

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total	
211	ARTS • HUMANITIES		Philosophy	390	0	28	0	2	420	
212			Chinese Philosophy	101	0	18	0	1	120	
213			Indian Philosophy (inclu. Buddhist Studies)	62	0	8	3	0	73	
214			Religion	92	0	5	1	0	98	
215			Ethics	161	0	4	0	3	168	
216			History of Philosophy	143	0	14	0	0	157	
217			Aesthetics (inclu. Arts)	622	27	1	3	8	661	
218			Art History	210	3	0	4	46	263	
		Philosophy total			1,781	30	78	11	60	1,960
221				Experimental Psychology	485	2	3	12	3	505
222				Educational and Social	1,189	0	3	14	51	1,257
223				Sociology	714	4	0	11	7	736
224				Education	1,493	3	52	32	91	1,671
225				Cultural Anthropology (inclu. Ethnology and Folklore)	332	0	0	40	7	379
		Psychology • Sociology • Education Cultural Anthropology total			4,213	9	58	109	159	4,548
231				Japanese History	373	0	35	14	4	426
232				Oriental History	277	0	11	3	2	293
233				European History	280	0	9	1	2	292
234				Archaeology (inclu. Prehistory)	182	0	3	13	9	207
		History total			1,112	0	58	31	17	1,218
241				Japanese Language	238	0	6	0	19	263
242				Japanese Literature	359	0	80	5	2	446
243				Chinese Language and Literature	213	7	17	0	0	237
244				English Language and Literature	937	7	155	0	1	1,100
245				French Language and Literature	229	0	4	0	0	233
246				German Language and Literature	382	0	19	0	0	401
247				Other Foreign Languages and Literatures	279	0	3	0	0	282
248				Linguistics and Phonetics	565	0	52	5	21	643
249				Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	187	0	7	1	0	195
		Literature total			3,389	14	343	11	43	3,800
	ARTS • HUMANITIES Total			10,495	53	537	162	279	11,526	
261	LAW		Basic Science of Law	193	3	4	2	0	202	
262			Public Law	222	0	5	0	0	227	
263			International Law	115	0	8	0	0	123	
264			Civil Law	359	2	1	1	0	363	
265			Social Law	106	3	0	0	0	109	
266			Criminal Law	93	0	0	0	0	93	
267			Politics	546	0	10	3	3	562	
	LAW Total			1,634	8	28	6	3	1,679	
271	ECONOMICS		General Theory of Economics	533	2	12	0	0	547	
272			Economical Statistics	119	0	0	0	0	119	
273			Economic Policy (inclu. Economic Condition)	540	0	8	3	0	551	
274			Economic History	195	0	0	3	0	198	
275			Public Finance, Money and Banking	206	2	1	0	0	209	
276			Commercial Science	83	2	3	0	0	88	
277			Business Administration	324	3	9	0	0	336	
278			Accounting	188	3	0	0	0	191	
	ECONOMICS Total			2,188	12	33	6	0	2,239	
301	SCIENCE		Algebra	336	0	45	0	0	381	
302			Geometry	349	0	61	0	0	410	
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	435	0	55	16	0	506	
305			Basic Analysis	319	2	43	0	0	364	
306			Larger-area Analysis	171	0	15	0	0	186	
		Mathematics total			1,610	2	219	16	0	1,847
311			Astronomy	254	0	13	86	3	356	
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	802	0	19	128	2	951	

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Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	515	0	38	12	0	565
323			Solid-State Physics II (Magnetism, Metal Physics,	551	3	36	7	0	597
324			Physical Properties in General (inclu. Basic Theories)	378	6	25	20	0	429
325			Physics in General	388	0	22	41	0	451
			Physics total	2,634	9	140	208	2	2,993
331			Physics of Solid Earth	390	0	3	31	0	424
332			Meteorology, Oceanography and Hydrology	453	0	15	26	0	494
333			Aeronomy	112	0	4	18	0	134
334			Geology	262	0	2	0	6	270
335			Stratigraphy and Paleontology	147	0	0	3	8	158
336			Mineralogy, Petrology and Study of Mineral Deposit	348	0	0	3	6	357
337			Geochemistry	235	0	6	6	0	247
			Earth Science total	1,947	0	30	87	20	2,084
341			Physical Chemistry	778	0	28	60	3	869
342			Organic Chemistry	631	0	36	10	0	677
343			Inorganic Chemistry	392	0	26	7	3	428
344			Function, Properties and Materials in Chemistry	368	0	20	10	0	398
345			Substance Transformation	58	0	1	0	0	59
346			Separation, Refining and Identification	250	2	19	5	0	276
			Chemistry total	2,477	2	130	92	6	2,707
351			Genetics	306	0	0	28	3	337
352			Ecology	622	0	0	12	7	641
353			Plant Physiology	322	0	5	19	0	346
354			Morphology, Structure of Organism	188	0	0	14	6	208
355			Animal Physiology and	209	0	0	4	0	213
356			Morphology and Taxonomy	298	0	1	4	54	357
			Biology total	1,945	0	6	81	70	2,102
361			Physical Anthropology (inclu. Physiological Anthropology)	112	0	0	1	0	113
	SCIENCE Total			10,979	13	538	571	101	12,202
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	356	0	16	2	0	374
402			Surface Physics	250	0	16	2	0	268
403			Applied Optics and Quantum Optics	327	0	37	10	0	374
404			General Applied Physics	197	0	26	10	0	233
405			Fundamentals of Engineering	118	0	22	4	0	144
			Applied Physics-Fundamentals of Engineering total	1,248	0	117	28	0	1,393
411			Materials for Machines and Strength of Materials	553	0	125	4	0	682
412			Workshop Processes and Production Engineering	394	0	104	3	0	501
413			Design Engineering, Machine Elements and Tribology	291	3	52	3	0	349
414			Fluid Mechanics	516	1	136	3	0	656
415			Heat Engineering	588	3	112	14	0	717
416			Mechanics and Control Engineering	374	0	116	5	0	495
417			Intelligent Mechanics and Machine System	505	0	69	5	1	580
			Machine Engineering total	3,221	7	714	37	1	3,980
421			Electric Power Engineering and Electric Machinery	423	0	130	11	0	564
422			Electronic and Electric Materials Engineering	542	0	97	4	0	643
423			Electron Devices and Apparatus Engineering	495	2	90	7	0	594
424			Information and Communication Engineering	935	2	200	29	0	1,166

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Code	Subject	Subdivision	Item	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	213	2	20	7	2	244
427			Electronic Measurements	398	3	108	2	0	511
428			Control Engineering	415	0	96	3	0	514
			Electric and Electronic Engineering	3,421	9	741	63	2	4,236
431			Construction Materials and Dynamics in General Civil Engineering	208	0	55	0	0	263
432			Structural Engineering and Seismology	318	0	44	0	0	362
433			Ground Engineering	382	0	63	3	0	448
434			Hydraulics and River Engineering	412	0	52	0	0	464
435			Traffic Engineering and Regional Planning	278	0	33	0	0	311
436			Civil Environmental System	289	0	47	0	0	336
			Civil Engineering total	1,887	0	294	3	0	2,184
441		G	Building Structure and Materials	424	0	33	0	1	458
442			Building Science and Building Equipment	201	8	22	0	0	231
443			City Planning and Building Planning	529	2	62	0	2	595
444			Architectural History and Design	220	3	28	0	4	255
			Architecture total	1,374	13	145	0	7	1,539
451		N	Physical Metallurgy	294	0	46	0	0	340
452			Inorganic Materials and	505	0	50	3	0	558
453			Composed Materials and Properties	162	0	12	0	2	176
454			Structural and Functional Materials	362	0	27	0	0	389
455		R	Metallurgy and Material	409	3	50	1	0	463
456			Metal Productive Engineering	212	0	13	0	0	225
			Material Engineering total	1,944	3	198	4	2	2,151
461		G	Chemical Engineering in General	354	0	31	0	0	385
462			Reaction and Separation Engineering	246	0	16	0	0	262
463			Catalyst and Chemical Process	217	0	9	6	0	232
464			Bioengineering	348	0	18	0	0	366
465			Industrial Analytical Chemistry	143	0	30	0	0	173
			Process Engineering total	1,308	0	104	6	0	1,418
471			Industrial Physical Chemistry	341	3	22	0	0	366
472			Industrial Inorganic Chemistry	139	0	12	0	0	151
473			Industrial Organic Chemistry	129	1	14	0	0	144
474			Synthetic Chemistry	360	0	39	1	0	400
475			Polymer Synthesis	325	0	22	1	0	348
476			Polymer Structure and Property (inclu. Fiber)	347	0	15	3	0	365
			Industrial Chemistry total	1,641	4	124	5	0	1,774
481			Aeronautics	188	0	5	40	0	233
482			Ship Engineering	162	0	32	0	0	194
483			Marine Engineering	60	0	6	0	0	66
484			Resource Development Engineering	195	0	9	0	0	204
			Synthetic Engineering total	605	0	52	40	0	697
			ENGINEERING Total	16,649	36	2,489	186	12	19,372
501	A G R I C U L T U R E		Plant Breeding	180	0	2	0	3	185
502			Crop Science	185	0	3	0	0	188
503			Horticulture and Landscape Architecture	352	0	0	0	0	352
504			Plant Protection	287	0	0	0	0	287
505			Sericultural Science and Economic Entomology	70	0	0	0	0	70
			Agriculture total	1,074	0	5	0	3	1,082
511			Plant Fertilizer and Manure and Soil Science	235	0	1	0	1	237
512			Applied Microbiochemistry and Applied Biochemistry	573	0	19	0	0	592
513			Biological Productive Chemistry and Bioorganic Chemistry	196	0	7	0	0	203
514			Food Science and Nutritional Chemistry	458	0	8	0	0	466

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Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
	A		Agricultural Chemistry total	1,462	0	35	0	1	1,498
521			Forestry	529	0	1	7	0	537
522	G		Wood Science	334	3	2	0	0	339
			Forestry total	863	3	3	7	0	876
531	R		Fisheries in General	500	0	3	2	0	505
532			Fisheries Chemistry	172	0	2	0	0	174
			Fisheries total	672	0	5	2	0	679
541	I		Agricultural Economics	335	0	0	2	0	337
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	300	0	3	0	0	303
552	U		Agricultural Machinery	239	0	2	0	0	241
553	L		Biological Environment	103	0	0	0	0	103
			Agricultural Engineering total	642	0	5	0	0	647
561	T		Animal Science and Grassland Science	207	0	0	0	0	207
562	U		Applied Animal Science	244	0	0	0	0	244
563	R		Basic Veterinary Medicine and Basic Animal Science	276	0	0	0	3	279
564			Applied Veterinary Medicine	243	0	0	0	0	243
	E		Animal Science·Veterinary Medicine total	970	0	0	0	3	973
571			Biological Resource Science	130	0	0	0	0	130
572			Applied Molecular Cell Biology	104	0	5	0	0	109
			Interdisciplinary Agricultural Science total	234	0	5	0	0	239
			AGRICULTURE Total	6,252	3	58	11	7	6,331
601			Anatomy in General (inclu. Histology, Embryology)	336	11	0	5	0	352
602			Physiology in General	366	6	0	21	0	393
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	180	0	5	0	0	185
604			Pharmacology in General	247	0	0	4	0	251
605			Medical Chemistry in General	294	2	3	3	0	302
606			Pathological Medical Chemistry	174	1	0	0	0	175
	M		Physiology total	1,597	20	8	33	0	1,658
611			Hominal Pathology	371	3	0	0	0	374
612	E		Experimental Pathology	263	0	0	0	0	263
613	D		Parasitology (inclu. Medical Zoology)	171	0	0	0	1	172
614			Bacteriology (inclu. Eumycetes)	254	4	2	0	0	260
615	I		Virology	265	1	0	0	0	266
616			Immunology	384	9	0	0	0	393
	C		Pathology total	1,708	17	2	0	1	1,728
621			Hygiene	222	3	0	0	0	225
622	I		Public Health and Health Science	653	20	3	0	1	677
623			Legal Medicine	205	0	0	0	0	205
	N		Social Medicine total	1,080	23	3	0	1	1,107
631			Internal Medicine in General	381	5	0	0	0	386
632	E		Gastroenterology	477	5	0	0	0	482
633			Internal Medicine Respiratory System	224	3	0	0	0	227
634			Neurological Medicine	341	1	0	3	0	345
635			Cardioangiopathy	535	3	0	0	0	538
636			Pediatrics	487	4	0	0	0	491
637			Dermatology	278	0	0	0	0	278
638			Radiology	633	15	0	1	0	649
639			Neuropsychiatry	480	3	0	0	3	486
641			Hematology	325	9	0	0	0	334
642			Internal Medicine of Kidney	193	3	0	0	0	196
643			Embryology and Newborn	18	3	0	0	0	21
644			Endocrinology	219	3	0	0	0	222
645			Metabolic Science	229	0	0	0	0	229
			Internal Medicine total	4,820	57	0	4	3	4,884
651			Surgery in General	389	1	0	0	0	390
652			Gastroenterological Surgery	478	3	0	0	0	481
653			Thoracic Surgery	273	0	0	0	0	273

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Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total		
654	M		Neurosurgery	361	0	0	0	0	361		
655			Orthopedic Surgery	569	23	0	0	0	592		
656			Anesthesiology and Rescue Medicine	450	0	0	0	0	450		
657			Urology	298	0	0	0	0	298		
658			Obstetrics and Gynecology	407	0	0	0	0	407		
659			Oto-rhino-laryngology	286	0	0	0	0	286		
660			Ophthalmology	313	0	0	0	0	313		
661			Pediatric Surgery	99	0	0	0	0	99		
662			Formative Surgery	55	0	0	0	0	55		
			Surgery total	3,978	27	0	0	0	4,005		
671	E		Oral Anatomy and Morphological Basic Dentistry	218	0	0	0	0	218		
672	D		Functional Basic Dentistry	148	0	0	0	0	148		
673	I		Morbid Dentistry (inclu. Dental Radiology)	182	0	0	0	0	182		
674	C		Conservative Dentistry	231	0	0	0	0	231		
675	I		Prosthodontics and Dental Technology	438	0	0	0	0	438		
676	I		Oral Surgery	566	0	0	0	0	566		
677	N		Orthodontics, Pedodontics and Social Dentistry	502	0	0	0	0	502		
678	E		Periodontological Dentistry	152	0	0	0	0	152		
	Dentistry total		2,437	0	0	0	0	2,437			
681			Chemical Pharmaceuticals	259	0	0	0	0	259		
682			Physical Pharmaceuticals	136	0	0	0	0	136		
683			Biopharmaceutics	323	0	6	0	0	329		
684			Molecular Pharmaceuticals	115	0	0	0	0	115		
685			Environmental Pharmaceuticals	38	0	3	0	0	41		
			Pharmaceutics total	871	0	9	0	0	880		
691				Medical Sociology	146	7	0	0	0	153	
692				Human Genetics	122	0	0	2	0	124	
693				Applied Pharmacology and Medical Pharmacology	155	0	0	0	0	155	
694				Pathological Examination	195	10	0	0	0	205	
696	Science of Basic and Local Nursing	405		25	3	0	0	433			
697	Science of Clinical Nursing	592		15	0	0	0	607			
	Medicine in General total	1,615	57	3	2	0	1,677				
	MEDICINE Total			18,106	201	25	39	5	18,376		
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)	101	0	9	5	6	121		
703			Physical Education	979	10	105	0	0	1,094		
704			Human Geography	254	0	12	3	2	271		
705			Physical Geography	172	0	1	1	0	174		
			Geography total	426	0	13	4	2	445		
706			Home Science(inclu. Cloth/Living Environments)	307	0	4	0	0	311		
707			Food Culture	118	0	0	0	0	118		
			Domestic Science total	425	0	4	0	0	429		
708			Science of Cultural Property	37	2	1	2	9	51		
711			Science Education	306	0	29	0	20	355		
712	A R E A		Educational Engineering	203	3	40	34	14	294		
713			Curriculum Studies	1,085	7	90	0	20	1,202		
714			Japanese Language Education	232	0	3	0	12	247		
			Science Education·Curriculum Education total	1,826	10	162	34	66	2,098		
721			Statistics	112	0	0	35	0	147		
731			Computer Science	894	5	108	18	0	1,025		
732			Intelligent Informatics	765	5	67	31	3	871		
733			I		Study of Information System (Inclu. Library and Information Science)	301	13	31	38	4	387
					Information Science total	1,960	23	206	87	7	2,283
741					Social System Engineering	311	1	9	0	0	321
751	Natural Disaster Science	71			0	2	0	0	73		
761	Plasma Science and Technology	293			2	16	52	0	363		
772	Nuclear Fusion	117			0	3	36	0	156		

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773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	165	0	12	3	0	180
774			Nuclear Power Science	319	0	7	8	0	334
			Energy total	601	0	22	47	0	670
801			Environmental Dynamic Analysis	276	0	7	1	0	284
802			Environmental Influence Assessment (inclu. Radiobiology)	218	0	11	3	0	232
803			Environmental Preservation	342	3	19	2	0	366
			Environmental Science total	836	3	37	6	0	882
811			Biological Organic Chemistry	281	0	6	0	0	287
812			Structured Biochemistry	214	1	1	0	0	216
813			Functional Biochemistry	327	0	3	0	0	330
			Biological Chemistry total	822	1	10	0	0	833
821			Biophysics	275	0	9	25	0	309
822			Molecular Biology	713	0	5	31	0	749
823			Cell Biology	417	0	0	11	0	428
824			Developmental Biology	259	0	2	22	0	283
			Basic Biology total	1,664	0	16	89	0	1,769
831			Neuroanatomy and Neuropathology	161	4	0	2	0	167
832			Neurochemistry and Neuropharmacology	161	0	0	2	0	163
833			Neuro Science in General	354	3	3	35	0	395
834			Neuro and Muscular Physiology	220	4	0	14	0	238
			Neuro Science (inclu. Brain Science) total	896	11	3	53	0	963
841			Laboratory Animal Science	98	0	1	1	0	100
851			Medical Organism Engineering and Material Science of Organism	478	10	40	0	0	528
			INTERDISCIPLINARY AREA Total	11,936	73	656	415	90	13,170
999			WIDE AREA Total	936	28	43	18	11	1,036
			Item n.a. Total	33,721	65	2,045	668	191	36,690
			Grand Total	112,896	492	6,452	2,082	699	122,621

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total	
211	ARTS • HUMANITIES		Philosophy	62	11	4	77	
212			Chinese Philosophy	16	7	3	26	
213			Indian Philosophy (inclu. Buddhist Studies)	6	6	0	12	
214			Religion	3	0	1	4	
215			Ethics	16	0	0	16	
216			History of Philosophy	40	2	0	42	
217			Aesthetics (inclu. Arts)	164	34	9	207	
218			Art History	43	3	0	46	
			Philosophy total	350	63	17	430	
221				Experimental Psychology	67	9	0	76
222				Educational and Social	155	35	0	190
223				Sociology	310	39	0	349
224				Education	121	63	4	188
225				Cultural Anthropology (inclu. Ethnology and Folklore)	40	6	0	46
		Psychology • Sociology • Education Cultural Anthropology total			693	152	4	849
231				Japanese History	52	8	4	64
232				Oriental History	32	4	2	38
233				European History	67	11	0	78
234				Archaeology (inclu. Prehistory)	8	0	0	8
		History total			159	23	6	188
241				Japanese Language	30	8	0	38
242				Japanese Literature	72	18	8	98
243				Chinese Language and Literature	39	4	0	43
244				English Language and Literature	226	56	12	294
245				French Language and Literature	46	3	0	49
246				German Language and Literature	59	0	1	60
247				Other Foreign Languages and Literatures	37	7	0	44
248				Linguistics and Phonetics	121	18	9	148
249				Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	17	3	0	20
		Literature total			647	117	30	794
	ARTS • HUMANITIES Total			1,849	355	57	2,261	
261	LAW		Basic Science of Law	27	2	0	29	
262			Public Law	43	3	0	46	
263			International Law	15	0	0	15	
264			Civil Law	42	1	0	43	
265			Social Law	20	3	0	23	
266			Criminal Law	9	1	0	10	
267			Politics	116	10	0	126	
	LAW Total			272	20	0	292	
271	ECONOMICS		General Theory of Economics	159	19	0	178	
272			Economical Statistics	26	0	0	26	
273			Economic Policy (inclu. Economic Condition)	171	19	2	192	
274			Economic History	44	7	0	51	
275			Public Finance, Money and Banking	72	10	0	82	
276			Commercial Science	43	6	0	49	
277			Business Administration	105	15	0	120	
278			Accounting	62	4	0	66	
	ECONOMICS Total			682	80	2	764	
301	SCIENCE		Algebra	36	2	3	41	
302			Geometry	25	0	8	33	
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	53	2	12	67	
305			Basic Analysis	33	0	4	37	
306			Larger-area Analysis	14	0	0	14	
		Mathematics total			161	4	27	192
311		Astronomy		4	0	3	7	
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	62	3	3	68		

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	49	3	2	54
323			Solid-State Physics II (Magnetism, Metal Physics,	51	0	4	55
324			Physical Properties in General (inclu. Basic Theories)	22	0	9	31
325			Physics in General	39	0	3	42
			Physics total	223	6	21	250
331			Physics of Solid Earth	9	0	0	9
332			Meteorology, Oceanography and Hydrology	21	0	0	21
333			Aeronomy	2	0	0	2
334			Geology	27	2	0	29
335			Stratigraphy and Paleontology	11	0	0	11
336			Mineralogy, Petrology and Study of Mineral Deposit	11	0	0	11
337			Geochemistry	11	0	0	11
			Earth Science total	92	2	0	94
341			Physical Chemistry	87	5	4	96
342			Organic Chemistry	77	0	4	81
343			Inorganic Chemistry	34	3	1	38
344			Function, Properties and Materials in Chemistry	28	1	0	29
345			Substance Transformation	1	0	0	1
346			Separation, Refining and Identification	27	1	0	28
			Chemistry total	254	10	9	273
351			Genetics	32	0	0	32
352			Ecology	51	4	0	55
353			Plant Physiology	81	1	0	82
354			Morphology, Structure of Organism	6	0	0	6
355			Animal Physiology and	21	5	0	26
356			Morphology and Taxonomy	23	3	0	26
			Biology total	214	13	0	227
361			Physical Anthropology (inclu. Physiological Anthropology)	10	0	0	10
	SCIENCE Total			958	35	60	1,053
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	40	0	6	46
402			Surface Physics	11	0	0	11
403			Applied Optics and Quantum Optics	32	0	1	33
404			General Applied Physics	17	0	0	17
405			Fundamentals of Engineering	9	0	3	12
			Applied Physics-Fundamentals of Engineering total	109	0	10	119
411			Materials for Machines and Strength of Materials	52	0	8	60
412			Workshop Processes and Production Engineering	37	2	19	58
413			Design Engineering, Machine Elements and Tribology	21	0	9	30
414			Fluid Mechanics	50	3	12	65
415			Heat Engineering	38	0	14	52
416			Mechanics and Control Engineering	21	0	13	34
417			Intelligent Mechanics and Machine System	46	0	2	48
			Machine Engineering total	265	5	77	347
421			Electric Power Engineering and Electric Machinery	37	0	17	54
422			Electronic and Electric Materials Engineering	30	0	0	30
423			Electron Devices and Apparatus Engineering	43	0	4	47
424			Information and Communication Engineering	138	4	17	159

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
425	E		System Engineering	19	0	3	22
427			Electronic Measurements	23	0	8	31
428			Control Engineering	62	0	11	73
			Electric and Electronic Engineering	352	4	60	416
431			Construction Materials and Dynamics in General Civil Engineering	11	0	3	14
432			Structural Engineering and Seismology	35	0	9	44
433			Ground Engineering	23	0	0	23
434			Hydraulics and River Engineering	17	0	9	26
435			Traffic Engineering and Regional Planning	18	0	2	20
436			Civil Environmental System	16	4	1	21
			Civil Engineering total	120	4	24	148
441		N	Building Structure and Materials	70	0	0	70
442			Building Science and Building Equipment	58	12	3	73
443		G	City Planning and Building Planning	92	10	3	105
444		I	Architectural History and Design	36	6	0	42
			Architecture total	256	28	6	290
451		N	Physical Metallurgy	13	0	0	13
452			Inorganic Materials and	9	0	0	9
453		E	Composed Materials and Properties	17	0	2	19
454		E	Structural and Functional Materials	22	0	2	24
455		R	Metallurgy and Material	15	0	4	19
456			Metal Productive Engineering	7	0	2	9
			Material Engineering total	83	0	10	93
461		G	Chemical Engineering in General	20	0	6	26
462			Reaction and Separation Engineering	16	0	0	16
463			Catalyst and Chemical Process	12	0	0	12
464			Bioengineering	41	0	0	41
465			Industrial Analytical Chemistry	13	0	3	16
			Process Engineering total	102	0	9	111
471			Industrial Physical Chemistry	35	0	4	39
472			Industrial Inorganic Chemistry	10	0	3	13
473			Industrial Organic Chemistry	7	0	0	7
474			Synthetic Chemistry	15	0	6	21
475			Polymer Synthesis	30	0	1	31
476			Polymer Structure and Property (inclu. Fiber)	22	9	1	32
			Industrial Chemistry total	119	9	15	143
481			Aeronautics	16	0	4	20
482			Ship Engineering	8	0	1	9
483			Marine Engineering	11	0	0	11
484			Resource Development Engineering	3	0	5	8
			Synthetic Engineering total	38	0	10	48
			ENGINEERING Total	1,444	50	221	1,715
501	A G R I C U L T U R E		Plant Breeding	34	9	0	43
502			Crop Science	13	5	0	18
503			Horticulture and Landscape Architecture	93	9	1	103
504			Plant Protection	22	12	0	34
505			Sericultural Science and Economic Entomology	5	0	0	5
			Agriculture total	167	35	1	203
511			Plant Fertilizer and Manure and Soil Science	17	11	0	28
512			Applied Microbiochemistry and Applied Biochemistry	68	3	0	71
513			Biological Productive Chemistry and Bioorganic Chemistry	28	3	0	31
514			Food Science and Nutritional Chemistry	113	47	0	160

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
	A		Agricultural Chemistry total	226	64	0	290
521			Forestry	32	1	0	33
522	G		Wood Science	14	0	0	14
			Forestry total	46	1	0	47
531	R		Fisheries in General	13	0	0	13
532			Fisheries Chemistry	1	2	0	3
			Fisheries total	14	2	0	16
541	I		Agricultural Economics	46	7	0	53
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	12	21	0	33
552	U		Agricultural Machinery	2	7	0	9
553	L		Biological Environment	22	3	0	25
			Agricultural Engineering total	36	31	0	67
561	T		Animal Science and Grassland Science	7	8	0	15
562	U		Applied Animal Science	5	13	0	18
563	R		Basic Veterinary Medicine and Basic Animal Science	28	1	0	29
564			Applied Veterinary Medicine	30	0	0	30
	E		Animal Science·Veterinary Medicine total	70	22	0	92
571			Biological Resource Science	10	0	0	10
572			Applied Molecular Cell Biology	9	0	0	9
			Interdisciplinary Agricultural Science total	19	0	0	19
			AGRICULTURE Total	624	162	1	787
601			Anatomy in General (inclu. Histology, Embryology)	62	8	0	70
602			Physiology in General	56	7	0	63
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	54	14	0	68
604			Pharmacology in General	48	0	0	48
605			Medical Chemistry in General	50	0	0	50
606			Pathological Medical Chemistry	28	0	0	28
	M		Physiology total	298	29	0	327
611			Hominal Pathology	79	3	0	82
612	E		Experimental Pathology	41	4	0	45
613	D		Parasitology (inclu. Medical Zoology)	28	4	0	32
614			Bacteriology (inclu. Eumycetes)	43	11	0	54
615	I		Virology	23	0	0	23
616			Immunology	25	4	0	29
	C		Pathology total	239	26	0	265
621			Hygiene	46	4	0	50
622	I		Public Health and Health Science	223	34	0	257
623			Legal Medicine	47	0	0	47
	N		Social Medicine total	316	38	0	354
631			Internal Medicine in General	98	10	0	108
632	E		Gastroenterology	97	0	0	97
633			Internal Medicine Respiratory System	55	0	0	55
634			Neurological Medicine	62	0	0	62
635			Cardioangiopathy	84	3	0	87
636			Pediatrics	98	0	0	98
637			Dermatology	69	0	0	69
638			Radiology	74	3	0	77
639			Neuropsychiatry	75	7	0	82
641			Hematology	44	6	0	50
642			Internal Medicine of Kidney	28	3	0	31
643			Embryology and Newborn	20	0	0	20
644			Endocrinology	16	0	0	16
645			Metabolic Science	31	1	0	32
			Internal Medicine total	851	33	0	884
651			Surgery in General	60	4	0	64
652			Gastroenterological Surgery	103	0	0	103
653			Thoracic Surgery	38	0	0	38

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
654	M		Neurosurgery	73	0	0	73
655			Orthopedic Surgery	184	5	0	189
656			Anesthesiology and Rescue Medicine	107	2	0	109
657			Urology	70	0	0	70
658			Obstetrics and Gynecology	68	6	0	74
659			Oto-rhino-laryngology	72	0	0	72
660			Ophthalmology	57	0	0	57
661			Pediatric Surgery	11	0	0	11
662			Formative Surgery	7	0	0	7
			Surgery total	850	17	0	867
671	E		Oral Anatomy and Morphological Basic Dentistry	22	0	0	22
672	D		Functional Basic Dentistry	14	0	0	14
673	I		Morbid Dentistry (inclu. Dental Radiology)	11	0	0	11
674	C		Conservative Dentistry	16	3	0	19
675			Prosthodontics and Dental Technology	11	0	0	11
676	I		Oral Surgery	60	0	0	60
677	N		Orthodontics, Pedodontics and Social Dentistry	12	7	0	19
678			Periodontological Dentistry	6	1	0	7
	E		Dentistry total	152	11	0	163
681			Chemical Pharmaceutics	36	0	0	36
682			Physical Pharmaceutics	26	1	0	27
683			Biopharmaceutics	68	3	0	71
684			Molecular Pharmaceutics	14	0	0	14
685			Environmental Pharmaceutics	12	0	0	12
			Pharmaceutics total	156	4	0	160
691			Medical Sociology	37	11	0	48
692			Human Genetics	7	0	0	7
693			Applied Pharmacology and Medical Pharmacology	11	0	0	11
694			Pathological Examination	21	16	0	37
696			Science of Basic and Local Nursing	334	140	0	474
697			Science of Clinical Nursing	424	142	0	566
			Medicine in General total	834	309	0	1,143
			MEDICINE Total	3,696	467	0	4,163
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	0	0	10
703			Physical Education	140	25	4	169
704			Human Geography	44	0	3	47
705			Physical Geography	13	0	2	15
			Geography total	57	0	5	62
706			Home Science(inclu. Cloth/Living Environments)	33	46	0	79
707			Food Culture	65	41	0	106
			Domestic Science total	98	87	0	185
708			Science of Cultural Property	5	0	0	5
711			Science Education	2	0	5	7
712	A R E A		Educational Engineering	32	12	10	54
713			Curriculum Studies	39	34	6	79
714			Japanese Language Education	17	0	0	17
			Science Education·Curriculum Education total	90	46	21	157
721			Statistics	13	2	0	15
731			Computer Science	99	2	2	103
732			Intelligent Informatics	99	3	10	112
733			Study of Information System (Inclu. Library and Information Science)	62	7	0	69
			Information Science total	260	12	12	284
741			Social System Engineering	53	9	0	62
751	I		Natural Disaster Science	9	0	3	12
761			Plasma Science and Technology	17	0	3	20
772			Nuclear Fusion	2	0	0	2

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	18	0	0	18
774			Nuclear Power Science	2	0	0	2
			Energy total	22	0	0	22
801			Environmental Dynamic Analysis	19	2	0	21
802			Environmental Influence Assessment (inclu. Radiobiology)	43	8	3	54
803			Environmental Preservation	57	5	0	62
			Environmental Science total	119	15	3	137
811			Biological Organic Chemistry	29	1	0	30
812			Structured Biochemistry	34	1	0	35
813			Functional Biochemistry	49	8	0	57
			Biological Chemistry total	112	10	0	122
821			Biophysics	38	0	1	39
822			Molecular Biology	57	7	0	64
823			Cell Biology	57	0	0	57
824			Developmental Biology	26	0	0	26
			Basic Biology total	178	7	1	186
831			Neuroanatomy and Neuropathology	28	3	0	31
832			Neurochemistry and Neuropharmacology	37	3	0	40
833			Neuro Science in General	56	2	0	58
834			Neuro and Muscular Physiology	38	3	0	41
		Neuro Science (inclu. Brain Science) total	159	11	0	170	
841		Laboratory Animal Science	16	0	0	16	
851		Medical Organism Engineering and Material Science of Organism	40	1	7	48	
	INTERDISCIPLINARY AREA Total			1,398	225	59	1,682
999	WIDE AREA Total			167	29	5	201
	Item n.a. Total			3,879	483	138	4,500
	Grand Total			14,969	1,906	543	17,418

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
211	ARTS • HUMANITIES		Philosophy	606	97	0	0	703
212			Chinese Philosophy	137	7	0	0	144
213			Indian Philosophy (inclu. Buddhist Studies)	388	74	0	17	479
214			Religion	483	83	0	1	567
215			Ethics	169	20	0	0	189
216			History of Philosophy	321	46	0	2	369
217			Aesthetics (inclu. Arts)	1,342	588	1	3	1,934
218			Art History	348	59	0	10	417
		Philosophy total	3,794	974	1	33	4,802	
221			Experimental Psychology	588	58	0	4	650
222			Educational and Social	2,062	598	0	3	2,663
223			Sociology	2,515	553	0	11	3,079
224			Education	1,674	704	1	7	2,386
225			Cultural Anthropology (inclu. Ethnology and Folklore)	631	111	0	3	745
		Psychology • Sociology • Education Cultural Anthropology total	7,470	2,024	1	28	9,523	
231			Japanese History	646	79	3	21	749
232			Oriental History	395	18	0	6	419
233			European History	591	70	3	3	667
234			Archaeology (inclu. Prehistory)	215	20	0	17	252
		History total	1,847	187	6	47	2,087	
241			Japanese Language	379	63	0	0	442
242			Japanese Literature	1,187	337	3	0	1,527
243			Chinese Language and Literature	469	23	0	0	492
244			English Language and Literature	3,179	776	0	0	3,955
245			French Language and Literature	473	52	0	0	525
246			German Language and Literature	611	13	0	0	624
247			Other Foreign Languages and Literatures	403	21	0	2	426
248			Linguistics and Phonetics	1,225	218	0	2	1,445
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	403	55	0	0	458
		Literature total	8,329	1,558	3	4	9,894	
	ARTS • HUMANITIES Total		21,440	4,743	11	112	26,306	
261	LAW		Basic Science of Law	325	21	0	0	346
262			Public Law	506	50	0	0	556
263			International Law	314	6	0	0	320
264			Civil Law	805	47	0	8	860
265			Social Law	188	15	0	3	206
266			Criminal Law	232	12	0	3	247
267			Politics	1,227	35	0	0	1,262
	LAW Total		3,597	186	0	14	3,797	
271	ECONOMICS		General Theory of Economics	1,132	61	0	7	1,200
272			Economical Statistics	229	7	0	3	239
273			Economic Policy (inclu. Economic Condition)	1,496	76	0	15	1,587
274			Economic History	502	22	0	3	527
275			Public Finance, Money and Banking	666	29	0	0	695
276			Commercial Science	675	74	0	0	749
277			Business Administration	1,651	228	0	0	1,879
278			Accounting	800	99	0	0	899
	ECONOMICS Total		7,151	596	0	28	7,775	
301	SCIENCE		Algebra	261	8	0	1	270
302			Geometry	158	7	1	3	169
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	402	31	3	0	436
305			Basic Analysis	199	8	0	2	209
306			Larger-area Analysis	79	1	0	0	80
		Mathematics total	1,099	55	4	6	1,164	
311		Astronomy	64	7	0	0	71	
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	389	46	5	0	440

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	227	5	3	3	238
323			Solid-State Physics II (Magnetism, Metal Physics,	193	6	0	0	199
324			Physical Properties in General (inclu. Basic Theories)	187	12	0	0	199
325			Physics in General	189	11	0	1	201
			Physics total	1,185	80	8	4	1,277
331			Physics of Solid Earth	63	4	0	2	69
332			Meteorology, Oceanography and Hydrology	106	2	0	0	108
333			Aeronomy	40	2	0	0	42
334			Geology	62	0	0	11	73
335			Stratigraphy and Paleontology	28	3	0	1	32
336			Mineralogy, Petrology and Study of Mineral Deposit	51	2	0	0	53
337			Geochemistry	61	3	0	0	64
			Earth Science total	411	16	0	14	441
341			Physical Chemistry	298	16	0	1	315
342			Organic Chemistry	263	6	0	14	283
343			Inorganic Chemistry	178	8	0	0	186
344			Function, Properties and Materials in Chemistry	164	7	0	0	171
345			Substance Transformation	18	0	0	0	18
346			Separation, Refining and Identification	145	8	0	2	155
			Chemistry total	1,066	45	0	17	1,128
351			Genetics	72	9	0	6	87
352			Ecology	184	33	0	17	234
353			Plant Physiology	93	8	0	3	104
354			Morphology, Structure of Organism	88	11	0	4	103
355			Animal Physiology and	76	10	0	1	87
356			Morphology and Taxonomy	103	7	0	9	119
			Biology total	616	78	0	40	734
361			Physical Anthropology (inclu. Physiological Anthropology)	89	6	0	0	95
	SCIENCE Total			4,530	287	12	81	4,910
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	130	2	1	1	134
402			Surface Physics	91	2	0	0	93
403			Applied Optics and Quantum Optics	182	8	0	3	193
404			General Applied Physics	81	12	2	13	108
405			Fundamentals of Engineering	76	5	0	0	81
			Applied Physics-Fundamentals of Engineering total	560	29	3	17	609
411			Materials for Machines and Strength of Materials	365	12	2	1	380
412			Workshop Processes and Production Engineering	300	7	5	0	312
413			Design Engineering, Machine Elements and Tribology	195	27	3	2	227
414			Fluid Mechanics	353	13	0	0	366
415			Heat Engineering	287	24	1	0	312
416			Mechanics and Control Engineering	249	19	3	0	271
417			Intelligent Mechanics and Machine System	269	15	0	0	284
			Machine Engineering total	2,018	117	14	3	2,152
421			Electric Power Engineering and Electric Machinery	381	17	6	0	404
422			Electronic and Electric Materials Engineering	340	15	0	8	363
423			Electron Devices and Apparatus Engineering	377	8	1	3	389
424			Information and Communication Engineering	773	43	11	2	829

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
425	E N G I N E E R I N G		System Engineering	188	14	2	2	206
427			Electronic Measurements	301	11	12	1	325
428			Control Engineering	178	11	7	0	196
			Electric and Electronic Engineering	2,538	119	39	16	2,712
431			Construction Materials and Dynamics in General Civil Engineering	196	0	0	0	196
432			Structural Engineering and Seismology	222	19	0	0	241
433			Ground Engineering	163	1	0	3	167
434			Hydraulics and River Engineering	171	5	0	5	181
435			Traffic Engineering and Regional Planning	176	13	1	0	190
436			Civil Environmental System	159	2	0	0	161
			Civil Engineering total	1,087	40	1	8	1,136
441		N	Building Structure and Materials	470	16	0	2	488
442			Building Science and Building Equipment	229	15	0	5	249
443			City Planning and Building Planning	732	79	0	1	812
444		I	Architectural History and Design	285	53	0	0	338
			Architecture total	1,716	163	0	8	1,887
451		N	Physical Metallurgy	50	3	0	4	57
452			Inorganic Materials and	166	3	0	0	169
453			Composed Materials and Properties	53	3	0	0	56
454		E	Structural and Functional Materials	100	7	0	2	109
455		R	Metallurgy and Material	163	7	0	9	179
456			Metal Productive Engineering	49	6	0	0	55
			Material Engineering total	581	29	0	15	625
461		I N D U S T R I A L	Chemical Engineering in General	83	0	0	0	83
462			Reaction and Separation Engineering	46	0	0	0	46
463			Catalyst and Chemical Process	54	0	0	0	54
464			Bioengineering	118	2	0	1	121
465			Industrial Analytical Chemistry	53	0	0	0	53
			Process Engineering total	354	2	0	1	357
471			Industrial Physical Chemistry	86	0	0	5	91
472			Industrial Inorganic Chemistry	49	1	0	0	50
473			Industrial Organic Chemistry	64	11	0	0	75
474			Synthetic Chemistry	90	1	0	4	95
475			Polymer Synthesis	83	5	0	0	88
476			Polymer Structure and Property (inclu. Fiber)	111	34	0	1	146
			Industrial Chemistry total	483	52	0	10	545
481			Aeronautics	82	3	0	0	85
482			Ship Engineering	29	0	0	0	29
483			Marine Engineering	27	0	0	0	27
484			Resource Development Engineering	16	0	0	0	16
			Synthetic Engineering total	154	3	0	0	157
			ENGINEERING Total	9,491	554	57	78	10,180
501	A G R I C U L T U R E		Plant Breeding	38	0	0	4	42
502			Crop Science	31	2	0	3	36
503			Horticulture and Landscape Architecture	139	34	0	3	176
504			Plant Protection	54	7	0	1	62
505			Sericultural Science and Economic Entomology	27	3	0	15	45
			Agriculture total	289	46	0	26	361
511			Plant Fertilizer and Manure and Soil Science	39	9	0	0	48
512			Applied Microbiochemistry and Applied Biochemistry	284	56	0	13	353
513			Biological Productive Chemistry and Bioorganic Chemistry	52	11	0	3	66
514			Food Science and Nutritional Chemistry	416	295	0	6	717

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
	A		Agricultural Chemistry total	791	371	0	22	1,184
521			Forestry	60	6	0	0	66
522	G		Wood Science	21	0	0	0	21
			Forestry total	81	6	0	0	87
531	R		Fisheries in General	146	0	0	0	146
532			Fisheries Chemistry	47	9	0	1	57
			Fisheries total	193	9	0	1	203
541	I		Agricultural Economics	220	18	0	0	238
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	47	3	0	0	50
552	U		Agricultural Machinery	19	13	0	0	32
553	L		Biological Environment	27	0	0	0	27
			Agricultural Engineering total	93	16	0	0	109
561	T		Animal Science and Grassland Science	80	6	0	0	86
562	U		Applied Animal Science	53	3	0	5	61
563	R		Basic Veterinary Medicine and Basic Animal Science	164	10	0	14	188
564			Applied Veterinary Medicine	205	0	0	15	220
	E		Animal Science-Veterinary Medicine total	502	19	0	34	555
571			Biological Resource Science	33	0	0	0	33
572			Applied Molecular Cell Biology	21	4	0	0	25
			Interdisciplinary Agricultural Science total	54	4	0	0	58
			AGRICULTURE Total	2,223	489	0	83	2,795
601			Anatomy in General (inclu. Histology, Embryology)	279	22	0	2	303
602			Physiology in General	294	36	0	0	330
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	231	61	0	0	292
604			Pharmacology in General	279	16	0	1	296
605			Medical Chemistry in General	191	22	0	0	213
606			Pathological Medical Chemistry	86	10	0	3	99
	M		Physiology total	1,360	167	0	6	1,533
611			Hominal Pathology	368	18	0	9	395
612	E		Experimental Pathology	107	12	0	13	132
613	D		Parasitology (inclu. Medical Zoology)	110	10	0	0	120
614			Bacteriology (inclu. Eumycetes)	213	17	0	10	240
615	I		Virology	98	2	0	21	121
616			Immunology	258	9	0	16	283
			Pathology total	1,154	68	0	69	1,291
621	C		Hygiene	232	21	0	17	270
622	I		Public Health and Health Science	632	183	0	5	820
623			Legal Medicine	153	5	0	0	158
			Social Medicine total	1,017	209	0	22	1,248
631	N		Internal Medicine in General	400	19	0	5	424
632	E		Gastroenterology	462	0	0	8	470
633			Internal Medicine Respiratory System	212	6	0	4	222
634			Neurological Medicine	276	11	0	3	290
635			Cardioangiopathy	521	10	0	2	533
636			Pediatrics	466	28	0	1	495
637			Dermatology	216	2	0	0	218
638			Radiology	398	29	0	6	433
639			Neuropsychiatry	466	29	0	0	495
641			Hematology	275	3	0	4	282
642			Internal Medicine of Kidney	218	9	0	4	231
643			Embryology and Newborn	37	0	0	0	37
644			Endocrinology	165	2	0	2	169
645			Metabolic Science	168	4	0	1	173
			Internal Medicine total	4,280	152	0	40	4,472
651			Surgery in General	411	0	0	0	411
652			Gastroenterological Surgery	351	0	0	6	357
653			Thoracic Surgery	316	0	0	4	320

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

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

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

Code	Subj ect	Subd ivisio n	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	64	2	0	0	66
774			Nuclear Power Science	64	1	0	0	65
			Energy total	151	6	0	3	160
801			Environmental Dynamic Analysis	109	10	0	0	119
802			Environmental Influence Assessment (inclu. Radiobiology)	131	5	4	7	147
803			Environmental Preservation	288	25	0	4	317
			Environmental Science total	528	40	4	11	583
811			Biological Organic Chemistry	105	4	0	8	117
812			Structured Biochemistry	124	5	0	5	134
813			Functional Biochemistry	176	12	0	0	188
			Biological Chemistry total	405	21	0	13	439
821			Biophysics	120	3	0	1	124
822			Molecular Biology	277	15	0	11	303
823			Cell Biology	208	5	0	17	230
824			Developmental Biology	80	1	0	3	84
			Basic Biology total	685	24	0	32	741
831			Neuroanatomy and Neuropathology	100	1	0	0	101
832			Neurochemistry and Neuropharmacology	131	0	0	2	133
833			Neuro Science in General	163	9	0	1	173
834			Neuro and Muscular Physiology	162	17	0	0	179
			Neuro Science (inclu. Brain Science) total	556	27	0	3	586
841			Laboratory Animal Science	55	0	0	34	89
851			Medical Organism Engineering and Material Science of Organism	356	24	0	0	380
			INTERDISCIPLINARY AREA Total	9,268	2,540	25	142	11,975
999			WIDE AREA Total	1,521	406	3	17	1,947
			Item n.a. Total	26,628	3,035	43	328	30,034
			Grand Total	103,374	13,880	151	1,080	118,485

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

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
211	A R T S · H U M A N I T I E S		Philosophy	1,016	37	64	19	64	1,200
212			Chinese Philosophy	235	5	24	4	22	290
213			Indian Philosophy (inclu. Buddhist Studies)	447	35	36	17	29	564
214			Religion	558	26	43	16	26	669
215			Ethics	300	22	25	5	21	373
216			History of Philosophy	487	18	24	13	26	568
217			Aesthetics (inclu. Arts)	2,281	162	149	59	151	2,802
218			Art History	604	17	41	25	39	726
		Philosophy total		5,928	322	406	158	378	7,192
221			Experimental Psychology	717	120	274	69	51	1,231
222			Educational and Social	2,756	337	694	160	163	4,110
223			Sociology	2,865	255	614	197	233	4,164
224			Education	3,066	293	538	149	199	4,245
225			Cultural Anthropology (inclu. Ethnology and Folklore)	799	51	158	110	52	1,170
		Psychology·Sociology·Education Cultural Anthropology total		10,203	1,056	2,278	685	698	14,920
231			Japanese History	1,003	52	85	18	81	1,239
232			Oriental History	573	35	60	42	40	750
233			European History	869	31	63	34	40	1,037
234			Archaeology (inclu. Prehistory)	313	27	62	48	17	467
		History total		2,758	145	270	142	178	3,493
241			Japanese Language	618	24	49	7	45	743
242			Japanese Literature	1,820	44	96	12	99	2,071
243			Chinese Language and Literature	630	23	56	29	34	772
244			English Language and Literature	4,568	188	254	72	267	5,349
245			French Language and Literature	696	24	35	12	40	807
246			German Language and Literature	919	29	56	25	56	1,085
247			Other Foreign Languages and Literatures	610	31	48	21	42	752
248			Linguistics and Phonetics	1,713	116	182	99	126	2,236
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	574	20	32	12	35	673
			Literature total		12,148	499	808	289	744
	ARTS·HUMANITIES Total		31,037	2,022	3,762	1,274	1,998	40,093	
261	L A W	Basic Science of Law	459	30	45	13	30	577	
262		Public Law	702	28	55	7	37	829	
263		International Law	367	9	49	9	24	458	
264		Civil Law	1,068	24	89	22	63	1,266	
265		Social Law	259	9	45	9	16	338	
266		Criminal Law	297	6	28	6	13	350	
267		Politics	1,526	74	147	86	117	1,950	
	LAW Total		4,678	180	458	152	300	5,768	
271	E C O N O M I C S	General Theory of Economics	1,460	76	183	105	101	1,925	
272		Economical Statistics	219	20	91	32	22	384	
273		Economic Policy (inclu. Economic Condition)	1,693	112	261	143	121	2,330	
274		Economic History	616	20	80	28	32	776	
275		Public Finance, Money and Banking	764	36	93	31	62	986	
276		Commercial Science	698	45	74	31	38	886	
277		Business Administration	1,725	112	276	85	137	2,335	
278		Accounting	942	30	96	32	56	1,156	
	ECONOMICS Total		8,117	451	1,154	487	569	10,778	
301	S C I E N C E		Algebra	537	40	68	25	22	692
302			Geometry	459	27	63	38	25	612
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	660	62	192	51	44	1,009
305			Basic Analysis	432	28	72	50	28	610
306			Larger-area Analysis	181	17	55	21	6	280
		Mathematics total		2,269	174	450	185	125	3,203
311		Astronomy	119	68	133	102	12	434	
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Phvsics, and Cosmic Physics	298	208	454	422	77	1,459	

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

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	257	242	278	53	27	857
323			Solid-State Physics II (Magnetism, Metal Physics,	185	239	295	90	42	851
324			Physical Properties in General (inclu. Basic Theories)	293	112	169	63	22	659
325			Physics in General	256	181	168	60	29	694
			Physics total	1,289	982	1,364	688	197	4,520
331			Physics of Solid Earth	162	96	162	61	21	502
332			Meteorology, Oceanography and Hydrology	221	96	193	86	27	623
333			Aeronomy	38	23	59	55	3	178
334			Geology	169	24	91	72	16	372
335			Stratigraphy and Paleontology	101	9	46	42	3	201
336			Mineralogy, Petrology and Study of Mineral Deposit	194	51	102	62	12	421
337			Geochemistry	80	67	112	45	18	322
			Earth Science total	965	366	765	423	100	2,619
341			Physical Chemistry	491	359	281	89	60	1,280
342			Organic Chemistry	425	335	199	42	40	1,041
343			Inorganic Chemistry	243	168	193	29	19	652
344			Function, Properties and Materials in Chemistry	252	164	148	17	17	598
345			Substance Transformation	35	16	19	7	1	78
346			Separation, Refining and Identification	176	124	121	19	19	459
			Chemistry total	1,622	1,166	961	203	156	4,108
351			Genetics	174	89	131	40	22	456
352			Ecology	424	121	230	127	28	930
353			Plant Physiology	214	128	121	52	17	532
354			Morphology, Structure of Organism	137	72	58	31	19	317
355			Animal Physiology and	134	61	84	32	15	326
356			Morphology and Taxonomy	229	38	86	125	24	502
			Biology total	1,312	509	710	407	125	3,063
361			Physical Anthropology (inclu. Physiological Anthropology)	88	29	52	42	7	218
	SCIENCE Total			7,664	3,294	4,435	2,050	722	18,165
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	180	166	158	29	21	554
402			Surface Physics	129	121	86	22	14	372
403			Applied Optics and Quantum Optics	240	149	154	25	32	600
404			General Applied Physics	128	98	95	14	23	358
405			Fundamentals of Engineering	113	39	64	11	10	237
			Applied Physics-Fundamentals of Engineering total	790	573	557	101	100	2,121
411			Materials for Machines and Strength of Materials	508	265	277	30	42	1,122
412			Workshop Processes and Production Engineering	357	240	213	23	38	871
413			Design Engineering, Machine Elements and Tribology	283	130	158	10	25	606
414			Fluid Mechanics	468	273	254	44	48	1,087
415			Heat Engineering	389	355	237	45	55	1,081
416			Mechanics and Control Engineering	371	189	182	23	35	800
417			Intelligent Mechanics and Machine System	404	213	213	31	51	912
			Machine Engineering total	2,780	1,665	1,534	206	294	6,479
421			Electric Power Engineering and Electric Machinery	417	269	281	17	38	1,022
422			Electronic and Electric Materials Engineering	360	369	233	32	42	1,036
423			Electron Devices and Apparatus Engineering	419	274	247	35	55	1,030
424			Information and Communication Engineering	1,014	530	436	56	118	2,154

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

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
425	E N G I N E E R I N G		System Engineering	228	98	88	23	35	472
427			Electronic Measurements	368	213	222	31	33	867
428			Control Engineering	386	165	179	24	29	783
			Electric and Electronic Engineering	3,192	1,918	1,686	218	350	7,364
431			Construction Materials and Dynamics in General Civil Engineering	211	94	134	12	22	473
432			Structural Engineering and Seismology	282	140	184	16	25	647
433			Ground Engineering	244	127	198	40	29	638
434			Hydraulics and River Engineering	276	168	165	50	12	671
435			Traffic Engineering and Regional Planning	221	109	136	30	25	521
436			Civil Environmental System	179	136	149	32	22	518
			Civil Engineering total	1,413	774	966	180	135	3,468
441		G	Building Structure and Materials	453	216	256	39	52	1,016
442			Building Science and Building Equipment	247	88	183	19	16	553
443			City Planning and Building Planning	840	216	299	88	69	1,512
444			Architectural History and Design	432	51	91	27	34	635
			Architecture total	1,972	571	829	173	171	3,716
451		N	Physical Metallurgy	123	144	93	31	19	410
452			Inorganic Materials and	261	244	164	26	41	736
453			Composed Materials and Properties	85	79	66	13	8	251
454			Structural and Functional Materials	167	167	129	30	29	522
455		R	Metallurgy and Material	255	190	173	19	24	661
456			Metal Productive Engineering	113	74	78	11	13	289
			Material Engineering total	1,004	898	703	130	134	2,869
461		G	Chemical Engineering in General	193	175	91	13	22	494
462			Reaction and Separation Engineering	120	124	51	17	12	324
463			Catalyst and Chemical Process	139	82	58	8	11	298
464			Bioengineering	183	184	121	18	22	528
465			Industrial Analytical Chemistry	95	81	52	6	8	242
			Process Engineering total	730	646	373	62	75	1,886
471			Industrial Physical Chemistry	205	161	91	24	15	496
472			Industrial Inorganic Chemistry	78	67	47	9	13	214
473			Industrial Organic Chemistry	97	74	36	11	8	226
474			Synthetic Chemistry	208	190	81	14	23	516
475			Polymer Synthesis	264	115	58	4	26	467
476			Polymer Structure and Property (inclu. Fiber)	217	139	123	28	36	543
			Industrial Chemistry total	1,069	746	436	90	121	2,462
481			Aeronautics	131	85	82	26	14	338
482			Ship Engineering	112	67	40	4	9	232
483			Marine Engineering	40	28	32	2	2	104
484			Resource Development Engineering	64	89	45	18	12	228
			Synthetic Engineering total	347	269	199	50	37	902
			ENGINEERING Total	13,297	8,060	7,283	1,210	1,417	31,267
501	A G R I C U L T U R E		Plant Breeding	86	80	67	20	17	270
502			Crop Science	103	69	26	31	13	242
503			Horticulture and Landscape Architecture	355	135	83	25	33	631
504			Plant Protection	161	98	78	18	28	383
505			Sericultural Science and Economic Entomology	40	41	33	3	3	120
			Agriculture total	745	423	287	97	94	1,646
511			Plant Fertilizer and Manure and Soil Science	143	65	47	37	21	313
512			Applied Microbiochemistry and Applied Biochemistry	342	300	234	75	65	1,016
513			Biological Productive Chemistry and Bioorganic Chemistry	105	74	92	14	15	300
514			Food Science and Nutritional Chemistry	487	354	379	60	63	1,343

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

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
	A		Agricultural Chemistry total	1,077	793	752	186	164	2,972
521			Forestry	286	125	138	65	22	636
522	G		Wood Science	144	128	74	11	17	374
			Forestry total	430	253	212	76	39	1,010
531	R		Fisheries in General	249	143	180	53	39	664
532			Fisheries Chemistry	80	76	57	12	9	234
			Fisheries total	329	219	237	65	48	898
541	I		Agricultural Economics	394	26	103	66	39	628
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	171	80	85	38	12	386
552	U		Agricultural Machinery	81	99	70	16	16	282
553	L		Biological Environment	80	30	16	14	15	155
			Agricultural Engineering total	332	209	171	68	43	823
561	T		Animal Science and Grassland Science	116	99	53	22	18	308
562	U		Applied Animal Science	113	88	70	37	15	323
563	R		Basic Veterinary Medicine and Basic Animal Science	143	172	115	45	21	496
564			Applied Veterinary Medicine	140	175	118	31	29	493
	E		Animal Science·Veterinary Medicine total	512	534	356	135	83	1,620
571			Biological Resource Science	58	36	43	30	6	173
572			Applied Molecular Cell Biology	54	27	39	14	9	143
			Interdisciplinary Agricultural Science total	112	63	82	44	15	316
			AGRICULTURE Total	3,931	2,520	2,200	737	525	9,913
601			Anatomy in General (inclu. Histology, Embryology)	232	278	128	60	27	725
602			Physiology in General	231	330	142	58	25	786
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	164	156	167	36	22	545
604			Pharmacology in General	137	290	98	49	21	595
605			Medical Chemistry in General	141	214	121	59	30	565
606			Pathological Medical Chemistry	70	102	76	40	14	302
	M		Physiology total	975	1,370	732	302	139	3,518
611			Hominal Pathology	277	342	123	61	48	851
612	E		Experimental Pathology	103	196	81	36	24	440
613	D		Parasitology (inclu. Medical Zoology)	65	89	82	80	8	324
614			Bacteriology (inclu. Eumycetes)	133	188	153	55	25	554
615	I		Virology	86	147	108	48	21	410
616			Immunology	160	274	143	76	52	705
	C		Pathology total	824	1,236	690	356	178	3,284
621			Hygiene	124	180	173	53	15	545
622	I		Public Health and Health Science	515	415	604	125	95	1,754
623			Legal Medicine	127	169	74	26	14	410
	N		Social Medicine total	766	764	851	204	124	2,709
631			Internal Medicine in General	238	409	174	56	41	918
632	E		Gastroenterology	321	517	113	51	47	1,049
633			Internal Medicine Respiratory System	148	251	69	22	14	504
634			Neurological Medicine	208	291	131	35	32	697
635			Cardioangiopathy	333	567	153	48	57	1,158
636			Pediatrics	343	411	213	71	46	1,084
637			Dermatology	188	237	59	34	47	565
638			Radiology	347	525	194	28	65	1,159
639			Neuropsychiatry	367	405	182	50	59	1,063
641			Hematology	202	273	115	45	31	666
642			Internal Medicine of Kidney	138	217	62	23	18	458
643			Embryology and Newborn	16	37	18	6	1	78
644			Endocrinology	113	180	75	23	16	407
645			Metabolic Science	113	209	60	27	25	434
			Internal Medicine total	3,075	4,529	1,618	519	499	10,240
651			Surgery in General	282	400	108	16	59	865
652			Gastroenterological Surgery	252	517	84	32	56	941
653			Thoracic Surgery	201	311	62	17	40	631

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

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
654	M		Neurosurgery	213	381	92	23	57	766
655			Orthopedic Surgery	427	545	184	56	70	1,282
656			Anesthesiology and Rescue Medicine	342	372	58	30	45	847
657			Urology	168	281	74	38	47	608
658			Obstetrics and Gynecology	238	383	111	33	38	803
659			Oto-rhino-laryngology	241	286	66	25	34	652
660			Ophthalmology	193	302	62	40	36	633
661			Pediatric Surgery	52	93	16	4	8	173
662			Formative Surgery	43	89	16	2	11	161
			Surgery total	2,652	3,960	933	316	501	8,362
671	E		Oral Anatomy and Morphological Basic Dentistry	160	277	91	33	22	583
672			Functional Basic Dentistry	117	229	56	19	26	447
673			Morbid Dentistry (inclu. Dental Radiology)	119	232	34	12	38	435
674			Conservative Dentistry	180	409	49	32	44	714
675			Prosthodontics and Dental Technology	279	591	91	48	57	1,066
676			Oral Surgery	408	604	119	46	54	1,231
677			Orthodontics, Pedodontics and Social Dentistry	330	508	130	70	75	1,113
678			Periodontological Dentistry	65	152	20	19	26	282
			Dentistry total	1,658	3,002	590	279	342	5,871
681	E		Chemical Pharmaceuticals	231	390	209	69	29	928
682			Physical Pharmaceuticals	103	217	81	32	16	449
683			Biopharmaceuticals	344	386	255	70	43	1,098
684			Molecular Pharmaceuticals	75	92	91	14	13	285
685			Environmental Pharmaceuticals	41	45	46	10	2	144
			Pharmaceuticals total	794	1,130	682	195	103	2,904
691			Medical Sociology	163	106	110	22	13	414
692			Human Genetics	43	50	48	23	10	174
693			Applied Pharmacology and Medical Pharmacology	111	179	75	18	15	398
694			Pathological Examination	111	188	87	17	11	414
696	E		Science of Basic and Local Nursing	464	402	386	25	60	1,337
697			Science of Clinical Nursing	651	569	352	25	83	1,680
			Medicine in General total	1,543	1,494	1,058	130	192	4,417
			MEDICINE Total	12,287	17,485	7,154	2,301	2,078	41,305
702	I	N	History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	196	13	42	13	10	274
703			Physical Education	1,543	521	778	106	135	3,083
704			Human Geography	457	13	61	41	31	603
705			Physical Geography	173	25	60	41	6	305
			Geography total	630	38	121	82	37	908
706			Home Science(inclu. Cloth/Living Environments)	703	240	424	33	41	1,441
707			Food Culture	374	240	335	27	42	1,018
			Domestic Science total	1,077	480	759	60	83	2,459
708			Science of Cultural Property	42	8	17	7	2	76
711			Science Education	292	78	122	24	22	538
712	I	N	Educational Engineering	417	163	193	27	31	831
713			Curriculum Studies	1,697	175	297	47	102	2,318
714			Japanese Language Education	335	62	64	25	30	516
			Science Education·Curriculum Education total	2,741	478	676	123	185	4,203
721			Statistics	190	37	76	11	11	325
731			Computer Science	921	399	421	64	75	1,880
732			Intelligent Informatics	707	340	337	58	74	1,516
733			Study of Information System (Inclu. Library and Information Science)	671	224	223	55	82	1,255
			Information Science total	2,299	963	981	177	231	4,651
741			Social System Engineering	459	125	180	38	43	845
751	I		Natural Disaster Science	45	23	35	11	3	117
761			Plasma Science and Technology	109	175	115	40	23	462
772			Nuclear Fusion	32	63	48	34	10	187

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

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	112	68	55	23	6	264
774			Nuclear Power Science	108	123	132	34	4	401
			Energy total	252	254	235	91	20	852
801			Environmental Dynamic Analysis	128	90	131	61	14	424
802			Environmental Influence Assessment (inclu. Radiobiology)	115	137	127	44	10	433
803			Environmental Preservation	317	147	188	57	36	745
			Environmental Science total	560	374	446	162	60	1,602
811			Biological Organic Chemistry	125	136	117	37	19	434
812			Structured Biochemistry	92	115	137	31	10	385
813			Functional Biochemistry	189	170	154	51	11	575
			Biological Chemistry total	406	421	408	119	40	1,394
821			Biophysics	137	101	171	45	18	472
822			Molecular Biology	337	372	244	105	58	1,116
823			Cell Biology	215	253	154	51	42	715
824			Developmental Biology	143	115	81	31	23	393
			Basic Biology total	832	841	650	232	141	2,696
831	A R E A		Neuroanatomy and Neuropathology	94	101	63	33	8	299
832			Neurochemistry and Neuropharmacology	69	138	87	29	13	336
833			Neuro Science in General	199	205	151	42	29	626
834			Neuro and Muscular Physiology	147	170	89	35	17	458
			Neuro Science (inclu. Brain Science) total	509	614	390	139	67	1,719
841			Laboratory Animal Science	55	59	65	14	12	205
851			Medical Organism Engineering and Material Science of Organism	245	284	333	50	44	956
			INTERDISCIPLINARY AREA Total	12,190	5,708	6,307	1,475	1,147	26,827
999			WIDE AREA Total	1,888	456	504	168	168	3,184
			Item n.a. Total	34,968	17,403	12,047	3,211	3,595	71,224
			Grand Total	130,057	57,579	45,304	13,065	12,519	258,524

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

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
211	A R T S · H U M A N I T I E S		Philosophy	355	15	18	7	25	420
212			Chinese Philosophy	96	2	9	1	12	120
213			Indian Philosophy (inclu. Buddhist Studies)	53	0	6	6	8	73
214			Religion	84	0	7	3	4	98
215			Ethics	138	12	11	3	4	168
216			History of Philosophy	134	3	8	5	7	157
217			Aesthetics (inclu. Arts)	556	23	34	17	31	661
218			Art History	222	7	12	13	9	263
			Philosophy total	1,638	62	105	55	100	1,960
221			Experimental Psychology	289	61	98	35	22	505
222			Educational and Social	830	129	201	52	45	1,257
223			Sociology	509	23	119	47	38	736
224			Education	1,175	120	240	72	64	1,671
225			Cultural Anthropology (inclu. Ethnology and Folklore)	253	10	55	39	22	379
			Psychology·Sociology·Education Cultural Anthropology total	3,056	343	713	245	191	4,548
231			Japanese History	338	19	37	8	24	426
232			Oriental History	229	10	25	15	14	293
233			European History	241	6	21	10	14	292
234			Archaeology (inclu. Prehistory)	141	15	26	15	10	207
			History total	949	50	109	48	62	1,218
241			Japanese Language	210	16	24	3	10	263
242			Japanese Literature	404	7	11	4	20	446
243			Chinese Language and Literature	206	4	15	4	8	237
244			English Language and Literature	972	32	41	17	38	1,100
245			French Language and Literature	208	7	10	3	5	233
246			German Language and Literature	338	13	20	13	17	401
247			Other Foreign Languages and Literatures	232	13	16	11	10	282
248			Linguistics and Phonetics	490	28	51	37	37	643
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	176	6	7	3	3	195
			Literature total	3,236	126	195	95	148	3,800
			ARTS·HUMANITIES Total	8,879	581	1,122	443	501	11,526
261	L A W		Basic Science of Law	150	11	20	7	14	202
262			Public Law	192	10	12	4	9	227
263			International Law	101	0	13	4	5	123
264			Civil Law	302	10	34	6	11	363
265			Social Law	84	3	14	3	5	109
266			Criminal Law	81	0	7	1	4	93
267			Politics	452	14	42	22	32	562
			LAW Total	1,362	48	142	47	80	1,679
271	E C O N O M I C S		General Theory of Economics	406	18	58	35	30	547
272			Economical Statistics	76	2	20	10	11	119
273			Economic Policy (inclu. Economic Condition)	383	20	85	49	14	551
274			Economic History	154	5	22	10	7	198
275			Public Finance, Money and Banking	148	6	30	8	17	209
276			Commercial Science	73	1	8	3	3	88
277			Business Administration	223	16	49	28	20	336
278			Accounting	147	3	25	8	8	191
			ECONOMICS Total	1,610	71	297	151	110	2,239
301	S C I E N C E		Algebra	307	14	35	12	13	381
302			Geometry	309	14	43	30	14	410
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	327	34	100	32	13	506
305			Basic Analysis	259	15	41	27	22	364
306			Larger-area Analysis	128	14	29	11	4	186
			Mathematics total	1,330	91	248	112	66	1,847
311			Astronomy	90	61	103	92	10	356
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	161	161	267	315	47	951

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

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	160	175	177	37	16	565
323			Solid-State Physics II (Magnetism, Metal Physics,	127	176	199	65	30	597
324			Physical Properties in General (inclu. Basic Theories)	170	81	116	47	15	429
325			Physics in General	159	134	95	45	18	451
			Physics total	777	727	854	509	126	2,993
331			Physics of Solid Earth	129	86	137	53	19	424
332			Meteorology, Oceanography and Hydrology	164	79	154	76	21	494
333			Aeronomy	28	21	39	43	3	134
334			Geology	126	15	66	53	10	270
335			Stratigraphy and Paleontology	75	8	37	36	2	158
336			Mineralogy, Petrology and Study of Mineral Deposit	160	46	84	57	10	357
337			Geochemistry	61	52	82	35	17	247
			Earth Science total	743	307	599	353	82	2,084
341			Physical Chemistry	338	275	162	57	37	869
342			Organic Chemistry	272	234	118	27	26	677
343			Inorganic Chemistry	166	127	108	12	15	428
344			Function, Properties and Materials in Chemistry	157	121	98	14	8	398
345			Substance Transformation	27	14	12	5	1	59
346			Separation, Refining and Identification	111	66	72	13	14	276
			Chemistry total	1,071	837	570	128	101	2,707
351			Genetics	122	72	94	31	18	337
352			Ecology	289	80	157	93	22	641
353			Plant Physiology	143	88	72	34	9	346
354			Morphology, Structure of Organism	90	55	32	22	9	208
355			Animal Physiology and	101	31	51	23	7	213
356			Morphology and Taxonomy	156	31	65	91	14	357
			Biology total	901	357	471	294	79	2,102
361			Physical Anthropology (inclu. Physiological Anthropology)	44	20	19	24	6	113
	SCIENCE Total			4,956	2,400	2,864	1,512	470	12,202
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	118	119	103	21	13	374
402			Surface Physics	84	99	56	17	12	268
403			Applied Optics and Quantum Optics	145	100	97	11	21	374
404			General Applied Physics	87	67	59	12	8	233
405			Fundamentals of Engineering	65	27	41	6	5	144
			Applied Physics-Fundamentals of Engineering total	499	412	356	67	59	1,393
411			Materials for Machines and Strength of Materials	304	168	165	15	30	682
412			Workshop Processes and Production Engineering	185	158	125	11	22	501
413			Design Engineering, Machine Elements and Tribology	163	74	93	4	15	349
414			Fluid Mechanics	260	191	147	32	26	656
415			Heat Engineering	247	244	160	30	36	717
416			Mechanics and Control Engineering	220	120	118	20	17	495
417			Intelligent Mechanics and Machine System	249	146	134	20	31	580
			Machine Engineering total	1,628	1,101	942	132	177	3,980
421			Electric Power Engineering and Electric Machinery	227	143	167	6	21	564
422			Electronic and Electric Materials Engineering	224	242	131	18	28	643
423			Electron Devices and Apparatus Engineering	218	183	147	17	29	594
424			Information and Communication Engineering	518	325	225	31	67	1,166

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

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
425	E N G I N E E R I N G		System Engineering	102	63	46	11	22	244
427			Electronic Measurements	217	127	123	18	26	511
428			Control Engineering	242	112	128	16	16	514
			Electric and Electronic Engineering	1,748	1,195	967	117	209	4,236
431			Construction Materials and Dynamics in General Civil Engineering	112	51	80	10	10	263
432			Structural Engineering and Seismology	146	84	100	14	18	362
433			Ground Engineering	178	87	132	33	18	448
434			Hydraulics and River Engineering	182	139	91	43	9	464
435			Traffic Engineering and Regional Planning	120	75	85	20	11	311
436			Civil Environmental System	119	95	82	22	18	336
			Civil Engineering total	857	531	570	142	84	2,184
441		G	Building Structure and Materials	213	94	99	24	28	458
442			Building Science and Building Equipment	102	45	61	13	10	231
443			City Planning and Building Planning	311	104	105	49	26	595
444			Architectural History and Design	166	35	29	11	14	255
			Architecture total	792	278	294	97	78	1,539
451		N	Physical Metallurgy	97	123	79	26	15	340
452			Inorganic Materials and	201	188	117	20	32	558
453			Composed Materials and Properties	59	56	43	10	8	176
454			Structural and Functional Materials	120	120	99	25	25	389
455		R	Metallurgy and Material	164	154	115	11	19	463
456			Metal Productive Engineering	83	62	60	8	12	225
			Material Engineering total	724	703	513	100	111	2,151
461		G	Chemical Engineering in General	151	138	73	7	16	385
462			Reaction and Separation Engineering	95	106	38	13	10	262
463			Catalyst and Chemical Process	106	71	40	5	10	232
464			Bioengineering	118	134	84	12	18	366
465			Industrial Analytical Chemistry	68	59	35	4	7	173
			Process Engineering total	538	508	270	41	61	1,418
471			Industrial Physical Chemistry	142	135	61	17	11	366
472			Industrial Inorganic Chemistry	48	52	34	8	9	151
473			Industrial Organic Chemistry	56	56	22	6	4	144
474			Synthetic Chemistry	159	163	55	8	15	400
475			Polymer Synthesis	190	89	44	4	21	348
476			Polymer Structure and Property (inclu. Fiber)	150	107	64	25	19	365
			Industrial Chemistry total	745	602	280	68	79	1,774
481			Aeronautics	91	68	49	18	7	233
482			Ship Engineering	89	62	35	3	5	194
483			Marine Engineering	26	16	21	2	1	66
484			Resource Development Engineering	53	83	38	18	12	204
			Synthetic Engineering total	259	229	143	41	25	697
			ENGINEERING Total	7,790	5,559	4,335	805	883	19,372
501	A G R I C U L T U R E		Plant Breeding	56	59	42	14	14	185
502			Crop Science	75	53	23	29	8	188
503			Horticulture and Landscape Architecture	191	81	46	16	18	352
504			Plant Protection	120	72	61	9	25	287
505			Sericultural Science and Economic Entomology	24	22	20	1	3	70
			Agriculture total	466	287	192	69	68	1,082
511			Plant Fertilizer and Manure and Soil Science	107	55	30	32	13	237
512			Applied Microbiochemistry and Applied Biochemistry	204	168	127	51	42	592
513			Biological Productive Chemistry and Bioorganic Chemistry	78	49	59	8	9	203
514			Food Science and Nutritional Chemistry	145	136	127	33	25	466

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
	A		Agricultural Chemistry total	534	408	343	124	89	1,498
521			Forestry	236	107	118	55	21	537
522	G		Wood Science	133	117	68	10	11	339
			Forestry total	369	224	186	65	32	876
531	R		Fisheries in General	187	102	141	45	30	505
532			Fisheries Chemistry	57	64	37	9	7	174
			Fisheries total	244	166	178	54	37	679
541	I		Agricultural Economics	204	18	56	40	19	337
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	131	68	64	32	8	303
552	U		Agricultural Machinery	68	88	63	10	12	241
553	L		Biological Environment	55	19	7	13	9	103
			Agricultural Engineering total	254	175	134	55	29	647
561	T		Animal Science and Grassland Science	81	65	35	16	10	207
562	U		Applied Animal Science	87	70	47	33	7	244
563	R		Basic Veterinary Medicine and Basic Animal Science	85	96	60	29	9	279
564			Applied Veterinary Medicine	68	78	63	18	16	243
	E		Animal Science·Veterinary Medicine total	321	309	205	96	42	973
571			Biological Resource Science	42	32	27	23	6	130
572			Applied Molecular Cell Biology	42	24	23	13	7	109
			Interdisciplinary Agricultural Science total	84	56	50	36	13	239
			AGRICULTURE Total	2,476	1,643	1,344	539	329	6,331
601			Anatomy in General (inclu. Histology, Embryology)	105	157	55	29	6	352
602			Physiology in General	110	174	68	27	14	393
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	57	59	44	16	9	185
604			Pharmacology in General	59	127	33	22	10	251
605			Medical Chemistry in General	62	127	55	39	19	302
606			Pathological Medical Chemistry	31	66	43	24	11	175
	M		Physiology total	424	710	298	157	69	1,658
611			Hominal Pathology	124	156	43	31	20	374
612	E		Experimental Pathology	60	112	50	25	16	263
613	D		Parasitology (inclu. Medical Zoology)	30	52	39	47	4	172
614			Bacteriology (inclu. Eumycetes)	79	84	55	31	11	260
615	I		Virology	59	96	68	33	10	266
616			Immunology	96	164	58	37	38	393
	C		Pathology total	448	664	313	204	99	1,728
621			Hygiene	52	66	68	33	6	225
622	I		Public Health and Health Science	193	149	227	76	32	677
623			Legal Medicine	73	73	38	15	6	205
	N		Social Medicine total	318	288	333	124	44	1,107
631			Internal Medicine in General	97	163	68	38	20	386
632	E		Gastroenterology	136	231	62	27	26	482
633			Internal Medicine Respiratory System	71	104	35	13	4	227
634			Neurological Medicine	110	130	65	22	18	345
635			Cardioangiopathy	166	247	72	29	24	538
636			Pediatrics	138	210	88	38	17	491
637			Dermatology	96	114	29	16	23	278
638			Radiology	197	298	106	13	35	649
639			Neuropsychiatry	161	199	78	22	26	486
641			Hematology	91	149	54	26	14	334
642			Internal Medicine of Kidney	48	99	29	12	8	196
643			Embryology and Newborn	2	15	2	1	1	21
644			Endocrinology	59	97	37	17	12	222
645			Metabolic Science	57	112	34	12	14	229
			Internal Medicine total	1,429	2,168	759	286	242	4,884
651			Surgery in General	125	174	55	7	29	390
652			Gastroenterological Surgery	118	286	32	16	29	481
653			Thoracic Surgery	88	134	28	7	16	273

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

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
654	M		Neurosurgery	76	204	47	9	25	361
655			Orthopedic Surgery	186	265	84	26	31	592
656			Anesthesiology and Rescue Medicine	187	182	33	21	27	450
657			Urology	68	150	38	18	24	298
658			Obstetrics and Gynecology	127	196	43	21	20	407
659			Oto-rhino-laryngology	93	140	25	12	16	286
660			Ophthalmology	90	155	26	23	19	313
661			Pediatric Surgery	24	59	8	2	6	99
662			Formative Surgery	17	28	5	1	4	55
			Surgery total	1,199	1,973	424	163	246	4,005
671	E		Oral Anatomy and Morphological Basic Dentistry	47	109	33	22	7	218
672			Functional Basic Dentistry	38	69	19	10	12	148
673			Morbid Dentistry (inclu. Dental Radiology)	44	109	12	2	15	182
674			Conservative Dentistry	49	140	17	15	10	231
675			Prosthodontics and Dental Technology	94	256	36	31	21	438
676			Oral Surgery	190	280	55	21	20	566
677			Orthodontics, Pedodontics and Social Dentistry	129	243	63	33	34	502
678			Periodontological Dentistry	31	86	10	15	10	152
			Dentistry total	622	1,292	245	149	129	2,437
681	E		Chemical Pharmaceuticals	69	113	46	23	8	259
682			Physical Pharmaceuticals	32	59	26	16	3	136
683			Biopharmaceuticals	100	114	68	28	19	329
684			Molecular Pharmaceuticals	34	43	28	4	6	115
685			Environmental Pharmaceuticals	10	17	9	4	1	41
			Pharmaceuticals total	245	346	177	75	37	880
691			Medical Sociology	53	56	31	8	5	153
692			Human Genetics	28	35	33	19	9	124
693			Applied Pharmacology and Medical Pharmacology	33	85	21	8	8	155
694			Pathological Examination	54	86	47	13	5	205
696			Science of Basic and Local Nursing	130	142	131	9	21	433
697			Science of Clinical Nursing	240	228	108	8	23	607
			Medicine in General total	538	632	371	65	71	1,677
			MEDICINE Total	5,223	8,073	2,920	1,223	937	18,376
702	I		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	84	4	18	9	6	121
703			Physical Education	568	179	255	53	39	1,094
704			Human Geography	209	5	24	17	16	271
705			Physical Geography	87	16	37	28	6	174
			Geography total	296	21	61	45	22	445
706			Home Science (inclu. Cloth/Living Environments)	162	27	106	10	6	311
707			Food Culture	40	21	43	9	5	118
			Domestic Science total	202	48	149	19	11	429
708			Science of Cultural Property	28	2	12	7	2	51
711			Science Education	185	52	84	20	14	355
712	A		Educational Engineering	139	55	78	9	13	294
713			Curriculum Studies	855	82	175	38	52	1,202
714			Japanese Language Education	143	32	45	11	16	247
			Science Education·Curriculum Education total	1,322	221	382	78	95	2,098
721			Statistics	82	15	36	8	6	147
731			Computer Science	472	250	227	42	34	1,025
732			Intelligent Informatics	379	222	190	40	40	871
733			Study of Information System (Inclu. Library and Information Science)	159	104	77	28	19	387
			Information Science total	1,010	576	494	110	93	2,283
741			Social System Engineering	162	64	65	18	12	321
751	I		Natural Disaster Science	25	14	25	6	3	73
761			Plasma Science and Technology	84	141	89	35	14	363
772			Nuclear Fusion	24	55	35	32	10	156

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

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
773	N T E R D I S C I P L I N A R Y		Energy Science General	69	53	35	18	5	180
774			Nuclear Power Science	86	114	108	23	3	334
			Energy total	179	222	178	73	18	670
801			Environmental Dynamic Analysis	87	63	74	52	8	284
802			Environmental Influence Assessment (inclu. Radiobiology)	48	76	74	27	7	232
803			Environmental Preservation	143	97	83	30	13	366
			Environmental Science total	278	236	231	109	28	882
811			Biological Organic Chemistry	91	91	71	24	10	287
812			Structured Biochemistry	55	62	79	18	2	216
813			Functional Biochemistry	112	102	84	27	5	330
			Biological Chemistry total	258	255	234	69	17	833
821	B A S I C		Biophysics	83	75	110	28	13	309
822			Molecular Biology	225	262	156	68	38	749
823			Cell Biology	143	151	73	36	25	428
824			Developmental Biology	112	90	47	22	12	283
			Basic Biology total	563	578	386	154	88	1,769
831	A R E A		Neuroanatomy and Neuropathology	55	49	42	17	4	167
832			Neurochemistry and Neuropharmacology	36	65	42	14	6	163
833			Neuro Science in General	121	143	86	28	17	395
834			Neuro and Muscular Physiology	74	98	35	21	10	238
			Neuro Science (inclu. Brain Science) total	286	355	205	80	37	963
841			Laboratory Animal Science	35	18	33	7	7	100
851			Medical Organism Engineering and Material Science of Organism	131	175	165	32	25	528
	INTERDISCIPLINARY AREA Total			5,593	3,124	3,018	912	523	13,170
999	WIDE AREA Total			526	192	187	84	47	1,036
	Item n.a. Total			15,980	10,396	6,378	2,032	1,904	36,690
	Grand Total			54,395	32,087	22,607	7,748	5,784	122,621

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

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
211	A R T S · H U M A N I T I E S		Philosophy	63	2	9	1	2	77
212			Chinese Philosophy	20	0	3	0	3	26
213			Indian Philosophy (inclu. Buddhist Studies)	6	2	3	1	0	12
214			Religion	4	0	0	0	0	4
215			Ethics	13	0	0	1	2	16
216			History of Philosophy	38	1	1	0	2	42
217			Aesthetics (inclu. Arts)	157	13	17	7	13	207
218			Art History	35	1	4	3	3	46
		Philosophy total		336	19	37	13	25	430
221			Experimental Psychology	33	5	26	9	3	76
222			Educational and Social	123	11	45	2	9	190
223			Sociology	229	20	66	16	18	349
224			Education	131	22	20	4	11	188
225			Cultural Anthropology (inclu. Ethnology and Folklore)	23	4	9	9	1	46
		Psychology·Sociology·Education Cultural Anthropology total		539	62	166	40	42	849
231			Japanese History	55	0	5	1	3	64
232			Oriental History	31	0	3	2	2	38
233			European History	72	1	4	0	1	78
234			Archaeology (inclu. Prehistory)	5	0	1	1	1	8
		History total		163	1	13	4	7	188
241			Japanese Language	34	0	2	0	2	38
242			Japanese Literature	88	1	5	0	4	98
243			Chinese Language and Literature	34	0	5	4	0	43
244			English Language and Literature	256	8	13	4	13	294
245			French Language and Literature	36	0	9	1	3	49
246			German Language and Literature	53	0	4	1	2	60
247			Other Foreign Languages and Literatures	34	1	4	2	3	44
248			Linguistics and Phonetics	115	3	14	9	7	148
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	18	1	0	0	1	20
		Literature total		668	14	56	21	35	794
	ARTS·HUMANITIES Total		1,706	96	272	78	109	2,261	
261	L A W		Basic Science of Law	28	1	0	0	0	29
262			Public Law	39	1	4	0	2	46
263			International Law	14	0	1	0	0	15
264			Civil Law	34	0	5	1	3	43
265			Social Law	19	1	2	0	1	23
266			Criminal Law	8	0	2	0	0	10
267			Politics	96	3	12	9	6	126
	LAW Total		238	6	26	10	12	292	
271	E C O N O M I C S		General Theory of Economics	122	11	21	9	15	178
272			Economical Statistics	19	1	3	2	1	26
273			Economic Policy (inclu. Economic Condition)	134	15	22	10	11	192
274			Economic History	43	1	6	1	0	51
275			Public Finance, Money and Banking	59	4	15	2	2	82
276			Commercial Science	41	4	3	1	0	49
277			Business Administration	88	3	13	3	13	120
278			Accounting	51	3	4	7	1	66
	ECONOMICS Total		557	42	87	35	43	764	
301	S C I E N C E		Algebra	34	4	2	1	0	41
302			Geometry	23	0	4	4	2	33
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	44	5	10	3	5	67
305			Basic Analysis	27	2	4	3	1	37
306			Larger-area Analysis	7	1	6	0	0	14
		Mathematics total		135	12	26	11	8	192
311		Astronomy	1	0	5	1	0	7	
321		Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	17	5	23	19	4	68	

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

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	13	12	17	8	4	54
323			Solid-State Physics II (Magnetism, Metal Physics,	7	15	22	10	1	55
324			Physical Properties in General (inclu. Basic Theories)	12	2	15	2	0	31
325			Physics in General	9	16	8	7	2	42
			Physics total	58	50	85	46	11	250
331			Physics of Solid Earth	3	1	4	1	0	9
332			Meteorology, Oceanography and Hydrology	5	5	7	4	0	21
333			Aeronomy	0	0	1	1	0	2
334			Geology	12	5	7	5	0	29
335			Stratigraphy and Paleontology	7	0	2	2	0	11
336			Mineralogy, Petrology and Study of Mineral Deposit	7	3	1	0	0	11
337			Geochemistry	0	1	4	5	1	11
			Earth Science total	34	15	26	18	1	94
341			Physical Chemistry	38	14	27	10	7	96
342			Organic Chemistry	42	17	13	7	2	81
343			Inorganic Chemistry	18	5	12	2	1	38
344			Function, Properties and Materials in Chemistry	13	10	6	0	0	29
345			Substance Transformation	1	0	0	0	0	1
346			Separation, Refining and Identification	10	6	10	1	1	28
			Chemistry total	122	52	68	20	11	273
351			Genetics	11	3	13	3	2	32
352			Ecology	23	13	13	5	1	55
353			Plant Physiology	35	18	18	7	4	82
354			Morphology, Structure of Organism	2	0	2	1	1	6
355			Animal Physiology and	6	4	8	5	3	26
356			Morphology and Taxonomy	18	0	1	6	1	26
			Biology total	95	38	55	27	12	227
361			Physical Anthropology (inclu. Physiological Anthropology)	6	0	2	2	0	10
	SCIENCE Total			451	167	267	125	43	1,053
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	15	9	16	5	1	46
402			Surface Physics	5	4	2	0	0	11
403			Applied Optics and Quantum Optics	10	8	13	1	1	33
404			General Applied Physics	4	7	3	0	3	17
405			Fundamentals of Engineering	5	1	6	0	0	12
			Applied Physics-Fundamentals of Engineering total	39	29	40	6	5	119
411			Materials for Machines and Strength of Materials	17	29	11	2	1	60
412			Workshop Processes and Production Engineering	23	12	20	2	1	58
413			Design Engineering, Machine Elements and Tribology	11	5	9	2	3	30
414			Fluid Mechanics	23	14	19	6	3	65
415			Heat Engineering	11	24	12	3	2	52
416			Mechanics and Control Engineering	18	5	8	0	3	34
417			Intelligent Mechanics and Machine System	22	10	13	0	3	48
			Machine Engineering total	125	99	92	15	16	347
421			Electric Power Engineering and Electric Machinery	15	18	19	2	0	54
422			Electronic and Electric Materials Engineering	10	13	4	3	0	30
423			Electron Devices and Apparatus Engineering	14	18	12	0	3	47
424			Information and Communication Engineering	66	39	43	5	6	159

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

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
425	ENGINEERING		System Engineering	14	6	2	0	0	22
427			Electronic Measurements	14	4	9	3	1	31
428			Control Engineering	28	23	19	2	1	73
			Electric and Electronic Engineering	161	121	108	15	11	416
431			Construction Materials and Dynamics in General Civil Engineering	7	3	4	0	0	14
432			Structural Engineering and Seismology	11	14	15	2	2	44
433			Ground Engineering	6	8	7	0	2	23
434			Hydraulics and River Engineering	14	5	5	2	0	26
435			Traffic Engineering and Regional Planning	8	4	7	0	1	20
436			Civil Environmental System	7	7	6	1	0	21
			Civil Engineering total	53	41	44	5	5	148
441			Building Structure and Materials	24	21	21	2	2	70
442			Building Science and Building Equipment	27	11	31	4	0	73
443			City Planning and Building Planning	65	14	19	4	3	105
444			Architectural History and Design	30	2	8	0	2	42
			Architecture total	146	48	79	10	7	290
451			Physical Metallurgy	7	4	2	0	0	13
452			Inorganic Materials and	3	3	3	0	0	9
453			Composed Materials and Properties	6	1	10	2	0	19
454			Structural and Functional Materials	5	13	5	0	1	24
455			Metallurgy and Material	6	9	4	0	0	19
456			Metal Productive Engineering	3	4	1	0	1	9
			Material Engineering total	30	34	25	2	2	93
461			Chemical Engineering in General	7	12	7	0	0	26
462			Reaction and Separation Engineering	6	7	3	0	0	16
463			Catalyst and Chemical Process	6	0	4	2	0	12
464			Bioengineering	13	16	8	1	3	41
465			Industrial Analytical Chemistry	7	6	3	0	0	16
			Process Engineering total	39	41	25	3	3	111
471			Industrial Physical Chemistry	17	9	9	4	0	39
472			Industrial Inorganic Chemistry	4	8	1	0	0	13
473			Industrial Organic Chemistry	4	2	0	1	0	7
474			Synthetic Chemistry	3	9	4	4	1	21
475			Polymer Synthesis	15	13	3	0	0	31
476			Polymer Structure and Property (inclu. Fiber)	4	8	11	1	8	32
			Industrial Chemistry total	47	49	28	10	9	143
481			Aeronautics	4	7	4	3	2	20
482			Ship Engineering	4	3	2	0	0	9
483			Marine Engineering	2	7	2	0	0	11
484			Resource Development Engineering	2	0	6	0	0	8
			Synthetic Engineering total	12	17	14	3	2	48
		ENGINEERING Total		652	479	455	69	60	1,715
501	AGRICULTURE		Plant Breeding	9	12	14	5	3	43
502			Crop Science	8	5	2	0	3	18
503			Horticulture and Landscape Architecture	58	24	13	4	4	103
504			Plant Protection	16	7	6	5	0	34
505			Sericultural Science and Economic Entomology	2	1	2	0	0	5
			Agriculture total	93	49	37	14	10	203
511			Plant Fertilizer and Manure and Soil Science	15	0	7	2	4	28
512			Applied Microbiochemistry and Applied Biochemistry	23	19	19	3	7	71
513			Biological Productive Chemistry and Bioorganic Chemistry	9	12	5	3	2	31
514			Food Science and Nutritional Chemistry	57	40	48	5	10	160

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

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
	A		Agricultural Chemistry total	104	71	79	13	23	290
521			Forestry	15	8	4	6	0	33
522	G		Wood Science	5	4	4	0	1	14
			Forestry total	20	12	8	6	1	47
531	R		Fisheries in General	5	5	3	0	0	13
532			Fisheries Chemistry	2	1	0	0	0	3
			Fisheries total	7	6	3	0	0	16
541	I		Agricultural Economics	28	4	10	7	4	53
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	17	5	10	1	0	33
552	U		Agricultural Machinery	3	2	2	0	2	9
553	L		Biological Environment	11	4	5	0	5	25
			Agricultural Engineering total	31	11	17	1	7	67
561	T		Animal Science and Grassland Science	8	3	2	0	2	15
562	U		Applied Animal Science	10	1	6	0	1	18
563	R		Basic Veterinary Medicine and Basic Animal Science	16	4	7	1	1	29
564			Applied Veterinary Medicine	9	13	4	4	0	30
	E		Animal Science·Veterinary Medicine total	43	21	19	5	4	92
571			Biological Resource Science	5	2	3	0	0	10
572			Applied Molecular Cell Biology	2	3	4	0	0	9
			Interdisciplinary Agricultural Science total	7	5	7	0	0	19
			AGRICULTURE Total	333	179	180	46	49	787
601			Anatomy in General (inclu. Histology, Embryology)	18	22	9	13	8	70
602			Physiology in General	18	24	15	5	1	63
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	21	17	24	6	0	68
604			Pharmacology in General	15	24	6	1	2	48
605			Medical Chemistry in General	17	17	7	5	4	50
606			Pathological Medical Chemistry	7	11	7	3	0	28
	M		Physiology total	96	115	68	33	15	327
611			Hominal Pathology	17	35	17	10	3	82
612	E		Experimental Pathology	12	21	7	3	2	45
613	D		Parasitology (inclu. Medical Zoology)	7	15	7	2	1	32
614			Bacteriology (inclu. Eumycetes)	5	12	20	8	9	54
615	I		Virology	2	9	8	3	1	23
616			Immunology	5	12	8	4	0	29
	C		Pathology total	48	104	67	30	16	265
621			Hygiene	13	8	23	5	1	50
622	I		Public Health and Health Science	79	45	97	13	23	257
623			Legal Medicine	16	24	3	4	0	47
	N		Social Medicine total	108	77	123	22	24	354
631			Internal Medicine in General	22	50	27	7	2	108
632	E		Gastroenterology	24	55	7	9	2	97
633			Internal Medicine Respiratory System	16	28	9	1	1	55
634			Neurological Medicine	15	24	16	4	3	62
635			Cardioangiopathy	21	44	13	4	5	87
636			Pediatrics	40	35	15	4	4	98
637			Dermatology	16	34	8	6	5	69
638			Radiology	24	29	16	1	7	77
639			Neuropsychiatry	32	29	10	3	8	82
641			Hematology	18	18	10	4	0	50
642			Internal Medicine of Kidney	7	15	8	1	0	31
643			Embryology and Newborn	3	9	8	0	0	20
644			Endocrinology	5	5	5	1	0	16
645			Metabolic Science	7	15	3	6	1	32
			Internal Medicine total	250	390	155	51	38	884
651			Surgery in General	18	33	4	3	6	64
652			Gastroenterological Surgery	14	63	13	5	8	103
653			Thoracic Surgery	14	17	3	3	1	38

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

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
654	M		Neurosurgery	21	28	15	4	5	73
655			Orthopedic Surgery	64	69	35	8	13	189
656			Anesthesiology and Rescue Medicine	28	65	4	6	6	109
657			Urology	23	27	7	7	6	70
658			Obstetrics and Gynecology	22	32	14	3	3	74
659			Oto-rhino-laryngology	27	30	10	3	2	72
660			Ophthalmology	17	30	7	1	2	57
661			Pediatric Surgery	7	4	0	0	0	11
662			Formative Surgery	5	1	0	0	1	7
				Surgery total	260	399	112	43	53
671	E		Oral Anatomy and Morphological Basic Dentistry	1	14	5	1	1	22
672	D		Functional Basic Dentistry	4	8	1	0	1	14
673	I		Morbid Dentistry (inclu. Dental Radiology)	2	0	4	0	5	11
674	C		Conservative Dentistry	6	9	4	0	0	19
675			Prosthodontics and Dental Technology	3	5	1	1	1	11
676	I		Oral Surgery	23	24	8	3	2	60
677	N		Orthodontics, Pedodontics and Social Dentistry	9	6	3	0	1	19
678			Periodontological Dentistry	0	2	3	0	2	7
	E		Dentistry total	48	68	29	5	13	163
681			Chemical Pharmaceutics	12	13	11	0	0	36
682			Physical Pharmaceutics	9	11	3	1	3	27
683			Biopharmaceutics	25	20	17	5	4	71
684			Molecular Pharmaceutics	6	4	4	0	0	14
685			Environmental Pharmaceutics	3	0	9	0	0	12
		Pharmaceutics total	55	48	44	6	7	160	
691			Medical Sociology	22	5	19	0	2	48
692			Human Genetics	2	2	3	0	0	7
693			Applied Pharmacology and Medical Pharmacology	7	1	3	0	0	11
694			Pathological Examination	14	10	9	2	2	37
696			Science of Basic and Local Nursing	152	145	141	14	22	474
697			Science of Clinical Nursing	202	184	141	11	28	566
			Medicine in General total	399	347	316	27	54	1,143
	MEDICINE Total			1,264	1,548	914	217	220	4,163
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	7	1	1	1	0	10
703			Physical Education	58	27	66	14	4	169
704			Human Geography	36	0	7	3	1	47
705			Physical Geography	10	0	3	2	0	15
			Geography total	46	0	10	5	1	62
706			Home Science(inclu. Cloth/Living Environments)	34	16	26	2	1	79
707			Food Culture	34	17	45	4	6	106
			Domestic Science total	68	33	71	6	7	185
708			Science of Cultural Property	1	2	2	0	0	5
711			Science Education	4	0	3	0	0	7
712			Educational Engineering	21	11	16	2	4	54
713			Curriculum Studies	60	6	10	1	2	79
714			Japanese Language Education	11	0	3	3	0	17
			Science Education·Curriculum Education total	96	17	32	6	6	157
721	A R E A		Statistics	6	1	7	0	1	15
731			Computer Science	37	29	28	2	7	103
732			Intelligent Informatics	46	29	30	1	6	112
733			Study of Information System (Inclu. Library and Information Science)	32	13	17	4	3	69
			Information Science total	115	71	75	7	16	284
741			Social System Engineering	34	10	10	5	3	62
751			Natural Disaster Science	7	1	3	1	0	12
761			Plasma Science and Technology	5	8	6	1	0	20
772			Nuclear Fusion	1	0	1	0	0	2

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

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	5	9	4	0	0	18
774			Nuclear Power Science	1	0	1	0	0	2
			Energy total	7	9	6	0	0	22
801			Environmental Dynamic Analysis	7	1	12	0	1	21
802			Environmental Influence Assessment (inclu. Radiobiology)	13	19	19	3	0	54
803			Environmental Preservation	23	10	24	4	1	62
			Environmental Science total	43	30	55	7	2	137
811			Biological Organic Chemistry	8	12	7	3	0	30
812			Structured Biochemistry	13	12	7	2	1	35
813			Functional Biochemistry	27	11	12	5	2	57
			Biological Chemistry total	48	35	26	10	3	122
821	A R E A		Biophysics	9	6	19	5	0	39
822			Molecular Biology	18	20	19	5	2	64
823			Cell Biology	14	25	13	2	3	57
824			Developmental Biology	3	4	8	6	5	26
			Basic Biology total	44	55	59	18	10	186
831			Neuroanatomy and Neuropathology	14	8	6	3	0	31
832			Neurochemistry and Neuropharmacology	5	18	9	6	2	40
833			Neuro Science in General	13	23	18	4	0	58
834			Neuro and Muscular Physiology	18	10	9	2	2	41
			Neuro Science (inclu. Brain Science) total	50	59	42	15	4	170
841			Laboratory Animal Science	7	2	2	0	5	16
851			Medical Organism Engineering and Material Science of Organism	8	20	16	1	3	48
			INTERDISCIPLINARY AREA Total	650	381	489	97	65	1,682
999			WIDE AREA Total	110	45	37	3	6	201
			Item n.a. Total	2,033	1,162	912	181	212	4,500
			Grand Total	7,994	4,105	3,639	861	819	17,418

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

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
211	A R T S · H U M A N I T I E S		Philosophy	598	20	37	11	37	703
212			Chinese Philosophy	119	3	12	3	7	144
213			Indian Philosophy (inclu. Buddhist Studies)	388	33	27	10	21	479
214			Religion	470	26	36	13	22	567
215			Ethics	149	10	14	1	15	189
216			History of Philosophy	315	14	15	8	17	369
217			Aesthetics (inclu. Arts)	1,568	126	98	35	107	1,934
218			Art History	347	9	25	9	27	417
			Philosophy total	3,954	241	264	90	253	4,802
221			Experimental Psychology	395	54	150	25	26	650
222			Educational and Social	1,803	197	448	106	109	2,663
223			Sociology	2,127	212	429	134	177	3,079
224			Education	1,760	151	278	73	124	2,386
225			Cultural Anthropology (inclu. Ethnology and Folklore)	523	37	94	62	29	745
			Psychology·Sociology·Education Cultural Anthropology total	6,608	651	1,399	400	465	9,523
231			Japanese History	610	33	43	9	54	749
232			Oriental History	313	25	32	25	24	419
233			European History	556	24	38	24	25	667
234			Archaeology (inclu. Prehistory)	167	12	35	32	6	252
			History total	1,646	94	148	90	109	2,087
241			Japanese Language	374	8	23	4	33	442
242			Japanese Literature	1,328	36	80	8	75	1,527
243			Chinese Language and Literature	390	19	36	21	26	492
244			English Language and Literature	3,340	148	200	51	216	3,955
245			French Language and Literature	452	17	16	8	32	525
246			German Language and Literature	528	16	32	11	37	624
247			Other Foreign Languages and Literatures	344	17	28	8	29	426
248			Linguistics and Phonetics	1,108	85	117	53	82	1,445
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	380	13	25	9	31	458
			Literature total	8,244	359	557	173	561	9,894
			ARTS·HUMANITIES Total	20,452	1,345	2,368	753	1,388	26,306
261	L A W		Basic Science of Law	281	18	25	6	16	346
262			Public Law	471	17	39	3	26	556
263			International Law	252	9	35	5	19	320
264			Civil Law	732	14	50	15	49	860
265			Social Law	156	5	29	6	10	206
266			Criminal Law	208	6	19	5	9	247
267			Politics	978	57	93	55	79	1,262
			LAW Total	3,078	126	290	95	208	3,797
271	E C O N O M I C S		General Theory of Economics	932	47	104	61	56	1,200
272			Economical Statistics	124	17	68	20	10	239
273			Economic Policy (inclu. Economic Condition)	1,176	77	154	84	96	1,587
274			Economic History	419	14	52	17	25	527
275			Public Finance, Money and Banking	557	26	48	21	43	695
276			Commercial Science	584	40	63	27	35	749
277			Business Administration	1,414	93	214	54	104	1,879
278			Accounting	744	24	67	17	47	899
			ECONOMICS Total	5,950	338	770	301	416	7,775
301	S C I E N C E		Algebra	196	22	31	12	9	270
302			Geometry	127	13	16	4	9	169
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	289	23	82	16	26	436
305			Basic Analysis	146	11	27	20	5	209
306			Larger-area Analysis	46	2	20	10	2	80
			Mathematics total	804	71	176	62	51	1,164
311			Astronomy	28	7	25	9	2	71
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	120	42	164	88	26	440

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

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	84	55	84	8	7	238
323			Solid-State Physics II (Magnetism, Metal Physics,	51	48	74	15	11	199
324			Physical Properties in General (inclu. Basic Theories)	111	29	38	14	7	199
325			Physics in General	88	31	65	8	9	201
			Physics total	454	205	425	133	60	1,277
331			Physics of Solid Earth	30	9	21	7	2	69
332			Meteorology, Oceanography and Hydrology	52	12	32	6	6	108
333			Aeronomy	10	2	19	11	0	42
334			Geology	31	4	18	14	6	73
335			Stratigraphy and Paleontology	19	1	7	4	1	32
336			Mineralogy, Petrology and Study of Mineral Deposit	27	2	17	5	2	53
337			Geochemistry	19	14	26	5	0	64
			Earth Science total	188	44	140	52	17	441
341			Physical Chemistry	115	70	92	22	16	315
342			Organic Chemistry	111	84	68	8	12	283
343			Inorganic Chemistry	59	36	73	15	3	186
344			Function, Properties and Materials in Chemistry	82	33	44	3	9	171
345			Substance Transformation	7	2	7	2	0	18
346			Separation, Refining and Identification	55	52	39	5	4	155
			Chemistry total	429	277	323	55	44	1,128
351			Genetics	41	14	24	6	2	87
352			Ecology	112	28	60	29	5	234
353			Plant Physiology	36	22	31	11	4	104
354			Morphology, Structure of Organism	45	17	24	8	9	103
355			Animal Physiology and	27	26	25	4	5	87
356			Morphology and Taxonomy	55	7	20	28	9	119
			Biology total	316	114	184	86	34	734
361			Physical Anthropology (inclu. Physiological Anthropology)	38	9	31	16	1	95
	SCIENCE Total			2,257	727	1,304	413	209	4,910
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	47	38	39	3	7	134
402			Surface Physics	40	18	28	5	2	93
403			Applied Optics and Quantum Optics	85	41	44	13	10	193
404			General Applied Physics	37	24	33	2	12	108
405			Fundamentals of Engineering	43	11	17	5	5	81
			Applied Physics·Fundamentals of Engineering total	252	132	161	28	36	609
411			Materials for Machines and Strength of Materials	187	68	101	13	11	380
412			Workshop Processes and Production Engineering	149	70	68	10	15	312
413			Design Engineering, Machine Elements and Tribology	109	51	56	4	7	227
414			Fluid Mechanics	185	68	88	6	19	366
415			Heat Engineering	131	87	65	12	17	312
416			Mechanics and Control Engineering	133	64	56	3	15	271
417			Intelligent Mechanics and Machine System	133	57	66	11	17	284
			Machine Engineering total	1,027	465	500	59	101	2,152
421			Electric Power Engineering and Electric Machinery	175	108	95	9	17	404
422			Electronic and Electric Materials Engineering	126	114	98	11	14	363
423			Electron Devices and Apparatus Engineering	187	73	88	18	23	389
424			Information and Communication Engineering	430	166	168	20	45	829

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

Code	Subject	Subdivision	Item	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
425	ENGINEERING		System Engineering	112	29	40	12	13	206
427			Electronic Measurements	137	82	90	10	6	325
428			Control Engineering	116	30	32	6	12	196
			Electric and Electronic Engineering	1,283	602	611	86	130	2,712
431			Construction Materials and Dynamics in General Civil Engineering	92	40	50	2	12	196
432			Structural Engineering and Seismology	125	42	69	0	5	241
433			Ground Engineering	60	32	59	7	9	167
434			Hydraulics and River Engineering	80	24	69	5	3	181
435			Traffic Engineering and Regional Planning	93	30	44	10	13	190
436			Civil Environmental System	53	34	61	9	4	161
			Civil Engineering total	503	202	352	33	46	1,136
441		N	Building Structure and Materials	216	101	136	13	22	488
442			Building Science and Building Equipment	118	32	91	2	6	249
443			City Planning and Building Planning	464	98	175	35	40	812
444			Architectural History and Design	236	14	54	16	18	338
			Architecture total	1,034	245	456	66	86	1,887
451		N	Physical Metallurgy	19	17	12	5	4	57
452			Inorganic Materials and	57	53	44	6	9	169
453			Composed Materials and Properties	20	22	13	1	0	56
454			Structural and Functional Materials	42	34	25	5	3	109
455		R	Metallurgy and Material	85	27	54	8	5	179
456			Metal Productive Engineering	27	8	17	3	0	55
			Material Engineering total	250	161	165	28	21	625
461		G	Chemical Engineering in General	35	25	11	6	6	83
462			Reaction and Separation Engineering	19	11	10	4	2	46
463			Catalyst and Chemical Process	27	11	14	1	1	54
464			Bioengineering	52	34	29	5	1	121
465			Industrial Analytical Chemistry	20	16	14	2	1	53
			Process Engineering total	153	97	78	18	11	357
471			Industrial Physical Chemistry	46	17	21	3	4	91
472			Industrial Inorganic Chemistry	26	7	12	1	4	50
473			Industrial Organic Chemistry	37	16	14	4	4	75
474			Synthetic Chemistry	46	18	22	2	7	95
475			Polymer Synthesis	59	13	11	0	5	88
476			Polymer Structure and Property (inclu. Fiber)	63	24	48	2	9	146
			Industrial Chemistry total	277	95	128	12	33	545
481			Aeronautics	36	10	29	5	5	85
482			Ship Engineering	19	2	3	1	4	29
483			Marine Engineering	12	5	9	0	1	27
484			Resource Development Engineering	9	6	1	0	0	16
			Synthetic Engineering total	76	23	42	6	10	157
			ENGINEERING Total	4,855	2,022	2,493	336	474	10,180
501	AGRICULTURE		Plant Breeding	21	9	11	1	0	42
502			Crop Science	20	11	1	2	2	36
503			Horticulture and Landscape Architecture	106	30	24	5	11	176
504			Plant Protection	25	19	11	4	3	62
505			Sericultural Science and Economic Entomology	14	18	11	2	0	45
			Agriculture total	186	87	58	14	16	361
511			Plant Fertilizer and Manure and Soil Science	21	10	10	3	4	48
512			Applied Microbiochemistry and Applied Biochemistry	115	113	88	21	16	353
513			Biological Productive Chemistry and Bioorganic Chemistry	18	13	28	3	4	66
514			Food Science and Nutritional Chemistry	285	178	204	22	28	717

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

Code	Subj ect	Subd ivisi on	I t e m	Individual	Collaboration in organization	Collaboration in Japan	International collaboration	Unknown	Total
	A		Agricultural Chemistry total	439	314	330	49	52	1,184
521			Forestry	35	10	16	4	1	66
522	G		Wood Science	6	7	2	1	5	21
			Forestry total	41	17	18	5	6	87
531	R		Fisheries in General	57	36	36	8	9	146
532			Fisheries Chemistry	21	11	20	3	2	57
			Fisheries total	78	47	56	11	11	203
541	I		Agricultural Economics	162	4	37	19	16	238
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	23	7	11	5	4	50
552	U		Agricultural Machinery	10	9	5	6	2	32
553	L		Biological Environment	14	7	4	1	1	27
			Agricultural Engineering total	47	23	20	12	7	109
561	T		Animal Science and Grassland Science	27	31	16	6	6	86
562	U		Applied Animal Science	16	17	17	4	7	61
563	R		Basic Veterinary Medicine and Basic Animal Science	42	72	48	15	11	188
564			Applied Veterinary Medicine	63	84	51	9	13	220
	E		Animal Science·Veterinary Medicine total	148	204	132	34	37	555
571			Biological Resource Science	11	2	13	7	0	33
572			Applied Molecular Cell Biology	10	0	12	1	2	25
			Interdisciplinary Agricultural Science total	21	2	25	8	2	58
			AGRICULTURE Total	1,122	698	676	152	147	2,795
601			Anatomy in General (inclu. Histology, Embryology)	109	99	64	18	13	303
602			Physiology in General	103	132	59	26	10	330
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	86	80	99	14	13	292
604			Pharmacology in General	63	139	59	26	9	296
605			Medical Chemistry in General	62	70	59	15	7	213
606			Pathological Medical Chemistry	32	25	26	13	3	99
	M		Physiology total	455	545	366	112	55	1,533
611			Hominal Pathology	136	151	63	20	25	395
612	E		Experimental Pathology	31	63	24	8	6	132
613	D		Parasitology (inclu. Medical Zoology)	28	22	36	31	3	120
614			Bacteriology (inclu. Eumycetes)	49	92	78	16	5	240
615	I		Virology	25	42	32	12	10	121
616			Immunology	59	98	77	35	14	283
	C		Pathology total	328	468	310	122	63	1,291
621			Hygiene	59	106	82	15	8	270
622	I		Public Health and Health Science	243	221	280	36	40	820
623			Legal Medicine	38	72	33	7	8	158
	N		Social Medicine total	340	399	395	58	56	1,248
631			Internal Medicine in General	119	196	79	11	19	424
632	E		Gastroenterology	161	231	44	15	19	470
633			Internal Medicine Respiratory System	61	119	25	8	9	222
634			Neurological Medicine	83	137	50	9	11	290
635			Cardioangiopathy	146	276	68	15	28	533
636			Pediatrics	165	166	110	29	25	495
637			Dermatology	76	89	22	12	19	218
638			Radiology	126	198	72	14	23	433
639			Neuropsychiatry	174	177	94	25	25	495
641			Hematology	93	106	51	15	17	282
642			Internal Medicine of Kidney	83	103	25	10	10	231
643			Embryology and Newborn	11	13	8	5	0	37
644			Endocrinology	49	78	33	5	4	169
645			Metabolic Science	49	82	23	9	10	173
			Internal Medicine total	1,396	1,971	704	182	219	4,472
651			Surgery in General	139	193	49	6	24	411
652			Gastroenterological Surgery	120	168	39	11	19	357
653			Thoracic Surgery	99	160	31	7	23	320

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
654	M		Neurosurgery	116	149	30	10	27	332
655			Orthopedic Surgery	177	211	65	22	26	501
656			Anesthesiology and Rescue Medicine	127	125	21	3	12	288
657			Urology	77	104	29	13	17	240
658			Obstetrics and Gynecology	89	155	54	9	15	322
659			Oto-rhino-laryngology	121	116	31	10	16	294
660			Ophthalmology	86	117	29	16	15	263
661			Pediatric Surgery	21	30	8	2	2	63
662			Formative Surgery	21	60	11	1	6	99
			Surgery total	1,193	1,588	397	110	202	3,490
671	E		Oral Anatomy and Morphological Basic Dentistry	112	154	53	10	14	343
672			Functional Basic Dentistry	75	152	36	9	13	285
673			Morbid Dentistry (inclu. Dental Radiology)	73	123	18	10	18	242
674			Conservative Dentistry	125	260	28	17	34	464
675			Prosthodontics and Dental Technology	182	330	54	16	35	617
676			Oral Surgery	195	300	56	22	32	605
677			Orthodontics, Pedodontics and Social Dentistry	192	259	64	37	40	592
678			Periodontological Dentistry	34	64	7	4	14	123
			Dentistry total	988	1,642	316	125	200	3,271
681	E		Chemical Pharmaceutics	150	264	152	46	21	633
682			Physical Pharmaceutics	62	147	52	15	10	286
683			Biopharmaceutics	219	252	170	37	20	698
684			Molecular Pharmaceutics	35	45	59	10	7	156
685			Environmental Pharmaceutics	28	28	28	6	1	91
			Pharmaceutics total	494	736	461	114	59	1,864
691			Medical Sociology	88	45	60	14	6	213
692			Human Genetics	13	13	12	4	1	43
693			Applied Pharmacology and Medical Pharmacology	71	93	51	10	7	232
694			Pathological Examination	43	92	31	2	4	172
696	E		Science of Basic and Local Nursing	182	115	114	2	17	430
697			Science of Clinical Nursing	209	157	103	6	32	507
			Medicine in General total	606	515	371	38	67	1,597
			MEDICINE Total	5,800	7,864	3,320	861	921	18,766
702	I		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	105	8	23	3	4	143
703			Physical Education	917	315	457	39	92	1,820
704			Human Geography	212	8	30	21	14	285
705			Physical Geography	76	9	20	11	0	116
			Geography total	288	17	50	32	14	401
706			Home Science (inclu. Cloth/Living Environments)	507	197	292	21	34	1,051
707			Food Culture	300	202	247	14	31	794
			Domestic Science total	807	399	539	35	65	1,845
708			Science of Cultural Property	13	4	3	0	0	20
711			Science Education	103	26	35	4	8	176
712	I		Educational Engineering	257	97	99	16	14	483
713			Curriculum Studies	782	87	112	8	48	1,037
714			Japanese Language Education	181	30	16	11	14	252
			Science Education・Curriculum Education total	1,323	240	262	39	84	1,948
721			Statistics	102	21	33	3	4	163
731			Computer Science	412	120	166	20	34	752
732			Intelligent Informatics	282	89	117	17	28	533
733			Study of Information System (Inclu. Library and Information Science)	480	107	129	23	60	799
			Information Science total	1,174	316	412	60	122	2,084
741	I		Social System Engineering	263	51	105	15	28	462
751			Natural Disaster Science	13	8	7	4	0	32
761			Plasma Science and Technology	20	26	20	4	9	79
772			Nuclear Fusion	7	8	12	2	0	29

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
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	38	6	16	5	1	66
774			Nuclear Power Science	21	9	23	11	1	65
			Energy total	66	23	51	18	2	160
801			Environmental Dynamic Analysis	34	26	45	9	5	119
802			Environmental Influence Assessment (inclu. Radiobiology)	54	42	34	14	3	147
803			Environmental Preservation	151	40	81	23	22	317
			Environmental Science total	239	108	160	46	30	583
811			Biological Organic Chemistry	26	33	39	10	9	117
812			Structured Biochemistry	24	41	51	11	7	134
813			Functional Biochemistry	50	57	58	19	4	188
			Biological Chemistry total	100	131	148	40	20	439
821			Biophysics	45	20	42	12	5	124
822			Molecular Biology	94	90	69	32	18	303
823			Cell Biology	58	77	68	13	14	230
824			Developmental Biology	28	21	26	3	6	84
			Basic Biology total	225	208	205	60	43	741
831			Neuroanatomy and Neuropathology	25	44	15	13	4	101
832			Neurochemistry and Neuropharmacology	28	55	36	9	5	133
833			Neuro Science in General	65	39	47	10	12	173
834			Neuro and Muscular Physiology	55	62	45	12	5	179
			Neuro Science (inclu. Brain Science) total	173	200	143	44	26	586
841			Laboratory Animal Science	13	39	30	7	0	89
851			Medical Organism Engineering and Material Science of Organism	106	89	152	17	16	380
	INTERDISCIPLINARY AREA Total			5,947	2,203	2,800	466	559	11,975
999	WIDE AREA Total			1,252	219	280	81	115	1,947
	Item n.a. Total			16,955	5,845	4,757	998	1,479	30,034
	Grand Total			67,668	21,387	19,058	4,456	5,916	118,485

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	33	4	1	0	0	0	38	
212			Chinese Philosophy	14	0	0	0	0	0	14	
213			Indian Philosophy (inclu. Buddhist Studies)	12	1	0	0	0	1	14	
214			Religion	22	0	0	1	0	0	23	
215			Ethics	13	3	0	0	0	0	16	
216			History of Philosophy	19	4	1	0	0	0	24	
217			Aesthetics (inclu. Arts)	127	28	0	0	0	0	155	
218			Art History	29	3	0	0	2	1	35	
		Philosophy total	269	43	2	1	2	2	319		
221			Experimental Psychology	20	1	0	1	0	0	22	
222			Educational and Social	61	7	0	0	0	0	68	
223			Sociology	129	5	0	1	1	0	136	
224			Education	109	12	2	2	1	0	126	
225			Cultural Anthropology (inclu. Ethnology and Folklore)	84	2	0	4	0	0	90	
		Psychology•Sociology•Education Cultural Anthropology total			403	27	2	8	2	0	442
231			Japanese History	16	1	1	1	0	0	19	
232			Oriental History	47	2	0	1	0	0	50	
233			European History	76	2	1	1	0	1	81	
234			Archaeology (inclu. Prehistory)	23	5	0	2	0	1	31	
		History total			162	10	2	5	0	2	181
241			Japanese Language	10	0	0	0	0	0	0	10
242			Japanese Literature	11	5	0	1	0	0	17	
243			Chinese Language and Literature	26	2	0	0	0	0	28	
244			English Language and Literature	156	26	4	0	0	0	186	
245			French Language and Literature	45	2	0	0	0	0	47	
246			German Language and Literature	43	0	1	0	0	0	44	
247			Other Foreign Languages and Literatures	59	2	0	0	0	0	61	
248			Linguistics and Phonetics	90	10	3	1	0	0	104	
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	24	3	0	1	0	0	28	
			Literature total			464	50	8	3	0	0
	ARTS•HUMANITIES Total			1,298	130	14	17	4	4	1,467	
261	LAW	Basic Science of Law	15	3	0	0	0	0	0	18	
262		Public Law	20	1	0	0	0	0	21		
263		International Law	14	1	0	0	0	0	15		
264		Civil Law	23	1	0	0	0	0	24		
265		Social Law	9	0	0	0	0	0	9		
266		Criminal Law	8	0	0	0	0	0	8		
267		Politics	77	0	0	1	0	0	78		
	LAW Total			166	6	0	1	0	0	173	
271	ECONOMICS	General Theory of Economics	53	1	0	0	0	0	0	54	
272		Economical Statistics	11	0	0	0	0	0	11		
273		Economic Policy (inclu. Economic Condition)	85	3	1	0	0	0	89		
274		Economic History	31	1	0	0	0	0	32		
275		Public Finance, Money and Banking	20	0	0	0	0	0	20		
276		Commercial Science	19	0	0	0	0	0	19		
277		Business Administration	50	4	0	0	0	0	54		
278		Accounting	26	0	0	0	0	0	26		
	ECONOMICS Total			295	9	1	0	0	0	305	
301	SCIENCE		Algebra	32	0	1	0	0	0	33	
302			Geometry	27	0	1	0	0	0	28	
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	25	1	1	0	0	0	27	
305			Basic Analysis	19	0	0	0	0	0	19	
306		Larger-area Analysis	16	0	0	0	0	0	16		
		Mathematics total			119	1	3	0	0	0	123
311	COSMOS	Astronomy		17	0	2	3	0	0	22	
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	66	0	2	10	1	0	79	

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)	18	0	0	0	0	0	18
323			Solid-State Physics II (Magnetism, Metal Physics,	29	0	1	0	0	0	30
324			Physical Properties in General (inclu. Basic Theories)	20	0	0	2	0	0	22
325			Physics in General	23	0	1	2	0	0	26
			Physics total	156	0	4	14	1	0	175
331			Physics of Solid Earth	22	0	0	0	0	0	22
332			Meteorology, Oceanography and Hydrology	20	0	0	1	0	0	21
333			Aeronomy	5	0	1	0	0	0	6
334			Geology	25	0	0	0	0	0	25
335			Stratigraphy and Paleontology	13	0	0	0	1	0	14
336			Mineralogy, Petrology and Study of Mineral Deposit	25	0	0	1	0	0	26
337			Geochemistry	16	0	1	0	0	0	17
			Earth Science total	126	0	2	2	1	0	131
341			Physical Chemistry	37	1	0	0	0	0	38
342			Organic Chemistry	25	0	1	0	0	0	26
343			Inorganic Chemistry	7	1	0	0	0	0	8
344			Function, Properties and Materials in Chemistry	17	0	0	0	0	0	17
345			Substance Transformation	2	0	0	0	0	0	2
346			Separation, Refining and Identification	9	0	0	1	0	0	10
			Chemistry total	97	2	1	1	0	0	101
351			Genetics	12	0	0	0	0	0	12
352			Ecology	49	1	0	2	1	1	54
353			Plant Physiology	15	1	0	0	0	0	16
354			Morphology, Structure of Organism	7	0	0	0	1	1	9
355			Animal Physiology and	6	0	0	0	0	0	6
356			Morphology and Taxonomy	30	0	0	0	8	0	38
			Biology total	119	2	0	2	10	2	135
361			Physical Anthropology (inclu. Physiological Anthropology)	14	0	0	0	0	0	14
			SCIENCE Total	648	5	12	22	12	2	701
401			Applied Physics of Property and Crystallography	7	0	1	0	0	0	8
402			Surface Physics	6	0	0	0	0	0	6
403			Applied Optics and Quantum Optics	10	0	0	0	0	0	10
404			General Applied Physics	2	1	1	0	0	0	4
405			Fundamentals of Engineering	4	0	0	1	0	0	5
			Applied Physics·Fundamentals of Engineering total	29	1	2	1	0	0	33
411			Materials for Machines and Strength of Materials	14	0	2	0	0	0	16
412			Workshop Processes and Production Engineering	17	0	1	0	0	0	18
413			Design Engineering, Machine Elements and Tribology	9	0	0	0	0	0	9
414			Fluid Mechanics	19	0	3	0	0	0	22
415			Heat Engineering	17	1	1	0	0	0	19
416			Mechanics and Control Engineering	12	0	5	1	0	0	18
417			Intelligent Mechanics and Machine System	19	0	0	0	0	0	19
			Machine Engineering total	107	1	12	1	0	0	121
421			Electric Power Engineering and Electric Machinery	17	0	2	1	0	0	20
422			Electronic and Electric Materials Engineering	20	2	2	0	0	0	24
423			Electron Devices and Apparatus Engineering	15	0	1	0	0	0	16
424			Information and Communication Engineering	40	0	4	0	0	0	44

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
425			System Engineering	10	0	0	0	0	0	10
427			Electronic Measurements	13	0	4	0	0	0	17
428			Control Engineering	12	0	1	0	0	0	13
			Electric and Electronic Engineering	127	2	14	1	0	0	144
431			Construction Materials and Dynamics in General Civil Engineering	10	0	1	0	0	0	11
432			Structural Engineering and Seismology	14	1	0	0	0	0	15
433			Ground Engineering	9	0	0	0	0	0	9
434			Hydraulics and River Engineering	24	0	1	0	0	0	25
435			Traffic Engineering and Regional Planning	12	0	1	0	0	0	13
436			Civil Environmental System	14	0	1	0	0	0	15
			Civil Engineering total	83	1	4	0	0	0	88
441			Building Structure and Materials	14	0	1	0	1	0	16
442			Building Science and Building Equipment	13	0	0	0	0	0	13
443			City Planning and Building Planning	55	2	0	0	0	0	57
444			Architectural History and Design	31	0	3	0	1	0	35
			Architecture total	113	2	4	0	2	0	121
451			Physical Metallurgy	10	0	1	0	0	0	11
452			Inorganic Materials and	9	0	0	0	0	0	9
453			Composed Materials and Properties	5	0	0	0	0	0	5
454			Structural and Functional Materials	13	0	0	0	0	0	13
455			Metallurgy and Material	11	0	1	0	0	0	12
456			Metal Productive Engineering	3	0	0	0	0	0	3
			Material Engineering total	51	0	2	0	0	0	53
461			Chemical Engineering in General	11	0	0	0	0	0	11
462			Reaction and Separation Engineering	8	0	0	0	0	0	8
463			Catalyst and Chemical Process	6	0	0	0	0	0	6
464			Bioengineering	13	0	1	0	0	1	15
465			Industrial Analytical Chemistry	5	0	0	0	0	0	5
			Process Engineering total	43	0	1	0	0	1	45
471			Industrial Physical Chemistry	12	0	1	0	0	0	13
472			Industrial Inorganic Chemistry	2	0	0	0	0	0	2
473			Industrial Organic Chemistry	4	0	0	0	0	0	4
474			Synthetic Chemistry	15	0	0	0	0	0	15
475			Polymer Synthesis	3	0	0	0	0	0	3
476			Polymer Structure and Property (inclu. Fiber)	14	0	0	0	0	0	14
			Industrial Chemistry total	50	0	1	0	0	0	51
481			Aeronautics	8	0	0	2	0	0	10
482			Ship Engineering	5	0	0	0	0	0	5
483			Marine Engineering	4	0	0	0	0	0	4
484			Resource Development Engineering	7	0	0	0	0	0	7
			Synthetic Engineering total	24	0	0	2	0	0	26
			ENGINEERING Total	627	7	40	5	2	1	682
501			Plant Breeding	11	0	0	0	0	0	11
502			Crop Science	10	0	1	0	0	0	11
503			Horticulture and Landscape Architecture	26	1	0	0	0	0	27
504			Plant Protection	16	0	0	0	0	0	16
505			Sericultural Science and Economic Entomology	3	0	0	0	0	1	4
			Agriculture total	66	1	1	0	0	1	69
511			Plant Fertilizer and Manure and Soil Science	17	0	0	0	0	0	17
512			Applied Microbiochemistry and Applied Biochemistry	20	1	1	0	0	0	22
513			Biological Productive Chemistry and Bioorganic Chemistry	6	0	0	0	0	0	6
514			Food Science and Nutritional Chemistry	25	1	0	0	0	0	26

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
			Agricultural Chemistry total	68	2	1	0	0	0	71
521			Forestry	41	0	0	1	0	0	42
522			Wood Science	15	0	0	0	0	0	15
			Forestry total	56	0	0	1	0	0	57
531			Fisheries in General	30	0	0	0	0	0	30
532			Fisheries Chemistry	11	0	0	0	0	0	11
			Fisheries total	41	0	0	0	0	0	41
541			Agricultural Economics	32	0	0	1	0	0	33
551			Irrigation, Drainage and Reclamation Engineering and Rural Planning	18	0	0	0	0	0	18
552			Agricultural Machinery	9	1	0	0	0	0	10
553			Biological Environment	7	0	0	0	0	0	7
			Agricultural Engineering total	34	1	0	0	0	0	35
561			Animal Science and Grassland Science	11	0	0	0	0	0	11
562			Applied Animal Science	9	0	0	0	0	0	9
563			Basic Veterinary Medicine and Basic Animal Science	24	0	0	0	0	0	24
564			Applied Veterinary Medicine	18	0	0	0	0	0	18
			Animal Science·Veterinary Medicine total	62	0	0	0	0	0	62
571			Biological Resource Science	12	0	0	0	0	0	12
572			Applied Molecular Cell Biology	3	0	0	0	0	0	3
			Interdisciplinary Agricultural Science total	15	0	0	0	0	0	15
			AGRICULTURE Total	374	4	2	2	0	1	383
601			Anatomy in General (inclu. Histology, Embryology)	22	1	0	0	0	0	23
602			Physiology in General	18	2	0	0	0	0	20
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	10	2	0	0	0	0	12
604			Pharmacology in General	25	1	0	0	0	0	26
605			Medical Chemistry in General	8	0	0	0	0	0	8
606			Pathological Medical Chemistry	4	0	0	0	0	0	4
			Physiology total	87	6	0	0	0	0	93
611			Hominal Pathology	11	0	0	0	0	0	11
612			Experimental Pathology	5	0	0	0	0	0	5
613			Parasitology (inclu. Medical Zoology)	20	0	0	0	0	0	20
614			Bacteriology (inclu. Eumycetes)	6	1	0	0	0	0	7
615			Virology	8	0	0	0	0	0	8
616			Immunology	11	0	0	0	0	0	11
			Pathology total	61	1	0	0	0	0	62
621			Hygiene	10	1	0	0	0	0	11
622			Public Health and Health Science	31	2	0	0	0	0	33
623			Legal Medicine	3	0	0	0	0	0	3
			Social Medicine total	44	3	0	0	0	0	47
631			Internal Medicine in General	15	2	0	0	0	0	17
632			Gastroenterology	21	0	0	0	0	0	21
633			Internal Medicine Respiratory System	8	0	0	0	0	0	8
634			Neurological Medicine	18	0	0	0	0	0	18
635			Cardioangiopathy	12	0	0	0	0	0	12
636			Pediatrics	14	0	0	0	0	0	14
637			Dermatology	5	0	0	0	0	0	5
638			Radiology	12	0	0	0	0	0	12
639			Neuropsychiatry	17	1	0	0	0	0	18
641			Hematology	12	0	0	0	0	0	12
642			Internal Medicine of Kidney	4	0	0	0	0	0	4
643			Embryology and Newborn	1	0	0	0	0	0	1
644			Endocrinology	2	0	0	0	0	0	2
645			Metabolic Science	6	0	0	0	0	0	6
			Internal Medicine total	147	3	0	0	0	0	150
651			Surgery in General	12	0	0	0	0	0	12
652			Gastroenterological Surgery	12	0	0	0	0	0	12
653			Thoracic Surgery	7	0	0	0	0	0	7

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
654			Neurosurgery	13	0	0	0	0	0	13
655			Orthopedic Surgery	24	0	0	0	0	0	24
656			Anesthesiology and Rescue Medicine	9	0	0	0	0	0	9
657			Urology	12	0	0	0	0	0	12
658			Obstetrics and Gynecology	10	0	0	0	0	0	10
659			Oto-rhino-laryngology	7	0	0	0	0	0	7
660			Ophthalmology	11	0	0	0	0	0	11
661			Pediatric Surgery	5	0	0	0	0	0	5
662			Formative Surgery	3	0	0	0	0	0	3
			Surgery total	125	0	0	0	0	0	125
671			Oral Anatomy and Morphological Basic Dentistry	15	0	0	0	0	0	15
672			Functional Basic Dentistry	15	0	0	0	0	0	15
673			Morbid Dentistry (inclu. Dental Radiology)	4	0	0	0	0	0	4
674			Conservative Dentistry	7	0	0	0	0	0	7
675			Prosthodontics and Dental Technology	20	0	0	0	0	0	20
676			Oral Surgery	12	0	0	0	0	0	12
677			Orthodontics, Pedodontics and Social Dentistry	18	0	0	0	0	0	18
678			Periodontological Dentistry	6	0	0	0	0	0	6
			Dentistry total	97	0	0	0	0	0	97
681			Chemical Pharmaceutics	23	0	0	0	0	0	23
682			Physical Pharmaceutics	8	1	0	0	0	0	9
683			Biopharmaceutics	20	0	0	0	0	0	20
684			Molecular Pharmaceutics	9	0	0	0	0	0	9
685			Environmental Pharmaceutics	9	0	0	0	0	0	9
			Pharmaceutics total	69	1	0	0	0	0	70
691			Medical Sociology	6	1	0	0	0	0	7
692			Human Genetics	6	0	0	0	0	0	6
693			Applied Pharmacology and Medical Pharmacology	9	0	0	0	0	0	9
694			Pathological Examination	9	0	0	0	0	0	9
696			Science of Basic and Local Nursing	5	2	0	0	0	0	7
697			Science of Clinical Nursing	13	1	0	0	0	0	14
			Medicine in General total	48	4	0	0	0	0	52
			MEDICINE Total	678	18	0	0	0	0	696
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)	9	0	0	1	0	0	10
703			Physical Education	67	6	0	0	0	0	73
704			Human Geography	37	0	0	0	0	0	37
705			Physical Geography	24	0	0	0	0	0	24
			Geography total	61	0	0	0	0	0	61
706			Home Science(inclu. Cloth/Living Environments)	19	7	0	0	0	0	26
707			Food Culture	7	3	0	0	0	0	10
			Domestic Science total	26	10	0	0	0	0	36
708			Science of Cultural Property	3	1	0	0	1	0	5
711			Science Education	12	1	0	0	0	0	13
712			Educational Engineering	12	0	1	1	0	0	14
713			Curriculum Studies	43	9	4	0	0	0	56
714			Japanese Language Education	13	1	0	0	0	0	14
			Science Education·Curriculum Education total	80	11	5	1	0	0	97
721			Statistics	8	0	0	1	0	0	9
731			Computer Science	39	1	2	0	0	0	42
732			Intelligent Informatics	19	0	1	2	0	0	22
733			Study of Information System (Inclu. Library and Information Science)	21	1	0	5	0	0	27
			Information Science total	79	2	3	7	0	0	91
741			Social System Engineering	33	0	0	0	0	0	33
751			Natural Disaster Science	4	1	0	0	0	0	5
761			Plasma Science and Technology	4	1	0	5	0	0	10
772			Nuclear Fusion	6	0	0	0	0	0	6

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

Code	Subj ect	Subd ivisio n	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
773			Energy Science General	8	0	0	0	0	0	8
774			Nuclear Power Science	10	0	0	2	0	0	12
			Energy total	24	0	0	2	0	0	26
801			Environmental Dynamic Analysis	15	0	0	0	0	0	15
802			Environmental Influence Assessment (inclu. Radiobiology)	8	1	0	0	0	0	9
803			Environmental Preservation	34	1	0	1	0	0	36
			Environmental Science total	57	2	0	1	0	0	60
811			Biological Organic Chemistry	12	0	0	0	0	0	12
812			Structured Biochemistry	7	0	0	0	0	0	7
813			Functional Biochemistry	8	0	0	0	0	0	8
			Biological Chemistry total	27	0	0	0	0	0	27
821			Biophysics	12	0	0	1	0	0	13
822			Molecular Biology	26	0	0	0	0	0	26
823			Cell Biology	14	0	0	0	0	1	15
824			Developmental Biology	7	0	1	0	0	0	8
			Basic Biology total	59	0	1	1	0	1	62
831			Neuroanatomy and Neuropathology	6	0	0	0	0	0	6
832			Neurochemistry and Neuropharmacology	5	0	0	0	0	0	5
833			Neuro Science in General	17	0	0	0	0	0	17
834			Neuro and Muscular Physiology	13	1	0	0	0	0	14
			Neuro Science (inclu. Brain Science) total	41	1	0	0	0	0	42
841			Laboratory Animal Science	6	0	0	0	0	1	7
851			Medical Organism Engineering and Material Science of Organism	25	2	2	0	0	0	29
			INTERDISCIPLINARY AREA Total	613	37	11	19	1	2	683
999			WIDE AREA Total	111	16	0	0	1	0	128
			Item n.a. Total	2,361	72	49	41	6	10	2,539
			Grand Total	7,171	304	129	107	26	20	7,757

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	11	0	1	0	0	12
212			Chinese Philosophy	6	0	0	0	0	6
213			Indian Philosophy (inclu. Buddhist Studies)	5	0	0	0	0	5
214			Religion	5	0	0	1	0	6
215			Ethics	6	0	0	0	0	6
216			History of Philosophy	4	0	1	0	0	5
217			Aesthetics (inclu. Arts)	35	3	0	0	0	38
218			Art History	9	0	0	0	2	11
		Philosophy total	81	3	2	1	2	89	
221			Experimental Psychology	11	0	0	1	0	12
222			Educational and Social	27	0	0	0	0	27
223			Sociology	40	0	0	1	1	42
224			Education	61	0	2	2	1	66
225			Cultural Anthropology (inclu. Ethnology and Folklore)	33	0	0	4	0	37
		Psychology • Sociology • Education Cultural Anthropology total	172	0	2	8	2	184	
231			Japanese History	5	0	1	1	0	7
232			Oriental History	17	0	0	1	0	18
233			European History	20	0	0	1	0	21
234			Archaeology (inclu. Prehistory)	14	0	0	2	0	16
			History total	56	0	1	5	0	62
241			Japanese Language	4	0	0	0	0	4
242			Japanese Literature	2	0	0	1	0	3
243			Chinese Language and Literature	4	2	0	0	0	6
244			English Language and Literature	38	0	4	0	0	42
245			French Language and Literature	12	0	0	0	0	12
246			German Language and Literature	13	0	1	0	0	14
247			Other Foreign Languages and Literatures	24	0	0	0	0	24
248			Linguistics and Phonetics	23	0	3	1	0	27
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	6	0	0	1	0	7
			Literature total	126	2	8	3	0	139
	ARTS • HUMANITIES Total	435	5	13	17	4	474		
261	LAW	Basic Science of Law	3	0	0	0	0	3	
262		Public Law	5	0	0	0	0	5	
263		International Law	5	0	0	0	0	5	
264		Civil Law	10	0	0	0	0	10	
265		Social Law	6	0	0	0	0	6	
266		Criminal Law	3	0	0	0	0	3	
267		Politics	20	0	0	1	0	21	
	LAW Total	52	0	0	1	0	53		
271	ECONOMICS	General Theory of Economics	20	0	0	0	0	20	
272		Economical Statistics	7	0	0	0	0	7	
273		Economic Policy (inclu. Economic Condition)	20	0	1	0	0	21	
274		Economic History	6	0	0	0	0	6	
275		Public Finance, Money and Banking	8	0	0	0	0	8	
276		Commercial Science	3	0	0	0	0	3	
277		Business Administration	9	0	0	0	0	9	
278		Accounting	5	0	0	0	0	5	
	ECONOMICS Total	78	0	1	0	0	79		
301	SCIENCE		Algebra	17	0	1	0	0	18
302			Geometry	19	0	1	0	0	20
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	14	0	1	0	0	15
305			Basic Analysis	11	0	0	0	0	11
306			Larger-area Analysis	9	0	0	0	0	9
		Mathematics total	70	0	3	0	0	73	
311	COSMIC PHYSICS	Astronomy	Astronomy	14	0	2	3	0	19
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	49	0	2	10	1	62

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			Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	12	0	0	0	0	12
323			Solid-State Physics II (Magnetism, Metal Physics,	18	0	1	0	0	19
324			Physical Properties in General (inclu. Basic Theories)	14	0	0	2	0	16
325			Physics in General	15	0	0	2	0	17
			Physics total	108	0	3	14	1	126
331			Physics of Solid Earth	20	0	0	0	0	20
332			Meteorology, Oceanography and Hydrology	16	0	0	1	0	17
333			Aeronomy	2	0	1	0	0	3
334			Geology	21	0	0	0	0	21
335			Stratigraphy and Paleontology	9	0	0	0	1	10
336			Mineralogy, Petrology and Study of Mineral Deposit	23	0	0	1	0	24
337			Geochemistry	15	0	1	0	0	16
			Earth Science total	106	0	2	2	1	111
341			Physical Chemistry	21	0	0	0	0	21
342			Organic Chemistry	19	0	1	0	0	20
343			Inorganic Chemistry	3	0	0	0	0	3
344			Function, Properties and Materials in Chemistry	13	0	0	0	0	13
345			Substance Transformation	2	0	0	0	0	2
346			Separation, Refining and Identification	5	0	0	1	0	6
			Chemistry total	63	0	1	1	0	65
351			Genetics	10	0	0	0	0	10
352			Ecology	37	0	0	2	1	40
353			Plant Physiology	6	0	0	0	0	6
354			Morphology, Structure of Organism	4	0	0	0	1	5
355			Animal Physiology and	6	0	0	0	0	6
356			Morphology and Taxonomy	21	0	0	0	8	29
			Biology total	84	0	0	2	10	96
361			Physical Anthropology (inclu. Physiological Anthropology)	10	0	0	0	0	10
			SCIENCE Total	455	0	11	22	12	500
401			Applied Physics of Property and Crystallography	6	0	1	0	0	7
402			Surface Physics	3	0	0	0	0	3
403			Applied Optics and Quantum Optics	8	0	0	0	0	8
404			General Applied Physics	0	0	1	0	0	1
405			Fundamentals of Engineering	3	0	0	1	0	4
			Applied Physics-Fundamentals of Engineering total	20	0	2	1	0	23
411			Materials for Machines and Strength of Materials	6	0	2	0	0	8
412			Workshop Processes and Production Engineering	8	0	1	0	0	9
413			Design Engineering, Machine Elements and Tribology	6	0	0	0	0	6
414			Fluid Mechanics	10	0	3	0	0	13
415			Heat Engineering	14	0	1	0	0	15
416			Mechanics and Control Engineering	9	0	4	1	0	14
417			Intelligent Mechanics and Machine System	12	0	0	0	0	12
			Machine Engineering total	65	0	11	1	0	77
421			Electric Power Engineering and Electric Machinery	7	0	1	1	0	9
422			Electronic and Electric Materials Engineering	13	0	2	0	0	15
423			Electron Devices and Apparatus Engineering	3	0	1	0	0	4
424			Information and Communication Engineering	22	0	4	0	0	26

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
425			System Engineering	6	0	0	0	0	6
427			Electronic Measurements	6	0	4	0	0	10
428			Control Engineering	9	0	1	0	0	10
			Electric and Electronic Engineering	66	0	13	1	0	80
431			Construction Materials and Dynamics in General Civil Engineering	3	0	1	0	0	4
432			Structural Engineering and Seismology	7	0	0	0	0	7
433			Ground Engineering	8	0	0	0	0	8
434			Hydraulics and River Engineering	18	0	1	0	0	19
435			Traffic Engineering and Regional Planning	8	0	1	0	0	9
436			Civil Environmental System	13	0	1	0	0	14
			Civil Engineering total	57	0	4	0	0	61
441			Building Structure and Materials	9	0	1	0	1	11
442			Building Science and Building Equipment	6	0	0	0	0	6
443			City Planning and Building Planning	24	0	0	0	0	24
444			Architectural History and Design	13	0	3	0	1	17
			Architecture total	52	0	4	0	2	58
451			Physical Metallurgy	8	0	1	0	0	9
452			Inorganic Materials and	7	0	0	0	0	7
453			Composed Materials and Properties	4	0	0	0	0	4
454			Structural and Functional Materials	12	0	0	0	0	12
455			Metallurgy and Material	8	0	1	0	0	9
456			Metal Productive Engineering	2	0	0	0	0	2
			Material Engineering total	41	0	2	0	0	43
461			Chemical Engineering in General	9	0	0	0	0	9
462			Reaction and Separation Engineering	6	0	0	0	0	6
463			Catalyst and Chemical Process	6	0	0	0	0	6
464			Bioengineering	10	0	1	0	0	11
465			Industrial Analytical Chemistry	3	0	0	0	0	3
			Process Engineering total	34	0	1	0	0	35
471			Industrial Physical Chemistry	9	0	1	0	0	10
472			Industrial Inorganic Chemistry	2	0	0	0	0	2
473			Industrial Organic Chemistry	4	0	0	0	0	4
474			Synthetic Chemistry	10	0	0	0	0	10
475			Polymer Synthesis	3	0	0	0	0	3
476			Polymer Structure and Property (inclu. Fiber)	9	0	0	0	0	9
			Industrial Chemistry total	37	0	1	0	0	38
481			Aeronautics	7	0	0	2	0	9
482			Ship Engineering	2	0	0	0	0	2
483			Marine Engineering	2	0	0	0	0	2
484			Resource Development Engineering	7	0	0	0	0	7
			Synthetic Engineering total	18	0	0	2	0	20
			ENGINEERING Total	390	0	38	5	2	435
501	Natural Science	I	Plant Breeding	8	0	0	0	0	8
502			Crop Science	10	0	1	0	0	11
503			Horticulture and Landscape Architecture	12	0	0	0	0	12
504			Plant Protection	14	0	0	0	0	14
505			Sericultural Science and Economic Entomology	1	0	0	0	0	1
			Agriculture total	45	0	1	0	0	46
511		L	Plant Fertilizer and Manure and Soil Science	16	0	0	0	0	16
512			Applied Microbiochemistry and Applied Biochemistry	14	0	1	0	0	15
513			Biological Productive Chemistry and Bioorganic Chemistry	6	0	0	0	0	6
514			Food Science and Nutritional Chemistry	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	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
			Agricultural Chemistry total	52	0	1	0	0	53
521			Forestry	28	0	0	1	0	29
522			Wood Science	15	0	0	0	0	15
			Forestry total	43	0	0	1	0	44
531			Fisheries in General	23	0	0	0	0	23
532			Fisheries Chemistry	7	0	0	0	0	7
			Fisheries total	30	0	0	0	0	30
541			Agricultural Economics	21	0	0	1	0	22
551			Irrigation, Drainage and Reclamation Engineering and Rural Planning	14	0	0	0	0	14
552			Agricultural Machinery	9	0	0	0	0	9
553			Biological Environment	4	0	0	0	0	4
			Agricultural Engineering total	27	0	0	0	0	27
561			Animal Science and Grassland Science	8	0	0	0	0	8
562			Applied Animal Science	6	0	0	0	0	6
563			Basic Veterinary Medicine and Basic Animal Science	16	0	0	0	0	16
564			Applied Veterinary Medicine	10	0	0	0	0	10
			Animal Science-Veterinary Medicine total	40	0	0	0	0	40
571			Biological Resource Science	8	0	0	0	0	8
572			Applied Molecular Cell Biology	3	0	0	0	0	3
			Interdisciplinary Agricultural Science total	11	0	0	0	0	11
			AGRICULTURE Total	269	0	2	2	0	273
601			Anatomy in General (inclu. Histology, Embryology)	17	0	0	0	0	17
602			Physiology in General	14	0	0	0	0	14
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	4	0	0	0	0	4
604			Pharmacology in General	11	0	0	0	0	11
605			Medical Chemistry in General	6	0	0	0	0	6
606			Pathological Medical Chemistry	3	0	0	0	0	3
			Physiology total	55	0	0	0	0	55
611			Hominal Pathology	8	0	0	0	0	8
612			Experimental Pathology	3	0	0	0	0	3
613			Parasitology (inclu. Medical Zoology)	18	0	0	0	0	18
614			Bacteriology (inclu. Eumycetes)	3	0	0	0	0	3
615			Virology	5	0	0	0	0	5
616			Immunology	9	0	0	0	0	9
			Pathology total	46	0	0	0	0	46
621			Hygiene	6	0	0	0	0	6
622			Public Health and Health Science	17	1	0	0	0	18
623			Legal Medicine	1	0	0	0	0	1
			Social Medicine total	24	1	0	0	0	25
631			Internal Medicine in General	5	2	0	0	0	7
632			Gastroenterology	13	0	0	0	0	13
633			Internal Medicine Respiratory System	5	0	0	0	0	5
634			Neurological Medicine	10	0	0	0	0	10
635			Cardioangiopathy	5	0	0	0	0	5
636			Pediatrics	7	0	0	0	0	7
637			Dermatology	3	0	0	0	0	3
638			Radiology	8	0	0	0	0	8
639			Neuropsychiatry	8	0	0	0	0	8
641			Hematology	6	0	0	0	0	6
642			Internal Medicine of Kidney	2	0	0	0	0	2
643			Embryology and Newborn	0	0	0	0	0	0
644			Endocrinology	2	0	0	0	0	2
645			Metabolic Science	6	0	0	0	0	6
			Internal Medicine total	80	2	0	0	0	82
651			Surgery in General	4	0	0	0	0	4
652			Gastroenterological Surgery	5	0	0	0	0	5
653			Thoracic Surgery	4	0	0	0	0	4

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
654			Neurosurgery	6	0	0	0	0	6
655			Orthopedic Surgery	14	0	0	0	0	14
656			Anesthesiology and Rescue Medicine	4	0	0	0	0	4
657			Urology	8	0	0	0	0	8
658			Obstetrics and Gynecology	6	0	0	0	0	6
659			Oto-rhino-laryngology	4	0	0	0	0	4
660			Ophthalmology	6	0	0	0	0	6
661			Pediatric Surgery	4	0	0	0	0	4
662			Formative Surgery	0	0	0	0	0	0
			Surgery total	65	0	0	0	0	65
671			Oral Anatomy and Morphological Basic Dentistry	8	0	0	0	0	8
672			Functional Basic Dentistry	8	0	0	0	0	8
673			Morbid Dentistry (inclu. Dental Radiology)	1	0	0	0	0	1
674			Conservative Dentistry	5	0	0	0	0	5
675			Prosthodontics and Dental Technology	12	0	0	0	0	12
676			Oral Surgery	9	0	0	0	0	9
677			Orthodontics, Pedodontics and Social Dentistry	11	0	0	0	0	11
678			Periodontological Dentistry	3	0	0	0	0	3
			Dentistry total	57	0	0	0	0	57
681			Chemical Pharmaceutics	10	0	0	0	0	10
682			Physical Pharmaceutics	1	0	0	0	0	1
683			Biopharmaceutics	6	0	0	0	0	6
684			Molecular Pharmaceutics	5	0	0	0	0	5
685			Environmental Pharmaceutics	2	0	0	0	0	2
			Pharmaceutics total	24	0	0	0	0	24
691			Medical Sociology	4	0	0	0	0	4
692			Human Genetics	4	0	0	0	0	4
693			Applied Pharmacology and Medical Pharmacology	3	0	0	0	0	3
694			Pathological Examination	5	0	0	0	0	5
696			Science of Basic and Local Nursing	1	1	0	0	0	2
697			Science of Clinical Nursing	6	0	0	0	0	6
			Medicine in General total	23	1	0	0	0	24
			MEDICINE Total	374	4	0	0	0	378
702	INTERDISCIPLINARY AREA		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	4	0	0	1	0	5
703			Physical Education	33	0	0	0	0	33
704			Human Geography	26	0	0	0	0	26
705			Physical Geography	15	0	0	0	0	15
			Geography total	41	0	0	0	0	41
706			Home Science(inclu. Cloth/Living Environments)	7	0	0	0	0	7
707			Food Culture	4	0	0	0	0	4
			Domestic Science total	11	0	0	0	0	11
708			Science of Cultural Property	2	1	0	0	1	4
711			Science Education	8	0	0	0	0	8
712			Educational Engineering	5	0	1	1	0	7
713			Curriculum Studies	25	0	4	0	0	29
714			Japanese Language Education	9	0	0	0	0	9
			Science Education·Curriculum Education total	47	0	5	1	0	53
721			Statistics	6	0	0	1	0	7
731			Computer Science	17	1	1	0	0	19
732			Intelligent Informatics	16	0	1	2	0	19
733			Study of Information System (Inclu. Library and Information Science)	7	0	0	5	0	12
			Information Science total	40	1	2	7	0	50
741			Social System Engineering	11	0	0	0	0	11
751			Natural Disaster Science	3	0	0	0	0	3
761			Plasma Science and Technology	4	1	0	5	0	10
772			Nuclear Fusion	5	0	0	0	0	5

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
773			Energy Science General	6	0	0	0	0	6
774			Nuclear Power Science	6	0	0	2	0	8
			Energy total	17	0	0	2	0	19
801			Environmental Dynamic Analysis	11	0	0	0	0	11
802			Environmental Influence Assessment (inclu. Radiobiology)	8	0	0	0	0	8
803			Environmental Preservation	18	0	0	1	0	19
			Environmental Science total	37	0	0	1	0	38
811			Biological Organic Chemistry	8	0	0	0	0	8
812			Structured Biochemistry	6	0	0	0	0	6
813			Functional Biochemistry	3	0	0	0	0	3
			Biological Chemistry total	17	0	0	0	0	17
821			Biophysics	5	0	0	1	0	6
822			Molecular Biology	18	0	0	0	0	18
823			Cell Biology	7	0	0	0	0	7
824			Developmental Biology	5	0	1	0	0	6
			Basic Biology total	35	0	1	1	0	37
831			Neuroanatomy and Neuropathology	1	0	0	0	0	1
832			Neurochemistry and Neuropharmacology	3	0	0	0	0	3
833			Neuro Science in General	12	0	0	0	0	12
834			Neuro and Muscular Physiology	9	0	0	0	0	9
			Neuro Science (inclu. Brain Science) total	25	0	0	0	0	25
841			Laboratory Animal Science	3	0	0	0	0	3
851			Medical Organism Engineering and Material Science of Organism	15	1	2	0	0	18
			INTERDISCIPLINARY AREA Total	351	4	10	19	1	385
999			WIDE AREA Total	31	3	0	0	1	35
			Item n.a. Total	1,350	3	48	41	6	1,448
			Grand Total	3,785	19	123	107	26	4,060

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
211	ARTS • HUMANITIES	Philosophy	Philosophy	0	0	0	0
212			Chinese Philosophy	1	0	0	1
213			Indian Philosophy (inclu. Buddhist Studies)	1	1	0	2
214			Religion	0	0	0	0
215			Ethics	2	0	0	2
216			History of Philosophy	2	0	0	2
217			Aesthetics (inclu. Arts)	19	2	0	21
218			Art History	0	1	0	1
			Philosophy total	25	4	0	29
221		Psychology • Sociology • Education	Experimental Psychology	1	1	0	2
222			Educational and Social	2	1	0	3
223			Sociology	7	1	0	8
224			Education	5	1	0	6
225			Cultural Anthropology (inclu. Ethnology and Folklore)	5	0	0	5
			Psychology • Sociology • Education Cultural Anthropology total	20	4	0	24
231		History	Japanese History	1	0	0	1
232			Oriental History	2	0	0	2
233			European History	6	0	0	6
234			Archaeology (inclu. Prehistory)	0	0	0	0
			History total	9	0	0	9
241		Literature	Japanese Language	0	0	0	0
242			Japanese Literature	0	1	0	1
243			Chinese Language and Literature	0	0	0	0
244			English Language and Literature	6	1	0	7
245			French Language and Literature	4	0	0	4
246			German Language and Literature	2	0	0	2
247			Other Foreign Languages and Literatures	2	0	0	2
248			Linguistics and Phonetics	8	1	0	9
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	0	0	0	0
			Literature total	22	3	0	25
			ARTS • HUMANITIES Total	76	11	0	87
261	LAW	Basic Science of Law	Basic Science of Law	0	1	0	1
262			Public Law	0	0	0	0
263			International Law	1	0	0	1
264			Civil Law	0	1	0	1
265			Social Law	0	0	0	0
266			Criminal Law	0	0	0	0
267			Politics	3	0	0	3
			LAW Total	4	2	0	6
271	ECONOMICS	General Theory of Economics	General Theory of Economics	5	0	0	5
272			Economical Statistics	0	0	0	0
273			Economic Policy (inclu. Economic Condition)	6	3	0	9
274			Economic History	4	1	0	5
275			Public Finance, Money and Banking	0	0	0	0
276			Commercial Science	2	0	0	2
277			Business Administration	4	0	0	4
278			Accounting	0	0	0	0
			ECONOMICS Total	21	4	0	25
301	MATHEMATICS	Algebra	Algebra	6	0	0	6
302			Geometry	1	0	0	1
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	1	0	0	1
305			Basic Analysis	0	0	0	0
306			Larger-area Analysis	0	0	0	0
			Mathematics total	8	0	0	8
311	ASTRONOMY	Astronomy	Astronomy	0	0	0	0
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	3	0	0	3

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
322			Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	1	0	0	1
323			Solid-State Physics II (Magnetism, Metal Physics,	4	0	0	4
324			Physical Properties in General (inclu. Basic Theories)	0	0	0	0
325			Physics in General	2	0	1	3
			Physics total	10	0	1	11
331			Physics of Solid Earth	1	0	0	1
332			Meteorology, Oceanography and Hydrology	2	0	0	2
333			Aeronomy	0	0	0	0
334			Geology	2	0	0	2
335			Stratigraphy and Paleontology	2	0	0	2
336			Mineralogy, Petrology and Study of Mineral Deposit	1	0	0	1
337			Geochemistry	0	0	0	0
			Earth Science total	8	0	0	8
341			Physical Chemistry	5	1	0	6
342			Organic Chemistry	2	0	0	2
343			Inorganic Chemistry	1	1	0	2
344			Function, Properties and Materials in Chemistry	0	0	0	0
345			Substance Transformation	0	0	0	0
346			Separation, Refining and Identification	1	0	0	1
			Chemistry total	9	2	0	11
351			Genetics	0	0	0	0
352			Ecology	2	0	0	2
353			Plant Physiology	5	0	0	5
354			Morphology, Structure of Organism	1	0	0	1
355			Animal Physiology and	0	0	0	0
356			Morphology and Taxonomy	3	0	0	3
			Biology total	11	0	0	11
361			Physical Anthropology (inclu. Physiological Anthropology)	2	0	0	2
			SCIENCE Total	48	2	1	51
401			Applied Physics of Property and Crystallography	1	0	0	1
402			Surface Physics	0	0	0	0
403			Applied Optics and Quantum Optics	0	0	0	0
404			General Applied Physics	1	0	0	1
405			Fundamentals of Engineering	0	0	0	0
			Applied Physics-Fundamentals of Engineering total	2	0	0	2
411			Materials for Machines and Strength of Materials	1	0	0	1
412			Workshop Processes and Production Engineering	4	0	0	4
413			Design Engineering, Machine Elements and Tribology	0	0	0	0
414			Fluid Mechanics	0	0	0	0
415			Heat Engineering	1	0	0	1
416			Mechanics and Control Engineering	0	0	1	1
417			Intelligent Mechanics and Machine System	0	0	0	0
			Machine Engineering total	6	0	1	7
421			Electric Power Engineering and Electric Machinery	2	0	0	2
422			Electronic and Electric Materials Engineering	1	0	0	1
423			Electron Devices and Apparatus Engineering	0	0	0	0
424			Information and Communication Engineering	4	0	0	4

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
425			System Engineering	0	0	0	0
427			Electronic Measurements	0	0	0	0
428			Control Engineering	0	0	0	0
			Electric and Electronic Engineering	7	0	0	7
431			Construction Materials and Dynamics in General Civil Engineering	0	0	0	0
432			Structural Engineering and Seismology	0	0	0	0
433			Ground Engineering	1	0	0	1
434			Hydraulics and River Engineering	0	0	0	0
435			Traffic Engineering and Regional Planning	0	0	0	0
436			Civil Environmental System	0	0	0	0
			Civil Engineering total	1	0	0	1
441			Building Structure and Materials	0	0	0	0
442			Building Science and Building Equipment	1	0	0	1
443			City Planning and Building Planning	6	0	0	6
444			Architectural History and Design	0	0	0	0
			Architecture total	7	0	0	7
451			Physical Metallurgy	1	0	0	1
452			Inorganic Materials and	0	0	0	0
453			Composed Materials and Properties	0	0	0	0
454			Structural and Functional Materials	1	0	0	1
455			Metallurgy and Material	0	0	0	0
456			Metal Productive Engineering	0	0	0	0
			Material Engineering total	2	0	0	2
461			Chemical Engineering in General	0	0	0	0
462			Reaction and Separation Engineering	1	0	0	1
463			Catalyst and Chemical Process	0	0	0	0
464			Bioengineering	1	0	0	1
465			Industrial Analytical Chemistry	2	0	0	2
			Process Engineering total	4	0	0	4
471			Industrial Physical Chemistry	2	0	0	2
472			Industrial Inorganic Chemistry	0	0	0	0
473			Industrial Organic Chemistry	0	0	0	0
474			Synthetic Chemistry	0	0	0	0
475			Polymer Synthesis	0	0	0	0
476			Polymer Structure and Property (inclu. Fiber)	1	0	0	1
			Industrial Chemistry total	3	0	0	3
481			Aeronautics	0	0	0	0
482			Ship Engineering	3	0	0	3
483			Marine Engineering	1	0	0	1
484			Resource Development Engineering	0	0	0	0
			Synthetic Engineering total	4	0	0	4
			ENGINEERING Total	36	0	1	37
501			Plant Breeding	2	0	0	2
502			Crop Science	0	0	0	0
503			Horticulture and Landscape Architecture	7	0	0	7
504			Plant Protection	0	0	0	0
505			Sericultural Science and Economic Entomology	0	0	0	0
			Agriculture total	9	0	0	9
511			Plant Fertilizer and Manure and Soil Science	0	0	0	0
512			Applied Microbiochemistry and Applied Biochemistry	1	1	0	2
513			Biological Productive Chemistry and Bioorganic Chemistry	0	0	0	0
514			Food Science and Nutritional Chemistry	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
			Agricultural Chemistry total	6	1	0	7
521			Forestry	4	0	0	4
522			Wood Science	0	0	0	0
			Forestry total	4	0	0	4
531			Fisheries in General	0	0	0	0
532			Fisheries Chemistry	0	0	0	0
			Fisheries total	0	0	0	0
541			Agricultural Economics	3	0	0	3
551			Irrigation, Drainage and Reclamation Engineering and Rural Planning	0	0	0	0
552			Agricultural Machinery	0	0	0	0
553			Biological Environment	2	0	0	2
			Agricultural Engineering total	2	0	0	2
561			Animal Science and Grassland Science	0	0	0	0
562			Applied Animal Science	0	0	0	0
563			Basic Veterinary Medicine and Basic Animal Science	0	0	0	0
564			Applied Veterinary Medicine	2	0	0	2
			Animal Science·Veterinary Medicine total	2	0	0	2
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	27	1	0	28
601			Anatomy in General (inclu. Histology, Embryology)	1	0	0	1
602			Physiology in General	0	0	0	0
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	0	1	0	1
604			Pharmacology in General	2	0	0	2
605			Medical Chemistry in General	1	0	0	1
606			Pathological Medical Chemistry	0	0	0	0
			Physiology total	4	1	0	5
611			Hominal Pathology	0	0	0	0
612			Experimental Pathology	1	0	0	1
613			Parasitology (inclu. Medical Zoology)	0	0	0	0
614			Bacteriology (inclu. Eumycetes)	0	0	0	0
615			Virology	0	0	0	0
616			Immunology	0	0	0	0
			Pathology total	1	0	0	1
621			Hygiene	1	1	0	2
622			Public Health and Health Science	5	0	0	5
623			Legal Medicine	0	0	0	0
			Social Medicine total	6	1	0	7
631			Internal Medicine in General	2	0	0	2
632			Gastroenterology	1	0	0	1
633			Internal Medicine Respiratory System	1	0	0	1
634			Neurological Medicine	2	0	0	2
635			Cardioangiopathy	1	0	0	1
636			Pediatrics	2	0	0	2
637			Dermatology	1	0	0	1
638			Radiology	0	0	0	0
639			Neuropsychiatry	2	0	0	2
641			Hematology	2	0	0	2
642			Internal Medicine of Kidney	1	0	0	1
643			Embryology and Newborn	0	0	0	0
644			Endocrinology	0	0	0	0
645			Metabolic Science	0	0	0	0
			Internal Medicine total	15	0	0	15
651			Surgery in General	0	0	0	0
652			Gastroenterological Surgery	1	0	0	1
653			Thoracic 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
654			Neurosurgery	0	0	0	0
655			Orthopedic Surgery	3	0	0	3
656			Anesthesiology and Rescue Medicine	3	0	0	3
657			Urology	1	0	0	1
658			Obstetrics and Gynecology	1	0	0	1
659			Oto-rhino-laryngology	2	0	0	2
660			Ophthalmology	1	0	0	1
661			Pediatric Surgery	0	0	0	0
662			Formative Surgery	1	0	0	1
			Surgery total	14	0	0	14
671			Oral Anatomy and Morphological Basic Dentistry	2	0	0	2
672			Functional Basic Dentistry	0	0	0	0
673			Morbid Dentistry (inclu. Dental Radiology)	0	0	0	0
674			Conservative Dentistry	0	0	0	0
675			Prosthodontics and Dental Technology	0	0	0	0
676			Oral Surgery	1	0	0	1
677			Orthodontics, Pedodontics and Social Dentistry	0	0	0	0
678			Periodontological Dentistry	0	0	0	0
			Dentistry total	3	0	0	3
681			Chemical Pharmaceutics	0	0	0	0
682			Physical Pharmaceutics	0	0	0	0
683			Biopharmaceutics	1	0	0	1
684			Molecular Pharmaceutics	0	0	0	0
685			Environmental Pharmaceutics	1	0	0	1
			Pharmaceutics total	2	0	0	2
691			Medical Sociology	0	1	0	1
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	2	0	0	2
697			Science of Clinical Nursing	2	1	0	3
			Medicine in General total	4	2	0	6
			MEDICINE Total	49	4	0	53
702	INTERDISCIPLINARY AREA		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	0	0	0	0
703			Physical Education	4	0	0	4
704			Human Geography	0	0	0	0
705			Physical Geography	2	0	0	2
			Geography total	2	0	0	2
706			Home Science(inclu. Cloth/Living Environments)	0	0	0	0
707			Food Culture	1	1	0	2
			Domestic Science total	1	1	0	2
708			Science of Cultural Property	0	0	0	0
711			Science Education	0	0	0	0
712			Educational Engineering	0	0	0	0
713			Curriculum Studies	3	1	0	4
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	4	0	0	4
732			Intelligent Informatics	1	0	0	1
733			Study of Information System (Inclu. Library and Information Science)	3	0	0	3
			Information Science total	8	0	0	8
741			Social System Engineering	2	0	0	2
751			Natural Disaster Science	1	0	0	1
761			Plasma Science and Technology	0	0	0	0
772			Nuclear Fusion	0	0	0	0

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

Code	Subj ect	Subd ivisio n	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
773			Energy Science General	0	0	0	0
774			Nuclear Power Science	0	0	0	0
			Energy total	0	0	0	0
801			Environmental Dynamic Analysis	2	0	0	2
802			Environmental Influence Assessment (inclu. Radiobiology)	0	1	0	1
803			Environmental Preservation	4	0	0	4
			Environmental Science total	6	1	0	7
811			Biological Organic Chemistry	0	0	0	0
812			Structured Biochemistry	0	0	0	0
813			Functional Biochemistry	0	0	0	0
			Biological Chemistry total	0	0	0	0
821			Biophysics	2	0	0	2
822			Molecular Biology	2	0	0	2
823			Cell Biology	1	0	0	1
824			Developmental Biology	2	0	0	2
			Basic Biology total	7	0	0	7
831			Neuroanatomy and Neuropathology	1	0	0	1
832			Neurochemistry and Neuropharmacology	0	0	0	0
833			Neuro Science in General	1	0	0	1
834			Neuro and Muscular Physiology	0	0	0	0
			Neuro Science (inclu. Brain Science) total	2	0	0	2
841			Laboratory Animal Science	1	0	0	1
851			Medical Organism Engineering and Material Science of Organism	1	0	0	1
			INTERDISCIPLINARY AREA Total	38	3	0	41
999			WIDE AREA Total	6	0	0	6
			Item n.a. Total	139	15	1	155
			Grand Total	444	42	3	489

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	22	4	0	0	26
212			Chinese Philosophy	7	0	0	0	7
213			Indian Philosophy (inclu. Buddhist Studies)	6	0	0	1	7
214			Religion	17	0	0	0	17
215			Ethics	5	3	0	0	8
216			History of Philosophy	13	4	0	0	17
217			Aesthetics (inclu. Arts)	73	23	0	0	96
218			Art History	20	2	0	1	23
			Philosophy total	163	36	0	2	201
221			Experimental Psychology	8	0	0	0	8
222			Educational and Social	32	6	0	0	38
223			Sociology	82	4	0	0	86
224			Education	43	11	0	0	54
225			Cultural Anthropology (inclu. Ethnology and Folklore)	46	2	0	0	48
			Psychology • Sociology • Education Cultural Anthropology total	211	23	0	0	234
231			Japanese History	10	1	0	0	11
232			Oriental History	28	2	0	0	30
233			European History	50	2	1	1	54
234			Archaeology (inclu. Prehistory)	9	5	0	1	15
			History total	97	10	1	2	110
241			Japanese Language	6	0	0	0	6
242			Japanese Literature	9	4	0	0	13
243			Chinese Language and Literature	22	0	0	0	22
244			English Language and Literature	112	25	0	0	137
245			French Language and Literature	29	2	0	0	31
246			German Language and Literature	28	0	0	0	28
247			Other Foreign Languages and Literatures	33	2	0	0	35
248			Linguistics and Phonetics	59	9	0	0	68
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	18	3	0	0	21
			Literature total	316	45	0	0	361
			ARTS • HUMANITIES Total	787	114	1	4	906
261	LAW		Basic Science of Law	12	2	0	0	14
262			Public Law	15	1	0	0	16
263			International Law	8	1	0	0	9
264			Civil Law	13	0	0	0	13
265			Social Law	3	0	0	0	3
266			Criminal Law	5	0	0	0	5
267			Politics	54	0	0	0	54
			LAW Total	110	4	0	0	114
271	ECONOMICS		General Theory of Economics	28	1	0	0	29
272			Economical Statistics	4	0	0	0	4
273			Economic Policy (inclu. Economic Condition)	59	0	0	0	59
274			Economic History	21	0	0	0	21
275			Public Finance, Money and Banking	12	0	0	0	12
276			Commercial Science	14	0	0	0	14
277			Business Administration	37	4	0	0	41
278			Accounting	21	0	0	0	21
			ECONOMICS Total	196	5	0	0	201
301	SCIENCE		Algebra	9	0	0	0	9
302			Geometry	7	0	0	0	7
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	10	1	0	0	11
305			Basic Analysis	8	0	0	0	8
306			Larger-area Analysis	7	0	0	0	7
			Mathematics total	41	1	0	0	42
311	SCIENCE		Astronomy	3	0	0	0	3
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	14	0	0	0	14

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)	5	0	0	0	5
323			Solid-State Physics II (Magnetism, Metal Physics,	7	0	0	0	7
324			Physical Properties in General (inclu. Basic Theories)	6	0	0	0	6
325			Physics in General	6	0	0	0	6
			Physics total	38	0	0	0	38
331			Physics of Solid Earth	1	0	0	0	1
332			Meteorology, Oceanography and Hydrology	2	0	0	0	2
333			Aeronomy	3	0	0	0	3
334			Geology	2	0	0	0	2
335			Stratigraphy and Paleontology	2	0	0	0	2
336			Mineralogy, Petrology and Study of Mineral Deposit	1	0	0	0	1
337			Geochemistry	1	0	0	0	1
			Earth Science total	12	0	0	0	12
341			Physical Chemistry	11	0	0	0	11
342			Organic Chemistry	4	0	0	0	4
343			Inorganic Chemistry	3	0	0	0	3
344			Function, Properties and Materials in Chemistry	4	0	0	0	4
345			Substance Transformation	0	0	0	0	0
346			Separation, Refining and Identification	3	0	0	0	3
			Chemistry total	25	0	0	0	25
351			Genetics	2	0	0	0	2
352			Ecology	10	1	0	1	12
353			Plant Physiology	4	1	0	0	5
354			Morphology, Structure of Organism	2	0	0	1	3
355			Animal Physiology and	0	0	0	0	0
356			Morphology and Taxonomy	6	0	0	0	6
			Biology total	24	2	0	2	28
361			Physical Anthropology (inclu. Physiological Anthropology)	2	0	0	0	2
			SCIENCE Total	145	3	0	2	150
401			Applied Physics of Property and Crystallography	0	0	0	0	0
402			Surface Physics	3	0	0	0	3
403			Applied Optics and Quantum Optics	2	0	0	0	2
404			General Applied Physics	1	1	0	0	2
405			Fundamentals of Engineering	1	0	0	0	1
			Applied Physics-Fundamentals of Engineering total	7	1	0	0	8
411			Materials for Machines and Strength of Materials	7	0	0	0	7
412			Workshop Processes and Production Engineering	5	0	0	0	5
413			Design Engineering, Machine Elements and Tribology	3	0	0	0	3
414			Fluid Mechanics	9	0	0	0	9
415			Heat Engineering	2	1	0	0	3
416			Mechanics and Control Engineering	3	0	0	0	3
417			Intelligent Mechanics and Machine System	7	0	0	0	7
			Machine Engineering total	36	1	0	0	37
421			Electric Power Engineering and Electric Machinery	8	0	1	0	9
422			Electronic and Electric Materials Engineering	6	2	0	0	8
423			Electron Devices and Apparatus Engineering	12	0	0	0	12
424			Information and Communication Engineering	14	0	0	0	14

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
425			System Engineering	4	0	0	0	4
427			Electronic Measurements	7	0	0	0	7
428			Control Engineering	3	0	0	0	3
			Electric and Electronic Engineering	54	2	1	0	57
431			Construction Materials and Dynamics in General Civil Engineering	7	0	0	0	7
432			Structural Engineering and Seismology	7	1	0	0	8
433			Ground Engineering	0	0	0	0	0
434			Hydraulics and River Engineering	6	0	0	0	6
435			Traffic Engineering and Regional Planning	4	0	0	0	4
436			Civil Environmental System	1	0	0	0	1
			Civil Engineering total	25	1	0	0	26
441			Building Structure and Materials	5	0	0	0	5
442			Building Science and Building Equipment	6	0	0	0	6
443			City Planning and Building Planning	25	2	0	0	27
444			Architectural History and Design	18	0	0	0	18
			Architecture total	54	2	0	0	56
451			Physical Metallurgy	1	0	0	0	1
452			Inorganic Materials and	2	0	0	0	2
453			Composed Materials and Properties	1	0	0	0	1
454			Structural and Functional Materials	0	0	0	0	0
455			Metallurgy and Material	3	0	0	0	3
456			Metal Productive Engineering	1	0	0	0	1
			Material Engineering total	8	0	0	0	8
461			Chemical Engineering in General	2	0	0	0	2
462			Reaction and Separation Engineering	1	0	0	0	1
463			Catalyst and Chemical Process	0	0	0	0	0
464			Bioengineering	2	0	0	1	3
465			Industrial Analytical Chemistry	0	0	0	0	0
			Process Engineering total	5	0	0	1	6
471			Industrial Physical Chemistry	1	0	0	0	1
472			Industrial Inorganic Chemistry	0	0	0	0	0
473			Industrial Organic Chemistry	0	0	0	0	0
474			Synthetic Chemistry	5	0	0	0	5
475			Polymer Synthesis	0	0	0	0	0
476			Polymer Structure and Property (inclu. Fiber)	4	0	0	0	4
			Industrial Chemistry total	10	0	0	0	10
481			Aeronautics	1	0	0	0	1
482			Ship Engineering	0	0	0	0	0
483			Marine Engineering	1	0	0	0	1
484			Resource Development Engineering	0	0	0	0	0
			Synthetic Engineering total	2	0	0	0	2
			ENGINEERING Total	201	7	1	1	210
501			Plant Breeding	1	0	0	0	1
502			Crop Science	0	0	0	0	0
503			Horticulture and Landscape Architecture	7	1	0	0	8
504			Plant Protection	2	0	0	0	2
505			Sericultural Science and Economic Entomology	2	0	0	1	3
			Agriculture total	12	1	0	1	14
511			Plant Fertilizer and Manure and Soil Science	1	0	0	0	1
512			Applied Microbiochemistry and Applied Biochemistry	5	0	0	0	5
513			Biological Productive Chemistry and Bioorganic Chemistry	0	0	0	0	0
514			Food Science and Nutritional Chemistry	4	1	0	0	5

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
			Agricultural Chemistry total	10	1	0	0	11
521			Forestry	9	0	0	0	9
522			Wood Science	0	0	0	0	0
			Forestry total	9	0	0	0	9
531			Fisheries in General	7	0	0	0	7
532			Fisheries Chemistry	4	0	0	0	4
			Fisheries total	11	0	0	0	11
541			Agricultural Economics	8	0	0	0	8
551			Irrigation, Drainage and Reclamation Engineering and Rural Planning	4	0	0	0	4
552			Agricultural Machinery	0	1	0	0	1
553			Biological Environment	1	0	0	0	1
			Agricultural Engineering total	5	1	0	0	6
561			Animal Science and Grassland Science	3	0	0	0	3
562			Applied Animal Science	3	0	0	0	3
563			Basic Veterinary Medicine and Basic Animal Science	8	0	0	0	8
564			Applied Veterinary Medicine	6	0	0	0	6
			Animal Science-Veterinary Medicine total	20	0	0	0	20
571			Biological Resource Science	3	0	0	0	3
572			Applied Molecular Cell Biology	0	0	0	0	0
			Interdisciplinary Agricultural Science total	3	0	0	0	3
			AGRICULTURE Total	78	3	0	1	82
601			Anatomy in General (inclu. Histology, Embryology)	4	1	0	0	5
602			Physiology in General	4	2	0	0	6
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	6	1	0	0	7
604			Pharmacology in General	12	1	0	0	13
605			Medical Chemistry in General	1	0	0	0	1
606			Pathological Medical Chemistry	1	0	0	0	1
			Physiology total	28	5	0	0	33
611			Hominal Pathology	3	0	0	0	3
612			Experimental Pathology	1	0	0	0	1
613			Parasitology (inclu. Medical Zoology)	2	0	0	0	2
614			Bacteriology (inclu. Eumycetes)	3	1	0	0	4
615			Virology	3	0	0	0	3
616			Immunology	2	0	0	0	2
			Pathology total	14	1	0	0	15
621			Hygiene	3	0	0	0	3
622			Public Health and Health Science	9	1	0	0	10
623			Legal Medicine	2	0	0	0	2
			Social Medicine total	14	1	0	0	15
631			Internal Medicine in General	8	0	0	0	8
632			Gastroenterology	7	0	0	0	7
633			Internal Medicine Respiratory System	2	0	0	0	2
634			Neurological Medicine	6	0	0	0	6
635			Cardioangiopathy	6	0	0	0	6
636			Pediatrics	5	0	0	0	5
637			Dermatology	1	0	0	0	1
638			Radiology	4	0	0	0	4
639			Neuropsychiatry	7	1	0	0	8
641			Hematology	4	0	0	0	4
642			Internal Medicine of Kidney	1	0	0	0	1
643			Embryology and Newborn	1	0	0	0	1
644			Endocrinology	0	0	0	0	0
645			Metabolic Science	0	0	0	0	0
			Internal Medicine total	52	1	0	0	53
651			Surgery in General	8	0	0	0	8
652			Gastroenterological Surgery	6	0	0	0	6
653			Thoracic Surgery	2	0	0	0	2

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total	
654			Neurosurgery	7	0	0	0	7	
655			Orthopedic Surgery	7	0	0	0	7	
656			Anesthesiology and Rescue Medicine	2	0	0	0	2	
657			Urology	3	0	0	0	3	
658			Obstetrics and Gynecology	3	0	0	0	3	
659			Oto-rhino-laryngology	1	0	0	0	1	
660			Ophthalmology	4	0	0	0	4	
661			Pediatric Surgery	1	0	0	0	1	
662			Formative Surgery	2	0	0	0	2	
			Surgery total	46	0	0	0	46	
671			Oral Anatomy and Morphological Basic Dentistry	5	0	0	0	5	
672			Functional Basic Dentistry	7	0	0	0	7	
673			Morbid Dentistry (inclu. Dental Radiology)	3	0	0	0	3	
674			Conservative Dentistry	2	0	0	0	2	
675			Prosthodontics and Dental Technology	8	0	0	0	8	
676			Oral Surgery	2	0	0	0	2	
677			Orthodontics, Pedodontics and Social Dentistry	7	0	0	0	7	
678			Periodontological Dentistry	3	0	0	0	3	
			Dentistry total	37	0	0	0	37	
681				Chemical Pharmaceutics	13	0	0	0	13
682		Physical Pharmaceutics		7	1	0	0	8	
683		Biopharmaceutics		13	0	0	0	13	
684		Molecular Pharmaceutics		4	0	0	0	4	
685		Environmental Pharmaceutics		6	0	0	0	6	
		Pharmaceutics total	43	1	0	0	44		
691			Medical Sociology	2	0	0	0	2	
692			Human Genetics	2	0	0	0	2	
693			Applied Pharmacology and Medical Pharmacology	6	0	0	0	6	
694			Pathological Examination	4	0	0	0	4	
696			Science of Basic and Local Nursing	2	1	0	0	3	
697			Science of Clinical Nursing	5	0	0	0	5	
			Medicine in General total	21	1	0	0	22	
	MEDICINE Total			255	10	0	0	265	
702	INTERDISCIPLINARY AREA		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	5	0	0	0	5	
703			Physical Education	30	6	0	0	36	
704			Human Geography	11	0	0	0	11	
705			Physical Geography	7	0	0	0	7	
			Geography total	18	0	0	0	18	
706			Home Science(inclu. Cloth/Living Environments)	12	7	0	0	19	
707			Food Culture	2	2	0	0	4	
			Domestic Science total	14	9	0	0	23	
708			Science of Cultural Property	1	0	0	0	1	
711			Science Education	4	1	0	0	5	
712			Educational Engineering	7	0	0	0	7	
713			Curriculum Studies	15	8	0	0	23	
714			Japanese Language Education	4	1	0	0	5	
			Science Education·Curriculum Education total	30	10	0	0	40	
721			Statistics	2	0	0	0	2	
731				Computer Science	18	0	1	0	19
732				Intelligent Informatics	2	0	0	0	2
733				Study of Information System (Inclu. Library and Information Science)	11	1	0	0	12
				Information Science total	31	1	1	0	33
741				Social System Engineering	20	0	0	0	20
751				Natural Disaster Science	0	1	0	0	1
761				Plasma Science and Technology	0	0	0	0	0
772				Nuclear Fusion	1	0	0	0	1

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Private Scientific Research Institutes	Total
773			Energy Science General	2	0	0	0	2
774			Nuclear Power Science	4	0	0	0	4
			Energy total	7	0	0	0	7
801			Environmental Dynamic Analysis	2	0	0	0	2
802			Environmental Influence Assessment (inclu. Radiobiology)	0	0	0	0	0
803			Environmental Preservation	12	1	0	0	13
			Environmental Science total	14	1	0	0	15
811			Biological Organic Chemistry	4	0	0	0	4
812			Structured Biochemistry	1	0	0	0	1
813			Functional Biochemistry	5	0	0	0	5
			Biological Chemistry total	10	0	0	0	10
821			Biophysics	5	0	0	0	5
822			Molecular Biology	6	0	0	0	6
823			Cell Biology	6	0	0	1	7
824			Developmental Biology	0	0	0	0	0
			Basic Biology total	17	0	0	1	18
831			Neuroanatomy and Neuropathology	4	0	0	0	4
832			Neurochemistry and Neuropharmacology	2	0	0	0	2
833			Neuro Science in General	4	0	0	0	4
834			Neuro and Muscular Physiology	4	1	0	0	5
			Neuro Science (inclu. Brain Science) total	14	1	0	0	15
841			Laboratory Animal Science	2	0	0	1	3
851			Medical Organism Engineering and Material Science of Organism	9	1	0	0	10
			INTERDISCIPLINARY AREA Total	224	30	1	2	257
999			WIDE AREA Total	74	13	0	0	87
			Item n.a. Total	872	54	0	10	936
			Grand Total	2,942	243	3	20	3,208

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total	
211	ARTS • HUMANITIES		Philosophy	39	2	1	0	0	0	42	
212			Chinese Philosophy	15	1	0	0	0	0	16	
213			Indian Philosophy (inclu. Buddhist Studies)	28	3	1	1	0	1	34	
214			Religion	36	3	1	0	0	0	40	
215			Ethics	21	0	0	0	0	0	21	
216			History of Philosophy	22	1	0	0	0	0	23	
217			Aesthetics (inclu. Arts)	86	14	0	0	0	0	100	
218			Art History	18	1	0	1	1	0	21	
			Philosophy total	265	25	3	2	1	1	297	
221				Experimental Psychology	75	4	0	2	0	1	82
222				Educational and Social	156	13	0	0	0	0	169
223				Sociology	137	11	0	0	0	0	148
224				Education	128	16	1	4	0	0	149
225				Cultural Anthropology (inclu. Ethnology and Folklore)	59	2	0	4	0	0	65
			Psychology • Sociology • Education Cultural Anthropology total		555	46	1	10	0	1	613
231				Japanese History	32	0	1	1	0	0	34
232				Oriental History	53	2	0	0	0	0	55
233				European History	35	1	0	1	0	1	38
234		Archaeology (inclu. Prehistory)		25	0	0	0	0	2	27	
		History total		145	3	1	2	0	3	154	
241				Japanese Language	22	2	0	0	2	0	26
242				Japanese Literature	30	5	1	1	0	0	37
243				Chinese Language and Literature	59	1	0	0	0	0	60
244				English Language and Literature	160	18	2	0	0	0	180
245				French Language and Literature	35	0	0	0	0	0	35
246				German Language and Literature	25	0	0	0	0	0	25
247				Other Foreign Languages and Literatures	51	1	0	0	0	0	52
248				Linguistics and Phonetics	128	8	4	0	0	0	140
249				Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	28	3	0	0	0	0	31
				Literature total		538	38	7	1	2	0
	ARTS • HUMANITIES Total			1,503	112	12	15	3	5	1,650	
261	LAW		Basic Science of Law	21	1	0	0	0	0	22	
262			Public Law	20	0	0	0	0	0	20	
263			International Law	21	0	0	0	0	0	21	
264			Civil Law	26	0	0	0	0	1	27	
265			Social Law	8	1	0	0	0	0	9	
266			Criminal Law	7	0	0	0	0	0	7	
267			Politics	87	1	1	0	0	0	89	
	LAW Total		190	3	1	0	0	1	195		
271	ECONOMICS		General Theory of Economics	72	2	0	0	0	0	74	
272			Economical Statistics	19	0	0	0	0	0	19	
273			Economic Policy (inclu. Economic Condition)	89	0	0	0	0	1	90	
274			Economic History	25	0	0	0	0	0	25	
275			Public Finance, Money and Banking	45	0	0	0	0	0	45	
276			Commercial Science	24	2	0	0	0	0	26	
277			Business Administration	101	5	0	0	0	0	106	
278			Accounting	30	0	0	0	0	0	30	
	ECONOMICS Total		405	9	0	0	0	1	415		
301	SCIENCE		Algebra	50	0	2	0	0	0	52	
302			Geometry	47	0	1	0	0	0	48	
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	92	0	4	0	0	0	96	
305			Basic Analysis	60	0	2	0	0	0	62	
306			Larger-area Analysis	36	0	0	0	0	0	36	
			Mathematics total		285	0	9	0	0	0	294
311		Astronomy	34	1	1	7	0	0	43		
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	140	2	0	18	1	0	161	

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	78	0	1	0	0	0	79
323			Solid-State Physics II (Magnetism, Metal Physics,	75	1	4	0	0	0	80
324			Physical Properties in General (inclu. Basic Theories)	56	2	2	3	0	0	63
325			Physics in General	46	2	4	6	0	0	58
			Physics total	395	7	11	27	1	0	441
331			Physics of Solid Earth	50	1	0	6	0	0	57
332			Meteorology, Oceanography and Hydrology	45	0	1	2	0	0	48
333			Aeronomy	10	0	1	2	0	0	13
334			Geology	34	0	0	0	0	0	34
335			Stratigraphy and Paleontology	17	0	0	0	0	0	17
336			Mineralogy, Petrology and Study of Mineral Deposit	36	0	0	0	1	0	37
337			Geochemistry	24	0	2	1	0	0	27
			Earth Science total	216	1	4	11	1	0	233
341			Physical Chemistry	105	2	0	1	0	0	108
342			Organic Chemistry	65	1	0	0	0	1	67
343			Inorganic Chemistry	37	1	0	0	0	0	38
344			Function, Properties and Materials in Chemistry	62	1	1	0	0	0	64
345			Substance Transformation	5	0	0	0	0	0	5
346			Separation, Refining and Identification	31	1	2	0	0	0	34
			Chemistry total	305	6	3	1	0	1	316
351			Genetics	37	0	0	2	0	1	40
352			Ecology	64	1	0	3	0	3	71
353			Plant Physiology	42	0	0	0	0	1	43
354			Morphology, Structure of Organism	22	0	0	0	0	1	23
355			Animal Physiology and	24	1	0	0	0	1	26
356			Morphology and Taxonomy	22	0	0	0	5	1	28
			Biology total	211	2	0	5	5	8	231
361			Physical Anthropology (inclu. Physiological Anthropology)	17	1	0	0	0	0	18
	SCIENCE Total			1,463	18	28	51	7	9	1,576
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	47	0	1	0	0	0	48
402			Surface Physics	35	0	0	0	0	0	35
403			Applied Optics and Quantum Optics	60	0	2	0	0	0	62
404			General Applied Physics	19	1	2	2	0	2	26
405			Fundamentals of Engineering	22	0	1	2	0	0	25
			Applied Physics-Fundamentals of Engineering total	183	1	6	4	0	2	196
411			Materials for Machines and Strength of Materials	88	0	7	1	0	0	96
412			Workshop Processes and Production Engineering	56	1	7	0	0	0	64
413			Design Engineering, Machine Elements and Tribology	44	2	1	1	0	0	48
414			Fluid Mechanics	86	0	7	0	0	0	93
415			Heat Engineering	68	2	8	3	0	0	81
416			Mechanics and Control Engineering	51	0	13	1	0	0	65
417			Intelligent Mechanics and Machine System	82	0	4	1	0	0	87
			Machine Engineering total	475	5	47	7	0	0	534
421			Electric Power Engineering and Electric Machinery	104	0	11	3	0	0	118
422			Electronic and Electric Materials Engineering	110	2	6	1	0	0	119
423			Electron Devices and Apparatus Engineering	77	0	4	1	0	0	82
424			Information and Communication Engineering	190	1	15	3	0	0	209

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Governmen t Research Institutes	Private Scientific Research Institutes	Total
425	E N G I N E E R I N G		System Engineering	47	0	1	1	0	0	49
427			Electronic Measurements	84	1	13	0	0	0	98
428			Control Engineering	69	0	2	0	0	0	71
			Electric and Electronic Engineering	681	4	52	9	0	0	746
431			Construction Materials and Dynamics in General Civil Engineering	42	0	3	0	0	0	45
432			Structural Engineering and Seismology	50	2	3	0	0	0	55
433			Ground Engineering	55	0	6	0	0	0	61
434			Hydraulics and River Engineering	66	1	4	0	0	0	71
435			Traffic Engineering and Regional Planning	53	0	4	0	0	0	57
436			Civil Environmental System	49	0	2	0	0	0	51
			Civil Engineering total	315	3	22	0	0	0	340
441		G	Building Structure and Materials	69	0	4	0	0	0	73
442			Building Science and Building Equipment	46	0	0	0	0	1	47
443			City Planning and Building Planning	72	3	2	0	0	0	77
444			Architectural History and Design	17	1	0	0	0	0	18
			Architecture total	204	4	6	0	0	1	215
451		R	Physical Metallurgy	37	1	1	0	0	0	39
452			Inorganic Materials and	54	0	3	0	0	0	57
453			Composed Materials and Properties	16	0	2	0	0	0	18
454			Structural and Functional Materials	49	1	1	0	0	0	51
455		I	Metallurgy and Material	52	3	3	0	0	0	58
456			Metal Productive Engineering	19	0	0	0	0	0	19
			Material Engineering total	227	5	10	0	0	0	242
461		G	Chemical Engineering in General	40	0	2	0	0	0	42
462			Reaction and Separation Engineering	20	0	0	0	0	0	20
463			Catalyst and Chemical Process	19	0	0	0	0	0	19
464			Bioengineering	36	0	3	0	0	0	39
465			Industrial Analytical Chemistry	11	0	1	0	0	0	12
			Process Engineering total	126	0	6	0	0	0	132
471			Industrial Physical Chemistry	45	0	0	0	0	0	45
472			Industrial Inorganic Chemistry	20	0	0	0	0	0	20
473			Industrial Organic Chemistry	16	0	0	0	0	0	16
474			Synthetic Chemistry	44	0	2	0	0	0	46
475			Polymer Synthesis	37	0	1	0	0	0	38
476			Polymer Structure and Property (inclu. Fiber)	42	3	1	1	0	0	47
			Industrial Chemistry total	204	3	4	1	0	0	212
481			Aeronautics	21	0	1	7	0	0	29
482			Ship Engineering	23	0	1	0	0	0	24
483			Marine Engineering	12	0	0	0	0	0	12
484			Resource Development Engineering	16	0	1	0	0	0	17
			Synthetic Engineering total	72	0	3	7	0	0	82
			ENGINEERING Total	2,487	25	156	28	0	3	2,699
501	A G R I C U L T U R E		Plant Breeding	20	1	0	0	0	0	21
502			Crop Science	21	0	1	0	0	0	22
503			Horticulture and Landscape Architecture	33	2	0	0	0	0	35
504			Plant Protection	34	1	0	0	0	0	35
505			Sericultural Science and Economic Entomology	7	0	0	0	0	0	7
			Agriculture total	115	4	1	0	0	0	120
511			Plant Fertilizer and Manure and Soil Science	21	1	0	0	0	0	22
512			Applied Microbiochemistry and Applied Biochemistry	79	0	2	0	0	0	81
513			Biological Productive Chemistry and Bioorganic Chemistry	29	0	0	0	0	1	30
514			Food Science and Nutritional Chemistry	68	13	0	0	0	0	81

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Governmen t Research Institutes	Private Scientific Research Institutes	Total
	A		Agricultural Chemistry total	197	14	2	0	0	1	214
521			Forestry	40	0	0	2	0	0	42
522	G		Wood Science	38	0	0	0	0	0	38
			Forestry total	78	0	0	2	0	0	80
531	R		Fisheries in General	66	0	1	0	0	0	67
532			Fisheries Chemistry	20	0	0	0	0	0	20
			Fisheries total	86	0	1	0	0	0	87
541	I		Agricultural Economics	24	0	0	1	0	0	25
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	25	1	0	0	0	0	26
552	U		Agricultural Machinery	22	1	0	0	0	0	23
553	L		Biological Environment	13	0	0	0	0	0	13
			Agricultural Engineering total	60	2	0	0	0	0	62
561	T		Animal Science and Grassland Science	19	0	0	0	0	0	19
562	U		Applied Animal Science	28	0	0	0	0	1	29
563	R		Basic Veterinary Medicine and Basic Animal Science	27	0	0	0	0	0	27
564			Applied Veterinary Medicine	32	0	0	0	0	1	33
	E		Animal Science·Veterinary Medicine total	106	0	0	0	0	2	108
571			Biological Resource Science	16	0	0	0	0	0	16
572			Applied Molecular Cell Biology	11	0	0	0	0	0	11
			Interdisciplinary Agricultural Science total	27	0	0	0	0	0	27
			AGRICULTURE Total	693	20	4	3	0	3	723
601			Anatomy in General (inclu. Histology, Embryology)	52	1	0	0	0	0	53
602			Physiology in General	65	3	0	0	0	0	68
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	38	4	0	0	0	0	42
604			Pharmacology in General	57	0	0	0	0	0	57
605			Medical Chemistry in General	39	0	0	0	0	0	39
606			Pathological Medical Chemistry	26	1	0	0	0	0	27
	M		Physiology total	277	9	0	0	0	0	286
611			Hominal Pathology	60	0	0	0	0	0	60
612	E		Experimental Pathology	34	0	0	0	0	1	35
613	D		Parasitology (inclu. Medical Zoology)	29	1	0	0	0	0	30
614			Bacteriology (inclu. Eumycetes)	34	3	0	0	0	0	37
615	I		Virology	31	0	0	0	0	1	32
616			Immunology	49	2	0	0	0	1	52
	C		Pathology total	237	6	0	0	0	3	246
621			Hygiene	32	1	0	0	0	1	34
622	I		Public Health and Health Science	99	12	0	0	0	0	111
623			Legal Medicine	27	0	0	0	0	0	27
	N		Social Medicine total	158	13	0	0	0	1	172
631			Internal Medicine in General	85	3	0	0	0	2	90
632	E		Gastroenterology	102	0	0	0	0	2	104
633			Internal Medicine Respiratory System	35	0	0	0	0	1	36
634			Neurological Medicine	67	0	0	0	0	0	67
635			Cardioangiology	107	2	0	0	0	0	109
636			Pediatrics	79	0	0	0	0	0	79
637			Dermatology	48	0	0	0	0	0	48
638			Radiology	97	3	0	0	0	0	100
639			Neuropsychiatry	64	1	0	0	0	0	65
641			Hematology	58	1	0	0	0	0	59
642			Internal Medicine of Kidney	49	1	0	0	0	0	50
643			Embryology and Newborn	4	0	0	0	0	0	4
644			Endocrinology	24	0	0	0	0	0	24
645			Metabolic Science	39	0	0	0	0	0	39
			Internal Medicine total	858	11	0	0	0	5	874
651			Surgery in General	80	0	0	0	0	0	80
652			Gastroenterological Surgery	89	0	0	0	0	1	90
653			Thoracic Surgery	50	0	0	0	0	0	50

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Private Scientific Research Institutes	Total
654	M		Neurosurgery	73	0	0	0	0	0	73
655			Orthopedic Surgery	117	3	0	0	0	0	120
656			Anesthesiology and Rescue Medicine	67	0	0	0	0	0	67
657			Urology	67	0	0	0	0	0	67
658			Obstetrics and Gynecology	56	0	0	0	0	0	56
659			Oto-rhino-laryngology	41	0	0	0	0	0	41
660			Ophthalmology	49	0	0	0	0	0	49
661			Pediatric Surgery	14	0	0	0	0	0	14
662			Formative Surgery	24	0	0	0	0	0	24
			Surgery total	727	3	0	0	0	1	731
671	E		Oral Anatomy and Morphological Basic Dentistry	43	0	0	0	0	43	
672	D		Functional Basic Dentistry	45	0	0	0	0	45	
673	I		Morbid Dentistry (inclu. Dental Radiology)	40	0	0	0	0	40	
674	C		Conservative Dentistry	60	3	0	0	0	63	
675	I		Prosthodontics and Dental Technology	110	2	0	0	0	112	
676	I		Oral Surgery	100	0	0	0	1	101	
677	N		Orthodontics, Pedodontics and Social Dentistry	98	1	0	0	0	99	
678	E		Periodontological Dentistry	19	0	0	0	0	19	
	Dentistry total		515	6	0	0	0	1	522	
681			Chemical Pharmaceuticals	72	0	0	0	0	72	
682			Physical Pharmaceuticals	34	1	0	0	0	35	
683			Biopharmaceutics	81	1	0	0	1	83	
684			Molecular Pharmaceuticals	28	0	0	0	0	28	
685			Environmental Pharmaceuticals	20	0	0	0	0	20	
		Pharmaceutics total	235	2	0	0	0	1	238	
691			Medical Sociology	18	1	0	0	0	19	
692			Human Genetics	17	0	0	0	1	18	
693			Applied Pharmacology and Medical Pharmacology	36	0	0	0	0	36	
694			Pathological Examination	26	3	0	0	0	29	
696	Science of Basic and Local Nursing		42	6	0	0	0	48		
697	Science of Clinical Nursing		56	7	0	0	0	63		
	Medicine in General total	195	17	0	0	0	1	213		
	MEDICINE Total	3,202	67	0	0	0	13	3,282		
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)	15	0	0	1	0	16	
703			Physical Education	145	11	2	0	0	0	158
704			Human Geography	28	0	0	0	0	0	28
705			Physical Geography	20	0	0	0	0	0	20
			Geography total	48	0	0	0	0	0	48
706			Home Science(inclu. Cloth/Living Environments)	42	20	0	0	0	0	62
707			Food Culture	33	16	0	0	0	0	49
			Domestic Science total	75	36	0	0	0	0	111
708			Science of Cultural Property	3	1	0	0	0	0	4
711			Science Education	28	2	2	0	0	0	32
712		Educational Engineering	33	4	2	6	0	0	45	
713		Curriculum Studies	72	9	3	0	0	0	84	
714		Japanese Language Education	30	0	0	0	1	0	31	
		Science Education·Curriculum Education total	163	15	7	6	1	0	192	
721	A R E A		Statistics	25	0	0	1	0	0	26
731			Computer Science	139	2	7	1	0	0	149
732			Intelligent Informatics	130	4	11	4	0	0	149
733			Study of Information System (Inclu. Library and Information Science)	68	1	2	9	0	0	80
			Information Science total	337	7	20	14	0	0	378
741			Social System Engineering	91	3	0	0	0	0	94
751			Natural Disaster Science	11	1	0	0	0	0	12
761			Plasma Science and Technology	40	0	0	10	0	0	50
772			Nuclear Fusion	14	1	0	11	0	0	26

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

Code	Subj ect	Subd ivision	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Governmen t Research Institutes	Private Scientific Research Institutes	Total
773	N T		Energy Science General	24	0	2	0	0	0	26
774			Nuclear Power Science	42	0	0	3	0	0	45
	E		Energy total	80	1	2	14	0	0	97
801	R D I S C		Environmental Dynamic Analysis	35	0	0	1	0	0	36
802			Environmental Influence Assessment (inclu. Radiobiology)	33	2	0	0	0	0	35
803			Environmental Preservation	66	1	1	1	0	0	69
			Environmental Science total	134	3	1	2	0	0	140
811	I P L I		Biological Organic Chemistry	40	0	1	0	0	1	42
812			Structured Biochemistry	34	0	0	0	0	0	34
813			Functional Biochemistry	45	2	0	0	0	0	47
			Biological Chemistry total	119	2	1	0	0	1	123
821	N A R Y		Biophysics	38	0	1	1	0	0	40
822			Molecular Biology	93	2	1	0	0	0	96
823			Cell Biology	54	0	0	1	0	3	58
824			Developmental Biology	22	1	0	0	0	0	23
			Basic Biology total	207	3	2	2	0	3	217
831	A R E A		Neuroanatomy and Neuropathology	15	1	0	0	0	0	16
832			Neurochemistry and Neuropharmacology	30	0	0	0	0	0	30
833			Neuro Science in General	63	1	1	0	0	0	65
834			Neuro and Muscular Physiology	41	2	0	0	0	0	43
			Neuro Science (inclu. Brain Science) total	149	4	1	0	0	0	154
841			Laboratory Animal Science	8	0	0	0	0	1	9
851			Medical Organism Engineering and Material Science of Organism	105	1	4	0	0	0	110
			INTERDISCIPLINARY AREA Total	1,755	88	40	50	1	5	1,939
999			WIDE AREA Total	184	19	0	4	0	1	208
			Item n.a. Total	5,922	130	137	97	6	22	6,314
			Grand Total	17,804	491	378	248	17	63	19,001

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total	
211	ARTS • HUMANITIES		Philosophy	10	0	1	0	0	11	
212			Chinese Philosophy	8	0	0	0	0	8	
213			Indian Philosophy (inclu. Buddhist Studies)	3	0	1	1	0	5	
214			Religion	3	0	0	0	0	3	
215			Ethics	12	0	0	0	0	12	
216			History of Philosophy	4	0	0	0	0	4	
217			Aesthetics (inclu. Arts)	20	1	0	0	0	21	
218			Art History	5	0	0	1	1	7	
		Philosophy total		65	1	2	2	1	71	
221				Experimental Psychology	40	1	0	2	0	43
222				Educational and Social	73	0	0	0	0	73
223				Sociology	30	0	0	0	0	30
224				Education	59	0	1	4	0	64
225				Cultural Anthropology (inclu. Ethnology and Folklore)	23	0	0	4	0	27
		Psychology • Sociology • Education Cultural Anthropology total		225	1	1	10	0	237	
231				Japanese History	11	0	1	1	0	13
232				Oriental History	25	0	0	0	0	25
233				European History	6	0	0	1	0	7
234				Archaeology (inclu. Prehistory)	10	0	0	0	0	10
		History total		52	0	1	2	0	55	
241				Japanese Language	8	0	0	0	2	10
242				Japanese Literature	9	0	1	1	0	11
243				Chinese Language and Literature	14	1	0	0	0	15
244				English Language and Literature	37	0	2	0	0	39
245				French Language and Literature	14	0	0	0	0	14
246				German Language and Literature	8	0	0	0	0	8
247				Other Foreign Languages and Literatures	14	0	0	0	0	14
248				Linguistics and Phonetics	32	0	4	0	0	36
249				Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	7	0	0	0	0	7
		Literature total		143	1	7	1	2	154	
	ARTS•HUMANITIES Total			485	3	11	15	3	517	
261	LAW		Basic Science of Law	5	0	0	0	0	5	
262			Public Law	7	0	0	0	0	7	
263			International Law	7	0	0	0	0	7	
264			Civil Law	6	0	0	0	0	6	
265			Social Law	5	0	0	0	0	5	
266			Criminal Law	2	0	0	0	0	2	
267			Politics	20	0	1	0	0	21	
	LAW Total		52	0	1	0	0	53		
271	ECONOMICS		General Theory of Economics	26	0	0	0	0	26	
272			Economical Statistics	7	0	0	0	0	7	
273			Economic Policy (inclu. Economic Condition)	24	0	0	0	0	24	
274			Economic History	3	0	0	0	0	3	
275			Public Finance, Money and Banking	15	0	0	0	0	15	
276			Commercial Science	2	0	0	0	0	2	
277			Business Administration	15	0	0	0	0	15	
278			Accounting	5	0	0	0	0	5	
	ECONOMICS Total		97	0	0	0	0	97		
301	SCIENCE		Algebra	19	0	2	0	0	21	
302			Geometry	31	0	1	0	0	32	
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	46	0	4	0	0	50	
305			Basic Analysis	33	0	2	0	0	35	
306			Larger-area Analysis	23	0	0	0	0	23	
		Mathematics total		152	0	9	0	0	161	
311		Astronomy		28	0	1	7	0	36	
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	99	0	0	18	1	118	

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
322	S		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	52	0	1	0	0	53
323			Solid-State Physics II (Magnetism, Metal Physics,	48	1	4	0	0	53
324			Physical Properties in General (inclu. Basic Theories)	37	0	1	3	0	41
325			Physics in General	34	0	4	6	0	44
			Physics total	270	1	10	27	1	309
331		C	Physics of Solid Earth	42	0	0	6	0	48
332			Meteorology, Oceanography and Hydrology	32	0	1	2	0	35
333			Aeronomy	6	0	1	2	0	9
334			Geology	27	0	0	0	0	27
335			Stratigraphy and Paleontology	12	0	0	0	0	12
336		I	Mineralogy, Petrology and Study of Mineral Deposit	31	0	0	0	1	32
337			Geochemistry	19	0	2	1	0	22
		E	Earth Science total	169	0	4	11	1	185
341		N	Physical Chemistry	62	0	0	1	0	63
342			Organic Chemistry	48	0	0	0	0	48
343			Inorganic Chemistry	28	0	0	0	0	28
344			Function, Properties and Materials in Chemistry	43	0	1	0	0	44
345			Substance Transformation	3	0	0	0	0	3
346		E	Separation, Refining and Identification	20	1	2	0	0	23
			Chemistry total	204	1	3	1	0	209
351			Genetics	31	0	0	2	0	33
352			Ecology	51	0	0	3	0	54
353			Plant Physiology	27	0	0	0	0	27
354			Morphology, Structure of	15	0	0	0	0	15
355			Animal Physiology and	18	0	0	0	0	18
356			Morphology and Taxonomy	16	0	0	0	5	21
			Biology total	158	0	0	5	5	168
361			Physical Anthropology (inclu. Physiological Anthropology)	12	0	0	0	0	12
	SCIENCE Total			993	2	27	51	7	1,080
401	E	N	Applied Physics of Property and Crystallography	28	0	1	0	0	29
402			Surface Physics	24	0	0	0	0	24
403			Applied Optics and Quantum	35	0	2	0	0	37
404			General Applied Physics	11	0	2	2	0	15
405			Fundamentals of Engineering	15	0	1	2	0	18
		G	Applied Physics·Fundamentals of Engineering total	113	0	6	4	0	123
411		I	Materials for Machines and Strength of Materials	48	0	7	1	0	56
412		N	Workshop Processes and Production Engineering	28	0	7	0	0	35
413		E	Design Engineering, Machine Elements and Tribology	27	1	1	1	0	30
414		E	Fluid Mechanics	50	0	7	0	0	57
415	R	I	Heat Engineering	47	0	7	3	0	57
416			Mechanics and Control	33	0	12	1	0	46
417			Intelligent Mechanics and Machine System	55	0	4	1	0	60
			Machine Engineering total	288	1	45	7	0	341
421	G		Electric Power Engineering and Electric Machinery	57	0	9	3	0	69
422			Electronic and Electric Materials Engineering	65	0	6	1	0	72
423			Electron Devices and Apparatus Engineering	41	0	4	1	0	46
424			Information and Communication Engineering	98	0	12	3	0	113
425			System Engineering	23	0	1	1	0	25
427			Electronic Measurements	47	1	11	0	0	59
428			Control Engineering	38	0	2	0	0	40

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total
			Electric and Electronic Engineering	369	1	45	9	0	424
431			Construction Materials and Dynamics in General Civil Engineering	27	0	3	0	0	30
432			Structural Engineering and Seismology	29	0	3	0	0	32
433			Ground Engineering	41	0	6	0	0	47
434			Hydraulics and River Engineering	41	0	3	0	0	44
435			Traffic Engineering and Regional Planning	32	0	4	0	0	36
436			Civil Environmental System	31	0	2	0	0	33
			Civil Engineering total	201	0	21	0	0	222
441			Building Structure and Materials	33	0	4	0	0	37
442			Building Science and Building Equipment	20	0	0	0	0	20
443			City Planning and Building	36	0	2	0	0	38
444			Architectural History and Design	10	0	0	0	0	10
			Architecture total	99	0	6	0	0	105
451			Physical Metallurgy	30	0	1	0	0	31
452			Inorganic Materials and	40	0	3	0	0	43
453			Composed Materials and	8	0	2	0	0	10
454			Structural and Functional	42	0	1	0	0	43
455			Metallurgy and Material	39	1	3	0	0	43
456			Metal Productive Engineering	16	0	0	0	0	16
			Material Engineering total	175	1	10	0	0	186
461			Chemical Engineering in General	30	0	2	0	0	32
462			Reaction and Separation Engineering	16	0	0	0	0	16
463			Catalyst and Chemical Process	14	0	0	0	0	14
464			Bioengineering	22	0	3	0	0	25
465			Industrial Analytical Chemistry	7	0	1	0	0	8
			Process Engineering total	89	0	6	0	0	95
471			Industrial Physical Chemistry	35	0	0	0	0	35
472			Industrial Inorganic Chemistry	16	0	0	0	0	16
473			Industrial Organic Chemistry	10	0	0	0	0	10
474			Synthetic Chemistry	33	0	2	0	0	35
475			Polymer Synthesis	29	0	1	0	0	30
476			Polymer Structure and Property (inclu. Fiber)	30	0	1	1	0	32
			Industrial Chemistry total	153	0	4	1	0	158
481			Aeronautics	17	0	1	7	0	25
482			Ship Engineering	19	0	1	0	0	20
483			Marine Engineering	7	0	0	0	0	7
484			Resource Development	16	0	1	0	0	17
			Synthetic Engineering total	59	0	3	7	0	69
			ENGINEERING Total	1,546	3	146	28	0	1,723
501			Plant Breeding	14	0	0	0	0	14
502			Crop Science	15	0	1	0	0	16
503			Horticulture and Landscape Architecture	22	0	0	0	0	22
504			Plant Protection	27	0	0	0	0	27
505			Sericultural Science and Economic Entomology	3	0	0	0	0	3
			Agriculture total	81	0	1	0	0	82
511			Plant Fertilizer and Manure and Soil Science	16	0	0	0	0	16
512			Applied Microbiochemistry and Applied Biochemistry	52	0	2	0	0	54
513			Biological Productive Chemistry and Bioorganic Chemistry	20	0	0	0	0	20
514			Food Science and Nutritional Chemistry	38	0	0	0	0	38
			Agricultural Chemistry total	126	0	2	0	0	128
521			Forestry	34	0	0	2	0	36
522			Wood Science	36	0	0	0	0	36
			Forestry total	70	0	0	2	0	72
531			Fisheries in General	47	0	1	0	0	48
532			Fisheries Chemistry	16	0	0	0	0	16
			Fisheries total	63	0	1	0	0	64

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Inter- University Research Institutes	Government Research Institutes	Total	
541	C U L T U R E	Agricultural Economics	Agricultural Economics	16	0	0	1	0	17	
551			Irrigation, Drainage and Reclamation Engineering and Agricultural Machinery	22	0	0	0	0	22	
552				21	0	0	0	0	21	
553				Biological Environment	10	0	0	0	0	10
				Agricultural Engineering total	53	0	0	0	0	53
561		Animal Science and Grassland Science	13	0	0	0	0	13		
562			Applied Animal Science	24	0	0	0	0	24	
563			Basic Veterinary Medicine and Basic Animal Science	18	0	0	0	0	18	
564			Applied Veterinary Medicine	16	0	0	0	0	16	
		Animal Science·Veterinary Medicine total	71	0	0	0	0	71		
571			Biological Resource Science	8	0	0	0	0	8	
572			Applied Molecular Cell Biology	8	0	0	0	0	8	
			Interdisciplinary Agricultural Science total	16	0	0	0	0	16	
		AGRICULTURE Total			496	0	4	3	0	503
601	M E D I C I N E	Physiology	Anatomy in General (inclu. Histology, Embryology)	29	0	0	0	0	29	
602			Physiology in General	34	0	0	0	0	34	
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	14	0	0	0	0	14	
604			Pharmacology in General	28	0	0	0	0	28	
605			Medical Chemistry in General	20	0	0	0	0	20	
606			Pathological Medical Chemistry	14	0	0	0	0	14	
			Physiology total	139	0	0	0	0	139	
611		Hominal Pathology	27	0	0	0	0	27		
612			Experimental Pathology	22	0	0	0	0	22	
613			Parasitology (inclu.Medical	16	0	0	0	0	16	
614		Bacteriology (inclu. Eumycetes)	16	1	0	0	0	17		
615			Virology	23	0	0	0	0	23	
616		Immunology	34	2	0	0	0	36		
		Pathology total	138	3	0	0	0	141		
621		Hygiene	11	0	0	0	0	11		
622			Public Health and Health Science	46	3	0	0	0	49	
623			Legal Medicine	12	0	0	0	0	12	
			Social Medicine total	69	3	0	0	0	72	
631		Internal Medicine	Internal Medicine in General	38	1	0	0	0	39	
632			Gastroenterology	46	0	0	0	0	46	
633			Internal Medicine Respiratory System	16	0	0	0	0	16	
634			Neurological Medicine	36	0	0	0	0	36	
635			Cardioangiology	48	0	0	0	0	48	
636			Pediatrics	39	0	0	0	0	39	
637			Dermatology	24	0	0	0	0	24	
638			Radiology	60	1	0	0	0	61	
639			Neuropsychiatry	28	0	0	0	0	28	
641			Hematology	33	0	0	0	0	33	
642			Internal Medicine of Kidney	23	0	0	0	0	23	
643			Embryology and Newborn	2	0	0	0	0	2	
644			Endocrinology	14	0	0	0	0	14	
645			Metabolic Science	25	0	0	0	0	25	
			Internal Medicine total	432	2	0	0	0	434	
651	Surgery	Surgery in General	35	0	0	0	0	35		
652		Gastroenterological Surgery	38	0	0	0	0	38		
653		Thoracic Surgery	24	0	0	0	0	24		
654		Neurosurgery	37	0	0	0	0	37		
655		Orthopedic Surgery	58	1	0	0	0	59		
656		Anesthesiology and Rescue Medicine	30	0	0	0	0	30		
657		Urology	40	0	0	0	0	40		
658		Obstetrics and Gynecology	26	0	0	0	0	26		
659		Oto-rhino-laryngology	20	0	0	0	0	20		
660		Ophthalmology	28	0	0	0	0	28		
661		Pediatric Surgerv	10	0	0	0	0	10		

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
662	M		Formative Surgery	2	0	0	0	0	2
			Surgery total	348	1	0	0	0	349
671	E		Oral Anatomy and Morphological Basic Dentistry	22	0	0	0	0	22
672	D		Functional Basic Dentistry	20	0	0	0	0	20
673	I		Morbid Dentistry (inclu. Dental Radiology)	13	0	0	0	0	13
674	C		Conservative Dentistry	23	0	0	0	0	23
675			Prosthodontics and Dental Technology	51	0	0	0	0	51
676	I		Oral Surgery	49	0	0	0	0	49
677	N		Orthodontics, Pedodontics and Social Dentistry	56	0	0	0	0	56
678			Periodontological Dentistry	10	0	0	0	0	10
	E		Dentistry total	244	0	0	0	0	244
681			Chemical Pharmaceutics	23	0	0	0	0	23
682			Physical Pharmaceutics	11	0	0	0	0	11
683			Biopharmaceutics	24	0	0	0	0	24
684			Molecular Pharmaceutics	15	0	0	0	0	15
685			Environmental Pharmaceutics	5	0	0	0	0	5
			Pharmaceutics total	78	0	0	0	0	78
691			Medical Sociology	10	0	0	0	0	10
692			Human Genetics	10	0	0	0	0	10
693			Applied Pharmacology and Medical Pharmacology	15	0	0	0	0	15
694			Pathological Examination	14	1	0	0	0	15
696			Science of Basic and Local Nursing	21	3	0	0	0	24
697			Science of Clinical Nursing	22	3	0	0	0	25
			Medicine in General total	92	7	0	0	0	99
			MEDICINE Total	1,540	16	0	0	0	1,556
702	I		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	5	0	0	1	0	6
703	N		Physical Education	70	0	2	0	0	72
704	T		Human Geography	15	0	0	0	0	15
705	R		Physical Geography	11	0	0	0	0	11
	D		Geography total	26	0	0	0	0	26
706	I		Home Science (inclu. Cloth/Living Environments)	21	0	0	0	0	21
707	S		Food Culture	10	0	0	0	0	10
	C		Domestic Science total	31	0	0	0	0	31
708	P		Science of Cultural Property	1	1	0	0	0	2
711			Science Education	20	0	1	0	0	21
712			Educational Engineering	13	0	2	6	0	21
713			Curriculum Studies	43	0	3	0	0	46
714			Japanese Language Education	13	0	0	0	1	14
			Science Education·Curriculum Education total	89	0	6	6	1	102
721	A		Statistics	10	0	0	1	0	11
731			Computer Science	81	0	6	1	0	88
732			Intelligent Informatics	78	0	9	4	0	91
733			Study of Information System (Inclu. Library and Information)	27	0	2	9	0	38
			Information Science total	186	0	17	14	0	217
741			Social System Engineering	33	0	0	0	0	33
751			Natural Disaster Science	9	0	0	0	0	9
761			Plasma Science and Technology	29	0	0	10	0	39
772	I		Nuclear Fusion	11	0	0	11	0	22
773	N		Energy Science General	15	0	2	0	0	17
774	T		Nuclear Power Science	33	0	0	3	0	36
	E		Energy total	59	0	2	14	0	75
801	R		Environmental Dynamic Analysis	25	0	0	1	0	26
802	D		Environmental Influence Assessment (inclu. Radiobiology)	21	0	0	0	0	21
803	S		Environmental Preservation	34	1	1	1	0	37
	C		Environmental Science total	80	1	1	2	0	84
811	I		Biological Organic Chemistry	25	0	1	0	0	26
812	P		Structured Biochemistry	21	0	0	0	0	21

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Inter-University Research Institutes	Government Research Institutes	Total
813	L I N E A R Y A R E A		Functional Biochemistry	24	0	0	0	0	24
			Biological Chemistry total	70	0	1	0	0	71
821			Biophysics	24	0	1	1	0	26
822			Molecular Biology	63	0	1	0	0	64
823			Cell Biology	38	0	0	1	0	39
824			Developmental Biology	14	0	0	0	0	14
			Basic Biology total	139	0	2	2	0	143
831			Neuroanatomy and	7	1	0	0	0	8
832			Neurochemistry and Neuropharmacology	15	0	0	0	0	15
833			Neuro Science in General	39	0	1	0	0	40
834			Neuro and Muscular Physiology	19	0	0	0	0	19
			Neuro Science (inclu. Brain Science) total	80	1	1	0	0	82
841			Laboratory Animal Science	6	0	0	0	0	6
851			Medical Organism Engineering and Material Science of Organism	61	0	3	0	0	64
	INTERDISCIPLINARY AREA Total			984	3	35	50	1	1,073
999	WIDE AREA Total			76	4	0	4	0	84
	Item n.a. Total			3,551	10	129	97	6	3,793
	Grand Total			9,820	41	353	248	17	10,479

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
211	ARTS • HUMANITIES		Philosophy	1	0	0	1
212			Chinese Philosophy	1	0	0	1
213			Indian Philosophy (inclu. Buddhist Studies)	1	1	0	2
214			Religion	0	0	1	1
215			Ethics	4	0	0	4
216			History of Philosophy	0	0	0	0
217			Aesthetics (inclu. Arts)	12	1	0	13
218			Art History	3	1	0	4
			Philosophy total	22	3	1	26
221			Experimental Psychology	5	0	0	5
222			Educational and Social	5	0	0	5
223			Sociology	15	1	0	16
224			Education	4	0	0	4
225			Cultural Anthropology (inclu. Ethnology and Folklore)	3	0	0	3
			Psychology • Sociology • Education Cultural Anthropology total	32	1	0	33
231			Japanese History	2	0	0	2
232			Oriental History	2	0	0	2
233			European History	3	0	0	3
234			Archaeology (inclu. Prehistory)	0	0	0	0
			History total	7	0	0	7
241			Japanese Language	0	0	0	0
242			Japanese Literature	0	1	0	1
243			Chinese Language and Literature	3	0	0	3
244			English Language and Literature	6	0	0	6
245			French Language and Literature	3	0	0	3
246			German Language and Literature	3	0	0	3
247			Other Foreign Languages and Literatures	2	0	0	2
248			Linguistics and Phonetics	9	1	0	10
249			Literature in General (inclu. Literary Theory, Comparative Literature) and Western Classics	0	1	0	1
			Literature total	26	3	0	29
			ARTS • HUMANITIES Total	87	7	1	95
261	LAW		Basic Science of Law	1	0	0	1
262			Public Law	0	0	0	0
263			International Law	1	0	0	1
264			Civil Law	1	0	0	1
265			Social Law	0	0	0	0
266			Criminal Law	0	0	0	0
267			Politics	4	0	0	4
			LAW Total	7	0	0	7
271	ECONOMICS		General Theory of Economics	7	0	0	7
272			Economical Statistics	2	0	0	2
273			Economic Policy (inclu. Economic Condition)	8	0	0	8
274			Economic History	2	0	0	2
275			Public Finance, Money and Banking	0	0	0	0
276			Commercial Science	2	0	0	2
277			Business Administration	4	0	0	4
278			Accounting	2	0	0	2
			ECONOMICS Total	27	0	0	27
301	SCIENCE		Algebra	7	0	0	7
302			Geometry	3	0	0	3
304			Mathematics in General (inclu. Probability Theory and Mathematical Statistics)	6	0	0	6
305			Basic Analysis	4	0	0	4
306			Larger-area Analysis	1	0	0	1
			Mathematics total	21	0	0	21
311			Astronomy	0	0	0	0
321			Elementary Particles Physics, Nuclear Physics, Cosmic Ray Physics, and Cosmic Physics	5	0	0	5

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
322	S C I E N C E		Solid-State Physics I (Optical Properties, Semiconductor and Dielectrics)	3	0	0	3
323			Solid-State Physics II (Magnetism, Metal Physics,	6	0	0	6
324			Physical Properties in General (inclu. Basic Theories)	3	0	1	4
325			Physics in General	4	0	0	4
			Physics total	21	0	1	22
331			Physics of Solid Earth	0	0	0	0
332			Meteorology, Oceanography and Hydrology	2	0	0	2
333			Aeronomy	0	0	0	0
334			Geology	1	0	0	1
335			Stratigraphy and Paleontology	4	0	0	4
336			Mineralogy, Petrology and Study of Mineral Deposit	0	0	0	0
337			Geochemistry	0	0	0	0
			Earth Science total	7	0	0	7
341			Physical Chemistry	14	1	0	15
342			Organic Chemistry	7	0	0	7
343			Inorganic Chemistry	1	1	0	2
344			Function, Properties and Materials in Chemistry	5	0	0	5
345			Substance Transformation	0	0	0	0
346			Separation, Refining and Identification	1	0	0	1
			Chemistry total	28	2	0	30
351			Genetics	3	0	0	3
352			Ecology	5	0	0	5
353			Plant Physiology	9	0	0	9
354			Morphology, Structure of Organism	2	0	0	2
355			Animal Physiology and	3	0	0	3
356			Morphology and Taxonomy	0	0	0	0
			Biology total	22	0	0	22
361			Physical Anthropology (inclu. Physiological Anthropology)	0	0	0	0
	SCIENCE Total			99	2	1	102
401	E N G I N E E R I N G		Applied Physics of Property and Crystallography	6	0	0	6
402			Surface Physics	2	0	0	2
403			Applied Optics and Quantum Optics	3	0	0	3
404			General Applied Physics	1	0	0	1
405			Fundamentals of Engineering	0	0	0	0
			Applied Physics-Fundamentals of Engineering total	12	0	0	12
411			Materials for Machines and Strength of Materials	6	0	0	6
412			Workshop Processes and Production Engineering	4	1	0	5
413			Design Engineering, Machine Elements and Tribology	1	0	0	1
414			Fluid Mechanics	5	0	0	5
415			Heat Engineering	4	0	1	5
416			Mechanics and Control Engineering	3	0	1	4
417			Intelligent Mechanics and Machine System	2	0	0	2
			Machine Engineering total	25	1	2	28
421			Electric Power Engineering and Electric Machinery	3	0	2	5
422			Electronic and Electric Materials Engineering	5	0	0	5
423			Electron Devices and Apparatus Engineering	4	0	0	4
424			Information and Communication Engineering	19	1	1	21

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

Code	Subj ect	Subd ivisi on	I t e m	Universities	Junior Colleges	Colleges of Technology	Total
425	E N G I N E E R I N G		System Engineering	1	0	0	1
427			Electronic Measurements	2	0	1	3
428			Control Engineering	7	0	0	7
			Electric and Electronic Engineering	41	1	4	46
431			Construction Materials and Dynamics in General Civil Engineering	1	0	0	1
432			Structural Engineering and Seismology	3	0	0	3
433			Ground Engineering	4	0	0	4
434			Hydraulics and River Engineering	1	0	1	2
435			Traffic Engineering and Regional Planning	3	0	0	3
436			Civil Environmental System	2	0	0	2
			Civil Engineering total	14	0	1	15
441		N	Building Structure and Materials	4	0	0	4
442			Building Science and Building Equipment	4	0	0	4
443			City Planning and Building Planning	6	0	0	6
444			Architectural History and Design	0	0	0	0
			Architecture total	14	0	0	14
451		N	Physical Metallurgy	2	0	0	2
452			Inorganic Materials and	1	0	0	1
453			Composed Materials and Properties	3	0	0	3
454			Structural and Functional Materials	3	0	0	3
455		R	Metallurgy and Material	1	0	0	1
456			Metal Productive Engineering	0	0	0	0
			Material Engineering total	10	0	0	10
461		I	Chemical Engineering in General	2	0	0	2
462			Reaction and Separation Engineering	0	0	0	0
463			Catalyst and Chemical Process	1	0	0	1
464			Bioengineering	5	0	0	5
465			Industrial Analytical Chemistry	2	0	0	2
			Process Engineering total	10	0	0	10
471			Industrial Physical Chemistry	3	0	0	3
472			Industrial Inorganic Chemistry	2	0	0	2
473			Industrial Organic Chemistry	1	0	0	1
474			Synthetic Chemistry	2	0	0	2
475			Polymer Synthesis	3	0	0	3
476			Polymer Structure and Property (inclu. Fiber)	2	0	0	2
			Industrial Chemistry total	13	0	0	13
481			Aeronautics	0	0	0	0
482			Ship Engineering	3	0	0	3
483			Marine Engineering	1	0	0	1
484			Resource Development Engineering	0	0	0	0
			Synthetic Engineering total	4	0	0	4
			ENGINEERING Total	143	2	7	152
501	A G R I C U L T U R E		Plant Breeding	2	1	0	3
502			Crop Science	2	0	0	2
503			Horticulture and Landscape Architecture	7	0	0	7
504			Plant Protection	1	0	0	1
505			Sericultural Science and Economic Entomology	0	0	0	0
			Agriculture total	12	1	0	13
511			Plant Fertilizer and Manure and Soil Science	2	0	0	2
512			Applied Microbiochemistry and Applied Biochemistry	4	0	0	4
513			Biological Productive Chemistry and Bioorganic Chemistry	2	0	0	2
514			Food Science and Nutritional Chemistry	8	1	0	9

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
	A		Agricultural Chemistry total	16	1	0	17
521			Forestry	1	0	0	1
522	G		Wood Science	1	0	0	1
			Forestry total	2	0	0	2
531	R		Fisheries in General	0	0	0	0
532			Fisheries Chemistry	0	0	0	0
			Fisheries total	0	0	0	0
541	I		Agricultural Economics	1	0	0	1
551	C		Irrigation, Drainage and Reclamation Engineering and Rural Planning	0	1	0	1
552	U		Agricultural Machinery	0	0	0	0
553	L		Biological Environment	1	0	0	1
			Agricultural Engineering total	1	1	0	2
561	T		Animal Science and Grassland Science	0	0	0	0
562	U		Applied Animal Science	0	0	0	0
563	R		Basic Veterinary Medicine and Basic Animal Science	1	0	0	1
564			Applied Veterinary Medicine	3	0	0	3
	E		Animal Science-Veterinary Medicine total	4	0	0	4
571			Biological Resource Science	2	0	0	2
572			Applied Molecular Cell Biology	2	0	0	2
			Interdisciplinary Agricultural Science total	4	0	0	4
			AGRICULTURE Total	40	3	0	43
601			Anatomy in General (inclu. Histology, Embryology)	5	0	0	5
602			Physiology in General	9	0	0	9
603			Environmental Physiology (inclu. Physical Fitness and Sports Medicine, and Nutritional Physiology)	4	0	0	4
604			Pharmacology in General	3	0	0	3
605			Medical Chemistry in General	4	0	0	4
606			Pathological Medical Chemistry	1	0	0	1
	M		Physiology total	26	0	0	26
611			Hominal Pathology	6	0	0	6
612	E		Experimental Pathology	3	0	0	3
613	D		Parasitology (inclu. Medical Zoology)	3	0	0	3
614			Bacteriology (inclu. Eumycetes)	4	0	0	4
615	I		Virology	0	0	0	0
616			Immunology	0	0	0	0
			Pathology total	16	0	0	16
621	C		Hygiene	5	1	0	6
622	I		Public Health and Health Science	13	0	0	13
623			Legal Medicine	3	0	0	3
			Social Medicine total	21	1	0	22
631	N		Internal Medicine in General	15	0	0	15
632	E		Gastroenterology	11	0	0	11
633			Internal Medicine Respiratory System	4	0	0	4
634			Neurological Medicine	6	0	0	6
635			Cardioangiopathy	13	1	0	14
636			Pediatrics	8	0	0	8
637			Dermatology	7	0	0	7
638			Radiology	3	0	0	3
639			Neuropsychiatry	5	0	0	5
641			Hematology	2	1	0	3
642			Internal Medicine of Kidney	3	0	0	3
643			Embryology and Newborn	2	0	0	2
644			Endocrinology	3	0	0	3
645			Metabolic Science	2	0	0	2
			Internal Medicine total	84	2	0	86
651			Surgery in General	5	0	0	5
652			Gastroenterological Surgery	8	0	0	8
653			Thoracic Surgery	3	0	0	3

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
654	M		Neurosurgery	5	0	0	5
655			Orthopedic Surgery	13	1	0	14
656			Anesthesiology and Rescue Medicine	11	0	0	11
657			Urology	3	0	0	3
658			Obstetrics and Gynecology	6	0	0	6
659			Oto-rhino-laryngology	1	0	0	1
660			Ophthalmology	1	0	0	1
661			Pediatric Surgery	1	0	0	1
662			Formative Surgery	2	0	0	2
			Surgery total	59	1	0	60
671	E		Oral Anatomy and Morphological Basic Dentistry	1	0	0	1
672	D		Functional Basic Dentistry	1	0	0	1
673	I		Morbid Dentistry (inclu. Dental Radiology)	2	0	0	2
674	C		Conservative Dentistry	0	1	0	1
675			Prosthodontics and Dental Technology	1	0	0	1
676	I		Oral Surgery	6	0	0	6
677	N		Orthodontics, Pedodontics and Social Dentistry	1	0	0	1
678			Periodontological Dentistry	0	0	0	0
	E		Dentistry total	12	1	0	13
681			Chemical Pharmaceutics	5	0	0	5
682			Physical Pharmaceutics	0	0	0	0
683			Biopharmaceutics	4	0	0	4
684			Molecular Pharmaceutics	1	0	0	1
685			Environmental Pharmaceutics	0	0	0	0
		Pharmaceutics total	10	0	0	10	
691			Medical Sociology	1	1	0	2
692			Human Genetics	0	0	0	0
693			Applied Pharmacology and Medical Pharmacology	0	0	0	0
694			Pathological Examination	0	1	0	1
696			Science of Basic and Local Nursing	12	1	0	13
697			Science of Clinical Nursing	21	1	0	22
			Medicine in General total	34	4	0	38
			MEDICINE Total	262	9	0	271
702	I N T E R D I S C I P L I N A R Y		History of Science and Technology (inclu. Sociology of Science, and Basic Theory of Science and Technology)	1	0	0	1
703			Physical Education	12	2	0	14
704			Human Geography	2	0	0	2
705			Physical Geography	2	0	0	2
			Geography total	4	0	0	4
706			Home Science(inclu. Cloth/Living Environments)	1	4	0	5
707			Food Culture	6	2	0	8
			Domestic Science total	7	6	0	13
708			Science of Cultural Property	0	0	0	0
711			Science Education	0	0	1	1
712	A R E A		Educational Engineering	4	0	0	4
713			Curriculum Studies	3	1	0	4
714			Japanese Language Education	2	0	0	2
			Science Education·Curriculum Education total	9	1	1	11
721			Statistics	2	0	0	2
731			Computer Science	12	0	0	12
732			Intelligent Informatics	11	0	1	12
733			Study of Information System (Inclu. Library and Information Science)	4	0	0	4
			Information Science total	27	0	1	28
741			Social System Engineering	6	2	0	8
751	I		Natural Disaster Science	0	0	0	0
761			Plasma Science and Technology	3	0	0	3
772			Nuclear Fusion	0	0	0	0

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

Code	Subject	Subdivision	Item	Universities	Junior Colleges	Colleges of Technology	Total
773	N T E R D I S C I P L I N A R Y A R E A		Energy Science General	3	0	0	3
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	2	0	5
803			Environmental Preservation	3	0	0	3
			Environmental Science total	10	2	0	12
811			Biological Organic Chemistry	5	0	0	5
812			Structured Biochemistry	0	0	0	0
813			Functional Biochemistry	2	1	0	3
			Biological Chemistry total	7	1	0	8
821	N A R Y A R E A		Biophysics	4	0	0	4
822			Molecular Biology	5	2	0	7
823			Cell Biology	4	0	0	4
824			Developmental Biology	3	0	0	3
			Basic Biology total	16	2	0	18
831			Neuroanatomy and Neuropathology	3	0	0	3
832			Neurochemistry and Neuropharmacology	3	0	0	3
833			Neuro Science in General	7	0	0	7
834			Neuro and Muscular Physiology	3	0	0	3
			Neuro Science (inclu. Brain Science) total	16	0	0	16
841			Laboratory Animal Science	1	0	0	1
851			Medical Organism Engineering and Material Science of Organism	3	0	1	4
			INTERDISCIPLINARY AREA Total	127	16	3	146
999			WIDE AREA Total	13	2	0	15
			Item n.a. Total	356	18	4	378
			Grand Total	1,161	59	16	1,236