JSPS Postdoctoral Fellowship for Overseas Researcher

FY 2020 Engineering sciences

Name(Nationality)	Research Subject	Host Institute Host Researcher	Period	Region Prefecture
ALIABADIAN, Z. AUSTRALIA	Elucidation of microcracking mechanism in anisotropic rock and optimization of indirect tensile test	Kumamoto University SAINOKI, Atsushi Associate professor International Research Organization for Advanced Science and Technology	Nov 22, 2020～ Nov 21, 2022	Kyushu Kumamoto
GULATI, K. AUSTRALIA	Finding the Nanoscale Forces Experienced by a Single Osteoblast and Fibroblast on Nanoporous Implants	Kyoto University ADACHI, Taiji Professor Institute for Frontier Life and Medical Sciences	Sep 29, 2021～ Sep 28, 2022	Kinki Kyoto
YILDIRIM, T. AUSTRALIA	Development of multiple mode nanomechanical sensors towards agricultural applications	National Institute for Materials Science YOSHIKAWA, Genki Group Leader Research Center for Functional Materials	Nov 12, 2020～ Nov 11, 2022	Kanto Ibaraki
HOEFLER, T. AUSTRIA	Behavior of C and O During Sintering of Ni-based Superalloy MIM Parts: A Simulation Approach	Kyushu University SHINAGAWA, Kazunari Professor Faculty of Engineering	Nov 30, 2020～ Nov 29, 2022	Kyushu Fukuoka
VAN GUYSE, J. F. BELGIUM	Development of polymeric micellar nanocarrier for messenger RNA delivery	Kawasaki Institute of Industrial Promotion KATAOKA, Kazunori Director General Innovation Center of NanoMedicine	Oct 1, 2020～ Sep 30, 2022	Kanto Kanagawa
BHADRA, B. N. BANGLADESH	MOF-related materials for adsorptive removal of perfluoroalkyl substances from water	National Institute for Materials Science ARIGA, Katsuhiko Principal Investigator International Center for Materials Nanoarchitectonics	Apr 1, 2021～ Mar 31, 2023	Kanto Ibaraki
GEORGIEV, M. L. BULGARIA	Production of Gold-Indium and Palladium-Indium Nanoparticles by Electrochemical and Laser Ablation Techniques	Tokai University KULINICH, Sergey Professor Department of Mechanical Engineering	Apr 28, 2021～ Apr 27, 2022	Kanto Kanagawa
TEMGA, J. CANADA	mm Wave and Sub-THz on-chip antenna array beamforming for high speed wireless communications.	Tohoku University SUEMATSU, Noriharu Professor Research Institute of Electrical Communication	Oct 15, 2020～ Oct 14, 2022	Tohoku Miyagi

SCHNEIDER, M. Y. SWITZERLAND	Autonomous wastewater treatment: Monitoring and control of on-site wastewater treatment plants	The University of Tokyo KUNIYOSHI, Yasuo Professor Graduate School of Information Science and Technology	Nov 19, 2020～ Nov 18, 2022	Kanto Tokyo
GAI, C. CHINA	Development of non-noble-metal catalysts using biomass-derived carbon for biohydrogen production	Tohoku University TOMISHIGE, Keiichi Professor Graduate School of Engineering	Sep 30, 2021～ Sep 29, 2023	Tohoku Miyagi
GAO, Y. CHINA	Plasmonic arrays for upconversion enhancement toward efficient solar cells	Kyoto University TANAKA, Katsuhisa professor Graduate School of Engineering	Oct 1, 2020～ Sep 30, 2022	Kinki Kyoto
GUO, X. CHINA	The development of novel inerter damper to enhance the base-isolated building system	Tohoku University IKAGO, Kohju Professor International Research Institute of Disaster Science	Nov 29, 2020～ Nov 28, 2022	Tohoku Miyagi
HAN, C. CHINA	Fabrication of High Performance Silicon Based Thin Film Flexible Thermoelectric Generator	National Institute for Materials Science MORI, Takao Group Leader International Center for Materials Nanoarchitectonics	Apr 1, 2021～ Mar 31, 2023	Kanto Ibaraki
HUA, Y. CHINA	Study on Thermoelectric Properties of Metamaterials in Presence of Magnetic Field	The University of Tokyo SHIOMI, Junichiro Professor Graduate School of Engineering	Dec 2, 2020～ Dec 1, 2022	Kanto Tokyo
JIANG, C. CHINA	Performance Evaluation of FRP Retrofitted Corroded RC Members using RBSM Simulation	The University of Tokyo NAGAI, Kohei Associate Professor Institute of Industrial Science	Dec 1, 2020～ Nov 30, 2022	Kanto Tokyo
JIANG, M. CHINA	Manipulation of spin-orbit torque in a spin-orbit ferromagnet single layer for future spin devices	The University of Tokyo TANAKA, Masaaki Professor Graduate School of Engineering	Oct 1, 2020～ Sep 30, 2022	Kanto Tokyo
LENG, L. CHINA	Deciphering novel metabolism for biotechnology innovation through meta-omics and machine learning	National Institute of Advanced Industrial Science and Technology NOBU, Masaru konishi Researcher Bioproduction Research Institute	Oct 1, 2020～ Sep 30, 2022	Kanto Ibaraki

LI, Q. CHINA	Integrating biochar amended AnMBR and two-stage Anammox for organic wastes treatment and bioenergy recovery	Tohoku University LI, Yu-You Professor Graduate School of Engineering	Apr 1, 2021～ Mar 31, 2023	Tohoku Miyagi
LI, W. CHINA	Mass Transport in Two-Dimensional Nanospace Formed by Polymeric Nanosheets	RIKEN AIDA, Takuzo Group Director Emergent Soft Matter Function Research Group	Apr 1, 2021～ Mar 31, 2023	Kanto Saitama
LI, W. CHINA	Development of novel multifunctional composite oxide for carbon dioxide capture and sulfide removal	Tohoku University UEDA, Shigeru Professor Institute of Multidisciplinary Research for Advanced Materials	Sep 1, 2020～ Aug 31, 2022	Tohoku Miyagi
LI, Y. CHINA	Seismic performance and design methodology of EDRCs under bidirectional earthquakes	Kyoto University KOETAKA, Yuji Associate Professor Graduate School of Engineering	Oct 30, 2020～ Oct 29, 2022	Kinki Kyoto
LIN, J. CHINA	Atomic defective structure and functionality in ceramic materials	The University of Tokyo IKUHARA, Yuichi Professor Graduate School of Engineering	Nov 19, 2020～ Nov 18, 2022	Kanto Tokyo
LIU, H. CHINA	Characterization of Crack Nucleation in Titanium Alloys with Metastable Microstructures	Kyushu University CHEN, Qiang Professor Faculty of Engineering	Nov 26, 2020～ Nov 25, 2022	Kyushu Fukuoka
LIU, S. CHINA	Novel MOF-derived electrodes for solid-state supercapacitors	National Institute for Materials Science YAMAUCHI, Yusuke Group Leader International Center for Materials Nanoarchitectonics (WPI-MANA)	Jan 6, 2021～ Jan 5, 2023	Kanto Ibaraki
LIU, Z. CHINA	Functional Design of Biomass Carbon-based Adsorbent for Enhanced Greenhouse Gas Capture	Nagoya University NORINAGA, Koyo Professor Graduate School of Engineering	Aug 12, 2021～ Aug 11, 2023	Chubu Aichi
MA, J. CHINA	Novel nanomaterial synthesis and application for prevention the toxicity of microcystin-LR	Nagoya University SAITO, Nagahiro Professor Institutes of Innovation for Future Society	Apr 1, 2021～ Mar 31, 2023	Chubu Aichi

MAO, N. CHINA	Heat transfer characteristics of transcritical CO2 in micro/nano-channel	The University of Tokyo SHIKAZONO, Naoki Professor Institute of Industrial Science	Dec 9, 2020～ Dec 8, 2022	Kanto Tokyo
SHI, Q. CHINA	Effects of Irradiation and Solute Elements on the Passivation Behaviors in Fe-Cr Based Alloys	The University of Tokyo ABE, Hiroaki Professor School of Engineering	Apr 1, 2021～ Mar 31, 2023	Kanto Tokyo
TU, S. CHINA	Enhancing brittle crack arrest ability of ultra-thick steel structures by mechanism investigations	The University of Tokyo SHIBANUMA, Kazuki Associate Professor Graduate School of Engineering	Oct 7, 2020～ Oct 6, 2022	Kanto Tokyo
WANG, G. CHINA	Structurally tailored novel catalyst for mild and efficient CO2 hydrogenation to methanol	Hokkaido University SHIMIZU, Kenichi Professor Institute for Catalysis	Nov 26, 2020～ Nov 25, 2022	Hokkaido Hokkaido
WANG, R. CHINA	Prediction of Residual Life of Heat-resistant Alloys under Random Load at Elevated Temperatures	Tohoku University MIURA, Hideo Professor Graduate School of Engineering	Sep 1, 2021～ Aug 31, 2022	Tohoku Miyagi
WANG, Z. CHINA	Durability Mechanics of Structural Concrete under Broadband Temperature for Safety Assessment	Yokohama National University MAEKAWA, Koichi Professor Institute of Urban Innovation	Oct 1, 2020～ Sep 30, 2022	Kanto Kanagawa
WEN, P. CHINA	Research of High-Performance Multi-Function Balanced Filtering Microwave Components	Saitama University MA, Zhewang Professor Graduate School of Science and Engineering	Dec 16, 2020～ Dec 15, 2022	Kanto Saitama
XING, J. CHINA	High-fidelity simulation and machine learning modeling of clean biomass combustion	Kyoto University KUROSE, Ryoichi Professor Graduate School of Engineering	Apr 7, 2021～ Apr 6, 2023	Kinki Kyoto
XU, K. CHINA	Multifunctional Hybrid Flexible Sensor Systems for Internet of Things Applications	Osaka Prefecture University TAKEI, Kuniharu Professor Department of Physics and Electronics	Sep 1, 2020～ Oct 30, 2020	Kinki Osaka

YANG, J. CHINA	Investigation of the mechanism of biofilm formation by means of biomechanics	Tohoku University ISHIKAWA, Takuji Professor Graduate School of Engineering	Apr 1, 2021～ Mar 31, 2023	Tohoku Miyagi
YIN, X. CHINA	Study on unidirectional-emitting photonic-crystal lasers based on topological photonics	Kyoto University NODA, Susumu Professor Graduate school of engineering	Nov 26, 2020～ Nov 25, 2022	Kinki Kyoto
ZHANG, B. CHINA	Advanced oxidation process using a new N-doped carbon material for emerging contaminant removal	Tokyo Institute of Technology FUJII, Manabu Specially Appointed Associate Professor School of Environment and Society	Dec 21, 2020～ Dec 20, 2022	Kanto Tokyo
ZHANG, L. CHINA	Atomic-scale interface control for large-area glass molding of micro/nanostructured optics	Keio University YAN, Jiwang Professor Faculty of Science and Technology	Sep 26, 2020～ Sep 25, 2022	Kanto Kanagawa
ZHANG, X. CHINA	Memory, Logic Computing, and Neural Networks Based on Topological Spin Textures	Shinshu University LIU, Xiaoxi Professor School of Science and Technology, Institute of Engineering	Nov 8, 2020～ Nov 7, 2022	Chubu Nagano
ZHENG, R. CHINA	Development of halide perovskite composite with thermal-conductive microstructure for high power LED	Kyoto University TANABE, Setsuhisa Professor Graduate School of Human and Environmental Studies	Nov 26, 2020～ Nov 25, 2022	Kinki Kyoto
ZONG, L. CHINA	Demountable and reusable modular steel construction	Hokkaido University OKAZAKI, Taichiro Professor Faculty of Engineering	Sep 30, 2021～ Sep 29, 2023	Hokkaido Hokkaido
VALADEZ HUERTA, G. GERMANY	Molecular insight of solid/liquid interfaces to update electrochemical double layer models	Shinshu University KOYAMA, Michihisa Professor Reserch Intiative for Supra-Materials	Apr 1, 2021～ Mar 31, 2023	Chubu Nagano
CEGARRA POLO, M. SPAIN	Detection and characterisation of space debris with telescopes using photometry and FPGA processing	Japan Aerospace Exploration Agency YANAGISAWA, Toshifumi Associate Senior Researcher Research and Development Directorate	Sep 29, 2020～ Mar 28, 2022	Kanto Tokyo

MARTINEZ PANCORBO, P. SPAIN	Optofluidic plasmonic platform for ex vivo single-molecule detection of human disease biomarkers	The University of Tokyo GODA, Keisuke Professor Graduate School of Science	Sep 30, 2021～ Sep 29, 2023	Kanto Tokyo
CACHEUX, J. FRANCE	Dynamic monitoring of microvessel models in time and space	The University of Tokyo MATSUNAGA, Yukiko Associate Professor Institute of Industrial Science	Nov 25, 2020～ Nov 24, 2022	Kanto Tokyo
DEROT, J. FRANCE	Improvement of a hybrid hydro-ecological and machine learning model for water quality management	Shimane University YAJIMA, Hiroshi Professor Institute of Environmental System Science	May 8, 2020～ May 7, 2022	Chugoku Shimane
SALHANI, C. G. FRANCE	Development of Novel Cooling Devices Based on Semiconductor Heterostructures	The University of Tokyo HIRAKAWA, Kazuhiko Professor Institute of Industrial Science	Nov 26, 2020～ Nov 25, 2022	Kanto Tokyo
DION, T. C. UNITED KINGDOM	Spin-Wave Dynamics in Yytrium Iron Garnet / Nanomagnet Hybrid Devices for Magnonic Computing	Kyushu University KIMURA, Takashi Professor Faculty of Science	Apr 30, 2021～ Apr 29, 2023	Kyushu Fukuoka
YANINGSIH, I. INDONESIA	Deep learning for predicting heat transfer and effective thermal conductivity of porous media	The University of Electro-Communications ENOKI, Koji Associate Professor The University of Electro-Communications	May 1, 2021～ Apr 30, 2023	Kanto Tokyo
BANERJEE, A. INDIA	Ultra-sensitive mass detection of ppt-level gas molecules with graphene nanomechanical resonators	JAIST MIZUTA, Hiroshi Professor Graduate School of Advanced Science and Technology	Apr 1, 2020～ Aug 31, 2020	Chubu Ishikawa
BARMAN, B. K. INDIA	Light-emitting Device by Strongly-coupled Nanophotonic Cavity and Metal-free Carbon Nano-dots	National Institute for Materials Science NAGAO, Tadaaki Group Leader International Center for Materials Nanoarchitectonics	Nov 30, 2020～ Nov 29, 2022	Kanto Ibaraki
BHATTACHARYA, S. INDIA	Molecular Magnet Embedded Hybrid 2D Nanostructures: A High Temperature Novel Spintronic Device	Osaka University TADA, Hirokazu Professor Graduate School of Engineering Science	Sep 30, 2021～ Sep 29, 2023	Kinki Osaka

K, S. INDIA	Lab-on-chip monitoring neurotransmitters in extracellular fluid using disposable paper electrodes	University of Tsukuba TSUJIMURA, Seiya Associate Professor Faculty of Pure and Applied Sciences	Apr 1, 2021～ Mar 31, 2023	Kanto Ibaraki
PANDEY, M. INDIA	Staggered-Gated Bi-Layer Flexible Inverters with Transferred Highly Oriented Polymer Semiconductors	NAIST NAKAMURA, Masakazu Professor Graduate School of Science and Technology	Apr 1, 2020～ Sep 30, 2020	Kinki Nara
PAWAR, S. A. INDIA	EFFICIENT ENERGY CONVERSION AND STORAGE ELECTRODES BY DESIGNING INTEGRATED LAYERED TERNARY HYBRID	University of Tsukuba SAKURAI, Takeaki Associate Professor Faculty of Pure and Applied Sciences	Nov 25, 2020～ Nov 24, 2022	Kanto Ibaraki
RAJAGOPALAN, P. INDIA	Design of magnetic nanoparticles embedded phase change material nanocapsules for electronic cooling	The University of Tokyo DAIGUJI, Hirofumi Professor Graduate School of Engineering	Apr 1, 2021～ Mar 31, 2022	Kanto Tokyo
SAHOO, R. INDIA	Giant magnetic response properties of double-perovskite type oxides based heterostructures	Tokyo Institute of Technology OHTOMO, Akira Professor School of Materials and Chemical Technology	Jan 7, 2021～ Jan 6, 2023	Kanto Tokyo
SETHUMATHAVAN, V. INDIA	Oxidative treatment of wastewater enabling simultaneous H2 generation using C3N5-type photocatalyst	Tokyo Institute of Technology FUJII, Manabu Specially Appointed Associate Professor School of Environment and Society	Nov 17, 2020～ Nov 16, 2022	Kanto Tokyo
SHIVANNA, M. INDIA	Chemistry of MOF based Thin Layer Materials for Synergistic Purification	Kyoto University KITAGAWA, Susumu Distinguished Professor Kyoto University Institute for Advanced Study	Apr 1, 2020～ Mar 31, 2022	Kinki Kyoto
SINGH, G. D. INDIA	Ultrasensitive Nonlinear Vibrational Spectroscopy Using Light-Matter Strong Coupling	The University of Tokyo ASHIHARA, Satoshi Professor Institute of Industrial Science	Apr 1, 2020～ Jan 27, 2021	Kanto Tokyo
GRANELLO, G. ITALY	Comprehensive monitoring system for improving the post-earthquake emergency response	The University of Tokyo KUSUNOKI, Koichi Professor Earthquake Research Institute	Oct 1, 2020～ Dec 31, 2020	Kanto Tokyo

LISI, F. ITALY	Development of dynamic hydrogel systems to tune local microenvironment in three-dimensional cell culture systems	The University of Tokyo TAKEUCHI, Shoji Professor Institute of Industrial Science	Jan 20, 2021～ Jan 19, 2022	Kanto Tokyo
REINA, G. ITALY	Exfoliation of black phosphorus nanosheets with natural antioxidant and application to nanomedicine	Kyoto University KOMATSU, Naoki Professor Graduate School of Human and Environmental Studies	Apr 7, 2021～ Apr 6, 2023	Kinki Kyoto
KIM, J. KOREA (REP. OF KOREA)	Removal of Motion and Touch Noises Using Shielded Nanomesh Electronics	The University of Tokyo YOKOTA, Tomoyuki Associate Professor Graduate School of Engineering	Nov 4, 2020～ Nov 3, 2022	Kanto Tokyo
KIM, J. KOREA (REP. OF KOREA)	Room Temperature ppb-level CO Gas Sensor Based on 2D Transition Metal Dichalcogenides (TMDs)	National Institute for Materials Science SAITO, Noriko Senior Researcher Research Center for Functional Materials	Nov 15, 2020～ Nov 14, 2022	Kanto Ibaraki
ADIKARAM, K. SRI LANKA	High Density Data Sets Visualization Algorithm Applied To Fault Prediction of Industrial Machinery	National Institute of Advanced Industrial Science and Technology KOMOTO, Hitoshi Senior Researcher Advanced Manufacturing Research Institute	Aug 1, 2021～ Oct 31, 2022	Kanto Ibaraki
TAN, Z. MALAYSIA	aero-structural interaction measurement technique using LF camera and Mars drone blade measurement	Japan Aerospace Exploration Agency OYAMA, Akira Associate Professor Institute of Space and Astronautical Science	Sep 1, 2020～ Aug 31, 2022	Kanto Kanagawa
MEFFAN, R. C. NEW ZEALAND	Reservoir Computing with MEMs resonators	Kyoto University TSUCHIYA, Toshiyuki Professor Graduate School of Engineering	Jan 12, 2021～ Jan 11, 2023	Kinki Kyoto
GOLASINSKI, K. M. POLAND	Multiscale investigation of mechanisms of superelasticity in biomedical O-added Ti-Nb-based shape memory alloys	University of Tsukuba KIM, Hee Young Professor Faculty of Pure and Applied Sciences	Nov 21, 2020～ Nov 20, 2022	Kanto Ibaraki
GUSELNIKOVA, O. RUSSIA FEDERATION	Tailored design of mesoporous plasmonic films	National Institute for Materials Science YAMAUCHI, Yusuke Group Leader International Center for Materials Nanoarchitectonics (WPI-MANA)	Apr 1, 2021～ Mar 31, 2023	Kanto Ibaraki

MYASNIKOVA, D. RUSSIA FEDERATION	Fabrication of 3D in vitro model of diabetic neuropathy with real-time detection of ROS generation	The University of Tokyo TAKEUCHI, Shoji Professor Department of Mechano-Informatics, Graduate School of Information, Science and Technology	Nov 1, 2020～ Oct 31, 2022	Kanto Tokyo
SAMRANSUKSAMER, B. THAILAND	Development of Robust Artificial Olfactory Sensor using Multi-Element Gradient Inorganic Nano Film	The University of Tokyo NAGASHIMA, Kazuki Associate Professor School of Engineering	Apr 1, 2020～ Mar 31, 2022	Kanto Tokyo
SRINURAK, N. THAILAND	Historic City Tolerance: evacuation simulation index considering simultaneous street obstructions	Saga University MISHIMA, Nobuo Professor Faculty of Science and Engineering	Oct 30, 2020～ Oct 29, 2022	Kyushu Saga
SRISAMRANRUNGRUANG, T. THAILAND	Stabilizing natural ventilation utilizing waste heat optimized by Artificial Neutral Network	Meiji University HIYAMA, Kyosuke Associate Professor School of Science and Technology	Apr 1, 2020～ Oct 31, 2022	Kanto Kanagawa
CHENG, C. TAIWAN	Group-IV semiconductor based photonic waveguide devices for versatile pulsed data processing	The University of Tokyo YAMASHITA, Shinji Professor Research Center for Advanced Science and Technology (RCAST)	Nov 23, 2020～ Nov 22, 2022	Kanto Tokyo
LEE, Y. TAIWAN	Lasing with long-range Bloch surface waves for high-sensitivity and high-throughput biosensing	The University of Tokyo DELAUNAY, Jean Jacques Associate Professor School of Engineering	Nov 30, 2020～ Nov 29, 2022	Kanto Tokyo
RICHARDSON, J. J. U.S.A.	Metal-phenolic networks and synthetic phenolic polymers for detecting and inactivating viruses	The University of Tokyo EJIMA, Hirotaka Associate Professor School of Engineering	Nov 25, 2020～ Jul 24, 2022	Kanto Tokyo
NGUYEN, K. H. VIET NAM	Ultralow power magnetoresistive memory using topological insulator	Tokyo Institute of Technology PHAM, Nam hai Associate Professor School of Engineering	Apr 1, 2020～ Mar 31, 2022	Kanto Tokyo
NGUYEN, T. T. VIET NAM	A Novel Biodegradable Approach to Stabilise Mud Pumping Tracks for Higher Speed Rail	Hokkaido University ISHIKAWA, Tatsuya Professor Faculty of Engineering	Sep 30, 2021～ Sep 29, 2023	Hokkaido Hokkaido

VU, C. D. VIET NAM	Fate and transport of enteric viruses through unplanned potable reuse	The University of Tokyo KATAYAMA, Hiroyuki Professor School of Engineering	Apr 1, 2020～ Mar 31, 2022	Kanto Tokyo