

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
211	A R T S · H U M A N I T I E S		Philosophy	173	10	3	0	0	0	186
212			Chinese Philosophy	41	4	0	0	0	0	45
213			Indian Philosophy (inclu. Buddhist Studies)	107	12	2	2	0	4	127
214			Religion	128	16	0	0	0	0	144
215			Ethics	54	1	0	0	0	0	55
216			History of Philosophy	57	10	0	0	0	0	67
217			Aesthetics (inclu. Arts)	85	5	0	2	1	0	93
218			Art History	48	6	0	1	2	0	57
			Philosophy total	693	64	5	5	3	4	774
221			Experimental Psychology	318	15	1	1	3	2	340
222			Educational and Social	492	45	0	5	6	1	549
223			Sociology (inclu. Social Welfare)	337	26	0	3	0	0	366
224			Education	345	33	0	2	10	0	390
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	189	15	0	16	0	3	223
			Psychology· Sociology · Education Cultural Anthropology total	1,681	134	1	27	19	6	1,868
231			Japanese History	303	19	2	10	2	4	340
232			Oriental History	140	1	0	0	0	1	142
233			European History	144	5	0	0	0	0	149
234			Archaeology (inclu. Prehistory)	47	2	0	3	3	1	56
			History total	634	27	2	13	5	6	687
241			Japanese Language	73	5	0	0	0	0	78
242			Japanese Literature	195	25	3	4	0	0	227
243			Chinese Language and Literature	65	0	0	0	0	0	65
244			English Language and Literature	262	26	3	0	0	0	291
245			French Language and Literature	150	5	0	0	0	0	155
246			German Language and Literature	68	1	0	0	0	0	69
247			Other Foreign Languages and Literatures	47	4	0	0	0	0	51
248			Linguistics and Phonetics	256	18	2	3	3	0	282
249			Literature in General (i nclu. Literary Theory, Comparative Literature) and Western Classics	63	6	0	0	0	0	69
			Literature total	1,179	90	8	7	3	0	1,287
			ARTS · HUMANITIES Total	4,187	315	16	52	30	16	4,616
261	L A W		Basic Science of Law	84	3	0	0	0	0	87
262			Public Law	118	6	1	0	0	0	125
263			International Law	56	0	1	0	0	1	58
264			Civil Law	182	0	0	0	0	2	184
265			Social Law	43	2	0	0	0	1	46
266			Criminal Law	69	2	0	0	0	0	71
267			Politics	319	2	0	1	1	0	323
			LAW Total	871	15	2	1	1	4	894
271	E C O N O M I C S		General Theory of Economics	451	15	0	0	0	2	468
272			Economical Statistics	87	0	0	0	0	0	87
273			Economic Policy (inclu. Economic Condition)	404	7	0	0	0	4	415
274			Economic History	202	5	0	0	0	0	207
275			Public Finance, Money and Banking	170	8	0	1	0	0	179
276			Commercial Science	107	7	0	0	0	0	114
277			Business Administration	327	22	0	1	0	1	351
278			Accounting	184	6	0	0	0	0	190
			ECONOMICS Total	1,932	70	0	2	0	7	2,011
301	S C I E N C E		Algebra	462	8	14	0	0	0	484
302			Geometry	401	5	19	0	0	0	425
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	444	8	13	8	0	0	473
305			Basic Analysis	488	8	14	0	0	0	510
306			Larger-area Analysis	94	1	4	0	0	0	99
			Mathematics total	1,889	30	64	8	0	0	1,991
311			Astronomy	184	9	3	63	2	0	261
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	858	47	29	109	0	0	1,043
322			Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	540	5	21	13	0	0	579
323			Solid - State Physics II (Magnetism, Metal Physics,	620	6	15	8	0	0	649

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Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
324			Physical Properties in General (inclu. Basic Theories)	409	16	23	20	0	2	470
325			Physics in General	282	16	9	19	0	5	331
			Physics total	2,709	90	97	169	0	7	3,072
331			Physics of Solid Earth	292	4	0	11	1	1	309
332			Meteorology, Oceanography and Hydrology	273	3	5	9	0	0	290
333			Aeronomy	87	2	3	15	0	0	107
334			Geology	185	2	0	0	4	3	194
335			Stratigraphy and Paleontology	106	3	0	1	9	0	119
336			Mineralogy, Petrology and Study of Mineral Deposit	239	1	0	2	3	0	245
337			Geochemistry	157	1	1	1	1	0	161
			Earth Science total	1,339	16	9	39	18	4	1,425
341			Physical Chemistry	720	17	20	42	2	2	803
342			Organic Chemistry	627	9	18	7	0	18	679
343			Inorganic Chemistry	293	7	7	11	1	0	319
344			Function, Properties and Materials in Chemistry	305	8	9	3	1	0	326
345			Substance Transformation	33	0	2	0	0	1	36
346			Separation, Refining and Identification	222	9	12	2	0	0	245
			Chemistry total	2,200	50	68	65	4	21	2,408
351			Genetics	191	9	2	26	0	3	231
352			Ecology	393	34	2	5	2	6	442
353			Plant Physiology	296	21	2	15	0	0	334
354			Morphology, Structure of Organism	135	10	0	7	1	1	154
355			Animal Physiology and	199	5	0	4	0	4	212
356			Morphology and Taxonomy	212	8	0	5	27	6	258
			Biology total	1,426	87	6	62	30	20	1,631
361			Physical Anthropology (inclu. Physiological Anthropology)	81	5	0	1	3	0	90
			SCIENCE Total	9,828	287	247	407	57	52	10,878
401			Applied Physics of Property and Crystallography	265	4	13	2	0	1	285
402			Surface Physics	168	2	10	2	0	0	182
403			Applied Optics and Quantum Optics	284	5	22	3	0	0	314
404			General Applied Physics	107	5	9	2	0	4	127
405			Fundamentals of Engineering	77	2	8	0	0	0	87
			Applied Physics·Fundamentals of Engineering total	901	18	62	9	0	5	995
411			Materials for Machines and Strength of Materials	551	12	73	1	0	0	637
412			Workshop Processes and Production Engineering	355	5	42	1	1	0	404
413			Design Engineering, Machine Elements and Tribology	234	3	22	2	0	0	261
414			Fluid Mechanics	452	8	46	1	0	0	507
415			Heat Engineering	448	7	51	4	0	0	510
416			Mechanics and Control Engineering	380	8	43	2	0	0	433
417			Intelligent Mechanics and Machine System	285	6	14	0	0	0	305
			Machine Engineering total	2,705	49	291	11	1	0	3,057
421			Electric Power Engineering and Electric Machinery	407	9	53	5	0	0	474
422			Electronic and Electric Materials Engineering	491	10	46	1	0	2	550
423			Electron Devices and Apparatus Engineering	434	6	43	1	0	0	484
424			Information and Communication Engineering	866	23	61	15	0	1	966
425			System Engineering	223	13	9	2	0	1	248
427			Electronic Measurements	352	6	48	1	0	0	407
428			Control Engineering	157	2	15	1	0	0	175
			Electric and Electronic Engineering	2,930	69	275	26	0	4	3,304
431			Construction Materials and Dynamics in General Civil Engineering	172	2	21	0	0	0	195
432			Structural Engineering and Seismology	253	7	26	0	0	1	287
433			Ground Engineering	232	2	21	0	0	1	256

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434	E N G I N E E R I N G	Civil Engineering	Hydraulics and River Engineering	251	4	19	0	0	2	276
435			Traffic Engineering and Regional Planning	186	4	12	0	0	0	202
436			Civil Environmental System	157	1	11	0	0	1	170
			Civil Engineering total	1,251	20	110	0	0	5	1,386
441		Architecture	Building Structure and Materials	421	6	17	0	1	1	446
442			Building Science and Building Equipment	208	15	9	0	0	0	232
443			City Planning and Building Planning	403	18	18	0	0	0	439
444			Architectural History and Design	157	14	9	1	9	0	190
			Architecture total	1,189	53	53	1	10	1	1,307
451		Material Engineering	Physical Metallurgy	208	0	12	0	0	1	221
452			Inorganic Materials and Composed Materials and Properties	324	3	15	0	0	0	342
453			Structural and Functional Materials	108	0	12	1	0	1	122
454		Metal Productive Engineering	Metallurgy and Material	206	5	13	1	0	4	229
455			Metal Productive Engineering	239	7	27	0	0	3	276
456			Metal Productive Engineering	132	2	8	1	0	0	143
			Material Engineering total	1,217	17	87	3	0	9	1,333
461		Process Engineering	Chemical Engineering in General	236	1	16	0	0	0	253
462			Reaction and Separation Engineering	162	0	18	0	0	1	181
463			Catalyst and Chemical Process	132	0	4	0	0	0	136
464		Industrial Chemistry	Bioengineering	213	0	11	1	0	0	225
465			Industrial Analytical Chemistry	115	0	8	0	0	0	123
			Process Engineering total	858	1	57	1	0	1	918
471		Industrial Chemistry	Industrial Physical Chemistry	248	4	9	0	0	2	263
472			Industrial Inorganic Chemistry	112	0	5	1	0	0	118
473			Industrial Organic Chemistry	150	7	10	0	0	0	167
474		Polymer Engineering	Synthetic Chemistry	280	1	17	1	0	4	303
475			Polymer Synthesis	242	4	14	0	0	0	260
476			Polymer Structure and Property (inclu. Fiber)	260	24	9	1	0	0	294
			Industrial Chemistry total	1,292	40	64	3	0	6	1,405
481		Synthetic Engineering	Aeronautics	133	0	1	28	0	0	162
482			Ship Engineering	85	1	2	0	0	0	88
483			Marine Engineering	35	0	0	0	0	0	35
484			Resource Development Engineering	108	0	2	0	0	0	110
			Synthetic Engineering total	361	1	5	28	0	0	395
			ENGINEERING Total	12,704	268	1,004	82	11	31	14,100
501	A G R I C U L T U R E	Agriculture	Plant Breeding	133	7	1	0	1	3	145
502			Crop Science	109	7	0	0	0	0	116
503			Horticulture and Landscape Architecture	259	28	0	0	1	1	289
504		Agricultural Chemistry	Plant Protection	214	8	0	0	0	0	222
505			Sericultural Science and Economic Entomology	50	3	0	0	0	7	60
			Agriculture total	765	53	1	0	2	11	832
511		Agricultural Chemistry	Plant Fertilizer and Manure and Soil Science	161	13	0	0	1	0	175
512			Applied Microbiochemistry and Applied Biochemistry	539	44	12	2	0	18	615
513			Biological Productive Chemistry and Bioorganic Chemistry	170	7	1	0	0	4	182
514		Food Science and Nutritional Chemistry	Food Science and Nutritional Chemistry	419	180	3	0	0	2	604
			Agricultural Chemistry total	1,289	244	16	2	1	24	1,576
521		Forestry	Forestry	257	4	0	1	0	0	262
522			Wood Science	182	8	0	0	0	1	191
			Forestry total	439	12	0	1	0	1	453
531		Fisheries	Fisheries in General	326	7	1	0	0	0	334
532			Fisheries Chemistry	145	7	1	0	0	2	155
			Fisheries total	471	14	2	0	0	2	489
541		Agricultural Engineering	Agricultural Economics	272	13	0	0	0	0	285
551			Irrigation, Drainage and Reclamation Engineering and Rural Planning	205	12	0	0	0	3	220
552			Agricultural Machinery	112	9	1	0	0	0	122
553			Biological Environment	67	2	0	0	0	0	69
			Agricultural Engineering total	384	23	1	0	0	3	411

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561	A G R I C U L T U R E		Animal Science and Grassland Science	163	9	0	0	0	0	172
562			Applied Animal Science	132	6	0	0	0	0	138
563			Basic Veterinary Medicine and Basic Animal Science	277	3	0	0	1	12	293
564			Applied Veterinary Medicine	206	2	0	0	0	10	218
			Animal Science· Veterinary Medicine total	778	20	0	0	1	22	821
571			Biological Resource Science	59	5	0	1	0	2	67
572			Applied Molecular Cell Biology	51	2	0	0	0	0	53
			Interdisciplinary Agricultural Science total	110	7	0	1	0	2	120
			AGRICULTURE Total	4,508	386	20	4	4	65	4,987
601	M E D I C I N E		Anatomy in General (inclu. Histology, Embryology)	426	34	0	2	0	3	465
602			Physiology in General	378	34	0	8	1	1	422
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	217	38	1	0	0	0	256
604			Pharmacology in General	346	10	0	0	0	2	358
605			Medical Chemistry in General	377	21	1	1	0	7	407
606			Pathological Medical Chemistry	132	7	0	0	0	4	143
			Physiology total	1,876	144	2	11	1	17	2,051
611			Hominal Pathology	479	18	0	0	0	3	500
612			Experimental Pathology	267	10	0	0	0	9	286
613			Parasitology (inclu. Medical Zoology)	186	11	0	0	1	1	199
614			Bacteriology (inclu. Eumycetes)	257	33	1	0	0	6	297
615			Virology	228	4	0	0	0	8	240
616			Immunology	388	12	0	0	0	7	407
			Pathology total	1,805	88	1	0	1	34	1,929
621			Hygiene	240	19	0	0	0	9	268
622			Public Health and Health	508	86	1	3	1	4	603
623			Legal Medicine	217	1	0	0	0	0	218
			Social Medicine total	965	106	1	3	1	13	1,089
631			Internal Medicine in General	431	14	0	0	0	2	447
632			Gastroenterology	674	3	0	0	0	3	680
633			Internal Medicine Respiratory System	336	8	0	0	0	2	346
634			Neurological Medicine	380	10	0	3	0	2	395
635			Cardioangiolog	723	14	0	0	0	11	748
636			Pediatrics	605	23	0	0	1	2	631
637			Dermatology	373	1	0	0	0	3	377
638			Radiology	580	36	0	0	0	2	618
639			Neuropsychiatry	553	17	0	0	1	0	571
640			Endocrinology and Metabolic Science	233	10	0	0	0	1	244
641			Hematology	434	5	0	1	0	3	443
642			Internal Medicine of Kidney	227	1	0	0	0	2	230
643			Embryology and Newborn	44	1	0	0	0	0	45
644			Endocrinology	132	2	0	0	0	2	136
645			Metabolic Science	99	3	0	0	0	0	102
			Internal Medicine total	5,824	148	0	4	2	35	6,013
651			Surgery in General	498	7	0	0	0	0	505
652			Gastroenterological Surgery	683	10	0	0	0	5	698
653			Thoracic Surgery	388	4	0	0	0	2	394
654			Neurosurgery	476	1	0	1	0	3	481
655			Orthopedic Surgery	632	19	0	0	0	2	653
656			Anesthesiology and Rescue Medicine	533	2	0	0	0	3	538
657			Urology	408	1	0	0	0	3	412
658			Obstetrics and Gynecology	526	11	0	0	0	1	538
659			Oto-rhino-laryngology	419	6	0	0	0	2	427
660			Ophthalmology	384	0	0	0	0	1	385
661			Pediatric Surgery	106	1	0	0	0	0	107
662			Formative Surgery	43	0	0	0	0	0	43
			Surgery total	5,096	62	0	1	0	22	5,181
671			Oral Anatomy and Morphological Basic Dentistry	354	6	0	0	0	0	360
672			Functional Basic Dentistry	288	5	0	0	0	0	293
673			Morbid Dentistry (inclu. Dental Radiology)	197	4	0	0	0	0	201

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674	M E D I C I N E		Conservative Dentistry	499	12	0	0	0	0	511
675			Prosthodontics and Dental Technology	641	7	0	0	0	0	648
676			Oral Surgery	661	5	0	0	0	0	666
677			Orthodontics, Pedodontics and Social Dentistry	543	15	0	0	0	0	558
678			Periodontological Dentistry	40	1	0	0	0	0	41
			Dentistry total	3,223	55	0	0	0	0	3,278
681			Chemical Pharmaceuticals	664	3	1	0	0	7	675
682			Physical Pharmaceuticals	244	1	0	0	0	0	245
683			Biopharmaceutics	770	5	4	0	0	10	789
684			Molecular Pharmaceuticals	69	0	1	2	0	1	73
685			Environmental Pharmaceutics	16	3	0	0	0	0	19
			Pharmaceutics total	1,763	12	6	2	0	18	1,801
691	I N T E R D I S C I P L I N A R Y		Medical Sociology	65	3	0	0	0	0	68
692			Human Genetics	60	1	0	0	0	1	62
693			Applied Pharmacology and Medical Pharmacology	157	4	1	0	0	1	163
694			Pathological Examination	153	39	0	0	0	0	192
696			Science of Basic and Local Nursing	110	23	0	0	0	0	133
697			Science of Clinical Nursing	53	9	0	0	0	0	62
			Medicine in Gene r a l total	598	79	1	0	0	2	680
			MEDICINE Total	21,150	694	11	21	5	141	22,022
702			History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	58	5	1	1	0	0	65
703			Physical Education	259	19	1	0	0	0	279
704			Human Geography	189	6	0	0	2	1	198
705			Physical Geography	132	2	1	2	0	0	137
			Geography total	321	8	1	2	2	1	335
706			Home Science(inclu. Cloth/Living Environments)	203	110	0	0	0	0	313
707			Food Culture	50	35	0	0	0	0	85
			Domestic Science total	253	145	0	0	0	0	398
708			Science of Cultural Property	5	0	0	2	4	0	11
711			Science Education	57	6	4	0	1	0	68
712	I N T E R D I S C I P L I N A R Y		Educational Engineering	54	9	1	3	0	0	67
713			Curriculum Studies	82	3	2	0	0	0	87
714			Japanese Language Education	17	0	0	0	1	0	18
			Science Education· Curriculum Education total	210	18	7	3	2	0	240
721			Statistics	112	2	0	24	0	1	139
731			Computer Science	700	16	19	5	0	0	740
732			Intelligent Informatics	512	8	18	7	0	0	545
733			Study of Information System (Inclu. Library and Information Science)	215	13	6	9	0	0	243
			Information Science total	1,427	37	43	21	0	0	1,528
741			Social System Engineering	182	5	1	0	0	0	188
751	A R E A		Natural Disaster Science	31	0	2	0	0	1	34
761			Plasma Science and Technology	241	3	17	35	0	4	300
772			Nuclear Fusion	88	0	2	23	0	1	114
773			Energy Science General	115	5	5	4	0	1	130
774			Nuclear Power Science	94	0	2	3	0	0	99
			Energy total	297	5	9	30	0	2	343
801			Environmental Dynamic Analysis	135	4	2	0	0	0	141
802			Environmental Influence Assessment (inclu. Radiobiology)	138	14	1	1	0	3	157
803			Environmental Preservation	148	6	5	0	0	1	160
			Environmental Science total	421	24	8	1	0	4	458
811			Biological Organic Chemistry	188	10	6	2	0	9	215
812			Structured Biochemistry	234	7	2	1	0	6	250
813			Functional Biochemistry	307	25	3	0	0	1	336
			Biological Chemistry total	729	42	11	3	0	16	801
821			Biophysics	250	3	8	20	0	0	281
822			Molecular Biology	703	10	3	41	1	15	773
823			Cell Biology	382	6	0	11	0	10	409
824			Developmental Biology	235	4	2	13	0	1	255
			Basic Biology total	1,570	23	13	85	1	26	1,718
831			Neuroanatomy and Neuropathology	176	10	0	1	0	0	187

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832	I N T E R D I S C I P L I N A R Y		Neurochemistry and Neuropharmacology	166	5	0	0	0	1	172
833			Neuro Science in General	255	9	0	19	0	4	287
834			Neuro and Muscular Physiology	193	16	0	13	0	1	223
			Neuro Science (inclu. Brain Science) total	790	40	0	33	0	6	869
841			Laboratory Animal Science	78	0	0	2	0	9	89
851			Medical Organism Engineering and Material Science of Organism	271	15	9	0	0	1	296
			INTERDISCIPLINARY AREA Total	7,255	391	123	242	9	71	8,091
999			WIDE AREA Total	442	36	5	7	0	5	495
			Item n.a. Total	140	4	2	1	1	2	150
			Grand Total	63,017	2,466	1,430	819	118	394	68,244

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Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
211	ARTS • HUMANITIES		Philosophy	63	0	2	0	0	65
212			Chinese Philosophy	18	0	0	0	0	18
213			Indian Philosophy (inclu. Buddhist Studies)	20	0	2	2	0	24
214			Religion	17	1	0	0	0	18
215			Ethics	26	0	0	0	0	26
216			History of Philosophy	19	0	0	0	0	19
217			Aesthetics (inclu. Arts)	31	0	0	2	1	34
218			Art History	17	0	0	1	2	20
		Philosophy total		211	1	4	5	3	224
221			Experimental Psychology	168	2	1	1	3	175
222			Educational and Social	256	2	0	5	6	269
223			Sociology (inclu. Social Welfare)	80	0	0	3	0	83
224			Education	185	0	0	2	10	197
225		Cultural Anthropology (i n c l u . Ethnology and Folklore)	80	0	0	16	0	96	
		Psychology • Sociology • Education Cultural Anthropology total		769	4	1	27	19	820
231			Japanese History	128	0	2	10	2	142
232			Oriental History	52	0	0	0	0	52
233			European History	57	0	0	0	0	57
234			Archaeology (inclu. Prehistory)	23	0	0	3	3	29
		History total		260	0	2	13	5	280
241			Japanese Language	28	1	0	0	0	29
242			Japanese Literature	44	0	3	4	0	51
243			Chinese Language and Literature	21	0	0	0	0	21
244			English Language and Literature	64	1	3	0	0	68
245			French Language and Literature	51	0	0	0	0	51
246			German Language and Literature	19	0	0	0	0	19
247			Other Foreign Languages and Literatures	16	0	0	0	0	16
248			Linguistics and Phonetics	84	0	2	3	3	92
249			Literature in General (i n c l u . Literary Theory, Comparative Literature) and Western Classics	18	0	0	0	0	18
		Literature total		345	2	8	7	3	365
	ARTS • HUMANITIES Total			1,585	7	15	52	30	1,689
261	LAW	Basic Science of Law	31	0	0	0	0	31	
262		Public Law	50	0	1	0	0	51	
263		International Law	14	0	1	0	0	15	
264		Civil Law	46	0	0	0	0	46	
265		Social Law	14	0	0	0	0	14	
266		Criminal Law	18	0	0	0	0	18	
267		Politics	104	0	0	1	1	106	
	LAW Total		277	0	2	1	1	281	
271	ECONOMICS	General Theory of Economics	147	0	0	0	0	147	
272		Economical Statistics	42	0	0	0	0	42	
273		Economic Policy (inclu. Economic Condition)	114	0	0	0	0	114	
274		Economic History	65	0	0	0	0	65	
275		Public Finance, Money and Banking	52	1	0	1	0	54	
276		Commercial Science	19	0	0	0	0	19	
277		Business Administration	64	0	0	1	0	65	
278		Accounting	38	0	0	0	0	38	
	ECONOMICS Total		541	1	0	2	0	544	
301	SCIENCE	Algebra	282	0	14	0	0	296	
302		Geometry	255	0	17	0	0	272	
304		Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	260	2	12	8	0	282	
305		Basic Analysis	293	2	12	0	0	307	
306		Larger-area Analysis	70	0	4	0	0	74	
		Mathematics total		1,160	4	59	8	0	1,231
311		Astronomy		130	0	3	63	2	198
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	526	3	28	109	0	666	

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

Code	Subj ect	Subdi vision	I t e m	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)	363	1	17	13	0	394
323			Solid - State Physics II (Magnetism, Metal Physics,	442	0	15	8	0	465
324			Physical Properties in General (inclu. Basic Theories)	255	3	19	20	0	297
325			Physics in General	178	2	8	19	0	207
			Physics total	1,764	9	87	169	0	2,029
331			Physics of Solid Earth	251	0	0	11	1	263
332			Meteorology, Oceanography and Hydrology	225	0	5	9	0	239
333			Aeronomy	66	0	3	15	0	84
334			Geology	147	0	0	0	4	151
335			Stratigraphy and Paleontology	86	0	0	1	9	96
336			Mineralogy, Petrology and Study of Mineral Deposit	200	0	0	2	3	205
337			Geochemistry	126	0	1	1	1	129
			Earth Science total	1,101	0	9	39	18	1,167
341			Physical Chemistry	490	1	17	42	2	552
342			Organic Chemistry	420	0	17	7	0	444
343			Inorganic Chemistry	192	1	7	11	1	212
344			Function, Properties and Materials in Chemistry	210	1	9	3	1	224
345			Substance Transformation	23	0	1	0	0	24
346			Separation, Refining and Identification	136	2	11	2	0	151
			Chemistry total	1,471	5	62	65	4	1,607
351			Genetics	136	0	2	26	0	164
352			Ecology	279	1	1	5	2	288
353			Plant Physiology	208	0	2	15	0	225
354			Morphology, Structure of Organism	86	1	0	7	1	95
355			Animal Physiology and	128	0	0	4	0	132
356			Morphology and Taxonomy	151	0	0	5	27	183
			Biology total	988	2	5	62	30	1,087
361			Physical Anthropology (inclu. Physiological Anthropology)	52	0	0	1	3	56
	SCIENCE Total			6,666	20	225	407	57	7,375
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	185	0	12	2	0	199
402			Surface Physics	114	0	10	2	0	126
403			Applied Optics and Quantum Optics	172	1	19	3	0	195
404			General Applied Physics	66	1	8	2	0	77
405			Fundamentals of Engineering	51	0	7	0	0	58
			Applied Physics· Fundamentals of Engineering total	588	2	56	9	0	655
411			Materials for Machines and Strength of Materials	307	0	63	1	0	371
412			Workshop Processes and Production Engineering	191	0	38	1	1	231
413			Design Engineering, Machine Elements and Tribology	150	0	17	2	0	169
414			Fluid Mechanics	255	1	42	1	0	299
415			Heat Engineering	264	2	45	4	0	315
416			Mechanics and Control Engineering	215	1	40	2	0	258
417			Intelligent Mechanics and Machine System	166	0	13	0	0	179
			Machine Engineering total	1,548	4	258	11	1	1,822
421			Electric Power Engineering and Electric Machinery	194	1	49	5	0	249
422			Electronic and Electric Materials Engineering	282	1	46	1	0	330
423			Electron Devices and Apparatus Engineering	235	0	41	1	0	277
424			Information and Communication Engineering	412	2	56	15	0	485

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
425	E N G I N E E R I N G		System Engineering	119	1	9	2	0	131
427			Electronic Measurements	188	0	44	1	0	233
428			Control Engineering	92	0	13	1	0	106
			Electric and Electronic Engineering	1,522	5	258	26	0	1,811
431			Construction Materials and Dynamics in General Civil Engineering	89	0	21	0	0	110
432			Structural Engineering and Seismology	138	0	23	0	0	161
433			Ground Engineering	136	0	21	0	0	157
434			Hydraulics and River Engineering	167	0	17	0	0	184
435			Traffic Engineering and Regional Planning	103	0	11	0	0	114
436			Civil Environmental System	91	0	11	0	0	102
			Civil Engineering total	724	0	104	0	0	828
441			Building Structure and Materials	204	0	17	0	1	222
442			Building Science and Building Equipment	91	1	8	0	0	100
443			City Planning and Building Planning	153	4	16	0	0	173
444			Architectural History and Design	74	0	8	1	9	92
			Architecture total	522	5	49	1	10	587
451			Physical Metallurgy	163	0	12	0	0	175
452			Inorganic Materials and	222	0	15	0	0	237
453			Composed Materials and Properties	67	0	12	1	0	80
454			Structural and Functional Materials	149	1	12	1	0	163
455			Metallurgy and Material	168	1	25	0	0	194
456			Metal Productive Engineering	112	0	8	1	0	121
			Material Engineering total	881	2	84	3	0	970
461			Chemical Engineering in General	179	0	14	0	0	193
462			Reaction and Separation Engineering	110	0	18	0	0	128
463			Catalyst and Chemical Process	104	0	4	0	0	108
464			Bioengineering	157	0	11	1	0	169
465			Industrial Analytical Chemistry	84	0	8	0	0	92
			Process Engineering total	634	0	55	1	0	690
471			Industrial Physical Chemistry	176	2	8	0	0	186
472			Industrial Inorganic Chemistry	73	0	5	1	0	79
473			Industrial Organic Chemistry	95	1	8	0	0	104
474			Synthetic Chemistry	207	0	16	1	0	224
475			Polymer Synthesis	171	0	13	0	0	184
476			Polymer Structure and Property (inclu. Fiber)	197	0	7	1	0	205
			Industrial Chemistry total	919	3	57	3	0	982
481			Aeronautics	85	0	1	28	0	114
482			Ship Engineering	59	0	2	0	0	61
483			Marine Engineering	18	0	0	0	0	18
484			Resource Development Engineering	96	0	1	0	0	97
			Synthetic Engineering total	258	0	4	28	0	290
			ENGINEERING Total	7,596	21	925	82	11	8,635
501	A G R I C U L T U R E		Plant Breeding	102	0	1	0	1	104
502			Crop Science	89	0	0	0	0	89
503			Horticulture and Landscape Architecture	175	0	0	0	1	176
504			Plant Protection	167	0	0	0	0	167
505			Sericultural Science and Economic Entomology	39	0	0	0	0	39
			Agriculture total	572	0	1	0	2	575
511			Plant Fertilizer and Manure and Soil Science	122	0	0	0	1	123
512			Applied Microbiochemistry and Applied Biochemistry	358	0	12	2	0	372
513			Biological Productive Chemistry and Bioorganic Chemistry	125	0	1	0	0	126
514			Food Science and Nutritional Chemistry	208	0	3	0	0	211

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
			Agricultural Chemistry total	813	0	16	2	1	832
521			Forestry	229	0	0	1	0	230
522			Wood Science	167	1	0	0	0	168
	A		Forestry total	396	1	0	1	0	398
531			Fisheries in General	247	0	1	0	0	248
532			Fisheries Chemistry	115	0	1	0	0	116
	G		Fisheries total	362	0	2	0	0	364
541			Agricultural Economics	159	0	0	0	0	159
	R								
551			Irrigation, Drainage and Reclamation Engineering and Rural Planning	175	0	0	0	0	175
552			Agricultural Machinery	100	0	1	0	0	101
553			Biological Environment	50	0	0	0	0	50
	C		Agricultural Engineering total	325	0	1	0	0	326
561			Animal Science and Grassland Science	122	0	0	0	0	122
562			Applied Animal Science	93	0	0	0	0	93
563			Basic Veterinary Medicine and Basic Animal Science	157	0	0	0	1	158
564			Applied Veterinary Medicine	112	0	0	0	0	112
	U		Animal Science· Veterinary Medicine total	484	0	0	0	1	485
571			Biological Resource Science	46	0	0	1	0	47
572			Applied Molecular Cell Biology	38	0	0	0	0	38
	E		Interdisciplinary Agricultural Science total	84	0	0	1	0	85
			AGRICULTURE Total	3,195	1	20	4	4	3,224
601			Anatomy in General (inclu. Histology, Embryology)	215	11	0	2	0	228
602			Physiology in General	183	5	0	8	1	197
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	100	4	1	0	0	105
604			Pharmacology in General	164	1	0	0	0	165
605			Medical Chemistry in General	237	1	1	1	0	240
606			Pathological Medical Chemistry	77	0	0	0	0	77
			Physiology total	976	22	2	11	1	1,012
611			Hominal Pathology	222	10	0	0	0	232
612			Experimental Pathology	163	1	0	0	0	164
613			Parasitology (inclu. Medical Zoology)	93	2	0	0	1	96
614			Bacteriology (inclu. Eumycetes)	127	9	1	0	0	137
615			Virology	159	1	0	0	0	160
616			Immunology	228	4	0	0	0	232
	M		Pathology total	992	27	1	0	1	1,021
621			Hygiene	114	3	0	0	0	117
622			Public Health and Health Science	230	7	1	3	1	242
623			Legal Medicine	112	0	0	0	0	112
	E		Social Medicine total	456	10	1	3	1	471
631			Internal Medicine in General	187	4	0	0	0	191
632			Gastroenterology	297	2	0	0	0	299
633			Internal Medicine Respiratory System	165	7	0	0	0	172
634			Neurological Medicine	177	3	0	3	0	183
635			Cardioangioloogy	310	6	0	0	0	316
636			Pediatrics	299	8	0	0	1	308
637			Dermatology	196	0	0	0	0	196
638			Radiology	320	19	0	0	0	339
639			Neuropsychiatry	260	7	0	0	1	268
640			Endocrinology and Metabolic Science	119	5	0	0	0	124
641			Hematology	229	4	0	1	0	234
642			Internal Medicine of Kidney	87	1	0	0	0	88
643			Embryology and Newborn	16	1	0	0	0	17
644			Endocrinology	76	1	0	0	0	77
645			Metabolic Science	55	1	0	0	0	56
			Internal Medicine total	2,793	69	0	4	2	2,868
651			Surgery in General	192	3	0	0	0	195

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
652			Gastroenterological Surgery	313	7	0	0	0	320
653			Thoracic Surgery	183	1	0	0	0	184
654			Neurosurgery	242	1	0	1	0	244
655			Orthopedic Surgery	297	8	0	0	0	305
656			Anesthesiology and Rescue Medicine	293	1	0	0	0	294
657			Urology	203	0	0	0	0	203
658			Obstetrics and Gynecology	257	7	0	0	0	264
659			Oto-rhino-laryngology	197	0	0	0	0	197
660			Ophthalmology	197	0	0	0	0	197
661			Pediatric Surgery	60	1	0	0	0	61
662			Formative Surgery	9	0	0	0	0	9
			Surgery total	2,443	29	0	1	0	2,473
671	M		Oral Anatomy and Morphological Basic Dentistry	125	0	0	0	0	125
672	E		Functional Basic Dentistry	97	0	0	0	0	97
673	D		Morbid Dentistry (inclu. Dental Radiology)	72	1	0	0	0	73
674	I		Conservative Dentistry	191	0	0	0	0	191
675	C		Prosthodontics and Dental Technology	246	0	0	0	0	246
676	I		Oral Surgery	319	0	0	0	0	319
677			Orthodontics, Pedodontics and Social Dentistry	255	0	0	0	0	255
678			Periodontological Dentistry	27	0	0	0	0	27
			Dentistry total	1,332	1	0	0	0	1,333
681	E		Chemical Pharmaceutics	197	0	1	0	0	198
682			Physical Pharmaceutics	78	1	0	0	0	79
683			Biopharmaceutics	233	0	4	0	0	237
684			Molecular Pharmaceutics	30	0	1	2	0	33
685			Environmental Pharmaceutics	5	1	0	0	0	6
			Pharmaceutics total	543	2	6	2	0	553
691			Medical Sociology	28	2	0	0	0	30
692			Human Genetics	48	0	0	0	0	48
693			Applied Pharmacology and Medical Pharmacology	72	0	1	0	0	73
694			Pathological Examination	71	20	0	0	0	91
696			Science of Basic and Local Nursing	65	12	0	0	0	77
697			Science of Clinical Nursing	29	4	0	0	0	33
			Medicine in Gene r a l total	313	38	1	0	0	352
			MEDICINE Total	9,848	198	11	21	5	10,083
702	I		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	16	0	1	1	0	18
703	N		Physical Education	165	0	1	0	0	166
704	T		Human Geography	93	0	0	0	2	95
705	E		Physical Geography	83	0	1	2	0	86
			Geography total	176	0	1	2	2	181
706	R		Home Science(inclu. Cloth/Living Environments)	100	0	0	0	0	100
707	D		Food Culture	21	0	0	0	0	21
			Domestic Science total	121	0	0	0	0	121
708	S		Science of Cultural Property	4	0	0	2	4	10
711	C		Science Education	42	0	4	0	1	47
712	I		Educational Engineering	22	0	1	3	0	26
713	P		Curriculum Studies	70	0	2	0	0	72
714	L		Japanese Language Education	12	0	0	0	1	13
			Science Education· Curriculum Education total	146	0	7	3	2	158
721	A		Statistics	64	0	0	24	0	88
731	R		Computer Science	425	1	18	5	0	449
732	E		Intelligent Informatics	318	2	17	7	0	344
733	A		Study of Information System (Inclu. Library and Information Science)	97	0	4	9	0	110
			Information Science total	840	3	39	21	0	903
741			Social System Engineering	74	0	1	0	0	75
751			Natural Disaster Science	24	0	1	0	0	25

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
761	I N T E R D I S C I P L I N A R Y A R E A		Plasma Science and Technology	178	0	15	35	0	228
772			Nuclear Fusion	72	0	1	23	0	96
773			Energy Science General	81	0	5	4	0	90
774			Nuclear Power Science	74	0	2	3	0	79
			Energy total	227	0	8	30	0	265
801			Environmental Dynamic Analysis	90	0	1	0	0	91
802			Environmental Influence Assessment (inclu. Radiobiology)	84	3	1	1	0	89
803			Environmental Preservation	85	0	5	0	0	90
			Environmental Science total	259	3	7	1	0	270
811			Biological Organic Chemistry	120	2	6	2	0	130
812			Structured Biochemistry	134	0	2	1	0	137
813			Functional Biochemistry	177	5	3	0	0	185
			Biological Chemistry total	431	7	11	3	0	452
821			Biophysics	153	1	7	20	0	181
822			Molecular Biology	481	2	3	41	1	528
823			Cell Biology	254	1	0	11	0	266
824			Developmental Biology	170	1	2	13	0	186
			Basic Biology total	1,058	5	12	85	1	1,161
831	A R E A		Neuroanatomy and Neuropathology	101	3	0	1	0	105
832			Neurochemistry and Neuropharmacology	82	1	0	0	0	83
833			Neuro Science in General	141	1	0	19	0	161
834			Neuro and Muscular Physiology	115	7	0	13	0	135
			Neuro Science (inclu. Brain Science) total	439	12	0	33	0	484
841			Laboratory Animal Science	50	0	0	2	0	52
851			Medical Organism Engineering and Material Science of Organism	154	4	6	0	0	164
	INTERDISCIPLINARY AREA Total			4,426	34	110	242	9	4,821
999	WIDE AREA Total			177	5	4	7	0	193
	Item n.a. Total			35	1	2	1	1	40
	Grand Total			34,346	288	1,314	819	118	36,885

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
211	A R T S · H U M A N I T I E S		Philosophy	11	0	1	12
212			Chinese Philosophy	4	2	0	6
213			Indian Philosophy (inclu. Buddhist Studies)	4	1	0	5
214			Religion	1	0	0	1
215			Ethics	1	1	0	2
216			History of Philosophy	2	0	0	2
217			Aesthetics (inclu. Arts)	7	0	0	7
218			Art History	5	0	0	5
			Philosophy total	35	4	1	40
221			Experimental Psychology	17	2	0	19
222			Educational and Social	18	4	0	22
223			Sociology (inclu. Social Welfare)	30	0	0	30
224			Education	13	3	0	16
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	7	1	0	8
			Psychology· Sociology · Education Cultural Anthropology total	85	10	0	95
231			Japanese History	16	2	0	18
232			Oriental History	10	0	0	10
233			European History	6	0	0	6
234			Archaeology (inclu. Prehistory)	0	0	0	0
			History total	32	2	0	34
241			Japanese Language	4	0	0	4
242			Japanese Literature	13	1	0	14
243			Chinese Language and Literature	1	0	0	1
244			English Language and Literature	21	3	0	24
245			French Language and Literature	16	0	0	16
246			German Language and Literature	5	0	0	5
247			Other Foreign Languages and Literatures	4	1	0	5
248			Linguistics and Phonetics	12	0	0	12
249			Literature in General (i n c l u. Literary Theory, Comparative Literature) and Western Classics	3	0	0	3
			Literature total	79	5	0	84
			ARTS · HUMANITIES Total	231	21	1	253
261	L A W		Basic Science of Law	1	0	0	1
262			Public Law	5	1	0	6
263			International Law	2	0	0	2
264			Civil Law	8	0	0	8
265			Social Law	3	0	0	3
266			Criminal Law	0	1	0	1
267			Politics	28	0	0	28
			LAW Total	47	2	0	49
271	E C O N O M I C S		General Theory of Economics	40	3	0	43
272			Economical Statistics	7	0	0	7
273			Economic Policy (inclu. Economic Condition)	34	1	0	35
274			Economic History	15	1	0	16
275			Public Finance, Money and Banking	15	1	0	16
276			Commercial Science	5	1	0	6
277			Business Administration	19	1	0	20
278			Accounting	13	0	0	13
			ECONOMICS Total	148	8	0	156
301	S C I E N C E		Algebra	24	2	0	26
302			Geometry	20	1	2	23
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	30	0	1	31
305			Basic Analysis	23	1	2	26
306			Larger-area Analysis	6	0	0	6
			Mathematics total	103	4	5	112
311			Astronomy	6	0	0	6
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	45	7	1	53

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

Code	Subj ect	Subdi vision	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)	30	1	2	33
323			Solid - State Physics II (Magnetism, Metal Physics, Physical Properties in General (inclu. Basic Theories)	37	0	0	37
324			Physics in General	21	0	4	25
325			Physics in General	17	1	1	19
			Physics total	150	9	8	167
331			Physics of Solid Earth	5	0	0	5
332			Meteorology, Oceanography and Hydrology	7	0	0	7
333			Aeronomy	0	0	0	0
334			Geology	12	0	0	12
335			Stratigraphy and Paleontology	5	0	0	5
336			Mineralogy, Petrology and Study of Mineral Deposit	7	0	0	7
337			Geochemistry	7	0	0	7
			Earth Science total	43	0	0	43
341			Physical Chemistry	53	3	3	59
342			Organic Chemistry	41	1	1	43
343			Inorganic Chemistry	16	1	0	17
344			Function, Properties and Materials in Chemistry	14	0	0	14
345			Substance Transformation	2	0	1	3
346			Separation, Refining and Identification	15	2	1	18
			Chemistry total	141	7	6	154
351			Genetics	19	1	0	20
352			Ecology	27	6	1	34
353			Plant Physiology	29	7	0	36
354			Morphology, Structure of Organism	12	0	0	12
355			Animal Physiology and	15	2	0	17
356			Morphology and Taxonomy	9	1	0	10
			Biology total	111	17	1	129
361			Physical Anthropology (inclu. Physiological Anthropology)	2	0	0	2
			SCIENCE Total	556	37	20	613
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	17	0	0	17
402			Surface Physics	8	0	0	8
403			Applied Optics and Quantum Optics	15	0	2	17
404			General Applied Physics	5	0	1	6
405			Fundamentals of Engineering	4	0	1	5
			Applied Physics· Fundamentals of Engineering total	49	0	4	53
411			Materials for Machines and Strength of Materials	24	0	7	31
412			Workshop Processes and Production Engineering	15	3	2	20
413			Design Engineering, Machine Elements and Tribology	6	0	4	10
414			Fluid Mechanics	19	1	4	24
415			Heat Engineering	16	0	5	21
416			Mechanics and Control Engineering	20	0	3	23
417			Intelligent Mechanics and Machine System	17	0	1	18
			Machine Engineering total	117	4	26	147
421			Electric Power Engineering and Electric Machinery	16	0	3	19
422			Electronic and Electric Materials Engineering	19	0	0	19
423			Electron Devices and Apparatus Engineering	12	0	2	14
424			Information and Communication Engineering	65	1	4	70

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

Code	Subj ect	Subdi vision	I t e m	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	13	1	0	14
427			Electronic Measurements	10	0	3	13
428			Control Engineering	17	0	2	19
			Electric and Electronic Engineering	152	2	14	168
431		Civil Engineering	Construction Materials and Dynamics in General Civil Engineering	5	1	0	6
432			Structural Engineering and Seismology	9	0	3	12
433			Ground Engineering	10	0	0	10
434			Hydraulics and River Engineering	6	0	2	8
435			Traffic Engineering and Regional Planning	8	0	1	9
436			Civil Environmental System	7	1	0	8
			Civil Engineering total	45	2	6	53
441		Architecture	Building Structure and Materials	21	0	0	21
442			Building Science and Building Equipment	13	5	1	19
443			City Planning and Building Planning	29	1	2	32
444			Architectural History and Design	12	1	1	14
			Architecture total	75	7	4	86
451		Material Engineering	Physical Metallurgy	5	0	0	5
452			Inorganic Materials and	9	1	0	10
453			Composed Materials and Properties	7	0	0	7
454			Structural and Functional Materials	13	0	1	14
455			Metallurgy and Material	6	0	1	7
456			Metal Productive Engineering	2	0	0	2
			Material Engineering total	42	1	2	45
461		Process Engineering	Chemical Engineering in General	14	0	2	16
462			Reaction and Separation Engineering	11	0	0	11
463			Catalyst and Chemical Process	3	0	0	3
464			Bioengineering	10	0	0	10
465			Industrial Analytical Chemistry	7	0	0	7
			Process Engineering total	45	0	2	47
471		Industrial Chemistry	Industrial Physical Chemistry	19	0	1	20
472			Industrial Inorganic Chemistry	6	0	0	6
473			Industrial Organic Chemistry	6	0	2	8
474			Synthetic Chemistry	16	0	1	17
475			Polymer Synthesis	11	1	1	13
476			Polymer Structure and Property (inclu. Fiber)	10	3	2	15
			Industrial Chemistry total	68	4	7	79
481		Synthetic Engineering	Aeronautics	10	0	0	10
482			Ship Engineering	7	0	0	7
483			Marine Engineering	6	0	0	6
484			Resource Development Engineering	0	0	1	1
			Synthetic Engineering total	23	0	1	24
			ENGINEERING Total	616	20	66	702
501	A G R I C U L T U R E	Agriculture	Plant Breeding	9	4	0	13
502			Crop Science	3	5	0	8
503			Horticulture and Landscape Architecture	27	7	0	34
504			Plant Protection	11	4	0	15
505			Sericultural Science and Economic Entomology	1	0	0	1
			Agriculture total	51	20	0	71
511		Food Science and Nutritional Chemistry	Plant Fertilizer and Manure and Soil Science	12	5	0	17
512			Applied Microbiochemistry and Applied Biochemistry	33	5	0	38
513			Biological Productive Chemistry and Bioorganic Chemistry	14	0	0	14
514			Food Science and Nutritional Chemistry	38	28	0	66

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
			Agricultural Chemistry total	97	38	0	135
521			Forestry	12	0	0	12
522			Wood Science	6	6	0	12
			Forestry total	18	6	0	24
531			Fisheries in General	4	0	0	4
532			Fisheries Chemistry	5	0	0	5
			Fisheries total	9	0	0	9
541			Agricultural Economics	16	5	0	21
551			Irrigation, Drainage and Reclamation Engineering and Rural Planning	7	9	0	16
552			Agricultural Machinery	1	4	0	5
553			Biological Environment	8	0	0	8
			Agricultural Engineering total	16	13	0	29
561			Animal Science and Grassland Science	4	7	0	11
562			Applied Animal Science	2	5	0	7
563			Basic Veterinary Medicine and Basic Animal Science	22	1	0	23
564			Applied Veterinary Medicine	18	1	0	19
			Animal Science· Veterinary Medicine total	46	14	0	60
571			Biological Resource Science	4	0	0	4
572			Applied Molecular Cell Biology	2	0	0	2
			Interdisciplinary Agricultural Science total	6	0	0	6
			AGRICULTURE Total	259	96	0	355
601			Anatomy in General (inclu. Histology, Embryology)	29	4	0	33
602			Physiology in General	27	7	0	34
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	19	7	0	26
604			Pharmacology in General	33	0	0	33
605			Medical Chemistry in General	32	2	0	34
606			Pathological Medical Chemistry	11	0	0	11
			Physiology total	151	20	0	171
611			Hominal Pathology	50	2	0	52
612			Experimental Pathology	41	2	0	43
613			Parasitology (inclu. Medical Zoology)	18	3	0	21
614			Bacteriology (inclu. Eumycetes)	23	5	0	28
615			Virology	18	1	0	19
616			Immunology	14	4	0	18
			Pathology total	164	17	0	181
621			Hygiene	13	4	0	17
622			Public Health and Health Science	59	19	0	78
623			Legal Medicine	24	0	0	24
			Social Medicine total	96	23	0	119
631			Internal Medicine in General	39	6	0	45
632			Gastroenterology	55	1	0	56
633			Internal Medicine Respiratory System	24	0	0	24
634			Neurological Medicine	23	3	0	26
635			Cardioangiopathy	60	1	0	61
636			Pediatrics	59	1	0	60
637			Dermatology	40	0	0	40
638			Radiology	35	5	0	40
639			Neuropsychiatry	45	1	0	46
640			Endocrinology and Metabolic Science	15	1	0	16
641			Hematology	30	1	0	31
642			Internal Medicine of Kidney	15	0	0	15
643			Embryology and Newborn	6	0	0	6
644			Endocrinology	3	0	0	3
645			Metabolic Science	7	0	0	7
			Internal Medicine total	456	20	0	476
651			Surgery in General	45	3	0	48

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
652			Gastroenterological Surgery	65	1	0	66
653			Thoracic Surgery	32	1	0	33
654			Neurosurgery	46	0	0	46
655			Orthopedic Surgery	55	6	0	61
656			Anesthesiology and Rescue Medicine	40	0	0	40
657			Urology	47	0	0	47
658			Obstetrics and Gynecology	49	3	0	52
659			Oto-rhino-laryngology	41	4	0	45
660			Ophthalmology	36	0	0	36
661			Pediatric Surgery	9	0	0	9
662			Formative Surgery	1	0	0	1
			Surgery total	466	18	0	484
671	M		Oral Anatomy and Morphological Basic Dentistry	8	1	0	9
672			Functional Basic Dentistry	8	2	0	10
673			Morbid Dentistry (inclu. Dental Radiology)	10	0	0	10
674			Conservative Dentistry	13	3	0	16
675			Prosthodontics and Dental Technology	14	0	0	14
676			Oral Surgery	41	0	0	41
677			Orthodontics, Pedodontics and Social Dentistry	11	2	0	13
678			Periodontological Dentistry	3	0	0	3
	N		Dentistry total	108	8	0	116
681	E		Chemical Pharmaceutics	48	0	0	48
682			Physical Pharmaceutics	17	0	0	17
683			Biopharmaceutics	43	2	0	45
684			Molecular Pharmaceutics	3	0	0	3
685			Environmental Pharmaceutics	1	0	0	1
			Pharmaceutics total	112	2	0	114
691			Medical Sociology	4	0	0	4
692			Human Genetics	1	1	0	2
693			Applied Pharmacology and Medical Pharmacology	4	1	0	5
694			Pathological Examination	13	10	0	23
696			Science of Basic and Local Nursing	17	8	0	25
697			Science of Clinical Nursing	10	2	0	12
			Medicine in Gene r a l total	49	22	0	71
	MEDICINE Total			1,602	130	0	1,732
702	INTERDISCIPLINARY AREA		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	4	0	0	4
703			Physical Education	19	7	0	26
704			Human Geography	4	0	0	4
705			Physical Geography	14	0	0	14
			Geography total	18	0	0	18
706			Home Science(inclu. Cloth/Living Environments)	12	13	0	25
707			Food Culture	7	3	0	10
			Domestic Science total	19	16	0	35
708			Science of Cultural Property	0	0	0	0
711			Science Education	0	0	0	0
712			Educational Engineering	1	0	0	1
713			Curriculum Studies	0	0	0	0
714			Japanese Language Education	0	0	0	0
			Science Education·Curriculum Education total	1	0	0	1
721			Statistics	1	1	0	2
731			Computer Science	35	2	1	38
732			Intelligent Informatics	37	0	1	38
733			Study of Information System (Inclu. Library and Information Science)	11	1	1	13
			Information Science total	83	3	3	89
741			Social System Engineering	10	1	0	11
751			Natural Disaster Science	3	0	1	4

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Total	
761	I N T E R D I S C I P L I N A R Y A R E A		Plasma Science and Technology	9	1	2	12	
772				Nuclear Fusion	3	0	1	4
773				Energy Science General	5	0	0	5
774				Nuclear Power Science	0	0	0	0
			Energy total	8	0	1	9	
801			Environmental Dynamic Analysis	8	0	1	9	
802			Environmental Influence Assessment (inclu. Radiobiology)	12	4	0	16	
803			Environmental Preservation	10	1	0	11	
			Environmental Science total	30	5	1	36	
811			Biological Organic Chemistry	14	1	0	15	
812			Structured Biochemistry	25	3	0	28	
813			Functional Biochemistry	30	5	0	35	
			Biological Chemistry total	69	9	0	78	
821			Biophysics	23	0	1	24	
822			Molecular Biology	43	0	0	43	
823			Cell Biology	28	1	0	29	
824			Developmental Biology	19	0	0	19	
			Basic Biology total	113	1	1	115	
831	A R E A		Neuroanatomy and Neuropathology	19	3	0	22	
832			Neurochemistry and Neuropharmacology	11	0	0	11	
833			Neuro Science in General	20	2	0	22	
834			Neuro and Muscular Physiology	14	0	0	14	
			Neuro Science (inclu. Brain Science) total	64	5	0	69	
841			Laboratory Animal Science	7	0	0	7	
851		Medical Organism Engineering and Material Science of Organism	10	1	3	14		
		INTERDISCIPLINARY AREA Total		468	50	12	530	
999		WIDE AREA Total		33	1	1	35	
		Item n.a. Total		6	1	0	7	
		Grand Total		3,966	366	100	4,432	

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
211	A R T S · H U M A N I T I E S		Philosophy	99	10	0	0	109
212			Chinese Philosophy	19	2	0	0	21
213			Indian Philosophy (inclu. Buddhist Studies)	83	11	0	4	98
214			Religion	110	15	0	0	125
215			Ethics	27	0	0	0	27
216			History of Philosophy	36	10	0	0	46
217			Aesthetics (inclu. Arts)	47	5	0	0	52
218			Art History	26	6	0	0	32
			Philosophy total	447	59	0	4	510
221			Experimental Psychology	133	11	0	2	146
222			Educational and Social	218	39	0	1	258
223			Sociology (inclu. Social Welfare)	227	26	0	0	253
224			Education	147	30	0	0	177
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	102	14	0	3	119
			Psychology· Sociology · Education Cultural Anthropology total	827	120	0	6	953
231			Japanese History	159	17	0	4	180
232			Oriental History	78	1	0	1	80
233			European History	81	5	0	0	86
234			Archaeology (inclu. Prehistory)	24	2	0	1	27
			History total	342	25	0	6	373
241			Japanese Language	41	4	0	0	45
242			Japanese Literature	138	24	0	0	162
243			Chinese Language and Literature	43	0	0	0	43
244			English Language and Literature	177	22	0	0	199
245			French Language and Literature	83	5	0	0	88
246			German Language and Literature	44	1	0	0	45
247			Other Foreign Languages and Literatures	27	3	0	0	30
248			Linguistics and Phonetics	160	18	0	0	178
249			Literature in General (i n c l u. Literary Theory, Comparative Literature) and Western Classics	42	6	0	0	48
			Literature total	755	83	0	0	838
			ARTS · HUMANITIES Total	2,371	287	0	16	2,674
261	L A W		Basic Science of Law	52	3	0	0	55
262			Public Law	63	5	0	0	68
263			International Law	40	0	0	1	41
264			Civil Law	128	0	0	2	130
265			Social Law	26	2	0	1	29
266			Criminal Law	51	1	0	0	52
267			Politics	187	2	0	0	189
			LAW Total	547	13	0	4	564
271	E C O N O M I C S		General Theory of Economics	264	12	0	2	278
272			Economical Statistics	38	0	0	0	38
273			Economic Policy (inclu. Economic Condition)	256	6	0	4	266
274			Economic History	122	4	0	0	126
275			Public Finance, Money and Banking	103	6	0	0	109
276			Commercial Science	83	6	0	0	89
277			Business Administration	244	21	0	1	266
278			Accounting	133	6	0	0	139
			ECONOMICS Total	1,243	61	0	7	1,311
301	S C I E N C E		Algebra	156	6	0	0	162
302			Geometry	126	4	0	0	130
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	154	6	0	0	160
305			Basic Analysis	172	5	0	0	177
306			Larger-area Analysis	18	1	0	0	19
			Mathematics total	626	22	0	0	648
311			Astronomy	48	9	0	0	57
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	287	37	0	0	324

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
322	S C I E N C E		Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	147	3	2	0	152
323			Solid - State Physics II (Magnetism, Metal Physics,)	141	6	0	0	147
324			Physical Properties in General (inclu. Basic Theories)	133	13	0	2	148
325			Physics in General	87	13	0	5	105
			Physics total	795	72	2	7	876
331			Physics of Solid Earth	36	4	0	1	41
332			Meteorology, Oceanography and Hydrology	41	3	0	0	44
333			Aeronomy	21	2	0	0	23
334			Geology	26	2	0	3	31
335			Stratigraphy and Paleontology	15	3	0	0	18
336			Mineralogy, Petrology and Study of Mineral Deposit	32	1	0	0	33
337			Geochemistry	24	1	0	0	25
			Earth Science total	195	16	0	4	215
341			Physical Chemistry	177	13	0	2	192
342			Organic Chemistry	166	8	0	18	192
343			Inorganic Chemistry	85	5	0	0	90
344			Function, Properties and Materials in Chemistry	81	7	0	0	88
345			Substance Transformation	8	0	0	1	9
346			Separation, Refining and Identification	71	5	0	0	76
			Chemistry total	588	38	0	21	647
351			Genetics	36	8	0	3	47
352			Ecology	87	27	0	6	120
353			Plant Physiology	59	14	0	0	73
354			Morphology, Structure of Organism	37	9	0	1	47
355			Animal Physiology and	56	3	0	4	63
356			Morphology and Taxonomy	52	7	0	6	65
			Biology total	327	68	0	20	415
361			Physical Anthropology (inclu. Physiological Anthropology)	27	5	0	0	32
	SCIENCE Total			2,606	230	2	52	2,890
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	63	4	1	1	69
402			Surface Physics	46	2	0	0	48
403			Applied Optics and Quantum Optics	97	4	1	0	102
404			General Applied Physics	36	4	0	4	44
405			Fundamentals of Engineering	22	2	0	0	24
			Applied Physics· Fundamentals of Engineering total	264	16	2	5	287
411			Materials for Machines and Strength of Materials	220	12	3	0	235
412			Workshop Processes and Production Engineering	149	2	2	0	153
413			Design Engineering, Machine Elements and Tribology	78	3	1	0	82
414			Fluid Mechanics	178	6	0	0	184
415			Heat Engineering	168	5	1	0	174
416			Mechanics and Control Engineering	145	7	0	0	152
417			Intelligent Mechanics and Machine System	102	6	0	0	108
			Machine Engineering total	1,040	41	7	0	1,088
421			Electric Power Engineering and Electric Machinery	197	8	1	0	206
422			Electronic and Electric Materials Engineering	190	9	0	2	201
423			Electron Devices and Apparatus Engineering	187	6	0	0	193
424			Information and Communication Engineering	389	20	1	1	411

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

Code	Subj ect	Subdi vision	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	91	11	0	1	103
427			Electronic Measurements	154	6	1	0	161
428			Control Engineering	48	2	0	0	50
			Electric and Electronic Engineering	1,256	62	3	4	1,325
431			Construction Materials and Dynamics in General Civil Engineering	78	1	0	0	79
432			Structural Engineering and Seismology	106	7	0	1	114
433			Ground Engineering	86	2	0	1	89
434			Hydraulics and River Engineering	78	4	0	2	84
435			Traffic Engineering and Regional Planning	75	4	0	0	79
436			Civil Environmental System	59	0	0	1	60
			Civil Engineering total	482	18	0	5	505
441			Building Structure and Materials	196	6	0	1	203
442			Building Science and Building Equipment	104	9	0	0	113
443			City Planning and Building Planning	221	13	0	0	234
444			Architectural History and Design	71	13	0	0	84
			Architecture total	592	41	0	1	634
451			Physical Metallurgy	40	0	0	1	41
452			Inorganic Materials and	93	2	0	0	95
453			Composed Materials and Properties	34	0	0	1	35
454			Structural and Functional Materials	44	4	0	4	52
455			Metallurgy and Material	65	6	1	3	75
456			Metal Productive Engineering	18	2	0	0	20
			Material Engineering total	294	14	1	9	318
461			Chemical Engineering in General Reaction and Separation Engineering	43	1	0	0	44
462			Catalyst and Chemical Process	41	0	0	1	42
463			Bioengineering	25	0	0	0	25
464			Industrial Analytical Chemistry	46	0	0	0	46
465			Industrial Analytical Chemistry	24	0	0	0	24
			Process Engineering total	179	1	0	1	181
471			Industrial Physical Chemistry	53	2	0	2	57
472			Industrial Inorganic Chemistry	33	0	0	0	33
473			Industrial Organic Chemistry	49	6	0	0	55
474			Synthetic Chemistry	57	1	0	4	62
475			Polymer Synthesis	60	3	0	0	63
476			Polymer Structure and Property (inclu. Fiber)	53	21	0	0	74
			Industrial Chemistry total	305	33	0	6	344
481			Aeronautics	38	0	0	0	38
482			Ship Engineering	19	1	0	0	20
483			Marine Engineering	11	0	0	0	11
484			Resource Development Engineering	12	0	0	0	12
			Synthetic Engineering total	80	1	0	0	81
		ENGINEERING Total		4,492	227	13	31	4,763
501	A G R I C U L T U R E		Plant Breeding	22	3	0	3	28
502			Crop Science	17	2	0	0	19
503			Horticulture and Landscape Architecture	57	21	0	1	79
504			Plant Protection	36	4	0	0	40
505			Sericultural Science and Economic Entomology	10	3	0	7	20
			Agriculture total	142	33	0	11	186
511			Plant Fertilizer and Manure and Soil Science	27	8	0	0	35
512			Applied Microbiochemistry and Applied Biochemistry	148	39	0	18	205
513			Biological Productive Chemistry and Bioorganic Chemistry	31	7	0	4	42
514			Food Science and Nutritional Chemistry	173	152	0	2	327

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
			Agricultural Chemistry total	379	206	0	24	609
521			Forestry	16	4	0	0	20
522			Wood Science	9	1	0	1	11
			Forestry total	25	5	0	1	31
531			Fisheries in General	75	7	0	0	82
532			Fisheries Chemistry	25	7	0	2	34
			Fisheries total	100	14	0	2	116
541			Agricultural Economics	97	8	0	0	105
			Irrigation, Drainage and Reclamation Engineering and Rural Planning	23	3	0	3	29
551			Agricultural Machinery	11	5	0	0	16
552			Biological Environment	9	2	0	0	11
			Agricultural Engineering total	43	10	0	3	56
561			Animal Science and Grassland Science	37	2	0	0	39
562			Applied Animal Science	37	1	0	0	38
563			Basic Veterinary Medicine and Basic Animal Science	98	2	0	12	112
564			Applied Veterinary Medicine	76	1	0	10	87
			Animal Science· Veterinary Medicine total	248	6	0	22	276
571			Biological Resource Science	9	5	0	2	16
572			Applied Molecular Cell Biology	11	2	0	0	13
			Interdisciplinary Agricultural Science total	20	7	0	2	29
			AGRICULTURE Total	1,054	289	0	65	1,408
601			Anatomy in General (inclu. Histology, Embryology)	182	19	0	3	204
602			Physiology in General	168	22	0	1	191
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	98	27	0	0	125
604			Pharmacology in General	149	9	0	2	160
605			Medical Chemistry in General	108	18	0	7	133
606			Pathological Medical Chemistry	44	7	0	4	55
			Physiology total	749	102	0	17	868
611			Hominal Pathology	207	6	0	3	216
612			Experimental Pathology	63	7	0	9	79
613			Parasitology (inclu. Medical Zoology)	75	6	0	1	82
614			Bacteriology (inclu. Eumycetes)	107	19	0	6	132
615			Virology	51	2	0	8	61
616			Immunology	146	4	0	7	157
			Pathology total	649	44	0	34	727
621			Hygiene	113	12	0	9	134
622			Public Health and Health Science	219	60	0	4	283
623			Legal Medicine	81	1	0	0	82
			Social Medicine total	413	73	0	13	499
631			Internal Medicine in General	205	4	0	2	211
632			Gastroenterology	322	0	0	3	325
633			Internal Medicine Respiratory System	147	1	0	2	150
634			Neurological Medicine	180	4	0	2	186
635			Cardioangioloogy	353	7	0	11	371
636			Pediatrics	247	14	0	2	263
637			Dermatology	137	1	0	3	141
638			Radiology	225	12	0	2	239
639			Neuropsychiatry	248	9	0	0	257
640			Endocrinology and Metabolic Science	99	4	0	1	104
641			Hematology	175	0	0	3	178
642			Internal Medicine of Kidney	125	0	0	2	127
643			Embryology and Newborn	22	0	0	0	22
644			Endocrinology	53	1	0	2	56
645			Metabolic Science	37	2	0	0	39
			Internal Medicine total	2,575	59	0	35	2,669
651			Surgery in General	261	1	0	0	262

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total	
652	M E D I C I N E		Gastroenterological Surgery	305	2	0	5	312	
653			Thoracic Surgery	173	2	0	2	177	
654			Neurosurgery	188	0	0	3	191	
655			Orthopedic Surgery	280	5	0	2	287	
656			Anesthesiology and Rescue Medicine	200	1	0	3	204	
657			Urology	158	1	0	3	162	
658			Obstetrics and Gynecology	220	1	0	1	222	
659			Oto-rhino-laryngology	181	2	0	2	185	
660			Ophthalmology	151	0	0	1	152	
661			Pediatric Surgery	37	0	0	0	37	
662			Formative Surgery	33	0	0	0	33	
			Surgery total		2,187	15	0	22	2,224
671		D E N T I S T R Y		Oral Anatomy and Morphological Basic Dentistry	221	5	0	0	226
672				Functional Basic Dentistry	183	3	0	0	186
673				Morbid Dentistry (inclu. Dental Radiology)	115	3	0	0	118
674				Conservative Dentistry	295	9	0	0	304
675				Prosthodontics and Dental Technology	381	7	0	0	388
676				Oral Surgery	301	5	0	0	306
677				Orthodontics, Pedodontics and Social Dentistry	277	13	0	0	290
678				Periodontological Dentistry	10	1	0	0	11
		Dentistry total		1,783	46	0	0	1,829	
681		P H A R M A C E U T I C S		Chemical Pharmaceutics	419	3	0	7	429
682	Physical Pharmaceutics			149	0	0	0	149	
683	Biopharmaceutics			494	3	0	10	507	
684	Molecular Pharmaceutics			36	0	0	1	37	
685	Environmental Pharmaceutics			10	2	0	0	12	
	Pharmaceutics total		1,108	8	0	18	1,134		
691	N U R S I N G		Medical Sociology	33	1	0	0	34	
692			Human Genetics	11	0	0	1	12	
693			Applied Pharmacology and Medical Pharmacology	81	3	0	1	85	
694			Pathological Examination	69	9	0	0	78	
696			Science of Basic and Local Nursing	28	3	0	0	31	
697			Science of Clinical Nursing	14	3	0	0	17	
			Medicine in Gene r a l total		236	19	0	2	257
	MEDICINE Total			9,700	366	0	141	10,207	
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)	38	5	0	0	43	
703			Physical Education	75	12	0	0	87	
704			Human Geography	92	6	0	1	99	
705			Physical Geography	35	2	0	0	37	
			Geography total		127	8	0	1	136
706			Home Science(inclu. Cloth/Living Environments)	91	97	0	0	188	
707			Food Culture	22	32	0	0	54	
			Domestic Science total		113	129	0	0	242
708			Science of Cultural Property	1	0	0	0	1	
711			Science Education	15	6	0	0	21	
712			Educational Engineering	31	9	0	0	40	
713			Curriculum Studies	12	3	0	0	15	
714			Japanese Language Education	5	0	0	0	5	
			Science Education· Curriculum Education total		63	18	0	0	81
721			Statistics	47	1	0	1	49	
731			Computer Science	240	13	0	0	253	
732			Intelligent Informatics	157	6	0	0	163	
733			Study of Information System (Inclu. Library and Information Science)	107	12	1	0	120	
			Information Science total		504	31	1	0	536
741			Social System Engineering	98	4	0	0	102	
751	Natural Disaster Science	4	0	0	1	5			

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total	
761	I N T E R D I S C I P L I N A R Y A R E A		Plasma Science and Technology	54	2	0	4	60	
772				Nuclear Fusion	13	0	0	1	14
773				Energy Science General	29	5	0	1	35
774				Nuclear Power Science	20	0	0	0	20
		Energy total	62	5	0	2	69		
801			Environmental Dynamic Analysis	37	4	0	0	41	
802			Environmental Influence Assessment (inclu. Radiobiology)	42	7	0	3	52	
803			Environmental Preservation	53	5	0	1	59	
		Environmental Science total	132	16	0	4	152		
811			Biological Organic Chemistry	54	7	0	9	70	
812			Structured Biochemistry	75	4	0	6	85	
813			Functional Biochemistry	100	15	0	1	116	
		Biological Chemistry total	229	26	0	16	271		
821			Biophysics	74	2	0	0	76	
822			Molecular Biology	179	8	0	15	202	
823			Cell Biology	100	4	0	10	114	
824			Developmental Biology	46	3	0	1	50	
		Basic Biology total	399	17	0	26	442		
831			Neuroanatomy and Neuropathology	56	4	0	0	60	
832			Neurochemistry and Neuropharmacology	73	4	0	1	78	
833			Neuro Science in General	94	6	0	4	104	
834			Neuro and Muscular Physiology	64	9	0	1	74	
		Neuro Science (inclu. Brain Science) total	287	23	0	6	316		
841			Laboratory Animal Science	21	0	0	9	30	
851			Medical Organism Engineering and Material Science of Organism	107	10	0	1	118	
		INTERDISCIPLINARY AREA Total			2,361	307	1	71	2,740
999	WIDE AREA Total			232	30	0	5	267	
	Item n.a. Total			99	2	0	2	103	
	Grand Total			24,705	1,812	16	394	26,927	

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

Code	Subj ect	Subdi vision	Item	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total		
211	ARTS • HUMANITIES		Philosophy	1,471	222	48	0	0	0	1,741		
212			Chinese Philosophy	291	23	27	0	1	0	342		
213			Indian Philosophy (inclu. Buddhist Studies)	579	130	8	4	0	42	763		
214			Religion	612	145	14	0	0	2	773		
215			Ethics	389	41	7	0	5	0	442		
216			History of Philosophy	478	62	11	0	0	6	557		
217			Aesthetics (inclu. Arts)	1,862	796	16	4	23	1	2,702		
218			Art History	639	76	2	6	95	6	824		
		Philosophy total			6,321	1,495	133	14	124	57	8,144	
221				Experimental Psychology	1,424	145	1	10	9	6	1,595	
222				Educational and Social Psychology	3,494	921	1	24	63	5	4,508	
223				Sociology (inclu. Social Welfare)	3,522	769	2	14	6	13	4,326	
224				Education	3,672	1,147	48	24	127	19	5,037	
225				Cultural Anthropology (i n c l u. Ethnology and Folklore)	1,187	178	3	80	9	11	1,468	
		Psychology• Sociology • Education Cultural Anthropology total			13,299	3,160	55	152	214	54	16,934	
231				Japanese History	1,453	195	52	50	15	26	1,791	
232				Oriental History	860	46	9	2	2	5	924	
233				European History	1,128	118	14	0	0	3	1,263	
234				Archaeology (inclu. Prehistory)	529	26	4	16	55	29	659	
			History total			3,970	385	79	68	72	63	4,637
241					Japanese Language	967	177	18	0	36	0	1,198
242					Japanese Literature	2,249	775	127	24	5	2	3,182
243					Chinese Language and Literature	895	62	14	0	0	0	971
244					English Language and Literature	5,711	1,747	258	0	1	0	7,717
245					French Language and Literature	1,076	97	4	0	0	2	1,179
246					German Language and Literature	1,488	29	40	0	0	0	1,557
247					Other Foreign Languages and Literatures	746	35	0	0	0	0	781
248					Linguistics and Phonetics	2,144	439	68	13	28	0	2,692
249					Literature in General (i ncl. Literary Theory, Comparative Literature) and Western Classics	513	89	0	0	0	2	604
			Literature total			15,789	3,450	529	37	70	6	19,881
	ARTS • HUMANITIES Total			39,379	8,490	796	271	480	180	49,596		
261	LAW			Basic Science of Law	630	46	4	0	0	0	680	
262		Public Law		976	92	16	0	0	3	1,087		
263		International Law		555	8	3	0	0	0	566		
264		Civil Law		1,624	99	5	1	0	3	1,732		
265		Social Law		364	21	0	0	0	3	388		
266		Criminal Law		474	25	3	0	0	0	502		
267		Politics		1,965	91	3	6	1	0	2,066		
	LAW Total			6,588	382	34	7	1	9	7,021		
271	ECONOMICS		General Theory of Economics	2,180	146	7	3	0	4	2,340		
272			Economical Statistics	424	22	0	0	0	4	450		
273			Economic Policy (inclu. Economic Condition)	2,419	135	16	0	0	39	2,609		
274			Economic History	952	51	1	3	0	4	1,011		
275			Public Finance, Money and Banking	1,063	73	0	3	0	2	1,141		
276			Commercial Science	870	129	8	0	0	1	1,008		
277			Business Administration	2,166	412	7	1	0	1	2,587		
278	Accounting	1,335	210	1	0	0	0	1,546				
	ECONOMICS Total			11,409	1,178	40	10	0	55	12,692		
301	SCIENCE		Algebra	843	29	67	0	0	0	939		
302			Geometry	765	17	65	0	0	3	850		
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	1,031	36	77	17	0	0	1,161		
305			Basic Analysis	865	19	69	0	0	0	953		
306			Larger-area Analysis	192	2	9	0	0	0	203		

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
			Mathematics total	3,696	103	287	17	0	3	4,106
311			Astronomy	494	14	14	138	4	0	664
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	2,011	91	56	188	0	0	2,346
322			Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	1,304	11	66	23	0	0	1,404
323			Solid - State Physics II (Magnetism, Metal Physics,	1,420	14	40	13	0	0	1,487
324			Physical Properties in General (inclu. Basic Theories)	954	37	44	33	0	3	1,071
325			Physics in General	714	33	32	36	0	5	820
			Physics total	6,403	186	238	293	0	8	7,128
331			Physics of Solid Earth	764	8	3	41	1	2	819
332			Meteorology, Oceanography and Hydrology	788	11	14	22	0	2	837
333			Aeronomy	261	2	13	34	0	0	310
334			Geology	482	7	1	0	7	10	507
335			Stratigraphy and Paleontology	279	7	0	3	20	0	309
336			Mineralogy, Petrology and Study of Mineral Deposit	606	3	0	4	12	0	625
337			Geochemistry	475	8	6	1	1	0	491
			Earth Science total	3,655	46	37	105	41	14	3,898
341			Physical Chemistry	1,796	35	28	80	4	4	1,947
342			Organic Chemistry	1,511	16	45	10	0	43	1,625
343			Inorganic Chemistry	697	15	24	18	2	0	756
344			Function, Properties and Materials in Chemistry	816	18	26	5	2	0	867
345			Substance Transformation	84	0	2	0	0	1	87
346			Separation, Refining and Identification	570	15	28	5	0	0	618
			Chemistry total	5,474	99	153	118	8	48	5,900
351			Genetics	547	21	4	46	0	4	622
352			Ecology	1,104	86	5	5	18	43	1,261
353			Plant Physiology	715	37	6	17	0	0	775
354			Morphology, Structure of Organism	356	16	1	12	3	13	401
355			Animal Physiology and Metabolism	448	15	0	8	0	7	478
356			Morphology and Taxonomy	584	27	0	10	63	30	714
			Biology total	3,754	202	16	98	84	97	4,251
361			Physical Anthropology (inclu. Physiological Anthropology)	247	9	0	3	9	1	269
			SCIENCE Total	23,723	659	745	772	146	171	26,216
401			Applied Physics of Property and Crystallography	691	7	37	3	0	1	739
402			Surface Physics	482	6	23	6	0	0	517
403			Applied Optics and Quantum Optics	770	16	64	6	0	2	858
404			General Applied Physics	313	11	18	2	0	9	353
405			Fundamentals of Engineering	203	5	24	0	0	0	232
			Applied Physics-Fundamentals of Engineering total	2,459	45	166	17	0	12	2,699
411			Materials for Machines and Strength of Materials	1,607	28	242	5	0	0	1,882
412			Workshop Processes and Production Engineering	1,148	19	173	3	0	0	1,343
413			Design Engineering, Machine Elements and Tribology	799	22	100	5	0	1	927
414			Fluid Mechanics	1,449	21	177	3	0	0	1,650
415			Heat Engineering	1,352	25	181	17	0	0	1,575
416			Mechanics and Control Engineering	1,091	30	172	5	0	0	1,298
417			Intelligent Mechanics and Machine System	894	30	71	0	0	0	995
			Machine Engineering total	8,340	175	1,116	38	0	1	9,670
421			Electric Power Engineering and Electric Machinery	1,172	26	202	7	0	1	1,408

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
422	E		Electronic and Electric Materials Engineering	1,336	24	160	2	0	8	1,530
423			Electron Devices and Apparatus Engineering	1,197	29	131	4	0	1	1,362
424			Information and Communication Engineering	2,303	101	316	37	0	1	2,758
425			System Engineering	674	36	42	5	0	2	759
427			Electronic Measurements	952	23	192	3	0	4	1,174
428			Control Engineering	490	10	64	3	0	0	567
			Electric and Electronic Engineering total	8,124	249	1,107	61	0	17	9,558
431			Construction Materials and Dynamics in General Civil	559	9	80	0	0	0	648
432			Structural Engineering and Seismology	792	21	86	0	0	0	899
433			Ground Engineering	739	6	85	0	0	3	833
434			Hydraulics and River Engineering	837	11	83	0	0	2	933
435			Traffic Engineering and Regional Planning	629	18	39	0	0	0	686
436			Civil Environmental System	528	8	47	0	0	1	584
			Civil Engineering total	4,084	73	420	0	0	6	4,583
441		N	Building Structure and Materials	1,334	23	74	0	5	0	1,436
442			Building Science and Building Equipment	663	57	32	0	0	1	753
443			City Planning and Building Planning	1,613	145	83	0	0	0	1,841
444			Architectural History and Design	612	90	35	3	25	0	765
			Architecture total	4,222	315	224	3	30	1	4,795
451		E	Physical Metallurgy	594	2	33	0	0	3	632
452			Inorganic Materials and Properties	939	7	41	0	0	3	990
453			Composed Materials and Properties	338	5	30	2	0	3	378
454			Structural and Functional Materials	621	17	35	3	0	8	684
455			Metallurgy and Material Processing	728	19	73	0	0	10	830
456			Metal Productive Engineering	410	7	31	3	0	0	451
			Material Engineering total	3,630	57	243	8	0	27	3,965
461		G	Chemical Engineering in General	700	3	60	0	0	0	763
462			Reaction and Separation Engineering	478	0	56	0	0	1	535
463			Catalyst and Chemical Process	408	3	11	0	0	0	422
464			Bioengineering	635	1	24	1	0	0	661
465			Industrial Analytical Chemistry	300	0	29	0	0	0	329
			Process Engineering total	2,521	7	180	1	0	1	2,710
471			Industrial Physical Chemistry	702	7	26	0	0	6	741
472			Industrial Inorganic Chemistry	303	2	17	2	0	0	324
473			Industrial Organic Chemistry	398	11	16	0	0	0	425
474			Synthetic Chemistry	737	2	33	2	0	8	782
475			Polymer Synthesis	691	9	28	0	0	0	728
476			Polymer Structure and Property (inclu. Fiber)	806	73	26	1	0	0	906
			Industrial Chemistry total	3,637	104	146	5	0	14	3,906
481			Aeronautics	441	0	3	72	0	0	516
482			Ship Engineering	277	3	44	0	0	0	324
483			Marine Engineering	107	0	5	0	0	0	112
484			Resource Development Engineering	324	0	5	0	0	1	330
			Synthetic Engineering total	1,149	3	57	72	0	1	1,282
			ENGINEERING Total	38,166	1,028	3,659	205	30	80	43,168
501	A G R I C U L T U		Plant Breeding	360	16	1	0	2	17	396
502			Crop Science	339	22	0	0	0	1	362
503			Horticulture and Landscape Architecture	757	84	4	0	9	2	856
504			Plant Protection	536	20	0	0	0	1	557
505			Sericultural Science and Economic Entomology	134	5	0	0	0	14	153

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
			Agriculture total	2,126	147	5	0	11	35	2,324
511			Plant Fertilizer and Manure and Soil Science	452	34	0	0	1	0	487
512			Applied Microbiochemistry and Applied Biochemistry	1,411	109	28	4	0	36	1,588
513			Biological Productive Chemistry and Bioorganic Chemistry	409	14	6	0	0	6	435
514			Food Science and Nutritional Chemistry	1,183	584	8	0	0	15	1,790
			Agricultural Chemistry total	3,455	741	42	4	1	57	4,300
521			Forestry	795	12	0	3	0	0	810
522			Wood Science	550	22	0	0	0	2	574
			Forestry total	1,345	34	0	3	0	2	1,384
531			Fisheries in General	960	20	3	0	0	0	983
532			Fisheries Chemistry	383	19	2	0	0	3	407
			Fisheries total	1,343	39	5	0	0	3	1,390
541			Agricultural Economics	812	52	0	0	0	0	864
551			Irrigation, Drainage and Reclamation Engineering and Rural	575	40	0	0	0	2	617
552			Agricultural Machinery	369	30	1	0	0	0	400
553			Biological Environment	187	2	0	0	0	0	189
			Agricultural Engineering total	1,131	72	1	0	0	2	1,206
561			Animal Science and Grassland Science	464	22	0	0	0	1	487
562			Applied Animal Science	386	14	0	0	0	4	404
563			Basic Veterinary Medicine and Basic Animal Science	767	14	0	0	3	28	812
564			Applied Veterinary Medicine	575	6	0	0	0	27	608
			Animal Science·Veterinary Medicine	2,192	56	0	0	3	60	2,311
571			Biological Resource Science	201	11	0	2	0	6	220
572			Applied Molecular Cell Biology	119	5	0	0	0	0	124
			Interdisciplinary Agricultural Science total	320	16	0	2	0	6	344
			AGRICULTURE Total	12,724	1,157	53	9	15	165	14,123
601			Anatomy in General (inclu. Histology, Embryology)	1,030	64	0	3	0	9	1,106
602			Physiology in General	985	77	0	19	0	0	1,081
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional	584	119	7	0	0	1	711
604			Pharmacology in General	821	16	1	0	0	4	842
605			Medical Chemistry in General	860	43	3	1	0	13	920
606			Pathological Medical Chemistry	324	22	0	0	0	8	354
			Physiology total	4,604	341	11	23	0	35	5,014
611			Hominal Pathology	1,075	36	0	0	0	3	1,114
612			Experimental Pathology	646	27	0	0	0	26	699
613			Parasitology (inclu. Medical Zoology)	423	17	0	0	2	1	443
614			Bacteriology (inclu. Eumycetes)	640	65	1	0	0	20	726
615			Virology	568	9	0	0	0	28	605
616			Immunology	998	37	0	0	0	23	1,058
			Pathology total	4,350	191	1	0	2	101	4,645
621			Hygiene	616	45	0	0	0	17	678
622			Public Health and Health Science	1,549	363	3	6	0	8	1,929
623			Legal Medicine	571	3	0	0	0	0	574
			Social Medicine total	2,736	411	3	6	0	25	3,181
631			Internal Medicine in General	1,019	37	0	0	0	1	1,057
632			Gastroenterology	1,635	3	0	0	0	7	1,645
633			Internal Medicine Respiratory System	811	18	0	0	0	5	834
634			Neurological Medicine	891	26	0	5	0	4	926
635			Cardioangiopathy	1,711	29	0	0	0	19	1,759
636			Pediatrics	1,428	58	0	0	1	6	1,493
637			Dermatology	971	2	0	0	0	3	976
638			Radiology	1,418	105	0	0	0	6	1,529
639			Neuropsychiatry	1,512	51	0	0	3	2	1,568

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
640	M E D I C I N E		Endocrinology and Metabolic Science	484	19	0	0	0	3	506
641			Hematology	935	12	0	2	0	3	952
642			Internal Medicine of Kidney	543	5	0	0	0	5	553
643			Embryology and Newborn Medicine	93	3	0	0	0	0	96
644			Endocrinology	363	5	0	0	0	3	371
645			Metabolic Science	296	8	0	0	0	0	304
			Internal Medicine total	14,110	381	0	7	4	67	14,569
651			Surgery in General	1,167	11	0	0	0	2	1,180
652			Gastroenterological Surgery	1,545	20	0	0	0	12	1,577
653			Thoracic Surgery	862	5	0	0	0	9	876
654			Neurosurgery	1,134	3	0	2	0	6	1,145
655			Orthopedic Surgery	1,576	89	0	0	0	8	1,673
656			Anesthesiology and Rescue Medicine	1,207	3	0	0	0	6	1,216
657			Urology	978	2	0	0	0	7	987
658			Obstetrics and Gynecology	1,185	18	0	0	0	3	1,206
659			Oto-rhino-laryngology	1,004	16	0	0	0	4	1,024
660			Ophthalmology	936	0	0	0	0	4	940
661			Pediatric Surgery	251	1	0	0	0	0	252
662			Formative Surgery	127	0	0	0	0	0	127
			Surgery total	11,972	168	0	2	0	61	12,203
671			Oral Anatomy and Morphological Basic Dentistry	863	12	0	0	0	0	875
672			Functional Basic Dentistry	702	12	0	0	0	0	714
673			Morbid Dentistry (inclu. Dental Radiology)	525	7	0	0	0	0	532
674			Conservative Dentistry	1,179	16	0	0	0	0	1,195
675			Prosthodontics and Dental Technology	3,282	17	0	0	0	2	3,301
676			Oral Surgery	1,548	42	0	0	0	0	1,590
677			Orthodontics, Pedodontics and Social Dentistry	179	1	0	0	0	0	180
678			Periodontological Dentistry	8,278	107	0	0	0	2	8,387
			Dentistry total	1,594	6	2	0	0	23	1,625
681			Chemical Pharmaceuticals	636	2	0	0	0	2	640
682			Physical Pharmaceuticals	1,992	12	12	0	0	28	2,044
683			Biopharmaceutics	173	0	3	4	0	3	183
684			Molecular Pharmaceuticals	43	5	0	0	0	0	48
685			Environmental Pharmaceuticals	4,438	25	17	4	0	56	4,540
			Pharmaceutics total	247	35	0	0	0	1	283
691			Medical Sociology	162	1	0	0	0	3	166
692			Human Genetics	428	7	2	0	0	2	439
693			Applied Pharmacology and Medical Pharmacology	416	129	0	0	0	0	545
694			Pathological Examination	605	425	0	0	0	0	1,030
696			Science of Basic and Local Nursing	473	288	0	0	0	0	761
697			Science of Clinical Nursing	540	360	0	0	0	0	900
			Medicine in General total	2,871	1,245	2	0	0	6	4,124
	MEDICINE Total			53,359	2,869	34	42	6	353	56,663
702	I N T E R D I C I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	276	13	10	4	5	0	308
703			Physical Education	2,913	660	113	0	0	0	3,686
704			Human Geography	816	38	25	3	4	9	895
705			Physical Geography	387	14	11	3	0	0	415
			Geography total	1,203	52	36	6	4	9	1,310
706			Home Science(inclu. Cloth/Living Environments)	1,077	1,282	0	0	0	0	2,359
707			Food Culture	189	320	0	0	0	0	509
			Domestic Science total	1,266	1,602	0	0	0	0	2,868
708			Science of Cultural Property	30	0	0	8	14	0	52

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
711	I N T E R D I S C I P L I N A R Y A R E A		Science Education	276	49	25	0	32	2	384
712			Educational Engineering	435	144	49	26	17	0	671
713			Curriculum Studies	1,492	396	80	2	21	0	1,991
714			Japanese Language Education	428	26	0	0	13	21	488
			Science Education· Curriculum Education total	2,631	615	154	28	83	23	3,534
721			Statistics	339	11	0	63	0	1	414
731			Computer Science	1,965	134	125	11	0	0	2,235
732			Intelligent Informatics	1,532	86	89	15	0	0	1,722
733			Study of Information System (Inclu. Library and Information)	1,141	290	36	29	7	5	1,508
			Information Science total	4,638	510	250	55	7	5	5,465
741			Social System Engineering	559	23	9	0	0	0	591
751			Natural Disaster Science	104	0	6	0	0	1	111
761			Plasma Science and Technology	670	5	35	66	0	6	782
772			Nuclear Fusion	253	0	3	47	0	3	306
773			Energy Science General	364	8	8	5	0	1	386
774			Nuclear Power Science	346	0	6	9	0	0	361
			Energy total	963	8	17	61	0	4	1,053
801			Environmental Dynamic Analysis	400	15	11	0	0	0	426
802			Environmental Influence Assessment (inclu. Radiobiology)	403	42	9	1	0	10	465
803			Environmental Preservation	474	22	15	0	0	4	515
			Environmental Science total	1,277	79	35	1	0	14	1,406
811			Biological Organic Chemistry	480	17	9	2	0	19	527
812			Structured Biochemistry	579	13	5	1	0	10	608
813			Functional Biochemistry	722	43	7	0	0	2	774
			Biological Chemistry total	1,781	73	21	3	0	31	1,909
821			Biophysics	607	6	12	32	0	1	658
822			Molecular Biology	1,810	32	5	57	2	24	1,930
823			Cell Biology	878	11	1	18	0	16	924
824			Developmental Biology	546	4	5	23	0	3	581
			Basic Biology total	3,841	53	23	130	2	44	4,093
831			Neuroanatomy and Neuroanathology	370	15	0	1	0	0	386
832			Neurochemistry and Neuropharmacology	392	7	0	0	0	3	402
833			Neuro Science in General	649	19	1	30	0	5	704
834			Neuro and Muscular Physiology	436	42	0	20	0	1	499
			Neuro Science (inclu. Brain Science) total	1,847	83	1	51	0	9	1,991
841			Laboratory Animal Science	193	0	0	3	0	45	241
851			Medical Organism Engineering and Material Science of Organism	831	43	50	0	1	1	926
			INTERDISCIPLINARY AREA Total	25,362	3,830	760	479	116	193	30,740
999	WIDE AREA Total			1,718	526	39	17	7	25	2,332
	Item n.a. Total			267	26	3	1	2	1	300
	Grand Total			212,695	20,145	6,163	1,813	803	1,232	242,851

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

Code	Subj ect	Subdi vision	Item	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
211	A R T S · H U M A N I T I E S		Philosophy	560	6	43	0	0	609
212			Chinese Philosophy	121	0	24	0	1	146
213			Indian Philosophy (inclu. Buddhist Studies)	103	0	8	4	0	115
214			Religion	115	2	11	0	0	128
215			Ethics	191	1	6	0	5	203
216			History of Philosophy	153	1	11	0	0	165
217			Aesthetics (inclu. Arts)	601	22	4	4	23	654
218			Art History	240	1	0	6	95	342
			Philosophy total	2,084	33	107	14	124	2,362
221			Experimental Psychology	700	6	1	10	9	726
222			Educational and Social Psychology	1,512	19	1	24	63	1,619
223			Sociology (inclu. Social Welfare)	825	4	2	14	6	851
224			Education	1,817	18	41	24	127	2,027
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	445	0	3	80	9	537
			Psychology· Sociology · Education Cultural Anthropology total	5,299	47	48	152	214	5,760
231			Japanese History	589	3	43	50	15	700
232			Oriental History	391	0	8	2	2	403
233			European History	405	0	12	0	0	417
234			Archaeology (inclu. Prehistory)	263	0	4	16	55	338
			History total	1,648	3	67	68	72	1,858
241			Japanese Language	371	3	18	0	36	428
242			Japanese Literature	561	1	115	24	5	706
243			Chinese Language and Literature	287	7	14	0	0	308
244			English Language and Literature	1,317	29	240	0	1	1,587
245			French Language and Literature	330	0	4	0	0	334
246			German Language and Literature	551	2	39	0	0	592
247			Other Foreign Languages and Literatures	337	0	0	0	0	337
248			Linguistics and Phonetics	746	9	59	13	28	855
249			Literature in General (i ncl. Literary Theory, Comparative Literature) and Western Classics	172	0	0	0	0	172
			Literature total	4,672	51	489	37	70	5,319
			ARTS · HUMANITIES Total	13,703	134	711	271	480	15,299
261	L A W		Basic Science of Law	251	0	4	0	0	255
262			Public Law	343	0	16	0	0	359
263			International Law	185	0	3	0	0	188
264			Civil Law	512	3	5	1	0	521
265			Social Law	135	1	0	0	0	136
266			Criminal Law	147	0	3	0	0	150
267			Politics	623	0	3	6	1	633
			LAW Total	2,196	4	34	7	1	2,242
271	E C O N O M I C S		General Theory of Economics	698	0	7	3	0	708
272			Economical Statistics	166	0	0	0	0	166
273			Economic Policy (inclu. Economic Condition)	639	0	15	0	0	654
274			Economic History	277	0	1	3	0	281
275			Public Finance, Money and Banking	282	2	0	3	0	287
276			Commercial Science	105	0	8	0	0	113
277			Business Administration	403	6	7	1	0	417
278			Accounting	252	3	1	0	0	256
			ECONOMICS Total	2,822	11	39	10	0	2,882
301	S C I E N C E		Algebra	494	3	65	0	0	562
302			Geometry	496	0	56	0	0	552
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	576	2	62	17	0	657
305			Basic Analysis	506	4	61	0	0	571
306			Larger-area Analysis	149	0	9	0	0	158

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

Code	Subj ect	Subdi vision	Item	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
			Mathematics total	2,221	9	253	17	0	2,500
311			Astronomy	376	0	11	138	4	529
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	1,338	7	55	188	0	1,588
322			Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	876	3	57	23	0	959
323			Solid - State Physics II (Magnetism, Metal Physics, Physical Properties in General (inclu. Basic Theories)	1,025	0	37	13	0	1,075
324			Physics in General	642	7	32	33	0	714
325			Physics total	445	6	28	36	0	515
			Physics total	4,326	23	209	293	0	4,851
331			Physics of Solid Earth	672	0	3	41	1	717
332	S		Meteorology, Oceanography and Hydrology	673	0	14	22	0	709
333	C		Aeronomy	206	0	13	34	0	253
334			Geology	390	0	1	0	7	398
335	I		Stratigraphy and Paleontology	239	0	0	3	20	262
336	E		Mineralogy, Petrology and Study of Mineral Deposit	517	0	0	4	12	533
337			Geochemistry	391	0	6	1	1	399
	N		Earth Science total	3,088	0	37	105	41	3,271
341			Physical Chemistry	1,257	3	25	80	4	1,369
342	C		Organic Chemistry	1,049	0	37	10	0	1,096
343			Inorganic Chemistry	452	1	23	18	2	496
344	E		Function, Properties and Materials in Chemistry	583	3	26	5	2	619
345			Substance Transformation	66	0	1	0	0	67
346			Separation, Refining and Identification	355	2	27	5	0	389
			Chemistry total	3,762	9	139	118	8	4,036
351			Genetics	421	0	4	46	0	471
352			Ecology	817	5	2	5	18	847
353			Plant Physiology	535	0	6	17	0	558
354			Morphology, Structure of Organism	239	2	1	12	3	257
355			Animal Physiology and Metabolism	302	0	0	8	0	310
356			Morphology and Taxonomy	432	0	0	10	63	505
			Biology total	2,746	7	13	98	84	2,948
361			Physical Anthropology (inclu. Physiological Anthropology)	172	0	0	3	9	184
			SCIENCE Total	16,691	48	662	772	146	18,319
401			Applied Physics of Property and Crystallography	494	0	34	3	0	531
402			Surface Physics	337	0	23	6	0	366
403			Applied Optics and Quantum Optics	491	2	61	6	0	560
404			General Applied Physics	202	1	15	2	0	220
405			Fundamentals of Engineering	130	0	22	0	0	152
			Applied Physics· Fundamentals of Engineering total	1,654	3	155	17	0	1,829
411	E N G I N E E R I N G		Materials for Machines and Strength of Materials	972	0	214	5	0	1,191
412			Workshop Processes and Production Engineering	622	0	155	3	0	780
413			Design Engineering, Machine Elements and Tribology	522	2	82	5	0	611
414			Fluid Mechanics	888	1	162	3	0	1,054
415			Heat Engineering	859	5	161	17	0	1,042
416			Mechanics and Control Engineering	651	1	152	5	0	809
417			Intelligent Mechanics and Machine System	579	0	69	0	0	648
			Machine Engineering total	5,093	9	995	38	0	6,135
421			Electric Power Engineering and Electric Machinery	587	2	175	7	0	771

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

Code	Subj ect	Subdi vision	Item	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total	
422	E		Electronic and Electric Materials Engineering	790	1	157	2	0	950	
423			Electron Devices and Apparatus Engineering	708	2	122	4	0	836	
424			Information and Communication Engineering	1,217	3	290	37	0	1,547	
425			System Engineering	381	3	37	5	0	426	
427			Electronic Measurements	530	2	168	3	0	703	
428			Control Engineering	316	2	51	3	0	372	
			Electric and Electronic Engineering total	4,529	15	1,000	61	0	5,605	
431			Construction Materials and Dynamics in General Civil	313	0	74	0	0	387	
432			Structural Engineering and Seismology	482	0	76	0	0	558	
433			Ground Engineering	475	0	82	0	0	557	
434			Hydraulics and River Engineering	587	0	76	0	0	663	
435			Traffic Engineering and Regional Planning	383	0	36	0	0	419	
436			Civil Environmental System	325	0	46	0	0	371	
			Civil Engineering total	2,565	0	390	0	0	2,955	
441		N	G	Building Structure and Materials	649	0	74	0	5	728
442				Building Science and Building Equipment	334	5	29	0	0	368
443				City Planning and Building Planning	677	7	72	0	0	756
444				Architectural History and Design	237	0	34	3	25	299
		N		Architecture total	1,897	12	209	3	30	2,151
451		E	R	Physical Metallurgy	470	0	33	0	0	503
452	Inorganic Materials and Properties			657	0	41	0	0	698	
453	Composed Materials and Properties			219	0	25	2	0	246	
454	Structural and Functional Materials			461	3	31	3	0	498	
455	Metallurgy and Material Processing			533	3	67	0	0	603	
456	Metal Productive Engineering			351	0	31	3	0	385	
	N		Material Engineering total	2,691	6	228	8	0	2,933	
461	G		Chemical Engineering in General	536	0	51	0	0	587	
462			Reaction and Separation Engineering	350	0	54	0	0	404	
463			Catalyst and Chemical Process	329	0	11	0	0	340	
464			Bioengineering	484	0	24	1	0	509	
465			Industrial Analytical Chemistry	225	0	29	0	0	254	
			Process Engineering total	1,924	0	169	1	0	2,094	
471			Industrial Physical Chemistry	513	4	24	0	0	541	
472			Industrial Inorganic Chemistry	197	0	14	2	0	213	
473			Industrial Organic Chemistry	260	1	13	0	0	274	
474			Synthetic Chemistry	572	0	31	2	0	605	
475			Polymer Synthesis	513	0	25	0	0	538	
476			Polymer Structure and Property (inclu. Fiber)	617	0	24	1	0	642	
			Industrial Chemistry total	2,672	5	131	5	0	2,813	
481			Aeronautics	282	0	3	72	0	357	
482			Ship Engineering	210	0	43	0	0	253	
483			Marine Engineering	63	0	5	0	0	68	
484			Resource Development Engineering	289	0	3	0	0	292	
			Synthetic Engineering total	844	0	54	72	0	970	
	ENGINEERING Total			23,869	50	3,331	205	30	27,485	
501	A G R I C U L T U		Plant Breeding	282	0	1	0	2	285	
502			Crop Science	290	0	0	0	0	290	
503			Horticulture and Landscape Architecture	479	0	2	0	9	490	
504			Plant Protection	429	0	0	0	0	429	
505			Sericultural Science and Economic Entomology	104	0	0	0	0	104	
			Agriculture total	1,584	0	3	0	11	1,598	

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

Code	Subj ect	Subdi vision	Item	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total		
511	A		Plant Fertilizer and Manure and Soil Science	360	0	0	0	1	361		
512			Applied Microbiochemistry and Applied Biochemistry	997	0	28	4	0	1,029		
513			Biological Productive Chemistry and Bioorganic Chemistry	308	0	6	0	0	314		
514			Food Science and Nutritional Chemistry	578	0	8	0	0	586		
	G		Agricultural Chemistry total	2,243	0	42	4	1	2,290		
521	R		Forestry	708	0	0	3	0	711		
522			Wood Science	511	2	0	0	0	513		
			Forestry total	1,219	2	0	3	0	1,224		
531	I		Fisheries in General	746	0	3	0	0	749		
532			Fisheries Chemistry	307	0	2	0	0	309		
	C		Fisheries total	1,053	0	5	0	0	1,058		
541	U		Agricultural Economics	491	0	0	0	0	491		
551			Irrigation, Drainage and Reclamation Engineering and Rural	488	0	0	0	0	488		
552			Agricultural Machinery	318	0	1	0	0	319		
553			Biological Environment	141	0	0	0	0	141		
	T		Agricultural Engineering total	947	0	1	0	0	948		
561	U		Animal Science and Grassland Science	333	0	0	0	0	333		
562			Applied Animal Science	288	0	0	0	0	288		
563			Basic Veterinary Medicine and Basic Animal Science	461	0	0	0	3	464		
564			Applied Veterinary Medicine	332	3	0	0	0	335		
	E		Animal Science• Veterinary Medicine total	1,414	3	0	0	3	1,420		
571			Biological Resource Science	166	0	0	2	0	168		
572			Applied Molecular Cell Biology	88	0	0	0	0	88		
			Interdisciplinary Agricultural Science total	254	0	0	2	0	256		
	AGRICULTURE Total			9,205	5	51	9	15	9,285		
601	M		Anatomy in General (inclu. Histology, Embryology)	532	21	0	3	0	556		
602			Physiology in General	528	10	0	19	0	557		
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional	263	13	7	0	0	283		
604			Pharmacology in General	404	2	1	0	0	407		
605			Medical Chemistry in General	529	2	3	1	0	535		
606			Pathological Medical Chemistry	179	1	0	0	0	180		
			Physiology total	2,435	49	11	23	0	2,518		
611			E		Hominal Pathology	527	19	0	0	0	546
612					Experimental Pathology	408	6	0	0	0	414
613					Parasitology (inclu. Medical Zoology)	234	3	0	0	2	239
614			I		Bacteriology (inclu. Eumycetes)	325	21	1	0	0	347
615					Virology	414	2	0	0	0	416
616					Immunology	613	13	0	0	0	626
	C		Pathology total	2,521	64	1	0	2	2,588		
621	I		Hygiene	297	5	0	0	0	302		
622			Public Health and Health Science	752	64	3	6	0	825		
623			Legal Medicine	297	0	0	0	0	297		
	N		Social Medicine total	1,346	69	3	6	0	1,424		
631	E		Internal Medicine in General	475	9	0	0	0	484		
632			Gastroenterology	787	2	0	0	0	789		
633			Internal Medicine Respiratory System	441	17	0	0	0	458		
634			Neurological Medicine	493	4	0	5	0	502		
635			Cardioangiology	826	11	0	0	0	837		
636			Pediatrics	727	18	0	0	1	746		
637			Dermatology	533	0	0	0	0	533		
638			Radiology	826	65	0	0	0	891		
639			Neuropsychiatry	760	27	0	0	3	790		
640			Endocrinology and Metabolic Science	253	10	0	0	0	263		

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

Code	Subj ect	Subdi vision	Item	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
641	M E D I C I N E		Hematology	524	7	0	2	0	533
642			Internal Medicine of Kidney	225	1	0	0	0	226
643			Embryology and Newborn Medicine	33	3	0	0	0	36
644			Endocrinology	225	2	0	0	0	227
645			Metabolic Science	194	1	0	0	0	195
			Internal Medicine total	7,322	177	0	7	4	7,510
651			Surgery in General	521	6	0	0	0	527
652			Gastroenterological Surgery	797	15	0	0	0	812
653			Thoracic Surgery	435	3	0	0	0	438
654			Neurosurgery	619	2	0	2	0	623
655			Orthopedic Surgery	827	49	0	0	0	876
656			Anesthesiology and Rescue Medicine	690	2	0	0	0	692
657			Urology	531	0	0	0	0	531
658			Obstetrics and Gynecology	653	8	0	0	0	661
659			Oto-rhino-laryngology	521	0	0	0	0	521
660			Ophthalmology	529	0	0	0	0	529
661			Pediatric Surgery	151	1	0	0	0	152
662			Formative Surgery	44	0	0	0	0	44
			Surgery total	6,318	86	0	2	0	6,406
671			Oral Anatomy and Morphological Basic Dentistry	324	0	0	0	0	324
672			Functional Basic Dentistry	277	0	0	0	0	277
673			Morbid Dentistry (inclu. Dental Radiology)	220	2	0	0	0	222
674			Conservative Dentistry	478	0	0	0	0	478
675			Prosthodontics and Dental Technology	1,568	0	0	0	0	1,568
676			Oral Surgery	777	0	0	0	0	777
677			Orthodontics, Pedodontics and Social Dentistry	96	0	0	0	0	96
678			Periodontological Dentistry	3,740	2	0	0	0	3,742
			Dentistry total	536	0	2	0	0	538
681			Chemical Pharmaceuticals	213	2	0	0	0	215
682			Physical Pharmaceuticals	681	0	12	0	0	693
683			Biopharmaceutics	92	0	3	4	0	99
684			Molecular Pharmaceuticals	19	1	0	0	0	20
685			Environmental Pharmaceuticals	1,541	3	17	4	0	1,565
			Pharmaceutics total	98	21	0	0	0	119
691			Medical Sociology	133	0	0	0	0	133
692			Human Genetics	189	0	2	0	0	191
693			Applied Pharmacology and Medical Pharmacology	184	81	0	0	0	265
694			Pathological Examination	281	106	0	0	0	387
696			Science of Basic and Local Nursing	209	84	0	0	0	293
697			Science of Clinical Nursing	279	115	0	0	0	394
			Medicine in General total	1,373	407	2	0	0	1,782
	MEDICINE Total			26,596	857	34	42	6	27,535
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)	106	0	9	4	5	124
703			Physical Education	1,252	15	111	0	0	1,378
704			Human Geography	406	0	22	3	4	435
705			Physical Geography	230	0	9	3	0	242
			Geography total	636	0	31	6	4	677
706			Home Science(inclu. Cloth/Living Environments)	417	0	0	0	0	417
707			Food Culture	58	0	0	0	0	58
			Domestic Science total	475	0	0	0	0	475
708			Science of Cultural Property	27	0	0	8	14	49
711			Science Education	164	0	22	0	32	218
712			Educational Engineering	175	0	33	26	17	251

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

Code	Subj ect	Subdi vision	Item	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
713	I N T E R D I S C I P L I N A R Y A R E A		Curriculum Studies	1,075	5	72	2	21	1,175
714			Japanese Language Education	254	0	0	0	13	267
			Science Education・Curriculum Education total	1,668	5	127	28	83	1,911
721			Statistics	181	0	0	63	0	244
731			Computer Science	1,213	5	118	11	0	1,347
732			Intelligent Informatics	993	6	84	15	0	1,098
733			Study of Information System (Inclu. Library and Information)	387	13	33	29	7	469
			Information Science total	2,593	24	235	55	7	2,914
741			Social System Engineering	235	0	9	0	0	244
751			Natural Disaster Science	84	0	3	0	0	87
761			Plasma Science and Technology	504	0	31	66	0	601
772			Nuclear Fusion	219	0	1	47	0	267
773			Energy Science General	275	0	6	5	0	286
774			Nuclear Power Science	287	0	6	9	0	302
			Energy total	781	0	13	61	0	855
801			Environmental Dynamic Analysis	278	0	6	0	0	284
802			Environmental Influence Assessment (inclu. Radiobiology)	254	11	5	1	0	271
803			Environmental Preservation	283	0	15	0	0	298
			Environmental Science total	815	11	26	1	0	853
811			Biological Organic Chemistry	337	3	9	2	0	351
812			Structured Biochemistry	346	0	5	1	0	352
813			Functional Biochemistry	442	9	7	0	0	458
			Biological Chemistry total	1,125	12	21	3	0	1,161
821			Biophysics	415	1	11	32	0	459
822			Molecular Biology	1,325	4	5	57	2	1,393
823			Cell Biology	614	1	1	18	0	634
824			Developmental Biology	413	1	5	23	0	442
			Basic Biology total	2,767	7	22	130	2	2,928
831			Neuroanatomy and Neuronathology	226	4	0	1	0	231
832			Neurochemistry and Neuropharmacology	207	1	0	0	0	208
833			Neuro Science in General	393	4	1	30	0	428
834			Neuro and Muscular Physiology	264	15	0	20	0	299
			Neuro Science (inclu. Brain Science) total	1,090	24	1	51	0	1,166
841			Laboratory Animal Science	121	0	0	3	0	124
851			Medical Organism Engineering and Material Science of Organism	532	17	42	0	1	592
			INTERDISCIPLINARY AREA Total	14,992	115	681	479	116	16,383
999	WIDE AREA Total			591	34	25	17	7	674
	Item n.a. Total			114	0	3	1	2	120
	Grand Total			110,779	1,258	5,571	1,813	803	120,224

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

Code	Subj ect	Subdi vision	Item	Universities	Junior Colleges	Colleges of Technology	Total
211	ARTS • HUMANITIES		Philosophy	77	21	5	103
212			Chinese Philosophy	14	6	3	23
213			Indian Philosophy (inclu. Buddhist Studies)	6	7	0	13
214			Religion	13	0	1	14
215			Ethics	14	5	0	19
216			History of Philosophy	29	7	0	36
217			Aesthetics (inclu. Arts)	154	32	11	197
218			Art History	52	3	2	57
		Philosophy total	359	81	22	462	
221			Experimental Psychology	72	22	0	94
222			Educational and Social Psychology	148	56	0	204
223			Sociology (inclu. Social Welfare)	305	66	0	371
224			Education	144	82	5	231
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	61	17	0	78
		Psychology• Sociology • Education Cultural Anthropology total	730	243	5	978	
231			Japanese History	78	20	8	106
232			Oriental History	40	8	1	49
233			European History	48	12	0	60
234			Archaeology (inclu. Prehistory)	7	2	0	9
		History total	173	42	9	224	
241			Japanese Language	42	12	0	54
242			Japanese Literature	119	42	9	170
243			Chinese Language and Literature	50	7	0	57
244			English Language and Literature	337	107	15	459
245			French Language and Literature	61	6	0	67
246			German Language and Literature	87	0	1	88
247			Other Foreign Languages and Literatures	23	14	0	37
248			Linguistics and Phonetics	104	28	8	140
249			Literature in General (i nclu. Literary Theory, Comparative Literature) and Western Classics	11	0	0	11
		Literature total	834	216	33	1,083	
	ARTS • HUMANITIES Total			2,096	582	69	2,747
261	LAW		Basic Science of Law	26	1	0	27
262			Public Law	54	13	0	67
263			International Law	19	0	0	19
264			Civil Law	82	6	0	88
265			Social Law	22	5	0	27
266			Criminal Law	15	4	0	19
267			Politics	108	19	0	127
	LAW Total			326	48	0	374
271	ECONOMICS		General Theory of Economics	190	31	0	221
272			Economical Statistics	32	0	0	32
273			Economic Policy (inclu. Economic Condition)	177	20	1	198
274			Economic History	67	12	0	79
275			Public Finance, Money and Banking	90	9	0	99
276			Commercial Science	48	5	0	53
277			Business Administration	123	26	0	149
278			Accounting	87	8	0	95
	ECONOMICS Total			814	111	1	926
301	SCIENCE		Algebra	38	4	2	44
302			Geometry	29	4	9	42
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	56	2	13	71
305			Basic Analysis	49	1	7	57
306			Larger-area Analysis	7	0	0	7

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
			Mathematics total	179	11	31	221
311			Astronomy	8	0	3	11
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	103	15	1	119
322			Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	81	3	4	88
323			Solid - State Physics II (Magnetism, Metal Physics,	76	0	3	79
324			Physical Properties in General (inclu. Basic Theories)	43	0	11	54
325			Physics in General	35	1	3	39
			Physics total	338	19	22	379
331			Physics of Solid Earth	16	0	0	16
332			Meteorology, Oceanography and Hydrology	18	1	0	19
333			Aeronomy	2	0	0	2
334			Geology	27	2	0	29
335			Stratigraphy and Paleontology	8	0	0	8
336			Mineralogy, Petrology and Study of Mineral Deposit	13	0	0	13
337			Geochemistry	18	0	0	18
			Earth Science total	102	3	0	105
341			Physical Chemistry	122	6	3	131
342			Organic Chemistry	88	3	6	97
343			Inorganic Chemistry	42	3	1	46
344			Function, Properties and Materials in Chemistry	37	1	0	38
345			Substance Transformation	2	0	1	3
346			Separation, Refining and Identification	36	4	1	41
			Chemistry total	327	17	12	356
351			Genetics	45	2	0	47
352			Ecology	68	15	3	86
353			Plant Physiology	65	17	0	82
354			Morphology, Structure of Organism	15	0	0	15
355			Animal Physiology and Metabolism	26	2	0	28
356			Morphology and Taxonomy	31	3	0	34
			Biology total	250	39	3	292
361			Physical Anthropology (inclu. Physiological Anthropology)	9	1	0	10
			SCIENCE Total	1,213	90	71	1,374
401			Applied Physics of Property and Crystallography	38	0	0	38
402			Surface Physics	17	0	0	17
403			Applied Optics and Quantum Optics	33	0	3	36
404			General Applied Physics	20	0	3	23
405			Fundamentals of Engineering	8	0	2	10
			Applied Physics· Fundamentals of Engineering total	116	0	8	124
411			Materials for Machines and Strength of Materials	86	0	21	107
412			Workshop Processes and Production Engineering	48	4	12	64
413			Design Engineering, Machine Elements and Tribology	21	0	16	37
414			Fluid Mechanics	60	3	15	78
415			Heat Engineering	47	0	19	66
416			Mechanics and Control Engineering	52	0	18	70
417			Intelligent Mechanics and Machine System	36	1	2	39
			Machine Engineering total	350	8	103	461
421			Electric Power Engineering and Electric Machinery	44	0	18	62

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

Code	Subj ect	Subdi vision	Item	Universities	Junior Colleges	Colleges of Technology	Total	
422	E		Electronic and Electric Materials Engineering	51	0	3	54	
423			Electron Devices and Apparatus Engineering	33	1	5	39	
424			Information and Communication Engineering	158	6	18	182	
425			System Engineering	35	3	3	41	
427			Electronic Measurements	20	0	11	31	
428			Control Engineering	43	0	5	48	
			Electric and Electronic Engineering total			384	10	63
431			Construction Materials and Dynamics in General Civil	22	3	5	30	
432			Structural Engineering and Seismology	29	1	10	40	
433			Ground Engineering	26	0	3	29	
434			Hydraulics and River Engineering	21	0	7	28	
435			Traffic Engineering and Regional Planning	24	0	3	27	
436			Civil Environmental System	19	5	1	25	
			Civil Engineering total			141	9	29
441		G	Building Structure and Materials	64	0	0	64	
442			Building Science and Building Equipment	45	11	3	59	
443			City Planning and Building Planning	126	7	11	144	
444		N	Architectural History and Design	43	7	1	51	
		Architecture total			278	25	15	318
451		E	Physical Metallurgy	17	0	0	17	
452			Inorganic Materials and Properties	39	3	0	42	
453			Composed Materials and Properties	23	0	5	28	
454			Structural and Functional Materials	34	0	3	37	
455			Metallurgy and Material Processing	22	0	1	23	
456		N	Metal Productive Engineering	6	0	0	6	
			Material Engineering total			141	3	9
461		G	Chemical Engineering in General	44	0	9	53	
462			Reaction and Separation Engineering	28	0	2	30	
463			Catalyst and Chemical Process	9	0	0	9	
464			Bioengineering	36	0	0	36	
465			Industrial Analytical Chemistry	21	0	0	21	
		Process Engineering total			138	0	11	149
471			Industrial Physical Chemistry	50	0	2	52	
472			Industrial Inorganic Chemistry	19	0	3	22	
473			Industrial Organic Chemistry	17	0	3	20	
474			Synthetic Chemistry	31	0	2	33	
475			Polymer Synthesis	28	2	3	33	
476			Polymer Structure and Property (inclu. Fiber)	30	15	2	47	
			Industrial Chemistry total			175	17	15
481			Aeronautics	28	0	0	28	
482			Ship Engineering	23	0	1	24	
483			Marine Engineering	15	0	0	15	
484			Resource Development Engineering	0	0	2	2	
		Synthetic Engineering total			66	0	3	69
	ENGINEERING Total			1,789	72	256	2,117	
501	A G R I C U L T		Plant Breeding	28	10	0	38	
502			Crop Science	8	13	0	21	
503			Horticulture and Landscape Architecture	95	16	2	113	
504			Plant Protection	23	11	0	34	
505			Sericultural Science and Economic Entomology	5	0	0	5	

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
			Agriculture total	159	50	2	211
511			Plant Fertilizer and Manure and Soil Science	27	19	0	46
512			Applied Microbiochemistry and Applied Biochemistry	74	10	0	84
513			Biological Productive Chemistry and Bioorganic Chemistry	32	1	0	33
514			Food Science and Nutritional Chemistry	117	70	0	187
			Agricultural Chemistry total	250	100	0	350
521			Forestry	35	0	0	35
522			Wood Science	15	18	0	33
			Forestry total	50	18	0	68
531			Fisheries in General	12	0	0	12
532			Fisheries Chemistry	13	0	0	13
			Fisheries total	25	0	0	25
541			Agricultural Economics	45	11	0	56
551			Irrigation, Drainage and Reclamation Engineering and Rural	22	31	0	53
552			Agricultural Machinery	12	12	0	24
553			Biological Environment	24	0	0	24
			Agricultural Engineering total	58	43	0	101
561			Animal Science and Grassland Science	8	13	0	21
562			Applied Animal Science	6	11	0	17
563			Basic Veterinary Medicine and Basic Animal Science	71	6	0	77
564			Applied Veterinary Medicine	51	1	0	52
			Animal Science-Veterinary Medicine total	136	31	0	167
571			Biological Resource Science	9	0	0	9
572			Applied Molecular Cell Biology	4	0	0	4
			Interdisciplinary Agricultural Science total	13	0	0	13
			AGRICULTURE Total	736	253	2	991
601			Anatomy in General (inclu. Histology, Embryology)	77	9	0	86
602			Physiology in General	68	16	0	84
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional	55	22	0	77
604			Pharmacology in General	81	0	0	81
605			Medical Chemistry in General	61	7	0	68
606			Pathological Medical Chemistry	33	0	0	33
			Physiology total	375	54	0	429
611			Hominal Pathology	96	3	0	99
612			Experimental Pathology	83	6	0	89
613			Parasitology (inclu. Medical Zoology)	36	6	0	42
614			Bacteriology (inclu. Eumycetes)	55	10	0	65
615			Virology	54	3	0	57
616			Immunology	42	12	0	54
			Pathology total	366	40	0	406
621			Hygiene	46	11	0	57
622			Public Health and Health Science	157	85	0	242
623			Legal Medicine	60	0	0	60
			Social Medicine total	263	96	0	359
631			Internal Medicine in General	90	12	0	102
632			Gastroenterology	138	1	0	139
633			Internal Medicine Respiratory System	64	0	0	64
634			Neurological Medicine	59	5	0	64
635			Cardioangiopathy	138	2	0	140
636			Pediatrics	141	11	0	152
637			Dermatology	112	0	0	112
638			Radiology	91	13	0	104
639			Neuropsychiatry	139	7	0	146

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

Code	Subj ect	Subdi vision	Item	Universities	Junior Colleges	Colleges of Technology	Total
640	M E D I C I N E		Endocrinology and Metabolic Science	28	3	0	31
641			Hematology	65	4	0	69
642			Internal Medicine of Kidney	31	0	0	31
643			Embryology and Newborn Medicine	17	0	0	17
644			Endocrinology	6	0	0	6
645			Metabolic Science	11	0	0	11
			Internal Medicine total	1,130	58	0	1,188
651			Surgery in General	103	4	0	107
652			Gastroenterological Surgery	144	3	0	147
653			Thoracic Surgery	56	1	0	57
654			Neurosurgery	106	1	0	107
655			Orthopedic Surgery	153	26	0	179
656			Anesthesiology and Rescue Medicine	113	0	0	113
657			Urology	96	0	0	96
658			Obstetrics and Gynecology	96	5	0	101
659			Oto-rhino-laryngology	113	11	0	124
660			Ophthalmology	85	0	0	85
661			Pediatric Surgery	22	0	0	22
662			Formative Surgery	5	0	0	5
			Surgery total	1,092	51	0	1,143
671			Oral Anatomy and Morphological Basic Dentistry	26	2	0	28
672			Functional Basic Dentistry	13	5	0	18
673			Morbid Dentistry (inclu. Dental Radiology)	26	0	0	26
674			Conservative Dentistry	33	5	0	38
675			Prosthodontics and Dental Technology	145	0	0	145
676			Oral Surgery	27	8	0	35
677			Orthodontics, Pedodontics and Social Dentistry	15	0	0	15
678			Periodontological Dentistry	285	20	0	305
			Dentistry total	106	0	0	106
681			Chemical Pharmaceutics	47	0	0	47
682			Physical Pharmaceutics	99	3	0	102
683			Biopharmaceutics	7	0	0	7
684			Molecular Pharmaceutics	1	0	0	1
685			Environmental Pharmaceutics	260	3	0	263
			Pharmaceutics total	14	2	0	16
691			Medical Sociology	3	1	0	4
692			Human Genetics	11	3	0	14
693			Applied Pharmacology and Medical Pharmacology	40	21	0	61
694			Pathological Examination	177	169	0	346
696			Science of Basic and Local Nursing	101	116	0	217
697			Science of Clinical Nursing	104	156	0	260
			Medicine in Gene r a l total	450	468	0	918
	MEDICINE Total			4,221	790	0	5,011
702	I N T E R D I S C I P L I N E		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	21	0	1	22
703			Physical Education	119	60	2	181
704			Human Geography	55	3	3	61
705			Physical Geography	35	0	2	37
			Geography total	90	3	5	98
706			Home Science(inclu. Cloth/Living Environments)	50	77	0	127
707			Food Culture	30	25	0	55
			Domestic Science total	80	102	0	182
708			Science of Cultural Property	0	0	0	0

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

Code	Subj ect	Subdi vision	Item	Universities	Junior Colleges	Colleges of Technology	Total	
711	I N T E R D I S C I P L I N A R Y A R E A		Science Education	9	1	3	13	
712			Educational Engineering	5	8	7	20	
713			Curriculum Studies	25	17	5	47	
714			Japanese Language Education	9	0	0	9	
			Science Education・Curriculum Education total		48	26	15	89
721			Statistics		3	3	0	6
731				Computer Science	87	7	3	97
732				Intelligent Informatics	110	8	3	121
733				Study of Information System (Inclu. Library and Information	55	11	2	68
				Information Science total	252	26	8	286
741				Social System Engineering	25	6	0	31
751				Natural Disaster Science	6	0	3	9
761				Plasma Science and Technology	25	2	4	31
772				Nuclear Fusion	7	0	2	9
773				Energy Science General	14	0	0	14
774				Nuclear Power Science	0	0	0	0
				Energy total	21	0	2	23
801				Environmental Dynamic Analysis	20	2	3	25
802				Environmental Influence Assessment (inclu. Radiobiology)	28	11	0	39
803				Environmental Preservation	36	8	0	44
				Environmental Science total	84	21	3	108
811				Biological Organic Chemistry	33	1	0	34
812				Structured Biochemistry	54	7	0	61
813				Functional Biochemistry	64	11	0	75
				Biological Chemistry total	151	19	0	170
821				Biophysics	42	0	1	43
822				Molecular Biology	95	3	0	98
823				Cell Biology	62	2	0	64
824				Developmental Biology	36	0	0	36
				Basic Biology total	235	5	1	241
831				Neuroanatomy and Neuroanathology	36	4	0	40
832				Neurochemistry and Neuropharmacology	18	0	0	18
833				Neuro Science in General	43	9	0	52
834				Neuro and Muscular Physiology	33	2	0	35
				Neuro Science (inclu. Brain Science) total	130	15	0	145
841				Laboratory Animal Science	25	0	0	25
851				Medical Organism Engineering and Material Science of Organism	19	5	8	32
			INTERDISCIPLINARY AREA Total		1,334	293	52	1,679
999	WIDE AREA Total			127	34	10	171	
	Item n.a. Total			16	4	0	20	
	Grand Total			12,672	2,277	461	15,410	

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

Code	Subj ect	Subdi vision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total	
211	ARTS • HUMANITIES		Philosophy	834	195	0	0	1,029	
212			Chinese Philosophy	156	17	0	0	173	
213			Indian Philosophy (inclu. Buddhist Studies)	470	123	0	42	635	
214			Religion	484	143	2	2	631	
215			Ethics	184	35	1	0	220	
216			History of Philosophy	296	54	0	6	356	
217			Aesthetics (inclu. Arts)	1,107	742	1	1	1,851	
218			Art History	347	72	0	6	425	
		Philosophy total			3,878	1,381	4	57	5,320
221			Experimental Psychology	652	117	0	6	775	
222			Educational and Social Psychology	1,834	846	0	5	2,685	
223			Sociology (inclu. Social Welfare)	2,392	699	0	13	3,104	
224			Education	1,711	1,047	2	19	2,779	
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	681	161	0	11	853	
		Psychology• Sociology • Education Cultural Anthropology total			7,270	2,870	2	54	10,196
231			Japanese History	786	172	1	26	985	
232			Oriental History	429	38	0	5	472	
233			European History	675	106	2	3	786	
234			Archaeology (inclu. Prehistory)	259	24	0	29	312	
		History total			2,149	340	3	63	2,555
241			Japanese Language	554	162	0	0	716	
242			Japanese Literature	1,569	732	3	2	2,306	
243			Chinese Language and Literature	558	48	0	0	606	
244			English Language and Literature	4,057	1,611	3	0	5,671	
245			French Language and Literature	685	91	0	2	778	
246			German Language and Literature	850	27	0	0	877	
247			Other Foreign Languages and Literatures	386	21	0	0	407	
248			Linguistics and Phonetics	1,294	402	1	0	1,697	
249			Literature in General (i n c l u. Literary Theory, Comparative Literature) and Western Classics	330	89	0	2	421	
		Literature total			10,283	3,183	7	6	13,479
	ARTS • HUMANITIES Total			23,580	7,774	16	180	31,550	
261	LAW	Basic Science of Law	353	45	0	0	398		
262		Public Law	579	79	0	3	661		
263		International Law	351	8	0	0	359		
264		Civil Law	1,030	90	0	3	1,123		
265		Social Law	207	15	0	3	225		
266		Criminal Law	312	21	0	0	333		
267		Politics	1,234	72	0	0	1,306		
	LAW Total			4,066	330	0	9	4,405	
271	ECONOMICS	General Theory of Economics	1,292	115	0	4	1,411		
272		Economical Statistics	226	22	0	4	252		
273		Economic Policy (inclu. Economic Condition)	1,603	115	0	39	1,757		
274		Economic History	608	39	0	4	651		
275		Public Finance, Money and Banking	691	62	0	2	755		
276		Commercial Science	717	124	0	1	842		
277		Business Administration	1,640	380	0	1	2,021		
278	Accounting	996	199	0	0	1,195			
	ECONOMICS Total			7,773	1,056	0	55	8,884	
301	SCIENCE	Algebra	311	22	0	0	333		
302		Geometry	240	13	0	3	256		
304		Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	399	32	2	0	433		
305		Basic Analysis	310	14	1	0	325		
306		Larger-area Analysis	36	2	0	0	38		

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
			Mathematics total	1,296	83	3	3	1,385
311			Astronomy	110	14	0	0	124
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	570	69	0	0	639
322			Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	347	5	5	0	357
323			Solid - State Physics II (Magnetism, Metal Physics,	319	14	0	0	333
324			Physical Properties in General (inclu. Basic Theories)	269	30	1	3	303
325			Physics in General	234	26	1	5	266
			Physics total	1,739	144	7	8	1,898
331			Physics of Solid Earth	76	8	0	2	86
332	S		Meteorology, Oceanography and Hydrology	97	10	0	2	109
333	C		Aeronomy	53	2	0	0	55
334	I		Geology	65	5	0	10	80
335	E		Stratigraphy and Paleontology	32	7	0	0	39
336			Mineralogy, Petrology and Study of Mineral Deposit	76	3	0	0	79
337	N		Geochemistry	66	8	0	0	74
			Earth Science total	465	43	0	14	522
341			Physical Chemistry	417	26	0	4	447
342	C		Organic Chemistry	374	13	2	43	432
343	E		Inorganic Chemistry	203	11	0	0	214
344			Function, Properties and Materials in Chemistry	196	14	0	0	210
345			Substance Transformation	16	0	0	1	17
346			Separation, Refining and Identification	179	9	0	0	188
			Chemistry total	1,385	73	2	48	1,508
351			Genetics	81	19	0	4	104
352			Ecology	219	66	0	43	328
353			Plant Physiology	115	20	0	0	135
354			Morphology, Structure of Organism	102	14	0	13	129
355			Animal Physiology and Metabolism	120	13	0	7	140
356			Morphology and Taxonomy	121	24	0	30	175
			Biology total	758	156	0	97	1,011
361			Physical Anthropology (inclu. Physiological Anthropology)	66	8	0	1	75
			SCIENCE Total	5,819	521	12	171	6,523
401			Applied Physics of Property and Crystallography	159	7	3	1	170
402			Surface Physics	128	6	0	0	134
403			Applied Optics and Quantum Optics	246	14	0	2	262
404			General Applied Physics	91	10	0	9	110
405			Fundamentals of Engineering	65	5	0	0	70
			Applied Physics· Fundamentals of Engineering total	689	42	3	12	746
411	E		Materials for Machines and Strength of Materials	549	28	7	0	584
412	N		Workshop Processes and Production Engineering	478	15	6	0	499
413	G		Design Engineering, Machine Elements and Tribology	256	20	2	1	279
414	I		Fluid Mechanics	501	17	0	0	518
415	E		Heat Engineering	446	20	1	0	467
416	E		Mechanics and Control Engineering	388	29	2	0	419
417	E		Intelligent Mechanics and Machine System	279	29	0	0	308
			Machine Engineering total	2,897	158	18	1	3,074
421			Electric Power Engineering and Electric Machinery	541	24	9	1	575

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
422	E		Electronic and Electric Materials Engineering	495	23	0	8	526
423			Electron Devices and Apparatus Engineering	456	26	4	1	487
424			Information and Communication Engineering	928	92	8	1	1,029
425			System Engineering	258	30	2	2	292
427			Electronic Measurements	402	21	13	4	440
428			Control Engineering	131	8	8	0	147
			Electric and Electronic Engineering total	3,211	224	44	17	3,496
431			Construction Materials and Dynamics in General Civil	224	6	1	0	231
432			Structural Engineering and Seismology	281	20	0	0	301
433			Ground Engineering	238	6	0	3	247
434			Hydraulics and River Engineering	229	11	0	2	242
435			Traffic Engineering and Regional Planning	222	18	0	0	240
436			Civil Environmental System	184	3	0	1	188
			Civil Engineering total	1,378	64	1	6	1,449
441		N	Building Structure and Materials	621	23	0	0	644
442			Building Science and Building Equipment	284	41	0	1	326
443			City Planning and Building Planning	810	131	0	0	941
444			Architectural History and Design	332	83	0	0	415
			Architecture total	2,047	278	0	1	2,326
451		E	Physical Metallurgy	107	2	0	3	112
452			Inorganic Materials and Properties	243	4	0	3	250
453			Composed Materials and Properties	96	5	0	3	104
454			Structural and Functional Materials	126	14	1	8	149
455			Metallurgy and Material Processing	173	16	5	10	204
456			Metal Productive Engineering	53	7	0	0	60
			Material Engineering total	798	48	6	27	879
461		N	Chemical Engineering in General	120	3	0	0	123
462			Reaction and Separation Engineering	100	0	0	1	101
463			Catalyst and Chemical Process	70	3	0	0	73
464			Bioengineering	115	1	0	0	116
465			Industrial Analytical Chemistry	54	0	0	0	54
			Process Engineering total	459	7	0	1	467
471			Industrial Physical Chemistry	139	3	0	6	148
472			Industrial Inorganic Chemistry	87	2	0	0	89
473			Industrial Organic Chemistry	121	10	0	0	131
474			Synthetic Chemistry	134	2	0	8	144
475			Polymer Synthesis	150	7	0	0	157
476			Polymer Structure and Property (inclu. Fiber)	159	58	0	0	217
			Industrial Chemistry total	790	82	0	14	886
481			Aeronautics	131	0	0	0	131
482			Ship Engineering	44	3	0	0	47
483			Marine Engineering	29	0	0	0	29
484			Resource Development Engineering	35	0	0	1	36
			Synthetic Engineering total	239	3	0	1	243
			ENGINEERING Total	12,508	906	72	80	13,566
501	A G R I C U L T U		Plant Breeding	50	6	0	17	73
502			Crop Science	41	9	0	1	51
503			Horticulture and Landscape Architecture	183	68	0	2	253
504			Plant Protection	84	9	0	1	94
505			Sericultural Science and Economic Entomology	25	5	0	14	44

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 G R I C U L T U R E	Agriculture total		383	97	0	35	515
511			Plant Fertilizer and Manure and Soil Science	65	15	0	0	80
512			Applied Microbiochemistry and Applied Biochemistry	340	99	0	36	475
513			Biological Productive Chemistry and Bioorganic Chemistry	69	13	0	6	88
514			Food Science and Nutritional Chemistry	488	514	0	15	1,017
		Agricultural Chemistry total		962	641	0	57	1,660
521			Forestry	52	12	0	0	64
522			Wood Science	24	2	0	2	28
		Forestry total		76	14	0	2	92
531			Fisheries in General	202	20	0	0	222
532			Fisheries Chemistry	63	19	0	3	85
		Fisheries total		265	39	0	3	307
541		Agricultural Economics		276	41	0	0	317
551			Irrigation, Drainage and Reclamation Engineering and Rural	65	9	0	2	76
552			Agricultural Machinery	39	18	0	0	57
553			Biological Environment	22	2	0	0	24
		Agricultural Engineering total		126	29	0	2	157
561			Animal Science and Grassland Science	123	9	0	1	133
562			Applied Animal Science	92	3	0	4	99
563			Basic Veterinary Medicine and Basic Animal Science	235	8	0	28	271
564			Applied Veterinary Medicine	192	2	0	27	221
		Animal Science- Veterinary Medicine total		642	22	0	60	724
571			Biological Resource Science	26	11	0	6	43
572			Applied Molecular Cell Biology	27	5	0	0	32
		Interdisciplinary Agricultural Science total		53	16	0	6	75
		AGRICULTURE Total		2,783	899	0	165	3,847
601	M E D I C I N E		Anatomy in General (inclu. Histology, Embryology)	421	34	0	9	464
602			Physiology in General	389	51	0	0	440
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional	266	84	0	1	351
604			Pharmacology in General	336	14	0	4	354
605			Medical Chemistry in General	270	34	0	13	317
606			Pathological Medical Chemistry	112	21	0	8	141
		Physiology total		1,794	238	0	35	2,067
611			Hominal Pathology	452	14	0	3	469
612			Experimental Pathology	155	15	0	26	196
613			Parasitology (inclu. Medical Zoology)	153	8	0	1	162
614			Bacteriology (inclu. Eumycetes)	260	34	0	20	314
615			Virology	100	4	0	28	132
616			Immunology	343	12	0	23	378
		Pathology total		1,463	87	0	101	1,651
621			Hygiene	273	29	0	17	319
622			Public Health and Health Science	640	214	0	8	862
623			Legal Medicine	214	3	0	0	217
		Social Medicine total		1,127	246	0	25	1,398
631			Internal Medicine in General	454	16	0	1	471
632			Gastroenterology	710	0	0	7	717
633			Internal Medicine Respiratory System	306	1	0	5	312
634			Neurological Medicine	339	17	0	4	360
635			Cardioangiopathy	747	16	0	19	782
636			Pediatrics	560	29	0	6	595
637			Dermatology	326	2	0	3	331
638			Radiology	501	27	0	6	534
639			Neuropsychiatry	613	17	0	2	632

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
640	M E D I C I N E		Endocrinology and Metabolic Science	203	6	0	3	212
641			Hematology	346	1	0	3	350
642			Internal Medicine of Kidney	287	4	0	5	296
643			Embryology and Newborn Medicine	43	0	0	0	43
644			Endocrinology	132	3	0	3	138
645			Metabolic Science	91	7	0	0	98
			Internal Medicine total	5,658	146	0	67	5,871
651			Surgery in General	543	1	0	2	546
652			Gastroenterological Surgery	604	2	0	12	618
653			Thoracic Surgery	371	1	0	9	381
654			Neurosurgery	409	0	0	6	415
655			Orthopedic Surgery	596	14	0	8	618
656			Anesthesiology and Rescue Medicine	404	1	0	6	411
657			Urology	351	2	0	7	360
658			Obstetrics and Gynecology	436	5	0	3	444
659			Oto-rhino-laryngology	370	5	0	4	379
660			Ophthalmology	322	0	0	4	326
661			Pediatric Surgery	78	0	0	0	78
662			Formative Surgery	78	0	0	0	78
			Surgery total	4,562	31	0	61	4,654
671			Oral Anatomy and Morphological Basic Dentistry	513	10	0	0	523
672			Functional Basic Dentistry	412	7	0	0	419
673			Morbid Dentistry (inclu. Dental Radiology)	279	5	0	0	284
674			Conservative Dentistry	668	11	0	0	679
675			Prosthodontics and Dental Technology	1,569	17	0	2	1,588
676			Oral Surgery	744	34	0	0	778
677			Orthodontics, Pedodontics and Social Dentistry	68	1	0	0	69
678			Periodontological Dentistry	4,253	85	0	2	4,340
			Dentistry total	952	6	0	23	981
681			Chemical Pharmaceutics	376	0	0	2	378
682			Physical Pharmaceutics	1,212	9	0	28	1,249
683			Biopharmaceutics	74	0	0	3	77
684			Molecular Pharmaceutics	23	4	0	0	27
685			Environmental Pharmaceutics	2,637	19	0	56	2,712
			Pharmaceutics total	135	12	0	1	148
691			Medical Sociology	26	0	0	3	29
692			Human Genetics	228	4	0	2	234
693			Applied Pharmacology and Medical Pharmacology	192	27	0	0	219
694			Pathological Examination	147	150	0	0	297
696			Science of Basic and Local Nursing	163	88	0	0	251
697			Science of Clinical Nursing	157	89	0	0	246
			Medicine in General total	1,048	370	0	6	1,424
			MEDICINE Total	22,542	1,222	0	353	24,117
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)	149	13	0	0	162
703			Physical Education	1,542	585	0	0	2,127
704			Human Geography	355	35	0	9	399
705			Physical Geography	122	14	0	0	136
			Geography total	477	49	0	9	535
706			Home Science (inclu. Cloth/Living Environments)	610	1,205	0	0	1,815
707			Food Culture	101	295	0	0	396
			Domestic Science total	711	1,500	0	0	2,211
708			Science of Cultural Property	3	0	0	0	3

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	
711	I N T E R D I S C I P L I N A R Y A R E A		Science Education	103	48	0	2	153	
712			Educational Engineering	255	136	9	0	400	
713			Curriculum Studies	392	374	3	0	769	
714			Japanese Language Education	165	26	0	21	212	
		Science Education· Curriculum Education total			915	584	12	23	1,534
721		Statistics			155	8	0	1	164
731			Computer Science	665	122	4	0	791	
732			Intelligent Informatics	429	72	2	0	503	
733			Study of Information System (Inclu. Library and Information	699	266	1	5	971	
		Information Science total			1,793	460	7	5	2,265
741		Social System Engineering			299	17	0	0	316
751		Natural Disaster Science			14	0	0	1	15
761		Plasma Science and Technology			141	3	0	6	150
772			Nuclear Fusion	27	0	0	3	30	
773			Energy Science General	75	8	2	1	86	
774			Nuclear Power Science	59	0	0	0	59	
		Energy total			161	8	2	4	175
801			Environmental Dynamic Analysis	102	13	2	0	117	
802			Environmental Influence Assessment (inclu. Radiobiology)	121	20	4	10	155	
803			Environmental Preservation	155	14	0	4	173	
		Environmental Science total			378	47	6	14	445
811			Biological Organic Chemistry	110	13	0	19	142	
812			Structured Biochemistry	179	6	0	10	195	
813			Functional Biochemistry	216	23	0	2	241	
		Biological Chemistry total			505	42	0	31	578
821			Biophysics	150	5	0	1	156	
822			Molecular Biology	390	25	0	24	439	
823			Cell Biology	202	8	0	16	226	
824			Developmental Biology	97	3	0	3	103	
		Basic Biology total			839	41	0	44	924
831			Neuroanatomy and Neuroanathology	108	7	0	0	115	
832			Neurochemistry and Neuropharmacology	167	6	0	3	176	
833			Neuro Science in General	213	6	0	5	224	
834			Neuro and Muscular Physiology	139	25	0	1	165	
		Neuro Science (inclu. Brain Science) total			627	44	0	9	680
841		Laboratory Animal Science			47	0	0	45	92
851		Medical Organism Engineering and Material Science of Organism			280	21	0	1	302
		INTERDISCIPLINARY AREA Total			9,036	3,422	27	193	12,678
999	WIDE AREA Total			1,000	458	4	25	1,487	
	Item n.a. Total			137	22	0	1	160	
	Grand Total			89,244	16,610	131	1,232	107,217	

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

Code	Subj ect	Subdi vision	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	1,485	51	71	21	113	1,741
212			Chinese Philosophy	289	6	18	9	20	342
213			Indian Philosophy (inclu. Buddhist Studies)	608	40	40	23	52	763
214			Religion	627	36	44	26	40	773
215			Ethics	372	14	23	5	28	442
216			History of Philosophy	445	26	24	9	53	557
217			Aesthetics (inclu. Arts)	2,179	136	142	45	200	2,702
218			Art History	653	29	58	28	56	824
			Philosophy total	6,658	338	420	166	562	8,144
221			Experimental Psychology	964	170	305	87	69	1,595
222			Educational and Social Psychology	2,965	390	746	194	213	4,508
223			Sociology (inclu. Social Welfare)	2,923	272	671	202	258	4,326
224			Education	3,684	354	550	155	294	5,037
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	985	65	203	131	84	1,468
			Psychology· Sociology · Education Cultural Anthropology total	11,521	1,251	2,475	769	918	16,934
231			Japanese History	1,425	88	100	19	159	1,791
232			Oriental History	723	37	67	42	55	924
233			European History	1,062	30	70	26	75	1,263
234			Archaeology (inclu. Prehistory)	430	42	88	67	32	659
			History total	3,640	197	325	154	321	4,637
241			Japanese Language	997	47	68	5	81	1,198
242			Japanese Literature	2,762	61	119	13	227	3,182
243			Chinese Language and Literature	790	39	55	32	55	971
244			English Language and Literature	6,562	272	287	81	515	7,717
245			French Language and Literature	1,027	32	42	13	65	1,179
246			German Language and Literature	1,319	49	78	27	84	1,557
247			Other Foreign Languages and Literatures	632	24	45	26	54	781
248			Linguistics and Phonetics	2,059	121	201	117	194	2,692
249			Literature in General (i n c l u. Literary Theory, Comparative Literature) and Western Classics	499	17	22	9	57	604
			Literature total	16,647	662	917	323	1,332	19,881
			ARTS · HUMANITIES Total	38,466	2,448	4,137	1,412	3,133	49,596
261	L A W		Basic Science of Law	562	22	42	12	42	680
262			Public Law	898	31	70	19	69	1,087
263			International Law	462	12	45	15	32	566
264			Civil Law	1,469	31	105	28	99	1,732
265			Social Law	292	13	44	10	29	388
266			Criminal Law	411	8	47	6	30	502
267			Politics	1,634	70	157	76	129	2,066
			LAW Total	5,728	187	510	166	430	7,021
271	E C O N O M I C S		General Theory of Economics	1,784	94	236	98	128	2,340
272			Economical Statistics	263	29	95	35	28	450
273			Economic Policy (inclu. Economic Condition)	1,876	139	271	161	162	2,609
274			Economic History	786	22	110	34	59	1,011
275			Public Finance, Money and Banking	874	46	115	27	79	1,141
276			Commercial Science	770	48	86	42	62	1,008
277			Business Administration	1,895	151	272	108	161	2,587
278			Accounting	1,245	53	117	38	93	1,546
			ECONOMICS Total	9,493	582	1,302	543	772	12,692
301	S C I E N C E		Algebra	753	36	77	31	42	939
302			Geometry	658	29	79	32	52	850
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	756	99	184	59	63	1,161
305			Basic Analysis	707	49	111	44	42	953
306			Larger-area Analysis	135	21	27	17	3	203
			Mathematics total	3,009	234	478	183	202	4,106
311			Astronomy	178	139	186	134	27	664
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	443	415	743	613	132	2,346

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

Code	Subj ect	Subdi vision	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
322			Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	406	459	421	56	62	1,404
323			Solid - State Physics II (Magnetism, Metal Physics, Cryogenics)	302	492	473	127	93	1,487
324			Physical Properties in General (inclu. Basic Theories)	440	212	262	107	50	1,071
325			Physics in General	341	196	206	49	28	820
			Physics total	1,932	1,774	2,105	952	365	7,128
331			Physics of Solid Earth	287	160	239	96	37	819
332			Meteorology, Oceanography and Hydrology	287	181	223	116	30	837
333	S		Aeronomy	58	53	91	97	11	310
334			Geology	244	41	121	83	18	507
335	C		Stratigraphy and Paleontology	177	16	54	54	8	309
336	I		Mineralogy, Petrology and Study of Mineral Deposit	291	79	160	78	17	625
337			Geochemistry	163	109	125	67	27	491
	E		Earth Science total	1,507	639	1,013	591	148	3,898
341			Physical Chemistry	715	681	363	89	99	1,947
342	N		Organic Chemistry	580	642	269	64	70	1,625
343			Inorganic Chemistry	284	210	181	36	45	756
344	C		Function, Properties and Materials in Chemistry	299	290	201	29	48	867
345	E		Substance Transformation	33	17	32	2	3	87
346			Separation, Refining and Identification	250	192	128	14	34	618
			Chemistry total	2,161	2,032	1,174	234	299	5,900
351			Genetics	245	171	124	49	33	622
352			Ecology	609	152	284	171	45	1,261
353			Plant Physiology	311	203	171	60	30	775
354			Morphology, Structure of Organism	185	101	57	40	18	401
355			Animal Physiology and Metabolism	190	125	101	27	35	478
356			Morphology and Taxonomy	352	78	110	131	43	714
			Biology total	1,892	830	847	478	204	4,251
361			Physical Anthropology (inclu. Physiological Anthropology)	110	43	52	58	6	269
			SCIENCE Total	10,789	5,691	5,855	2,630	1,251	26,216
401			Applied Physics of Property and Crystallography	245	245	177	33	39	739
402			Surface Physics	167	191	104	29	26	517
403			Applied Optics and Quantum	313	279	199	26	41	858
404			General Applied Physics	146	113	65	10	19	353
405	E		Fundamentals of Engineering	108	41	62	11	10	232
	N		Applied Physics- Fundamentals of Engineering total	979	869	607	109	135	2,699
411	G		Materials for Machines and Strength of Materials	818	521	410	49	84	1,882
412	I		Workshop Processes and Production Engineering	564	407	278	25	69	1,343
413	N		Design Engineering, Machine Elements and Tribology	383	245	227	10	62	927
414			Fluid Mechanics	688	511	315	52	84	1,650
415	E		Heat Engineering	623	521	308	41	82	1,575
416			Mechanics and Control Engineering	590	354	274	16	64	1,298
417	E		Intelligent Mechanics and Machine System	423	288	192	27	65	995
	R		Machine Engineering total	4,089	2,847	2,004	220	510	9,670
421	I		Electric Power Engineering and Electric Machinery	618	352	339	31	68	1,408
422	N		Electronic and Electric Materials Engineering	499	581	308	50	92	1,530
423	G		Electron Devices and Apparatus Engineering	502	444	308	31	77	1,362
424			Information and Communication Engineering	1,289	711	515	75	168	2,758
425			System Engineering	337	184	153	22	63	759
427			Electronic Measurements	511	321	260	26	56	1,174
428			Control Engineering	304	124	97	20	22	567

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

Code	Subj ect	Subdi vision	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
			Electric and Electronic Engineering total	4,060	2,717	1,980	255	546	9,558
431			Construction Materials and Dynamics in General Civil Engineering	280	163	158	9	38	648
432			Structural Engineering and Seismology	397	207	228	26	41	899
433			Ground Engineering	352	176	228	31	46	833
434			Hydraulics and River Engineering	382	256	201	36	58	933
435			Traffic Engineering and Regional Planning	292	170	161	28	35	686
436			Civil Environmental System	199	164	151	33	37	584
			Civil Engineering total	1,902	1,136	1,127	163	255	4,583
441	E		Building Structure and Materials	620	330	360	50	76	1,436
442	N		Building Science and Building Equipment	301	158	240	21	33	753
443	G		City Planning and Building Planning	963	281	389	92	116	1,841
444			Architectural History and Design	515	78	95	36	41	765
			Architecture total	2,399	847	1,084	199	266	4,795
451	I		Physical Metallurgy	188	249	133	36	26	632
452	N		Inorganic Materials and Properties	304	401	197	43	45	990
453			Composed Materials and Properties	126	107	110	14	21	378
454	E		Structural and Functional Materials	221	254	143	30	36	684
455			Metallurgy and Material Processing	338	244	179	26	43	830
456	E		Metal Productive Engineering	162	162	90	19	18	451
			Material Engineering total	1,339	1,417	852	168	189	3,965
461	R		Chemical Engineering in General	292	297	118	9	47	763
462			Reaction and Separation	195	213	80	21	26	535
463	I		Catalyst and Chemical Process	156	169	61	10	26	422
464			Bioengineering	226	275	114	13	33	661
465	N		Industrial Analytical Chemistry	123	128	50	10	18	329
			Process Engineering total	992	1,082	423	63	150	2,710
471	G		Industrial Physical Chemistry	279	277	106	30	49	741
472			Industrial Inorganic Chemistry	115	122	58	7	22	324
473			Industrial Organic Chemistry	171	158	51	17	28	425
474			Synthetic Chemistry	294	367	74	16	31	782
475			Polymer Synthesis	321	274	81	11	41	728
476			Polymer Structure and Property (inclu. Fiber)	330	313	178	49	36	906
			Industrial Chemistry total	1,510	1,511	548	130	207	3,906
481			Aeronautics	217	154	97	23	25	516
482			Ship Engineering	147	85	70	4	18	324
483			Marine Engineering	46	34	29	1	2	112
484			Resource Development Engineering	92	127	71	23	17	330
			Synthetic Engineering total	502	400	267	51	62	1,282
			ENGINEERING Total	17,772	12,826	8,892	1,358	2,320	43,168
501			Plant Breeding	149	133	67	23	24	396
502			Crop Science	173	106	41	24	18	362
503			Horticulture and Landscape Architecture	444	226	100	31	55	856
504			Plant Protection	229	171	93	38	26	557
505			Sericultural Science and Economic Entomology	62	48	28	6	9	153
			Agriculture total	1,057	684	329	122	132	2,324
511	A		Plant Fertilizer and Manure and Soil Science	203	136	69	55	24	487
512	G		Applied Microbiochemistry and Applied Biochemistry	571	507	335	85	90	1,588
513	R		Biological Productive Chemistry and Bioorganic Chemistry	145	135	98	29	28	435
514	I		Food Science and Nutritional Chemistry	674	563	404	60	89	1,790
			Agricultural Chemistry total	1,593	1,341	906	229	231	4,300
521			Forestry	370	187	150	69	34	810
522			Wood Science	201	213	95	31	34	574
			Forestry total	571	400	245	100	68	1,384
531			Fisheries in General	404	251	200	70	58	983
532			Fisheries Chemistry	136	153	86	17	15	407
			Fisheries total	540	404	286	87	73	1,390
541			Agricultural Economics	558	61	124	88	33	864

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
551	AGRICULTURE		Irrigation, Drainage and Reclamation Engineering and Rural Planning	281	152	112	45	27	617
552			Agricultural Machinery	145	146	63	17	29	400
553			Biological Environment	85	46	31	9	18	189
			Agricultural Engineering total	511	344	206	71	74	1,206
561			Animal Science and Grassland Science	179	190	60	29	29	487
562			Applied Animal Science	146	138	60	30	30	404
563			Basic Veterinary Medicine and Basic Animal Science	232	319	159	60	42	812
564			Applied Veterinary Medicine	169	239	128	35	37	608
			Animal Science· Veterinary Medicine total	726	886	407	154	138	2,311
571			Biological Resource Science	67	49	61	29	14	220
572			Applied Molecular Cell Biology	34	42	32	5	11	124
			Interdisciplinary Agricultural Science total	101	91	93	34	25	344
			AGRICULTURE Total	5,657	4,211	2,596	885	774	14,123
601	MEDICINE		Anatomy in General (inclu. Histology, Embryology)	328	432	199	90	57	1,106
602			Physiology in General	308	471	190	65	47	1,081
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional	188	230	211	39	43	711
604			Pharmacology in General	191	440	101	54	56	842
605			Medical Chemistry in General	196	423	188	76	37	920
606			Pathological Medical Chemistry	86	114	99	35	20	354
			Physiology total	1,297	2,110	988	359	260	5,014
611			Hominal Pathology	326	489	163	61	75	1,114
612			Experimental Pathology	140	343	142	44	30	699
613			Parasitology (inclu. Medical Zoology)	80	132	105	97	29	443
614			Bacteriology (inclu. Eumycetes)	159	316	158	56	37	726
615			Virology	108	238	165	62	32	605
616			Immunology	231	476	200	81	70	1,058
			Pathology total	1,044	1,994	933	401	273	4,645
621			Hygiene	163	252	175	57	31	678
622			Public Health and Health Science	564	505	608	119	133	1,929
623			Legal Medicine	176	266	82	19	31	574
			Social Medicine total	903	1,023	865	195	195	3,181
631			Internal Medicine in General	307	484	154	50	62	1,057
632			Gastroenterology	461	858	156	54	116	1,645
633			Internal Medicine Respiratory System	200	463	101	37	33	834
634			Neurological Medicine	250	418	145	52	61	926
635			Cardioangiopathy	467	966	177	55	94	1,759
636			Pediatrics	458	636	240	70	89	1,493
637			Dermatology	307	439	109	44	77	976
638			Radiology	445	765	200	26	93	1,529
639			Neuropsychiatry	554	607	248	74	85	1,568
640			Endocrinology and Metabolic Science	137	250	76	21	22	506
641			Hematology	286	397	178	49	42	952
642			Internal Medicine of Kidney	162	263	70	26	32	553
643			Embryology and Newborn Medicine	26	52	13	3	2	96
644			Endocrinology	85	189	58	19	20	371
645			Metabolic Science	71	169	21	19	24	304
			Internal Medicine total	4,216	6,956	1,946	599	852	14,569
651			Surgery in General	358	614	91	30	87	1,180
652			Gastroenterological Surgery	446	848	107	46	130	1,577
653			Thoracic Surgery	274	435	78	27	62	876
654			Neurosurgery	319	587	127	27	85	1,145
655			Orthopedic Surgery	522	815	178	57	101	1,673
656			Anesthesiology and Rescue Medicine	454	586	73	28	75	1,216
657			Urology	303	482	117	29	56	987
658			Obstetrics and Gynecology	331	673	100	39	63	1,206
659			Oto-rhino-laryngology	335	515	91	34	49	1,024
660			Ophthalmology	284	476	85	45	50	940
661			Pediatric Surgery	89	135	15	4	9	252

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

Code	Subj ect	Subdi vision	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
662	M E D I C I N E		Formative Surgery	42	63	13	1	8	127
			Surgery total	3,757	6,229	1,075	367	775	12,203
671			Oral Anatomy and Morphological Basic Dentistry	263	407	125	40	40	875
672			Functional Basic Dentistry	157	400	91	30	36	714
673			Morbid Dentistry (inclu. Dental Radiology)	159	281	42	14	36	532
674			Conservative Dentistry	283	703	71	52	86	1,195
675			Prosthodontics and Dental Technology	427	922	125	44	107	1,625
676			Oral Surgery	514	883	124	58	97	1,676
677			Orthodontics, Pedodontics and Social Dentistry	394	844	164	71	117	1,590
678			Periodontological Dentistry	37	111	10	5	17	180
			Dentistry total	2,234	4,551	752	314	536	8,387
681			Chemical Pharmaceuticals	388	727	322	107	81	1,625
682			Physical Pharmaceuticals	166	299	109	21	45	640
683			Biopharmaceutics	553	886	412	93	100	2,044
684			Molecular Pharmaceuticals	49	66	41	13	14	183
685			Environmental Pharmaceuticals	12	15	12	6	3	48
			Pharmaceutics total	1,168	1,993	896	240	243	4,540
691			Medical Sociology	116	78	49	9	31	283
692			Human Genetics	28	54	61	17	6	166
693			Applied Pharmacology and Medical Pharmacology	103	205	96	17	18	439
694			Pathological Examination	132	259	109	25	20	545
696			Science of Basic and Local Nursing	608	657	384	26	116	1,791
697			Science of Clinical Nursing	372	318	148	8	54	900
			Medicine in Gene r a l total	1,359	1,571	847	102	245	4,124
			MEDICINE Total	15,978	26,427	8,302	2,577	3,379	56,663
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)	228	12	28	15	25	308
703			Physical Education	1,843	643	916	88	196	3,686
704			Human Geography	683	21	87	61	43	895
705			Physical Geography	239	25	79	61	11	415
			Geography total	922	46	166	122	54	1,310
706			Home Science(inclu. Cloth/Living Environments)	1,100	462	628	55	114	2,359
707			Food Culture	179	158	142	7	23	509
			Domestic Science total	1,279	620	770	62	137	2,868
708			Science of Cultural Property	22	11	12	7	0	52
711			Science Education	200	67	81	18	18	384
712			Educational Engineering	316	142	168	23	22	671
713			Curriculum Studies	1,437	183	223	43	105	1,991
714			Japanese Language Education	290	75	69	21	33	488
			Science Education· Curriculum Education total	2,243	467	541	105	178	3,534
721			Statistics	230	46	102	17	19	414
731			Computer Science	1,068	560	434	75	98	2,235
732			Intelligent Informatics	774	473	364	46	65	1,722
733			Study of Information System (Inclu. Library and Information Science)	868	255	227	37	121	1,508
			Information Science total	2,710	1,288	1,025	158	284	5,465
741			Social System Engineering	302	90	132	36	31	591
751			Natural Disaster Science	51	30	18	10	2	111
761			Plasma Science and Technology	208	316	173	51	34	782
772			Nuclear Fusion	47	128	76	36	19	306
773			Energy Science General	130	113	103	19	21	386
774			Nuclear Power Science	97	121	111	15	17	361
			Energy total	274	362	290	70	57	1,053
801			Environmental Dynamic Analysis	131	106	117	52	20	426
802			Environmental Influence Assessment (inclu. Radiobiology)	123	161	125	29	27	465
803			Environmental Preservation	188	115	134	37	41	515
			Environmental Science total	442	382	376	118	88	1,406
811			Biological Organic Chemistry	143	201	124	38	21	527
812			Structured Biochemistry	137	188	198	50	35	608
813			Functional Biochemistry	247	262	193	45	27	774

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
	INTERDISCIPLINARY AREA		Biological Chemistry total	527	651	515	133	83	1,909
821			Biophysics	213	168	192	55	30	658
822			Molecular Biology	535	748	349	168	130	1,930
823			Cell Biology	238	374	189	68	55	924
824			Developmental Biology	193	185	122	50	31	581
			Basic Biology total	1,179	1,475	852	341	246	4,093
831			Neuroanatomy and Neuropathology	109	159	72	34	12	386
832			Neurochemistry and Neuropharmacology	79	180	100	28	15	402
833			Neuro Science in General	187	244	174	57	42	704
834			Neuro and Muscular Physiology	161	208	71	39	20	499
			Neuro Science (inclu. Brain Science) total	536	791	417	158	89	1,991
841			Laboratory Animal Science	55	73	77	14	22	241
851			Medical Organism Engineering and Material Science of Organism	215	290	323	49	49	926
			INTERDISCIPLINARY AREA Total	13,266	7,593	6,733	1,554	1,594	30,740
999			WIDE AREA Total	1,334	365	305	115	213	2,332
			Item n.a. Total	150	73	29	12	36	300
			Grand Total	118,633	60,403	38,661	11,252	13,902	242,851

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

Code	Subj ect	Subdi vision	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	537	15	17	6	34	609
212			Chinese Philosophy	127	3	6	4	6	146
213			Indian Philosophy (inclu. Buddhist Studies)	88	2	10	6	9	115
214			Religion	103	4	9	5	7	128
215			Ethics	175	5	14	3	6	203
216			History of Philosophy	133	3	8	2	19	165
217			Aesthetics (inclu. Arts)	535	18	27	19	55	654
218			Art History	266	15	26	19	16	342
			Philosophy total	1,964	65	117	64	152	2,362
221			Experimental Psychology	434	97	120	51	24	726
222			Educational and Social Psychology	1,073	168	241	79	58	1,619
223			Sociology (inclu. Social Welfare)	598	30	128	42	53	851
224			Education	1,495	142	226	73	91	2,027
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	350	20	72	58	37	537
			Psychology· Sociology · Education Cultural Anthropology total	3,950	457	787	303	263	5,760
231			Japanese History	561	38	37	8	56	700
232			Oriental History	316	12	29	22	24	403
233			European History	359	8	22	9	19	417
234			Archaeology (inclu. Prehistory)	238	26	35	25	14	338
			History total	1,474	84	123	64	113	1,858
241			Japanese Language	342	27	21	2	36	428
242			Japanese Literature	616	6	22	2	60	706
243			Chinese Language and Literature	252	10	18	11	17	308
244			English Language and Literature	1,421	36	46	14	70	1,587
245			French Language and Literature	298	11	9	2	14	334
246			German Language and Literature	516	11	27	11	27	592
247			Other Foreign Languages and Literatures	279	7	21	13	17	337
248			Linguistics and Phonetics	651	37	61	49	57	855
249			Literature in General (i n c l u . Literary Theory, Comparative Literature) and Western Classics	154	6	3	1	8	172
			Literature total	4,529	151	228	105	306	5,319
			ARTS · HUMANITIES Total	11,917	757	1,255	536	834	15,299
261	L A W		Basic Science of Law	203	7	20	6	19	255
262			Public Law	300	9	20	13	17	359
263			International Law	154	1	16	9	8	188
264			Civil Law	434	13	42	12	20	521
265			Social Law	113	2	11	0	10	136
266			Criminal Law	127	0	14	1	8	150
267			Politics	495	12	62	32	32	633
			LAW Total	1,826	44	185	73	114	2,242
271	E C O N O M I C S		General Theory of Economics	511	24	93	40	40	708
272			Economical Statistics	95	12	33	17	9	166
273			Economic Policy (inclu. Economic Condition)	464	26	83	52	29	654
274			Economic History	222	4	32	12	11	281
275			Public Finance, Money and Banking	214	9	37	8	19	287
276			Commercial Science	78	5	9	11	10	113
277			Business Administration	306	10	43	25	33	417
278			Accounting	196	9	23	11	17	256
			ECONOMICS Total	2,086	99	353	176	168	2,882
301	S C I E N C E		Algebra	461	13	41	23	24	562
302			Geometry	430	18	51	22	31	552
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	417	63	108	38	31	657
305			Basic Analysis	420	25	70	30	26	571
306			Larger-area Analysis	106	20	18	13	1	158
			Mathematics total	1,834	139	288	126	113	2,500
311			Astronomy	128	128	137	113	23	529
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	243	327	453	475	90	1,588

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		Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	253	338	281	42	45	959
323			Solid - State Physics II (Magnetism, Metal Physics, Cryogenics)	206	363	338	98	70	1,075
324			Physical Properties in General (inclu. Basic Theories)	268	169	162	88	27	714
325			Physics in General	193	140	128	37	17	515
			Physics total	1,163	1,337	1,362	740	249	4,851
331			Physics of Solid Earth	252	145	205	82	33	717
332			Meteorology, Oceanography and Hydrology	232	163	187	106	21	709
333			Aeronomy	45	44	70	85	9	253
334			Geology	198	27	97	63	13	398
335			Stratigraphy and Paleontology	153	15	41	46	7	262
336			Mineralogy, Petrology and Study of Mineral Deposit	247	71	131	69	15	533
337			Geochemistry	127	96	98	58	20	399
			Earth Science total	1,254	561	829	509	118	3,271
341			Physical Chemistry	478	532	226	64	69	1,369
342			Organic Chemistry	379	459	163	45	50	1,096
343			Inorganic Chemistry	178	169	102	19	28	496
344			Function, Properties and Materials in Chemistry	178	244	143	22	32	619
345			Substance Transformation	21	17	25	1	3	67
346			Separation, Refining and Identification	165	120	72	8	24	389
			Chemistry total	1,399	1,541	731	159	206	4,036
351			Genetics	189	143	80	35	24	471
352			Ecology	415	103	178	119	32	847
353			Plant Physiology	225	165	106	41	21	558
354			Morphology, Structure of Organism	112	71	32	29	13	257
355			Animal Physiology and Metabolism	125	82	58	22	23	310
356			Morphology and Taxonomy	250	52	78	98	27	505
			Biology total	1,316	616	532	344	140	2,948
361			Physical Anthropology (inclu. Physiological Anthropology)	70	35	30	45	4	184
	SCIENCE Total			7,164	4,357	3,909	2,036	853	18,319
401	E		Applied Physics of Property and Crystallography	177	184	113	29	28	531
402			Surface Physics	106	159	63	16	22	366
403			Applied Optics and Quantum	200	201	120	11	28	560
404			General Applied Physics	94	74	39	7	6	220
405			Fundamentals of Engineering	73	30	37	6	6	152
			Applied Physics· Fundamentals of Engineering total	650	648	372	69	90	1,829
411			Materials for Machines and Strength of Materials	484	349	274	29	55	1,191
412			Workshop Processes and Production Engineering	307	270	142	15	46	780
413			Design Engineering, Machine Elements and Tribology	237	184	141	6	43	611
414			Fluid Mechanics	426	367	177	39	45	1,054
415			Heat Engineering	406	364	184	28	60	1,042
416			Mechanics and Control Engineering	360	237	160	15	37	809
417			Intelligent Mechanics and Machine System	249	222	120	15	42	648
			Machine Engineering total	2,469	1,993	1,198	147	328	6,135
421	G		Electric Power Engineering and Electric Machinery	348	187	186	19	31	771
422			Electronic and Electric Materials Engineering	290	387	182	34	57	950
423			Electron Devices and Apparatus Engineering	272	311	196	14	43	836
424			Information and Communication Engineering	684	458	269	45	91	1,547
425			System Engineering	160	132	84	16	34	426
427			Electronic Measurements	305	203	146	13	36	703
428			Control Engineering	185	93	69	12	13	372

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

Code	Subj ect	Subdi vision	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
			Electric and Electronic Engineering total	2,244	1,771	1,132	153	305	5,605
431			Construction Materials and Dynamics in General Civil Engineering	161	100	101	7	18	387
432			Structural Engineering and Seismology	226	146	135	21	30	558
433			Ground Engineering	232	125	147	24	29	557
434			Hydraulics and River Engineering	271	199	122	30	41	663
435			Traffic Engineering and Regional Planning	166	129	85	18	21	419
436			Civil Environmental System	139	108	68	26	30	371
			Civil Engineering total	1,195	807	658	126	169	2,955
441	E		Building Structure and Materials	320	185	157	26	40	728
442	N		Building Science and Building Equipment	135	99	98	15	21	368
443	G		City Planning and Building Planning	394	129	138	50	45	756
444			Architectural History and Design	202	44	20	19	14	299
			Architecture total	1,051	457	413	110	120	2,151
451	I		Physical Metallurgy	135	216	102	30	20	503
452	N		Inorganic Materials and Properties	206	305	122	33	32	698
453			Composed Materials and Properties	89	76	55	10	16	246
454	E		Structural and Functional Materials	154	205	84	25	30	498
455			Metallurgy and Material Processing	230	196	123	23	31	603
456	E		Metal Productive Engineering	134	148	73	14	16	385
			Material Engineering total	948	1,146	559	135	145	2,933
461	R		Chemical Engineering in General	212	232	98	6	39	587
462			Reaction and Separation	132	174	58	17	23	404
463	I		Catalyst and Chemical Process	123	150	39	7	21	340
464			Bioengineering	159	220	88	13	29	509
465	N		Industrial Analytical Chemistry	91	105	37	9	12	254
			Process Engineering total	717	881	320	52	124	2,094
471	G		Industrial Physical Chemistry	186	230	67	21	37	541
472			Industrial Inorganic Chemistry	66	89	36	7	15	213
473			Industrial Organic Chemistry	104	112	28	12	18	274
474			Synthetic Chemistry	216	300	57	10	22	605
475			Polymer Synthesis	239	205	54	11	29	538
476			Polymer Structure and Property (inclu. Fiber)	212	254	111	43	22	642
			Industrial Chemistry total	1,023	1,190	353	104	143	2,813
481			Aeronautics	141	127	57	16	16	357
482			Ship Engineering	115	71	55	2	10	253
483			Marine Engineering	30	20	17	1	0	68
484			Resource Development Engineering	73	120	61	23	15	292
			Synthetic Engineering total	359	338	190	42	41	970
			ENGINEERING Total	10,656	9,231	5,195	938	1,465	27,485
501			Plant Breeding	102	98	47	21	17	285
502			Crop Science	131	88	33	23	15	290
503			Horticulture and Landscape Architecture	247	141	58	17	27	490
504			Plant Protection	164	144	73	28	20	429
505			Sericultural Science and Economic Entomology	46	30	17	3	8	104
			Agriculture total	690	501	228	92	87	1,598
511	A		Plant Fertilizer and Manure and Soil Science	146	107	45	45	18	361
512	G		Applied Microbiochemistry and Applied Biochemistry	377	340	202	63	47	1,029
513	R		Biological Productive Chemistry and Bioorganic Chemistry	108	98	64	25	19	314
514	I		Food Science and Nutritional Chemistry	225	209	109	23	20	586
			Agricultural Chemistry total	856	754	420	156	104	2,290
521			Forestry	317	168	133	63	30	711
522			Wood Science	176	196	87	28	26	513
			Forestry total	493	364	220	91	56	1,224
531			Fisheries in General	298	185	163	56	47	749
532			Fisheries Chemistry	110	116	60	12	11	309
			Fisheries total	408	301	223	68	58	1,058
541			Agricultural Economics	309	34	77	55	16	491

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
551	AGRICULTURE		Irrigation, Drainage and Reclamation Engineering and Rural Planning	216	123	91	38	20	488
552			Agricultural Machinery	112	120	54	11	22	319
553			Biological Environment	74	31	18	8	10	141
			Agricultural Engineering total	402	274	163	57	52	948
561			Animal Science and Grassland Science	120	139	39	21	14	333
562			Applied Animal Science	106	106	34	23	19	288
563			Basic Veterinary Medicine and Basic Animal Science	131	182	93	39	19	464
564			Applied Veterinary Medicine	106	117	74	19	19	335
		Animal Science· Veterinary Medicine total		463	544	240	102	71	1,420
571			Biological Resource Science	49	46	42	18	13	168
572			Applied Molecular Cell Biology	26	30	20	4	8	88
			Interdisciplinary Agricultural Science total	75	76	62	22	21	256
		AGRICULTURE Total		3,696	2,848	1,633	643	465	9,285
601	MEDICINE		Anatomy in General (inclu. Histology, Embryology)	151	257	84	38	26	556
602			Physiology in General	152	257	87	30	31	557
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional	73	117	62	16	15	283
604			Pharmacology in General	87	218	41	30	31	407
605			Medical Chemistry in General	83	286	97	45	24	535
606			Pathological Medical Chemistry	35	60	49	25	11	180
		Physiology total		581	1,195	420	184	138	2,518
611			Hominal Pathology	166	245	67	37	31	546
612			Experimental Pathology	82	211	69	35	17	414
613			Parasitology (inclu. Medical Zoology)	38	80	48	54	19	239
614			Bacteriology (inclu. Eumycetes)	76	163	61	25	22	347
615			Virology	78	176	100	45	17	416
616			Immunology	143	296	98	43	46	626
		Pathology total		583	1,171	443	239	152	2,588
621			Hygiene	69	104	77	39	13	302
622			Public Health and Health Science	223	238	244	68	52	825
623			Legal Medicine	98	136	38	10	15	297
		Social Medicine total		390	478	359	117	80	1,424
631			Internal Medicine in General	142	213	68	30	31	484
632			Gastroenterology	222	405	79	31	52	789
633			Internal Medicine Respiratory System	102	257	61	20	18	458
634			Neurological Medicine	140	203	94	33	32	502
635			Cardioangiopathy	216	450	95	34	42	837
636			Pediatrics	215	343	108	39	41	746
637			Dermatology	162	244	52	25	50	533
638			Radiology	257	465	105	14	50	891
639			Neuropsychiatry	269	313	118	44	46	790
640			Endocrinology and Metabolic Science	78	126	32	14	13	263
641			Hematology	160	227	98	24	24	533
642			Internal Medicine of Kidney	66	112	26	7	15	226
643			Embryology and Newborn Medicine	11	22	3	0	0	36
644			Endocrinology	48	122	32	15	10	227
645			Metabolic Science	43	106	12	15	19	195
		Internal Medicine total		2,131	3,608	983	345	443	7,510
651			Surgery in General	170	266	42	15	34	527
652			Gastroenterological Surgery	223	439	53	32	65	812
653			Thoracic Surgery	125	226	39	10	38	438
654			Neurosurgery	156	339	65	13	50	623
655			Orthopedic Surgery	242	453	103	28	50	876
656			Anesthesiology and Rescue Medicine	266	320	42	16	48	692
657			Urology	152	269	66	14	30	531
658			Obstetrics and Gynecology	162	390	47	27	35	661
659			Oto-rhino-laryngology	158	285	37	20	21	521
660			Ophthalmology	152	283	41	25	28	529
661			Pediatric Surgery	46	89	12	2	3	152

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
662	M E D I C I N E		Formative Surgery	11	23	6	0	4	44
			Surgery total	1,863	3,382	553	202	406	6,406
671			Oral Anatomy and Morphological Basic Dentistry	70	174	44	20	16	324
672			Functional Basic Dentistry	56	165	28	10	18	277
673			Morbid Dentistry (inclu. Dental Radiology)	59	125	18	7	13	222
674			Conservative Dentistry	87	303	28	26	34	478
675			Prosthodontics and Dental Technology	157	435	55	28	45	720
676			Oral Surgery	257	460	61	28	42	848
677			Orthodontics, Pedodontics and Social Dentistry	201	412	76	35	53	777
678			Periodontological Dentistry	20	62	1	4	9	96
			Dentistry total	907	2,136	311	158	230	3,742
681			Chemical Pharmaceutics	150	252	77	32	27	538
682			Physical Pharmaceutics	51	101	41	11	11	215
683			Biopharmaceutics	194	292	122	35	50	693
684			Molecular Pharmaceutics	21	39	21	10	8	99
685			Environmental Pharmaceutics	4	8	3	3	2	20
			Pharmaceutics total	420	692	264	91	98	1,565
691			Medical Sociology	47	34	24	4	10	119
692			Human Genetics	24	41	49	14	5	133
693			Applied Pharmacology and Medical Pharmacology	28	110	37	10	6	191
694			Pathological Examination	57	140	45	15	8	265
696			Science of Basic and Local Nursing	238	245	135	17	45	680
697			Science of Clinical Nursing	181	142	48	3	20	394
			Medicine in General total	575	712	338	63	94	1,782
			MEDICINE Total	7,450	13,374	3,671	1,399	1,641	27,535
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)	96	4	12	4	8	124
703			Physical Education	750	211	316	48	53	1,378
704			Human Geography	332	10	36	34	23	435
705			Physical Geography	121	18	50	44	9	242
			Geography total	453	28	86	78	32	677
706			Home Science (inclu. Cloth/Living Environments)	210	45	130	15	17	417
707			Food Culture	22	12	16	5	3	58
			Domestic Science total	232	57	146	20	20	475
708			Science of Cultural Property	19	11	12	7	0	49
711			Science Education	109	36	48	13	12	218
712			Educational Engineering	121	54	57	12	7	251
713			Curriculum Studies	830	96	150	37	62	1,175
714			Japanese Language Education	154	36	47	11	19	267
			Science Education· Curriculum Education total	1,214	222	302	73	100	1,911
721			Statistics	130	27	65	11	11	244
731			Computer Science	576	409	255	47	60	1,347
732			Intelligent Informatics	468	352	212	22	44	1,098
733			Study of Information System (Inclu. Library and Information Science)	200	135	79	15	40	469
			Information Science total	1,244	896	546	84	144	2,914
741			Social System Engineering	115	48	56	17	8	244
751			Natural Disaster Science	40	24	13	8	2	87
761			Plasma Science and Technology	145	265	122	44	25	601
772			Nuclear Fusion	40	119	58	34	16	267
773			Energy Science General	88	94	73	15	16	286
774			Nuclear Power Science	77	110	91	10	14	302
			Energy total	205	323	222	59	46	855
801			Environmental Dynamic Analysis	83	75	69	43	14	284
802			Environmental Influence Assessment (inclu. Radiobiology)	68	102	63	20	18	271
803			Environmental Preservation	102	84	65	26	21	298
			Environmental Science total	253	261	197	89	53	853
811			Biological Organic Chemistry	95	133	78	27	18	351
812			Structured Biochemistry	87	98	120	28	19	352
813			Functional Biochemistry	161	160	93	23	21	458

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
	INTERDISCIPLINARY AREA		Biological Chemistry total	343	391	291	78	58	1,161
821			Biophysics	140	127	131	38	23	459
822			Molecular Biology	397	546	229	115	106	1,393
823			Cell Biology	166	267	110	51	40	634
824			Developmental Biology	141	150	90	40	21	442
			Basic Biology total	844	1,090	560	244	190	2,928
831			Neuroanatomy and Neuropathology	67	91	45	19	9	231
832			Neurochemistry and Neuropharmacology	47	85	51	13	12	208
833			Neuro Science in General	113	163	92	32	28	428
834			Neuro and Muscular Physiology	90	130	41	27	11	299
			Neuro Science (inclu. Brain Science) total	317	469	229	91	60	1,166
841			Laboratory Animal Science	25	41	40	7	11	124
851			Medical Organism Engineering and Material Science of Organism	135	196	197	37	27	592
			INTERDISCIPLINARY AREA Total	6,560	4,564	3,412	999	848	16,383
999			WIDE AREA Total	335	122	112	47	58	674
			Item n.a. Total	51	28	15	9	17	120
			Grand Total	51,741	35,424	19,740	6,856	6,463	120,224

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

Code	Sub ject	Subdi vision	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	88	3	5	1	6	103
212			Chinese Philosophy	19	0	1	0	3	23
213			Indian Philosophy (inclu. Buddhist Studies)	9	2	1	0	1	13
214			Religion	10	0	2	2	0	14
215			Ethics	18	0	0	0	1	19
216			History of Philosophy	30	2	0	3	1	36
217			Aesthetics (inclu. Arts)	148	14	12	3	20	197
218			Art History	45	0	6	3	3	57
			Philosophy total	367	21	27	12	35	462
221			Experimental Psychology	57	8	21	5	3	94
222			Educational and Social Psychology	142	15	37	2	8	204
223			Sociology (inclu. Social Welfare)	251	27	65	12	16	371
224			Education	179	13	24	6	9	231
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	53	5	10	7	3	78
			Psychology • Sociology • Education Cultural Anthropology total	682	68	157	32	39	978
231			Japanese History	95	1	6	0	4	106
232			Oriental History	40	0	4	3	2	49
233			European History	54	1	1	1	3	60
234			Archaeology (inclu. Prehistory)	4	0	1	2	2	9
			History total	193	2	12	6	11	224
241			Japanese Language	45	1	4	0	4	54
242			Japanese Literature	150	0	9	0	11	170
243			Chinese Language and Literature	46	3	2	3	3	57
244			English Language and Literature	396	5	18	7	33	459
245			French Language and Literature	55	0	7	2	3	67
246			German Language and Literature	79	2	5	0	2	88
247			Other Foreign Languages and Literatures	25	2	2	4	4	37
248			Linguistics and Phonetics	102	4	15	9	10	140
249			Literature in General (i n c l u . Literary Theory, Comparative Literature) and Western Classics	7	0	0	1	3	11
			Literature total	905	17	62	26	73	1,083
			ARTS • HUMANITIES Total	2,147	108	258	76	158	2,747
261	L A W		Basic Science of Law	26	0	0	0	1	27
262			Public Law	53	1	5	2	6	67
263			International Law	15	1	2	0	1	19
264			Civil Law	73	0	7	1	7	88
265			Social Law	20	1	5	0	1	27
266			Criminal Law	18	0	1	0	0	19
267			Politics	104	4	11	3	5	127
			LAW Total	309	7	31	6	21	374
271	E C O N O M I C S		General Theory of Economics	160	14	32	3	12	221
272			Economical Statistics	24	1	4	1	2	32
273			Economic Policy (inclu. Economic Condition)	132	11	24	15	16	198
274			Economic History	62	4	9	0	4	79
275			Public Finance, Money and Banking	64	4	18	4	9	99
276			Commercial Science	45	4	2	1	1	53
277			Business Administration	111	9	18	4	7	149
278			Accounting	71	3	6	7	8	95
			ECONOMICS Total	669	50	113	35	59	926
301	S C I E N C E		Algebra	38	3	2	1	0	44
302			Geometry	33	0	3	4	2	42
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	49	3	13	2	4	71
305			Basic Analysis	45	5	4	1	2	57
306			Larger-area Analysis	5	0	2	0	0	7
			Mathematics total	170	11	24	8	8	221
311			Astronomy	2	1	6	2	0	11
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	26	13	42	28	10	119

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

Code	Sub ject	Subdi vision	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
322			Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	17	39	26	1	5	88
323			Solid - State Physics II (Magnetism, Metal Physics, Cryogenics)	11	25	30	9	4	79
324			Physical Properties in General (inclu. Basic Theories)	23	5	20	2	4	54
325			Physics in General	12	15	8	2	2	39
			Physics total	89	97	126	42	25	379
331			Physics of Solid Earth	2	2	9	2	1	16
332			Meteorology, Oceanography and Hydrology	5	3	6	5	0	19
333	S		Aeronomy	1	0	0	1	0	2
334			Geology	12	5	5	7	0	29
335	C		Stratigraphy and Paleontology	6	0	1	1	0	8
336	I		Mineralogy, Petrology and Study of Mineral Deposit	7	3	3	0	0	13
337			Geochemistry	6	3	4	3	2	18
	E		Earth Science total	39	16	28	19	3	105
341			Physical Chemistry	43	38	37	8	5	131
342	N		Organic Chemistry	47	22	19	6	3	97
343			Inorganic Chemistry	22	9	9	0	6	46
344	C		Function, Properties and Materials in Chemistry	15	9	11	2	1	38
345	E		Substance Transformation	3	0	0	0	0	3
346			Separation, Refining and Identification	11	13	15	0	2	41
			Chemistry total	141	91	91	16	17	356
351			Genetics	16	12	11	5	3	47
352			Ecology	34	11	21	15	5	86
353			Plant Physiology	29	15	22	10	6	82
354			Morphology, Structure of Organism	7	3	3	2	0	15
355			Animal Physiology and Metabolism	13	7	5	2	1	28
356			Morphology and Taxonomy	19	4	3	7	1	34
			Biology total	118	52	65	41	16	292
361			Physical Anthropology (inclu. Physiological Anthropology)	7	2	0	1	0	10
			SCIENCE Total	566	270	340	129	69	1,374
401			Applied Physics of Property and Crystallography	12	13	9	1	3	38
402			Surface Physics	6	4	4	2	1	17
403			Applied Optics and Quantum	11	15	6	3	1	36
404			General Applied Physics	11	9	2	0	1	23
405	E		Fundamentals of Engineering	2	1	4	3	0	10
	N		Applied Physics-Fundamentals of Engineering total	42	42	25	9	6	124
411	G		Materials for Machines and Strength of Materials	33	49	17	5	3	107
412	I		Workshop Processes and Production Engineering	24	20	18	0	2	64
413	N		Design Engineering, Machine Elements and Tribology	16	3	15	2	1	37
414			Fluid Mechanics	33	23	18	1	3	78
415	E		Heat Engineering	15	31	17	2	1	66
416			Mechanics and Control Engineering	29	15	22	0	4	70
417	E		Intelligent Mechanics and Machine System	19	6	12	1	1	39
	R		Machine Engineering total	169	147	119	11	15	461
421	I		Electric Power Engineering and Electric Machinery	18	21	18	4	1	62
422	N		Electronic and Electric Materials Engineering	11	29	9	3	2	54
423	G		Electron Devices and Apparatus Engineering	12	14	8	0	5	39
424			Information and Communication Engineering	65	58	42	7	10	182
425			System Engineering	19	12	7	1	2	41
427			Electronic Measurements	16	4	8	1	2	31
428			Control Engineering	23	10	9	3	3	48

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

Code	Sub ject	Subdi vision	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
			Electric and Electronic Engineering total	164	148	101	19	25	457
431			Construction Materials and Dynamics in General Civil Engineering	13	11	5	0	1	30
432			Structural Engineering and Seismology	11	8	18	1	2	40
433			Ground Engineering	13	9	6	0	1	29
434			Hydraulics and River Engineering	11	8	5	0	4	28
435			Traffic Engineering and Regional Planning	8	11	7	0	1	27
436			Civil Environmental System	11	7	7	0	0	25
			Civil Engineering total	67	54	48	1	9	179
441	E		Building Structure and Materials	32	14	12	2	4	64
442	N		Building Science and Building Equipment	14	17	25	1	2	59
443	G		City Planning and Building Planning	72	24	36	6	6	144
444			Architectural History and Design	31	10	6	0	4	51
			Architecture total	149	65	79	9	16	318
451	I		Physical Metallurgy	7	6	2	1	1	17
452	N		Inorganic Materials and Properties	4	26	12	0	0	42
453			Composed Materials and Properties	3	5	18	1	1	28
454	E		Structural and Functional Materials	16	10	10	0	1	37
455			Metallurgy and Material Processing	3	10	5	1	4	23
456	E		Metal Productive Engineering	2	4	0	0	0	6
			Material Engineering total	35	61	47	3	7	153
461	R		Chemical Engineering in General	21	24	5	0	3	53
462			Reaction and Separation	7	15	7	0	1	30
463	I		Catalyst and Chemical Process	0	5	4	0	0	9
464			Bioengineering	17	11	7	0	1	36
465	N		Industrial Analytical Chemistry	7	11	0	0	3	21
			Process Engineering total	52	66	23	0	8	149
471	G		Industrial Physical Chemistry	21	13	13	5	0	52
472			Industrial Inorganic Chemistry	8	10	2	0	2	22
473			Industrial Organic Chemistry	10	7	0	1	2	20
474			Synthetic Chemistry	10	17	2	4	0	33
475			Polymer Synthesis	8	20	5	0	0	33
476			Polymer Structure and Property (inclu. Fiber)	20	10	12	0	5	47
			Industrial Chemistry total	77	77	34	10	9	207
481			Aeronautics	8	11	3	1	5	28
482			Ship Engineering	6	11	4	2	1	24
483			Marine Engineering	2	10	2	0	1	15
484			Resource Development Engineering	0	0	2	0	0	2
			Synthetic Engineering total	16	32	11	3	7	69
			ENGINEERING Total	771	692	487	65	102	2,117
501			Plant Breeding	14	13	7	0	4	38
502			Crop Science	9	6	5	0	1	21
503			Horticulture and Landscape Architecture	62	27	8	6	10	113
504			Plant Protection	19	5	8	2	0	34
505			Sericultural Science and Economic Entomology	2	1	2	0	0	5
			Agriculture total	106	52	30	8	15	211
511	A		Plant Fertilizer and Manure and Soil Science	20	11	12	3	0	46
512	G		Applied Microbiochemistry and Applied Biochemistry	29	20	22	5	8	84
513	R		Biological Productive Chemistry and Bioorganic Chemistry	12	11	6	1	3	33
514	I		Food Science and Nutritional Chemistry	62	55	55	8	7	187
			Agricultural Chemistry total	123	97	95	17	18	350
521			Forestry	21	8	1	5	0	35
522			Wood Science	15	6	6	1	5	33
			Forestry total	36	14	7	6	5	68
531			Fisheries in General	1	11	0	0	0	12
532			Fisheries Chemistry	2	5	4	0	2	13
			Fisheries total	3	16	4	0	2	25
541			Agricultural Economics	33	5	10	4	4	56

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

Code	Sub ject	Subdi vision	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
551	A G R I C U L T U R E		Irrigation, Drainage and Reclamation Engineering and Rural Planning	29	14	8	2	0	53
552			Agricultural Machinery	13	4	2	0	5	24
553			Biological Environment	4	9	8	0	3	24
			Agricultural Engineering total	46	27	18	2	8	101
561			Animal Science and Grassland Science	11	1	4	0	5	21
562			Applied Animal Science	7	2	6	1	1	17
563			Basic Veterinary Medicine and Basic Animal Science	33	32	7	2	3	77
564			Applied Veterinary Medicine	11	24	8	4	5	52
			Animal Science· Veterinary Medicine total	62	59	25	7	14	167
571			Biological Resource Science	4	2	2	1	0	9
572			Applied Molecular Cell Biology	0	3	1	0	0	4
			Interdisciplinary Agricultural Science total	4	5	3	1	0	13
			AGRICULTURE Total	413	275	192	45	66	991
601	M E D I C I N E		Anatomy in General (inclu. Histology, Embryology)	23	28	13	16	6	86
602			Physiology in General	17	36	22	6	3	84
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional	18	21	32	4	2	77
604			Pharmacology in General	22	41	10	2	6	81
605			Medical Chemistry in General	25	21	14	5	3	68
606			Pathological Medical Chemistry	10	5	12	3	3	33
			Physiology total	115	152	103	36	23	429
611			Hominal Pathology	16	46	24	4	9	99
612			Experimental Pathology	15	43	19	6	6	89
613			Parasitology (inclu. Medical Zoology)	7	19	11	3	2	42
614			Bacteriology (inclu. Eumycetes)	10	23	17	8	7	65
615			Virology	9	20	20	3	5	57
616			Immunology	8	25	14	4	3	54
			Pathology total	65	176	105	28	32	406
621			Hygiene	19	10	21	4	3	57
622			Public Health and Health Science	70	53	84	12	23	242
623			Legal Medicine	16	30	10	2	2	60
			Social Medicine total	105	93	115	18	28	359
631			Internal Medicine in General	25	48	19	5	5	102
632			Gastroenterology	23	83	12	11	10	139
633			Internal Medicine Respiratory System	17	29	12	3	3	64
634			Neurological Medicine	16	28	9	4	7	64
635			Cardioangiolog	36	78	14	5	7	140
636			Pediatrics	44	71	23	7	7	152
637			Dermatology	26	56	17	7	6	112
638			Radiology	30	46	16	0	12	104
639			Neuropsychiatry	45	55	29	10	7	146
640			Endocrinology and Metabolic Science	11	10	4	4	2	31
641			Hematology	13	31	17	6	2	69
642			Internal Medicine of Kidney	8	13	8	2	0	31
643			Embryology and Newborn Medicine	1	10	5	0	1	17
644			Endocrinology	2	1	1	2	0	6
645			Metabolic Science	2	6	0	1	2	11
			Internal Medicine total	299	565	186	67	71	1,188
651			Surgery in General	30	57	10	1	9	107
652			Gastroenterological Surgery	25	86	18	6	12	147
653			Thoracic Surgery	22	27	3	2	3	57
654			Neurosurgery	34	53	13	3	4	107
655			Orthopedic Surgery	53	75	27	11	13	179
656			Anesthesiology and Rescue Medicine	37	58	6	2	10	113
657			Urology	22	47	13	4	10	96
658			Obstetrics and Gynecology	26	60	4	2	9	101
659			Oto-rhino-laryngology	42	58	14	0	10	124
660			Ophthalmology	25	46	10	2	2	85
661			Pediatric Surgery	11	10	0	1	0	22

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

Code	Sub ject	Subdi vision	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
662			Formative Surgery	5	0	0	0	0	5
			Surgery total	332	577	118	34	82	1,143
671			Oral Anatomy and Morphological Basic Dentistry	6	12	7	2	1	28
672			Functional Basic Dentistry	4	11	3	0	0	18
673			Morbid Dentistry (inclu. Dental Radiology)	9	8	2	0	7	26
674	M		Conservative Dentistry	7	22	7	0	2	38
675	E		Prosthodontics and Dental Technology	10	20	1	3	1	35
676	D		Oral Surgery	44	38	8	3	17	110
677	I		Orthodontics, Pedodontics and Social Dentistry	4	16	10	0	5	35
678			Periodontological Dentistry	3	9	2	0	1	15
			Dentistry total	87	136	40	8	34	305
681	C		Chemical Pharmaceuticals	37	37	25	5	2	106
682			Physical Pharmaceuticals	10	23	9	1	4	47
683	I		Biopharmaceutics	43	34	18	7	0	102
684			Molecular Pharmaceuticals	3	2	2	0	0	7
685	N		Environmental Pharmaceuticals	1	0	0	0	0	1
			Pharmaceutics total	94	96	54	13	6	263
691	E		Medical Sociology	7	1	4	0	4	16
692			Human Genetics	2	0	1	0	1	4
693			Applied Pharmacology and Medical Pharmacology	0	3	11	0	0	14
694			Pathological Examination	27	14	13	3	4	61
696			Science of Basic and Local Nursing	172	220	123	5	43	563
697			Science of Clinical Nursing	94	95	53	1	17	260
			Medicine in Gene r a l total	302	333	205	9	69	918
			MEDICINE Total	1,399	2,128	926	213	345	5,011
702			History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	20	0	2	0	0	22
703			Physical Education	62	31	78	4	6	181
704			Human Geography	43	1	11	5	1	61
705			Physical Geography	25	0	7	3	2	37
			Geography total	68	1	18	8	3	98
706			Home Science (inclu. Cloth/Living Environments)	53	18	43	5	8	127
707			Food Culture	16	25	11	0	3	55
			Domestic Science total	69	43	54	5	11	182
708			Science of Cultural Property	0	0	0	0	0	0
711			Science Education	6	1	5	0	1	13
712			Educational Engineering	11	4	5	0	0	20
713			Curriculum Studies	39	4	2	0	2	47
714			Japanese Language Education	7	1	1	0	0	9
			Science Education· Curriculum Education total	63	10	13	0	3	89
721			Statistics	2	1	2	1	0	6
731			Computer Science	35	26	24	5	7	97
732			Intelligent Informatics	56	33	27	4	1	121
733			Study of Information System (Inclu. Library and Information Science)	37	9	14	6	2	68
			Information Science total	128	68	65	15	10	286
741			Social System Engineering	17	4	3	2	5	31
751			Natural Disaster Science	5	2	1	1	0	9
761			Plasma Science and Technology	7	13	7	3	1	31
772			Nuclear Fusion	1	0	6	0	2	9
773			Energy Science General	4	2	7	0	1	14
774			Nuclear Power Science	0	0	0	0	0	0
			Energy total	5	2	13	0	3	23
801			Environmental Dynamic Analysis	9	5	10	0	1	25
802			Environmental Influence Assessment (inclu. Radiobiology)	5	18	13	2	1	39
803			Environmental Preservation	13	6	22	2	1	44
			Environmental Science total	27	29	45	4	3	108
811			Biological Organic Chemistry	10	15	5	2	2	34
812			Structured Biochemistry	14	15	25	4	3	61
813			Functional Biochemistry	26	27	14	5	3	75

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

Code	Sub ject	Subdi vision	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
			Biological Chemistry total	50	57	44	11	8	170
821			Biophysics	12	11	14	3	3	43
822			Molecular Biology	27	43	19	6	3	98
823			Cell Biology	13	28	13	6	4	64
824			Developmental Biology	12	9	8	5	2	36
			Basic Biology total	64	91	54	20	12	241
831			Neuroanatomy and Neuropathology	18	15	4	3	0	40
832			Neurochemistry and Neuropharmacology	3	6	6	3	0	18
833			Neuro Science in General	13	15	20	4	0	52
834			Neuro and Muscular Physiology	11	19	2	1	2	35
			Neuro Science (inclu. Brain Science) total	45	55	32	11	2	145
841			Laboratory Animal Science	13	4	0	0	8	25
851			Medical Organism Engineering and Material Science of Organism	8	12	10	0	2	32
			INTERDISCIPLINARY AREA Total	653	423	441	85	77	1,679
999			WIDE AREA Total	101	34	20	4	12	171
			Item n.a. Total	8	7	3	0	2	20
			Grand Total	7,036	3,994	2,811	658	911	15,410

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

Code	Subj ect	Subdi vision	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	860	33	49	14	73	1,029
212			Chinese Philosophy	143	3	11	5	11	173
213			Indian Philosophy (inclu. Buddhist Studies)	511	36	29	17	42	635
214			Religion	514	32	33	19	33	631
215			Ethics	179	9	9	2	21	220
216			History of Philosophy	282	21	16	4	33	356
217			Aesthetics (inclu. Arts)	1,496	104	103	23	125	1,851
218			Art History	342	14	26	6	37	425
			Philosophy total	4,327	252	276	90	375	5,320
221			Experimental Psychology	473	65	164	31	42	775
222			Educational and Social Psychology	1,750	207	468	113	147	2,685
223			Sociology (inclu. Social Welfare)	2,074	215	478	148	189	3,104
224			Education	2,010	199	300	76	194	2,779
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	582	40	121	66	44	853
			Psychology· Sociology · Education Cultural Anthropology total	6,889	726	1,531	434	616	10,196
231			Japanese History	769	49	57	11	99	985
232			Oriental History	367	25	34	17	29	472
233			European History	649	21	47	16	53	786
234			Archaeology (inclu. Prehistory)	188	16	52	40	16	312
			History total	1,973	111	190	84	197	2,555
241			Japanese Language	610	19	43	3	41	716
242			Japanese Literature	1,996	55	88	11	156	2,306
243			Chinese Language and Literature	492	26	35	18	35	606
244			English Language and Literature	4,745	231	223	60	412	5,671
245			French Language and Literature	674	21	26	9	48	778
246			German Language and Literature	724	36	46	16	55	877
247			Other Foreign Languages and Literatures	328	15	22	9	33	407
248			Linguistics and Phonetics	1,306	80	125	59	127	1,697
249			Literature in General (i n c l u . Literary Theory, Comparative Literature) and Western Classics	338	11	19	7	46	421
			Literature total	11,213	494	627	192	953	13,479
			ARTS · HUMANITIES Total	24,402	1,583	2,624	800	2,141	31,550
261	L A W		Basic Science of Law	333	15	22	6	22	398
262			Public Law	545	21	45	4	46	661
263			International Law	293	10	27	6	23	359
264			Civil Law	962	18	56	15	72	1,123
265			Social Law	159	10	28	10	18	225
266			Criminal Law	266	8	32	5	22	333
267			Politics	1,035	54	84	41	92	1,306
			LAW Total	3,593	136	294	87	295	4,405
271	E C O N O M I C S		General Theory of Economics	1,113	56	111	55	76	1,411
272			Economical Statistics	144	16	58	17	17	252
273			Economic Policy (inclu. Economic Condition)	1,280	102	164	94	117	1,757
274			Economic History	502	14	69	22	44	651
275			Public Finance, Money and Banking	596	33	60	15	51	755
276			Commercial Science	647	39	75	30	51	842
277			Business Administration	1,478	132	211	79	121	2,021
278			Accounting	978	41	88	20	68	1,195
			ECONOMICS Total	6,738	433	836	332	545	8,884
301	S C I E N C E		Algebra	254	20	34	7	18	333
302			Geometry	195	11	25	6	19	256
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	290	33	63	19	28	433
305			Basic Analysis	242	19	37	13	14	325
306			Larger-area Analysis	24	1	7	4	2	38
			Mathematics total	1,005	84	166	49	81	1,385
311			Astronomy	48	10	43	19	4	124
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	174	75	248	110	32	639

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		Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	136	82	114	13	12	357
323			Solid - State Physics II (Magnetism, Metal Physics, Cryogenics)	85	104	105	20	19	333
324			Physical Properties in General (inclu. Basic Theories)	149	38	80	17	19	303
325			Physics in General	136	41	70	10	9	266
			Physics total	680	340	617	170	91	1,898
331			Physics of Solid Earth	33	13	25	12	3	86
332			Meteorology, Oceanography and Hydrology	50	15	30	5	9	109
333			Aeronomy	12	9	21	11	2	55
334			Geology	34	9	19	13	5	80
335			Stratigraphy and Paleontology	18	1	12	7	1	39
336			Mineralogy, Petrology and Study of Mineral Deposit	37	5	26	9	2	79
337			Geochemistry	30	10	23	6	5	74
			Earth Science total	214	62	156	63	27	522
341			Physical Chemistry	194	111	100	17	25	447
342			Organic Chemistry	154	161	87	13	17	432
343			Inorganic Chemistry	84	32	70	17	11	214
344			Function, Properties and Materials in Chemistry	106	37	47	5	15	210
345			Substance Transformation	9	0	7	1	0	17
346			Separation, Refining and Identification	74	59	41	6	8	188
			Chemistry total	621	400	352	59	76	1,508
351			Genetics	40	16	33	9	6	104
352			Ecology	160	38	85	37	8	328
353			Plant Physiology	57	23	43	9	3	135
354			Morphology, Structure of Organism	66	27	22	9	5	129
355			Animal Physiology and Metabolism	52	36	38	3	11	140
356			Morphology and Taxonomy	83	22	29	26	15	175
			Biology total	458	162	250	93	48	1,011
361			Physical Anthropology (inclu. Physiological Anthropology)	33	6	22	12	2	75
	SCIENCE Total			3,059	1,064	1,606	465	329	6,523
401	E		Applied Physics of Property and Crystallography	56	48	55	3	8	170
402			Surface Physics	55	28	37	11	3	134
403			Applied Optics and Quantum	102	63	73	12	12	262
404			General Applied Physics	41	30	24	3	12	110
405			Fundamentals of Engineering	33	10	21	2	4	70
			Applied Physics- Fundamentals of Engineering total	287	179	210	31	39	746
411			Materials for Machines and Strength of Materials	301	123	119	15	26	584
412			Workshop Processes and Production Engineering	233	117	118	10	21	499
413			Design Engineering, Machine Elements and Tribology	130	58	71	2	18	279
414			Fluid Mechanics	229	121	120	12	36	518
415			Heat Engineering	202	126	107	11	21	467
416			Mechanics and Control Engineering	201	102	92	1	23	419
417			Intelligent Mechanics and Machine System	155	60	60	11	22	308
			Machine Engineering total	1,451	707	687	62	167	3,074
421	G		Electric Power Engineering and Electric Machinery	252	144	135	8	36	575
422			Electronic and Electric Materials Engineering	198	165	117	13	33	526
423			Electron Devices and Apparatus Engineering	218	119	104	17	29	487
424			Information and Communication Engineering	540	195	204	23	67	1,029
425			System Engineering	158	40	62	5	27	292
427			Electronic Measurements	190	114	106	12	18	440
428			Control Engineering	96	21	19	5	6	147

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

Code	Subj ect	Subdi vision	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
			Electric and Electronic Engineering total	1,652	798	747	83	216	3,496
431			Construction Materials and Dynamics in General Civil Engineering	106	52	52	2	19	231
432			Structural Engineering and Seismology	160	53	75	4	9	301
433			Ground Engineering	107	42	75	7	16	247
434			Hydraulics and River Engineering	100	49	74	6	13	242
435			Traffic Engineering and Regional Planning	118	30	69	10	13	240
436			Civil Environmental System	49	49	76	7	7	188
			Civil Engineering total	640	275	421	36	77	1,449
441	E		Building Structure and Materials	268	131	191	22	32	644
442	N		Building Science and Building Equipment	152	42	117	5	10	326
443	G		City Planning and Building Planning	497	128	215	36	65	941
444			Architectural History and Design	282	24	69	17	23	415
			Architecture total	1,199	325	592	80	130	2,326
451	I		Physical Metallurgy	46	27	29	5	5	112
452	N		Inorganic Materials and Properties	94	70	63	10	13	250
453			Composed Materials and Properties	34	26	37	3	4	104
454	E		Structural and Functional Materials	51	39	49	5	5	149
455			Metallurgy and Material Processing	105	38	51	2	8	204
456	E		Metal Productive Engineering	26	10	17	5	2	60
			Material Engineering total	356	210	246	30	37	879
461	R		Chemical Engineering in General	59	41	15	3	5	123
462			Reaction and Separation	56	24	15	4	2	101
463	I		Catalyst and Chemical Process	33	14	18	3	5	73
464			Bioengineering	50	44	19	0	3	116
465	N		Industrial Analytical Chemistry	25	12	13	1	3	54
			Process Engineering total	223	135	80	11	18	467
471	G		Industrial Physical Chemistry	72	34	26	4	12	148
472			Industrial Inorganic Chemistry	41	23	20	0	5	89
473			Industrial Organic Chemistry	57	39	23	4	8	131
474			Synthetic Chemistry	68	50	15	2	9	144
475			Polymer Synthesis	74	49	22	0	12	157
476			Polymer Structure and Property (inclu. Fiber)	98	49	55	6	9	217
			Industrial Chemistry total	410	244	161	16	55	886
481			Aeronautics	68	16	37	6	4	131
482			Ship Engineering	26	3	11	0	7	47
483			Marine Engineering	14	4	10	0	1	29
484			Resource Development Engineering	19	7	8	0	2	36
			Synthetic Engineering total	127	30	66	6	14	243
			ENGINEERING Total	6,345	2,903	3,210	355	753	13,566
501			Plant Breeding	33	22	13	2	3	73
502			Crop Science	33	12	3	1	2	51
503			Horticulture and Landscape Architecture	135	58	34	8	18	253
504			Plant Protection	46	22	12	8	6	94
505			Sericultural Science and Economic Entomology	14	17	9	3	1	44
			Agriculture total	261	131	71	22	30	515
511	A		Plant Fertilizer and Manure and Soil Science	37	18	12	7	6	80
512	G		Applied Microbiochemistry and Applied Biochemistry	165	147	111	17	35	475
513	R		Biological Productive Chemistry and Bioorganic Chemistry	25	26	28	3	6	88
514	I		Food Science and Nutritional Chemistry	387	299	240	29	62	1,017
			Agricultural Chemistry total	614	490	391	56	109	1,660
521			Forestry	32	11	16	1	4	64
522			Wood Science	10	11	2	3	3	28
			Forestry total	42	22	18	3	7	92
531			Fisheries in General	105	55	37	14	11	222
532			Fisheries Chemistry	24	32	22	5	2	85
			Fisheries total	129	87	59	19	13	307
541			Agricultural Economics	216	22	37	29	13	317

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
551	AGRICULTURE		Irrigation, Drainage and Reclamation Engineering and Rural Planning	36	15	13	5	7	76
552			Agricultural Machinery	20	22	7	6	2	57
553			Biological Environment	7	6	5	1	5	24
			Agricultural Engineering total	63	43	25	12	14	157
561			Animal Science and Grassland Science	48	50	17	8	10	133
562			Applied Animal Science	33	30	20	6	10	99
563			Basic Veterinary Medicine and Basic Animal Science	68	105	59	19	20	271
564			Applied Veterinary Medicine	52	98	46	12	13	221
			Animal Science· Veterinary Medicine total	201	283	142	45	53	724
571			Biological Resource Science	14	1	17	10	1	43
572			Applied Molecular Cell Biology	8	9	11	1	3	32
			Interdisciplinary Agricultural Science total	22	10	28	11	4	75
	AGRICULTURE Total			1,548	1,088	771	197	243	3,847
601	MEDICINE		Anatomy in General (inclu. Histology, Embryology)	154	147	102	36	25	464
602			Physiology in General	139	178	81	29	13	440
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional	97	92	117	19	26	351
604			Pharmacology in General	82	181	50	22	19	354
605			Medical Chemistry in General	88	116	77	26	10	317
606			Pathological Medical Chemistry	41	49	38	7	6	141
			Physiology total	601	763	465	139	99	2,067
611			Hominal Pathology	144	198	72	20	35	469
612			Experimental Pathology	43	89	54	3	7	196
613			Parasitology (inclu. Medical Zoology)	35	33	46	40	8	162
614			Bacteriology (inclu. Eumycetes)	73	130	80	23	8	314
615			Virology	21	42	45	14	10	132
616			Immunology	80	155	88	34	21	378
			Pathology total	396	647	385	134	89	1,651
621			Hygiene	75	138	77	14	15	319
622			Public Health and Health Science	271	214	280	39	58	862
623			Legal Medicine	62	100	34	7	14	217
			Social Medicine total	408	452	391	60	87	1,398
631			Internal Medicine in General	140	223	67	15	26	471
632			Gastroenterology	216	370	65	12	54	717
633			Internal Medicine Respiratory System	81	177	28	14	12	312
634			Neurological Medicine	94	187	42	15	22	360
635			Cardioangiopathy	215	438	68	16	45	782
636			Pediatrics	199	222	109	24	41	595
637			Dermatology	119	139	40	12	21	331
638			Radiology	158	254	79	12	31	534
639			Neuropsychiatry	240	239	101	20	32	632
640			Endocrinology and Metabolic Science	48	114	40	3	7	212
641			Hematology	113	139	63	19	16	350
642			Internal Medicine of Kidney	88	138	36	17	17	296
643			Embryology and Newborn Medicine	14	20	5	3	1	43
644			Endocrinology	35	66	25	2	10	138
645			Metabolic Science	26	57	9	3	3	98
			Internal Medicine total	1,786	2,783	777	187	338	5,871
651			Surgery in General	158	291	39	14	44	546
652			Gastroenterological Surgery	198	323	36	8	53	618
653			Thoracic Surgery	127	182	36	15	21	381
654			Neurosurgery	129	195	49	11	31	415
655			Orthopedic Surgery	227	287	48	18	38	618
656			Anesthesiology and Rescue Medicine	151	208	25	10	17	411
657			Urology	129	166	38	11	16	360
658			Obstetrics and Gynecology	143	223	49	10	19	444
659			Oto-rhino-laryngology	135	172	40	14	18	379
660			Ophthalmology	107	147	34	18	20	326
661			Pediatric Surgery	32	36	3	1	6	78

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

Code	Subj ect	Subdi vision	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
662			Formative Surgery	26	40	7	1	4	78
			Surgery total	1,562	2,270	404	131	287	4,654
671			Oral Anatomy and Morphological Basic Dentistry	187	221	74	18	23	523
672			Functional Basic Dentistry	97	224	60	20	18	419
673			Morbid Dentistry (inclu. Dental Radiology)	91	148	22	7	16	284
674			Conservative Dentistry	189	378	36	26	50	679
675			Prosthodontics and Dental Technology	260	467	69	13	61	870
676			Oral Surgery	213	385	55	27	38	718
677			Orthodontics, Pedodontics and Social Dentistry	189	416	78	36	59	778
678			Periodontological Dentistry	14	40	7	1	7	69
			Dentistry total	1,240	2,279	401	148	272	4,340
681			Chemical Pharmaceuticals	201	438	220	70	52	981
682			Physical Pharmaceuticals	105	175	59	9	30	378
683			Biopharmaceutics	316	560	272	51	50	1,249
684			Molecular Pharmaceuticals	25	25	18	3	6	77
685			Environmental Pharmaceuticals	7	7	9	3	1	27
			Pharmaceutics total	654	1,205	578	136	139	2,712
691			Medical Sociology	62	43	21	5	17	148
692			Human Genetics	2	13	11	3	0	29
693			Applied Pharmacology and Medical Pharmacology	75	92	48	7	12	234
694			Pathological Examination	48	105	51	7	8	219
696			Science of Basic and Local Nursing	198	192	126	4	28	548
697			Science of Clinical Nursing	97	81	47	4	17	246
			Medicine in Gene r a l total	482	526	304	30	82	1,424
			MEDICINE Total	7,129	10,925	3,705	965	1,393	24,117
702			History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	112	8	14	11	17	162
703			Physical Education	1,031	401	522	36	137	2,127
704			Human Geography	308	10	40	22	19	399
705			Physical Geography	93	7	22	14	0	136
			Geography total	401	17	62	36	19	535
706			Home Science(inclu. Cloth/Living Environments)	837	399	455	35	89	1,815
707			Food Culture	141	121	115	2	17	396
			Domestic Science total	978	520	570	37	106	2,211
708			Science of Cultural Property	3	0	0	0	0	3
711			Science Education	85	30	28	5	5	153
712			Educational Engineering	184	84	106	11	15	400
713			Curriculum Studies	568	83	71	6	41	769
714			Japanese Language Education	129	38	21	10	14	212
			Science Education・Curriculum Education total	966	235	226	32	75	1,534
721			Statistics	98	18	35	5	8	164
731			Computer Science	457	125	155	23	31	791
732			Intelligent Informatics	250	88	125	20	20	503
733			Study of Information System (Inclu. Library and Information Science)	631	111	134	16	79	971
			Information Science total	1,338	324	414	59	130	2,265
741			Social System Engineering	170	38	73	17	18	316
751			Natural Disaster Science	6	4	4	1	0	15
761			Plasma Science and Technology	56	38	44	4	8	150
772			Nuclear Fusion	6	9	12	2	1	30
773			Energy Science General	38	17	23	4	4	86
774			Nuclear Power Science	20	11	20	5	3	59
			Energy total	64	37	55	11	8	175
801			Environmental Dynamic Analysis	39	26	38	9	5	117
802			Environmental Influence Assessment (inclu. Radiobiology)	50	41	49	7	8	155
803			Environmental Preservation	73	25	47	9	19	173
			Environmental Science total	162	92	134	25	32	445
811			Biological Organic Chemistry	38	53	41	9	1	142
812			Structured Biochemistry	36	75	53	18	13	195
813			Functional Biochemistry	60	75	86	17	3	241

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

Code	Subj ect	Subdi vision	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
			Biological Chemistry total	134	203	180	44	17	578
821	I N T E R D I S C I P L I N A R Y		Biophysics	61	30	47	14	4	156
822			Molecular Biology	111	159	101	47	21	439
823			Cell Biology	59	79	66	11	11	226
824			Developmental Biology	40	26	24	5	8	103
			Basic Biology total	271	294	238	77	44	924
831			Neuroanatomy and Neuropathology	24	53	23	12	3	115
832			Neurochemistry and Neuropharmacology	29	89	43	12	3	176
833			Neuro Science in General	61	66	62	21	14	224
834			Neuro and Muscular Physiology	60	59	28	11	7	165
			Neuro Science (inclu. Brain Science) total	174	267	156	56	27	680
841			Laboratory Animal Science	17	28	37	7	3	92
851			Medical Organism Engineering and Material Science of Organism	72	82	116	12	20	302
			INTERDISCIPLINARY AREA Total	6,053	2,606	2,880	470	669	12,678
999			WIDE AREA Total	898	209	173	64	143	1,487
			Item n.a. Total	91	38	11	3	17	160
			Grand Total	59,856	20,985	16,110	3,738	6,528	107,217

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	77	8	3	0	0	0	88	
212			Chinese Philosophy	15	3	1	0	0	0	19	
213			Indian Philosophy (inclu. Buddhist Studies)	33	4	1	1	0	4	43	
214			Religion	45	12	0	0	0	1	58	
215			Ethics	26	2	0	0	0	0	28	
216			History of Philosophy	34	3	0	0	0	0	37	
217			Aesthetics (inclu. Arts)	206	63	0	1	2	0	272	
218			Art History	77	6	0	2	6	0	91	
			Philosophy total	513	101	5	4	8	5	636	
221			Experimental Psychology	55	2	0	1	0	0	58	
222			Educational and Social Psychology	108	15	0	4	4	0	131	
223			Sociology (inclu. Social Welfare)	243	21	0	3	1	0	268	
224			Education	193	31	0	2	4	0	230	
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	240	16	0	21	0	3	280	
		Psychology• Sociology • Education Cultural Anthropology total			839	85	0	31	9	3	967
231			Japanese History	42	5	1	10	1	0	59	
232			Oriental History	141	6	0	1	0	0	148	
233			European History	139	12	1	0	0	2	154	
234			Archaeology (inclu. Prehistory)	67	1	0	2	8	5	83	
			History total	389	24	2	13	9	7	444	
241				Japanese Language	24	0	0	0	1	0	25
242				Japanese Literature	46	10	0	2	0	0	58
243				Chinese Language and Literature	77	3	0	0	0	0	80
244				English Language and Literature	417	84	5	0	0	0	506
245		French Language and Literature		103	11	1	0	0	1	116	
246		German Language and Literature		132	2	1	0	0	0	135	
247		Other Foreign Languages and Literatures		90	1	0	0	0	0	91	
248		Linguistics and Phonetics		203	27	1	2	5	0	238	
249		Literature in General (i n c l u. Literary Theory, Comparative Literature) and Western Classics		48	5	0	0	0	0	53	
		Literature total	1,140	143	8	4	6	1	1,302		
	ARTS • HUMANITIES Total			2,881	353	15	52	32	16	3,349	
261	LAW	Basic Science of Law	42	2	0	0	0	0	44		
262		Public Law	61	1	1	0	0	0	63		
263		International Law	53	0	0	0	0	0	53		
264		Civil Law	78	3	0	0	0	0	81		
265		Social Law	21	1	0	0	0	0	22		
266		Criminal Law	30	0	0	0	0	0	30		
267		Politics	228	6	0	1	0	0	235		
	LAW Total			513	13	1	1	0	0	528	
271	ECONOMICS	General Theory of Economics	112	5	0	1	0	2	120		
272		Economical Statistics	19	0	0	0	0	0	19		
273		Economic Policy (inclu. Economic Condition)	208	3	1	0	0	0	212		
274		Economic History	85	1	0	1	0	0	87		
275		Public Finance, Money and Banking	56	3	0	0	0	0	59		
276		Commercial Science	45	2	0	0	0	0	47		
277		Business Administration	124	12	0	0	0	0	136		
278		Accounting	50	6	0	0	0	0	56		
	ECONOMICS Total			699	32	1	2	0	2	736	
301	SCIENCE	Algebra	57	1	2	0	0	0	60		
302		Geometry	48	0	0	0	0	0	48		
304		Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	73	0	0	4	0	0	77		
305		Basic Analysis	68	1	1	0	0	0	70		
306		Larger-area Analysis	23	0	0	0	0	0	23		
		Mathematics total	269	2	3	4	0	0	278		
311		Astronomy	37	0	0	7	0	0	44		
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	220	2	2	19	0	0	243		

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			Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	41	0	1	3	0	0	45
323			Solid - State Physics II (Magnetism, Metal Physics, Cryogenics)	96	1	2	1	0	0	100
324			Physical Properties in General (inclu. Basic Theories)	62	1	1	5	0	0	69
325			Physics in General	52	0	0	3	0	0	55
			Physics total	471	4	6	31	0	0	512
331			Physics of Solid Earth	77	0	0	5	0	0	82
332			Meteorology, Oceanography and Hydrology	75	1	0	5	0	0	81
333	S		Aeronomy	29	0	1	5	0	0	35
334	C		Geology	59	0	0	0	1	0	60
335			Stratigraphy and Paleontology	33	1	0	1	5	0	40
336	I		Mineralogy, Petrology and Study of Mineral Deposit	69	0	0	0	0	0	69
337	E		Geochemistry	38	0	1	0	1	0	40
			Earth Science total	380	2	2	16	7	0	407
341			Physical Chemistry	96	4	0	8	0	0	108
342	N		Organic Chemistry	52	0	3	2	0	0	57
343	C		Inorganic Chemistry	25	1	1	0	0	0	27
344	E		Function, Properties and Materials in Chemistry	37	1	0	0	0	0	38
345			Substance Transformation	3	0	0	0	0	0	3
346			Separation, Refining and Identification	25	0	0	1	0	0	26
			Chemistry total	238	6	4	11	0	0	259
351			Genetics	22	0	0	2	0	1	25
352			Ecology	124	5	0	0	3	5	137
353			Plant Physiology	39	1	0	3	0	0	43
354			Morphology, Structure of Organism	22	1	0	1	1	0	25
355			Animal Physiology and Metabolism	22	0	0	0	0	0	22
356			Morphology and Taxonomy	79	2	0	1	16	4	102
			Biology total	308	9	0	7	20	10	354
361			Physical Anthropology (inclu. Physiological Anthropology)	38	0	0	0	3	0	41
			SCIENCE Total	1,741	23	15	76	30	10	1,895
401			Applied Physics of Property and Crystallography	24	1	2	1	0	0	28
402			Surface Physics	22	0	1	0	0	0	23
403			Applied Optics and Quantum Optics	32	0	1	0	0	2	35
404			General Applied Physics	10	0	0	0	0	0	10
405	E		Fundamentals of Engineering	7	0	0	0	0	0	7
			Applied Physics·Fundamentals of Engineering total	95	1	4	1	0	2	103
411	G		Materials for Machines and Strength of Materials	58	0	3	0	0	0	61
412	I		Workshop Processes and Production Engineering	42	0	1	0	0	0	43
413	N		Design Engineering, Machine Elements and Tribology	19	0	0	0	0	0	19
414	E		Fluid Mechanics	53	0	1	0	0	0	54
415			Heat Engineering	38	1	1	1	0	0	41
416	E		Mechanics and Control Engineering	27	0	1	0	0	0	28
417			Intelligent Mechanics and Machine System	42	0	2	0	0	0	44
			Machine Engineering total	279	1	9	1	0	0	290
421	I		Electric Power Engineering and Electric Machinery	46	0	2	0	0	0	48
422	N		Electronic and Electric Materials Engineering	61	0	4	0	0	0	65
423	G		Electron Devices and Apparatus Engineering	39	0	2	1	0	0	42
424			Information and Communication Engineering	83	1	3	3	0	0	90
425			System Engineering	26	1	0	1	0	0	28
427			Electronic Measurements	26	0	3	0	0	0	29
428			Control Engineering	16	1	5	0	0	0	22

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
			Electric and Electronic Engineering total	297	3	19	5	0	0	324
431			Construction Materials and Dynamics in General Civil	24	0	0	0	0	0	24
432			Structural Engineering and Seismology	28	0	1	0	0	0	29
433			Ground Engineering	29	0	1	0	0	0	30
434			Hydraulics and River Engineering	38	1	2	0	0	0	41
435			Traffic Engineering and Regional Planning	40	0	2	0	0	0	42
436			Civil Environmental System	29	0	1	0	0	0	30
			Civil Engineering total	188	1	7	0	0	0	196
441	E		Building Structure and Materials	32	0	1	0	0	0	33
442	N		Building Science and Building Equipment	28	1	0	0	0	0	29
443			City Planning and Building Planning	112	13	0	0	0	0	125
444	G		Architectural History and Design	57	6	0	0	2	0	65
			Architecture total	229	20	1	0	2	0	252
451	I		Physical Metallurgy	28	0	1	0	0	0	29
452			Inorganic Materials and Properties	48	0	0	0	0	0	48
453	N		Composed Materials and Properties	16	0	0	0	0	0	16
454			Structural and Functional Materials	28	1	2	0	0	0	31
455	E		Metallurgy and Material Processing	26	0	1	0	0	0	27
456			Metal Productive Engineering	17	0	1	0	0	0	18
			Material Engineering total	163	1	5	0	0	0	169
461			Chemical Engineering in General	19	0	2	0	0	0	21
462	R		Reaction and Separation	16	0	2	0	0	0	18
463			Catalyst and Chemical Process	20	0	0	0	0	0	20
464	I		Bioengineering	31	0	0	0	0	0	31
465			Industrial Analytical Chemistry	15	0	0	0	0	0	15
			Process Engineering total	101	0	4	0	0	0	105
471			Industrial Physical Chemistry	22	0	0	0	0	0	22
472	G		Industrial Inorganic Chemistry	9	0	0	0	0	0	9
473			Industrial Organic Chemistry	15	0	0	0	0	0	15
474			Synthetic Chemistry	30	0	2	0	0	1	33
475			Polymer Synthesis	33	0	0	0	0	0	33
476			Polymer Structure and Property (inclu. Fiber)	33	0	0	1	0	0	34
			Industrial Chemistry total	142	0	2	1	0	1	146
481			Aeronautics	21	0	0	5	0	0	26
482			Ship Engineering	12	0	0	0	0	0	12
483			Marine Engineering	4	0	0	0	0	0	4
484			Resource Development Engineering	24	0	0	0	0	0	24
			Synthetic Engineering total	61	0	0	5	0	0	66
			ENGINEERING Total	1,555	27	51	13	2	3	1,651
501			Plant Breeding	22	0	0	0	1	0	23
502			Crop Science	20	1	0	0	0	0	21
503			Horticulture and Landscape Architecture	41	6	0	0	0	0	47
504			Plant Protection	26	0	0	0	0	0	26
505			Sericultural Science and Economic Entomology	7	0	0	0	0	0	7
			Agriculture total	116	7	0	0	1	0	124
511	A		Plant Fertilizer and Manure and Soil Science	40	0	0	0	0	0	40
512	G		Applied Microbiochemistry and Applied Biochemistry	54	4	0	0	0	0	58
513			Biological Productive Chemistry and Bioorganic Chemistry	18	0	0	0	0	1	19
514			Food Science and Nutritional Chemistry	40	8	0	0	0	0	48
			Agricultural Chemistry total	152	12	0	0	0	1	165
521			Forestry	71	1	0	0	0	0	72
522			Wood Science	30	0	0	0	0	0	30
			Forestry total	101	1	0	0	0	0	102
531			Fisheries in General	70	0	0	0	0	0	70
532			Fisheries Chemistry	7	0	0	0	0	0	7
			Fisheries total	77	0	0	0	0	0	77
541			Agricultural Economics	96	1	0	0	0	0	97

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
551	AGRICULTURE		Irrigation, Drainage and Reclamation Engineering and Rural Planning	41	0	0	0	0	1	42
552			Agricultural Machinery	15	3	0	0	0	0	18
553			Biological Environment	14	0	0	0	0	0	14
			Agricultural Engineering total	70	3	0	0	0	1	74
561			Animal Science and Grassland Science	27	0	0	0	0	0	27
562			Applied Animal Science	21	0	0	0	0	0	21
563			Basic Veterinary Medicine and Basic Animal Science	38	0	0	0	1	0	39
564			Applied Veterinary Medicine	34	0	0	0	0	0	34
			Animal Science· Veterinary Medicine total	120	0	0	0	1	0	121
571			Biological Resource Science	19	1	0	1	0	1	22
572			Applied Molecular Cell Biology	2	0	0	0	0	0	2
			Interdisciplinary Agricultural Science total	21	1	0	1	0	1	24
		AGRICULTURE Total		753	25	0	1	2	3	784
601	MEDICINE		Anatomy in General (inclu. Histology, Embryology)	33	1	0	0	0	0	34
602			Physiology in General	52	1	0	2	0	0	55
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional	26	2	0	0	0	0	28
604			Pharmacology in General	25	0	0	0	0	0	25
605			Medical Chemistry in General	26	0	0	0	0	1	27
606			Pathological Medical Chemistry	15	0	0	0	0	0	15
			Physiology total	177	4	0	2	0	1	184
611			Hominal Pathology	26	2	0	0	0	0	28
612			Experimental Pathology	19	0	0	0	0	1	20
613			Parasitology (inclu. Medical Zoology)	41	0	0	0	0	0	41
614			Bacteriology (inclu. Eumycetes)	27	0	0	0	0	1	28
615			Virology	23	0	0	0	0	0	23
616			Immunology	27	0	0	0	0	0	27
			Pathology total	163	2	0	0	0	2	167
621			Hygiene	15	1	0	0	0	0	16
622			Public Health and Health Science	69	4	0	0	0	0	73
623			Legal Medicine	17	0	0	0	0	0	17
			Social Medicine total	101	5	0	0	0	0	106
631			Internal Medicine in General	22	0	0	0	0	0	22
632			Gastroenterology	26	0	0	0	0	0	26
633			Internal Medicine Respiratory	20	0	0	0	0	0	20
634			Neurological Medicine	25	0	0	2	0	0	27
635			Cardioangiopathy	33	0	0	0	0	0	33
636			Pediatrics	41	1	0	0	0	0	42
637			Dermatology	27	0	0	0	0	0	27
638			Radiology	45	2	0	0	0	0	47
639			Neuropsychiatry	32	0	0	0	0	0	32
640			Endocrinology and Metabolic	10	0	0	0	0	0	10
641			Hematology	30	0	0	0	0	0	30
642			Internal Medicine of Kidney	8	0	0	0	0	0	8
643			Embryology and Newborn Medicine	0	0	0	0	0	0	0
644			Endocrinology	9	0	0	0	0	0	9
645			Metabolic Science	11	0	0	0	0	0	11
			Internal Medicine total	339	3	0	2	0	0	344
651			Surgery in General	26	0	0	0	0	0	26
652			Gastroenterological Surgery	42	0	0	0	0	0	42
653			Thoracic Surgery	33	0	0	0	0	0	33
654			Neurosurgery	41	0	0	0	0	0	41
655			Orthopedic Surgery	56	0	0	0	0	0	56
656			Anesthesiology and Rescue	43	0	0	0	0	0	43
657			Urology	21	0	0	0	0	0	21
658			Obstetrics and Gynecology	22	0	0	0	0	0	22
659			Oto-rhino-laryngology	35	0	0	0	0	0	35
660			Ophthalmology	24	0	0	0	0	0	24
661			Pediatric Surgery	9	0	0	0	0	0	9
662			Formative Surgery	4	0	0	0	0	0	4
			Surgery total	356	0	0	0	0	0	356

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		
671	MEDICINE	M E D I C I N E	Oral Anatomy and Morphological Basic Dentistry	27	0	0	0	0	0	27		
672			Functional Basic Dentistry	13	1	0	0	0	0	14		
673			Morbid Dentistry (inclu. Dental Radiology)	12	0	0	0	0	0	12		
674			Conservative Dentistry	24	0	0	0	0	0	24		
675			Prosthodontics and Dental Technology	41	0	0	0	0	0	41		
676			Oral Surgery	41	0	0	0	0	0	41		
677			Orthodontics, Pedodontics and Social Dentistry	36	0	0	0	0	0	36		
678			Periodontological Dentistry	1	0	0	0	0	0	1		
			Dentistry total	195	1	0	0	0	0	196		
681		C H E M I S T R Y	P H A R M A C E U T I C S	Chemical Pharmaceutics	52	0	0	0	0	0	52	
682				Physical Pharmaceutics	13	0	0	0	0	0	13	
683				Biopharmaceutics	46	0	0	0	0	2	48	
684				Molecular Pharmaceutics	7	0	0	1	0	0	8	
685				Environmental Pharmaceutics	3	0	0	0	0	0	3	
			Pharmaceutics total	121	0	0	1	0	2	124		
691		E N G I N E E R I N G	M E D I C A L S C I E N C E S	Medical Sociology	8	1	0	0	0	0	9	
692				Human Genetics	6	0	0	0	0	0	6	
693				Applied Pharmacology and Medical Pharmacology	10	0	0	0	0	0	10	
694				Pathological Examination	7	1	0	0	0	0	8	
696				Science of Basic and Local Nursing	24	9	0	0	0	0	33	
697	Science of Clinical Nursing			8	4	0	0	0	0	12		
	Medicine in Gene r a l total			63	15	0	0	0	0	78		
	MEDICINE Total			1,515	30	0	5	0	5	1,555		
702	I N T E R D I S C I P L I N A R Y A R E A	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)	22	1	0	0	0	0	23		
703			Physical Education	134	13	2	0	0	0	149		
704			G E O G R A P H Y	Human Geography	88	4	0	0	0	0	92	
705				Physical Geography	49	1	0	2	0	0	52	
			Geography total	137	5	0	2	0	0	144		
706			H O M E S C I E N C E	Home Science(inclu. Cloth/Living Environments)	31	16	0	0	0	0	47	
707				Food Culture	4	1	0	0	0	0	5	
			Domestic Science total	35	17	0	0	0	0	52		
708			Science of Cultural Property	5	0	0	0	3	0	8		
711			E D U C A T I O N	E D U C A T I O N	Science Education	6	1	0	0	1	0	8
712					Educational Engineering	17	4	0	1	3	0	25
713					Curriculum Studies	56	10	0	0	1	0	67
714					Japanese Language Education	26	0	0	0	1	0	27
			Science Education·Curriculum Education total	105	15	0	1	6	0	127		
721			Statistics	18	0	0	4	0	0	22		
731			I N F O R M A T I O N S C I E N C E	I N F O R M A T I O N S C I E N C E	Computer Science	84	4	1	1	0	0	90
732					Intelligent Informatics	63	0	1	1	0	0	65
733					Study of Information System (Inclu. Library and Information Science)	42	5	0	1	0	0	48
			Information Science total	189	9	2	3	0	0	203		
741			Social System Engineering	25	0	0	0	0	0	25		
751			Natural Disaster Science	9	0	0	0	0	0	9		
761			Plasma Science and Technology	45	0	0	7	0	0	52		
772			N U C L E A R S C I E N C E	N U C L E A R S C I E N C E	Nuclear Fusion	20	0	0	2	0	0	22
773					Energy Science General	16	0	0	0	0	0	16
774					Nuclear Power Science	20	0	0	0	0	0	20
			Energy total	56	0	0	2	0	0	58		
801			E N V I R O N M E N T A L S C I E N C E	E N V I R O N M E N T A L S C I E N C E	Environmental Dynamic Analysis	26	1	0	0	0	0	27
802					Environmental Influence Assessment (inclu. Radiobiology)	23	2	0	0	0	0	25
803					Environmental Preservation	34	0	0	0	0	0	34
					Environmental Science total	83	3	0	0	0	0	86
811					B I O L O G I C A L C H E M I S T R Y	B I O L O G I C A L C H E M I S T R Y	Biological Organic Chemistry	17	0	0	0	0
812			Structured Biochemistry	15			0	0	0	0	0	15
813			Functional Biochemistry	25			0	0	0	0	1	26
			Biological Chemistry total	57	0	0	0	0	1	58		
821			Biophysics	24	1	2	1	0	0	28		

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
822	INTERDISCIPLINARY AREA		Molecular Biology	76	2	0	6	0	1	85
823			Cell Biology	33	1	0	1	0	0	35
824			Developmental Biology	22	1	0	2	0	0	25
			Basic Biology total	155	5	2	10	0	1	173
831			Neuroanatomy and Neuropathology	16	0	0	0	0	0	16
832			Neurochemistry and Neuropharmacology	23	0	0	0	0	0	23
833			Neuro Science in General	41	0	0	4	0	0	45
834			Neuro and Muscular Physiology	22	3	0	0	0	0	25
			Neuro Science (inclu. Brain Science) total	102	3	0	4	0	0	109
841			Laboratory Animal Science	10	0	0	0	0	2	12
851			Medical Organism Engineering and Material Science of Organism	38	0	0	0	0	0	38
			INTERDISCIPLINARY AREA Total	1,225	71	6	33	9	4	1,348
999	WIDE AREA Total			187	41	1	6	2	2	239
	Item n.a. Total			36	3	0	0	0	0	39
	Grand Total			11,105	618	90	189	77	45	12,124

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	28	0	2	0	0	30
212			Chinese Philosophy	6	0	1	0	0	7
213			Indian Philosophy (inclu. Buddhist Studies)	9	0	1	1	0	11
214			Religion	11	1	0	0	0	12
215			Ethics	13	0	0	0	0	13
216			History of Philosophy	12	0	0	0	0	12
217			Aesthetics (inclu. Arts)	53	1	0	1	2	57
218			Art History	35	0	0	2	6	43
		Philosophy total		167	2	4	4	8	185
221			Experimental Psychology	31	0	0	1	0	32
222			Educational and Social Psychology	44	1	0	4	4	53
223			Sociology (inclu. Social Welfare)	73	0	0	3	1	77
224			Education	103	1	0	2	4	110
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	102	0	0	21	0	123
		Psychology• Sociology • Education Cultural Anthropology total		353	2	0	31	9	395
231			Japanese History	19	0	1	10	1	31
232			Oriental History	70	0	0	1	0	71
233			European History	51	0	0	0	0	51
234			Archaeology (inclu. Prehistory)	31	0	0	2	8	41
		History total		171	0	1	13	9	194
241			Japanese Language	8	0	0	0	1	9
242			Japanese Literature	6	0	0	2	0	8
243			Chinese Language and Literature	20	1	0	0	0	21
244			English Language and Literature	101	2	5	0	0	108
245			French Language and Literature	27	0	1	0	0	28
246			German Language and Literature	44	0	1	0	0	45
247			Other Foreign Languages and Literatures	36	0	0	0	0	36
248			Linguistics and Phonetics	72	1	1	2	5	81
249			Literature in General (i n c l u. Literary Theory, Comparative Literature) and Western Classics	20	0	0	0	0	20
		Literature total		334	4	8	4	6	356
	ARTS • HUMANITIES Total			1,025	8	13	52	32	1,130
261	LAW	Basic Science of Law	18	0	0	0	0	18	
262		Public Law	25	0	1	0	0	26	
263		International Law	24	0	0	0	0	24	
264		Civil Law	24	0	0	0	0	24	
265		Social Law	7	0	0	0	0	7	
266		Criminal Law	6	0	0	0	0	6	
267		Politics	84	0	0	1	0	85	
	LAW Total		188	0	1	1	0	190	
271	ECONOMICS	General Theory of Economics	38	0	0	1	0	39	
272		Economical Statistics	7	0	0	0	0	7	
273		Economic Policy (inclu. Economic Condition)	49	0	1	0	0	50	
274		Economic History	33	0	0	1	0	34	
275		Public Finance, Money and Banking	11	0	0	0	0	11	
276		Commercial Science	9	0	0	0	0	9	
277		Business Administration	29	0	0	0	0	29	
278		Accounting	8	0	0	0	0	8	
	ECONOMICS Total		184	0	1	2	0	187	
301	SCIENCE	Algebra	42	0	2	0	0	44	
302		Geometry	32	0	0	0	0	32	
304		Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	50	0	0	4	0	54	
305		Basic Analysis	38	1	1	0	0	40	
306		Larger-area Analysis	20	0	0	0	0	20	
		Mathematics total		182	1	3	4	0	190
311		Astronomy		30	0	0	7	0	37
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	160	0	2	19	0	181	

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		Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	32	0	1	3	0	36
323			Solid - State Physics II (Magnetism, Metal Physics,	79	0	2	1	0	82
324			Physical Properties in General (inclu. Basic Theories)	53	1	1	5	0	60
325			Physics in General	40	0	0	3	0	43
			Physics total	364	1	6	31	0	402
331			Physics of Solid Earth	70	0	0	5	0	75
332			Meteorology, Oceanography and Hydrology	67	0	0	5	0	72
333			Aeronomy	26	0	1	5	0	32
334			Geology	50	0	0	0	1	51
335			Stratigraphy and Paleontology	29	0	0	1	5	35
336			Mineralogy, Petrology and Study of Mineral Deposit	63	0	0	0	0	63
337			Geochemistry	33	0	1	0	1	35
			Earth Science total	338	0	2	16	7	363
341			Physical Chemistry	72	1	0	8	0	81
342			Organic Chemistry	40	0	3	2	0	45
343			Inorganic Chemistry	15	0	1	0	0	16
344			Function, Properties and Materials in Chemistry	28	0	0	0	0	28
345			Substance Transformation	3	0	0	0	0	3
346			Separation, Refining and Identification	17	0	0	1	0	18
			Chemistry total	175	1	4	11	0	191
351			Genetics	17	0	0	2	0	19
352			Ecology	97	1	0	0	3	101
353			Plant Physiology	21	0	0	3	0	24
354			Morphology, Structure of Organism	16	1	0	1	1	19
355			Animal Physiology and Metabolism	17	0	0	0	0	17
356			Morphology and Taxonomy	61	0	0	1	16	78
			Biology total	229	2	0	7	20	258
361			Physical Anthropology (inclu. Physiological Anthropology)	29	0	0	0	3	32
			SCIENCE Total	1,347	5	15	76	30	1,473
401	E		Applied Physics of Property and Crystallography	18	0	2	1	0	21
402			Surface Physics	14	0	1	0	0	15
403			Applied Optics and Quantum	21	0	1	0	0	22
404			General Applied Physics	6	0	0	0	0	6
405			Fundamentals of Engineering	5	0	0	0	0	5
			Applied Physics· Fundamentals of Engineering total	64	0	4	1	0	69
411			Materials for Machines and Strength of Materials	34	0	2	0	0	36
412			Workshop Processes and Production Engineering	21	0	1	0	0	22
413			Design Engineering, Machine Elements and Tribology	12	0	0	0	0	12
414			Fluid Mechanics	36	0	1	0	0	37
415			Heat Engineering	31	1	1	1	0	34
416			Mechanics and Control Engineering	18	0	0	0	0	18
417			Intelligent Mechanics and Machine System	28	0	2	0	0	30
			Machine Engineering total	180	1	7	1	0	189
421			Electric Power Engineering and Electric Machinery	25	0	1	0	0	26
422			Electronic and Electric Materials Engineering	39	0	4	0	0	43
423			Electron Devices and Apparatus Engineering	20	0	2	1	0	23
424			Information and Communication Engineering	47	0	3	3	0	53
425			System Engineering	15	0	0	1	0	16
427			Electronic Measurements	19	0	3	0	0	22
428			Control Engineering	11	0	5	0	0	16

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
			Electric and Electronic Engineering total	176	0	18	5	0	199
431			Construction Materials and Dynamics in General Civil Engineering	14	0	0	0	0	14
432			Structural Engineering and Seismology	21	0	1	0	0	22
433			Ground Engineering	18	0	1	0	0	19
434			Hydraulics and River Engineering	31	0	2	0	0	33
435			Traffic Engineering and Regional Planning	30	0	2	0	0	32
436			Civil Environmental System	17	0	1	0	0	18
			Civil Engineering total	131	0	7	0	0	138
441	E		Building Structure and Materials	19	0	1	0	0	20
442	N		Building Science and Building Equipment	17	0	0	0	0	17
443	G		City Planning and Building Planning	48	2	0	0	0	50
444			Architectural History and Design	25	0	0	0	2	27
			Architecture total	109	2	1	0	2	114
451	I		Physical Metallurgy	24	0	1	0	0	25
452	N		Inorganic Materials and Properties	38	0	0	0	0	38
453			Composed Materials and	13	0	0	0	0	13
454	E		Structural and Functional Materials	22	0	2	0	0	24
455			Metallurgy and Material Processing	18	0	1	0	0	19
456	E		Metal Productive Engineering	16	0	1	0	0	17
			Material Engineering total	131	0	5	0	0	136
461	R		Chemical Engineering in General	14	0	2	0	0	16
462			Reaction and Separation	13	0	2	0	0	15
463	I		Catalyst and Chemical Process	17	0	0	0	0	17
464			Bioengineering	24	0	0	0	0	24
465	N		Industrial Analytical Chemistry	12	0	0	0	0	12
			Process Engineering total	80	0	4	0	0	84
471	G		Industrial Physical Chemistry	19	0	0	0	0	19
472			Industrial Inorganic Chemistry	7	0	0	0	0	7
473			Industrial Organic Chemistry	12	0	0	0	0	12
474			Synthetic Chemistry	25	0	2	0	0	27
475			Polymer Synthesis	29	0	0	0	0	29
476			Polymer Structure and Property (inclu. Fiber)	29	0	0	1	0	30
			Industrial Chemistry total	121	0	2	1	0	124
481			Aeronautics	17	0	0	5	0	22
482			Ship Engineering	11	0	0	0	0	11
483			Marine Engineering	3	0	0	0	0	3
484			Resource Development Engineering	22	0	0	0	0	22
			Synthetic Engineering total	53	0	0	5	0	58
			ENGINEERING Total	1,045	3	48	13	2	1,111
501			Plant Breeding	18	0	0	0	1	19
502			Crop Science	18	0	0	0	0	18
503			Horticulture and Landscape Architecture	26	0	0	0	0	26
504			Plant Protection	20	0	0	0	0	20
505			Sericultural Science and Economic Entomology	4	0	0	0	0	4
			Agriculture total	86	0	0	0	1	87
511	A		Plant Fertilizer and Manure and Soil Science	30	0	0	0	0	30
512	G		Applied Microbiochemistry and Applied Biochemistry	41	0	0	0	0	41
513	R		Biological Productive Chemistry and Bioorganic Chemistry	13	0	0	0	0	13
514	C		Food Science and Nutritional Chemistry	20	0	0	0	0	20
			Agricultural Chemistry total	104	0	0	0	0	104
521			Forestry	66	0	0	0	0	66
522			Wood Science	26	0	0	0	0	26
			Forestry total	92	0	0	0	0	92
531			Fisheries in General	59	0	0	0	0	59
532			Fisheries Chemistry	7	0	0	0	0	7
			Fisheries total	66	0	0	0	0	66
541			Agricultural Economics	63	0	0	0	0	63

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	
551	AGRICULTURE		Irrigation, Drainage and Reclamation Engineering and Rural	35	0	0	0	0	35	
552			Agricultural Machinery	14	0	0	0	0	14	
553			Biological Environment	11	0	0	0	0	11	
			Agricultural Engineering total	60	0	0	0	0	60	
561			Animal Science and Grassland Science	20	0	0	0	0	20	
562			Applied Animal Science	19	0	0	0	0	19	
563			Basic Veterinary Medicine and Basic Animal Science	26	0	0	0	1	27	
564			Applied Veterinary Medicine	22	0	0	0	0	22	
		Animal Science· Veterinary Medicine total		87	0	0	0	1	88	
571			Biological Resource Science	17	0	0	1	0	18	
572			Applied Molecular Cell Biology	2	0	0	0	0	2	
		Interdisciplinary Agricultural Science total		19	0	0	1	0	20	
	AGRICULTURE Total			577	0	0	1	2	580	
601	MEDICINE		Anatomy in General (inclu. Histology, Embryology)	20	0	0	0	0	20	
602			Physiology in General	32	0	0	2	0	34	
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional	11	0	0	0	0	11	
604			Pharmacology in General	13	0	0	0	0	13	
605			Medical Chemistry in General	13	0	0	0	0	13	
606			Pathological Medical Chemistry	9	0	0	0	0	9	
		Physiology total		98	0	0	2	0	100	
611			Humoral Pathology	15	2	0	0	0	17	
612			Experimental Pathology	13	0	0	0	0	13	
613			Parasitology (inclu. Medical Zoology)	21	0	0	0	0	21	
614			Bacteriology (inclu. Eumycetes)	17	0	0	0	0	17	
615			Virology	17	0	0	0	0	17	
616			Immunology	21	0	0	0	0	21	
		Pathology total		104	2	0	0	0	106	
621			Hygiene	8	0	0	0	0	8	
622			Public Health and Health Science	49	1	0	0	0	50	
623			Legal Medicine	10	0	0	0	0	10	
		Social Medicine total		67	1	0	0	0	68	
631		INTERNAL MEDICINE		Internal Medicine in General	10	0	0	0	0	10
632				Gastroenterology	13	0	0	0	0	13
633				Internal Medicine Respiratory System	12	0	0	0	0	12
634				Neurological Medicine	13	0	0	2	0	15
635				Cardioangiopathy	9	0	0	0	0	9
636				Pediatrics	23	0	0	0	0	23
637			Dermatology	12	0	0	0	0	12	
638			Radiology	33	1	0	0	0	34	
639			Neuropsychiatry	15	0	0	0	0	15	
640			Endocrinology and Metabolic Science	2	0	0	0	0	2	
641			Hematology	18	0	0	0	0	18	
642			Internal Medicine of Kidney	5	0	0	0	0	5	
643			Embryology and Newborn Medicine	0	0	0	0	0	0	
644			Endocrinology	5	0	0	0	0	5	
645	Metabolic Science		7	0	0	0	0	7		
	Internal Medicine total		177	1	0	2	0	180		
651			Surgery in General	13	0	0	0	0	13	
652			Gastroenterological Surgery	29	0	0	0	0	29	
653			Thoracic Surgery	13	0	0	0	0	13	
654			Neurosurgery	25	0	0	0	0	25	
655			Orthopedic Surgery	30	0	0	0	0	30	
656			Anesthesiology and Rescue Medicine	29	0	0	0	0	29	
657			Urology	12	0	0	0	0	12	
658			Obstetrics and Gynecology	15	0	0	0	0	15	
659			Oto-rhino-laryngology	21	0	0	0	0	21	
660			Ophthalmology	13	0	0	0	0	13	
661			Pediatric Surgery	8	0	0	0	0	8	

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
662	MEDICINE	M E D I C I N E	Formative Surgery	2	0	0	0	0	2
			Surgery total	210	0	0	0	0	210
671			Oral Anatomy and Morphological Basic Dentistry	13	0	0	0	0	13
672			Functional Basic Dentistry	4	0	0	0	0	4
673			Morbid Dentistry (inclu. Dental Radiology)	4	0	0	0	0	4
674			Conservative Dentistry	17	0	0	0	0	17
675			Prosthodontics and Dental Technology	20	0	0	0	0	20
676			Oral Surgery	20	0	0	0	0	20
677			Orthodontics, Pedodontics and Social Dentistry	28	0	0	0	0	28
678			Periodontological Dentistry	1	0	0	0	0	1
			Dentistry total	107	0	0	0	0	107
681			Chemical Pharmaceutics	23	0	0	0	0	23
682			Physical Pharmaceutics	4	0	0	0	0	4
683			Biopharmaceutics	22	0	0	0	0	22
684			Molecular Pharmaceutics	4	0	0	1	0	5
685			Environmental Pharmaceutics	3	0	0	0	0	3
			Pharmaceutics total	56	0	0	1	0	57
691			Medical Sociology	3	1	0	0	0	4
692			Human Genetics	4	0	0	0	0	4
693			Applied Pharmacology and Medical Pharmacology	2	0	0	0	0	2
694			Pathological Examination	3	1	0	0	0	4
696			Science of Basic and Local Nursing	8	5	0	0	0	13
697			Science of Clinical Nursing	4	2	0	0	0	6
			Medicine in Gene r a l total	24	9	0	0	0	33
			MEDICINE Total	843	13	0	5	0	861
702	INTERDISCIPLINARY AREA	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)	10	0	0	0	0	10
703			Physical Education	72	0	2	0	0	74
704			Human Geography	48	0	0	0	0	48
705			Physical Geography	32	0	0	2	0	34
			Geography total	80	0	0	2	0	82
706			Home Science(inclu. Cloth/Living Environments)	13	0	0	0	0	13
707			Food Culture	2	0	0	0	0	2
			Domestic Science total	15	0	0	0	0	15
708			Science of Cultural Property	5	0	0	0	3	8
711			Science Education	3	0	0	0	1	4
712			Educational Engineering	7	0	0	1	3	11
713			Curriculum Studies	37	0	0	0	1	38
714			Japanese Language Education	14	0	0	0	1	15
			Science Education·Curriculum Education total	61	0	0	1	6	68
721			Statistics	9	0	0	4	0	13
731			Computer Science	57	0	1	1	0	59
732			Intelligent Informatics	45	0	1	1	0	47
733			Study of Information System (Inclu. Library and Information Science)	12	1	0	1	0	14
			Information Science total	114	1	2	3	0	120
741			Social System Engineering	10	0	0	0	0	10
751			Natural Disaster Science	7	0	0	0	0	7
761			Plasma Science and Technology	37	0	0	7	0	44
772			Nuclear Fusion	19	0	0	2	0	21
773			Energy Science General	13	0	0	0	0	13
774			Nuclear Power Science	19	0	0	0	0	19
			Energy total	51	0	0	2	0	53
801			Environmental Dynamic Analysis	22	0	0	0	0	22
802			Environmental Influence Assessment (inclu. Radiobiology)	16	1	0	0	0	17
803			Environmental Preservation	25	0	0	0	0	25
			Environmental Science total	63	1	0	0	0	64
811			Biological Organic Chemistry	14	0	0	0	0	14
812			Structured Biochemistry	6	0	0	0	0	6
813			Functional Biochemistry	16	0	0	0	0	16

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
	I N T E R D I S C I P L I N A R Y		Biological Chemistry total	36	0	0	0	0	36
821			Biophysics	19	0	1	1	0	21
822			Molecular Biology	53	1	0	6	0	60
823			Cell Biology	25	0	0	1	0	26
824			Developmental Biology	18	1	0	2	0	21
			Basic Biology total	115	2	1	10	0	128
831			Neuroanatomy and Neuropathology	7	0	0	0	0	7
832			Neurochemistry and Neuropharmacology	17	0	0	0	0	17
833			Neuro Science in General	25	0	0	4	0	29
834			Neuro and Muscular Physiology	15	2	0	0	0	17
			Neuro Science (inclu. Brain Science) total	64	2	0	4	0	70
841			Laboratory Animal Science	7	0	0	0	0	7
851			Medical Organism Engineering and Material Science of Organism	31	0	0	0	0	31
			INTERDISCIPLINARY AREA Total	787	6	5	33	9	840
999			WIDE AREA Total	65	3	0	6	2	76
			Item n.a. Total	13	0	0	0	0	13
			Grand Total	6,074	38	83	189	77	6,461

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
211	A R T S · H U M A N I T I E S		Philosophy	4	0	1	5
212			Chinese Philosophy	1	2	0	3
213			Indian Philosophy (inclu. Buddhist Studies)	0	0	0	0
214			Religion	1	0	0	1
215			Ethics	1	1	0	2
216			History of Philosophy	7	1	0	8
217			Aesthetics (inclu. Arts)	41	0	0	41
218			Art History	8	0	0	8
			Philosophy total	63	4	1	68
221			Experimental Psychology	1	0	0	1
222			Educational and Social Psychology	8	0	0	8
223			Sociology (inclu. Social Welfare)	22	1	0	23
224			Education	11	0	0	11
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	18	2	0	20
			Psychology· Sociology · Education Cultural Anthropology total	60	3	0	63
231			Japanese History	4	0	0	4
232			Oriental History	6	2	0	8
233			European History	8	3	0	11
234			Archaeology (inclu. Prehistory)	1	0	0	1
			History total	19	5	0	24
241			Japanese Language	2	0	0	2
242			Japanese Literature	3	1	0	4
243			Chinese Language and Literature	4	1	0	5
244			English Language and Literature	23	5	0	28
245			French Language and Literature	7	0	0	7
246			German Language and Literature	6	0	0	6
247			Other Foreign Languages and Literatures	2	0	0	2
248			Linguistics and Phonetics	11	3	0	14
249			Literature in General (i n c l u . Literary Theory, Comparative Literature) and Western Classics	1	0	0	1
			Literature total	59	10	0	69
			ARTS · HUMANITIES Total	201	22	1	224
261	L A W		Basic Science of Law	2	0	0	2
262			Public Law	0	0	0	0
263			International Law	0	0	0	0
264			Civil Law	7	0	0	7
265			Social Law	5	0	0	5
266			Criminal Law	2	0	0	2
267			Politics	14	2	0	16
			LAW Total	30	2	0	32
271	E C O N O M I C S		General Theory of Economics	11	3	0	14
272			Economical Statistics	0	0	0	0
273			Economic Policy (inclu. Economic Condition)	23	0	0	23
274			Economic History	5	0	0	5
275			Public Finance, Money and Banking	10	1	0	11
276			Commercial Science	2	0	0	2
277			Business Administration	3	0	0	3
278			Accounting	2	2	0	4
			ECONOMICS Total	56	6	0	62
301	S C I E N C E		Algebra	3	0	0	3
302			Geometry	3	0	0	3
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	5	0	0	5
305			Basic Analysis	6	0	0	6
306			Larger-area Analysis	0	0	0	0
			Mathematics total	17	0	0	17
311			Astronomy	0	0	0	0
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	11	0	0	11

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			Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	2	0	0	2
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	0	1
			Physics total	19	0	0	19
331			Physics of Solid Earth	1	0	0	1
332			Meteorology, Oceanography and Hydrology	2	0	0	2
333	S		Aeronomy	0	0	0	0
334			Geology	5	0	0	5
335	C		Stratigraphy and Paleontology	1	0	0	1
336	I		Mineralogy, Petrology and Study of Mineral Deposit	1	0	0	1
337			Geochemistry	1	0	0	1
	E		Earth Science total	11	0	0	11
341			Physical Chemistry	2	1	0	3
342	N		Organic Chemistry	3	0	0	3
343			Inorganic Chemistry	2	0	0	2
344	C		Function, Properties and Materials in Chemistry	0	0	0	0
345	E		Substance Transformation	0	0	0	0
346			Separation, Refining and Identification	2	0	0	2
			Chemistry total	9	1	0	10
351			Genetics	1	0	0	1
352			Ecology	8	2	0	10
353			Plant Physiology	11	0	0	11
354			Morphology, Structure of Organism	2	0	0	2
355			Animal Physiology and Metabolism	2	0	0	2
356			Morphology and Taxonomy	5	0	0	5
			Biology total	29	2	0	31
361			Physical Anthropology (inclu. Physiological Anthropology)	0	0	0	0
			SCIENCE Total	85	3	0	88
401			Applied Physics of Property and Crystallography	2	0	0	2
402			Surface Physics	2	0	0	2
403			Applied Optics and Quantum	1	0	0	1
404			General Applied Physics	2	0	0	2
405	E		Fundamentals of Engineering	1	0	0	1
	N		Applied Physics· Fundamentals of Engineering total	8	0	0	8
411	G		Materials for Machines and Strength of Materials	5	0	1	6
412	I		Workshop Processes and Production Engineering	5	0	0	5
413	N		Design Engineering, Machine Elements and Tribology	1	0	0	1
414			Fluid Mechanics	1	0	0	1
415	E		Heat Engineering	0	0	0	0
416	E		Mechanics and Control Engineering	1	0	1	2
417			Intelligent Mechanics and Machine System	2	0	0	2
	R		Machine Engineering total	15	0	2	17
421	I		Electric Power Engineering and Electric Machinery	2	0	1	3
422	N		Electronic and Electric Materials Engineering	2	0	0	2
423	G		Electron Devices and Apparatus Engineering	1	0	0	1
424			Information and Communication Engineering	6	0	0	6
425			System Engineering	1	0	0	1
427			Electronic Measurements	2	0	0	2
428			Control Engineering	0	0	0	0

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
			Electric and Electronic Engineering total	14	0	1	15
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	1	0	0	1
435			Traffic Engineering and Regional Planning	1	0	0	1
436			Civil Environmental System	0	0	0	0
			Civil Engineering total	3	0	0	3
441	E		Building Structure and Materials	3	0	0	3
442	N		Building Science and Building Equipment	0	0	0	0
443	G		City Planning and Building Planning	13	1	0	14
444			Architectural History and Design	3	1	0	4
			Architecture total	19	2	0	21
451	I		Physical Metallurgy	0	0	0	0
452			Inorganic Materials and Properties	1	0	0	1
453	N		Composed Materials and	1	0	0	1
454	E		Structural and Functional Materials	3	0	0	3
455			Metallurgy and Material Processing	3	0	0	3
456	E		Metal Productive Engineering	0	0	0	0
			Material Engineering total	8	0	0	8
461	R		Chemical Engineering in General	1	0	0	1
462			Reaction and Separation	1	0	0	1
463	I		Catalyst and Chemical Process	0	0	0	0
464			Bioengineering	1	0	0	1
465	N		Industrial Analytical Chemistry	1	0	0	1
			Process Engineering total	4	0	0	4
471	G		Industrial Physical Chemistry	1	0	0	1
472			Industrial Inorganic Chemistry	0	0	0	0
473			Industrial Organic Chemistry	0	0	0	0
474			Synthetic Chemistry	2	0	0	2
475			Polymer Synthesis	1	0	0	1
476			Polymer Structure and Property (inclu. Fiber)	0	0	0	0
			Industrial Chemistry total	4	0	0	4
481			Aeronautics	1	0	0	1
482			Ship Engineering	1	0	0	1
483			Marine Engineering	0	0	0	0
484			Resource Development	0	0	0	0
			Synthetic Engineering total	2	0	0	2
			ENGINEERING Total	77	2	3	82
501			Plant Breeding	2	0	0	2
502			Crop Science	0	0	0	0
503			Horticulture and Landscape Architecture	5	1	0	6
504			Plant Protection	2	0	0	2
505			Sericultural Science and Economic Entomology	0	0	0	0
			Agriculture total	9	1	0	10
511	A		Plant Fertilizer and Manure and Soil Science	4	0	0	4
512	G		Applied Microbiochemistry and Applied Biochemistry	4	0	0	4
513	R		Biological Productive Chemistry and Bioorganic Chemistry	2	0	0	2
514	I		Food Science and Nutritional Chemistry	6	1	0	7
			Agricultural Chemistry total	16	1	0	17
521			Forestry	5	0	0	5
522			Wood Science	1	0	0	1
			Forestry total	6	0	0	6
531			Fisheries in General	0	0	0	0
532			Fisheries Chemistry	0	0	0	0
			Fisheries total	0	0	0	0
541			Agricultural Economics	5	0	0	5

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
551	AGRICULTURE		Irrigation, Drainage and Reclamation Engineering and Rural Agricultural Machinery	3	0	0	3
552			Biological Environment	0	0	0	0
553			Animal Science and Grassland Science	2	0	0	2
			Agricultural Engineering total	5	0	0	5
561			Applied Animal Science	2	0	0	2
562			Basic Veterinary Medicine and Basic Animal Science	0	0	0	0
563			Applied Veterinary Medicine	4	0	0	4
564			Animal Science· Veterinary Medicine total	4	0	0	4
			Biological Resource Science	10	0	0	10
571			Applied Molecular Cell Biology	0	0	0	0
572			Interdisciplinary Agricultural Science total	0	0	0	0
			AGRICULTURE Total	0	0	0	0
601	MEDICINE		Anatomy in General (inclu. Histology, Embryology)	51	2	0	53
602			Physiology in General	2	0	0	2
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional	5	0	0	5
604			Pharmacology in General	4	0	0	4
605			Medical Chemistry in General	2	0	0	2
606			Pathological Medical Chemistry	2	0	0	2
			Physiology total	1	0	0	1
611			Hominal Pathology	16	0	0	16
612			Experimental Pathology	3	0	0	3
613			Parasitology (inclu. Medical	2	0	0	2
614			Bacteriology (inclu. Eumycetes)	2	0	0	2
615			Virology	2	0	0	2
616			Immunology	1	0	0	1
			Pathology total	11	0	0	11
621			Hygiene	3	0	0	3
622			Public Health and Health Science	9	0	0	9
623			Legal Medicine	4	0	0	4
			Social Medicine total	16	0	0	16
631			Internal Medicine in General	2	0	0	2
632			Gastroenterology	4	0	0	4
633			Internal Medicine Respiratory System	0	0	0	0
634			Neurological Medicine	2	0	0	2
635			Cardioangiopathy	4	0	0	4
636			Pediatrics	5	1	0	6
637			Dermatology	7	0	0	7
638			Radiology	0	0	0	0
639			Neuropsychiatry	5	0	0	5
640			Endocrinology and Metabolic Science	2	0	0	2
641			Hematology	4	0	0	4
642			Internal Medicine of Kidney	1	0	0	1
643			Embryology and Newborn Medicine	0	0	0	0
644			Endocrinology	0	0	0	0
645			Metabolic Science	1	0	0	1
			Internal Medicine total	37	1	0	38
651			Surgery in General	3	0	0	3
652			Gastroenterological Surgery	2	0	0	2
653			Thoracic Surgery	4	0	0	4
654			Neurosurgery	7	0	0	7
655			Orthopedic Surgery	7	0	0	7
656			Anesthesiology and Rescue Medicine	4	0	0	4
657			Urology	3	0	0	3
658			Obstetrics and Gynecology	2	0	0	2
659			Oto-rhino-laryngology	5	0	0	5
660			Ophthalmology	4	0	0	4
661			Pediatric Surgery	1	0	0	1

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
662	M E D I C I N E		Formative Surgery	0	0	0	0
			Surgery total	42	0	0	42
671			Oral Anatomy and Morphological Basic Dentistry	1	0	0	1
672			Functional Basic Dentistry	0	0	0	0
673			Morbid Dentistry (inclu. Dental Radiology)	1	0	0	1
674			Conservative Dentistry	0	0	0	0
675			Prosthodontics and Dental Technology	0	0	0	0
676			Oral Surgery	11	0	0	11
677			Orthodontics, Pedodontics and Social Dentistry	1	0	0	1
678			Periodontological Dentistry	0	0	0	0
			Dentistry total	14	0	0	14
681			Chemical Pharmaceutics	6	0	0	6
682			Physical Pharmaceutics	2	0	0	2
683			Biopharmaceutics	2	0	0	2
684			Molecular Pharmaceutics	2	0	0	2
685			Environmental Pharmaceutics	0	0	0	0
			Pharmaceutics total	12	0	0	12
691			Medical Sociology	0	0	0	0
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	11	3	0	14
697			Science of Clinical Nursing	2	0	0	2
			Medicine in General total	13	3	0	16
			MEDICINE Total	161	4	0	165
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)	2	0	0	2
703			Physical Education	6	1	0	7
704			Human Geography	7	0	0	7
705			Physical Geography	2	0	0	2
			Geography total	9	0	0	9
706			Home Science (inclu. Cloth/Living Environments)	2	1	0	3
707			Food Culture	2	0	0	2
			Domestic Science total	4	1	0	5
708			Science of Cultural Property	0	0	0	0
711			Science Education	0	0	0	0
712			Educational Engineering	0	1	0	1
713			Curriculum Studies	1	0	0	1
714			Japanese Language Education	0	0	0	0
			Science Education·Curriculum Education total	1	1	0	2
721			Statistics	0	0	0	0
731			Computer Science	3	1	0	4
732			Intelligent Informatics	5	0	0	5
733			Study of Information System (Inclu. Library and Information Science)	5	1	0	6
			Information Science total	13	2	0	15
741			Social System Engineering	3	0	0	3
751			Natural Disaster Science	0	0	0	0
761			Plasma Science and Technology	2	0	0	2
772			Nuclear Fusion	0	0	0	0
773			Energy Science General	1	0	0	1
774			Nuclear Power Science	0	0	0	0
			Energy total	1	0	0	1
801			Environmental Dynamic Analysis	1	0	0	1
802			Environmental Influence Assessment (inclu. Radiobiology)	2	0	0	2
803			Environmental Preservation	2	0	0	2
			Environmental Science total	5	0	0	5
811			Biological Organic Chemistry	1	0	0	1
812			Structured Biochemistry	3	0	0	3
813			Functional Biochemistry	5	0	0	5

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
			Biological Chemistry total	9	0	0	9
821	I N T E R D I S C I P L I N A R Y		Biophysics	2	0	1	3
822			Molecular Biology	6	0	0	6
823			Cell Biology	2	0	0	2
824			Developmental Biology	2	0	0	2
			Basic Biology total	12	0	1	13
831			Neuroanatomy and Neuropathology	2	0	0	2
832			Neurochemistry and Neuropharmacology	0	0	0	0
833			Neuro Science in General	4	0	0	4
834			Neuro and Muscular Physiology	1	0	0	1
			Neuro Science (inclu. Brain Science) total	7	0	0	7
841			Laboratory Animal Science	2	0	0	2
851			Medical Organism Engineering and Material Science of Organism	1	0	0	1
			INTERDISCIPLINARY AREA Total	77	5	1	83
999			WIDE AREA Total	18	1	0	19
			Item n.a. Total	3	1	0	4
			Grand Total	759	48	5	812

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
211	ARTS • HUMANITIES		Philosophy	45	8	0	0	53
212			Chinese Philosophy	8	1	0	0	9
213			Indian Philosophy (inclu. Buddhist Studies)	24	4	0	4	32
214			Religion	33	11	0	1	45
215			Ethics	12	1	0	0	13
216			History of Philosophy	15	2	0	0	17
217			Aesthetics (inclu. Arts)	112	62	0	0	174
218			Art History	34	6	0	0	40
			Philosophy total	283	95	0	5	383
221			Experimental Psychology	23	2	0	0	25
222			Educational and Social Psychology	56	14	0	0	70
223			Sociology (inclu. Social Welfare)	148	20	0	0	168
224			Education	79	30	0	0	109
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	120	14	0	3	137
		Psychology• Sociology • Education Cultural Anthropology total		426	80	0	3	509
231			Japanese History	19	5	0	0	24
232			Oriental History	65	4	0	0	69
233			European History	80	9	1	2	92
234			Archaeology (inclu. Prehistory)	35	1	0	5	41
		History total		199	19	1	7	226
241			Japanese Language	14	0	0	0	14
242			Japanese Literature	37	9	0	0	46
243			Chinese Language and Literature	53	1	0	0	54
244			English Language and Literature	293	77	0	0	370
245			French Language and Literature	69	11	0	1	81
246			German Language and Literature	82	2	0	0	84
247			Other Foreign Languages and Literatures	52	1	0	0	53
248			Linguistics and Phonetics	120	23	0	0	143
249			Literature in General (i n c l u. Literary Theory, Comparative Literature) and Western Classics	27	5	0	0	32
		Literature total		747	129	0	1	877
	ARTS • HUMANITIES Total			1,655	323	1	16	1,995
261	LAW		Basic Science of Law	22	2	0	0	24
262			Public Law	36	1	0	0	37
263			International Law	29	0	0	0	29
264			Civil Law	47	3	0	0	50
265			Social Law	9	1	0	0	10
266			Criminal Law	22	0	0	0	22
267			Politics	130	4	0	0	134
	LAW Total		295	11	0	0	306	
271	ECONOMICS		General Theory of Economics	63	2	0	2	67
272			Economical Statistics	12	0	0	0	12
273			Economic Policy (inclu. Economic Condition)	136	3	0	0	139
274			Economic History	47	1	0	0	48
275			Public Finance, Money and Banking	35	2	0	0	37
276			Commercial Science	34	2	0	0	36
277			Business Administration	92	12	0	0	104
278			Accounting	40	4	0	0	44
	ECONOMICS Total		459	26	0	2	487	
301	SCIENCE		Algebra	12	1	0	0	13
302			Geometry	13	0	0	0	13
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	18	0	0	0	18
305			Basic Analysis	24	0	0	0	24
306			Larger-area Analysis	3	0	0	0	3
		Mathematics total		70	1	0	0	71
311		Astronomy		7	0	0	0	7
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	49	2	0	0	51

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			Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	7	0	0	0	7
323			Solid - State Physics II (Magnetism, Metal Physics, Physical Properties in General (inclu. Basic Theories)	14	1	0	0	15
324			Physics in General	7	0	0	0	7
325			Physics total	11	0	0	0	11
331			Physics of Solid Earth	88	3	0	0	91
332			Meteorology, Oceanography and Hydrology	6	0	0	0	6
333	S		Aeronomy	6	1	0	0	7
334			Geology	3	0	0	0	3
335	C		Stratigraphy and Paleontology	4	0	0	0	4
336	I		Mineralogy, Petrology and Study of Mineral Deposit	3	1	0	0	4
337			Geochemistry	5	0	0	0	5
	E		Earth Science total	4	0	0	0	4
341			Physical Chemistry	31	2	0	0	33
342	N		Organic Chemistry	22	2	0	0	24
343			Inorganic Chemistry	9	0	0	0	9
344	C		Function, Properties and Materials in Chemistry	8	1	0	0	9
345	E		Substance Transformation	9	1	0	0	10
346			Separation, Refining and Identification	0	0	0	0	0
			Chemistry total	6	0	0	0	6
351			Genetics	54	4	0	0	58
352			Ecology	4	0	0	1	5
353			Plant Physiology	19	2	0	5	26
354			Morphology, Structure of	7	1	0	0	8
355			Animal Physiology and Metabolism	4	0	0	0	4
356			Morphology and Taxonomy	3	0	0	0	3
			Biology total	13	2	0	4	19
361			Physical Anthropology (inclu. Physiological Anthropology)	50	5	0	10	65
			SCIENCE Total	9	0	0	0	9
401			Applied Physics of Property and Crystallography	4	1	0	0	5
402			Surface Physics	6	0	0	0	6
403			Applied Optics and Quantum	10	0	0	2	12
404			General Applied Physics	2	0	0	0	2
405	E		Fundamentals of Engineering	1	0	0	0	1
	N		Applied Physics· Fundamentals of Engineering total	23	1	0	2	26
411	G		Materials for Machines and Strength of Materials	19	0	0	0	19
412	I		Workshop Processes and Production Engineering	16	0	0	0	16
413	N		Design Engineering, Machine Elements and Tribology	6	0	0	0	6
414			Fluid Mechanics	16	0	0	0	16
415	E		Heat Engineering	7	0	0	0	7
416			Mechanics and Control	8	0	0	0	8
417	E		Intelligent Mechanics and Machine System	12	0	0	0	12
	R		Machine Engineering total	84	0	0	0	84
421	I		Electric Power Engineering and Electric Machinery	19	0	0	0	19
422	N		Electronic and Electric Materials Engineering	20	0	0	0	20
423	G		Electron Devices and Apparatus Engineering	18	0	0	0	18
424			Information and Communication Engineering	30	1	0	0	31
425			System Engineering	10	1	0	0	11
427			Electronic Measurements	5	0	0	0	5
428			Control Engineering	5	1	0	0	6

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
			Electric and Electronic Engineering total	107	3	0	0	110
431			Construction Materials and Dynamics in General Civil Engineering	10	0	0	0	10
432			Structural Engineering and Seismology	7	0	0	0	7
433			Ground Engineering	10	0	0	0	10
434			Hydraulics and River Engineering	6	1	0	0	7
435			Traffic Engineering and Regional Planning	9	0	0	0	9
436			Civil Environmental System	12	0	0	0	12
			Civil Engineering total	54	1	0	0	55
441	E		Building Structure and Materials	10	0	0	0	10
442	N		Building Science and Building Equipment	11	1	0	0	12
443			City Planning and Building	51	10	0	0	61
444	G		Architectural History and Design	29	5	0	0	34
			Architecture total	101	16	0	0	117
451	I		Physical Metallurgy	4	0	0	0	4
452			Inorganic Materials and Properties	9	0	0	0	9
453	N		Composed Materials and	2	0	0	0	2
454			Structural and Functional	3	1	0	0	4
455	E		Metallurgy and Material	5	0	0	0	5
456			Metal Productive Engineering	1	0	0	0	1
	E		Material Engineering total	24	1	0	0	25
461			Chemical Engineering in General	4	0	0	0	4
462	R		Reaction and Separation Engineering	2	0	0	0	2
463	I		Catalyst and Chemical Process	3	0	0	0	3
464			Bioengineering	6	0	0	0	6
465	N		Industrial Analytical Chemistry	2	0	0	0	2
			Process Engineering total	17	0	0	0	17
471	G		Industrial Physical Chemistry	2	0	0	0	2
472			Industrial Inorganic Chemistry	2	0	0	0	2
473			Industrial Organic Chemistry	3	0	0	0	3
474			Synthetic Chemistry	3	0	0	1	4
475			Polymer Synthesis	3	0	0	0	3
476			Polymer Structure and Property (inclu. Fiber)	4	0	0	0	4
			Industrial Chemistry total	17	0	0	1	18
481			Aeronautics	3	0	0	0	3
482			Ship Engineering	0	0	0	0	0
483			Marine Engineering	1	0	0	0	1
484			Resource Development	2	0	0	0	2
			Synthetic Engineering total	6	0	0	0	6
			ENGINEERING Total	433	22	0	3	458
501			Plant Breeding	2	0	0	0	2
502			Crop Science	2	1	0	0	3
503			Horticulture and Landscape Architecture	10	5	0	0	15
504			Plant Protection	4	0	0	0	4
505			Sericultural Science and Economic Entomology	3	0	0	0	3
			Agriculture total	21	6	0	0	27
511	A		Plant Fertilizer and Manure and Soil Science	6	0	0	0	6
512	G		Applied Microbiochemistry and Applied Biochemistry	9	4	0	0	13
513	R		Biological Productive Chemistry and Bioorganic Chemistry	3	0	0	1	4
514	I		Food Science and Nutritional Chemistry	14	7	0	0	21
			Agricultural Chemistry total	32	11	0	1	44
521			Forestry	0	1	0	0	1
522			Wood Science	3	0	0	0	3
			Forestry total	3	1	0	0	4
531			Fisheries in General	11	0	0	0	11
532			Fisheries Chemistry	0	0	0	0	0
			Fisheries total	11	0	0	0	11

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
541	AGRICULTURE		Agricultural Economics	28	1	0	0	29
551			Irrigation, Drainage and Reclamation Engineering and Rural	3	0	0	1	4
552			Agricultural Machinery	1	3	0	0	4
553			Biological Environment	1	0	0	0	1
			Agricultural Engineering total	5	3	0	1	9
561			Animal Science and Grassland Science	5	0	0	0	5
562			Applied Animal Science	2	0	0	0	2
563			Basic Veterinary Medicine and Basic Animal Science	8	0	0	0	8
564			Applied Veterinary Medicine	8	0	0	0	8
			Animal Science· Veterinary Medicine total	23	0	0	0	23
571			Biological Resource Science	2	1	0	1	4
572			Applied Molecular Cell Biology	0	0	0	0	0
			Interdisciplinary Agricultural Science total	2	1	0	1	4
			AGRICULTURE Total	125	23	0	3	151
601	MEDICINE		Anatomy in General (inclu. Histology, Embryology)	11	1	0	0	12
602			Physiology in General	15	1	0	0	16
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	11	2	0	0	13
604			Pharmacology in General	10	0	0	0	10
605			Medical Chemistry in General	11	0	0	1	12
606			Pathological Medical Chemistry	5	0	0	0	5
			Physiology total	63	4	0	1	68
611			Hominal Pathology	10	0	0	0	10
612			Experimental Pathology	3	0	0	1	4
613			Parasitology (inclu. Medical)	18	0	0	0	18
614			Bacteriology (inclu. Eumycetes)	8	0	0	1	9
615			Virology	4	0	0	0	4
616			Immunology	5	0	0	0	5
			Pathology total	48	0	0	2	50
621			Hygiene	4	1	0	0	5
622			Public Health and Health Science	11	3	0	0	14
623			Legal Medicine	3	0	0	0	3
			Social Medicine total	18	4	0	0	22
631			Internal Medicine in General	10	0	0	0	10
632			Gastroenterology	9	0	0	0	9
633			Internal Medicine Respiratory System	8	0	0	0	8
634			Neurological Medicine	10	0	0	0	10
635			Cardioangiopathy	20	0	0	0	20
636			Pediatrics	13	0	0	0	13
637			Dermatology	8	0	0	0	8
638			Radiology	12	1	0	0	13
639			Neuropsychiatry	12	0	0	0	12
640			Endocrinology and Metabolic Science	6	0	0	0	6
641			Hematology	8	0	0	0	8
642			Internal Medicine of Kidney	2	0	0	0	2
643			Embryology and Newborn Medicine	0	0	0	0	0
644			Endocrinology	4	0	0	0	4
645			Metabolic Science	3	0	0	0	3
			Internal Medicine total	125	1	0	0	126
651			Surgery in General	10	0	0	0	10
652			Gastroenterological Surgery	11	0	0	0	11
653			Thoracic Surgery	16	0	0	0	16
654			Neurosurgery	9	0	0	0	9
655			Orthopedic Surgery	19	0	0	0	19
656			Anesthesiology and Rescue Medicine	10	0	0	0	10
657			Urology	6	0	0	0	6
658			Obstetrics and Gynecology	5	0	0	0	5
659			Oto-rhino-laryngology	9	0	0	0	9

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
660	M E D I C I N E		Ophthalmology	7	0	0	0	7
661			Pediatric Surgery	0	0	0	0	0
662			Formative Surgery	2	0	0	0	2
			Surgery total	104	0	0	0	104
671			Oral Anatomy and Morphological Basic Dentistry	13	0	0	0	13
672			Functional Basic Dentistry	9	1	0	0	10
673			Morbid Dentistry (inclu. Dental Radiology)	7	0	0	0	7
674			Conservative Dentistry	7	0	0	0	7
675			Prosthodontics and Dental Technology	21	0	0	0	21
676			Oral Surgery	10	0	0	0	10
677			Orthodontics, Pedodontics and Social Dentistry	7	0	0	0	7
678			Periodontological Dentistry	0	0	0	0	0
			Dentistry total	74	1	0	0	75
681			Chemical Pharmaceuticals	23	0	0	0	23
682			Physical Pharmaceuticals	7	0	0	0	7
683			Biopharmaceutics	22	0	0	2	24
684			Molecular Pharmaceuticals	1	0	0	0	1
685			Environmental Pharmaceuticals	0	0	0	0	0
			Pharmaceutics total	53	0	0	2	55
691			Medical Sociology	5	0	0	0	5
692			Human Genetics	2	0	0	0	2
693			Applied Pharmacology and Medical Pharmacology	8	0	0	0	8
694			Pathological Examination	4	0	0	0	4
696			Science of Basic and Local Nursing	5	1	0	0	6
697			Science of Clinical Nursing	2	2	0	0	4
			Medicine in Gene r a l total	26	3	0	0	29
		MEDICINE Total		511	13	0	5	529
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	0	0	11
703			Physical Education	56	12	0	0	68
704			Human Geography	33	4	0	0	37
705			Physical Geography	15	1	0	0	16
			Geography total	48	5	0	0	53
706			Home Science(inclu. Cloth/Living Environments)	16	15	0	0	31
707			Food Culture	0	1	0	0	1
			Domestic Science total	16	16	0	0	32
708			Science of Cultural Property	0	0	0	0	0
711			Science Education	3	1	0	0	4
712			Educational Engineering	10	3	0	0	13
713			Curriculum Studies	18	10	0	0	28
714			Japanese Language Education	12	0	0	0	12
			Science Education·Curriculum Education total	43	14	0	0	57
721			Statistics	9	0	0	0	9
731			Computer Science	24	3	0	0	27
732			Intelligent Informatics	13	0	0	0	13
733			Study of Information System (Inclu. Library and Information	25	3	0	0	28
			Information Science total	62	6	0	0	68
741			Social System Engineering	12	0	0	0	12
751			Natural Disaster Science	2	0	0	0	2
761			Plasma Science and Technology	6	0	0	0	6
772			Nuclear Fusion	1	0	0	0	1
773			Energy Science General	2	0	0	0	2
774			Nuclear Power Science	1	0	0	0	1
			Energy total	4	0	0	0	4
801			Environmental Dynamic Analysis	3	1	0	0	4
802			Environmental Influence Assessment (inclu. Radiobiology)	5	1	0	0	6
803			Environmental Preservation	7	0	0	0	7
			Environmental Science total	15	2	0	0	17

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
811	INTERDISCIPLINARY AREA		Biological Organic Chemistry	2	0	0	0	2
812			Structured Biochemistry	6	0	0	0	6
813			Functional Biochemistry	4	0	0	1	5
			Biological Chemistry total	12	0	0	1	13
821			Biophysics	3	1	0	0	4
822			Molecular Biology	17	1	0	1	19
823			Cell Biology	6	1	0	0	7
824			Developmental Biology	2	0	0	0	2
			Basic Biology total	28	3	0	1	32
831			Neuroanatomy and	7	0	0	0	7
832			Neurochemistry and Neuropharmacology	6	0	0	0	6
833			Neuro Science in General	12	0	0	0	12
834			Neuro and Muscular Physiology	6	1	0	0	7
			Neuro Science (inclu. Brain Science) total	31	1	0	0	32
841			Laboratory Animal Science	1	0	0	2	3
851			Medical Organism Engineering and Material Science of Organism	6	0	0	0	6
			INTERDISCIPLINARY AREA Total	361	60	0	4	425
999			WIDE AREA Total	104	37	1	2	144
			Item n.a. Total	20	2	0	0	22
			Grand Total	4,272	532	2	45	4,851

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
211	A R T S · H U M A N I T I E S		Philosophy	75	5	1	0	0	0	81
212			Chinese Philosophy	24	1	0	0	0	0	25
213			Indian Philosophy (inclu. Buddhist Studies)	35	8	0	0	0	2	45
214			Religion	58	8	0	0	0	0	66
215			Ethics	20	2	0	0	1	0	23
216			History of Philosophy	32	1	0	0	0	1	34
217			Aesthetics (inclu. Arts)	134	23	0	1	1	0	159
218			Art History	42	5	0	1	2	0	50
			Philosophy total	420	53	1	2	4	3	483
221			Experimental Psychology	134	9	0	1	0	1	145
222			Educational and Social	195	28	0	5	4	0	232
223			Sociology (inclu. Social Welfare)	241	20	0	3	0	0	264
224			Education	209	33	1	4	12	0	259
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	109	8	0	8	1	0	126
			Psychology· Sociology · Education Cultural Anthropology total	888	98	1	21	17	1	1,026
231			Japanese History	50	2	1	3	0	1	57
232			Oriental History	103	4	0	0	0	0	107
233			European History	79	7	0	0	0	0	86
234			Archaeology (inclu. Prehistory)	25	0	0	2	2	2	31
			History total	257	13	1	5	2	3	281
241			Japanese Language	37	0	0	0	2	0	39
242			Japanese Literature	71	12	0	3	0	0	86
243			Chinese Language and Literature	97	4	0	0	0	0	101
244			English Language and Literature	341	57	5	0	0	0	403
245			French Language and Literature	61	2	0	0	0	0	63
246			German Language and Literature	64	0	0	0	0	0	64
247			Other Foreign Languages and Literatures	70	1	0	0	0	0	71
248			Linguistics and Phonetics	224	26	3	2	2	0	257
249			Literature in General (i n c l u. Literary Theory, Comparative Literature) and Western Classics	49	5	0	0	0	0	54
			Literature total	1,014	107	8	5	4	0	1,138
			ARTS · HUMANITIES Total	2,579	271	11	33	27	7	2,928
261	L A W		Basic Science of Law	43	0	0	0	0	0	43
262			Public Law	53	2	0	0	0	0	55
263			International Law	51	0	0	0	0	0	51
264			Civil Law	84	1	0	0	0	0	85
265			Social Law	21	0	0	0	0	0	21
266			Criminal Law	32	0	0	0	0	0	32
267			Politics	177	5	0	1	0	0	183
			LAW Total	461	8	0	1	0	0	470
271	E C O N O M I C S		General Theory of Economics	161	7	0	1	0	2	171
272			Economical Statistics	33	0	0	0	0	0	33
273			Economic Policy (inclu. Economic Condition)	206	7	1	0	0	0	214
274			Economic History	51	0	0	0	0	0	51
275			Public Finance, Money and Banking	56	3	0	0	0	0	59
276			Commercial Science	59	4	0	0	0	0	63
277			Business Administration	173	15	0	0	0	0	188
278			Accounting	63	6	0	0	0	0	69
			ECONOMICS Total	802	42	1	1	0	2	848
301	S C I E N C E		Algebra	88	1	1	0	0	0	90
302			Geometry	100	1	1	0	0	0	102
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	160	5	0	4	0	0	169
305			Basic Analysis	144	0	4	0	0	0	148
306			Larger-area Analysis	44	0	0	0	0	0	44
			Mathematics total	536	7	6	4	0	0	553
311			Astronomy	85	0	0	33	0	0	118
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	337	7	4	43	0	0	391

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

Code	Subj ect	Subdi vision	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)	230	1	2	8	0	0	241
323			Solid - State Physics II (Magnetism, Metal Physics, Physical Properties in General (inclu. Basic Theories)	294	1	1	4	0	0	300
324			Physics in General	126	3	3	7	0	0	139
325			Physics total	112	2	3	6	0	1	124
			Physics total	1,099	14	13	68	0	1	1,195
331			Physics of Solid Earth	138	1	0	8	0	0	147
332			Meteorology, Oceanography and Hydrology	134	1	0	3	0	0	138
333			Aeronomy	56	0	1	11	0	0	68
334			Geology	59	0	0	0	0	1	60
335			Stratigraphy and Paleontology	32	1	0	0	3	0	36
336			Mineralogy, Petrology and Study of Mineral Deposit	84	1	0	1	1	0	87
337			Geochemistry	53	0	1	0	1	0	55
			Earth Science total	556	4	2	23	5	1	591
341			Physical Chemistry	291	3	3	23	0	0	320
342			Organic Chemistry	181	0	2	4	0	1	188
343			Inorganic Chemistry	67	1	1	2	1	0	72
344			Function, Properties and Materials in Chemistry	128	1	3	3	0	0	135
345			Substance Transformation	10	0	0	0	0	0	10
346			Separation, Refining and Identification	53	0	2	0	0	0	55
			Chemistry total	730	5	11	32	1	1	780
351			Genetics	65	0	0	12	0	0	77
352			Ecology	99	7	0	3	1	4	114
353			Plant Physiology	141	5	0	12	0	0	158
354			Morphology, Structure of Organism	39	0	0	2	1	0	42
355			Animal Physiology and Morphology and Taxonomy	55	1	0	1	0	0	57
356			Biology total	61	1	0	2	3	2	69
			Biology total	460	14	0	32	5	6	517
361			Physical Anthropology (inclu. Physiological Anthropology)	22	0	0	1	2	0	25
			SCIENCE Total	3,488	44	32	193	13	9	3,779
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	139	1	2	1	0	0	143
402			Surface Physics	87	1	4	1	0	0	93
403			Applied Optics and Quantum Optics	139	2	6	2	0	2	151
404			General Applied Physics	50	0	1	0	0	3	54
405			Fundamentals of Engineering	43	0	1	0	0	0	44
			Applied Physics· Fundamentals of Engineering total	458	4	14	4	0	5	485
411			Materials for Machines and Strength of Materials	265	1	17	1	0	0	284
412			Workshop Processes and Production Engineering	172	1	13	1	0	0	187
413			Design Engineering, Machine Elements and Tribology	130	2	5	1	0	0	138
414			Fluid Mechanics	244	0	7	1	0	0	252
415			Heat Engineering	196	2	10	3	0	0	211
416			Mechanics and Control Engineering	208	0	18	1	0	0	227
417			Intelligent Mechanics and Machine System	206	1	6	0	0	0	213
			Machine Engineering total	1,421	7	76	8	0	0	1,512
421			Electric Power Engineering and Electric Machinery	227	2	14	1	0	1	245
422			Electronic and Electric Materials Engineering	271	4	16	0	0	0	291
423			Electron Devices and Apparatus Engineering	257	2	9	1	0	0	269
424			Information and Communication Engineering	464	10	14	5	0	1	494

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Code	Subj ect	Subdi vision	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	143	4	3	0	0	0	150
427			Electronic Measurements	173	2	10	1	0	0	186
428			Control Engineering	121	1	6	1	0	0	129
			Electric and Electronic Engineering	1,656	25	72	9	0	2	1,764
431			Construction Materials and Dynamics in General Civil Engineering	104	0	4	0	0	0	108
432			Structural Engineering and Seismology	121	1	8	0	0	1	131
433			Ground Engineering	124	0	7	0	0	0	131
434			Hydraulics and River Engineering	131	2	7	0	0	0	140
435			Traffic Engineering and Regional Planning	107	1	4	0	0	0	112
436			Civil Environmental System	86	0	2	0	0	1	89
			Civil Engineering total	673	4	32	0	0	2	711
441			Building Structure and Materials	164	0	4	0	0	0	168
442			Building Science and Building Equipment	84	4	1	0	0	0	89
443			City Planning and Building Planning	137	9	2	0	0	0	148
444			Architectural History and Design	30	1	0	0	2	0	33
			Architecture total	415	14	7	0	2	0	438
451			Physical Metallurgy	97	0	3	0	0	1	101
452			Inorganic Materials and	178	1	0	0	0	1	180
453			Composed Materials and Properties	58	0	4	0	0	1	63
454			Structural and Functional Materials	115	1	1	1	0	2	120
455			Metallurgy and Material	106	0	4	0	0	0	110
456			Metal Productive Engineering	69	0	4	1	0	0	74
			Material Engineering total	623	2	16	2	0	5	648
461			Chemical Engineering in General	110	0	0	0	0	0	110
462			Reaction and Separation Engineering	79	0	3	0	0	0	82
463			Catalyst and Chemical Process	62	0	0	0	0	0	62
464			Bioengineering	109	0	3	0	0	0	112
465			Industrial Analytical Chemistry	43	0	1	0	0	0	44
			Process Engineering total	403	0	7	0	0	0	410
471			Industrial Physical Chemistry	131	1	2	0	0	1	135
472			Industrial Inorganic Chemistry	53	0	0	1	0	0	54
473			Industrial Organic Chemistry	64	0	1	0	0	0	65
474			Synthetic Chemistry	103	0	2	1	0	1	107
475			Polymer Synthesis	118	0	0	0	0	0	118
476			Polymer Structure and Property (inclu. Fiber)	129	4	4	1	0	0	138
			Industrial Chemistry total	598	5	9	3	0	2	617
481			Aeronautics	81	0	0	19	0	0	100
482			Ship Engineering	37	1	1	0	0	0	39
483			Marine Engineering	21	0	0	0	0	0	21
484			Resource Development Engineering	59	0	1	0	0	0	60
			Synthetic Engineering total	198	1	2	19	0	0	220
			ENGINEERING Total	6,445	62	235	45	2	16	6,805
501	A G R I C U L T U R E		Plant Breeding	53	0	0	0	0	0	53
502			Crop Science	19	2	0	0	0	0	21
503			Horticulture and Landscape Architecture	75	4	0	0	0	0	79
504			Plant Protection	73	1	0	0	0	0	74
505			Sericultural Science and Economic Entomology	17	0	0	0	0	1	18
			Agriculture total	237	7	0	0	0	1	245
511			Plant Fertilizer and Manure and Soil Science	48	2	0	0	0	0	50
512			Applied Microbiochemistry and Applied Biochemistry	173	5	2	2	0	5	187
513			Biological Productive Chemistry and Bioorganic Chemistry	58	0	0	0	0	1	59
514			Food Science and Nutritional Chemistry	126	22	0	0	0	0	148

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

Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
			Agricultural Chemistry total	405	29	2	2	0	6	444
521			Forestry	49	0	0	0	0	0	49
522			Wood Science	88	3	0	0	0	0	91
			Forestry total	137	3	0	0	0	0	140
531			Fisheries in General	117	1	0	0	0	0	118
532			Fisheries Chemistry	30	0	0	0	0	0	30
			Fisheries total	147	1	0	0	0	0	148
541			Agricultural Economics	58	0	0	0	0	0	58
551			Irrigation, Drainage and Reclamation Engineering and Rural Planning	50	0	0	0	0	0	50
552			Agricultural Machinery	45	3	0	0	0	0	48
553			Biological Environment	22	0	0	0	0	0	22
			Agricultural Engineering total	117	3	0	0	0	0	120
561			Animal Science and Grassland Science	51	2	0	0	0	0	53
562			Applied Animal Science	52	1	0	0	0	0	53
563			Basic Veterinary Medicine and Basic Animal Science	70	1	0	0	1	1	73
564			Applied Veterinary Medicine	62	0	0	0	0	1	63
			Animal Science· Veterinary Medicine total	235	4	0	0	1	2	242
571			Biological Resource Science	27	1	0	1	0	0	29
572			Applied Molecular Cell Biology	18	0	0	0	0	0	18
			Interdisciplinary Agricultural Science total	45	1	0	1	0	0	47
			AGRICULTURE Total	1,381	48	2	3	1	9	1,444
601			Anatomy in General (inclu. Histology, Embryology)	122	6	0	1	0	0	129
602			Physiology in General	164	2	0	3	0	0	169
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	88	12	0	0	0	0	100
604			Pharmacology in General	102	0	0	0	0	1	103
605			Medical Chemistry in General	126	1	0	0	0	3	130
606			Pathological Medical Chemistry	57	2	0	0	0	3	62
			Physiology total	659	23	0	4	0	7	693
611			Hominal Pathology	133	4	0	0	0	1	138
612			Experimental Pathology	102	2	0	0	0	4	108
613			Parasitology (inclu. Medical Zoology)	41	0	0	0	0	0	41
614			Bacteriology (inclu. Eumycetes)	84	3	1	0	0	1	89
615			Virology	79	0	0	0	0	1	80
616			Immunology	128	1	0	0	0	2	131
			Pathology total	567	10	1	0	0	9	587
621			Hygiene	88	1	0	0	0	2	91
622			Public Health and Health Science	159	23	1	0	0	2	185
623			Legal Medicine	59	0	0	0	0	0	59
			Social Medicine total	306	24	1	0	0	4	335
631			Internal Medicine in General	199	4	0	0	0	0	203
632			Gastroenterology	277	0	0	0	0	0	277
633			Internal Medicine Respiratory System	176	3	0	0	0	1	180
634			Neurological Medicine	173	3	0	2	0	0	178
635			Cardioangiopathy	368	3	0	0	0	1	372
636			Pediatrics	234	10	0	0	0	0	244
637			Dermatology	182	0	0	0	0	1	183
638			Radiology	325	9	0	0	0	1	335
639			Neuropsychiatry	205	4	0	0	1	0	210
640			Endocrinology and Metabolic Science	93	1	0	0	0	0	94
641			Hematology	155	2	0	0	0	1	158
642			Internal Medicine of Kidney	127	0	0	0	0	1	128
643			Embryology and Newborn	14	0	0	0	0	0	14
644			Endocrinology	92	1	0	0	0	0	93
645			Metabolic Science	85	1	0	0	0	0	86
			Internal Medicine total	2,705	41	0	2	1	6	2,755
651			Surgery in General	211	1	0	0	0	1	213

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Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
652	M		Gastroenterological Surgery	275	2	0	0	0	2	279
653			Thoracic Surgery	169	2	0	0	0	1	172
654			Neurosurgery	236	0	0	1	0	1	238
655			Orthopedic Surgery	340	4	0	0	0	0	344
656			Anesthesiology and Rescue Medicine	238	0	0	0	0	0	238
657			Urology	215	0	0	0	0	1	216
658			Obstetrics and Gynecology	182	1	0	0	0	0	183
659			Oto-rhino-laryngology	176	1	0	0	0	1	178
660			Ophthalmology	206	0	0	0	0	0	206
661			Pediatric Surgery	46	0	0	0	0	0	46
662			Formative Surgery	32	0	0	0	0	0	32
			Surgery total	2,326	11	0	1	0	7	2,345
671	E	D	Oral Anatomy and Morphological Basic Dentistry	94	1	0	0	0	0	95
672			Functional Basic Dentistry	93	0	0	0	0	0	93
673			Morbid Dentistry (inclu. Dental Radiology)	67	0	0	0	0	0	67
674			Conservative Dentistry	180	1	0	0	0	0	181
675			Prosthodontics and Dental Technology	228	3	0	0	0	0	231
676			Oral Surgery	200	0	0	0	0	0	200
677			Orthodontics, Pedodontics and Social Dentistry	156	2	0	0	0	0	158
678			Periodontological Dentistry	26	0	0	0	0	0	26
	N		Dentistry total	1,044	7	0	0	0	0	1,051
681		E	Chemical Pharmaceuticals	167	0	0	0	0	2	169
682			Physical Pharmaceuticals	75	0	0	0	0	0	75
683			Biopharmaceutics	235	0	1	0	0	4	240
684			Molecular Pharmaceuticals	26	0	0	2	0	0	28
685			Environmental Pharmaceuticals	4	1	0	0	0	0	5
			Pharmaceutics total	507	1	1	2	0	6	517
691			Medical Sociology	27	0	0	0	0	0	27
692			Human Genetics	29	0	0	0	0	1	30
693			Applied Pharmacology and Medical Pharmacology	55	1	0	0	0	0	56
694			Pathological Examination	56	6	0	0	0	0	62
696			Science of Basic and Local Nursing	69	25	0	0	0	0	94
697			Science of Clinical Nursing	27	11	0	0	0	0	38
			Medicine in Gene r a l total	263	43	0	0	0	1	307
			MEDICINE Total	8,377	160	3	9	1	40	8,590
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)	34	0	0	0	0	0	34
703			Physical Education	215	19	1	0	0	0	235
704			Human Geography	55	2	1	0	0	0	58
705			Physical Geography	46	0	0	1	0	0	47
			Geography total	101	2	1	1	0	0	105
706			Home Science(inclu. Cloth/Living Environments)	70	43	0	0	0	0	113
707			Food Culture	20	9	0	0	0	0	29
			Domestic Science total	90	52	0	0	0	0	142
708			Science of Cultural Property	6	0	0	0	2	0	8
711			Science Education	23	2	0	0	6	0	31
712			Educational Engineering	40	3	2	3	3	0	51
713			Curriculum Studies	94	11	1	0	1	0	107
714			Japanese Language Education	37	0	0	0	3	0	40
			Science Education• Curriculum Education total	194	16	3	3	13	0	229
721			Statistics	53	0	0	11	0	0	64
731			Computer Science	374	4	4	4	0	0	386
732			Intelligent Informatics	281	2	9	3	0	0	295
733			Study of Information System (Inclu. Library and Information Science)	142	14	0	5	0	1	162
			Information Science total	797	20	13	12	0	1	843
741			Social System Engineering	95	2	0	0	0	0	97
751			Natural Disaster Science	22	0	1	0	0	0	23

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Code	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
761	I N T E R D I S C I P L I N A R Y A R E A		Plasma Science and Technology	128	1	5	18	0	1	153
772			Nuclear Fusion	44	0	0	12	0	0	56
773			Energy Science General	58	1	1	3	0	0	63
774			Nuclear Power Science	77	0	0	0	0	0	77
			Energy total	179	1	1	15	0	0	196
801			Environmental Dynamic Analysis	54	1	1	0	0	0	56
802			Environmental Influence Assessment (inclu. Radiobiology)	48	3	1	1	0	2	55
803			Environmental Preservation	63	1	1	0	0	1	66
			Environmental Science total	165	5	3	1	0	3	177
811			Biological Organic Chemistry	53	0	0	0	0	0	53
812			Structured Biochemistry	78	1	0	0	0	0	79
813			Functional Biochemistry	105	2	1	0	0	1	109
			Biological Chemistry total	236	3	1	0	0	1	241
821			Biophysics	110	0	0	1	0	0	111
822			Molecular Biology	307	3	0	19	0	4	333
823			Cell Biology	120	0	0	3	0	3	126
824			Developmental Biology	85	1	0	6	0	0	92
			Basic Biology total	622	4	0	29	0	7	662
831			Neuroanatomy and Neuropathology	68	1	0	0	0	0	69
832			Neurochemistry and Neuropharmacology	68	1	0	0	0	0	69
833			Neuro Science in General	135	4	0	9	0	2	150
834			Neuro and Muscular Physiology	86	7	0	4	0	0	97
			Neuro Science (inclu. Brain Science) total	357	13	0	13	0	2	385
841			Laboratory Animal Science	20	0	0	0	0	7	27
851			Medical Organism Engineering and Material Science of Organism	178	3	4	0	0	0	185
			INTERDISCIPLINARY AREA Total	3,492	141	33	103	15	22	3,806
999	WIDE AREA Total			261	40	1	6	1	2	311
	Item n.a. Total			66	2	0	0	0	0	68
	Grand Total			27,352	818	318	394	60	107	29,049

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

Code	Sub ject	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
211	A R T S · H U M A N I T I E S		Philosophy	22	0	0	0	0	22
212			Chinese Philosophy	13	0	0	0	0	13
213			Indian Philosophy (inclu. Buddhist Studies)	6	0	0	0	0	6
214			Religion	10	0	0	0	0	10
215			Ethics	7	0	0	0	1	8
216			History of Philosophy	7	0	0	0	0	7
217			Aesthetics (inclu. Arts)	44	0	0	1	1	46
218			Art History	19	1	0	1	2	23
			Philosophy total	128	1	0	2	4	135
221			Experimental Psychology	75	2	0	1	0	78
222			Educational and Social Psychology	91	0	0	5	4	100
223			Sociology (inclu. Social Welfare)	58	0	0	3	0	61
224			Education	104	2	1	4	12	123
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	45	0	0	8	1	54
			Psychology· Sociology · Education Cultural Anthropology total	373	4	1	21	17	416
231			Japanese History	20	0	1	3	0	24
232			Oriental History	46	0	0	0	0	46
233			European History	23	0	0	0	0	23
234			Archaeology (inclu. Prehistory)	6	0	0	2	2	10
			History total	95	0	1	5	2	103
241			Japanese Language	14	0	0	0	2	16
242			Japanese Literature	19	0	0	3	0	22
243			Chinese Language and Literature	26	0	0	0	0	26
244			English Language and Literature	73	2	5	0	0	80
245			French Language and Literature	23	0	0	0	0	23
246			German Language and Literature	22	0	0	0	0	22
247			Other Foreign Languages and Literatures	23	0	0	0	0	23
248			Linguistics and Phonetics	80	0	3	2	2	87
249			Literature in General (i n c l u . Literary Theory, Comparative Literature) and Western Classics	18	0	0	0	0	18
			Literature total	298	2	8	5	4	317
			ARTS · HUMANITIES Total	894	7	10	33	27	971
261	L A W		Basic Science of Law	18	0	0	0	0	18
262			Public Law	21	0	0	0	0	21
263			International Law	24	0	0	0	0	24
264			Civil Law	22	0	0	0	0	22
265			Social Law	8	0	0	0	0	8
266			Criminal Law	7	0	0	0	0	7
267			Politics	50	0	0	1	0	51
			LAW Total	150	0	0	1	0	151
271	E C O N O M I C S		General Theory of Economics	55	0	0	1	0	56
272			Economical Statistics	15	0	0	0	0	15
273			Economic Policy (inclu. Economic Condition)	68	0	1	0	0	69
274			Economic History	21	0	0	0	0	21
275			Public Finance, Money and Banking	18	1	0	0	0	19
276			Commercial Science	8	0	0	0	0	8
277			Business Administration	29	0	0	0	0	29
278			Accounting	16	0	0	0	0	16
			ECONOMICS Total	230	1	1	1	0	233
301	S C I E N C E		Algebra	61	0	1	0	0	62
302			Geometry	71	0	1	0	0	72
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	98	0	0	4	0	102
305			Basic Analysis	95	0	4	0	0	99
306			Larger-area Analysis	30	0	0	0	0	30
			Mathematics total	355	0	6	4	0	365
311			Astronomy	72	0	0	33	0	105
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	237	2	4	43	0	286

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

Code	Sub ject	Subdi vision	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)	163	0	2	8	0	173
323			Solid - State Physics II (Magnetism, Metal Physics, Physical Properties in General (inclu. Basic Theories)	227	0	1	4	0	232
324			Physics in General	89	2	2	7	0	100
325			Physics in General	86	0	3	6	0	95
			Physics total	802	4	12	68	0	886
331			Physics of Solid Earth	124	0	0	8	0	132
332			Meteorology, Oceanography and Hydrology	121	0	0	3	0	124
333	S		Aeronomy	50	0	1	11	0	62
334			Geology	50	0	0	0	0	50
335	C		Stratigraphy and Paleontology	26	0	0	0	3	29
336	I		Mineralogy, Petrology and Study of Mineral Deposit	77	0	0	1	1	79
337			Geochemistry	48	0	1	0	1	50
	E		Earth Science total	496	0	2	23	5	526
341			Physical Chemistry	216	0	3	23	0	242
342	N		Organic Chemistry	138	0	2	4	0	144
343			Inorganic Chemistry	37	1	1	2	1	42
344	C		Function, Properties and Materials in Chemistry	97	0	3	3	0	103
345	E		Substance Transformation	7	0	0	0	0	7
346			Separation, Refining and Identification	36	0	2	0	0	38
			Chemistry total	531	1	11	32	1	576
351			Genetics	52	0	0	12	0	64
352			Ecology	83	0	0	3	1	87
353			Plant Physiology	104	0	0	12	0	116
354			Morphology, Structure of	27	0	0	2	1	30
355			Animal Physiology and Metabolism	40	0	0	1	0	41
356			Morphology and Taxonomy	50	0	0	2	3	55
			Biology total	356	0	0	32	5	393
361			Physical Anthropology (inclu. Physiological Anthropology)	16	0	0	1	2	19
			SCIENCE Total	2,628	5	31	193	13	2,870
401			Applied Physics of Property and Crystallography	100	0	2	1	0	103
402			Surface Physics	61	0	4	1	0	66
403			Applied Optics and Quantum	92	0	6	2	0	100
404			General Applied Physics	35	0	1	0	0	36
405	E		Fundamentals of Engineering	32	0	0	0	0	32
	N		Applied Physics- Fundamentals of Engineering total	320	0	13	4	0	337
411	G		Materials for Machines and Strength of Materials	170	0	14	1	0	185
412	I		Workshop Processes and Production Engineering	110	0	11	1	0	122
413	N		Design Engineering, Machine Elements and Tribology	87	1	3	1	0	92
414			Fluid Mechanics	158	0	7	1	0	166
415	E		Heat Engineering	130	2	9	3	0	144
416			Mechanics and Control	145	0	15	1	0	161
417	E		Intelligent Mechanics and Machine System	143	0	6	0	0	149
	R		Machine Engineering total	943	3	65	8	0	1,019
421	I		Electric Power Engineering and Electric Machinery	131	1	13	1	0	146
422	N		Electronic and Electric Materials Engineering	178	1	16	0	0	195
423	G		Electron Devices and Apparatus Engineering	173	0	9	1	0	183
424			Information and Communication Engineering	293	1	13	5	0	312
425			System Engineering	96	1	3	0	0	100
427			Electronic Measurements	107	0	10	1	0	118
428			Control Engineering	80	0	6	1	0	87

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

Code	Sub ject	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
			Electric and Electronic Engineering total	1,058	4	70	9	0	1,141
431			Construction Materials and Dynamics in General Civil Engineering	75	0	4	0	0	79
432			Structural Engineering and Seismology	84	0	8	0	0	92
433			Ground Engineering	96	0	7	0	0	103
434			Hydraulics and River Engineering	103	0	6	0	0	109
435			Traffic Engineering and Regional Planning	79	0	4	0	0	83
436			Civil Environmental System	55	0	2	0	0	57
			Civil Engineering total	492	0	31	0	0	523
441	E		Building Structure and Materials	109	0	4	0	0	113
442	N		Building Science and Building Equipment	51	1	1	0	0	53
443			City Planning and Building	75	2	2	0	0	79
444	G		Architectural History and Design	13	0	0	0	2	15
			Architecture total	248	3	7	0	2	260
451	I		Physical Metallurgy	74	0	3	0	0	77
452			Inorganic Materials and Properties	131	0	0	0	0	131
453	N		Composed Materials and	33	0	3	0	0	36
454			Structural and Functional	89	0	1	1	0	91
455	E		Metallurgy and Material	82	0	4	0	0	86
456			Metal Productive Engineering	62	0	4	1	0	67
			Material Engineering total	471	0	15	2	0	488
461			Chemical Engineering in General	91	0	0	0	0	91
462	R		Reaction and Separation Engineering	62	0	3	0	0	65
463	I		Catalyst and Chemical Process	51	0	0	0	0	51
464			Bioengineering	87	0	3	0	0	90
465	N		Industrial Analytical Chemistry	32	0	1	0	0	33
			Process Engineering total	323	0	7	0	0	330
471	G		Industrial Physical Chemistry	102	1	2	0	0	105
472			Industrial Inorganic Chemistry	42	0	0	1	0	43
473			Industrial Organic Chemistry	46	0	0	0	0	46
474			Synthetic Chemistry	81	0	2	1	0	84
475			Polymer Synthesis	93	0	0	0	0	93
476			Polymer Structure and Property (inclu. Fiber)	98	0	4	1	0	103
			Industrial Chemistry total	462	1	8	3	0	474
481			Aeronautics	61	0	0	19	0	80
482			Ship Engineering	30	0	1	0	0	31
483			Marine Engineering	14	0	0	0	0	14
484			Resource Development	54	0	1	0	0	55
			Synthetic Engineering total	159	0	2	19	0	180
			ENGINEERING Total	4,476	11	218	45	2	4,752
501			Plant Breeding	44	0	0	0	0	44
502			Crop Science	18	0	0	0	0	18
503			Horticulture and Landscape Architecture	50	0	0	0	0	50
504			Plant Protection	60	0	0	0	0	60
505			Sericultural Science and Economic Entomology	13	0	0	0	0	13
			Agriculture total	185	0	0	0	0	185
511	A		Plant Fertilizer and Manure and Soil Science	37	0	0	0	0	37
512	G		Applied Microbiochemistry and Applied Biochemistry	140	0	2	2	0	144
513	R		Biological Productive Chemistry and Bioorganic Chemistry	48	0	0	0	0	48
514	I		Food Science and Nutritional Chemistry	78	0	0	0	0	78
			Agricultural Chemistry total	303	0	2	2	0	307
521			Forestry	40	0	0	0	0	40
522			Wood Science	82	0	0	0	0	82
			Forestry total	122	0	0	0	0	122
531			Fisheries in General	98	0	0	0	0	98
532			Fisheries Chemistry	25	0	0	0	0	25
			Fisheries total	123	0	0	0	0	123

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

Code	Sub ject	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
541	A G R I C U L T U R E		Agricultural Economics	33	0	0	0	0	33
551			Irrigation, Drainage and Reclamation Engineering and Rural	41	0	0	0	0	41
552			Agricultural Machinery	39	0	0	0	0	39
553			Biological Environment	17	0	0	0	0	17
			Agricultural Engineering total	97	0	0	0	0	97
561			Animal Science and Grassland Science	36	0	0	0	0	36
562			Applied Animal Science	42	0	0	0	0	42
563			Basic Veterinary Medicine and Basic Animal Science	49	0	0	0	1	50
564			Applied Veterinary Medicine	44	0	0	0	0	44
			Animal Science· Veterinary Medicine total	171	0	0	0	1	172
571			Biological Resource Science	23	0	0	1	0	24
572			Applied Molecular Cell Biology	15	0	0	0	0	15
			Interdisciplinary Agricultural Science total	38	0	0	1	0	39
			AGRICULTURE Total	1,072	0	2	3	1	1,078
601	M E D I C I N E		Anatomy in General (inclu. Histology, Embryology)	65	1	0	1	0	67
602			Physiology in General	94	0	0	3	0	97
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	48	1	0	0	0	49
604			Pharmacology in General	55	0	0	0	0	55
605			Medical Chemistry in General	80	0	0	0	0	80
606			Pathological Medical Chemistry	33	0	0	0	0	33
			Physiology total	375	2	0	4	0	381
611			Hominal Pathology	69	2	0	0	0	71
612			Experimental Pathology	64	0	0	0	0	64
613			Parasitology (inclu. Medical)	18	0	0	0	0	18
614			Bacteriology (inclu. Eumycetes)	46	0	1	0	0	47
615			Virology	56	0	0	0	0	56
616			Immunology	78	1	0	0	0	79
			Pathology total	331	3	1	0	0	335
621			Hygiene	41	0	0	0	0	41
622			Public Health and Health Science	89	5	1	0	0	95
623			Legal Medicine	28	0	0	0	0	28
			Social Medicine total	158	5	1	0	0	164
631			Internal Medicine in General	98	0	0	0	0	98
632			Gastroenterology	138	0	0	0	0	138
633			Internal Medicine Respiratory System	92	3	0	0	0	95
634			Neurological Medicine	107	1	0	2	0	110
635			Cardioangiopathy	174	1	0	0	0	175
636			Pediatrics	119	4	0	0	0	123
637			Dermatology	93	0	0	0	0	93
638			Radiology	199	4	0	0	0	203
639			Neuropsychiatry	88	1	0	0	1	90
640			Endocrinology and Metabolic Science	51	0	0	0	0	51
641			Hematology	88	1	0	0	0	89
642			Internal Medicine of Kidney	55	0	0	0	0	55
643			Embryology and Newborn Medicine	6	0	0	0	0	6
644			Endocrinology	59	0	0	0	0	59
645			Metabolic Science	53	1	0	0	0	54
			Internal Medicine total	1,420	16	0	2	1	1,439
651			Surgery in General	88	1	0	0	0	89
652			Gastroenterological Surgery	135	2	0	0	0	137
653			Thoracic Surgery	89	1	0	0	0	90
654			Neurosurgery	128	0	0	1	0	129
655			Orthopedic Surgery	163	2	0	0	0	165
656			Anesthesiology and Rescue Medicine	141	0	0	0	0	141
657			Urology	116	0	0	0	0	116
658			Obstetrics and Gynecology	94	0	0	0	0	94
659			Oto-rhino-laryngology	94	0	0	0	0	94

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

Code	Sub ject	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
660			Ophthalmology	119	0	0	0	0	119
661			Pediatric Surgery	29	0	0	0	0	29
662			Formative Surgery	8	0	0	0	0	8
			Surgery total	1,204	6	0	1	0	1,211
671			Oral Anatomy and Morphological Basic Dentistry	32	0	0	0	0	32
672			Functional Basic Dentistry	39	0	0	0	0	39
673			Morbid Dentistry (inclu. Dental Radiology)	29	0	0	0	0	29
674			Conservative Dentistry	69	0	0	0	0	69
675			Prosthodontics and Dental Technology	98	0	0	0	0	98
676			Oral Surgery	101	0	0	0	0	101
677			Orthodontics, Pedodontics and Social Dentistry	90	0	0	0	0	90
678			Periodontological Dentistry	13	0	0	0	0	13
			Dentistry total	471	0	0	0	0	471
681			Chemical Pharmaceutics	62	0	0	0	0	62
682			Physical Pharmaceutics	27	0	0	0	0	27
683			Biopharmaceutics	98	0	1	0	0	99
684			Molecular Pharmaceutics	15	0	0	2	0	17
685			Environmental Pharmaceutics	2	0	0	0	0	2
			Pharmaceutics total	204	0	1	2	0	207
691			Medical Sociology	14	0	0	0	0	14
692			Human Genetics	23	0	0	0	0	23
693			Applied Pharmacology and Medical Pharmacology	27	0	0	0	0	27
694			Pathological Examination	28	2	0	0	0	30
696			Science of Basic and Local Nursing	38	12	0	0	0	50
697			Science of Clinical Nursing	15	4	0	0	0	19
			Medicine in Gene r a l total	145	18	0	0	0	163
			MEDICINE Total	4,308	50	3	9	1	4,371
702			History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	16	0	0	0	0	16
703			Physical Education	112	1	1	0	0	114
704			Human Geography	28	0	0	0	0	28
705			Physical Geography	29	0	0	1	0	30
			Geography total	57	0	0	1	0	58
706			Home Science(inclu. Cloth/Living Environments)	32	0	0	0	0	32
707			Food Culture	8	0	0	0	0	8
			Domestic Science total	40	0	0	0	0	40
708			Science of Cultural Property	5	0	0	0	2	7
711			Science Education	13	0	0	0	6	19
712			Educational Engineering	19	0	1	3	3	26
713			Curriculum Studies	71	0	1	0	1	73
714			Japanese Language Education	26	0	0	0	3	29
			Science Education· Curriculum Education total	129	0	2	3	13	147
721			Statistics	33	0	0	11	0	44
731			Computer Science	265	0	3	4	0	272
732			Intelligent Informatics	201	1	9	3	0	214
733			Study of Information System (Inclu. Library and Information	68	4	0	5	0	77
			Information Science total	534	5	12	12	0	563
741			Social System Engineering	46	0	0	0	0	46
751			Natural Disaster Science	17	0	1	0	0	18
761			Plasma Science and Technology	108	0	4	18	0	130
772			Nuclear Fusion	40	0	0	12	0	52
773			Energy Science General	47	0	0	3	0	50
774			Nuclear Power Science	71	0	0	0	0	71
			Energy total	158	0	0	15	0	173
801			Environmental Dynamic Analysis	43	0	0	0	0	43
802			Environmental Influence Assessment (inclu. Radiobiology)	33	1	1	1	0	36
803			Environmental Preservation	40	0	1	0	0	41
			Environmental Science total	116	1	2	1	0	120

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

Code	Sub ject	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
811	I N T E R D I S C I P L I N A R Y A R E A		Biological Organic Chemistry	43	0	0	0	0	43
812			Structured Biochemistry	41	0	0	0	0	41
813			Functional Biochemistry	74	0	1	0	0	75
			Biological Chemistry total	158	0	1	0	0	159
821			Biophysics	86	0	0	1	0	87
822			Molecular Biology	238	1	0	19	0	258
823			Cell Biology	92	0	0	3	0	95
824			Developmental Biology	70	1	0	6	0	77
			Basic Biology total	486	2	0	29	0	517
831			Neuroanatomy and	41	0	0	0	0	41
832			Neurochemistry and Neuropharmacology	42	0	0	0	0	42
833			Neuro Science in General	85	0	0	9	0	94
834			Neuro and Muscular Physiology	53	4	0	4	0	61
			Neuro Science (inclu. Brain Science) total	221	4	0	13	0	238
841			Laboratory Animal Science	17	0	0	0	0	17
851			Medical Organism Engineering and Material Science of Organism	125	1	2	0	0	128
	INTERDISCIPLINARY AREA Total			2,378	14	25	103	15	2,535
999	WIDE AREA Total			99	4	0	6	1	110
	Item n.a. Total			27	0	0	0	0	27
	Grand Total			16,262	92	290	394	60	17,098

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	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
211	A R T S · H U M A N I T I E S		Philosophy	5	0	1	6
212			Chinese Philosophy	1	0	0	1
213			Indian Philosophy (inclu. Buddhist Studies)	0	0	0	0
214			Religion	1	0	0	1
215			Ethics	1	1	0	2
216			History of Philosophy	6	1	0	7
217			Aesthetics (inclu. Arts)	18	1	0	19
218			Art History	5	0	0	5
			Philosophy total	37	3	1	41
221			Experimental Psychology	8	2	0	10
222			Educational and Social	8	0	0	8
223			Sociology (inclu. Social Welfare)	25	2	0	27
224			Education	7	2	0	9
225			Cultural Anthropology (i n c l u. Ethnology and Folklore)	5	1	0	6
			Psychology· Sociology · Education Cultural Anthropology total	53	7	0	60
231			Japanese History	0	0	0	0
232			Oriental History	6	2	0	8
233			European History	3	0	0	3
234			Archaeology (inclu. Prehistory)	1	0	0	1
			History total	10	2	0	12
241			Japanese Language	1	0	0	1
242			Japanese Literature	4	1	0	5
243			Chinese Language and Literature	3	0	0	3
244			English Language and Literature	17	3	0	20
245			French Language and Literature	4	0	0	4
246			German Language and Literature	3	0	0	3
247			Other Foreign Languages and Literatures	6	0	0	6
248			Linguistics and Phonetics	10	1	0	11
249			Literature in General (i n c l u. Literary Theory, Comparative Literature) and Western Classics	0	0	0	0
			Literature total	48	5	0	53
			ARTS · HUMANITIES Total	148	17	1	166
261	L A W		Basic Science of Law	1	0	0	1
262			Public Law	1	0	0	1
263			International Law	1	0	0	1
264			Civil Law	6	0	0	6
265			Social Law	2	0	0	2
266			Criminal Law	1	0	0	1
267			Politics	11	1	0	12
			LAW Total	23	1	0	24
271	E C O N O M I C S		General Theory of Economics	16	0	0	16
272			Economical Statistics	1	0	0	1
273			Economic Policy (inclu. Economic Condition)	17	0	0	17
274			Economic History	3	0	0	3
275			Public Finance, Money and Banking	7	0	0	7
276			Commercial Science	3	0	0	3
277			Business Administration	11	1	0	12
278			Accounting	4	1	0	5
			ECONOMICS Total	62	2	0	64
301	S C I E N C E		Algebra	4	0	0	4
302			Geometry	7	0	0	7
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	6	0	0	6
305			Basic Analysis	9	0	0	9
306			Larger-area Analysis	5	0	0	5
			Mathematics total	31	0	0	31
311			Astronomy	1	0	0	1
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	17	0	0	17

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	Subdi vision	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)	8	1	0	9
323			Solid - State Physics II (Magnetism, Metal Physics,	18	0	0	18
324			Physical Properties in General (inclu. Basic Theories)	4	0	1	5
325			Physics in General	4	0	0	4
			Physics total	51	1	1	53
331			Physics of Solid Earth	3	0	0	3
332			Meteorology, Oceanography and Hydrology	2	0	0	2
333			Aeronomy	0	0	0	0
334			Geology	5	0	0	5
335			Stratigraphy and Paleontology	2	0	0	2
336			Mineralogy, Petrology and Study of Mineral Deposit	1	0	0	1
337			Geochemistry	3	0	0	3
			Earth Science total	16	0	0	16
341			Physical Chemistry	19	1	0	20
342			Organic Chemistry	11	0	0	11
343			Inorganic Chemistry	4	0	0	4
344			Function, Properties and Materials in Chemistry	5	0	0	5
345			Substance Transformation	0	0	0	0
346			Separation, Refining and Identification	5	0	0	5
			Chemistry total	44	1	0	45
351			Genetics	5	0	0	5
352			Ecology	7	2	0	9
353			Plant Physiology	14	4	0	18
354			Morphology, Structure of Organism	1	0	0	1
355			Animal Physiology and	5	0	0	5
356			Morphology and Taxonomy	2	0	0	2
			Biology total	34	6	0	40
361			Physical Anthropology (inclu. Physiological Anthropology)	0	0	0	0
			SCIENCE Total	177	8	1	186
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	10	0	0	10
402			Surface Physics	3	0	0	3
403			Applied Optics and Quantum Optics	5	0	0	5
404			General Applied Physics	3	0	0	3
405			Fundamentals of Engineering	3	0	1	4
			Applied Physics· Fundamentals of Engineering total	24	0	1	25
411			Materials for Machines and Strength of Materials	14	0	3	17
412			Workshop Processes and Production Engineering	13	1	2	16
413			Design Engineering, Machine Elements and Tribology	3	0	2	5
414			Fluid Mechanics	14	0	0	14
415			Heat Engineering	9	0	1	10
416			Mechanics and Control Engineering	11	0	3	14
417			Intelligent Mechanics and Machine System	8	0	0	8
			Machine Engineering total	72	1	11	84
421			Electric Power Engineering and Electric Machinery	7	0	1	8
422			Electronic and Electric Materials Engineering	11	0	0	11
423			Electron Devices and Apparatus Engineering	4	0	0	4
424			Information and Communication Engineering	31	1	0	32

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	Subdi vision	I t e m	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	6	1	0	7
427			Electronic Measurements	5	0	0	5
428			Control Engineering	13	0	0	13
			Electric and Electronic Engineering total	77	2	1	80
431		Civil Engineering	Construction Materials and Dynamics in General Civil Engineering	4	0	0	4
432			Structural Engineering and Seismology	4	0	0	4
433			Ground Engineering	3	0	0	3
434			Hydraulics and River Engineering	4	0	1	5
435			Traffic Engineering and Regional Planning	0	0	0	0
436			Civil Environmental System	2	0	0	2
			Civil Engineering total	17	0	1	18
441		Architecture	Building Structure and Materials	5	0	0	5
442			Building Science and Building Equipment	3	1	0	4
443			City Planning and Building Planning	10	0	0	10
444			Architectural History and Design	2	0	0	2
			Architecture total	20	1	0	21
451		Material Engineering	Physical Metallurgy	4	0	0	4
452			Inorganic Materials and	7	0	0	7
453			Composed Materials and Properties	6	0	1	7
454			Structural and Functional Materials	8	0	0	8
455			Metallurgy and Material	2	0	0	2
456			Metal Productive Engineering	1	0	0	1
			Material Engineering total	28	0	1	29
461		Process Engineering	Chemical Engineering in General	5	0	0	5
462			Reaction and Separation Engineering	3	0	0	3
463			Catalyst and Chemical Process	1	0	0	1
464			Bioengineering	4	0	0	4
465			Industrial Analytical Chemistry	4	0	0	4
			Process Engineering total	17	0	0	17
471		Industrial Chemistry	Industrial Physical Chemistry	5	0	0	5
472			Industrial Inorganic Chemistry	2	0	0	2
473			Industrial Organic Chemistry	2	0	1	3
474			Synthetic Chemistry	6	0	0	6
475			Polymer Synthesis	6	0	0	6
476			Polymer Structure and Property (inclu. Fiber)	6	2	0	8
			Industrial Chemistry total	27	2	1	30
481		Synthetic Engineering	Aeronautics	5	0	0	5
482			Ship Engineering	4	0	0	4
483			Marine Engineering	1	0	0	1
484			Resource Development Engineering	0	0	0	0
			Synthetic Engineering total	10	0	0	10
			ENGINEERING Total	292	6	16	314
501	A G R I C U L T U R E	Agriculture	Plant Breeding	4	0	0	4
502			Crop Science	0	1	0	1
503			Horticulture and Landscape Architecture	9	1	0	10
504			Plant Protection	6	1	0	7
505			Sericultural Science and Economic Entomology	0	0	0	0
			Agriculture total	19	3	0	22
511		Food Science and Nutritional Chemistry	Plant Fertilizer and Manure and Soil Science	4	1	0	5
512			Applied Microbiochemistry and Applied Biochemistry	8	0	0	8
513			Biological Productive Chemistry and Bioorganic Chemistry	5	0	0	5
514			Food Science and Nutritional Chemistry	14	5	0	19

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	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
			Agricultural Chemistry total	31	6	0	37
521			Forestry	4	0	0	4
522			Wood Science	2	3	0	5
			Forestry total	6	3	0	9
531			Fisheries in General	2	0	0	2
532			Fisheries Chemistry	0	0	0	0
			Fisheries total	2	0	0	2
541			Agricultural Economics	3	0	0	3
551			Irrigation, Drainage and Reclamation Engineering and Rural Planning	2	0	0	2
552			Agricultural Machinery	3	0	0	3
553			Biological Environment	2	0	0	2
			Agricultural Engineering total	7	0	0	7
561			Animal Science and Grassland Science	1	1	0	2
562			Applied Animal Science	0	1	0	1
563			Basic Veterinary Medicine and Basic Animal Science	4	1	0	5
564			Applied Veterinary Medicine	3	0	0	3
			Animal Science· Veterinary Medicine total	8	3	0	11
571			Biological Resource Science	1	0	0	1
572			Applied Molecular Cell Biology	0	0	0	0
			Interdisciplinary Agricultural Science total	1	0	0	1
			AGRICULTURE Total	77	15	0	92
601			Anatomy in General (inclu. Histology, Embryology)	7	2	0	9
602			Physiology in General	8	0	0	8
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	7	0	0	7
604			Pharmacology in General	9	0	0	9
605			Medical Chemistry in General	11	0	0	11
606			Pathological Medical Chemistry	8	0	0	8
			Physiology total	50	2	0	52
611			Hominal Pathology	6	0	0	6
612			Experimental Pathology	18	0	0	18
613			Parasitology (inclu. Medical Zoology)	4	0	0	4
614			Bacteriology (inclu. Eumycetes)	7	1	0	8
615			Virology	9	0	0	9
616			Immunology	7	0	0	7
			Pathology total	51	1	0	52
621			Hygiene	6	0	0	6
622			Public Health and Health Science	15	6	0	21
623			Legal Medicine	7	0	0	7
			Social Medicine total	28	6	0	34
631			Internal Medicine in General	18	0	0	18
632			Gastroenterology	28	0	0	28
633			Internal Medicine Respiratory System	16	0	0	16
634			Neurological Medicine	8	0	0	8
635			Cardioangiopathy	28	0	0	28
636			Pediatrics	32	1	0	33
637			Dermatology	28	0	0	28
638			Radiology	21	0	0	21
639			Neuropsychiatry	20	1	0	21
640			Endocrinology and Metabolic Science	6	0	0	6
641			Hematology	13	1	0	14
642			Internal Medicine of Kidney	8	0	0	8
643			Embryology and Newborn	1	0	0	1
644			Endocrinology	2	0	0	2
645			Metabolic Science	1	0	0	1
			Internal Medicine total	230	3	0	233
651			Surgery in General	19	0	0	19

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	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Total		
652	M E D I C I N E		Gastroenterological Surgery	28	0	0	28		
653			Thoracic Surgery	13	0	0	13		
654			Neurosurgery	31	0	0	31		
655			Orthopedic Surgery	48	2	0	50		
656			Anesthesiology and Rescue Medicine	38	0	0	38		
657			Urology	25	0	0	25		
658			Obstetrics and Gynecology	19	0	0	19		
659			Oto-rhino-laryngology	27	1	0	28		
660			Ophthalmology	32	0	0	32		
661			Pediatric Surgery	4	0	0	4		
662			Formative Surgery	1	0	0	1		
			Surgery total	285	3	0	288		
671		D I C I N E		Oral Anatomy and Morphological Basic Dentistry	3	0	0	3	
672				Functional Basic Dentistry	0	0	0	0	
673				Morbid Dentistry (inclu. Dental Radiology)	5	0	0	5	
674				Conservative Dentistry	3	0	0	3	
675				Prosthodontics and Dental Technology	6	0	0	6	
676				Oral Surgery	17	0	0	17	
677				Orthodontics, Pedodontics and Social Dentistry	2	0	0	2	
678				Periodontological Dentistry	1	0	0	1	
	Dentistry total	37	0	0	37				
681	E		Chemical Pharmaceu ^t ics	14	0	0	14		
682			Physical Pharmaceu ^t ics	5	0	0	5		
683			Biopharmaceutics	12	0	0	12		
684			Molecular Pharmaceu ^t ics	0	0	0	0		
685			Environmental Pharmaceu ^t ics	0	0	0	0		
	Pharmaceutics total	31	0	0	31				
691			Medical Sociology	1	0	0	1		
692			Human Genetics	0	0	0	0		
693			Applied Pharmacology and Medical Pharmacology	0	0	0	0		
694			Pathological Examination	5	2	0	7		
696			Science of Basic and Local Nursing	11	10	0	21		
697			Science of Clinical Nursing	3	5	0	8		
			Medicine in Gene r a l total	20	17	0	37		
	MEDICINE Total			732	32	0	764		
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	12	2	0	14		
704			Human Geography	5	0	1	6		
705			Physical Geography	4	0	0	4		
			Geography total	9	0	1	10		
706			Home Science(inclu. Cloth/Living Environments)	6	5	0	11		
707			Food Culture	5	0	0	5		
			Domestic Science total	11	5	0	16		
708			Science of Cultural Property	0	0	0	0		
711			Science Education	0	0	0	0		
712			Educational Engineering	1	0	0	1		
713			Curriculum Studies	2	1	0	3		
714			Japanese Language Education	0	0	0	0		
			Science Education· Curriculum Education total	3	1	0	4		
721			Statistics	0	0	0	0		
731					Computer Science	11	1	1	13
732					Intelligent Informatics	19	1	0	20
733					Study of Information System (Inclu. Library and Information Science)	7	1	0	8
			Information Science total	37	3	1	41		
741			Social System Engineering	4	0	0	4		
751	Natural Disaster Science	2	0	0	2				

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	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
761	I N T E R D I S C I P L I N A R Y		Plasma Science and Technology	2	1	1	4
772			Nuclear Fusion	1	0	0	1
773			Energy Science General	2	0	0	2
774			Nuclear Power Science	0	0	0	0
			Energy total	3	0	0	3
801			Environmental Dynamic Analysis	4	0	0	4
802			Environmental Influence Assessment (inclu. Radiobiology)	3	1	0	4
803			Environmental Preservation	1	1	0	2
			Environmental Science total	8	2	0	10
811			Biological Organic Chemistry	3	0	0	3
812			Structured Biochemistry	8	0	0	8
813			Functional Biochemistry	8	0	0	8
			Biological Chemistry total	19	0	0	19
821			Biophysics	5	0	0	5
822			Molecular Biology	15	1	0	16
823			Cell Biology	9	0	0	9
824			Developmental Biology	6	0	0	6
			Basic Biology total	35	1	0	36
831			Neuroanatomy and Neuropathology	8	0	0	8
832			Neurochemistry and Neuropharmacology	4	0	0	4
833			Neuro Science in General	11	2	0	13
834			Neuro and Muscular Physiology	8	0	0	8
			Neuro Science (inclu. Brain Science) total	31	2	0	33
841			Laboratory Animal Science	2	0	0	2
851			Medical Organism Engineering and Material Science of Organism	4	0	2	6
			INTERDISCIPLINARY AREA Total	183	17	5	205
999			WIDE AREA Total	25	2	1	28
			Item n.a. Total	9	1	0	10
			Grand Total	1,728	101	24	1,853

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	48	5	0	0	53
212			Chinese Philosophy	10	1	0	0	11
213			Indian Philosophy (inclu. Buddhist Studies)	29	8	0	2	39
214			Religion	47	8	0	0	55
215			Ethics	12	1	0	0	13
216			History of Philosophy	19	0	0	1	20
217			Aesthetics (inclu. Arts)	72	22	0	0	94
218			Art History	18	4	0	0	22
			Philosophy total	255	49	0	3	307
221			Experimental Psychology	51	5	0	1	57
222			Educational and Social Psychology	96	28	0	0	124
223			Sociology (inclu. Social Welfare)	158	18	0	0	176
224			Education	98	29	0	0	127
225			Cultural Anthropology (inclu. Ethnology and Folklore)	59	7	0	0	66
			Psychology • Sociology • Education Cultural Anthropology total	462	87	0	1	550
231			Japanese History	30	2	0	1	33
232			Oriental History	51	2	0	0	53
233			European History	53	7	0	0	60
234			Archaeology (inclu. Prehistory)	18	0	0	2	20
			History total	152	11	0	3	166
241			Japanese Language	22	0	0	0	22
242			Japanese Literature	48	11	0	0	59
243			Chinese Language and Literature	68	4	0	0	72
244			English Language and Literature	251	52	0	0	303
245			French Language and Literature	34	2	0	0	36
246			German Language and Literature	39	0	0	0	39
247			Other Foreign Languages and Literatures	41	1	0	0	42
248			Linguistics and Phonetics	134	25	0	0	159
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	31	5	0	0	36
			Literature total	668	100	0	0	768
			ARTS • HUMANITIES Total	1,537	247	0	7	1,791
261	LAW		Basic Science of Law	24	0	0	0	24
262			Public Law	31	2	0	0	33
263			International Law	26	0	0	0	26
264			Civil Law	56	1	0	0	57
265			Social Law	11	0	0	0	11
266			Criminal Law	24	0	0	0	24
267			Politics	116	4	0	0	120
			LAW Total	288	7	0	0	295
271	ECONOMICS		General Theory of Economics	90	7	0	2	99
272			Economical Statistics	17	0	0	0	17
273			Economic Policy (inclu. Economic Condition)	121	7	0	0	128
274			Economic History	27	0	0	0	27
275			Public Finance, Money and Banking	31	2	0	0	33
276			Commercial Science	48	4	0	0	52
277			Business Administration	133	14	0	0	147
278			Accounting	43	5	0	0	48
			ECONOMICS Total	510	39	0	2	551
301	SCIENCE		Algebra	23	1	0	0	24
302			Geometry	22	1	0	0	23
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	56	5	0	0	61
305			Basic Analysis	40	0	0	0	40
306			Larger-area Analysis	9	0	0	0	9
			Mathematics total	150	7	0	0	157
311			Astronomy	12	0	0	0	12
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	83	5	0	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	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
322			Solid - State Physics I (Optical Properties, Semiconductor and Dielectrics)	59	0	0	0	59
323			Solid - State Physics II (Magnetism, Metal Physics,	49	1	0	0	50
324			Physical Properties in General (inclu. Basic Theories)	33	1	0	0	34
325			Physics in General	22	2	0	1	25
			Physics total	246	9	0	1	256
331			Physics of Solid Earth	11	1	0	0	12
332			Meteorology, Oceanography and Hydrology	11	1	0	0	12
333	S		Aeronomy	6	0	0	0	6
334			Geology	4	0	0	1	5
335	C		Stratigraphy and Paleontology	4	1	0	0	5
336	I		Mineralogy, Petrology and Study of Mineral Deposit	6	1	0	0	7
337			Geochemistry	2	0	0	0	2
	E		Earth Science total	44	4	0	1	49
341			Physical Chemistry	56	2	0	0	58
342	N		Organic Chemistry	32	0	0	1	33
343			Inorganic Chemistry	26	0	0	0	26
344	C		Function, Properties and Materials in Chemistry	26	1	0	0	27
345	E		Substance Transformation	3	0	0	0	3
346			Separation, Refining and Identification	12	0	0	0	12
			Chemistry total	155	3	0	1	159
351			Genetics	8	0	0	0	8
352			Ecology	9	5	0	4	18
353			Plant Physiology	23	1	0	0	24
354			Morphology, Structure of	11	0	0	0	11
355			Animal Physiology and Metabolism	10	1	0	0	11
356			Morphology and Taxonomy	9	1	0	2	12
			Biology total	70	8	0	6	84
361			Physical Anthropology (inclu. Physiological Anthropology)	6	0	0	0	6
			SCIENCE Total	683	31	0	9	723
401			Applied Physics of Property and Crystallography	29	1	0	0	30
402			Surface Physics	23	1	0	0	24
403			Applied Optics and Quantum	42	2	0	2	46
404			General Applied Physics	12	0	0	3	15
405	E		Fundamentals of Engineering	8	0	0	0	8
	N		Applied Physics· Fundamentals of Engineering total	114	4	0	5	123
411	G		Materials for Machines and Strength of Materials	81	1	0	0	82
412	I		Workshop Processes and Production Engineering	49	0	0	0	49
413	N		Design Engineering, Machine Elements and Tribology	40	1	0	0	41
414			Fluid Mechanics	72	0	0	0	72
415	E		Heat Engineering	57	0	0	0	57
416			Mechanics and Control	52	0	0	0	52
417	E		Intelligent Mechanics and Machine System	55	1	0	0	56
	R		Machine Engineering total	406	3	0	0	409
421	I		Electric Power Engineering and Electric Machinery	89	1	0	1	91
422	N		Electronic and Electric Materials Engineering	82	3	0	0	85
423	G		Electron Devices and Apparatus Engineering	80	2	0	0	82
424			Information and Communication Engineering	140	8	1	1	150
425			System Engineering	41	2	0	0	43
427			Electronic Measurements	61	2	0	0	63
428			Control Engineering	28	1	0	0	29

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
			Electric and Electronic Engineering total	521	19	1	2	543
431			Construction Materials and Dynamics in General Civil Engineering	25	0	0	0	25
432			Structural Engineering and Seismology	33	1	0	1	35
433			Ground Engineering	25	0	0	0	25
434			Hydraulics and River Engineering	24	2	0	0	26
435			Traffic Engineering and Regional Planning	28	1	0	0	29
436			Civil Environmental System	29	0	0	1	30
			Civil Engineering total	164	4	0	2	170
441	E		Building Structure and Materials	50	0	0	0	50
442	N		Building Science and Building Equipment	30	2	0	0	32
443			City Planning and Building Planning	52	7	0	0	59
444	G		Architectural History and Design	15	1	0	0	16
			Architecture total	147	10	0	0	157
451	I		Physical Metallurgy	19	0	0	1	20
452			Inorganic Materials and Properties	40	1	0	1	42
453	N		Composed Materials and	19	0	0	1	20
454			Structural and Functional	18	1	0	2	21
455	E		Metallurgy and Material Processing	22	0	0	0	22
456			Metal Productive Engineering	6	0	0	0	6
	E		Material Engineering total	124	2	0	5	131
461			Chemical Engineering in General	14	0	0	0	14
462	R		Reaction and Separation Engineering	14	0	0	0	14
463	I		Catalyst and Chemical Process	10	0	0	0	10
464			Bioengineering	18	0	0	0	18
465	N		Industrial Analytical Chemistry	7	0	0	0	7
			Process Engineering total	63	0	0	0	63
471	G		Industrial Physical Chemistry	24	0	0	1	25
472			Industrial Inorganic Chemistry	9	0	0	0	9
473			Industrial Organic Chemistry	16	0	0	0	16
474			Synthetic Chemistry	16	0	0	1	17
475			Polymer Synthesis	19	0	0	0	19
476			Polymer Structure and Property (inclu. Fiber)	25	2	0	0	27
			Industrial Chemistry total	109	2	0	2	113
481			Aeronautics	15	0	0	0	15
482			Ship Engineering	3	1	0	0	4
483			Marine Engineering	6	0	0	0	6
484			Resource Development	5	0	0	0	5
			Synthetic Engineering total	29	1	0	0	30
			ENGINEERING Total	1,677	45	1	16	1,739
501			Plant Breeding	5	0	0	0	5
502			Crop Science	1	1	0	0	2
503			Horticulture and Landscape Architecture	16	3	0	0	19
504			Plant Protection	7	0	0	0	7
505			Sericultural Science and Economic Entomology	4	0	0	1	5
			Agriculture total	33	4	0	1	38
511	A		Plant Fertilizer and Manure and Soil Science	7	1	0	0	8
512	G		Applied Microbiochemistry and Applied Biochemistry	25	5	0	5	35
513	R		Biological Productive Chemistry and Bioorganic Chemistry	5	0	0	1	6
514	I		Food Science and Nutritional Chemistry	34	17	0	0	51
			Agricultural Chemistry total	71	23	0	6	100
521			Forestry	5	0	0	0	5
522			Wood Science	4	0	0	0	4
			Forestry total	9	0	0	0	9
531			Fisheries in General	17	1	0	0	18
532			Fisheries Chemistry	5	0	0	0	5
			Fisheries total	22	1	0	0	23

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
541	AGRICULTURE		Agricultural Economics	22	0	0	0	22
551			Irrigation, Drainage and Reclamation Engineering and Rural	7	0	0	0	7
552			Agricultural Machinery	3	3	0	0	6
553			Biological Environment	3	0	0	0	3
			Agricultural Engineering total	13	3	0	0	16
561			Animal Science and Grassland Science	14	1	0	0	15
562			Applied Animal Science	10	0	0	0	10
563			Basic Veterinary Medicine and Basic Animal Science	17	0	0	1	18
564			Applied Veterinary Medicine	15	0	0	1	16
			Animal Science· Veterinary Medicine total	56	1	0	2	59
571			Biological Resource Science	3	1	0	0	4
572			Applied Molecular Cell Biology	3	0	0	0	3
			Interdisciplinary Agricultural Science total	6	1	0	0	7
			AGRICULTURE Total	232	33	0	9	274
601	MEDICINE		Anatomy in General (inclu. Histology, Embryology)	50	3	0	0	53
602			Physiology in General	62	2	0	0	64
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	33	11	0	0	44
604			Pharmacology in General	38	0	0	1	39
605			Medical Chemistry in General	35	1	0	3	39
606			Pathological Medical Chemistry	16	2	0	3	21
			Physiology total	234	19	0	7	260
611			Hominal Pathology	58	2	0	1	61
612			Experimental Pathology	20	2	0	4	26
613			Parasitology (inclu. Medical)	19	0	0	0	19
614			Bacteriology (inclu. Eumycetes)	31	2	0	1	34
615			Virology	14	0	0	1	15
616			Immunology	43	0	0	2	45
			Pathology total	185	6	0	9	200
621			Hygiene	41	1	0	2	44
622			Public Health and Health Science	55	12	0	2	69
623			Legal Medicine	24	0	0	0	24
			Social Medicine total	120	13	0	4	137
631			Internal Medicine in General	83	4	0	0	87
632			Gastroenterology	111	0	0	0	111
633			Internal Medicine Respiratory System	68	0	0	1	69
634			Neurological Medicine	58	2	0	0	60
635			Cardioangiography	166	2	0	1	169
636			Pediatrics	83	5	0	0	88
637			Dermatology	61	0	0	1	62
638			Radiology	105	5	0	1	111
639			Neuropsychiatry	97	2	0	0	99
640			Endocrinology and Metabolic Science	36	1	0	0	37
641			Hematology	54	0	0	1	55
642			Internal Medicine of Kidney	64	0	0	1	65
643			Embryology and Newborn Medicine	7	0	0	0	7
644			Endocrinology	31	1	0	0	32
645			Metabolic Science	31	0	0	0	31
			Internal Medicine total	1,055	22	0	6	1,083
651			Surgery in General	104	0	0	1	105
652			Gastroenterological Surgery	112	0	0	2	114
653			Thoracic Surgery	67	1	0	1	69
654			Neurosurgery	77	0	0	1	78
655			Orthopedic Surgery	129	0	0	0	129
656			Anesthesiology and Rescue Medicine	59	0	0	0	59
657			Urology	74	0	0	1	75
658			Obstetrics and Gynecology	69	1	0	0	70
659			Oto-rhino-laryngology	55	0	0	1	56

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
660	M E D I C I N E		Ophthalmology	55	0	0	0	55
661			Pediatric Surgery	13	0	0	0	13
662			Formative Surgery	23	0	0	0	23
			Surgery total	837	2	0	7	846
671			Oral Anatomy and Morphological Basic Dentistry	59	1	0	0	60
672			Functional Basic Dentistry	54	0	0	0	54
673			Morbid Dentistry (inclu. Dental Radiology)	33	0	0	0	33
674			Conservative Dentistry	108	1	0	0	109
675			Prosthodontics and Dental Technology	124	3	0	0	127
676			Oral Surgery	82	0	0	0	82
677			Orthodontics, Pedodontics and Social Dentistry	64	2	0	0	66
678			Periodontological Dentistry	12	0	0	0	12
			Dentistry total	536	7	0	0	543
681			Chemical Pharmaceuticals	91	0	0	2	93
682			Physical Pharmaceuticals	43	0	0	0	43
683			Biopharmaceutics	125	0	0	4	129
684			Molecular Pharmaceuticals	11	0	0	0	11
685			Environmental Pharmaceuticals	2	1	0	0	3
			Pharmaceutics total	272	1	0	6	279
691			Medical Sociology	12	0	0	0	12
692			Human Genetics	6	0	0	1	7
693			Applied Pharmacology and Medical Pharmacology	28	1	0	0	29
694			Pathological Examination	23	2	0	0	25
696			Science of Basic and Local	20	3	0	0	23
697			Science of Clinical Nursing	9	2	0	0	11
			Medicine in Gene r a l total	98	8	0	1	107
		MEDICINE Total		3,337	78	0	40	3,455
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)	17	0	0	0	17
703			Physical Education	91	16	0	0	107
704			Human Geography	22	2	0	0	24
705			Physical Geography	13	0	0	0	13
			Geography total	35	2	0	0	37
706			Home Science(inclu. Cloth/Living Environments)	32	38	0	0	70
707			Food Culture	7	9	0	0	16
			Domestic Science total	39	47	0	0	86
708			Science of Cultural Property	1	0	0	0	1
711			Science Education	10	2	0	0	12
712			Educational Engineering	20	3	1	0	24
713			Curriculum Studies	21	10	0	0	31
714			Japanese Language Education	11	0	0	0	11
			Science Education· Curriculum	62	15	1	0	78
721			Statistics	20	0	0	0	20
731			Computer Science	98	3	0	0	101
732			Intelligent Informatics	61	0	0	0	61
733			Study of Information System (Inclu. Library and Information)	67	9	0	1	77
			Information Science total	226	12	0	1	239
741			Social System Engineering	45	2	0	0	47
751			Natural Disaster Science	3	0	0	0	3
761			Plasma Science and Technology	18	0	0	1	19
772			Nuclear Fusion	3	0	0	0	3
773			Energy Science General	9	1	1	0	11
774			Nuclear Power Science	6	0	0	0	6
			Energy total	18	1	1	0	20
801			Environmental Dynamic Analysis	7	1	1	0	9
802			Environmental Influence Assessment (inclu. Radiobiology)	12	1	0	2	15
803			Environmental Preservation	22	0	0	1	23
			Environmental Science total	41	2	1	3	47
811			Biological Organic Chemistry	7	0	0	0	7
812			Structured Biochemistry	29	1	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	Subj ect	Subdi vision	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
813	I N T E R D I S C I P L I N A R Y		Functional Biochemistry	23	2	0	1	26
			Biological Chemistry total	59	3	0	1	63
821			Biophysics	19	0	0	0	19
822			Molecular Biology	54	1	0	4	59
823			Cell Biology	19	0	0	3	22
824			Developmental Biology	9	0	0	0	9
			Basic Biology total	101	1	0	7	109
831			Neuroanatomy and	19	1	0	0	20
832			Neurochemistry and Neuropharmacology	22	1	0	0	23
833			Neuro Science in General	39	2	0	2	43
834			Neuro and Muscular Physiology	25	3	0	0	28
			Neuro Science (inclu. Brain Science) total	105	7	0	2	114
841			Laboratory Animal Science	1	0	0	7	8
851			Medical Organism Engineering and Material Science of Organism	49	2	0	0	51
			INTERDISCIPLINARY AREA Total	931	110	3	22	1,066
999	WIDE AREA Total			137	34	0	2	173
	Item n.a. Total			30	1	0	0	31
	Grand Total			9,362	625	4	107	10,098