

## List of Fellows (FY2024 Invitational Fellowships for Research in Japan (Second Recruitment of Short-term))

Humanities

The following list includes the names of the selected fellows, their host researchers and research themes under the 2nd recruitment of FY2024 JSPS Invitational Fellowships for Research in Japan (Short-term). Under this recruitment, 322 applicants were received, among which 75 fellowships were awarded.

| Fellow' name<br>(Family/First/Middle) | Nationality    | Host Researcher       | Host Institution        | Research Theme  |
|---------------------------------------|----------------|-----------------------|-------------------------|---|
| SHOBE Hunter William                  | U.S.A.         | Tomoya<br>HANIBUCHI   | Kyoto University        | Creating a Cultural Atlas in Japanese cities and its international comparison                   |
| TOSTOES Ana                           | PORTUGAL       | Kengo HAYASHI         | The University of Tokyo | Responsive Architecture to Climate and Culture: Towards a Global History of Modern Architecture |
| TZOHAR Roy                            | ISRAEL         | Nobuyoshi<br>YAMABE   | Waseda University       | Asvaghosa's Sectarian Affiliation and His Link to the Indian Yogacara School                    |
| LEE Tsung-Ling                        | TAIWAN         | Tsutomu SAWAI         | Hiroshima University    | Towards a transformative rights-based policy on health data governance                          |
| FLETCHER Robert Stephen Gray          | UNITED KINGDOM | Miki SUGIURA          | Hosei University        | Co-constructive Dimensions in Japanese Entry into Interwar British East Africa                  |
| UDDIN Nasir                           | BANGLADESH     | Yuki SHIOZAKI         | University of Shizuoka  | Communities of Rohingya Refugees and Network of Islamic Education                               |
| TRASNEL Christophe                    | FRANCE         | Noriyuki<br>NISHIYAMA | Kyoto University        | Place of minority francophones in the francophonie  |

## List of Fellows (FY2024 Invitational Fellowships for Research in Japan (Second Recruitment of Short-term))

Social sciences

The following list includes the names of the selected fellows, their host researchers and research themes under the 2nd recruitment of FY2024 JSPS Invitational Fellowships for Research in Japan (Short-term). Under this recruitment, 322 applicants were received, among which 75 fellowships were awarded.

| Fellow' name<br>(Family/First/Middle) | Nationality    | Host Researcher | Host Institution              | Research Theme   |
|---------------------------------------|----------------|-----------------|-------------------------------|--|
| GOVINDARAJAN Usharani Hareesh         | INDIA          | Daiju NARITA    | The University of Tokyo       | Integrating Machine Learning with Econometrics: A Cross-Disciplinary Approach to Data Analysis |
| FESTRE Agnes                          | FRANCE         | Nobuyuki HANAKI | Osaka University              | Comparing self-declared surveys and experimental measures of trust and social capital          |
| BURNETT Kimberly Michi                | U.S.A.         | Akira HIBIKI    | Tohoku University             | Improving labor market outcomes for fisheries in Minamisanriku                                 |
| MORLING Beth Ann                      | U.S.A.         | Yuri MIYAMOTO   | Hitotsubashi University       | Culture and Song Lyrics: Influence, Adjustment, and Mixed Emotions                             |
| PINEDA Pedro                          | GERMANY        | Masaaki KATSUNO | The University of Tokyo       | Political Ideologies and Pedagogies Framing Social Conflict Treatment in Textbooks             |
| RICHARDSON Jennifer Casey             | U.S.A.         | Yoshiko GODA    | Kumamoto University           | Educational Professionals for Quality Assurance of Education in Japanese Higher Education      |
| STULHOFER Aleksandar                  | CROATIA        | Yuko HIGASHI    | Osaka Metropolitan University | Dyadic Mixed Method Assessment of Successful Sexual Aging                                      |
| HIRATA Koji                           | JAPAN          | Jun KAJIMA      | KEIO UNIVERSITY               | China's trade with Japan during the planned economy period                                     |
| GRECO Luis                            | GERMANY        | Shin MATSUZAWA  | Waseda University             | Study on the Singularity of Criminal Punishment  |
| WILDER Jenny                          | SWEDEN         | Sachiyo ISHIDA  | Chiba University              | International Proposals on the School Environment for Neurodiversity and Quality Education     |
| PO Chung Yam                          | UNITED KINGDOM | Ryo IKEDA       | Tohoku University             | China and Japan in International Fisheries Exhibitions at the Turn of the Twentieth Century    |

## List of Fellows (FY2024 Invitational Fellowships for Research in Japan (Second Recruitment of Short-term))

Mathematical and physical sciences

The following list includes the names of the selected fellows, their host researchers and research themes under the 2nd recruitment of FY2024 JSPS Invitational Fellowships for Research in Japan (Short-term). Under this recruitment, 322 applicants were received, among which 75 fellowships were awarded.

| Fellow' name<br>(Family/First/Middle) | Nationality | Host Researcher    | Host Institution              | Research Theme  |
|---------------------------------------|-------------|--------------------|-------------------------------|---|
| WADSLEY James                         | CANADA      | Shigeru IDA        | Tokyo Institute of Technology | Simulations of the formation of planetesimals   |
| BARKANA Rennan                        | ISRAEL      | Naoki YOSHIDA      | The University of Tokyo       | Observational cosmology using hydrogen 21cm line  |
| HANANY Shaul                          | U.S.A.      | Tomotake MATSUMURA | The University of Tokyo       | Exploration towards the precision CMB polarimetry for the physics of early Universe               |
| ABARJI Snejana I                      | U.S.A.      | Yasuhide FUKUMOTO  | Kyushu University             | Instability of velocity/density interface and noncanonical turbulence of compressible fluids      |
| BAGARELLO Fabio                       | ITALY       | Naomichi HATANO    | The University of Tokyo       | Discovery of series of solvable models in non-Hermitian quantum mechanics                         |
| KRUZIK Martin                         | CZECH       | Karel SVADLENKA    | Tokyo Metropolitan University | Variational models of inhomogeneous solid materials with internal structure                       |
| SEREBRYANNIKOV Andriy                 | UKRAINE     | Yosuke NAKATA      | Osaka University              | Topological wave localization in metamaterials: single and collective effects and their interplay |
| GUILLAS Serge Etienne                 | FRANCE      | Takemasa MIYOSHI   | RIKEN                         | Uncertainty Quantification at the exascale  |
| VUTHA Amar Chandra                    | CANADA      | Yoshiro TAKAHASHI  | Kyoto University              | Ultracold Laser-cooled Atom Approach for Search for New Physics Beyond Standard Model             |

## List of Fellows (FY2024 Invitational Fellowships for Research in Japan (Second Recruitment of Short-term))

Chemistry

The following list includes the names of the selected fellows, their host researchers and research themes under the 2nd recruitment of FY2024 JSPS Invitational Fellowships for Research in Japan (Short-term). Under this recruitment, 322 applicants were received, among which 75 fellowships were awarded.

| Fellow' name<br>(Family/First/Middle) | Nationality | Host Researcher     | Host Institution        | Research Theme  |
|---------------------------------------|-------------|---------------------|-------------------------|---|
| MOHAMED BESISA Hanan Hussein Amin     | EGYPT       | Hiroshi ONISHI      | Kobe University         | Operando spectroscopy to reveal reaction kinetics on metal-free photocatalysts                    |
| ZUO Zhiwei                            | CHINA       | Keiji MARUOKA       | Kyoto University        | Development of Chemo- & Stereoselective Radical Reactions by New Chiral Organocatalysts           |
| FORBES Malcolm Donald Elder           | U.S.A.      | Yasuhiro KOBORI     | Kobe University         | Dynamic nuclear quantum sensing in biology using spin correlated radical pair model               |
| CHENG Quan Jason                      | U.S.A.      | Takeaki OZAWA       | The University of Tokyo | Development of optical imaging techniques to decipher biomolecular interactions on cell membranes |
| BONIFAZI Davide                       | ITALY       | Shigehiro YAMAGUCHI | Nagoya University       | Functions of Multi-Element-Doped pi-Electron Materials  |

## List of Fellows (FY2024 Invitational Fellowships for Research in Japan (Second Recruitment of Short-term))

Engineering sciences(page 1 of 2)

The following list includes the names of the selected fellows, their host researchers and research themes under the 2nd recruitment of FY2024 JSPS Invitational Fellowships for Research in Japan (Short-term). Under this recruitment, 322 applicants were received, among which 75 fellowships were awarded.

| Fellow' name<br>(Family/First/Middle) | Nationality          | Host Researcher    | Host Institution                               | Research Theme  |
|---------------------------------------|----------------------|--------------------|--|---|
| SALVARANI Francesco                   | ITALY                | Shigeru TAKATA     | Kyoto University                               | Foundation of kinetic theory for polyatomic ideal gas and related issues                            |
| XU Wenwu                              | U.S.A.               | Motomichi KOYAMA   | Tohoku University                              | Atomistic Studies of Grain Boundary Hydrogen Embrittlement in Pure Metal Iron                       |
| HU Hui                                | U.S.A.               | Taro IMAMURA       | The University of Tokyo                        | Basic research on icing prediction and ice prevention for aircraft                                  |
| CUI Tianhong                          | CHINA                | Fumihito ARAI      | The University of Tokyo                        | Design of Basis of Milli-Micro-Nano Scaled Robotic Systems  |
| ZHONG Chen                            | CHINA                | Fuko NAKAI         | Nagoya Institute of Technology                 | Unveiling Social Segregation and Inequality in the Disaster Recovery Using Mobile Positioning Data  |
| LI Wengui                             | CHINA                | Ippei MARUAYAMA    | The University of Tokyo                        | Self-sensing concrete: Unveiling multiscale interactions between hybrid nanofillers and matrix      |
| CASTEL Arnaud Laurent                 | FRANCE               | Yasutaka SAGAWA    | Kyushu University                              | Design of performance-based test of chloride diffusion and steel corrosion in geopolymer concrete   |
| KRASHENINNIKOV Arkady                 | RUSSIA<br>FEDERATION | Kazutomo SUENAGA   | Osaka University                               | Prediction and experimental realization of novel 2D materials sandwiched between graphene sheets    |
| PEREBEINOS Vasili                     | U.S.A.               | Shigeo MARUYAMA    | The University of Tokyo                        | Exciton behavior in 1D heterostructures based on single-walled CNTs                                 |
| AKBARI Hashem                         | U.S.A.               | Hideki TAKEBAYASHI | Kobe University                                | Study on Strategies for Adaptation Measures to Extreme High Temperatures in Urban Areas             |
| ZAN Mohd Saiful Dzulkefly Bin         | MALAYSIA             | Yosuke TANAKA      | Tokyo University of Agriculture and Technology | International joint study on high-speed, high-spatial-resolution Brillouin distributed fiber sensor |

**List of Fellows (FY2024 Invitational Fellowships for Research in Japan (Second Recruitment of Short-term))**

Engineering sciences(page 2 of 2)

| Fellow' name<br>(Family/First/Middle) | Nationality | Host Researcher          | Host Institution                         | Research Theme   |
|---------------------------------------|-------------|--------------------------|--|--|
| CEBRIAN RAMOS Manuel                  | SPAIN       | Tomomi KITO              | Waseda University                        | Empowering Citizens for Large Language Model Safety: A Japan-Focused Initiative                      |
| JOLY Laurent                          | FRANCE      | Yasutaka<br>YAMAGUCHI    | Osaka University                         | Molecular Dynamics of the thermocapillary flow by the temperature gradient on the solid surface      |
| GAO Peifeng                           | CHINA       | Yoshinori<br>YANAGISAWA, | RIKEN                                    | Intelligent self-protecting ultra-high-field HTS magnets design                                      |
| BHARGAVA Suresh Kumar                 | AUSTRALIA   | Kazunari DOMEN           | Shinshu University                       | Activation of photocatalysts for green hydrogen production by controlling cocatalyst nanostructures  |
| DOLEZ Patricia                        | CANADA      | Kaoru WAKATSUKI          | Shinshu University                       | Evaluation of Tensile Strength of Protective Clothing with High-Performance Fibers against UV Light. |
| ABDELHALIM Ibrahim                    | ISRAEL      | Tadaaki NAGAO            | National Institute for Materials Science | Cooperative Research on the Adaptive Organic-Inorganic Nanomaterials and their Infrared Devices      |
| MAO Zhiqiang                          | U.S.A.      | Yong CHEN                | Tohoku University                        | Discover and understanding of novel topological quantum states                                       |
| FAUSTINI Marco                        | ITALY       | Kenji OKADA              | Osaka Metropolitan University            | Photonic sensors based on oriented films of microporous materials                                    |

## List of Fellows (FY2024 Invitational Fellowships for Research in Japan (Second Recruitment of Short-term))

Informatics

The following list includes the names of the selected fellows, their host researchers and research themes under the 2nd recruitment of FY2024 JSPS Invitational Fellowships for Research in Japan (Short-term). Under this recruitment, 322 applicants were received, among which 75 fellowships were awarded.

| Fellow' name<br>(Family/First/Middle) | Nationality    | Host Researcher       | Host Institution                             | Research Theme  |
|---------------------------------------|----------------|-----------------------|--|---|
| EL ALI Abdallah                       | NETHERLANDS    | Kiyoshi<br>KIYOKAWA   | Nara Institute of Science and<br>Technology  | Investigating Haptic Feedback and Avatar Representations for Enhancing Shared Virtual<br>Co-Embodiment  |
| QIAN Kun                              | CHINA          | Yoshiharu<br>YAMAMOTO | The University of Tokyo                      | Explainable Deep Learning for Longitudinal Biomedical Signal Analysis and Healthcare<br>Application     |
| TOH Chai Keong                        | SINGAPORE      | Manabu TSUKADA        | The University of Tokyo                      | Communications and AI Convergence in Smart Transportation Systems                                       |
| HONG Danfeng                          | CHINA          | Naoto YOKOYA          | The University of Tokyo                      | Multimodal Remote Sensing Foundation Models for Disaster Damage Mapping                                 |
| GOWRISHANKAR Ganesh                   | INDIA          | Michiteru<br>KITAZAKI | Toyohashi University of<br>Technology        | Visual augmentation based on natural visuomotor behavior  |
| WANG Kezhi                            | CHINA          | Celimuge WU           | The University of Electro-<br>Communications | Generative AI-empowered Semantic Communications for Large-volume Image<br>Transmission in Vehicular IoT |
| LEE Pyoung Jik                        | UNITED KINGDOM | Takumi ASAKURA        | Tokyo University of Science                  | Assessing urban soundscape in courtyards and streets: Bridging the gap between<br>perception and design |

## List of Fellows (FY2024 Invitational Fellowships for Research in Japan (Second Recruitment of Short-term))

Biological sciences

The following list includes the names of the selected fellows, their host researchers and research themes under the 2nd recruitment of FY2024 JSPS Invitational Fellowships for Research in Japan (Short-term). Under this recruitment, 322 applicants were received, among which 75 fellowships were awarded.

| Fellow' name<br>(Family/First/Middle) | Nationality | Host Researcher      | Host Institution  | Research Theme  |
|---------------------------------------|-------------|----------------------|---|---|
| YUAN Qi                               | CANADA      | Takuya SASAKI        | Tohoku University   | Characterizing norepinephrine dynamics in a pretangle tau rat model with GRAB sensor imaging        |
| GRZYWACZ Beata                        | POLAND      | Haruki TATSUTA       | Kyushu University   | Evolutionary process of chromosomal variations focusing on interstitial telomeric repeats           |
| SENGUPTA Piali                        | U.S.A.      | Kazushige<br>TOUHARA | The University of Tokyo   | Characterization of a novel gut chemoreceptor   |
| SCHRAIDT Oliver Alexander             | GERMANY     | Oleg SITSEL          | Okinawa Institute of Science<br>and Technology Graduate<br>University | The ultrastructural signature of coral-algae endosymbiosis characterized by cryoelectron tomography |



## List of Fellows (FY2024 Invitational Fellowships for Research in Japan (Second Recruitment of Short-term))

Agriculture/Environmental sciences

The following list includes the names of the selected fellows, their host researchers and research themes under the 2nd recruitment of FY2024 JSPS Invitational Fellowships for Research in Japan (Short-term). Under this recruitment, 322 applicants were received, among which 75 fellowships were awarded.

| Fellow' name<br>(Family/First/Middle) | Nationality | Host Researcher  | Host Institution  | Research Theme  |
|---------------------------------------|-------------|------------------|---|---|
| DERBALAH Aly Soliman Hamed            | EGYPT       | Kazuhiko TAKEDA  | Hiroshima University                                      | Advanced remediation technologies of pesticides residues in wastewater with nanotechnology          |
| PLAIN Caroline Christiane Catherine   | FRANCE      | Masako DANNOURA  | Kyoto University  | Improving our knowledge of the methane budget of forest ecosystems in a changing world              |
| KABIR Muhammad Rezaul                 | BANGLADESH  | Hirokazu HANDA   | Kyoto Prefectural University                              | Study of resistance evaluation and resistant gene isolation for wheat blast resistance breeding     |
| DELUCCHI Luca                         | ITALY       | Nobusuke IWASAKI | Tottori University  | Development rural area investigation methods using DigiAgriApp and Free Satellite image             |
| BUMDUUREN Tuvshintulga                | MONGOLIA    | Naoaki YOKOYAMA  | Obihiro University of Agriculture and Veterinary Medicine | Isolation and characterization of a newly discovered, highly pathogenic bovine Babesia parasite     |
| WYBOUW Nicky Roger                    | BELGIUM     | Yohsuke TAGAMI   | National University Corporation Shizuoka University       | Unraveling the tripartite interaction among insect, insect manipulating bacteria, and their phages. |
| LIU Zehua                             | CHINA       | Koji HARADA      | Kyoto University  | Crosstalk between PFAS exposure and natural estrogen metabolisms and their environmental burdens    |
| GUO Zhongwu                           | CHINA       | Hiromune ANDO    | Gifu University   | Study on the behavior of GPI anchor in the cell membrane and its biological function                |
| YANG Yu                               | CHINA       | Yuki TOBIMATSU   | Kyoto University  | International Collaboration for Understanding Lignin Transformation into Soil Organic Matter        |

## List of Fellows (FY2024 Invitational Fellowships for Research in Japan (Second Recruitment of Short-term))

Medicine dentistry and pharmacy

The following list includes the names of the selected fellows, their host researchers and research themes under the 2nd recruitment of FY2024 JSPS Invitational Fellowships for Research in Japan (Short-term). Under this recruitment, 322 applicants were received, among which 75 fellowships were awarded.

| Fellow' name<br>(Family/First/Middle) | Nationality | Host Researcher    | Host Institution            | Research Theme   |
|---------------------------------------|-------------|--------------------|-----------------------------|--|
| JAKOBSSON UEDA Peter Ichiro Bjorn     | SWEDEN      | Shuhei NOMURA      | KEIO UNIVERSITY             | Determinants of singlehood, romantic interest, and sexual experience in Japanese adults        |
| MULLER Sylviane                       | FRANCE      | Tsuneyasu KAISHO   | Wakayama Medical University | Elucidation of molecules involved in autoimmune diseases and development of therapeutic agents |
| VENKATESWARAN Kasthuri                | U.S.A.      | Fumito<br>MARUYAMA | Hiroshima University        | Real-time Monitoring of Microbial Diversity and Burden in Space Station Environments           |
| CHEN Yau-Hung                         | TAIWAN      | Tao-sheng LI       | NAGASAKI UNIVERSITY         | Therapeutic resistance acquisition using zebrafish xenograft tumor model                       |