Organization and Activities of the Geoenvironmental Science Field for the Academic Year 2022

Organization

During the year from April, 2022 to March, 2023, several promotions and appointments were made so that our research and teaching activities covering geoenvironmental sciences were enforced. Following is the list of all faculty and administrative staffs with specialties:

Professors:

Asanuma, Jun, Ph.D., surface hydrology, hydrometeorology, flood risk management

Kureha, Masaaki, Ph.D., regional geography, geography of tourism, rural geography

Kusaka, Hiroyuki, D.Sc., urban climatology, mountain meteorology, applied meteorology

Matsui, Keisuke, D.Sc., cultural geography, geography of religion and tourism

Onda, Yuichi, D.Sc., environmental dynamics, hydrology, geomorphology, environmental radioactivity

Sugita, Michiaki, D.Sc., hydrologic sciences, surface hydrology, boundary layer meteorology

Tanaka, Hiroshi, Ph.D., atmospheric science, general circulation

Tsujimura, Maki, D.Sc., hydrologic sciences, groundwater hydrology, isotope hydrology

Tsutsumi, Jun, D.Sc., urban geography, regional geography of Australia, GIS

Ueda, Hiroaki, D.Sc., atmospheric science, climate dynamics

Yamanaka, Tsutomu, D.Sc., hydrologic sciences, isotope tracers, ecohydrology

Associate Professors:

Hattanji, Tsuyoshi, D.Sc., hydrogeomorphology, slope processes

Ikeda, Atsushi, D.Sc., geomorphology, geocryology

Kato, Hiroaki, D.Sc., forest hydrology, environmental radioactivity

Matsushita, Bunkei, D. Env., remote sensing, spatial information science, global environment

Ueno, Kenichi, D.Sc., atmospheric science, precipitation system, regional climatology

Assistant Professors:

Harada, Mariko, Ph.D., earth and planetary system science, paleoclimatology, paleoenvironment

Karaki, Tatsuro, Ph.D., physical oceanography, environmental science

Kubo, Tomoko, D.Sc., urban geography, geography of housing, geography of North America

Matsueda, Mio, D.Sc., atmospheric science, predictability of weather and climate

Morimoto, Takehiro, D.Sc., agricultural and rural geography, GIS and spatial information science

Ogura, Takuro, D.Env., geomorphology, GIS analysis, geoscience education

Parkner, Thomas, Ph.D., geomorphology, gully erosion, soil erosion, mass movements

Sekiguchi, Tomohiro, Ph.D., geomorphology, sedimentology

Takahashi, Junko, Ph.D., pedology, environmental radioactivity

Yamashita, Akio, D.Sc., regional geography, geography of urban environmental issues

Administrative Staff:

Sekine, Takako

Doctor and Master's Theses

[Abbreviations]

D.Sc.	Doctor of Philosophy (Science or Geoscience)
D.Env.	Doctor of Philosophy (Environmental Studies)
M.Sc.	Master of Science
M.Sc. (M)	Master of Science in Mountain Studies
M.Eng.	Master of Engineering
M.Env.	Master of Environmental Science
M.A. (E)	Master of Arts in Education
M.A. (A)	Master of Arts in Area Studies
M.S.E.Sc.	Master of Sustainable Environmental Sciences

[a] Human Geography

M.Sc.   Chen, Shuyi (2023): The Significance of Music Festivals to Local Cities from the Viewpoint of the Establishment Process of the Fuji Rock.

M.Sc.   Kakinuma, Yoshiki (2023): Restructuring of Residents' Place Images in the Tourist Area: A Case of "Using Starry Sky for Tourism and Being Authorized as International Dark Sky Places" in Kozushima Village.

M.Sc.　Onuma, Yuto（2023）: Residential Characteristics of Immigrants in the Greater Tokyo Area from the Perspective of Pan-ethnicity.

M.Sc.　Sasaki, Yuri（2023）: The Effects of the Progress in Tourism to the Daily Lives of Residents Living in the Existing Shopping Streets: A Case of Yanaka Ginza Shopping Street in Tokyo.

M.Sc.　Shimizu, Yuuki（2023）: Selection among the Outer Suburbs in the Tokyo Metropolitan Area during the Post-Suburbanizing Period: Focusing on Centrality and Diversity.

M.Sc.（M）Wu, Sigala（2023）: Regional Revitalisation through Photographic Tourism in Mountainous Areas: A Case Study of Instagram Tourism in the Nokogiri Mountains.

M.Sc.　Xiao, Jinping（2023）: Research on Melon Branding in Hokota City, Ibaraki Prefecture.

M.Sc.　Yoshino, Hiroto（2023）: The Roles and Significance of Demand Responsive Transport in Mobility of the Older Adults. -A Case Study of Haga Town, Tochigi Prefecture-.

[b] Regional Geography

D. Sc.　Zhang, Hong（2022）: Geographical Study on Elements Affecting Historical Landscape Preservation: Case Studies of Ouchi-juku in Japan and Chenlu Ancient Town in China.

D. Sc.　Huang, Lu（2023）: Study on Earthquake Reconstruction and Rehabilitation of Disaster Areas from the Perspective of Relationships among Actors.

D.Sc.　Suzuki, Shuto（2023）: A Geographical Study on Migration of Working-Age to Resort Areas Located in and around Metropolitan Areas: Focusing on the Viewpoint of Lifestyle Migration.

D.Sc.　Yoshizawa, Nao（2023）: Structural Change of Japanese Ski Resorts due to the Development of International Tourism: Focusing on Change in Composition of Actor in Resorts.

M.Sc.　Nakamura, Mizuho（2023）: Place Image and Environmental Behavior of Local Residents toward Waterside Spaces in Mishima City, Shizuoka Prefecture.

M.Sc.　Kawahara, Kohei（2023）: The role of public transportation in maintaining the social capital of the residents of depopulated mountain areas and its challenges.

M.Sc.　Maeno, Yurina（2023）: Consensus building among actors in urban redevelopment projects.

M.Sc.　Okada, Koki（2023）: The role of coworking spaces as places to work: A case study of Shibuya Ward, Tokyo.

M.Sc.　Tomita, Yuya（2023）: Changes of Urban Tourist Behavior Comparing before Corona Disaster and with Corona Disaster: Focusing on Tourists' Space Use in Nishi and Naka Wards of Yokohama City, Kanagawa Prefecture.

M.Sc.　Tongu, Yasuhiro（2023）: Regional conditions necessary to maintain and sustain public transportation in local cities: A case study of Aizuwakamatsu city, Fukushima prefecture.

[c] Spatial Information Science

D.Sc.　Hettiarachchige, Chamara Jayanath Hettiarachchi（2022）: Evaluation of Agroecological Diversity in Pathadumbara DS Division, Kandy, Sri Lanka.

D.Sc.　Msusa, Anastazia Daniel（2022）: Development of A Semi-Analytical Algorithm for Estimating Water Transparency in Various Waters from MERIS Data.

D. Sc.　Takehara, Mayuko（2023）: A Study on Assessment Methods of Spatial Cognition during Navigation Focusing on Behavior and Brain Mechanisms.

M.Env.　Bui, Anh Huy（2022）: Coastal Erosion Detection by Remote Sensing and GIS in the North of Vietnam.

M.Env.　Shimizu, Mai（2022）: Detection of Floating Plastic Litter in Coastal Areas of Japan by Remote Sensing.

M.Sc.　Komazaki, Hirokazu（2023）: Assessing the Validity of Urban Canopy Models Assuming a Transparent Atmosphere for Longwave Radiation.

M.Sc.　Kudo, Tatsuki（2023）: Climatology of the Obonai-dashi Blowing in Semboku City, Akita Prefecture.

M.Sc.　Takada, Natsuki（2023）: Study on the Shape of Tsurushi Clouds Forming Leeward of Mt. Fuji.

M.Sc.　Zhang, Gaoming（2023）: Estimating TSS Concentration in Lake Kasumigaura from MODIS Images.

[d] Hydrologic Sciences

D.Sc.　Zang, Chao（2023）: Contrasting Contribution of Surface and Groundwater Discharge to the Water Balance of a Lake and a 10 km^2-scale Volcanic Catchment: Lake Yamanaka Catch-

ment, Japan.

D. Env.　Baptista, Isabela Silbeira（2023）: Long Term Variation of Mean Transit Time in Spring and Groundwater in a Forested Headwater Catchment.

M. Env.　Kobayashi, Kaori（2023）: Long Term Variation of Streamflow Characteristics in Klang River Basin, Kuala Lumpur, Malaysia.

M. Env.　Sato, Keisuke（2023）: Groundwater and Surface Water Interaction in Tama River Basin, Tokyo Metropolitan Area.

M. Sc.　Kohno, Asuka（2023）: Groundwater salinization at Sagami River lowlands in Kanagawa Prefecture, Japan: origin of saline water and potential of mitigation due to an induced recharge.

[e] Atmospheric Science

M. Sc.　Namima, Yosuke（2023）: Winter weather variation changing snow cover structure in mountain areas.

M. Sc.　Kurokawa, Riho（2023）: An assessment of the influence of mid-latitude trough on tropical cyclone in the North-Western Pacific Basin.

M. Sc.　Sakuma, Yo（2023）: Predictability of extra-tropical transition of tropical cyclone in the western North Pacific in 2019.

M. Sc.　Koga, Hiroaki（2023）: Predictability of weather regimes over Australian sector in Austral winter.

M. Sc.　Akami, Shoichi（2023）: Parameter estimation of local particle filter by Bayesian optimization for improving accuracy of non-Gaussian data assimilation.

M. Sc.　Gokita, Rena（2023）: Effect of downward propagation from the stratosphere on the tropospheric jet stream.

M. Sc.　Kameda, Ryo（2023）: Numerical experiment of stratospheric sudden warming in September 2019 over Antarctica using NICAM.

[f] Geomorphology

M. Sc.　Kobayashi, Motoharu（2023）: Estimation of dissolution rate of pinnacles based on water chemistry analysis of surface flow: A case study of Akiyoshidai, Yamaguchi Prefecture, Japan.

M. Sc.　Suzuki, Kanami（2023）: Topographic changes at landslide scars due to rainfall events: High-resolution analysis by UAV-SfM approach.

M. Sc.　Shirade, Shotaro（2023）: A dynamic analysis of sand spit in the river mouth bounded by coastal structures focusing on seasonal variability.

[g] Environmental Dynamics

D. Sc.　Hisadome, Keigo（2022）: Effect of airbourne litterfall inside and outside of the forest on the redistribution of radiocesium.

M. Sc.　Iguchi, Satoshi（2022）: Contribution of fine roots to downward migration of Cs-137 in a Japanese cedar forest soil in Fukushima prefecture.

M. Sc.　Kawano, Taichi（2022）: Change in ^{137}Cs dynamics from headwaters to downstream in the Kuchibuto river basin.

Research Activities

　Each research group had the following research activities during the academic year 2022.

[a] Human Geography
Research grants
　Matsui, K.（2022）: Geographical study on activation of local communities by tourism. Donation for Scientific Research, Research and Consulting Regional Science Co. Ltd, JPY 1,000,000.

Attendance at international meetings
　Kubo, T. (2022, Aug.): Family and everyday behavior of older adults: Case studies of Tianjin, China and Ryugasaki, Japan. The 4th International Time-Geography Conference, Lund, Sweden.

Others
　Kubo, T. (2022, July.): IGU Early Career Award 2022, The International Geographical Union.
　_____ (2022, Oct.): Japan Society for Urbanology Special Award（Award for Foreign Language Writing）, Japan Society for Urbanology.

[b] Regional Geography
Research projects
　Kureha, M., Tsutsumi, J. and Yamashita, A. (2021-2023): Geographical studies on regional ecology in Matsumoto City and the surrounding region.
　Yamashita, A. (2018-): Causes and future prediction of heat island phenomena of rapidly growing cities in developing countries, project with Murayama, Y.

(Univ. of Tsukuba).

Research grants

Kureha, M. (2021-2025): Geographical study on the system for sustainable tourism in Japan. Grant-in Aid for Scientific Research (B), JSPS, JPY 17,290,000.

Tsutsumi, J. (2019-2022): Industrial diversification in contemporary Australia in terms of the emerging Asia link. Grant-in Aid for Scientific Research (B), JSPS, JPY 15,210,000.

Yamashita, A. (2021-2022): Research on governance for sustainable use and maintenance of agricultural canals in urbanized areas. Kurita Water and Environment Foundation, JPY 650,000.

_____ (2022-2023): Comprehensive evaluation of waterside spaces in urbanized area in terms of human, water, atmosphere and sound environments. Japan Geographic Data Center, JPY 800,000.

_____ (2022-): Study on spatio-temporal dynamism of Korean local cities toward local revitalization. Grant-in Aid for Scientific Research (B), JSPS (PI: Kaneko, J., Ehime Univ.), JPY 350,000.

Overseas fieldwork

Kureha, M. (2023, Feb.): Changing characteristics for sustainable development of mountain resorts in Tyrol, Austria, under JSPS grant.

Tsutsumi, J. (2022 Aug.-Sep.): Investigation of urban development in Gold Coast and Brisbane, Australia, under JSPS grant.

_____ (2023 Feb.-Mar.): Investigation of urban development in Melbourne, Australia, under JSPS grant.

Yamashita, A. (2023, Feb.-Mar.): Fieldwork on local revitalization of Korean local cities, under JSPS grant.

_____ (2023, Mar.): Fieldwork on urbanization and change of urban structure in Colombo Metropolitan Area in Sri Lanka, under JSPS grant.

Others

Kureha, M. (2022): Special lecture on socioeconomic geography in Hosei Univ.

_____ (2022): Special lecture on geography of tourism in Rikkyo Univ.

_____ (2022): Special lecture on regional geography of Europe in Univ. of Tokyo.

Tsutsumi, J. (2022): Lecture on national land development in Takasaki City University of Economics.

_____ (2022): Methodology of Fieldwork in Takasaki City University of Economics.

_____ (2022): Lecture on Disaster Management in Takasaki City University of Economics.

_____ (2022): Lecture on Regional Geography in Takasaki City University of Economics.

_____ (2022): Lecture on Geography in Gunma University.

_____ (2022): Special Lecture on Economic Geography I in Nihon University (Graduate School).

_____ (2022): Special Lecture on Economic Geography II in Nihon University (Graduate School).

Yamashita, A. (2022): Studies in geography 2A in Rikkyo Univ.

_____ (2022): Studies in geography 3B in Rikkyo Univ.

[c] Spatial Information Science

Research projects

Kusaka, H. (2021-2023): JSPS KAKENHI, Improvement of the urban district LES model and its application.

_____ (2019-2022): JSPS KAKENHI, Elucidation of the synergistic effects of meteorological changes and environmental pollution through water quality by developing an integrated particle model, (collaborated with Chief researcher M. Kazino)

_____ (2019-2022): JSPS KAKENHI, Evaluation of Impacts of Agricultural Land Dynamics on the Regional Thermal Environment Using a Regional Meteorological Model, (collaborated with A. Maruyama)

Matsushita, B. (2011-): Monitoring water environment change and analyzing its driving factors in inland waters by remote sensing technique, project with Research Center for Limnology, LIPI, Indonesia.

_____ (2012-): Impervious surface area as an indicator for evaluating drainage basins, project with Prof. Jin Chen (Beijing Normal University, China).

_____ (2014-): Remote estimation of chlorophyll-a concentration in inland waters using a hybrid algorithm, project with Dr. Gongliang Yu (Key Laboratory of Algal Biology, Institute of Hydrobiology, Chinese Academy of Sciences, China).

_____ (2017-): Remote estimation of phytoplankton primary production in various waters by integrating a semi-analytical model with a machine learning algorithm, project with Dr. Wei Yang (Center for Environmental Remote Sensing, Chiba University).

_____ (2020-): Seamless retrievals of water quality parameters from Sentinel-2 (MSI) and Sentinel-3

(OLCI) in inland and coastal waters by a machine-learning approach, project with Dr. Nima Phalevan (NASA Goddard Space Center).

_____ (2021-): Semi-analytically retrieving inherent optical properties for inland and coastal waters from remote sensing reflectance, project with Dr. Dalin Jiang (University of Stirling, UK).

_____ (2021-): A digital sustainability solution for allowing ports to meet their business and strategic objectives (Ports 4.0), project with Fregata Space, Spain.

Morimoto, T. (2021-): New Entrants and Branding Strategy in a Production Region of Processed Sweet Potato Products.

_____ (2021-): Devastating Agricultural Farmland in Sri Lanka and Japan.

_____ (2021-): Scenario Simulation Considering SDGs for Urban Volume in the Tokyo Metropolitan Area, a project under JSPS with Dr. Wang, R.

_____ (2021-): Causes and future prediction of heat island phenomena of rapidly growing cities in developing countries, a project under JSPS with Prof Emeritus Murayama, Y.

_____ (2022-): Urban Nature-based Solutions: Scenario-based Spatial Assessment of Benefits and Equity Toward SDG11, a project under JSPS with Dr. Derdouri, A.

Research grants

Kusaka, H. (2019-2022): Elucidation of the synergistic effects of meteorological changes and environmental pollution through water quality by developing an integrated particle model, JSPS KAKENHI, JPY 750,000

_____ (2019-2022): Evaluation of Impacts of Agricultural Land Dynamics on the Regional Thermal Environment Using a Regional Meteorological Model, JSPS KAKENHI, JPY 800,000

_____ (2021-2023): Improvement of the urban district LES model and its application, JSPS KAKENHI, JPY 500,000

Matsushita, B. (2021-2023): Using a new deep learning approach to properly segment multiscale geographic objects. Grant-in-Aid for Scientific Research for JSPS Research Fellows (International Research Fellow), JSPS, JPY 1,100,000 (2022).

Morimoto, T. (2018-2022): Causes and Future Prediction of Heat Island Phenomena of Rapidly Growing Cities in Developing Countries. Grant-in-Aid for Scientific Research B, JSPS, JPY 350,000. (Representative: Murayama, Y.).

_____ (2021-2022): Scenario Simulation Considering SDGs for Urban Volume in the Tokyo Metropolitan Area. Grant-in-Aid for Scientific Research for JSPS Research Fellows (International Research Fellow), JSPS, JPY 1,200,000 (2022).

_____ (2022-2024): Urban Nature-based Solutions: Scenario-based Spatial Assessment of Benefits and Equity Toward SDG11. Grant-in-Aid for Scientific Research for JSPS Research Fellows (International Research Fellow), JSPS, JPY 600,000 (2022).

Overseas fieldwork

Morimoto, T. (2023): A field survey on the urbanizing land use in the Colombo Metropolitan Area, Sri Lanka, in March 2023.

Visited researchers

Dr. Derdouri, Ahmed as a JSPS International Postdoctoral Fellow for Research in Japan. Nov. 2022 - Oct. 2024 (Host researcher: Morimoto, T.).

Dr. Wang Ruci as a JSPS International Postdoctoral Fellow for Research in Japan. Apr. 2021 - Aug. 2022 (Host researcher: Morimoto, T.).

Dr. Wang Ruci as a guest researcher of the University of Tsukuba from Chiba University, Japan. Sep. 2022 - Mar. 2023 (Host researcher: Morimoto, T.).

Dr. Yang, Jian as a JSPS International Postdoctoral Fellow for Research in Japan from University of Toronto, Canada. Dec. 2021 - Nov. 2023 (Host researcher: Matsushita, B.).

Others

Matsushita, B. (2018-): Associate Editor of ISPRS Journal of Photogrammetry & Remote Sensing.

[d] Hydrologic Sciences

Research projects

Asanuma, J. (2014-): Hydro-Meteorological studies with Multi-satellite sensors and Multidimensional approaches at Mongolian Grassland (Hydro4m, JAXA G-COM Research Announcement).

Research grants

Sugita, M. (2021-2025): Establishment of measurement technology of lake surface flux from a small ship and determination the spatial flux variability. Grant-in-Aid for Scientific Research (B) of the Japan Society for the Promotion of Science.

Tsujimura, M. (2020-2024): Cycle System between Groundwater and Surface Water Revealed by Multi Tracer Approach in Klang River Basin, Malaysia.

Joint International Research（B）of KAKENHI （Grants-in-Aid for Scientific Research）, Japan Society for the Promotion of Science.

_____ （2019- ）: Groundwater Flow System in To-kyo Area.（Tokyo Metropolitan Government）

_____ （2021- ）: Modeling of Groundwater and Surface water Interaction in Mountain-Lowland boundary area.（Asano Taisei Kiso Engineering （Ltd.））

Yamanaka, T.（2019-2023）: Evaluation of Hydrological Components by Dynamic Isoscape Models and Its Multifaceted Developments. Grant-in-Aid for Scientific Research（B）of the Japan Society for the Promotion of Science.

Others

Sugita, M.（2023, Sep.）: Science Award, The Japanese Association of Hydrological Sciences.

[e] Atmospheric Science

Research projects

Ueda, H.（2022-2024）: Joint research with the Meteoro-logical Research Institute on climate variation and models（Japan Meteorological Agency）.

_____ （2022-2023）: Joint research with the Institute of Low Temperature Science, Hokkaido University on sea ice-ocean-material cycle-ecosystem rela-tionship and variation in Shiretoko and the Sea of Okhotsk.

Research grants

Ueda, H.（PI: Ueda, H.）（2021-2024）: Grant-in-Aid for Scientific Research（B）, Japan Society for the Promotion of Science, JSPS, JPY 16,740,000.

_____ （PI: Mitsudera, H.）（2021-2023）: The Envi-ronment Research and Technology Development Fund（JPMEERF20214002）of the Environmental Restoration and Conservation Agency of Japan, JPY 18,895,500

_____ （PI: Mitsudera, M.）（2021-2024）: Grant-in-Aid for Scientific Research（B）, Japan Society for the Promotion of Science, JSPS, JPY 1,200,000.

_____ （PI: Harada, M.）（2021-2025）: Grant-in-Aid for Scientific Research（B）, Japan Society for the Promotion of Science, JSPS, JPY 900,000

Harada, M.（PI: Harada, M.）（2021-2024）: Grant-in-Aid for Scientific Research（B）, Japan Society for the Promotion of Science, JSPS, JPY 16,770,000.

Ueno, K.（2022）: Invitational Fellowships for Research in Japan,（PI by K. Ueno）JPY 150,000.

Attendance at international meetings

Ueno, K. and Kobayashi, Y.（2022, May）: The genesis tendency for a sea of clouds to occur at night in the Japanese Alps region derived by surface obser-vation and satellite data, EGU General Assembly 2022, Vienna, Austria, 23–27, Online.

[f] Geomorphology

Research projects

Hattanji, T.（2022- ）: Studies on shallow landslides and erosion in headwater basins based on LiDAR DEMs and radiocarbon dating, project with Tana-ka, Y.（Komazawa Univ.）, Doshida, S.（National Research Institute of Fire and Disaster）, Furuichi, T. （Forest Research and Management Organization）, Ogura, T.（Univ. of Tsukuba）

_____ （2017- ）: Interaction of weathering, water erosion and landsliding in the Yahata Okuzure, Hokkaido, project with Parkner, T.（Univ. of Tsukuba）

Ikeda, A.（2008- ）: Permafrost monitoring on Mt. Fuji, project with Iwahana, G.（IARC-UAF）, Imaizumi, F.（Shizuoka Univ.）

_____ （2017- ）: Geomorphological study on moor, grassland and shrub in a subalpine zone on heavily snow-covered mountains, project with Sasaki, N. （Chuo Univ.）.

Parkner, T.（2014- ）: Gully erosion on unstable hillslopes in the East Coast Region, North Island, New Zealand.

_____ （2017- ）: Interaction of weathering, water erosion and landsliding in the Yahata Okuzure, Hokkaido, project with Hattanji, T.（Univ. of Tsukuba）

Sekiguchi, T.（2007- ）: Self-organization of 3D-pat-terned bedforms under complex oscillatory flow.

_____ （2010- ）: Study on ripple transition under unsteady oscillatory flows.

_____ （2013- ）: An experiment on sedimentary process of onshore tsunami deposit, project with Yamaguchi, N.（Ibaraki Univ.）

Ogura, T.（2015- ）: Verification and possibility on the operation of riverbed measurement using UAV and SfM-MVS, project with Aoki, T. and Hayashi, K. （Kanazawa Univ.）

_____ （2018- ）: High-definition topography moni-toring after riverbed cultivation in the Echi River, central Japan, project with Mizuno, T.（Lake Biwa Environmental Research Institute）

_____ （2018- ）: Use of high-frequency, high-defi-nition topographic 3D data to develop geographic

thinking of students, project with Hayakawa, Y. S. (Hokkaido Univ.)

Research grants

Hattanji, T. (2022-2025): Life cycle of shallow landslides: Spatio-temporal analysis with evaluation of human impacts. Grant-in-Aid for Scientific Research (B), JSPS, JPY 11,570,000.

Ikeda, A. (2020-2021, 2023-2024): Topographical controls on dominant vegetation and historical botany in subalpine zone under snow-rich climate. Grant-in-Aid for Scientific Research (C), JSPS, JPY 4,290,000.

Ogura, T. (2020-2023): Damage assessment and conservation of underground space as valuable resources for human activities use in Italy and Japan, Bilateral Collaborations (Joint Research Projects and Seminars). JSPS, JPY 2,360,000, project with Oguchi, C. T. (Saitama Univ.)

_____ (2021-2024): Development and analysis of the effectiveness of physical geography and disaster education using online teaching materials with geographic information science. Grant-in-Aid for Scientific Research (B), JSPS, JPY 17,160,000, project with Oguchi, T. (the Univ. of Tokyo)

_____ (2022-2024): Study on the use of 3D print models to improve understanding of geomorphic processes. Grant-in-Aid for Scientific Research (C), JSPS, JPY 4,550,000.

Overseas fieldwork

Ogura, T. (2022, Oct.): Damage assessment and conservation of underground space as valuable resources for human activities use in Italy.

Attendance at international meetings

Parkner, T. (2022, Nov.): Virtual Humboldt Colloquium, Bonn, Germany (online).

Visited Researchers

Prof. Dr. Jürgen Herget (Univ. of Bonn, Germany), 16th - 23rd Nov. 2022.

[g] Environmental Dynamics

Research projects

Onda, Y. (2015-): Study on Elucidation and Modeling of Migration Mechanism of Radioactive Cesium Accumulated in Forest and Soil. Contact Research Project with Japan Atomic Energy Agency (JAEA).

_____ (2016-): Establishment of Assistive Technology for Environmental Management after the Chernobyl Disaster. Science and Technology Research Partnership for Sustainable Development (SATREPS), Project with Nanba, K. (PI, Fukushima Univ.)

_____ (2018-): Development of an emergency groundwater utilization system for disasters and critical droughts. Cross-ministerial Strategic Innovation Promotion Program (SIP) Strengthening national resilience (disaster prevention and mitigation), project with Oki, T. (PI, Univ. Tokyo)

Research grants

Onda, Y. (2015-): Study on Elucidation and Modeling of Migration Mechanism of Radioactive Cesium Accumulated in Forest and Soil. Contact Research Project with Japan Atomic Energy Agency (JAEA), JPY 17,500,000 (2022).

_____ (2016-): Establishment of Assistive Technology for Environmental Management after the Chernobyl Disaster. Science and Technology Research Partnership for Sustainable Development (SATREPS), Project with Nanba, K. (PI, Fukushima Univ.), JPY 8,886,000 (2021).

_____ (2018-): Development of an emergency groundwater utilization system for disasters and critical droughts. Cross-ministerial Strategic Innovation Promotion Program (SIP) Strengthening national resilience (disaster prevention and mitigation), project with Oki, T. (PI, Univ. Tokyo), JPY 2,348,000 (2022).

_____ (2021-): Abandonment and rebound: Societal views on landscape- and land-use change and their impacts on water and soils, Belmont Forum, JST, JPY 2,200,000 (2022).

_____ (2019-): Advanced research to elucidate the dynamics and effects of environmental radioactivity. Contract Research Project, IER at Fukushima University FY2020 Collaborative Research Promotion Program, JPY 2,000,000 (2022).

_____ (2019-): Measurement and modeling of radioactive runoff in forests and water systems. Joint Research Project, Fukushima University, JPY 2,000,000 (2022).

Kato, H. (2020-2022): Elucidation of Forest-Water Interactions Using Environmental Isotope Tracers and Development of a Material Circulation Analysis Method. Grant-in-Aid for Scientific Research (C) of the Japan Society for the Promotion of Science, JSPS, JPY 1,560,000 (2022).

Takahashi, J. (2020-2022): Evaluation of Radiocesium Bioavailability in Forest Soil Considering Spatial

Heterogeneity. Grant-in-Aid for Early-Career Scientist, JSPS, JPY 1,300,000 (2022).

Attendance at international meetings

Onda, Y. (2022, May): EGU General Assembly 2022, Vienna, Austria

_____ (2022, May): JpGU-AGU Joint Meeting 2022, Chiba, Japan (Online)

_____ (2022, Sep.): Fall Meeting of AESJ 2022, Ibaraki, Japan

_____ (2022, Dec.): AGU Fall Meeting 2022, Chicago, USA

Kato, H. (2022, May): EGU General Assembly 2022, Vienna, Austria (Online)

_____ (2022, Sep.): Fall Meeting of AESJ 2022, Ibaraki, Japan

_____ (2023, Mar.): The 134th Annual Meeting of the Japanese Forest Society, Tottori, Japan (Online)

Takahashi, J. (2022, Sep.): Fall Meeting of AESJ 2022, Ibaraki, Japan

_____ (2023, Mar.): The 134th Annual Meeting of the Japanese Forest Society, Tottori, Japan (Online)

[Symbol]

† Students, research assistants, researchers and fellows belonging to the research group

[Acronyms]

ACCU: Asia/Pacific Cultural Centre for UNESCO

AGU: American Geophysical Union

CAMP: CEOP Asia-Australia Monsoon Project

CAS: Chinese Academy of Sciences

CEOP: Coordinated Enhanced Observation Period

CliC: Climate and Cryosphere

CREST: Core Research for Evolutional Science and Technology

EGU: European Geosciences Union

GCCA: Global Change: Connection to the Arctic

GEWEX: Global Energy and Water Cycle Experiment

GEOSS: Global Earth Observation System of Systems

GI: Geophysical Institute

GISA: GIS Association in Japan

IARC: International Arctic Research Center

ICHARM: International Center for Water Hazard and Risk Management

IPCC: Intergovernmental Panel on Climate Change

IPY: International Polar Year

IGU: International Geographical Union

JAXA: Japan Aerospace Exploration Agency

JICA: Japan International Cooperation Agency

JSPS: Japan Society for the Promotion of Science

JST: Japan Science and Technology Agency

KAGIS: Korean Association of Geographic Information Studies

MAHASRI: Monsoon Asia Hydro-Atmosphere Scientific Research and Prediction Initiative

MAS: Mongolian Academy of Sciences

MEXT: The Ministry of Education, Culture, Sports, Science and Technology of Japan

MHLW: Ministry of Health, Labour and Welfare

MRI: Meteorological Research Institute (Japan)

NSF: National Science Foundation

RIHN: Research Institute for Humanity and Nature

TERC: Terrestrial Environment Research Center, University of Tsukuba

TRMM: Tropical Rainfall Measuring Mission

UAF: University of Alaska, Fairbanks

WERC: Water and Environmental Research Center

UNESCO: United Nations Educational, Scientific and Cultural Organization

UNESCO-IHP: International Hydrological Programme for UNESCO