

# Attached Table 3 Appendix Table of Keywords

1) The first stage of the screening of the research fields followed by A or B in the section “Integrated Science and Innovative Science” is carried out in two separate groups. The basis for this division in two groups is the keywords shown in all the research categories (except for “Overseas Academic Research”). Make sure to select A or B based on the keyword, when applying for the research fields in the list.

2) The first stage of the screening of the research fields followed by the numbers 1 to 5 in each category of the division column is carried out in separate groups. The basis for this division in separate groups is the keywords shown in “Scientific Research (C)”. Make sure to select a number from 1 to 5 based on the keyword, when applying for the research fields in the list for “Scientific Research (C)”.

Category: Integrated Science and Innovative Science			(Discipline: Informatics)		
Area: Comprehensive fields			Item Number	Research Field	Screening Sub-panel Number / Keyword
Discipline: Informatics					
1001	Fundamental theory of informatics	A Computational theory	1004	Media informatics/ Database	A Database, media, and information system
		B Automata theory/Formal language theory			A Database (DataBase Management System, DBMS)
		C Theory of programs			B Digital content
		D Computational complexity theory			C Multimedia
		E Algorithm theory			D Information systems
		F Cryptosystem			E Web services
		G Information mathematics			F Mobile systems
		H Mathematical logic			G Information retrieval
		J Discrete structure			H Graphics
		K Computational learning theory			J Visualization
		L Quantum computation theory			K Corpus
		M Combinatorial optimization			L Structured document
					B User interface
					M Human interface
					N User model
	P Groupware				
	Q Virtual reality				
	R Wearable appliance				
	S Universal design				
	T Accessibility				
	U Usability				
1002	Software	A Algorithm engineering	1005	Intelligent informatics	A Search, logic, and inference algorithms
		B Parallel processing/Distributed processing			B Learning and knowledge acquisition
		C Programming paradigm/Programming language theory			C Knowledge bases and knowledge systems
		D Implementation of programming systems			D Intelligent system architecture
		E Operating system			E Intelligent information processing
		F Software engineering			F Natural language processing
		G Software agent			G Knowledge discovery and data mining
		H Specification/Verification of specification			H Intelligent agent
		J Development environment			J Ontology
		K Development management			K Web intelligence
L Embedded software					
1003	Computer system/ Network	A Computer system	1006	Perception information processing/ Intelligent robotics	A Perceptual information processing
		A Computer architecture			A Pattern recognition
		B Circuit and system			B Image processing
		C VLSI design technology			C Speech processing
		D High performance computing			D Computer vision
		E Reconfigurable system			E Information sensing
		F Dependable computing			F Sensor fusion
		G Embedded system			G Sensing devices systems
		B Information network			B Intelligent robotics
		H Network architecture			H Intelligent robot
		J Network protocol			J Behavior and environment recognition
		K Network security technology			K Motion planning
		L Mobile network technology			L Sensory behavior system
		M Transport technology			M Autonomous system
		N Overlay network			N Digital human model
		P Traffic engineering			P Animation
		Q Network management technology			Q Real world information processing
		R Measurement of networks			R Physical agents
		S Ubiquitous computing			S Intelligent room
		T Large scale network simulation			
		U Interoperability			
		V Network node operating system			
		W Network information representation			
		X Basic technology of providing services			

## (Discipline: Informatics)

Item Number	Research Field	Screening Sub-panel Number / Keyword		
1007	Sensitivity informatics/ Soft computing	A Sensitivity informatics		
		A Sensitivity design		
		B Sensitivity expression		
		C Sensitivity recognition		
		D Sensitivity cognition		
		E Sensitivity robotics		
		F Sensitivity measurement evaluation		
		G Ambiguity and sensitivity		
		H Sensitivity information processing		
		J Sensitivity database		
		K Sensitivity interface		
		L Sensitivity physiology		
		M Sensitivity material products		
		N Sensitivity industry		
		P Sensitivity environmental science		
		Q Sensitivity sociology		
		R Sensitivity philosophy		
		S Sensitivity pedagogy		
		T Sensitivity brain science		
		U Sensitivity management		
		B Soft computing		
		V Neural network		
		W Genetic algorithm		
		X Fuzzy theory		
		Y Chaos		
		Z Fractal		
		a Complex systems		
		b Probabilistic information processing		
		1008	Library and information science/ Humanistic social informatics	A Library and information science
				A Library science
				B Information services
				C Library information systems
				D Digital archives
E Information organization				
F Information retrieval				
G Information media				
H Bibliometrics and scientometrics				
J Construction and management of information resources				
B Humanistic social informatics				
K Literature information				
L History information				
M Information sociology				
N Law information				
P Information economics				
Q Management information				
R Educational information				
S Art information				
T Medical information				
U Science and technology information				
V Intellectual property information				
W Geographic information				
1009	Cognitive science			A Cognitive psychology
				B Evolution/Development
				C Learning/Thinking/Memorization
				D Reasoning/Problem solving
		E Sensation/Perception/Attention		
		F Emotion/Feeling/Behavior		
		G Comparative cognitive psychology		
		H Cognitive philosophy		
		J Brain cognitive science		
		K Cognitive linguistics		
		L Comparative decision making theory		
		M Cognitive engineering		
		N Cognitive archaeology		
		P Cognitive model		
		Q Sociability		

## (Discipline: Informatics)

Item Number	Research Field	Screening Sub-panel Number / Keyword
1010	Statistical science	A Research survey and experimental design
		B Multivariate analysis
		C Time series analysis
		D Classification and pattern recognition
		E Statistical inference
		F Computational statistics and computer aided statistics
		G Statistical prediction and statistical control
		H Model selection
		J Optimization theory
		K Pharmaceutical statistical analysis genome
		L Behaviormetrics
		M Mathematical finance
		N Data mining
		P Spatial statistics and environmental statistics
		Q Statistics education
		R Statistical quality control
		S Statistical learning theory
		T Social research and analysis plan
		U Data science
		1011
A Bioinformatics		
B Genome information processing		
C Proteome information processing		
D Computer simulation		
E Biosystem information sciences		
B Vitae system informatics		
F Biological information		
G Neuroinformatics		
H Neural information processing		
J Artificial life system		
K Molecular computing		
L DNA computing		

## Discipline: Cerebral Neuroscience

Item Number	Research Field	Screening Sub-panel Number / Keyword
1101	Neuroscience in general	A Molecular and cellular neuroscience
		B Developmental and regenerative neuroscience
		C Neuroendocrinology
		D Clinical neuroscience
		E Neuroinformatics
		F Cognitive neuroscience
		G Behavioral neuroscience
		H Noninvasive neuroimaging
		J Computational neuroscience
		K Neuropsychology
		L Neuroscience of language
		M Brain Pathology
		1102
A Anatomy of neural tracts		
B Neural network		
C Neurohistology		
D Molecular neurobiology		
E Neural fine structure		
F Neurohistochemistry and neurocytochemistry		
G Neural development and its abnormality		
H Neural regeneration, remodeling and plasticity		
J Experimental morphology of the nervous system		
K Anatomical study of neuroimaging		
L Neurocytology		
B Neuropathology		
M Cellular neuropathology		
N Molecular neuropathology		
P Neurodegenerative diseases		
Q Developmental disorders		
R Senile dementia		
S Cerebrovascular disorders		
T Metabolic diseases		
U Toxic diseases		
V Brain tumors		
W Diseases of the spinal cord		
X Diseases of the muscle and peripheral nerve		

(Discipline: Cerebral Neuroscience)

Item Number	Research Field	Screening Sub-panel Number / Keyword		
1103	Neurochemistry/ Neuropharmacology	A Molecular and cellular neurobiology		
		B Development, differentiation, and aging		
		C Neurotransmitters and receptors		
		D Intracellular signal transduction		
		E Glial cells		
		F Pathophysiology and therapy of neuropsychiatric diseases		
		G Stem cell biology, regeneration, and repair		
		H Neural plasticity		
		J Neuropharmacology		
		K Drug development		
		L Genomic neuroscience		
		1104	Neurophysiology and muscle physiology	A Neurophysiology
				A Neuron, synapse, and neural circuit
B Glia				
C Vision, audition, equilibrium, gustation, and olfaction				
D Somatic and visceral sensation, and pain				
E Posture and motor control				
F Autonomic nervous regulation				
G System neuroscience and neuroinformatics				
H Cognition, language, memory, and emotion				
J Functional neuroimaging				
K Neurogenesis, development, regeneration, and repair				
L Neurological pathophysiology				
B Muscle physiology				
M Muscle contraction mechanism and energetics				
N Excitation-contraction coupling				
P Molecular neurophysiology and molecular motor				
Q Receptors and intracellular signal transduction				
R Neural control of muscle and skeletal, cardiac, and smooth muscles				
S Cardiac excitation and conduction abnormalities				
T Myocardial dysfunction and regeneration				
U Cardiac and smooth muscle remodeling				
V Smooth muscle physiology				
W Skeletal muscle physiology and pathophysiology				
1105	Fusional basic brain science	A Genome brain science		
		B Epigenetics		
		C Brain molecule profiling		
		D Nano brain science		
		E Chemical biology		
		F Medicinal brain science		
		G Brain function probe		
		H Brain imaging		
		J Luminary brain science		
		K Neuron glial cross-interaction		
		L Brain function model animals		
		M Brain function behavioral analysis		
		N Brain and rhythm		
		P Sleep		
1106	Fusional brain recording science	A Brain morphology measurement		
		B Brain function measurement		
		C Real time brain blood flow measurement		
		D Brain activity recording (Recording)		
		E Brain information reading (Decoding)		
		F Sensory information		
		G Kinetic (motor) information		
		H Cognitive information		
		J Higher brain function measurement		
		K Brain information processing		
		L Brain function operation		
		M Brain machine interface		
		1107	Fusional social brain science	A Communication
B Human interaction				
C Social behavior				
D Development and education				
E Sensibility, affectivity and emotion				
F Values, reward and punishment				
G Motivation				
H Neuroeconomics and neuromarketing				
J Political brain science				

Discipline: Laboratory animal science

Item Number	Research Field	Keyword
1201	Laboratory animal science	A Environmental facilities
		B Infectious diseases
		C Cryopreservation
		D Biosafety
		E Disease models
		F Breeding genetics
		G Developmental engineering
		H Laboratory animal welfare
		J Animal experiment technology
		K Bioresource research

Discipline: Biomedical engineering

Item Number	Research Field	Screening Sub-panel Number / Keyword
1301	Biomedical engineering/ Biological material science	A Biomedical engineering
		A Biomedical image
		B Physiome and biosystem
		C Bioinformation and instrumentation
		D Biomechanics
		E Artificial organs, regenerative medicine
		F Biological properties
		G Biomedical control and therapy
		H Biomedical optical engineering, thermal engineering
		J Medical micromachines, nanomachines
		K Nanobiology, nanomedicine
		L Bioimaging
		B Biomaterial science
		M Biomaterials
		N Biofunctional materials
		P Cell/Tissue engineering
		Q Biocompatible materials/Biosuitable materials
		R Intelligent materials
		S Bioconjugate materials
		T Materials for regenerative medicine and engineering
U Drug delivery system		
V Nano-biomaterials		
1302	Medical systems	A Medical ultrasonics
		B Medical imaging system
		C Laboratory examination system
		D Minimally invasive treatment system
		E Remote diagnosis and treatment system
		F Organ preservation and treatment system
		G Medical information system
		H Computational surgery
		J Medical robotics
		1303
A Rehabilitation medicine		
B Disability science		
C Physical therapy		
D Occupational therapy science		
E Speech language and hearing therapy		
F Social welfare and health science		
G Artificial sensory organs		
H Gerontology		
J Clinical psychotherapy		
B Welfare engineering		
K Engineering for health and welfare		
L Technology for activities of daily living		
M Preventive care/Assistive technology		
N Normalization		
P Barrier-free system		
Q Universal design		
R Robotics for welfare and nursing care		
S Technology for substituting biological function		
T Technical aid		
U Human interface		

**Discipline: Health/Sports science**

Item Number	Research Field	Screening Sub-panel Number / Keyword		
1401	Physical education	A Developmental mechanisms and the body works		
		A Educational physiology		
		B Physical systems science		
		C Biological information analysis		
		D Higher brain function science		
		E Physical growth developmental science		
		F Sensory and motor development studies		
		B Mental and physical education and culture		
		G Aesthetic education		
		H Physical environment theory		
		J Kinetic theory of leadership		
		K Pedagogy of physical education		
		L Fitness		
		M Cultural theories of physical movement		
		N Philosophy of the body		
		P Life and death education		
		Q Psychology of physical education		
		R Affective science		
		S Outdoor education		
		T Dance education		
		U Girls gymnastics		
		V Adult life stage elderly gymnastics		
		W Martial arts theory		
		X Motion adaptation life science		
		1402	Sports science	A Sports science
				A Sports philosophy
				B Sports history
				C Sports psychology
				D Sports science management
				E Sports pedagogy
F Training science				
G Sports biomechanics				
H Coaching				
J Sports talent				
K Sports for the disabled				
L Sports sociology				
M Sports environment				
N Cultural anthropology of sport				
B Medical and sport sciences				
P Sports physiology				
Q Sports biochemistry				
R Sports nutrition				
S Energy metabolism				
T Exercise and training				
U Sports disorders				
V Doping				
1403	Applied health science	A Health education/Health promotion activities		
		A Health education		
		B Health promotion		
		C Safety propulsion/Safety education		
		D Pedagogy of health education		
		E Stress management		
		F Smoking/Drug abuse prevention education		
		G School health		
		H AIDS and sex education		
		J Health management		
		K Health information		
		L Nutritional guidance		
		M Physical and mental health		
		N Leisure/Recreation		
		B Applied medical health		
		P Lifestyle diseases		
		Q Exercise prescription and exercise therapy		
		R Aging		
		S Sports medicine		
		T Sports immunology		

**Discipline: Human life science**

Item Number	Research Field	Screening Sub-panel Number / Keyword		
1501	General human life sciences	A Home economy		
		A Family finance and home management		
		B Family relations		
		C Lifestyle		
		D Consumer purchasing activities/Life information		
		E Human life and culture		
		F Life of the aged persons		
		G Care for aged and disabled persons		
		H Livelihood culture		
		J Home economics education		
		B Clothing and dwelling life		
		K Clothing life		
		L Clothing environment		
		M Living and lifestyle		
		N Living environment		
		P Life material		
		Q Living design/Living goods		
		1502	Eating habits, studies on eating habits	A Food and cooking
				A Cooking and processing
				B Food storage
				C Sensory evaluation
				D Food materials
				E Cooking and functional constituent
				F Food service
				G Food culture
				H Texture
				J Food item and mastication
B Diet and health				
K Health and dietary life				
L Diet and nutrition				
M Dietary education				
N Dietary habits				
P Dietary behavior				
Q Dietary information				
R Special nutritious food				
S Food and environment				
T Diet plan				
U Family and dietary life				
V Diet evaluation				
W Food management				

**Discipline: Science education/Educational technology**

Item Number	Research Field	Screening Sub-panel Number / Keyword
1601	Science education	1 A Natural science education (mathematics, science, earth science physical chemical biological information)
		B Engineering education
		C Understanding nature
		D Social awareness of science
		E Science literacy
		F Experiment/Observation
		G Science education curriculum
		H Environmental education
		2 J Industrial technology education
		K Science higher education
		L History of science and technology education
		M Science and sociocultural
		N Science and technology policy
		P Teacher education/Science communicator
1602	Educational technology	A Curriculum/Pedagogy development
		1 B Teaching-learning support systems
		C Distributed collaborative learning system
		D Human interface
		E Instructional materials information system
		F Utilization of media
		G Distance education
		H E-learning
		2 J Computer literacy
		K Media education
		L Learning environment
		M Teacher's education
		N Classroom instruction

**Discipline: Sociology/History of science and technology**

Item Number	Research Field	Keyword
1701	Sociology/History of science and technology	A Sociology of science
		B Bioethics
		C History of science
		D History of technology
		E Medical history
		F Industrial archaeology
		G Philosophy of science/Theory of science
		H Science, technology and society

**Discipline: Cultural property science**

Item Number	Research Field	Keyword
1801	Cultural property science	A Dating methods
		B Material analysis
		C Production technique
		D Conservation science
		E Archaeological prospection
		F Plants and animal bodies/Human remains
		G Cultural property/Cultural heritage
		H Cultural resources
		J Cultural property policy

**Discipline: Museology**

Item Number	Research Field	Keyword
1851	Museology	A Museum Informatics
		B Museum Education, Museum Pedagogy
		C Museum Information Systems, Museum Informatics
		D Museum Business Management
		E Public Financial and Administration of Museums
		F Museum Material Resources
		G History of Museology

**Discipline: Geography**

Item Number	Research Field	Keyword
1901	Geography	A Geography in general
		B Land use/Landscape
		C Environmental system
		D Regional planning
		E Geography education
		F Regional geography
		G Geomorphology
		H Climatology
		J Hydrology
		K Cartography
		L Geographic information system
		M Remote sensing

**Discipline: Oncology**

Item Number	Research Field	Keyword
1951	Carcinogenesis	A Genome instability
		B Epigenetics
		C Cancer genome analysis
		D Chemical carcinogenesis
		E Radiation carcinogenesis
		F Viral carcinogenesis
		G Bacterial infection and carcinogenesis
		H Inflammation and cancer
		J Laboratory animal models
		K Genetically-modified animals

**(Discipline: Oncology)**

Item Number	Research Field	Keyword
1952	Tumor biology	A Oncogene
		B Tumor suppressor gene
		C Signalling and gene expression
		D DNA replication
		E Cell cycle
		F Cancer and heredity
		G Apoptosis
		H Cell polarity
		J Cell adhesion and movement
		K Invasion
		L Metastasis
		M Characteristics of cancer cells
		N Cancer microenvironment
		P Angiogenesis
		Q Lymphangiogenesis
		R Stem cells
		S Cellular senescence
		T Cellular immortalization
1953	Tumor immunology	A Humoral immunity
		B Cell immunity
		C Antibody therapy
		D Immunotherapy
		E Vaccine therapy
		F Cell therapy
1954	Tumor diagnosis	G Cytokine
		H Immunosuppression
		J Immune activation
		A Genome analysis
		B Proteomics analysis
		C Expression analysis
		D Individuality diagnosis of cancer
		E Order-made medical treatment
		F Drug efficacy and calculation
		G Biomarkers
H Tumor markers		
1955	Clinical oncology	J Molecule imaging
		K Epigenome
		L miRNA
		M Functional RNA
		A Antitumor substance research and chemical biology
		B Chemotherapy
		C Molecular target therapy
		D Endocrine therapy
		E Drug delivery
		F Physical therapy
G Gene therapy		
1956	Cancer epidemiology and prevention	H Nucleid acid therapy
		J Cell therapy
		A Biobank
		B Ethnoepidemiology
		C Cohort study
		D Gene-environment interaction
		E Preventive intervention study
F Chemoprevention		
G Interface between cancer study and society		

**Area: New multidisciplinary fields**

**Discipline: Environmental science**

Item Number	Research Field	Screening Sub-panel Number / Keyword
2001	Environmental dynamic analysis	A Environmental change
		B Biogeochemical cycle
		C Environmental measurements
		D Environmental model
		E Environmental information
		F Global warming
		G Global change of water cycle
		H Environmental monitoring of the polar regions
		J Chemical oceanography
		K Biological oceanography
		2002
A Terrestrial, aquatic, and atmospheric impact assessment		
B Impact assessment on ecosystem		
C Impact assessment methods		
D Impact assessment on human health		
E Environmental impact assessment for the future generation		
F Human activities in polar regions		
B Environmental policy		
G Environmental philosophy		
H Environmental economics		
J Environmental management		
K Environmental activities		
L Environment and society		
M Consensus forming		
N Environmental safety and security		
2003	Risk sciences of radiation/ Chemicals	A Risk science of radiation
		A Environmental radiation
		B Protection
		C Basic process
		D Dosimetry assessment
		E Damage
		F Response
		G Repair
		H Sensitivity
		J Impact on life
		K Risk assessment
		B Risk science of chemicals
		L Toxicology
		M Toxic substance to human
N Estimation of trace chemicals pollution		
P Endocrine disrupting substances		
2004	Environmental technology/ Environmental materials	A Environmental technology
		A Environmental conservation technology
		B Environmental restoration technology
		C Resource conservation technology
		D Energy conservation technology
		E Recycling technology
		F Reduction technology of environmental impact
		B Environmental materials
		G Circular material design
		H Circulation and processing
		J Production system of circular materials
		K Human living environment
		L Green chemistry
		M Ecology and environment

**Discipline: Nano/Micro science**

Item Number	Research Field	Screening Sub-panel Number / Keyword
2101	Nanostructural science	A Chemical system
		A Nanostructural chemistry
		B Cluster/Fine particle
		C Nano/Microreaction field
		D Single molecule manipulation
		E Hierarchical structure/Superstructure
		F Surface/Interface nanostructure
		G Self-assembly
		B Physical system
		H Nanostructure properties
		J Mesoscopic physics
		K Nanoprobes
		L Quantum information
		M Nanotribology
2102	Nanomaterials/ Nanobioscience	A Nanomaterials
		A Creation of nanomaterials
		B Analysis and characterization of nanomaterials
		C Nanosurface/Nanointerface
		D Functional nanomaterials
		E Nanometrology
		F Formation/Control of nanostructures
		G Molecular devices
		H Nanoparticle/Nanotubes
		J Single-molecule science
		B Nanobioscience
		K DNA devices
		L Nano synthesis
		M Molecular manipulation
N Biochip		
P Single-molecule biochemistry and physiology		
Q Single-molecule bioinformation science		
R Single-molecule science		
S Single-molecule imaging/Nanometrology		
T Genomic engineering		
2103	Microdevices/ Nanodevices	A Microdevices/Micromachines
		A Microelectromechanical systems/ Nanoelectromechanical systems (MEMS/NEMS)
		B Microfabrication
		C Micro-optical devices
		D Microchemical systems
		E Micro biosystems
		F Micromechanics
		G Microsensors
		B Nanodevices
		H Nanostructure fabrication
		J Self-assembly
		K Nanoparticle
		L Quantum dot
		M Carbon nanotube
N Control of nano-properties		
P Quantum effect		
Q Nanoelectronic devices		
R Nano-optical devices		
S Spin devices		
T Molecular devices		
U Single-quantum devices		
V Nanomachines		

**Discipline: Quantum beam science**

Item Number	Research Field	Screening Sub-panel Number / Keyword
2051	Quantum beam science	A Development of accelerator elemental technology
		B Synchrotron light
		C Neutron
		D Muon
		E Electron • positron
		F Laser
		G Neutrino
		H Ion beam
		J Proton beam
		K Methodology
		L Data processing • analysis
		M Industrial application
		N Medical application
		P Technology of compact quantum beam generator

**Discipline: Social/Safety system science**

Item Number	Research Field	Screening Sub-panel Number / Keyword		
2201	Social systems engineering/ Safety system	A Social systems engineering		
		A Social engineering		
		B Social system		
		C Policy science		
		D Development planning		
		E Management engineering		
		F Management system		
		G Operations research		
		H Quality control		
		J Industrial engineering		
		K Modeling		
		L Logistics		
		M Marketing		
		N Finance		
		P Project management		
		Q Environmental management		
		B Safety system		
		R Safety system		
		S Safety engineering		
		T Crisis management		
		U Urban and social disaster prevention		
		V Fire/Accident		
		W Safety information/Environmental preparation		
		X Community resistance to disaster (evacuation, panic, communication, hazard map)		
		Y Reliability engineering		
		2202	Natural disaster science	A Earthquake and volcano disaster mitigation
				A Seismic motion
B Liquefaction				
C Active fault				
D Tsunami				
E Volcanic eruption				
F Volcanic ejecta/Debris flow				
G Seismic hazard				
H Volcanic hazard				
J Damage prediction/Analysis/Mitigation measures				
K Disaster mitigation and buildings				
B Natural disasters				
L Meteorological disasters				
M Hydrological disasters				
N Geo-hazard				
P Landslide				
Q Drought				
R Snow and ice disasters				
S Natural disaster prediction/Analysis/Measures				
T Lifeline disaster prevention				
U Local disaster preparedness plan and policy				
V Rehabilitation and reconstruction engineering				
W Disaster risk assessment				

**Discipline: Genome science**

Item Number	Research Field	Keyword
2301	Genome biology	A Genome structural diversity
		B Animal genome
		C Plant genome
		D Microbial genome
		E Bacterial flora genome
		F Organelle genome
		G Genome evolution
		H Genome architecture
		J Genome maintenance and restoration
		K Genome function expression
		L Gene expression regulation
		M Transcriptome
		N Proteome
		P Metabolome
		Q Epigenome
		R Genome database
		S Comparative genome

(Discipline: Genome science)

Item Number	Research Field	Keyword		
2302	Medical genome science	A Disease-associated gene		
		B Personalized medicine		
		C Gene diagnosis		
		D Human genome diversity		
		E Genome medicine		
		F Regenerative medicine		
		G Genome-wide association study		
		H Human genome resquencing		
		J Genome of model animals		
		K Disease epigenomics		
		L Human population genetics		
		M Statistical genetics		
		N Medical informatics		
		2303	System genome science	A Gene networks
				B Protein networks
				C Metabolic networks
				D Development and differentiation
E Synthetic biology				
F Database biology				
G Modeling and simulation				
H Bioinformatics				
J Database integration				
K Genome analysis technology				
L Functional RNA				
M Epigenome control				
2304	Applied genomics			A Industrial genome sciences
				A Industrial animal genome
				B Industrial plant genome
				C Bacterial flora in humans and animals
				D Industrial microorganism genome
		E Marker breeding		
		F Genome bioengineering		
		B Environmental genome sciences		
		G Environmental genome		
		H Metagenome		
		J Genome and symbiosis		
		K Biodiversity		
		L Conservation of species		
		M Genetic resource		
		N Biological database		

**Discipline: Living organism molecular science**

Item Number	Research Field	Keyword
2401	Living organism molecular science	A Natural product organic chemistry
		B Secondary metabolite
		C Searching bioactive molecules
		D Chemical modification of biomolecules
		E Biological function related substance
		F Molecular mechanism of activity expression
		G Biosynthesis
		H Design and synthesis of bioactive molecule
		J Combinatorial chemistry
		K Chemical ecology
L Proteomics		
2402	Chemical biology	A in vivo functional expression
		B searching medicines
		C searching diagnosis chemicals
		D searching agricultural chemicals
		E chemical library
		F structure-activity relationship
		G diversity-oriented organic synthesis
		H bioprobe
		J molecular imaging
		K biomolecule measurements
L intracellular chemical reactions		

**Discipline: Resource conservation science**

Item Number	Research Field	Keyword
2501	Resource conservation science	A Conservation biology
		B Biodiversity conservation
		C Conservation of biological strains
		D Conservation of genetic resources
		E Ecosystem conservation
		F Native species conservation
		G Seed conservation
		H Cell/Tissue preservation
		J Microbial culture collections

**Discipline: Area studies**

Item Number	Research Field	Keyword
2601	Area studies	A Europe
		B Russia/Slavic area
		C North America
		D Central and South America
		E East Asia
		F Southeast Asia
		G South Asia
		H West Asia/Central Asia
		J Africa/African history
		K Oceania/Oceanian history
		L Global studies
		M Cross-regional comparative studies
		N Aid/Regional cooperation

**Discipline: Gender**

Item Number	Research Field	Keyword
2701	Gender	A Gender differences/Gender roles
		B Sexuality
		C Social thought/Social movements/History
		D Law/Politics
		E Economy/Work
		F Social policy/Social welfare
		G Body/Expression/Media
		H Science and technology/Medicine/Life
		J Education/Human development
		K Development
		L Violence/Sex workers
		M Cross-cultural comparison
		N Women's studies/Men's studies/Queer studies



**Category: Humanities and Social Sciences**

(Discipline: Literature)

**Area: Humanities**

**Discipline: Philosophy**

Item Number	Research Field	Keyword
2801	Philosophy/ Ethics	A Principles of philosophy/Specific theories of philosophy
		B Principles of ethics/Specific theories of ethics
		C Western philosophy
		D Western ethics
		E Japanese philosophy
		F Japanese ethics
		G Comparative philosophy
		H Philosophy of religion
2802	Chinese philosophy	A Chinese philosophy/Thought
		B Chinese Buddhism
		C Taoism
		D Confucianism
2803	Indian philosophy/ Buddhist studies	A Indian philosophy/Thought
		B Buddhist studies/History of Buddhism
2804	Religious studies	A Religious studies in general
		B History of religions
		C Sociology of religion
		D Philosophy of religion
		E Comparative study of religion
2805	History of thought	A History of Western thought
		B History of Eastern and Japanese thought
		C Comparative history of thought
		D History of religious thought
		E History of social thought
		F History of political thought
		G History of scientific thought
		H History of art theory
2806	Aesthetics/ Art history	A Aesthetics
		B Art history

**Discipline: The arts**

Item Number	Research Field	Keyword
2851	Study of the arts/History of the arts/Arts in general	A Musicology
		B Theory of arts
		C Various studies on arts
		D Culture and representation
		E Popular arts
		F Arts and cultural policy

**Discipline: Literature**

Item Number	Research Field	Keyword
2901	Japanese literature	A Japanese literature in general
		B Ancient literature (Nara and Heian periods)
		C Medieval literature (Kamakura and Muromachi periods)
		D Premodern literature (Edo period)
		E Modern and contemporary literature (after Meiji Restoration)
		F Kanbungaku (Chinese literature in Japan)
		G Bibliography/Philology
		H Literary criticism/Literary theory
2902	Literature in English	A English literature
		B American literature
		C Other literatures in English
		D Bibliography/Philology
		E Literary criticism/Literary theory
		F Comparative literature

Item Number	Research Field	Keyword
2903	European literature (English literature excluded)	A French literature
		B German literature
		C Russian and East European literature
		D Other European literatures
		E Western classics
		F Bibliography/Philology
		G Literary criticism/Literary theory
		H Comparative literature
2904	Literatures/ Literary theories in other countries and areas	A Chinese literature
		B African literature
		C Southeast Asian literature
		D Other literatures
		E Bibliography/Philology
		F Literary criticism/Literary theory
		G Comparative literature

**Discipline: Linguistics**

Item Number	Research Field	Screening Sub-panel Number / Keyword
3001	Linguistics	A Phonetics
		B Phonology
		C Morphology
		D Syntax
		1 E Semantics
		F Pragmatics
		G Discourse analysis
		H Scripts and orthography
		J Lexicography
		K Sociolinguistics
		L Psycholinguistics
		M Biolinguistics
		N Historical linguistics
		2 P French linguistics
Q German linguistics		
R Chinese linguistics		
S Other languages		
T Endangered and minority languages		
3002	Japanese linguistics	A Phonetics/Phonology
		B Grammar
		C Morphology, Semantics
		D Writing systems
		E Stylistics
		F Dialect
		G Language in daily life
		H History of the Japanese language
		J History of Japanese linguistics
		3003
B Grammar		
C Morphology, Semantics		
D Stylistics		
E History of the English language		
F History of English linguistics		
G Diversity of the English language		
3004	Japanese language education	A Systems of Japanese language education/ Language policy
		B Theories on qualified teachers/ Classroom research
		C Teaching methods/Curriculum planning
		D Theory of second language acquisition
		E Educational technology/Teaching materials/Educational media in general
		F Mother tongue retention/Bilingual education
		G Cross-cultural understanding and communication
		H Japanese affairs
		J History of Japanese language education
		K Educational testing and evaluation

**(Discipline: Linguistics)**

Item Number	Research Field	Screening Sub-panel Number / Keyword
3005	Foreign language education	A Systems of foreign language education
		B Theory of foreign language education/History of foreign language education
		C Teaching methods/Curriculum planning
		D Theory of second language acquisition
		1 E Educational technology/Teaching materials/Educational media in general
		F e-Learning/Computer-assisted language learning
		G Cross-cultural communication
		H Educational testing and evaluation
		J Training of foreign language teachers
		2 K English language education in general
		L Early English education

**Discipline: Human geography**

Item Number	Research Field	Keyword
3201	Human geography	A History of geography/Methodology
		B Economic geography/Transportation geography
		C Political geography/Social geography
		D Cultural geography
		E Urban geography
		F Rural geography
		G Historical geography
		H Regional environment/Natural hazards
		J Geography education
		K Regional planning/Regional policy
		L Regional geography
		M Geographic information system
		N History of cartography

**Discipline: History**

Item Number	Research Field	Keyword
3101	Historical studies in general	A World history
		B History of cultural exchange
		C Comparative history
		D Comparative study of civilizations
		E Study of historical materials
		F Globalization
3102	Japanese history	A Ancient history (Nara and Heian periods)
		B Medieval history (Kamakura and Muromachi periods)
		C Early modern history (Edo period)
		D Modern and contemporary history (after Meiji Restoration)
		E Local history
		F Cultural history
		G History of cultural and diplomatic exchange
		H Japanese history in general
		J Research in historical materials
		3103
B Modern and contemporary Chinese history		
C East Asian history		
D Southeast Asian history		
E South Asian history		
F West Asian/Islamic history		
G Central Eurasian history		
H Comparative history/History of cultural and diplomatic exchange		
3104	History of Europe and America	A Ancient European history
		B Medieval European history
		C Modern and contemporary West European history
		D Modern and contemporary East European history
		E Modern and contemporary South European history
		F Modern and contemporary North European history
		G North and South American history
		H Research in historical materials
J Comparative history/History of cultural and diplomatic exchange		
3105	Archaeology	A Archaeology in general
		B Prehistoric studies
		C Historical archaeology
		D Japanese archaeology
		E Asian archaeology
		F Study of ancient civilizations
		G Study of material culture
		H Experimental archaeology
		J Research in buried cultural assets
		K Archaeological informatics

**Discipline: Cultural anthropology**

Item Number	Research Field	Keyword
3301	Cultural anthropology/ Folklore	A Cultural anthropology
		B Folklore
		C Ethnography
		D Social anthropology
		E Comparative folklore
		F Material culture
		G Prehistoric period/Historic period
		H Arts/Performing arts
		J Religion/Rituals
		K Development/Aid
		L Gender
		M Health care
		N Population/Emigration
		P Minority
		Q Ecology/Natural environment
		R Media

**Area: Social sciences**

**Discipline: Law**

Item Number	Research Field	Keyword
3401	Fundamental law	A Legal philosophy/Legal theory
		B Roman law
		C Legal history
		D Sociology of law
		E Comparative law
		F Foreign law
		G Law and policy
		H Law and economics
3402	Public law	A Constitutional law
		B Administrative law
		C Tax law
		D Constitutional theory
		E Legislative studies
		F Constitutional litigation
		G Comparative constitutional law
		H Constitutional history
		J Administrative organization law
		K Administrative procedure
		L Administrative remedies
		M International tax law
		N Judicial law
		3403
B Private international law		
C International human rights law		
D Law of international organizations		
E International economic law		
F Nationality law		
G International civil procedure		
H International trade law		
3404	Social law	A Labor law
		B Economic law
		C Social security law
		D Education law
3405	Criminal law	A Criminal law
		B Criminal procedure
		C Criminology
		D Criminal justice policy
		E Juvenile law
3406	Civil law	A Civil law
		B Commercial law
		C Civil procedure
		D Legal person
		E Business corporate law
		F Financial law
		G Securities law
		H Insurance law
		J International trade law
		K Insolvency law
		L Alternative dispute resolution
		M Civil execution law
		3407
B Medical law		
C Information law		
D Intellectual property law		
E EU law		
F Law and gender		
G Legal education/Legal theory		

**Discipline: Politics**

Item Number	Research Field	Keyword
3501	Politics	A Political theory
		B History of political thought
		C Political history
		D Japanese politics
		E Political process
		F Electoral studies
		G Public administration
		H Comparative politics
		J Public policy
		3502
B Diplomatic history/International history		
C Foreign policy		
D International security		
E International political economy		
F International cooperation (including theories of international regime and international integration)		
G Transnational issues		
H Global issues		

**Discipline: Economics**

Item Number	Research Field	Keyword
3601	Economic theory	A Microeconomics
		B Game theory
		C Macroeconomics
		D Economic theory
		E Political economy
3602	Economic doctrine/ Economic thought	A Economic doctrine
		B History of economics
		C Economic thought
		D History of economic thought
		E Social thought
		F History of social thought
3603	Economic statistics	A Statistical system
		B Statistical research
		C History of statistics
		D History of statistical theory
		E Population statistics
		F Income/Wealth distribution
		G National accounts
		H Econometrics
3604	Applied economics	A International economics
		B Labor economics
		C Theory of industry
		D Industrial organization
		E Urban economics
		F Environmental economics
		G Health economics
		H Regional economics
3605	Economic policy	A Economic policy
		B Economic affairs
		C Japanese economy
		D Social security
		E Economic system
		F Economic development
		G Policy simulation
3606	Public finance/ Monetary economics	A Public finance
		B Public economics
		C Monetary economics
		D Finance
		E International monetary theory
3607	Economic history	A Economic history
		B Business history
		C Industrial history

**Discipline: Business administration**

Item Number	Research Field	Screening Sub-panel Number / Keyword
3701	Business administration	1 A Corporate management
		B Administrative organization
		C Managerial finance
		D Management information
		E Business administration
		F Corporate strategy
		G International management
		2 H Human resource management
		J Management of technology
		K Corporate social responsibility
		L Business ventures
		3702
B Consumer behavior		
C Distribution		
D Commerce		
E Insurance		
3703	Accounting	A Financial accounting
		B Managerial accounting
		C Auditing
		D Bookkeeping
		E International accounting
		F Tax accounting
		G Governmental accounting
		H Environmental accounting

**Discipline: Psychology**

Item Number	Research Field	Keyword		
3901	Social psychology	A Self-process		
		B Social cognition/Emotion		
		C Attitude/Belief		
		D Social interaction/Interpersonal relations		
		E Interpersonal communication		
		F Group/Leadership		
		G Collective phenomena		
		H Industry/Organization		
		J Culture		
		K Social issues		
		L Environmental issues		
		M Media/Electronic network		
		N Personnel		
		P Work		
		Q Consumer affairs		
		3902	Educational psychology	A Lifelong development
				B Parent-child relationship
				C Developmental disabilities
				D Personality
				E Learning process
				F Teaching method
G Classroom group/Management				
H Educational evaluation				
J Educational counseling				
K Counseling				
L Student counseling				
3903	Clinical psychology			A Psychological disorder
		B Crime/Delinquency		
		C Psychological assessment		
		D Psychotherapy		
		E Psychological intervention		
		F Psychological tests		
		G Self-control		
		H Psychological interviewing process		
		J Case study		
		K Self-help group		
		L Therapist's theory		
		M Community support		
3904	Experimental psychology	N Health development		
		P Rehabilitation psychology		
		Q Health psychology		
		A Physiology		
		B Sensation/Perception		
		C Attention		
		D Learning/Behavior analysis		
		E Memory		
		F Thinking		
		G Language		
		H Motivation		
		J Emotion		
K Behavior				
L Data analysis method				
M Consciousness				
N Principle/History				

**Discipline: Sociology**

Item Number	Research Field	Screening Sub-panel Number / Keyword		
3801	Sociology	1 A Social philosophy/Social thought		
		B History of sociology		
		C General theory		
		D Sociological methodology		
		E Social research		
		F Mathematical sociology		
		G Social interaction/Social relations		
		H Social group/Social organization		
		J Institutions/Structure/Social change		
		K Knowledge/Science/Technology		
		L Politics/Power/State		
		M Body/Ego/Identity		
		N Family/Kinship/Population		
		P Community/Village/City		
		Q Industry/Labor/Leisure		
		R Class/Stratification/Social mobility		
		S Culture/Religion/Social consciousness		
		T Communication/Information/Media		
		2 U Gender/Generation		
		V Education/School		
		W Medical care/Welfare		
		X Social problems/Social movements		
		Y Discrimination/Social exclusion		
		Z Environment/Pollution		
		a International community/Ethnicity		
		3802	Social welfare and social work studies	A Principles of social welfare/Social welfare theory
				B Social welfare ideology/Social welfare history
				C Social security/Social welfare policy
				D Social work
				E Poverty/Social exclusion/Discrimination
F Child welfare/Family welfare/Women's welfare				
G Social welfare for disabled persons				
H Social welfare for aged persons				
J Community welfare/Community social work				
K Social work in health care/Care work				
L School social work/Forensic social work				
M Welfare management/Advocacy/Evaluation				
N International welfare/Welfare NGOs				
P Volunteer/Nonprofit social welfare agencies				
Q Social welfare education/Field instruction				

**Discipline: Educaion**

Item Number	Research Field	Screening Sub-panel Number / Keyword
4001	Educaion	A Philosophy of education
		B Educational thought
		C History of education
		D Curriculum theory
		1 E Instructional theory
		F Academic achievement theory
		G Educational methods
		H Educational evaluation
		J Administration and finance of education
		K School management
		L School education
		2 M Early childhood education/Child-care
		N Lifelong learning
		P Adult and community education
		Q Education at home
		R Education policy
4002	Sociology of education	A Sociology of education
		B Economics of education
		C Anthropology of education
		D Education policy
		E Comparative education
		F Human resource development/Development education
		G School system/School culture
		H Teacher/Student culture
		J Youth problems
		K Academic achievement problem
		L Multicultural education
		M Gender and education
		N Education survey method
P Educational information system		
4003	Education on school subjects and activities	1 A Education of individual subjects (Japanese, mathematics, science, social studies, geography/History, civics, life environmental studies, music, art, home economics, technology, English, information)
		B Education of vocational/Professional subject (industry, bussiness, agriculture, fishery, nursing, welfare)
		C Curriculum composition/development
		D Materials development
		2 E Education excluding subject (global learning, moral, special activities)
		F Guidance
		G Career education
4004	Special needs education	A Education for children with disabilities
		B Special needs education
		C Nursing for infants with disabilities
		D Special needs nursing
		E Inclusion
		F Schools for special needs education
		G Classes for special needs education
		H Resource room education
		J Special educational needs
		K Learning difficulty
		L Intellectual disabilities
		M Developmental disabilities
		N Physical disorders
		P Mental disorder
		Q Disease/Illness
		R Behavioral disabilities
		S Severe multiple disabilities
T Parenting difficulties/Abuse		
U School maladjustment		
V Educational counseling		

**Category: Science and Engineering**

(Discipline: Physics)

**Area: Mathematical and physical sciences**

**Discipline: Mathematics**

Item Number	Research Field	Screening Sub-panel Number / Keyword
4101	Algebra	A Number theory
		B Group theory
		C Arithmetic geometry
		1 D Representation theory of groups
		E Lie algebra theory
		F Algebraic combinatorics
		G Algebraic analysis
		H Algebraic geometry
		2 J Ring theory
		K General algebra
		4102
B Complex manifold		
C Topology		
D Complex analytic geometry		
E Differential topology		
4103	General mathematics (including Probability theory/ Statistical mathematics)	A Foundation of mathematics
		B Probability theory
		C Mathematical statistics
		D Applied mathematics
		E Combinatorics
		F Mathematics in information science
		G Discrete mathematics
		H Computational mathematics
		J Mathematical model
		K Self-assembly
		4104
B Real analysis		
C Functional equation		
D Functional analysis		
E Stochastic analysis		
4105	Global analysis	A Global theory of functional equation
		B Calculus of variations
		C Nonlinear phenomena
		D Analysis on manifold
		E Dynamical system
		F Operator algebra
		G Integrable system

**Discipline: Astronomy**

Item Number	Research Field	Keyword
4201	Astronomy	A Optical/Infrared astronomy
		B Radio astronomy
		C Solar physics
		D Astrometry
		E Theoretical astronomy
		F X-ray/ $\gamma$ -ray astronomy

**Discipline: Physics**

Item Number	Research Field	Screening Sub-panel Number / Keyword
4301	Particle/ Nuclear/ Cosmic ray/ Astro physics	A Particle physics (theory)
		B Nuclear physics (theory)
		1 C Cosmic ray (theory)
		D Astrophysics (theory)
		E Relativity/Gravitation (theory)
		F Particle physics (experiment)
		G Nuclear physics (experiment)
		H Cosmic ray (experiment)
		2 J Astrophysics (experiment)
		K Relativity/Gravitation (experiment)
		L Accelerator technology
		M Particle detectors
		4302
B Mesoscopic system/Localization		
C Optical properties		
D Surface/Interface		
E Crystal growth		
F Dielectrics		
G Lattice defects		
H X-ray/Particle beam		
J Phonon properties		

Item Number	Research Field	Screening Sub-panel Number / Keyword
4303	Condensed matter physics II	1 A Magnetism
		B Magnetic resonance
		C Strongly-correlated system
		D High temperature superconductivity
		E Metal
		2 F Ultralow temperature/Condensed quantum system
		G Superconductivity/Density wave system
		H Molecular solid/Organic conductor
4304	Mathematical physics/ Fundamental condensed matter physics	A Statistical physics
		B Fundamental condensed matter theory
		C Mathematical physics
		D Integrable system
		E Non-equilibrium/Nonlinear physics
		F Applied mathematics
		G Dynamics
		H Fluid physics
		J Disordered system
		K Computational physics
		4305
B Quantum electronics		
C Quantum information		
D Radiation		
E Beam physics		
4306	Biophysics/ Chemical physics	A Polymer/Liquid crystal
		B Chemical physics
		C Biophysics
		D Soft matter physics

**Discipline: Earth and planetary science**

Item Number	Research Field	Keyword		
4401	Solid earth and planetary physics	A Earthquake phenomena		
		B Volcanic phenomena		
		C Crustal movement/Sea floor crustal movement		
		D Geomagnetism		
		E Gravity		
		F Observation methods		
		G Tectonics		
		H Internal structure		
		J Internal variability/physical properties		
		K Solid planets/Satellite/Asteroid		
		L Planet formation and evolution		
		M Exploration of solid planets		
		N Earthquake disasters and prediction		
		4402	Meteorology/ Physical oceanography/ Hydrology	A Meteorology
B Physical oceanography				
C Land-area water cycle/Material circulation				
D Water balance				
E Global environmental system				
F Geophysical fluid dynamics				
G Climatology				
H Planetary atmospheres				
J Air-sea interaction				
4403	Space and upper atmospheric physics			A Solar-terrestrial system/Space weather
		B Solar wind/Interplanetary space		
		C Terrestrial and planetary magnetospheres		
		D Terrestrial and planetary ionospheres		
		E Terrestrial and planetary upper atmospheres		
		F Space plasma		
		G Geomagnetic variation		
		H Plasma waves		
		4404	Geology	A Stratum
				B The earth's crust
				C Environmental geology
D Tectonics				
E Geologic era				
F Earth history				
G Applied geology				
H Planetary geology				
J Quaternary research				
K Geologic hazard				

(Discipline: Earth and planetary science)

Item Number	Research Field	Keyword
4405	Stratigraphy/ Paleontology	A Stratigraphic succession
		B Paleoenvironment
		C Fossil
		D Phylogeny/Evolution/Diversity
		E Paleocology
		F Paleobiogeography
		G Function/Morphology
		H Paleo-ocean
4406	Petrology/ Mineralogy/ Science of ore deposit	A Terrestrial and planetary material
		B Terrestrial and planetary evolution
		C Crust/Mantle/Core
		D Magma/Igneous rock
		E Metamorphic rock
		F Natural and artificial crystals
		G Element fractionation
		H Mineral resources
		J Ore deposit formation
		K Mineral physics
		L Biologic and environmental minerals
		4407
B Isotope/Radiometric age		
C Material recycling		
D Chemistry of the crust and mantle		
E Chemistry of the extraterrestrial material		
F Atmospheric and hydrospheric chemistry		
G Biosphere geochemistry		

**Discipline: Plasma science**

Item Number	Research Field	Keyword
4501	Plasma science	A Basic studies of plasma
		B Plasma applications
		C Plasma diagnostic techniques and instrumentation
		D Plasma physics
		E Electric discharges
		F Reactive plasmas
		G Space and astrophysical plasmas
		H Burning plasma
		J Plasma chemistry
		K Plasma control/Laser

**Area: Chemistry****Discipline: Basic chemistry**

Item Number	Research Field	Keyword
4601	Physical chemistry	A Molecular structure
		B Crystal structure
		C Electronic state
		D Molecular dynamics
		E Chemical reaction
		F Reaction dynamics
		G Cluster
		H Solution/Colloid
		J Molecular spectroscopy
		K Molecular excitation process elementary
		L Quantum beam
		M Electron/Energy transfer
		N Surface/Interface
		P Theoretical chemistry
Q Electrochemistry		
4602	Organic chemistry	R Spin chemistry
		S Biophysical chemistry
		A Structural organic chemistry
		B Organic reaction chemistry
		C Synthetic organic chemistry
		D Organoelement chemistry
		E Organic photochemistry
F Physical organic chemistry		
4603	Inorganic chemistry	G Theoretical organic chemistry
		A Metal complex chemistry
		B Organometallic chemistry
		C Inorganic solid-state chemistry
		D Solution chemistry
		E Bioinorganic chemistry
		F Nuclear/Radiochemistry
		G Cluster
		H Supramolecular complex
		J Polynuclear complex
		K Coordination polymer

**Discipline: Applied Chemistry**

Item Number	Research Field	Keyword
4701	Analytical chemistry	A Sample preparation
		B Chemical analysis
		C Biological analysis
		D Chemical analysis by nuclear methods
		E Separation analysis
		F Chemical sensors
		G Chip analysis
		H Chromatography
		J Instrumental analysis
		K Surface and interface analysis
		L Chemical analysis
		M Environmental analysis
		N Bio-material analysis
P Biosensors		
4702	Synthetic chemistry	A Selective synthesis/reaction
		B Complex/Organometallic catalysis
		C Fine chemicals
		D Asymmetric synthesis/reaction
		E Catalyst design/reaction
		F Environmentally friendly reaction
		G Reaction field
		H Automatic synthesis
		J Biotic synthesis technique
		K Combinatorial method

## (Discipline: Applied Chemistry)

Item Number	Research Field	Keyword		
4703	Polymer chemistry	A Polymer synthesis		
		B Polymer reaction/degradation		
		C Asymmetric polymerization		
		D Polymerization catalyst		
		E Non-covalent polymer		
		F Self-assembled polymer		
		G Polymer structure		
		H Polymer properties		
		J Functional polymer		
		K Bio-related polymer		
		L Polymer thin film/surface		
		M Polymer complex		
		N Environment-related polymer		
		4704	Functional materials chemistry	A Optical properties
B Electric/Magnetic function				
C Molecular devices				
D Sensors				
E Molecular recognition				
F Supramolecule				
G Liquid crystal/Crystal				
H Film/Assembly				
J Surface/Interface				
K Colloid/Ultrafine particle				
L Electrochemistry				
M Functional catalysts				
4705	Environmental chemistry			A Green chemistry
				B Recycle chemistry
		C Low environmental load substances		
		D Biodegradable substances		
		E High-functional catalysts		
		F Trace environmental substance evaluation		
		G Reaction media		
		H Safety chemistry		
		J Micro-chemical methods		
		K Highly efficient reaction design		
		4706	Bio-related Chemistry	A Biofunctional chemistry
B Biomacromolecule chemistry				
C Bioinorganic chemistry				
D Natural products chemistry				
E Bioorganic chemistry				
F Biotechnology				
G Nucleic acid/Protein/Sugar chemistry				
H Enzyme chemistry				
J Biological recognition/Biofunctional chemistry				
K Post-genomic drug discovery				
L Biofunctional materials				

## (Discipline: Materials chemistry )

Item Number	Research Field	Keyword		
4803	Inorganic industrial materials	A Crystalline/Polycrystalline materials		
		B Glass		
		C Ceramics		
		D Fine particles/Powder		
		E Layered/Intercalation compound		
		F Ion exchanger/conductor		
		G Inorganic synthesis		
		H Photocatalyst		
		J Electrochemistry		
		K Nanoparticle		
		L Porous materials		
		M Hybrid materials		
		4804	Polymer/Textile materials	A Polymeric material properties
				B Polymeric material synthesis
C Textile materials				
D Rubber materials				
E Gel				
F Polymeric functional materials				
G Natural/Biopolymeric materials				
H Polymer alloy				
J Polymer composites				
K Polymer/Textile processing				
L Computational polymer science				

## Discipline: Materials chemistry

Item Number	Research Field	Keyword
4801	Functional materials/ Devices	A Liquid crystal materials/devices
		B Organic EL devices
		C Organic semiconductor devices
		D Optical materials/devices
		E Organic electronic materials/devices
		F Devices for electric conduction
		G Molecular devices
		H Electric/Magnetic devices
		J Battery
		K Condenser (Capacitor)
		L Biofunctional applied devices
		4802
B Hybrid materials		
C Surfactant		
D Dye/Pigment		
E Dye/Color materials		
F Printing/Ink		
G Resist		
H Glue		
J Selective reaction		
K New functional group		



**Area: Engineering**

(Discipline: Mechanical engineering)

**Discipline: Applied physics**

Item Number	Research Field	Keyword
4901	Applied materials science/ Crystal engineering	A Metal
		B Semiconductor
		C Magnetic material
		D Superconductor
		E Amorphous
		F Dielectric
		G Ceramics
		H Crystal growth
		J Epitaxial growth
		K Crystal characterization
		L Heterostructure
		M Optical properties
		N Particulate
		P Organic molecule
		Q Liquid crystal
		R New functional materials
		S Spintronics
		T Organic/Molecular electronics
U Bioelectronics		
4902	Thin film/ Surface and interfacial physical properties	A Thin film
		B Surface
		C Interface
		D Plasma process
		E Vacuum
		F Beam application
		G Scanning probe microscopy
		H Electron microscopy
4903	Applied optics/ Quantum optical engineering	A Optics
		B Optical elements/Instrumentation/Materials
		C Imaging/Optical information processing
		D Vision
		E Quantum electronics
		F Laser
		G Nonlinear optics
		H Quantum optics
		J Photonic crystals
		K Opt-electronics
		L Micro-and nano-optics
		M Optical sensing
		N Optical recording
		P Light control
Q Photo-processing		
4904	Applied physics, general	A Force
		B Heats
		C Sounds
		D Waves
		E Electromagnetism
		F Physical measurements and control
		G Standards
		H Sensors
		J Micromachines
		K Energy conversion
		L Plasma physics
		M Radiation
		N Accelerators
4905	Engineering fundamentals	A Mathematical engineering (mathematical analysis/plan/design/optimization)
		B Physical mathematics
		C Computational mechanics
		D Simulation engineering

**Discipline: Mechanical engineering**

Item Number	Research Field	Keyword
5001	Materials/ Mechanics of materials	A Material design/Process/Mechanical properties/Evaluation
		B Continuum mechanics
		C Structural mechanics
		D Damage mechanics
		E Fracture
		F Fatigue
		G Environments
		H Reliability
		J Biomechanics
		K Micromechanics of materials

Item Number	Research Field	Keyword		
5002	Production engineering/ Processing studies	A Modeling for production		
		B Production Systems		
		C Production management		
		D Process design		
		E Machine tools		
		F Forming process		
		G Cutting/Grinding process		
		H Special processing		
		J Ultraprecision machining		
		K Nano/Micro machining		
		L Precise positioning/Measurements		
		5003	Design engineering/ Machine functional elements/ Tribology	A Design engineering
B Shape modeling				
C Computer aided design (CAD)/Computer aided engineering (CAE)				
D Synectics				
E Dynamics of mechanisms				
F Machine elements				
G Functional components				
H Failure diagnostics				
J Safety design				
K Life cycle analysis and design				
L Tribology				
5004	Fluid engineering			A Computational fluid dynamics
		B Flow measurements		
		C Compressible/Incompressible flow		
		D Turbulent flow		
		E Multi-phase flow		
		F Reacting flow		
		G Non-Newtonian flow		
		H Micro flow		
		J Molecular fluid dynamics		
		K Bio-fluid mechanics		
		L Environmental fluid mechanics		
		M Acoustics		
		N Fluid machinery		
		P Fluid power systems		
5005	Thermal engineering	A Thermophysical property		
		B Convection		
		C Heat conduction		
		D Thermal radiation		
		E Mass transfer		
		F Combustion		
		G Micro/Nanoscale heat transfer		
		H Thermal engine		
		J Refrigeration/Air conditioning		
		K Heat transfer equipment		
		L Energy use		
		M Bio-thermal engineering		
5006	Dynamics/ Control	A Dynamics		
		B Dynamic design		
		C Vibration mechanics		
		D Vibration analysis/tests		
		E Control instrument		
		F Motion control		
		G Vibration control		
		H Mechanical measurements		
		J Aseismic/Seismic isolation design		
		K Vehicle and transport system control		
		L Acoustic information/Acoustical control		
		M Acoustic energy		
		5007	Intelligent mechanics/ Mechanical systems	A Robotics
				B Mechatronics
C Micro/Nano mechatronics				
D Biomechanics				
E Softmechanics				
F Information equipment/Intelligent (smart) machine systems				
G Precision mechanics and systems				
H Human-machine systems				
J Information systems				

**Discipline: Electrical and electronic engineering**

Item Number	Research Field	Keyword
5101	Power engineering/ Power conversion/ Electric machinery	A Electrical energy engineering (generation/conversion/storage, and energy conservation)
		B Power system engineering
		C Electric machinery
		D Power electronics
		E Effective utilization of electric energy
		F Electric/Electromagnetic compatibility
		G Illumination/Lighting
5102	Electronic materials/ Electric materials	A Electrical and electronic materials (semiconductor, dielectric, magnetic, ferro-dielectric, organic, insulator, superconductor, etc.)
		B Thin film/Quantum structure
		C Thick film
		D Fabrication/Characterization method
5103	Electron device/ Electronic equipment	A Electron device/Integrated circuits
		B Circuit design/Computer aided circuit design (CAD)
		C Optical devices and circuits
		D Quantum devices/Spintronic devices
		E Microwave/Millimeter wave
		F Wave technology and applications
		G Bio devices
		H Information storage/record
		J Display
		K Sensing
		L Micro fabrication process technology
		M Interconnect, packaging and system integration
		5104
B Nonlinear theory/circuits		
C Information theory		
D Signal processing		
E Communication systems (wireless, wired, satellite, optical and mobile)		
F Modulation/Demodulation		
G Coding/Decoding		
H Protocol		
J Antennas		
K Routing/Switching		
L Networks/Local area networks (LAN)		
M Multimedia		
N Cryptography/Security		
5105	System engineering	
		B Social engineering
		C Industrial engineering and management
		D Environmental engineering
		E Production system engineering
		F Biological engineering
		5106
B Sensing devices		
C Measuring/Analyzing instruments		
D Measurement systems		
E Signal processing		
F Sensing information processing		
5107	Control engineering	A Control theory
		B System theory
		C Knowledge-based control
		D Control technology
		E Control systems
		F Complex systems

**Discipline: Civil engineering**

Item Number	Research Field	Keyword
5201	Civil engineering materials/ Construction/ Construction management	A Concrete
		B Steel
		C Bituminous material
		D Composite material/New materials
		E Timber
		F Construction
		G Maintenance/Management
		H Construction business plan/Construction design
		J Construction management

**(Discipline: Civil engineering)**

Item Number	Research Field	Keyword
5202	Structural engineering/ Earthquake engineering/ Maintenance management engineering	A Applied mechanics
		B Structural engineering
		C Steel structure
		D Concrete structure
		E Hybrid structure
		F Wind engineering
		G Earthquake engineering
		H Earthquake resistant structure
		J Earthquake disaster prevention
		K Maintenance engineering
		5203
B Foundation engineering		
C Rock engineering		
D Engineering geology		
E Ground behavior		
F Ground and structure		
G Geotechnical disaster prevention		
H Geo-environmental engineering		
5204	Hydraulic engineering	A Hydraulics
		B Environmental hydraulics
		C Hydrology
		D River engineering
		E Water resources engineering
		F Coastal engineering
		G Port engineering
		H Ocean engineering
5205	Civil engineering project/ Traffic engineering	A Infrastructure planning
		B Regional/Urban planning
		C Nationwide spatial planning
		D Disaster prevention planning/Environmental planning
		E Transportation planning
		F Traffic engineering
		G Railway engineering
		H Surveying/Remote sensing
		J Landscape architecture/Design
		K Infrastructure history
5206	Civil and environmental engineering	A Environmental planning and management
		B Environmental systems
		C Environmental conservation
		D Water and wastewater systems
		E Domestic and industrial wastes
		F Soil and water environments
		G Atmospheric circulation/Noise and vibration
		H Ecological engineering

**Discipline: Architecture and building engineering**

Item Number	Research Field	Keyword		
5301	Building structures/ materials	A Load theory		
		B Structural analysis		
		C Structural design		
		D Concrete structure		
		E Steel structure		
		F Foundation		
		G Structural material		
		H Building construction method		
		J Maintenance technology		
		K Earthquake disaster prevention		
		L Structure control		
		M Earthquake resistant design		
		N Wind resistant design		
		5302	Architectural environment/ equipment	A Sound/Vibration environment
				B Light environment
				C Heat environment
				D Air environment
E Environmental equipment planning				
F Environmental psychology/physiology				
G Building equipment				
H Fire engineering				
J Global/Urban environment				
K Environment designing				

## (Discipline: Architecture and building engineering)

Item Number	Research Field	Keyword
5303	Town planning/ Architectural planning	A Planning theory
		B Design theory
		C Housing theory
		D Building types/District facilities
		E Urban/Regional planning
		F Administration/System
		G Building/Urban economy
		H Production management
		J Disaster prevention planning
		K Landscape/Environmental planning
		5304
B Urban history		
C Architectural theory		
D Design		
E Style		
F Landscape/Environment		
G Preservation/Renovation		

## (Discipline: Material engineering )

Item Number	Research Field	Keyword
5404	Structural/ Functional materials	A Strength/Toughness/Fracture/Fatigue/ Creep/Stress corrosion cracking/ Superplasticity/Wear
		B Nanostructure
		C Magnetic materials
		D Electronic/Information materials
		E Hydrogen storage materials
		F Fuel cell materials
		G Materials for heat and energy
		H Sensor materials/Optical functional materials
		J Cryogenic material
		K Earthquake resistant/ Environmental resistant materials
		L Biomaterials
		M High-temperature materials
		N Amorphous materials
5405	Material processing/ treatments	P Intelligent/Safety/Relieved material
		Q New functional materials
		R Environment-conscious materials
		S Functional polymeric material
		A Surface/Interface control
		B Corrosion anticorrosion
		C Plastic forming
		D Powder metallurgy
		E Heat treatment
		F Joining/Welding
		G Crystal/Microstructure control
		H Nano process
		J Microfabrication
K Plasma treatment/Laser processing		
L Thermal spraying/Coating/Particle deposition process		
M Plating process		
N Non destructive inspection		
P Thin film process		
Q Nonequilibrium process		
R Mechanical alloying		
S Precision molding process		
T Electrocatalysis		
U Repair/Life-prolonging treatment		
V Electrical connection/Wiring		
5406	Metal making engineering	A Reaction/Separation
		B Materials refining
		C Melting/Solidification
		D Foundry
		E Crystal growth
		F Microstructure control
		G Purification
		H Various manufacturing process
		J Energy saving process
		K Extreme condition/Environmental conscious process
		L Ecological materials
		M Resource separation/Resource conservation
		N Waste management
P Material recycling process		
Q Recycling		
R Materials engineering for safety		

**Discipline: Material engineering**

Item Number	Research Field	Keyword
5401	Physical properties of metals	A Electronic/Magnetic properties
		B Properties of semiconductors
		C Thermal properties
		D Optical properties
		E Mechanical properties
		F Superconductor
		G Properties of thin films
		H Properties of nano materials
		J Computational material properties
		K Surface/Interface/Grain boundary properties
		L Fine particulate/Cluster
		M Quasicrystals
		N Radiation damage
P Atomic/Electronic structure		
Q Lattice defects		
R Diffusion/Phase transformation/Phase diagram		
5402	Inorganic materials/ Physical properties	A Crystal structure/Microstructure control
		B Mechanical/Electronic/Electromagnetic/ Optical/Thermal properties
		C Surface/Interface properties
		D High-temperature properties
		E Grain boundary characteristics
		F Functional ceramics
		G Functional glass
		H Structural ceramics
		J Carbon material
		K Dielectric materials
		L Inorganic polymer
5403	Composite materials/ Physical properties	A Organic/Inorganic fibers
		B Matrix materials
		C Composite effect
		D Dispersion strengthening
		E Continuous fiber reinforcement
		F Fiber reinforced metals (FRM)
		G Fiber reinforced plastics (FRP)
		H Fiber reinforced celamics (FRC)
		J Functionally gradient
		K Composite particle
		L Composite fracture
		M Composite deformation stress
		N Interface failure
P Reaction sintering		
Q Complex polymer		

**Discipline: Process engineering**

Item Number	Research Field	Keyword
5501	Properties in chemical engineering process/ Transfer operation/ Unit operation	A Equilibrium/Transport properties
		B Fluid/Heat transfer/Mass transfer operation
		C Distillation
		D Extraction
		E Absorption
		F Adsorption
		G Ion exchange
		H Membrane separation
		J Hetero-phase separation
		K Ultra high separation
		L Stirring/Blending operation
M Granular and powdered materials operation		
N Crystallization procedure		
P Thin film/Microparticle forming operation		
Q Polymer processing		
5502	Reaction engineering/ Process system	A Gas/Liquid/Solid/Supercritical fluid operation
		B Novel reaction field
		C Reaction rate
		D Reaction mechanism
		E Reaction apparatus
		F Materials synthesis process
		G Polymerization process
		H Measurement
		J Sensors
		K Process control
		L Processing system design
M Process information processing		
N Process operation/Facilities management		
5503	Catalyst/ Resource chemical process	A Catalysis reaction
		B Catalyst preparation chemistry
		C Catalyst performance analysis
		D Energy conversion process
		E Fossil fuel effective utilization technology
		F Resources/Energy effective utilization technology
		G Resources/Energy saving technology
		H Combustion technology
5504	Biofunction/ Bioprocess	A Biocatalyst engineering
		B Biofunction engineering
		C Food engineering
		D Medicochemical engineering
		E Applied bioelectrochemistry
		F Bioproduction process
		G Bioreactor
		H Biosensor
		J Bioseparation
		K Bioinformatics
		L Genomic engineering

**Discipline: Integrated engineering**

Item Number	Research Field	Keyword
5601	Aerospace engineering	A Aerodynamics
		B Structure/Material
		C Vibration/Strength
		D Guidance/Navigation/Control
		E Propulsion/Engine
		F Flight dynamics
		G Aerospace system
		H Design/Instrumentation
		J Special aircraft
		K Space utilization/Exploration
		L Aerospace environment
5602	Naval and maritime engineering	A Propulsion/Vessel dynamics
		B Material/Structural mechanics
		C Marine hydrodynamics
		D Planning/Design/Production system
		E Shipbuilding/Equipment
		F Maritime transportation system
		G Marine engine/Fuel
		H Marine environment
		J Marine resources/Energy
		K Ocean exploration/Equipment
		L Undersea and subsea engineering
M Polar engineering		

**(Discipline: Integrated engineering)**

Item Number	Research Field	Keyword
5603	Earth system and resources engineering	A Applied geology
		B Geo-engineering
		C Remote sensing
		D Monitoring in Geo-engineering
		E Earth systems
		F Resource exploration
		G Natural resource development
		H Resource evaluation
		J Mineral processing
		K Underground disposal and storage
		L Contaminated soil remediation
M Development and utilization of deep underground		
N Material resources		
P Renewable source/Energy		
Q Economic resources		
5604	Recycling engineering	A Waste reduction
		B Reuse
		C Cascade recycling/Utilization
		D Recycling
		E Waste valuable recovery
		F Solid-solid separation
		G Purification of materials
		H Proper treatment and disposal of waste
		J Recycling and LCA
		K Environmentally conscious design
		L Green productions
M Zero emission		
5605	Nuclear fusion studies	A Core plasma
		B Peripheral plasma
		C Plasma measurement
		D Plasma-wall interaction
		E Theoretical simulation
		F Low activation material
		G Fuel/Blanket
		H Electromagnet
		J Inertial confinement fusion
		K Fusion systems engineering
		L Safety/Biological influence
5606	Nuclear engineering	A Radiation engineering/Beam science
		B Reactor physics/Nuclear data
		C Nuclear measurements/Radiation physics
		D Thermo-hydrodynamics/Structure
		E System design/Safety engineering
		F Nuclear material/Nuclear fuel
		G Isotope/Radiation chemistry
		H Fuel cycle
		J Backend
		K Advanced reactors
		L Health physics/Environmental safety
M Social environment of nuclear energy		
5607	Energy engineering	A Energy generation/conversion
		B Energy transport/storage
		C Energy saving/Efficient use of energy
		D Energy system
		E Environmental harmony
		F Natural energy use

**Category: Biological Sciences**

**Area: Biology**

Discipline: Basic biology

Item Number	Research Field	Keyword
5701	Genetics/ Genome dynamics	A Molecular genetics
		B Cytogenetics
		C Population genetics
		D Evolutionary genetics
		E Human genetics
		F Genetic diversity
		G Genome architecture, reorganization, and maintenance
		H Genomic function and expression
		J Developmental genetics
		K Behavioral genetics
		L Mutagen
		M Chromosome
		N Model organism
		5702
B Society		
C Species interaction		
D Assemblage		
E Ecosystem		
F Evolutionary ecology		
G Behavioral ecology		
H Natural environment		
J Physiological ecology		
K Molecular ecology		
L Conservation ecology		
5703	Plant molecular biology/ Plant physiology	
		B Phytohormones/Growth and development/Totipotency
		C Organelles/Cell wall
		D Response to environmental factors
		E Plant-microbe interaction/Symbiosis
		F Metabolism
		G Plant molecular function
5704	Morphology/ Structure	A Animal morphology
		B Plant morphology
		C Microbial morphology
		D Comparative endocrinology
		E Molecular morphology
		F Morphogenesis
		G Tissue construction
		H Microstructure
		J Microscopical technique
		5705
B Neurobiology		
C Neuroethology		
D Behavioral physiology		
E Animal physiology and biochemistry		
5706	Biodiversity/ Systematics	A Metabolism physiology
		B Classification system
		C Evolution
		D Genetic diversity
		E Population/Species diversity
		F Community/Ecosystem diversity
		G Taxonomic character
		H Phylogenetics
		J Speciation
		K Natural history
		L Museum

**Discipline: Biological science**

Item Number	Research Field	Keyword
5801	Structural biochemistry	A Carbohydrate
		B Lipid
		C Nucleic acid
		D Protein
		E Enzyme
		F Gene and chromosome
		G Biological membrane and receptor
		H Intercellular matrix
		J Organelles
		K Posttranslational modification
		L Molecular recognition and interaction
		M Denaturation and folding
		N Structural analysis and prediction
		P NMR
Q Mass spectrometry		
R X-ray crystallography		
S High resolution electron microscopy		
5802	Functional biochemistry	A Catalytic mechanism of enzyme
		B Regulation of enzyme
		C Allosteric effect
		D Enzyme abnormality
		E Gene expression and replication
		F Biological energy transduction
		G Metalloprotein
		H Biological trace element
		J Hormone and bioactive substances
		K Cell signal transduction
		L Membrane transport and transporters
		M Proteolysis
		N Cytoskeleton
		P Immunobiochemistry
Q Glycobiology		
R Bioelectrochemistry		
5803	Biophysics	A Structure, dynamics and functions of proteins and nucleic acids
		B Motility/Transport
		C Biomembranes/Receptors/Channels
		D Photobiology
		E Cellular signaling and dynamics
		F Neural information processing
		G Theoretical biology/Bioinformatics
		H Structural biology
		J Folding
		K Prediction of structure and function
		L Single-molecule measurements and manipulation
		M Bioimaging
		N Non-equilibrium/Complex systems
		5804
B DNA damage and repair		
C Recombination		
D Transcription		
E RNA		
F Translation		
G Protein modification		
H Intermolecular interaction		
J Chromosomal organization, function and segregation		
5805	Cell biology	
		B Biomembrane
		C Cytoskeleton/Cell motility
		D Intracellular signaling
		E Intercellular communication
		F Cell cycle
		G Cytokinesis
		H Nuclear structure
		J Cell-cell interaction/Extracellular matrix
		K Protein degradation
		L Chromatin

## (Discipline: Biological science)

Item Number	Research Field	Keyword
5806	Developmental biology	A Cell differentiation
		B Stem cells
		C Germ layer formation/Gastrulation/Somitogenesis
		D Organogenesis
		E Fertilization
		F Reproduction/Germ cells
		G Regulation of gene expression
		H Developmental genetics
		J Evolution and development
		5807
B Origin of eukaryotic organisms		
C Origin of organelles		
D Origin of multicellularity		
E Molecular evolution		
F Morphological evolution		
G Evolution of function		
H Evolution of genes		
J Evolutionary biology in general		
K Comparative genomics		
L Experimental evolutionary biology		

**Discipline: Anthropology**

Item Number	Research Field	Keyword
5901	Physical anthropology	A Morphology
		B Prehistory/Chronology
		C Biomechanism
		D Molecular anthropology/Genetics
		E Ecology
		F Primates
		G Evolution
		H Growth/Aging
		J Society
		K Behavior/Cognition
		L Reproduction/Development
		M Bone archaeology
		N Geographic diversity
5902	Applied anthropology	A Physiological anthropology
		B Ergonomics
		C Physiological polymorphism
		D Environmental adaptive capacity
		E Systemic relationship
		F Functional potential
		G Techno-adaptability
		H Somatometry
		J Clothing
		K Somatology/Adaptation
		L Constitution/Health
		M Forensic anthropology
		N Medical anthropology

**Area: Agricultural sciences****Discipline: Agriculture**

Item Number	Research Field	Keyword		
6001	Breeding science	A Plant breeding/Plant genetics		
		B Breeding theory		
		C Genetic resources/Phylogeny		
		D Plant molecular breeding		
		E Resistance/Tolerance		
		F Generation of genetic diversity/Analysis of genetic diversity		
		G Gene/Protein		
		H Chromosome engineering		
		J Plant genome information		
		K Quality/Composition		
		L Developmental physiology/Developmental genetics		
		6002	Crop science/Weed science	A Food crop
				B Industrial crop
C Forage crop				
D Cultivation system				
E Crop quality/Crop processing				
F Weed science				
G Weed control				
H Wild plant resources				
6003	Horticulture/Landscape architecture	A Fruit tree		
		B Vegetable		
		C Flower		
		D Use of horticultural plants		
		E Storage of horticultural plants/Processing of horticultural plants		
		F Protected horticulture		
		G Landscaping		
		H Landscape formation/Landscape conservation		
		J Open space planning		
		6004	Plant pathology	A Pathogenic
B Pathological physiology				
C Plant-pathogen interactions				
D Pathogenicity factor/Virulence factor				
E Disease control				
F Disease resistance				
G Phylogenetic systematics				
H Infection/Proliferation				
6005	Applied entomology	A Animal pest		
		B Animal pest management		
		C Insect properties development and utilization		
		D Insect pathology		
		E Sericulture/Silk		
		F Insect ecology		
		G Insect physiology		
		H Insect classification		
		J Insect pest management/Biological control		
		K Insect molecular biology		
		L Insect behavior		

**Discipline: Agricultural chemistry**

Item Number	Research Field	Keyword
6101	Plant nutrition/ Soil science	A Plant physiology, growth and development
		B Plant nutrition and metabolism
		C Plant metabolic regulation
		D Fertilizer
		E Soil classification
		F Soil physics
		G Soil chemistry
		H Soil organisms
		J Soil environment
		6102
B Fermentative production		
C Microbial classification		
D Microbial genetics/breeding		
E Microbial enzyme		
F Microbial metabolism		
G Microbial function		
H Microbial application		
J Environmental microorganism		
K Antibiotic production		
L Microbial ecology		
M Control of microbe		
N Genetic resources		
P Gene expression		
6103	Applied biochemistry	A Animal biochemistry
		B Plant biochemistry
		C Enzyme application
		D Genetic engineering
		E Protein engineering
		F Bioengineering
		G Metabolic engineering
		H Cell/Tissue culture
		J Enzyme chemistry
		K Metabolism and physiology
		L Gene expression
6104	Bioproduction chemistry/ Bioorganic chemistry	M Production of useful material
		N Cellular response
		P Signal transduction
		Q Trace element
		A Bioactive substance
		B Regulator of cell function
		C Pesticide science
		D Plant growth substance
		E Signal molecule
		F Biosynthesis
		G Natural products chemistry
H Bioinorganic chemistry		
J Physical chemistry		
K Analytical chemistry		
L Organic chemistry		
M Bioregulatory chemistry		
N Molecular recognition		
6105	Food science	A Food chemistry
		B Provisions chemistry
		C Food biochemistry
		D Food physics
		E Food engineering
		F Food function
		G Food preservation
		H Food manufacturing/processing
		J Nutritional chemistry
		K Nutritional biochemistry
		L Food safety
		M Food analysis

**Discipline: Forestry**

Item Number	Research Field	Keyword		
6201	Forest science	A Forest productivity/Tree breeding		
		B Forest ecology/Forest protection/Forest conservation		
		C Forest biology		
		D Forest management/Forest policy		
		E Forest landscape		
		F Forest utilization		
		G Revegetation/Environmental conservation forest		
		H Erosion control/Erosion and torrent improvement		
		J Landcollapse/Landslide/Mudflow		
		K Water conservation/Water quality		
		6202	Wood science	A Wood anatomy/Wood formation
				B Materials/Physical properties
				C Cellulose
D Lignin				
E Extractives/Minor extractives				
F Chemical processing				
G Preservation/Wood culture				
H Drying/Machining				
J Adhesion/Wood based material				
K Strength/Wooden construction				
L Habitability/Sensibility				
M Woody biomass				
N Pulp/Paper				

**Discipline: Fisheries science**

Item Number	Research Field	Keyword
6301	General fisheries	A Taxonomy
		B Development
		C Morphology
		D Physiology
		E Ecology/Behavior
		F Fishery
		G Resources/Resource management
		H Aquaculture
		J Genetics/Hereditiy/Breeding
		K Fish disease
		L Aquatic environment/Conservation
		M Algae/Seaweeds
		N Plankton
		P Microorganisms
		Q Harmful algae
6302	Fisheries chemistry	A Biochemistry
		B Metabolism/Enzyme
		C Fish nutrition
		D Molecular biology
		E Bioengineering
		F Biopolymer
		G Natural products chemistry
		H Analytical chemistry
		J Food chemistry
		K Food processing/Preservation
L Hygiene/Food sanitation		
M Food microorganism		

**Discipline: Agro-economics**

Item Number	Research Field	Keyword
6401	Agronomy	A Farm management
		B Agricultural policy
		C Agricultural economy
		D Agricultural finance
		E Agricultural history
		F International agriculture
		G Regional planning
		H Rural society
		J Agriculture and environment
		K Food system
		L Marketing
		M Food safety
		N Agricultural ethics

**Discipline: Agro-engineering**

Item Number	Research Field	Keyword
6501	Irrigation, drainage and rural engineering/ Rural planning	A Hydraulics
		B Hydrology
		C Soil physics
		D Soil mechanics/Applied mechanics
		E Land improvement facilities
		F Material/Construction
		G Irrigation and drainage
		H Land improvement/Agricultural land use planning
		J Regional planning/Community development
		K Regional environment/Countryside landscape
		L Rural ecosystem
		M Water pollution/Water environment
		N Material circulation
		P Soil conservation/Disaster prevention
6502	Agricultural environmental engineering	A Agricultural production environment
		B Bioproduction machinery
		C Postharvest engineering
		D Bioproduction system
		E Farming technology management
		F Agricultural labour science
		G Supply chain management
		H Environment control in biology
		J Greenhouse horticulture/Plant factory
		K Bioprocessing
		L Natural energy use
		M Agricultural meteorology/Micrometeorology
		N Meteorological disasters
		P Global warming impacts
Q Greening environment		
6503	Agricultural information engineering	A Image processing/Image recognition
		B Nondestructive measurement
		C Bioinstrumentation
		D Biosensing
		E Bioinformatics
		F Remote sensing
		G Geographic information system
		H Modeling/Simulation
		J Computer network
		K ICT/Knowledge processing
		L Agricultural robotics
		M Precision agriculture
		N Bioenvironmental information
		P Agricultural information
Q Farming information		

**Discipline: Zootechnical science/Veterinary medical science**

Item Number	Research Field	Keyword		
6601	Zootechnical science/ Grassland science	A Grassland ecology		
		B Grassland utilization		
		C Grassland management/Conservation		
		D Feed/Feedstuffs		
		E Nutrition/Feeding		
		F Livestock production system		
		G Livestock management/Welfare		
		H Wild animal management/utilization		
		J Animal product utilization		
		K Livestock biomass		
		6602	Applied animal science	A Breeding
				B Reproduction
				C Metabolism/Endocrine control
				D Functional substance
E Developmental biotechnology				
F Cloned livestock				
G Livestock genome				
H Wildlife protection/Proliferation				
6603	Basic veterinary science/ Basic zootechnical science			A Hereditary/Genetics
				B Embryology/Fetal development
				C Physiology
				D Morphology
				E Pharmacology
				F Pathology
		G Pathological condition		
		H Pathogenic microorganism		
		J Parasitology		
		K Immunology		
		L Biological information		
		M Behavior		
		6604	Applied veterinary science	A Animal hygiene
				B Veterinary public health
C Toxicology				
D Disease prevention and control				
E Wildlife				
F Animal welfare				
G Zoonoses				
H Epidemiology				
6605	Clinical veterinary science			A Internal medicine
				B Surgery
				C Clinical breeding/Obstetrics
				D Diagnostics
				E Laboratory examination
				F Therapy
		G Prognosis		
		H Clinical pathology/Pathological condition		
		J Regenerative medicine		
		K Anesthesia/Analgetics		
		L Radiology		
		M Animal nursing		

**Discipline: Boundary agriculture**

Item Number	Research Field	Keyword		
6701	Boundary agriculture	A Environmental analysis		
		B Environmental pollution		
		C Environmental reclamation		
		D Environmental purification		
		E Aquatic pollution		
		F Resource recycling systems		
		G Biomass		
		H Genetic resources		
		J Biological environment		
		K Resource environment balance		
		L Regional agriculture		
		6702	Applied molecular and cellular biology	A Gene/Chromosome engineering
				B Protein/Glycosylation engineering
				C Metabolic engineering
D Organelle engineering				
E Cellular engineering				
F Gene expression				
G Development/Differentiation control				
H Cell-cell interaction				
J Intermolecular interaction				
K Biosensor				
L Cellular function				
M Molecular information				
N Functional-molecule design				



**Area: Medicine, dentistry, and pharmacy**

(Discipline: Basic medicine)

**Discipline: Pharmacy**

Item Number	Research Field	Screening Sub-panel Number / Keyword
6801	Chemical pharmacy	A Organic chemistry
		B Synthetic organic chemistry
		C Biomolecules
		D Herbal medicine/Natural products chemistry
		E Mechanistic organic chemistry
		F Heterocyclic chemistry
		G Asymmetric synthesis
6802	Physical pharmacy	A Physical chemistry
		B Analytical chemistry
		C Galenical pharmacy
		D Biophysical chemistry
		E Isotope pharmaceutical chemistry
		F Biocomplex chemistry
		G Molecular structure science
		H Structural biology
		J Imaging
		K Drug delivery
		L Information science
6803	Biological pharmacy	A Biochemistry
		B Molecular biology
		1 C Immunology
		D Cell biology
		E Developmental biology
		F Pharmacology
		2 G Analytical pharmacology
H Neurobiology		
6804	Drug development chemistry	A Medicinal chemistry
		B Medicinal molecular design
		C Bioactive substance
		D Functional science of medicinal molecules
		E Genomic drug development
		F Regulatory science
6805	Environmental pharmacy	A Environmental hygiene
		B Environmental chemistry
		C Environmental dynamics
		D Food hygienics
		E Chemical nutrition
		F Microbiology and infectious diseases
		G Medicinal resources
		H Toxicology
6806	Medical pharmacy	A Clinical pharmaceutical sciences
		B Pharmacokinetics and drug metabolism
		C Medical pharmaceuticals
		D Drug information and clinical toxicology
		E Clinical chemistry
		F Drug economics
		G Personalized medicine
		H Social pharmacy
		J Pharmacy management insurance

**Discipline: Basic medicine**

Item Number	Research Field	Screening Sub-panel Number / Keyword
6901	General anatomy (including histology/embryology)	A Gross anatomy
		B Functional anatomy
		C Clinical anatomy
		D Comparative anatomy
		1 E Radiological anatomy
		F Physical anthropology
		G Morphogenesis and embryogenesis
		H Teratology
		J Experimental morphology
		K Anatomical education
		L Cytology
		M Histology
		N Cell differentiation and tissue formation
		2 P Cell function and morphology
		Q Ultrastructural morphology
		R Molecular morphology
		S Histochemistry
		T Microscopic technology

Item Number	Research Field	Screening Sub-panel Number / Keyword
6902	General physiology	A Molecular and cellular physiology
		B Biological membrane, channel, transporter and active transport
		C Receptor and intracellular signal transduction
		D Stimulation-secretion coupling
		E Epithelial function
		F Heredity, fertilization, development and differentiation
		G Cellular proliferation and cell death
		H Cellular motility, morphogenesis and intercellular interaction
		J Microcirculation, peripheral circulation, circulation dynamics and regulation
		K Ventilation mechanics, blood gas function and respiratory control
		L Gastrointestinal motility, absorption and digestion
		M Renal function, body fluids, and acid-base balance
		N Blood coagulation and rheology
		P Pathophysiology
		Q System physiology and physiome
R Comparative, developmental and genome physiology		
6903	Environmental physiology (including physical medicine and nutritional physiology)	A Environmental physiology
		B Physical medicine
		C Nutritional physiology
		D Adaptive and associative physiology
		E Biorhythm
		F Growth, development, and aging
		G Stress
		H Space medicine
		J Behavioral physiology
		K Biological clock
		L Hyperthermia physiology
M Feeding regulation		
N Social environment		
P Sleep and arousal		
Q Reproductive physiology		
6904	General pharmacology	A Kidney
		B Smooth muscle and skeletal muscle
		C Gastrointestinal
		D Inflammation and immunity
		E Bioactive substance
		F Central nervous system and peripheral nerve
		G Spinal cord and pain
		H Receptor, channel, transport system, and signal transduction system
		J Cardiovascular system and hematology
		K Drug discovery and pharmacogenomics
		L Drug therapy and toxicology
M Herbal medicine and pharmacology of natural products		
6905	General medical chemistry	A Biomolecular medicine
		B Cellular biochemistry (cellular medical chemistry)
		C Genomic biochemistry (genomic medical chemistry)
		D Developmental medicine
		E Regenerative medicine
		F Aging medicine
		G Higher order life sciences
		H Intracellular signaling

## (Discipline: Basic medicine)

Item Number	Research Field	Screening Sub-panel Number / Keyword		
6906	Pathological medical chemistry	A Abnormal metabolism		
		B Molecular pathogenesis		
		C Molecular and gene diagnosis		
		D Molecular oncology		
		E Molecular pathogenesis of nutrition		
6907	Human genetics	A Medical genome science		
		B Molecular genetics		
		C Cytogenetics		
		D Pharmacogenetics		
		E Genetic biochemistry		
		F Genetic epidemiology		
		G Genetic diagnostics		
		H Gene therapy		
		J Genetic counseling		
		K Bioethics		
		L Epigenetics		
		6908	Human pathology	A Brain and nervous system
B Digestive system and salivary gland				
C Respiratory and mediastinal organs				
1 D Cardiovascular system				
E Urogenital and endocrine organs				
F Bone, joint, muscle, skin and sense organs				
G Blood				
H Molecular pathology				
J Geographic pathology				
2 K Diagnostic pathology				
L Telepathology				
M Environmental pathology				
N Transplantation pathology				
6909	Experimental pathology			A Animal
				1 B Cells
		C Molecules		
		D Ultrastructure		
		E Tumors		
		F Inflammation		
		G Toxicological pathology		
		2 H Developmental pathology		
		J Animal models		
		K Regenerative medicine		
6910	Parasitology (including sanitary zoology)	A Helminth		
		B Protozoa		
		C Arthropod vector		
		D Pathogenic animals		
		E Molecule		
		F Epidemiology		
		G Incidence		
		H Genetics		
		J Immunity		
		K Tropical diseases and international health		
		6911	Bacteriology (including mycology)	A Pathogenicity
B Infection immunity				
C Epidemiology				
D Genetics				
E Classification				
F Diagnosis				
G Structure and physiology				
6912	Virology	A Molecules		
		B Cells		
		C Whole body		
		D Epidemiology		
		E Pathogenicity		
		F Diagnosis and treatment		
		G Protection/Vaccine		
		H Prions		
6913	Immunology	A Cytokines		
		B Antibodies		
		C Antigen recognition		
		D Lymphocytes		
		E Innate immunity		
		F Acquired immunity		
		G Mucosal immunity		
		H Immunological memory		
		J Immune tolerance/Autoimmunity		
		K Immune surveillance/Tumor immunology		
		L Immunodeficiency		
		M Allergy/Immune-related disorder		
		N Immunoregulation/Transplantation immunology		

## Discipline: Boundary medicine

Item Number	Research Field	Keyword
7001	Medical sociology	A Hospital administration
		B Medical administration
		C Medical informatics
		D Bioethics
		E Medical history
		F Medical and pharmaceutical education
		G Health economics
		H Risk management
		J Quality of medical care
		K Community medicine
		L Health policy science
		M Social security science
		N Care and welfare
		P Health policy evaluation
		Q Infection control science
7002	Applied pharmacology	A Clinical pharmacology
		B Clinical trials and ethics
		C Pharmaceutical therapeutics
		D Adverse drug reaction and drug interaction
		E Drug transport mechanism
		F Pharmacogenomics
		G Clinical isotope pharmacy
		H Medical devices and pharmacy
		J Drug metabolic enzyme and transporter
		K Imaging
		L Research using human tissue
		M Drug dependence and drug sensitivity
		N Genetic diagnosis and gene therapy
		P Drug delivery
		Q Pharmacoepidemiology
7003	Laboratory medicine	A Clinical laboratory medicine
		B Clinical pathology
		C Clinical chemistry
		D Immunology and serology
		E Clinical laboratory system
		F Genetic testing
		G Clinical microbiology
		H Laboratory oncology
		J Clinical hematology
		K Physiological laboratory testing
		7004
B epidemiology of pain		
C analgesic		
D non-drug therapy		
E pain producing substance (PPS), algescic substance		
F generating or exacerbating mechanism of pain		
G neural mechanism of pain		
H hyperalgesia		
J genetic factors of pain		
K development or aging factors of pain		
L Gender difference in pain		
M Pain withdrawal reflex		
N numbness, hypesthesia		
P nociceptor		
Q histopathic pain, histotoxic pain		
R neuropathic pain, neuralgia		
S psychological pain		
T itching, pruritus		
U epidemiology of itching, or pruritus		
V antipruritics		
W itch-producing substances		
X generating or exacerbating mechanism of pruritus		
Y neural mechanism of pruritus		
Z curettage behavior		
a hyperknesis		
b psychological itching		
c development or aging factors of itching		

**Discipline: Society medicine**

Item Number	Research Field	Keyword
7101	Hygiene	A Environmental health
		B Preventive medicine
		C Industrial health
		D Environmental epidemiology
		E Molecular epidemiology
		F Medical statistics
		G Bioethics
		H Environmental toxicology
		J Industrial toxicology
		K Environmental physiology
		L Global environment
M Disaster accident		
N Ergonomics		
P Traffic medicine		
Q Food sanitation		
7102	Public health/ Health science	A Community health nursing
		B Maternal and child health
		C School health
		D Adult health issues
		E Health/Nutrition
		F Health management
		G Health education
		H Behavioral healthcare
		J Population problem
		K International health
		L Health administration
		M Hospital management
		N Medical informatics
		P Care insurance
		Q Epidemiology
		R Medical examination
		S Mass-screening
7103	Legal medicine	A Forensics
		B Medical ethics
		C Criminal psychiatry
		D Correctional medicine
		E Compensation science
		F Medical record management
		G Forensic examination
		H Alcohol research
		J Forensic odontology
		K DNA polymorphism
		L Forensic pathology

**Discipline: Clinical internal medicine**

Item Number	Research Field	Screening Sub-panel Number / Keyword
7201	General internal medicine (including psychosomatic medicine)	A Psychosomatic internal medicine
		B Stress science
		C Oriental medicine
		D Alternative medicine
		E Palliative medicine
		F General medicine
		G Primary care
		H Geriatrics
7202	Gastroenterology	1 A Upper gastroenterology (esophagus, stomach, duodenum)
		2 B Lower gastroenterology (small intestine, colon)
		3 C Hepatology
		4 D Biliary-Pancreatology
		5 E Digestive endoscopy
7203	Circulatory organs internal medicine	1 A Clinical cardiology
		2 B Molecular cardiology
		3 C Molecular vascular biology
7204	Respiratory organ internal medicine	1 A Obstructive lung disease
		2 B Non-obstructive lung disease, pulmonary fibrosis, respiratory infection and other diseases
7205	Kidney internal medicine	1 A Nephrology
		B Hypertension
		2 C Water and electrolyte metabolism
		D Hemodialysis

**(Discipline: Clinical internal medicine)**

Item Number	Research Field	Screening Sub-panel Number / Keyword
7206	Neurology	A Molecular pathophysiology
		1 B Neuroimmunology
		C Clinical molecular neurogenetics
		D Clinical neurophysiology
		2 E Clinical neuromorphology
		F Clinical neuropsychology
		G Functional neuroimaging
7207	Metabolomics	A Disturbances of energy and carbohydrate metabolism
		1 B Metabolic syndrome
		C Abnormal lipid metabolism
		D Disorder of purine metabolism
		2 E Abnormal bone and calcium metabolism
		F Metabolic electrolyte abnormality
7208	Endocrinology	A Endocrinology
		B Reproductive endocrinology
7209	Hematology	A Hematology
		1 B Hematology/Oncology
		C Thrombosis/Hemostasis
		D Transfusion medicine
		2 E Hematopoietic stem cell transplantation
		F Hematology/Immunology
		G Immune regulation
7210	Collagenous pathology/ Allergology	1 A Connective tissue diseases
		B Rheumatology
		C Allergology
		2 D Clinical immunology
		E Inflammation
7211	Infectious disease medicine	A Infection diagnosis
		B Infection therapy
		C Infection prevention
		D International infection science
		E Infection epidemiology
		F Opportunistic infection
7212	Pediatrics	A Developmental pediatrics
		B Growth and developmental medicine
		C Pediatric neurology
		1 D Pediatric endocrinology
		E Pediatric metabolism/Nutrition
		F Hereditary/Teratology
		G Pediatric health
		H Pediatric social medicine
		J Pediatric hematology
		K Pediatric oncology
		2 L Pediatric immunology/Allergy/Connective tissue diseases
		M Pediatric cardiology
		N Pediatric respiratory
		3 P Pediatric infectious disease
Q Pediatric nephrology/Urology		
R Pediatric gastroenterology		
7213	Embryonic/ Neonatal medicine	A Prenatal diagnosis
		B Fetal medicine
		C Teratology
		D Neonatal medicine
		E Premature baby medicine
7214	Dermatology	A Skin diagnostics
		1 B Dermatopathology
		C Dermatologic oncology
		D Laser therapeutics
		E Skin physiology
		2 F Pigment cell biology
		G Sexually transmitted diseases
		H Infectious diseases
J Inflammation and regeneration		
7215	Psychiatric science	A Psychopharmacology
		1 B Clinical molecular genetics
		C Psychophysiology
		D Psychopathology
		E Social psychiatry
		F Child and adolescence psychiatry
		2 G Geriatric psychiatry
		H Forensic psychiatry
		J Neuropsychology
		K Liaison psychiatry
		L Psychiatric rehabilitation

## (Discipline: Clinical internal medicine)

Item Number	Research Field	Screening Sub-panel Number / Keyword
7216	Radiation science	1 A Medical imaging (including diagnostic)
		B X-Ray/CT
		C Magnetic resonance imaging
		D Nuclear medicine (including PET)
		E Radiopharmaceuticals/Contrast medium
		F Radiation safety management
		G Medical imaging technology
		2 H Interventional radiology
		J Angioplasty/Osteoplasty/Vascular embolization
		K Radiofrequency ablation (RFA)/Stent treatment/Reserver treatment
		L Therapeutic radiology
		M Radiation oncology
		3 N Radiotherapy physics
		P Radiotherapy biology
Q Particle beam therapy		

## (Discipline: Clinical surgery)

Item Number	Research Field	Screening Sub-panel Number / Keyword
7308	Obstetrics and gynecology	1 A Obstetrics
		B Reproductive medicine
		C Gynecology
		2 D Gynecologic oncology
		E Menopause medicine
7309	Otorhinolaryngology	1 A Otolaryngology
		2 B Rhinology
		C Head and neck surgery
		D Tracheal esophageal study
		3 E Laryngology
		F Pharyngology
7310	Ophthalmology	A Clinical research
		B Epidemiology study
		C Social medicine
		D Ocular biochemistry and molecular biology
		1 E Ocular cell biology
		F Ophthalmic genetics
		G Ocular histology
		H Ocular pathology
		J Ocular pharmacology
		K Ocular physiology
		L Ocular developmental and regenerative biology
		2 M Ocular immunology
		N Ocular microbiology/Infectious diseases
		P Orthoptic science
		Q Ophthalmological optics
		R Ophthalmic medical engineering
		7311
B Surgery of congenital cardiovascular diseases		
C Fetal surgery		
D Pediatric urology		
E Pediatric chest surgery		
F Pediatric oncology		
7312	Plastic surgery	A Reconstructive surgery
		B Wound healing science
		C Microsurgery
		D Tissue culture/Transplantation
		E Regenerative medicine
7313	Emergency medicine	A Intensive care medicine
		B Trauma surgery
		C Emergency resuscitation science
		D Acute toxicology
		E Disaster medicine

## Discipline: Clinical surgery

Item Number	Research Field	Screening Sub-panel Number / Keyword
7301	General surgery	1 A General surgery
		B Transplant surgery
		C Artificial organs science
		D Vascular surgery
		E Experimental surgery
		2 F Endocrine surgery
		G Breast surgery
		H Surgical metabolism and nutrition
7302	Digestive surgery	1 A Esophageal surgery
		B Gastrointestinal surgery
		2 C Colorectal surgery
		D Hepatic surgery
		3 E Surgery for spleen and portal vein
		4 F Biliary surgery
		G Pancreatic surgery
7303	Thoracic surgery	1 A Cardiovascular surgery
		B Chest surgery
		2 C Mediastinal surgery
		D Pleural surgery
7304	Cerebral neurosurgery	A Head injury
		B Cerebrovascular disorder
		1 C Cerebral blood vessel surgery
		D Experimental brain surgery
		E Diagnostic neuroimaging
		F Brain tumor
		G Functional cranial nerve surgery
		2 H Pediatric neurological surgery
		J Spinal cord/Spine disease
		K Brain surgical instruments
		L Radiation neurological surgery
7305	Orthopaedic surgery	A Spinal disorders
		B Muscle/Nerve disorders
		1 C Physical therapy
		D Musculoskeletal rehabilitation
		E Bone and soft tissue tumors
		F Limb reconstruction surgery
		2 G Pediatric orthopaedics
		H Musculoskeletal traumatology
		J Joint disorders
		K Rheumatic diseases
		3 L Bone cartilage metabolism
M Sports medicine		
7306	Anesthesiology/Resuscitation studies	1 A Anesthesiology
		B Resuscitation studies
		C Perioperative management
		2 D Pain management
7307	Urology	1 A Oncology
		B Voiding function and dysfunction
		C Urolithiasis studies
		2 D Infectious diseases
		E Regenerative medicine
		F Teratology
		G Adrenal surgery
		3 H Kidney transplantation
J Andrology		

## Discipline: Dentistry

Item Number	Research Field	Keyword
7401	Morphological basic dentistry	A Oral anatomy (including histology/embryology)
		B Oral pathology
		C Oral bacteriology
7402	Functional basic dentistry	A Oral physiology
		B Oral biochemistry
		C Dental pharmacology
7403	Pathobiological dentistry/ Dental radiology	A Experimental oncology
		B Immunity/Infection/Inflammation
		C General dental radiology
		D Oral and maxillofacial radiology
7404	Conservative dentistry	A Operative dentistry
		B Endodontist
7405	Prosthetic dentistry	A General prosthodontics
		B Removable denture prosthodontics
		C Fixed partial denture prosthodontics
		D Oral and maxillofacial prosthetics
		E Stomatognathic function
7406	Dental engineering/ Regenerative dentistry	A Dental science and engineering
		B Dental materials science
		C Biomaterials science
		D Adhesion dentistry
		E Regenerative dentistry
		F Oral implantology
7407	Surgical dentistry	1 A Oral and maxillofacial surgery
		2 B Clinical oncology
		C Dental anesthesiology
		3 D Pathobiological examination
		E Oral maxillofacial reconstructive surgery

## (Discipline: Dentistry)

Item Number	Research Field	Screening Sub-panel Number / Keyword
7408	Orthodontic/ Pediatric dentistry	A Orthodontics
		B Pediatric dentistry
		C Pediatric oral health science
		D Stomatognathic function and mechanics
7409	Periodontal dentistry	A Periodontal immunology
		B Surgical periodontology
		C Preventive periodontology
7410	Social dentistry	A Dental hygiene (including public hygiene/nutrition)
		B Preventive dentistry
		C Oral health administration and management
		D Forensic odontology
		E Gerodontics
		F Psychosomatic medicine dentistry

## Discipline: Nursing

Item Number	Research Field	Screening Sub-panel Number / Keyword
7501	Fundamental nursing	A Nursing philosophy
		B Nursing ethics
		C Nursing art
		D Nursing education
		E Nursing management
		F Nursing policy/Administration
		G Disaster nursing
		H History of nursing
7502	Clinical nursing	A Critical care/Emergency nursing
		B Perioperative nursing
		C Adult nursing (chronic)
		D Rehabilitation nursing
		E Terminal care
		F Oncology nursing
7503	Lifelong developmental nursing	A Family health nursing
		B Maternal/Women's nursing
		C Midwifery
		D Child health nursing
7504	Community health/ Gerontological nursing	A Community health nursing
		B Public health nursing
		C School nursing
		D Occupational and environmental health nursing
		E Gerontological nursing
		F Psychiatric/Mental health nursing
		G Home nursing
		H Visiting nursing
		J Family health nursing
		K Rehabilitation nursing