

# **Introducing JSPS's mobility programs**

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Japan Society for the Promotion of Science

# JSPS: A Funding Agency for "Science"

# JSPS

## JSPS supports

### curiosity-driven researches in all disciplines:

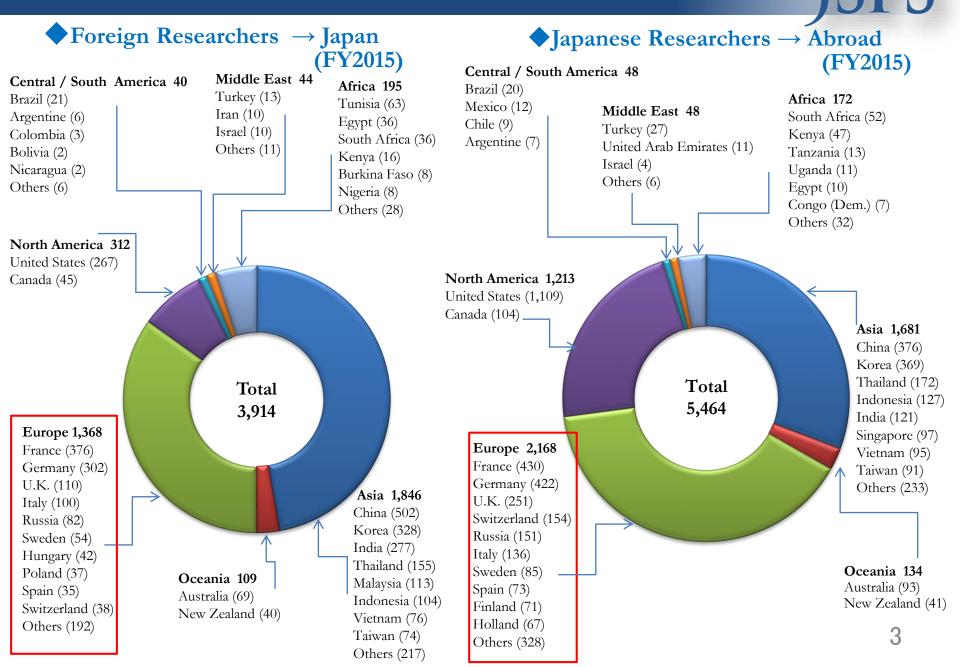
natural/medical/social sciences, mathematics, engineering and humanities.

- JSPS funds
  - Researches
    - (Grants-in-Aid, "KAKENHI": EUR 2 Billion /73,200 projects)
      - > For researchers at Japanese Institutions, regardless of their nationality.
  - □ Fellowships for 6,000 pre-/post-docs.
  - Mobility (from pre-docs to professors,

**10,000 researchers**)

International Collaborations (Bi- and Multi- lateral)

### Number of Researchers Exchanged under JSPS Programs



### Support for Outbound Young Japanese Researchers

# JSPS

### Overseas Research Fellowships <Individual Support>

Since 1982

FY 2014: 456 persons / 22 countries To Germany: 37 person FY 2015: 433 persons / 24 countries To Germany: 34 person Tenure: 2 years

Financial Support:

3.8 - 5.2 million Japanese yen (≓32,000~43,000 EUR) / year / person

Program for Advancing Strategic International Networks to Accelerate the Circulation of Talented Researchers <Organizational Support> Since 2014

	2011	2012	2013	2014	2015	Duration of Projects: 1 - 3 years
Projects	96	124	84	80	64	Financial Support:
Dispatched (To Germany)	414 (49)	530 (53)	387 (43)	782 (47)	758 (63)	Up to 40 million Japanese yen (≓ 333,000 EUR) / year / project
Invited (From Germany)	—	—	—	88 (5)	220 (20)	(*however, the first year 25 million Japanese yen (≓208,000 EUR) / year / project)

JSPS Programmes for Young Researchers

New Project (from FY 2017)

✓ Overseas Challenge Program for Young Researchers

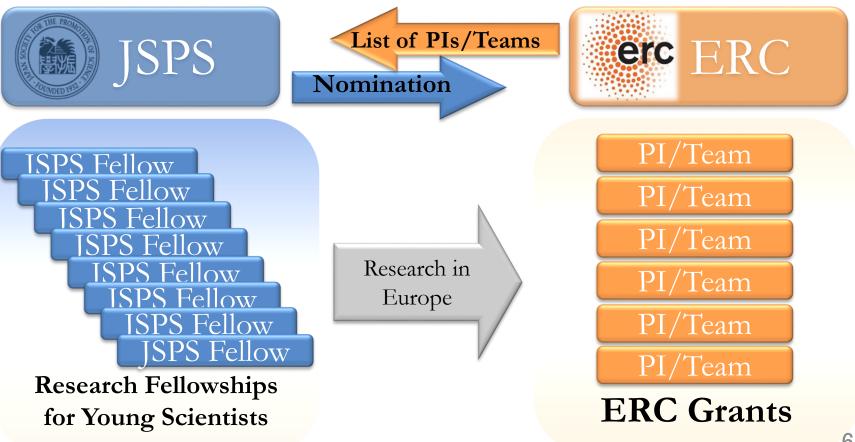
- This programme gives <u>doctoral students</u> an opportunity to go overseas to challenge a new research environment
- Period of Overseas Stay : 3 to 12 months
- Number of Participants: About 140



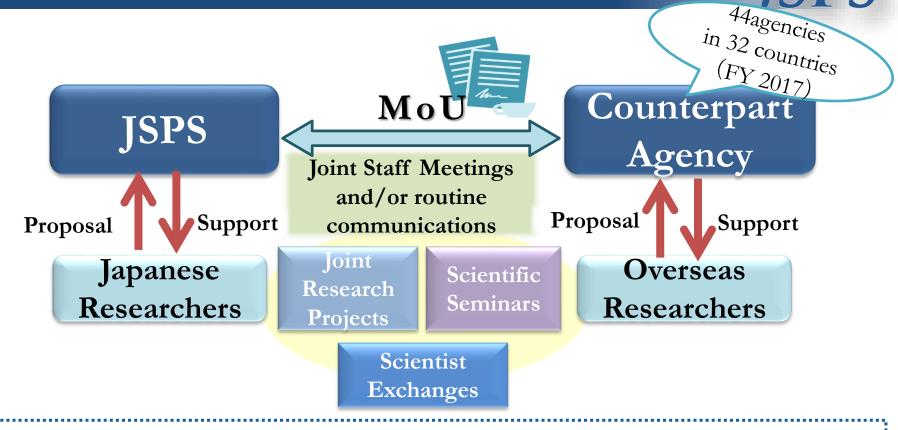
New Framework between JSPS and ERC

Research Visits of JSPS Research Fellows to ERC-supported European teams under the Agreement between <u>ERC and JSPS</u> since 2016





### Bilateral Collaborations Based on MoUs



Purpose: To promote and support academic cooperation between highly qualified Japanese and overseas researchers
 Practice: Equal or cross cost sharing for implementing cooperative activities
 With EU Countries: 17 agencies in 12 countries
 FWF, F.R.S-FNRS, FWO, CAS, AF, CNRS, Inria, Inserm, MAEDI, DAAD, DFG, HAS, CNR, NWO, PAN, MESS, STINT

# FY2017 Joint Research Projects

### **Ongoing Projects with Germany (DAAD)**



Japanese Leader	German Leader	Project Title	Project Period
TERAKAWA Mitsuhiro,Associate Professor (KEIO UNIVERSITY)	RIPKEN Tammo,Head of Department (Laser Zentrum Hannover e.V.)	Development of a multifunctional optical implant	2016/4/1 ~2018/3/31
UKAI Masatoshi,Professor (Tokyo University of Agriculture and Technology)	EHRESMAN Arno,Professor and Scientific Director CINSaT (The University of Kassel)	Development of fluorescence spectrometry for reaction intermediates for understanding the relaxational induction of radiation damages to biomolecules.	2016/4/1 ~2018/3/31
KODAMA Tadayuki,Associate Professor (National Institutes of Natural Sciences)	GENZEL Reinhard,Professor, Director (Max-Planck-Institute for extraterrestrial Physics)	Anatomy of Forming Galaxies with Near Infrared to Radio Observations with High Spatial Resolution	2016/4/1 ~2018/3/31
YAMAMOTO Keizo,Professor (Kyoto University)	BAUM Harald,Professor (Max Planck Institute for Comparative and International Private Law)	Private Autonomy and Self- Responsibility as Legal Principles in German and Japanese Comparative Law	2016/4/1 ~2018/3/31
MIYAMOTO Yoichi,Associate Professor (Osaka University)	SAUERLAND Uli,Research Group Leader (Center for General Linguistics)	An Experimental Pragmatic Study of Quantification	2016/4/1 ~2018/3/31

# FY2017 Joint Research Projects

### Ongoing Projects with Germany (DAAD)



Japanese Leader	German Leader	Project Title	Project Period
OOTANI Wataru,Associate Professor (The University of Tokyo)	SEFKOW Felix,Senior researcher (DESY)	Development of a highly granular scintillator calorimeter with latest generation photo-sensors	2016/4/1 ~2018/3/31
SASAKI Keiichi,Professor and Dean (Tohoku University)	EPPLE Matthias,Full Professor (Duisburg-Essen University)	Hard tissue regeneration and reduction of periodontal inflammation using calcium phosphate nanoparticles loaded with siRNA against TNF-a	2017/4/1 ~2019/3/31
ASANO Yasuhisa,Professor (Toyama Prefectural University)	GROEGER Harald,Professor (Bielefeld Univeristy)	Enantioselective Enzymatic Synthesis of Nitriles without Use of Cyanides	2017/4/1 ~2019/3/31
NAKAMURA Satoshi,Professor (Tohoku University)	POCHODZALLA Josef,Professor (Johannes Gutenberg University Mainz)	Establishment on high precision energy measurements of electron beams at the precision frontier	2017/4/1 ~2019/3/31
TAKADA Junichi,Professor (Tokyo Institute of Technology)	LANDMANN Herrmann Markus,Group Leader (Fraunhofer Institute for Integrated Circuits)	Measurement and modeling of millimeter wave propagation channel for 5G mobile communication systems	2017/4/1 ~2019/3/31
NAGAHARA Yoko,Professor (Kyoto University)	FUESS Harald,Professor (Heidelberg University)	Entangled Pasts in the Global Present: gender, Labor, and Citizenship	2017/4/1 ~2019/3/31 <b>9</b>

# FY2017 Joint Research Projects

# JSPS

### **Ongoing Projects with Germany (DAAD)**

Japanese Leader	German Leader	Project Title	Project Period
ZAIMA Shigeaki,Professor (Nagoya University)	BUCA Mihai Dan,Senior Scientist (Juelich Research Centre)	Group-IV SiGeSn semiconductors: From fundamental materials science to optoelectronic device physics	2016/4/1 ~2018/3/31
TABATA Tomoji,Associate Professor (Osaka University)	JANNIDIS Fotis,Professor for Literary Computing and German Literary History (University of Wurzburg)	Computational Approaches to Complexity in Literary Texts	2017/4/1 ~2019/3/31
TOKITOH Norihiro,Professor (Kyoto University)	STREUBEL Rainer,Full Professor (Reinische Friedrich-Wilhelms- University Bonn)	Metal complexes of monomolecular, anionic frustrated Lewis pairs	2017/4/1 ~2019/3/31
AKAI Shuji,Professor (Osaka University)	GROEGER Harald,Professor (Bielefeld University)	Design of chemo- and biocatalysts with vanadium as an environmentally benign metal component and their applications in the production of bioactive molecules	2017/4/1 ~2019/3/31
WATANABE Satoshi,Junior Associate Professor (Kyoto University)	VOGEL Nicolas,Associate Professor (Friedrich- Alexander University of Erlangen-Nuremberg)	Novel Flow Synthesis and Assembly of Micro/Meso/Macro Hierarchical Superstructure of Soft MOF Particles with Controlled Adsorption Characteristics	2017/4/1 ~2019/3/31 <b>10</b>

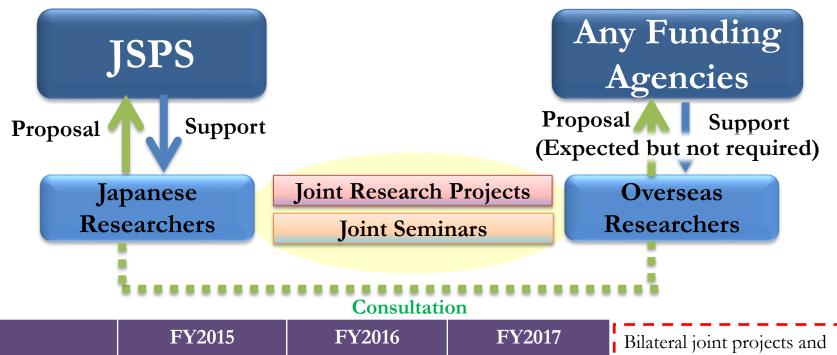
# FY2017 Joint Seminars



### Ongoing Seminars with Germany (DFG)

Japanese Leader	German Leader	Project Title	Project Period
IWATA Shuichi,Associate Professor (Nagoya Institute of Technology)	SCHLUETER Michael,Professor (Hamburg University of Technology)	Third International Symposium on Multiscale Multiphase Process Engineering	2017/5/8~5/11
NAKAGOME Kazuyuki,Director General (National Center of Neurology and Psychiatry)	ISING Marcus,Director Emeritus (Max Plank Institute of Psychiatry)	4th Joint Symposium, MPI of Psychiatry and NCNP. "The development and validation of biomarkers for improving diagnoses and therapy of neuropsychiatric disorders."	2017/10/16~10/18
NAKAKITA Kazuyuki,Senior Researcher (Japan Aerospace Exploration Agency)	BEIFUSS Uwe,Professor (University of Hohenheim)	High-speed Molecular Imaging for Interdiscip linary Research	2017/9/25~9/27

Bilateral Collaborations without MoUs: Open Partnership Joint Projects/Seminars



	1 1 2013		112	112010		112017		
	Projects	Seminars	Projects	Seminars	Projects	Seminars	seminar haven't	
# of application (DEU/ALL)	22/319	5/56	6/197	1/29	2/258	0/27	<b>Suppor</b> Joint Re	
(# of countries)	(54)	(25)	(46)	(22)	(51)	(15)	million( ect for t	
# of selected projects (DEU/ALL)	2/50	1/8	4/46	0/6	0/45	0/5	<u>Joint Se</u> million(	
(# of countries)	(33)	(8)	(23)	(6)	(26)	(5)		

eminars with countries that aven't concluded MoUs. Support for Japanese Team : oint Research: Up to JPY 2.5 nillion(EUR21,000)/year/proj

ect for two years <u>Joint Seminar</u>: Up to JPY 2.5 million(EUR21,000)/ seminar

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# FY2017Joint Research Projects



Japanese Leader	German Leader	Project Title	Project Period
YAMADA Takahiro, Professor (Nagoya University)	RISSE Thomas, Director (Free University of Berlin)	Multiple Communities? Internal Structuration and Knowledge Flows	2015/7/1 ~2017/6/30
SUGIMOTO Asako, Professor (Tohoku University)	SOMMER Ralf, Director, Professor (Max-Planck Institute for Developmental Biology)	Development of a model system for the study of evolutionary cell biology using two nematode species	2016/4/1 ~2018/3/31
FUJII Masaaki, Professor (Tokyo Institute of Technology)	DOPFER Otto, ProfessorDr. (Technische Universitaet Berlin)	Ionization Induced Molecular Switching	2016/4/1 ~2018/3/31
ASHIHARA Satoshi, Associate Professor (The University of Tokyo)	ROPERS Claus, Professor (University of Goettingen)	Advanced control of strong- field photoelectron emission by enhanced ultrashort optical fields	2016/4/1 ~2018/3/31

#### A. Advanced Research Networks

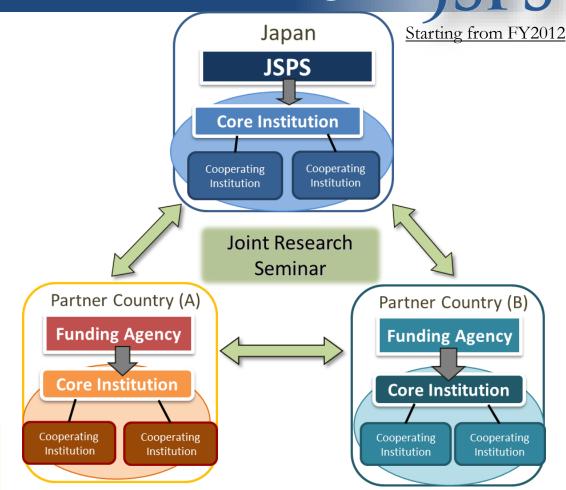
- Target: Any country in the worldObjective:
- Promote International collaboration in cutting edge fields by creating world-class research hubs
- Foster new generations of talented young researchers in Japan and other countries
- Grants: Up to JPY 18 million(EUR150,000) /year

\*Partner institutions are required to cover their own expenses. (cf. international exchange fees etc.)

Project Duration: 5 years

#### **B.** Asia-Africa Science Platforms

- Target: Asian and/or African countries / regions
- ■Objective:
- Japanese research institutions take the lead in building research hubs and fostering young researchers to contribute to Asian/African region
- Grants: Up to JPY 8 million(USD67,000) /year from JSPS
- Project Duration: 3 years



#### Number of applications/selected proposals

	FY20	13	FY2	014	FY2	015	FY20	16	FY.	2017
	App.	Sel.								
A. Advanced	34	8	41	8	45	7	54	7	55	8
B. Asia-Africa	80	11	56	10	41	10	77	12	70	12
	-	-	-	-	-			-	14	-

Project Title	Japanese Coordinator	German Coordinator	Other Partner Countries	Project Period
Construction of an academic consortium which create universal value of the religions cultural heritage by text studies	ABE Yasurou, Professor (Nagoya University)	JOCHEM Kahl Professor(Free University of Berlin)	USA, France	2017/4/1 ~2022/3/31
International Core Research Center for Phototheranostics	URANO Yasuteru, Professor (The University of Tokyo)	WAGNER Ernest Professor (Ludwig- Maximilians University Muenchen)	Canada, USA, UK, Switzerland	2017/4/1 ~2022/3/31
Nanobiology of neural plasticity based on optical nanoscopy	SAKABA Takeshi, Professor(Doshisha university)	HAUCKE Volker Professor (Free University Berlin, Neurocure, FMP)	France, USA	2017/4/1 ~2022/3/31
Research on the Public Policies on Migration, Multiculturalization and Welfare for the Regeneration of Communities in European, Asian and Japanese Societies	SAKAI Kazunari, Professor (Kobe University)	SCHNEIDER Wolfgang, Professor (University of Hildesheim)	Belgium, Italy, France, Vietnam, Thailand, Taiwan, Korea	2016/4/1 ~2021/3/31
International Network of Planetary Sciences	SUGITA Seiji, Professor (the University of Tokyo)	JAUMANN Ralph, Professor (German Aerospace Center)	USA, Switzerland, France	2016/4/1 ~2021/3/31 <b>15</b>

Project Title	Japanese Coordinator	German Coordinator	Other Partner Countries	Project Period
Solid-state chemistry for transition-metal oxides: Exploring for new materials with novel functionalities	SHIMAKAWA Yuichi, Professor (Kyoto University)	TAKAGI Hidenori, Director (Max-Planck- Institute for solid state research)	UK, France, Taiwan	2016/4/1 ~2021/3/31
International collaborative research network for drug discovery and the development of diagnostic and therapeutic biomarkers	TAKEDA Shunichi, Professor (Kyoto University)	BAJORATH Jurgen, Professor (the University of Bonn)	USA, Italy, UK, Canada, Switzerland, France	2016/4/1 ~2021/3/31
International Center for Observational Proof of Inflationary Universe	KATAYAMA Nobuhiko, Professor (the University of Tokyo)	KOMATSU Eiichiro, Director (Max-Planck Institute for Astrophysics)	USA, Canada, Chile, France	2015/4/1 ~2020/3/31
Foundation of a Global Core Research Center for Mathematical Logic and its Application	ISHIHARA Hajime, Professor (AIST)	SCHWICHTENBERG Helmut, Professor (Ludwig-Maximilians- University Munich)	UK, Sweden, Italy	2015/4/1 ~2020/3/31
International research center for new-concept spintronics devices	OHNO Hideo, Professor (Tohoku University)	HILLEBRANDS Burkard, Professor (Technical University of Kaiserslautern)	UK	2015/4/1 ~2020/3/31 <b>16</b>

Project Title	Japanese Coordinator	German Coordinator	Other Partner Countries	Project Period
International genome study based elucidation of pathology and assembly of treatment strategy of the severe ocular surface disease	KINOSHITA Shigeru, Professor (Kyoto Prefectural University of Medicine)	KRUSE Friedrich, Professor (Friedrich Alexander Nurmberg Erlangen University)	UK, Brazil, Thailand, Korea, Taiwan	2015/4/1 ~2020/3/31
Global History Collaborative	HANEDA Masashi, Professor (the University of Tokyo)	ECKERT Andreas, Professor (Berlin Humboldt University)	USA, France	2014/4/1 ~2019/3/31
Comparative Cognitive Science Network for understanding the origins of human mind	MATSUZAWA Tetsuro, Professor (Kyoto University)	PAABO Svante, Director (Max Planck Institute for Evolutionary Anthropology)	UK, USA	2014/4/1 ~2019/3/31
Foundation of a Global Research Cooperative Center in Mathematics focused on Number Theory and Geometry	KURIHARA Masato, Professor (Keio University)	KINGS Guido, Professor (Universitat Regensburg)	UK, USA, Italy, Denmark, Belgium, Switzerland, Australia, Korea	2014/4/1 ~2019/3/31
Elements Function for Transformative Catalysis and Materials	YAMAGUCHI Shigehiro, Professor (Nagoya University)	GLORIUS Frank, Professor (University of Muenster)	Canada	2014/4/1 ~2019/3/31 <b>17</b>

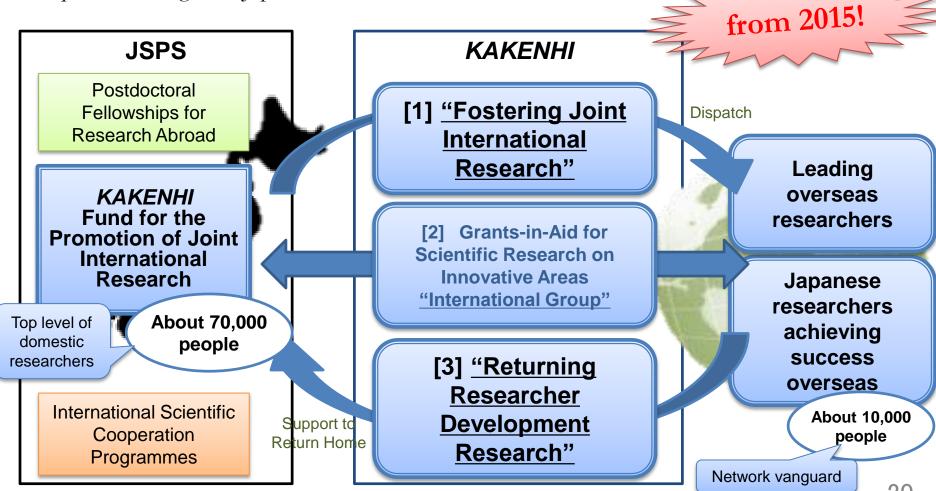
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Project Title	Japanese Coordinator	German Coordinator	Other Partner Countries	Project Period
Nanoscale electron-photon interactions via energy dissipation and fluctuation	TABATA Hitoshi, Professor (the University of Tokyo)	JELEZKO Fedor, Professor (Ulm University)	Sweden, Switzerland, France, the Netherlands	2014/4/1 ~2019/3/31
Three dimensional development of Lab- exchange Type Biomedical Science Research Consortium	INOUE Takafumi, Professor (Waseda University)	HOCH Michael, Professor (Universitaet Bonn)	Singapore, Italy, USA	2014/4/1 ~2019/3/31
Establishment of an international research core for new bio-research fields with microbes from tropical areas (World-class research hub of tropical microbial resources and their utilization)	YAMADA Mamoru, Professor (Yamaguchi University)	GOETZ Peter, Professor (Beuth University of Applied Sciences)	Thailand, Vietnam, Laos, Indonesia	2014/4/1 ~2019/3/31
International research network for virus infections and host responses	TOMONAGA Keizo, Professor (Kyoto University)	SCHWEMMLE Martin, Professor (University of Freiburg)	UK, USA, Belgium, France,	2014/4/1 ~2019/3/31
Isotope spintronics	ITOH Kohei, Professor (Keio University)	BRANDT Martin, Professor (Technical University of Munich)	UK, USA, Canada, Switzerland, Australia	2013/4/1 ~2018/3/31 <b>18</b>

Project Title	Japanese Coordinator	German Coordinator	Other Partner Countries	Project Period
Establishment of gravitational wave astronomy	KAWAMURA Seiji, Professor (the University of Tokyo)	LUECK Harald, Senior Researcher (Max Planck Society)	USA, UK, the Netherlands, Italy, Australia, Korea, China, Taiwan, India, Vietnam, France	2013/4/1 ~2018/3/31
International Alliance for Material Science in Extreme States with High Power Laser and XFEL	KODAMA Ryosuke, Professor (Osaka University)	COWAN Thomas, Director/Professor (the Dresden University of Technology)	UK, France, USA	2013/4/1 ~2018/3/31
International research core on smart layered materials and structures for energy saving	TAKAGI Toshiyuki, Professor (Tohoku University)	BOLLER Christian, Director / Professor (Fraunhofer Institute for NDT)	France, China, Sweden	2013/4/1 ~2018/3/31
International Research Collaboration Network for Developing Highly Functional Sensing Devices for Health, Safety and Security	MATSUMOTO Kazuhiko, Professor (Osaka University)	BLOM Paul, Director (Max Planck)	Belgium, UK, USA, Norway, France	2013/4/1 ~2018/3/31 <b>19</b>

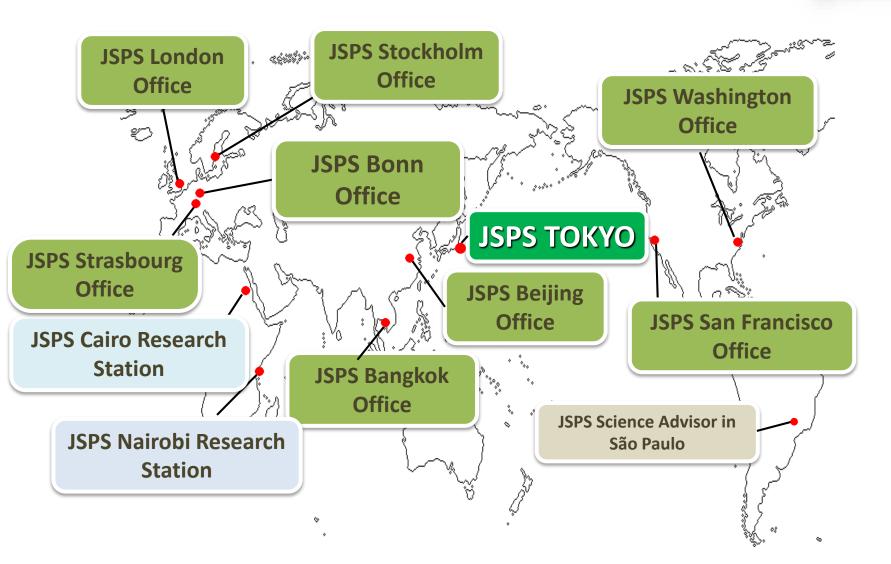
### KAKENHI Programme Fund for the Promotion of Joint International Research

The concern has been expressed that "Recently, the construction of international research networks has advanced around the world due to things like the invigoration of international intellectual circulation, etc., and Japan has been left behind from that great flow", and measures are required to invigorate Japanese research activities.



## JSPS Overseas Offices





## JSPS Alumni Associations

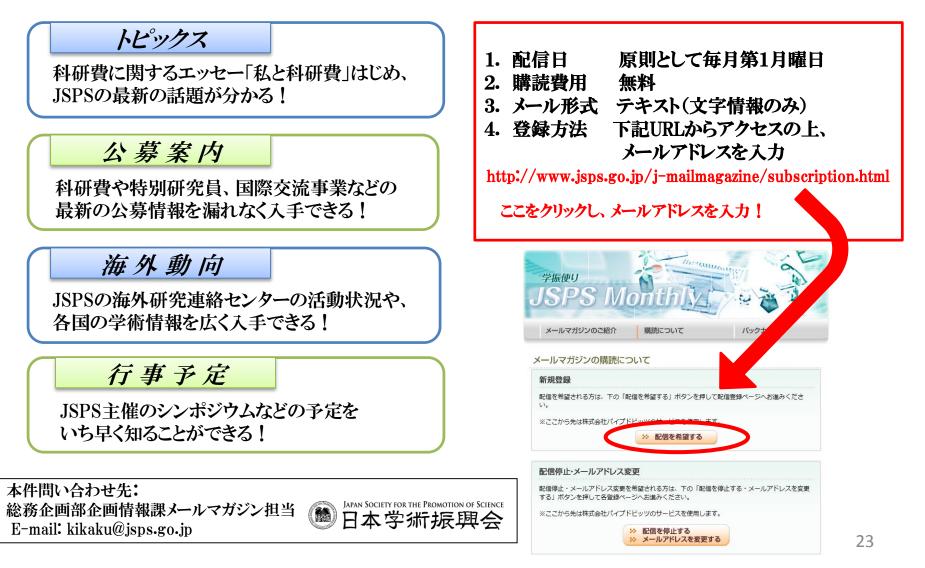
# **18** Alumni Associations and **7,400** of JSPS fellows join their activities.







# 日本学術振興会(JSPS)は、インターネットを活用した情報提供の一環として、<u>科研費などの各種公募案内を始め、最新の情報を、月1回メールマガジン「JSPS Monthly」にて配信</u>しています。



# Schedule of Call for Proposals in Japan



Program	Start Call	Application period or Deadline	Starting Month
Overseas Research Fellowships	February, previous year	Early-May, previous year	Apr-Feb, subject year
Program for Advancing Strategic International Networks to Accelerate the Circulation of Talented Researchers	February	Early-May	October
Bilateral Collaborations (Joint Research Projects and Seminars)	June, previous year	Early-Sep, previous year	Apr, subject year
Bilateral Collaborations (Open Partnership)	June, previous year	Early-Sep, previous year	Apr, subject year
Core-to-Core Program	July, previous year	October, previous year	April, subject year
KAKENHI: Fostering Joint International Research	July, subject fiscal year	Early-Sep, subject fiscal year	After application for funding (After January, subject fiscal year)

# Thank you for your kind attention.



### **Crowing Rooster**

Harbinger of new knowledge that promises a brilliant future for humankind