physics in General	18	2	0	0	20
			Physics total	141	5	0	1	147
331			Physics of Solid Earth	8	1	0	0	9
332			Meteorology, Oceanography and Hydrology	15	0	0	0	15
333			Aeronomy	5	0	0	0	5
334			Geology	8	0	0	0	8
335			Stratigraphy and Paleontology	1	0	0	1	2
336			Mineralogy, Petrology and Study of Mineral Deposit	4	0	0	0	4
337			Geochemistry	8	0	0	0	8
			Earth Science total	49	1	0	1	51
341			Physical Chemistry	28	3	0	0	31
342			Organic Chemistry	19	0	0	3	22
343			Inorganic Chemistry	16	0	0	0	16
344			Function, Properties and Materials in Chemistry	17	1	0	0	18
345			Substance Transformation	5	0	0	0	5
346			Separation, Refining and Identification	14	0	0	0	14
			Chemistry total	99	4	0	3	106
351			Genetics	5	0	0	1	6
352			Ecology	20	0	0	2	22
353			Plant Physiology	8	0	0	1	9
354			Morphology, Structure of Organism	8	1	0	1	10
355			Animal Physiology and	9	0	0	1	10
356			Morphology and Taxonomy	8	0	0	2	10
			Biology total	58	1	0	8	67
361			Physical Anthropology (inclu. Physiological Anthropology)	13	0	0	0	13
	SCIENCE Total			499	15	0	13	527
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	19	0	0	0	19
402			Surface Physics	14	0	0	0	14
403			Applied Optics and Quantum Optics	24	0	0	0	24
404			General Applied Physics	13	1	0	3	17
405			Fundamentals of Engineering	15	0	0	0	15
			Applied Physics-Fundamentals of Engineering total	85	1	0	3	89
411			Materials for Machines and Strength of Materials	48	0	0	0	48
412			Workshop Processes and Production Engineering	31	0	0	0	31
413			Design Engineering, Machine Elements and Tribology	18	1	0	1	20
414			Fluid Mechanics	40	0	0	0	40
415			Heat Engineering	26	2	0	0	28
416			Mechanics and Control Engineering	24	0	0	0	24
417			Intelligent Mechanics and Machine System	32	0	0	0	32
			Machine Engineering total	219	3	0	1	223
421			Electric Power Engineering and Electric Machinery	51	0	0	0	51
422			Electronic and Electric Materials Engineering	47	2	0	0	49
423			Electron Devices and Apparatus Engineering	53	0	0	0	53
424			Information and Communication Engineering	84	2	2	0	88

Table 30. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (Private Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
425	E N G I N E E R I N G		System Engineering	24	0	0	0	24
427			Electronic Measurements	47	0	1	0	48
428			Control Engineering	23	0	0	0	23
			Electric and Electronic Engineering	329	4	3	0	336
431			Construction Materials and Dynamics in General Civil Engineering	14	0	0	0	14
432			Structural Engineering and Seismology	22	3	0	0	25
433			Ground Engineering	20	0	0	1	21
434			Hydraulics and River Engineering	27	0	0	1	28
435			Traffic Engineering and Regional Planning	20	0	0	0	20
436			Civil Environmental System	13	0	0	0	13
			Civil Engineering total	116	3	0	2	121
441		N	Building Structure and Materials	36	0	0	0	36
442			Building Science and Building Equipment	24	0	0	2	26
443		G	City Planning and Building Planning	48	4	0	0	52
444		I	Architectural History and Design	11	1	0	0	12
			Architecture total	119	5	0	2	126
451		N	Physical Metallurgy	10	0	0	0	10
452			Inorganic Materials and	24	1	0	0	25
453		E	Composed Materials and Properties	7	0	0	0	7
454		E	Structural and Functional Materials	9	3	0	0	12
455		R	Metallurgy and Material	16	2	0	1	19
456			Metal Productive Engineering	5	0	0	0	5
			Material Engineering total	71	6	0	1	78
461		G	Chemical Engineering in General	14	0	0	0	14
462			Reaction and Separation Engineering	5	0	0	0	5
463			Catalyst and Chemical Process	3	1	0	0	4
464			Bioengineering	10	0	0	2	12
465			Industrial Analytical Chemistry	8	0	0	0	8
			Process Engineering total	40	1	0	2	43
471			Industrial Physical Chemistry	8	0	0	0	8
472			Industrial Inorganic Chemistry	6	0	0	0	6
473			Industrial Organic Chemistry	2	0	0	0	2
474			Synthetic Chemistry	12	0	0	0	12
475			Polymer Synthesis	8	0	0	0	8
476			Polymer Structure and Property (inclu. Fiber)	13	3	0	0	16
			Industrial Chemistry total	49	3	0	0	52
481			Aeronautics	5	0	0	0	5
482			Ship Engineering	3	0	0	0	3
483			Marine Engineering	3	0	0	0	3
484			Resource Development Engineering	7	0	0	0	7
			Synthetic Engineering total	18	0	0	0	18
			ENGINEERING Total	1,046	26	3	11	1,086
501	A G R I C U L T U R E		Plant Breeding	5	0	0	0	5
502			Crop Science	2	0	0	1	3
503			Horticulture and Landscape Architecture	9	3	0	0	12
504			Plant Protection	9	1	0	0	10
505			Sericultural Science and Economic Entomology	1	0	0	0	1
			Agriculture total	26	4	0	1	31
511			Plant Fertilizer and Manure and Soil Science	4	0	0	0	4
512			Applied Microbiochemistry and Applied Biochemistry	35	0	0	0	35
513			Biological Productive Chemistry and Bioorganic Chemistry	6	0	0	0	6
514			Food Science and Nutritional Chemistry	23	13	0	0	36

Table 30. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (Private Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
	A		Agricultural Chemistry total	68	13	0	0	81
521			Forestry	4	0	0	0	4
522	G		Wood Science	2	0	0	0	2
			Forestry total	6	0	0	0	6
531	R		Fisheries in General	17	0	0	0	17
532			Fisheries Chemistry	7	0	0	0	7
			Fisheries total	24	0	0	0	24
541	I		Agricultural Economics	16	0	0	0	16
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	8	0	0	0	8
552	U		Agricultural Machinery	4	1	0	0	5
553	L		Biological Environment	2	0	0	0	2
			Agricultural Engineering total	14	1	0	0	15
561	T		Animal Science and Grassland Science	5	0	0	0	5
562	U		Applied Animal Science	7	0	0	0	7
563	R		Basic Veterinary Medicine and Basic Animal Science	13	0	0	1	14
564			Applied Veterinary Medicine	16	0	0	1	17
	E		Animal Science·Veterinary Medicine total	41	0	0	2	43
571			Biological Resource Science	4	0	0	0	4
572			Applied Molecular Cell Biology	5	0	0	0	5
			Interdisciplinary Agricultural Science total	9	0	0	0	9
			AGRICULTURE Total	204	18	0	3	225
601			Anatomy in General (inclu. Histology, Embryology)	28	1	0	0	29
602			Physiology in General	31	2	0	0	33
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	24	4	0	0	28
604			Pharmacology in General	40	0	0	0	40
605			Medical Chemistry in General	18	0	0	0	18
606			Pathological Medical Chemistry	14	1	0	0	15
	M		Physiology total	155	8	0	0	163
611			Hominal Pathology	37	1	0	0	38
612	E		Experimental Pathology	13	1	0	2	16
613	D		Parasitology (inclu. Medical Zoology)	9	3	0	0	12
614			Bacteriology (inclu. Eumycetes)	25	1	0	0	26
615	I		Virology	8	0	0	1	9
616			Immunology	25	0	0	2	27
	C		Pathology total	117	6	0	5	128
621			Hygiene	36	1	0	1	38
622	I		Public Health and Health Science	53	4	0	1	58
623			Legal Medicine	19	0	0	0	19
	N		Social Medicine total	108	5	0	2	115
631			Internal Medicine in General	41	1	0	1	43
632	E		Gastroenterology	46	0	0	1	47
633			Internal Medicine Respiratory System	25	0	0	2	27
634			Neurological Medicine	32	0	0	0	32
635			Cardioangiopathy	68	1	0	1	70
636			Pediatrics	46	0	0	0	46
637			Dermatology	19	0	0	0	19
638			Radiology	49	3	0	1	53
639			Neuropsychiatry	37	1	0	0	38
641			Hematology	36	0	0	0	36
642			Internal Medicine of Kidney	28	1	0	0	29
643			Embryology and Newborn	2	0	0	0	2
644			Endocrinology	12	0	0	0	12
645			Metabolic Science	18	0	0	1	19
			Internal Medicine total	459	7	0	7	473
651			Surgery in General	51	0	0	1	52
652			Gastroenterological Surgery	45	0	0	2	47
653			Thoracic Surgery	30	0	0	0	30

Table 30. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (Private Institutions)

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
654	M		Neurosurgery	35	0	0	0	35
655			Orthopedic Surgery	54	4	0	0	58
656			Anesthesiology and Rescue Medicine	29	0	0	0	29
657			Urology	33	0	0	1	34
658			Obstetrics and Gynecology	33	0	0	0	33
659			Oto-rhino-laryngology	27	0	0	0	27
660			Ophthalmology	21	0	0	0	21
661			Pediatric Surgery	6	0	0	0	6
662			Formative Surgery	19	0	0	0	19
			Surgery total	383	4	0	4	391
671	E		Oral Anatomy and Morphological Basic Dentistry	35	1	0	0	36
672	D		Functional Basic Dentistry	28	0	0	0	28
673	I		Morbid Dentistry (inclu. Dental Radiology)	29	0	0	0	29
674	C		Conservative Dentistry	46	2	0	0	48
675			Prosthodontics and Dental Technology	81	1	0	0	82
676	I		Oral Surgery	61	1	0	1	63
677	N		Orthodontics, Pedodontics and Social Dentistry	66	1	0	0	67
678			Periodontological Dentistry	21	0	0	0	21
	E		Dentistry total	367	6	0	1	374
681			Chemical Pharmaceuticals	70	0	0	0	70
682			Physical Pharmaceuticals	35	1	0	0	36
683			Biopharmaceutics	72	1	0	1	74
684			Molecular Pharmaceuticals	26	0	0	0	26
685			Environmental Pharmaceuticals	15	0	0	0	15
			Pharmaceutics total	218	2	0	1	221
691			Medical Sociology	30	0	0	0	30
692			Human Genetics	19	0	0	0	19
693			Applied Pharmacology and Medical Pharmacology	22	0	0	0	22
694			Pathological Examination	14	0	0	0	14
696			Science of Basic and Local Nursing	18	3	0	0	21
697			Science of Clinical Nursing	17	2	0	0	19
			Medicine in General total	120	5	0	0	125
	MEDICINE Total			1,927	43	0	20	1,990
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	11	0	0	0	11
703			Physical Education	89	9	0	0	98
704			Human Geography	17	0	0	0	17
705				Physical Geography	11	0	0	0
			Geography total	28	0	0	0	28
706			Home Science(inclu. Cloth/Living Environments)	33	15	0	0	48
707				Food Culture	26	12	0	0
			Domestic Science total	59	27	0	0	86
708			Science of Cultural Property	2	0	0	0	2
711			Science Education	12	2	0	0	14
712	Educational Engineering	32		2	0	0	34	
713	Curriculum Studies	31		9	0	0	40	
714	Japanese Language Education	21		0	0	0	21	
	Science Education·Curriculum Education total	96	13	0	0	109		
721	A R E A		Statistics	17	0	0	0	17
731			Computer Science	61	0	1	0	62
732				Intelligent Informatics	88	3	2	0
733	I		Study of Information System (Inclu. Library and Information Science)	71	3	0	1	75
			Information Science total	220	6	3	1	230
741			Social System Engineering	62	0	0	1	63
751			Natural Disaster Science	3	1	0	0	4
761			Plasma Science and Technology	12	0	0	0	12
772			Nuclear Fusion	5	1	0	0	6

Table 30. Number of Researchers Who Have Participated in International Conferences, Etc., Overseas by Field of Specialization / by Institution Type (Private Institutions)

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
773	N T		Energy Science General	6	0	0	0	6
774			Nuclear Power Science	4	0	0	0	4
	E		Energy total	15	1	0	0	16
801	R D I S C		Environmental Dynamic Analysis	23	0	0	0	23
802			Environmental Influence Assessment (inclu. Radiobiology)	17	0	0	2	19
803			Environmental Preservation	29	0	0	2	31
			Environmental Science total	69	0	0	4	73
811	I P L I		Biological Organic Chemistry	11	0	0	1	12
812			Structured Biochemistry	12	1	0	0	13
813			Functional Biochemistry	24	1	0	0	25
			Biological Chemistry total	47	2	0	1	50
821	N A R Y		Biophysics	15	0	0	0	15
822			Molecular Biology	34	1	0	2	37
823			Cell Biology	22	0	0	2	24
824			Developmental Biology	8	0	0	0	8
			Basic Biology total	79	1	0	4	84
831	A R E A		Neuroanatomy and Neuropathology	13	0	0	0	13
832			Neurochemistry and Neuropharmacology	19	0	0	1	20
833			Neuro Science in General	29	1	0	0	30
834			Neuro and Muscular Physiology	21	2	0	0	23
			Neuro Science (inclu. Brain Science) total	82	3	0	1	86
841			Laboratory Animal Science	2	0	0	2	4
851			Medical Organism Engineering and Material Science of Organism	58	3	0	2	63
	INTERDISCIPLINARY AREA Total			951	66	3	16	1,036
999	WIDE AREA Total			120	14	0	1	135
	Item n.a. Total			3,270	155	8	49	3,482
	Grand Total			9,998	489	14	123	10,624