

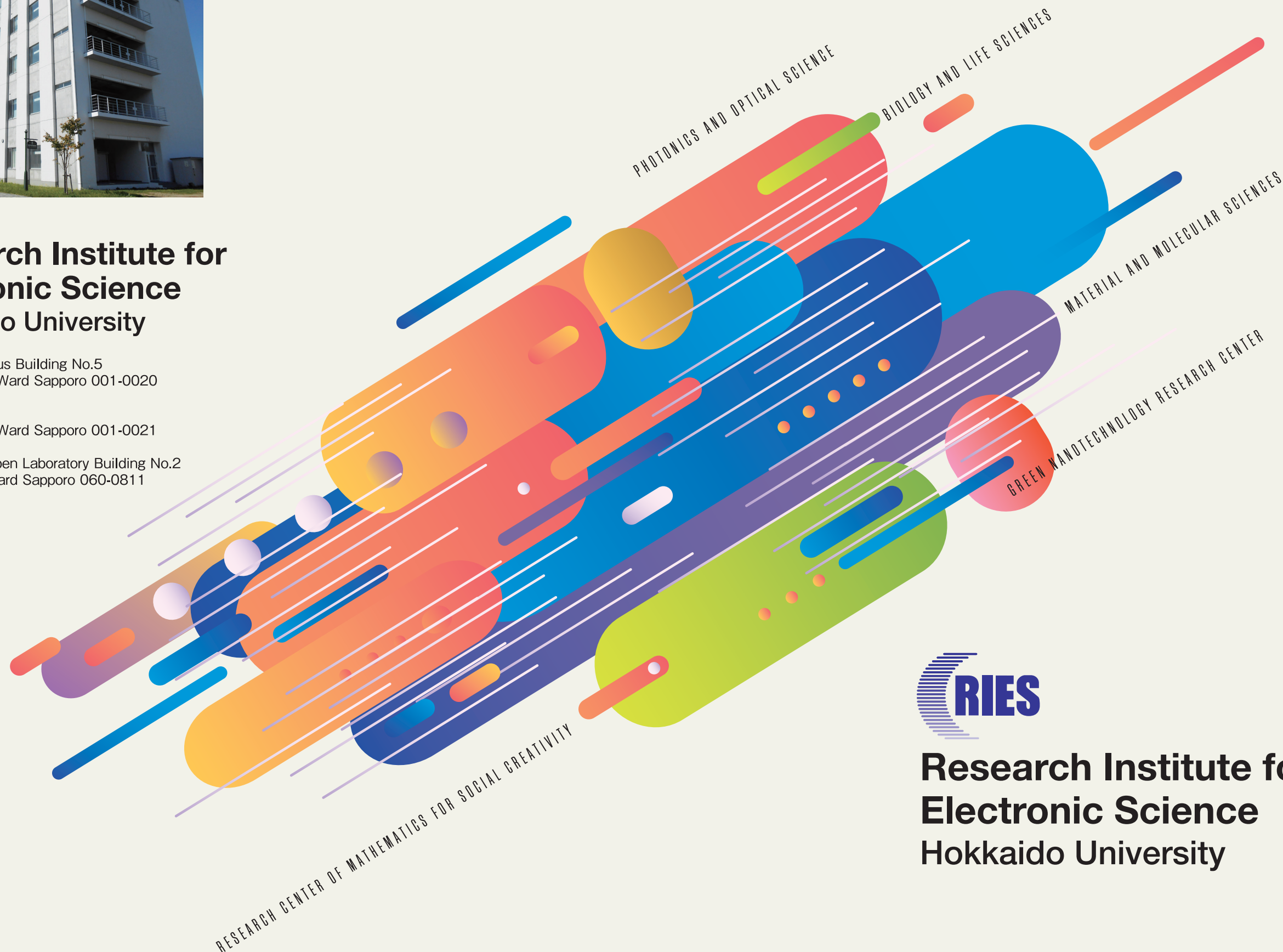


# Research Institute for Electronic Science Hokkaido University

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**Research Institute for  
Electronic Science  
Hokkaido University**

## About us

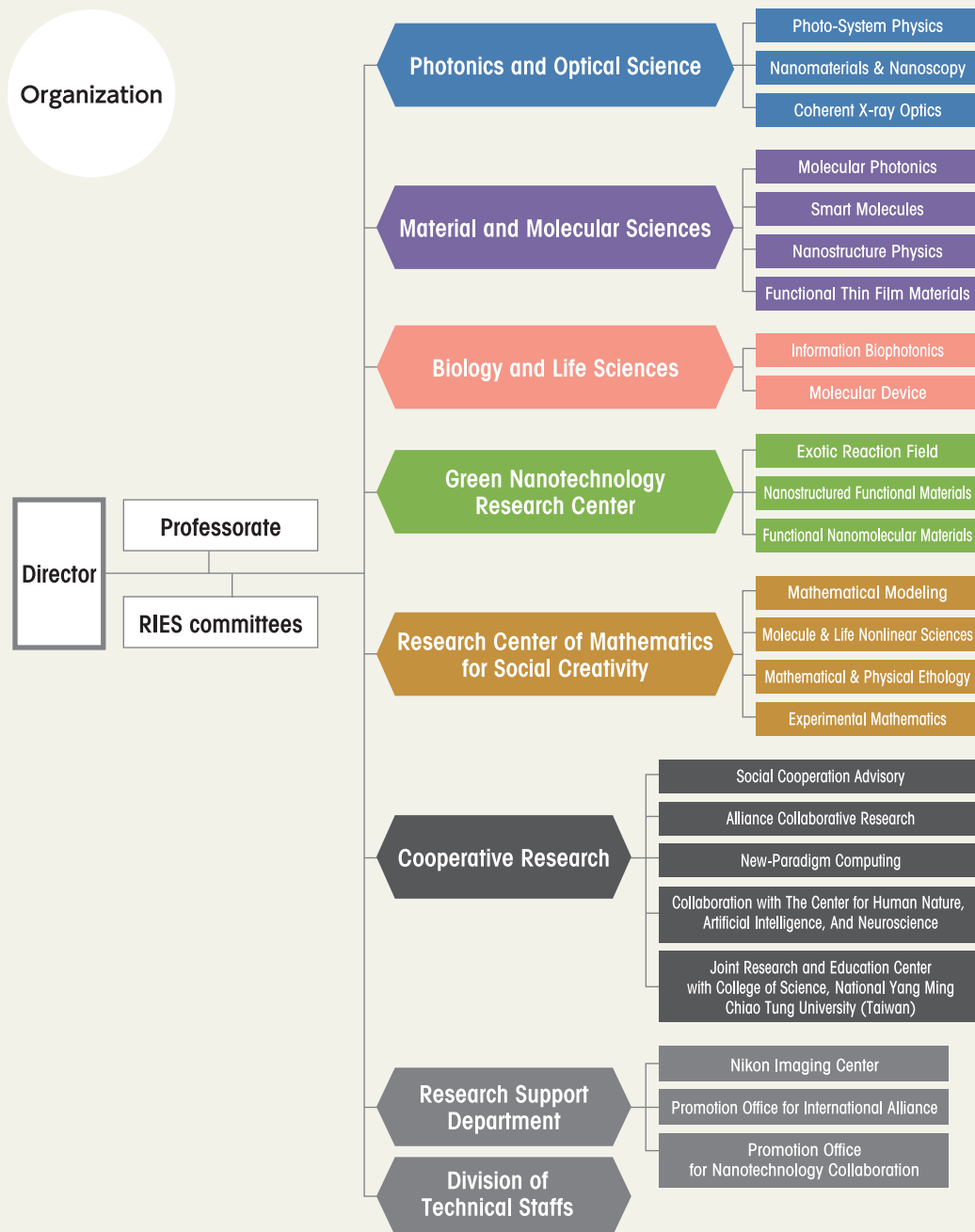
## Cooperating 5 sections explore interdisciplinary fields

The Research Institute for Electronic Science has engaged in the history of more than 20 years, with the mission to explore new interdisciplinary fields. Moreover, from the former ultra-shortwave laboratory, more than 70 years have passed since the organization was established.

In 2015, we implemented a reorganization in all

areas and set 5 sections; "Optical Science", "Material Science" and "Life Science", and "Department of Green Nanotechnology Research Center", "Research Center of Mathematics for Social Creativity". We are working on the mission in full force with our 5 pillar structure.

### Organization



## Section of Material and Molecular Sciences

### LABORATORY OF PHOTO-SYSTEM PHYSICS

PI: Prof. Keiji SASAKI, PhD; Assoc. Prof. Atsushi TAGUCHI, PhD;  
Assist. Prof. Christophe PIN, PhD; An-Chieh CHENG, PhD

#### Outline

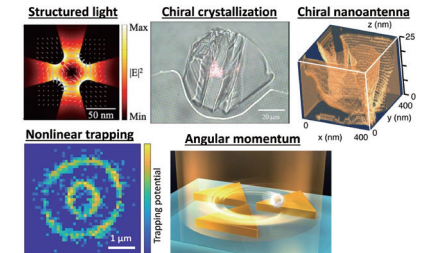
Understanding the unique characteristics of light and how it interacts with matter is of prime importance to develop new applications for optical observation and measurements, optical manipulation, and laser-assisted fabrication. Our goal is to unveil and understand the underlying physics of light-matter interactions by investigating cutting-edge photonic systems and related scientific fields including nano-optics, quantum optics, and photochemistry.

#### Research highlights

- Spin-orbit angular-momentum transfer from a nanogap surface plasmon to a trapped nanodiamond, *Nano Letters*, 2021, **21**, 6268–6273.
- Optical selection and sorting of nanoparticles according to quantum mechanical properties, *Sci. Adv.*, 2021, **7**, eabd9551.
- Plasmonic nanostructures for shrinking structured light to access forbidden transitions, *Nanophotonics*, 2022, **11**, 2465–2472.

#### Education

Graduate School of Information Science and Technology, Division of Information Science and Technology, Course of Electronics for Informatics



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## Section of Photonics and Optical Science

### LABORATORY OF NANOMATERIALS AND NANOSCOPY

PI: Prof. Hiroshi UJI-I, PhD; Assoc. Prof. Kenji HIRAI, PhD;  
Assist. Prof. Farsai TAEMAITREE, PhD

#### Outline

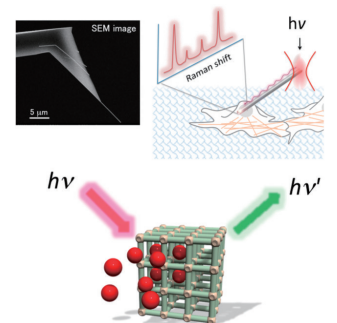
We develop novel nanoscopy based on nanomaterials and nano-photonics. Main research topics are control of chemical reactions via strong/weak coupling, and single-molecule Raman/fluorescence super resolution microscopy/spectroscopy using nanomaterials.

#### Research highlights

- Modulation of Prins Cyclization by Vibrational Strong Coupling, *Angew. Chem. Int. Ed.* 2020, **59**, 5332–5335.
- Gold-Etched Silver Nanowire Endoscopy: Toward a Widely Accessible Platform for Surface-Enhanced Raman Scattering-Based Analysis in Living Cells', *Analytical Chemistry*, 2021, **93**, 5037–5045.
- FRET-based intracellular investigation of nanoprodugs toward highly efficient anticancer drug delivery, *Nanoscale*, 2020, **12**, 16710–16715.

#### Education

Graduate School of Information Science and Technology, Division of Information Science and Technology, Course of Bioengineering and Bioinformatics



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## Section of Photonics and Optical science

### LABORATORY OF COHERENT X-RAY OPTICS

PI: Prof. Yoshinori NISHINO, PhD;  
Assoc. Prof. Akihiro SUZUKI, PhD

#### Outline

Using the state-of-the-art high-quality and high-intensity X-rays, *e.g.*, X-ray free-electron lasers and synchrotron radiation, we are developing microscopic techniques to observe phenomena that no one has ever seen before, aiming at elucidating biological functions, reducing global environmental problems, and so on. In the research, we also utilize supercomputers and cutting-edge nanofabrication techniques.

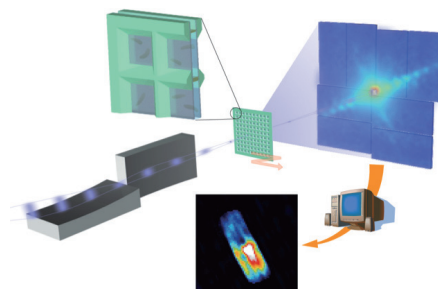
#### Research highlights

- Femtosecond X-ray laser reveals intact sea-island structures of metastable solid-state electrolytes for batteries, *Nano. Lett.*, 2022, **11**, 4603–4607.
- Three-dimensional structure determination of gold nanotriangles in solution using X-ray free-electron laser single-particle analysis, *Optica*, 2022, **9**, 776–784.
- Imaging live cell in micro-liquid enclosure by X-ray laser diffraction, *Nat. Commun.*, 2014, **5**, 3052.

#### Education

Graduate School of Information Science and Technology, Course of Bioengineering and Bioinformatics

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## Section of Material and Molecular Sciences

### LABORATORY OF MOLECULAR PHOTONICS

PI: Prof. Vasudevan Pillai BIJU, PhD; Assoc. Prof. Yuta TAKANO, PhD;  
Assist. Prof. Palyam SUBRAMANYAM, PhD

#### Outline

Our research focuses on developing cutting-edge semiconductor nanomaterials and organic molecular tool boxes for next generation nanophotonics and biophotonics. Our main research interests are in light-matter-life interactions encompassing optically active functional nanomaterials, photofunctional molecules, and living cells.

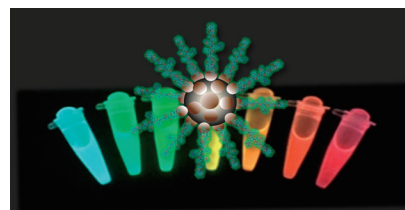
#### Research highlights

- Mechano-optical Modulation of Excitons and Carrier Recombination in Self-Assembled Halide Perovskite Quantum Dots, *ACS Nano*, 2022, **16**, 160–168.
- Multimodal CTC detection using stem cell antigen-specific immunosilica particles and immunofluorescent quantum dots, *NPG Asia Mater.* 2022, **14**, 1-8.
- Shape-Dependent Kinetics of Halide Vacancy Filling in Organolead Halide Perovskites, *Adv. Opt. Mater.* 2021, **9**, 2170078.

#### Education

Graduate School of Env. Science, Course in Molecular Photonics and Electronics Science

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## Section of Material and Molecular Sciences

### LABORATORY OF SMART MOLECULES

PI: Prof. Nobuyuki TAMAOKI, PhD; Assist. Prof. P. K. HASHIM, PhD;  
Assist. Prof. AMMATHNADU S. Amrutha, PhD

#### Outline

We explore advanced artificial molecular systems which can sense external stimuli, judge and execute informative functions.

Main research topic includes light-driven molecular machines: photoresponsive energy molecules and inhibitors for control of motor proteins, and photo-regulation of chiral liquid crystals for optical and mechanical functions.

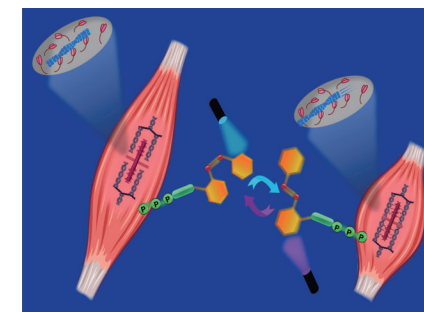
#### Research highlights

- Photoswitchable CENP-E inhibitor enabling the dynamic control of chromosome movement and mitotic progression, *J. Am. Chem. Soc.*, 2020, **142**, 1763-1767.
- Dynamic Control of Microbial Movement by Photoswitchable ATP Antagonists, *Chem. Eur. J.*, 2022, **28**, e202200807.

#### Education

Graduate School of Life Science, Transdisciplinary Life Science Course

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## Section of Material and Molecular Sciences

### LABORATORY OF NANOSTRUCTURE PHYSICS

PI: Prof. Akira ISHIBASHI, PhD; Assoc. Prof. Kenji KONDO, PhD

#### Outline

We explore advanced electronic devices and systems considering Atom•Bit•Energy/Environment (ABE<sup>2</sup>) space.

Main research topics are high efficiency solar cells, highly clean systems, theory of novel spintronics devices, theory of topological matters, and advanced clean systems.

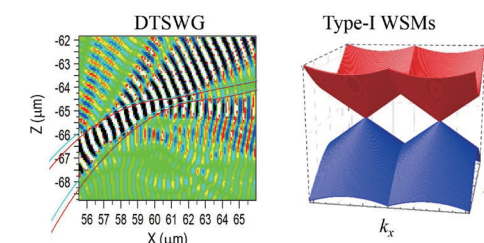
#### Research highlights

- Lifting Off Spatial Degeneracy of Functions, Where Does It Lead Us for Photovoltaic Device Systems?, *Energies*, 2020, **13**: 5234-1–5234-16.
- Compact Clean Unit System Platform (CUPS) for Quality-of-life Improvement, *IEEE 11th Global Conf. on Consumer Electronics (GCCE 2022)*, Oct.18-21, 2022, Osaka, Japan.
- General formula of chiral anomaly for type-I and type-II Weyl semimetals, *Appl. Phys. Lett.*, 2021, **119** 131907-1-131907-6.

#### Education

Graduate School of Sci. Dept. of Condensed Matter Physics

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## Section of Material and Molecular Sciences

### LABORATORY OF FUNCTIONAL THIN FILM MATERIALS

PI: Prof. Hiromichi OHTA, PhD; Assoc. Prof. Tsukasa KATAYAMA, PhD;  
Assist. Prof. Yusaku MAGARI, PhD

#### Outline

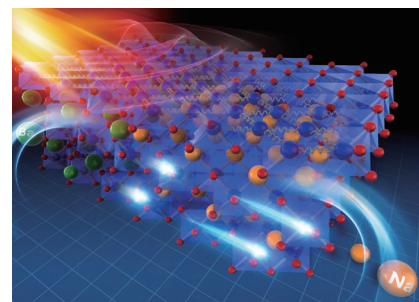
We fabricate high-quality thin film materials with the atomically flat surface to extract the intrinsic performance and develop novel devices. Especially, we develop thermoelectric materials, which can convert heat into electricity, and novel materials for advanced device applications.

#### Research highlights

- $\text{Ba}_{1/3}\text{CoO}_2$ : A Thermoelectric Oxide Showing a Reliable ZT of  $\sim 0.55$  at 600 °C in Air, *ACS Appl. Mater. Interfaces*, 2022, **14**, 33355.
- Solid-State Electrochemical Switch of Superconductor-Metal-Insulators, *ACS Appl. Mater. Interfaces*, 2021, **13**, 54204.
- High Electrical Conducting Deep-ultraviolet-transparent Oxide Semiconductor La-doped  $\text{SrSnO}_3$  Exceeding  $\sim 3000 \text{ S cm}^{-1}$ , *Appl. Phys. Lett.*, 2020, **116**, 022103.

#### Education

Graduate School of Information Science and Technology, Division of Electronics for Informatics



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## Section of Biology and Life Sciences

### LABORATORY OF MOLECULAR DEVICE

PI: Prof. Kuniharu IJIRO, PhD; Assoc. Prof. Hideyuki MITOMO, PhD; Yuzuru SATO, PhD;  
Assist. Prof. Yusuke YONAMINE, PhD

#### Outline

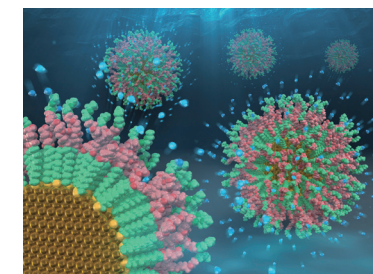
Biomolecules autonomously assemble and show higher functionalities in the cell. By learning the nature system, our group is working on development of nanoparticle assemblies with controlled structures via self-assembly focusing on the surface properties derived from ligand coating and shape of the nanoparticles. As the gold nanoparticles show unique properties related to electronic, optical and biomedical applications, their assemblies are expected to be novel functional materials.

#### Research highlights

- Core-Gap-Shell Nanoparticles@Polyaniline with Tunable Plasmonic Chiroptical Activities by pH and Electric Potential Dual Modulation, *Chemistry of Materials*, 2022, **34**, 4062–4072.
- Molecular configuration-mediated thermo-responsiveness in oligo(ethylene glycol) derivatives attached on gold nanoparticles, *Nanoscale Advances*, 2021, **3**, 3762–3769.
- Reversible Changes in the Orientation of Gold Nanorod Arrays on Polymer Brushes, *Nanoscale Advances*, 2020, **2**, 3798–3803.

#### Education

Graduate School of Life Science, Division of Soft Matter



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## Section of Biology and Life Sciences

### LABORATORY OF INFORMATION BIOPHOTONICS

PI: Prof. Hideharu MIKAMI, PhD; Assoc. Prof. Atsushi SHIBUKAWA, PhD;  
Assist. Prof. Ayumu ISHIJIMA, PhD

#### Outline

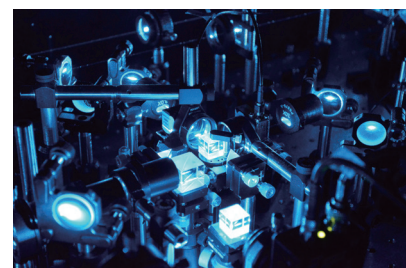
The goal of our research is to bring revolutionary progress to life science through the creation of cutting-edge optical and information technologies. We will create new technologies that integrate photonics and information technology to provide unconventional measurement and experimental methods, thereby creating new developments in life science. Furthermore, we aim to give back to society through the practical application and commercialization of our research results. Through our research activities, we will create a new trend that spans academia and industry.

#### Research highlights

- Virtual-freezing fluorescence imaging flow cytometry, *Nature Communications*, 2020, **11**, 1162.
- Intelligent image-activated cell sorting, *Cell*, 2018, **175**, 266–276.e13.
- Wavefront engineering with disorder-engineered metasurfaces, *Nature Photonics*, 2018, **12**, 84–90.

#### Education

Graduate School of Information Science and Technology, Division of Information Science and Technology, Course of Bioengineering and Bioinformatics



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## Green Nanotechnology Research Center

### LABORATORY OF EXOTIC REACTION FIELD

PI: Specially Appointed Prof. Hiroaki MISAWA, PhD

#### Outline

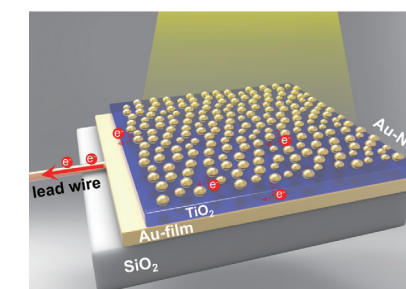
We study on highly efficient optical antennae based on the strong coupling between a Fabry-Pérot nanocavity mode and a localized surface plasmon resonance of Au nanoparticles and its application for solar cells as well as artificial-photosynthesis systems which evolve oxygen and hydrogen as a result of a photolysis of water.

#### Research highlights

- Water Oxidation under Modal Ultrastrong Coupling Conditions Using Au/Ag Alloy Nanoparticles and Fabry-Pérot Nanocavities, *Angew. Chem. Int. Ed.*, 2021, **60**, 18438–18442.
- Extrinsic Chirality by Interference between Two Plasmonic Modes on an Achiral Rectangular Nanostructure, *ACS Nano*, 2021, **15**, 16802–16810.
- Boosting Hydrogen Evolution at Visible Light Wavelengths Using a Photocathode with Modal Strong Coupling between Plasmons and a Fabry-Pérot Nanocavity, *Chem. Eur. J.*, 2022, **28**, e202200288.

#### Education

Graduate School of Information Science and Technology, Division of Bioengineering and Bioinformatics



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## LABORATORY OF NANOSTRUCTURED FUNCTIONAL MATERIALS

PI: Prof. Junji NISHII, PhD; Assoc. Prof. Madoka ONO, PhD;  
Assist. Prof. Masaya FUJIOKA, PhD

### Outline

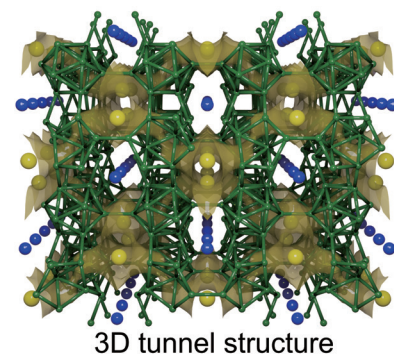
We are focusing on the material designs based on electron, phonon, photon, and ion transportation phenomena in inorganic materials. In particular, we have developed unique synthesis methods using solid-state electrochemistry or high-pressure methods to create metastable materials and develop novel functions.

### Research highlights

- A Novel Technique for Controlling Anisotropic Ion Diffusion: Bulk Single-Crystalline Metallic Silicon Clathrate, *Advanced Materials*, 2022, **34**, 2106754.
- Electric Transport Properties of NaAlB<sub>14</sub> with Covalent Frameworks, *Inorganic Chemistry*, 2022, **61**, 4378-4383.
- Investigating the role of GeO<sub>2</sub> in enhancing the thermal stability and proton mobility of proton-conducting phosphate glasses, *Journal of Materials Chemistry A*, 2021, **9**, 20595-20606.

### Education

Graduate School of Chemical Sciences and Engineering, Department of Chemistry, Materials Chemistry and Engineering Course



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## LABORATORY OF MATHEMATICAL MODELING

PI: Prof. Masaharu NAGAYAMA, PhD; Assoc. Prof. Yasuaki KOBAYASHI, PhD;  
Assist. Prof. Yikan LIU, PhD

### Outline

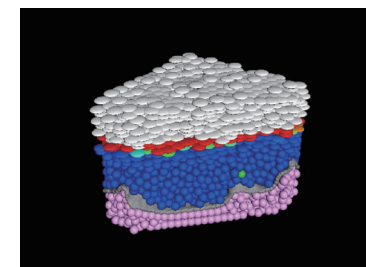
With mathematical modeling, numerical computation, and mathematical analysis forming the foundation of our research, we aim to understand biological and other natural phenomena from the perspective of the mathematical sciences. The main research topics are the following: Mathematical modeling of the nonlinear and biological phenomenon, Pattern formation in reaction-diffusion systems, Inverse problems for partial differential equations and applications.

### Research highlights

- A Computational model of the epidermis with the deformable dermis and Its application to skin diseases, *Scientific Reports*, 2021, **11**, 13234.
- Temporal coherency of mechanical stimuli modulates tactile form perception, *Scientific Reports*, 2021, **11**, 11737.
- Inverse moving source problem for time-fractional evolution equations: Determination of profiles, *Inverse Problems*, 2021, **37**(8), 084001.

### Education

Graduate School of Science, Department of Mathematics



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## LABORATORY OF FUNCTIONAL NANO-MOLECULAR MATERIALS

PI: Prof. Takayoshi NAKAMURA, PhD; Assist. Prof. Kiyonori TAKAHASHI, PhD;  
Rui-Kang HUANG, PhD; XUE Chen, PhD

### Outline

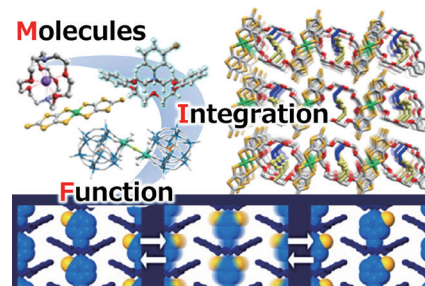
We construct the "Integrated Molecular Systems" through self-assembly processes of molecules, and develop the materials for the molecular devices to future electronics. Our main research interests are the development of molecular conductors and magnetic materials, molecular motors, single-chain ferroelectrics with composite functions from the viewpoint of supramolecular chemistry.

### Research highlights

- One-dimensional DABCO hydrogen-bonding chain in a hexagonal channel of magnetic [Ni(dmit)<sub>2</sub>], *Dalton Transactions*, 2020, **49**, 16772-16777.
- Hydrogen-Bonded Polyrotaxane Cation Structure in Nickel Dithiolate Anion Radical Salts: Ferromagnetic and Semiconducting Behavior Associated with Structural Phase Transition, *Chemistry—A European Journal*, 2019, **25**, 6920-6927.

### Education

Graduate School of Environmental Science, Division of Environmental Materials Science, Course in Molecular Photonics and Electronics Science



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## LABORATORY OF MOLECULE & LIFE NONLINEAR SCIENCES

PI: Prof. Tamiki KOMATSUZAKI, PhD; Assoc. Prof. Koji TABATA, PhD;  
Assist. Prof. Yuta MIZUNO, PhD; Goro NISHIMURA, PhD;  
Specially Appointed Assist. Prof. James Nick TAYLOR, PhD;  
Jean-Emmanuel CLEMENT, PhD; Mikhail TSITSVERO, PhD

### Outline

The purpose of our laboratory is to understand the fundamental principles of chance and necessity of "change of states", and to construct new concepts and methodologies in terms of data-driven mathematical sciences, enabling us to unveil the mechanisms that bridge molecules and life across hierarchies in time and space.

### Research highlights

- Modes of information flow in collective cohesion, *Science Advances*, 2022, **8**(6), sciadv.abj1720.
- Phase space geometry of isolated to condensed chemical reactions, *J. Chem. Phys.*, 2021, **155**, 210901(17pages).
- A bad arm existence checking problem: How to utilize asymmetric problem structure? *Machine Learning*, 2020, **109**, 327-372.

### Education

Graduate School of Chemical Sciences and Engineering Materials Chemistry and Engineering Course; Graduate School of Science, Department of Mathematics



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## LABORATORY OF MATHEMATICAL AND PHYSICAL ETHOLOGY

PI: Prof. Toshiyuki NAKAGAKI, PhD; Assoc. Prof. Katsuhiko SATO, PhD;  
Assist. Prof. Yukinori NISHIGAMI, PhD

### Outline

Soft matter physics that deals with soft and largely deformable materials is a necessary tool for mechanical understanding of motion, deformation and growth of biological systems such as cells, tissues and organisms. Based on these ideas, we are investigating characteristic and functional behaviors of various biological systems, by inventing unique experimental setup. We focus on unicellular organisms of amoebae and ciliates, and observe how they behave in complicated conditions and propose a mathematical model in terms of soft matter physics. Based on the model simulation and analysis, we seek for algorithm of how they process information and behavioral smartness.

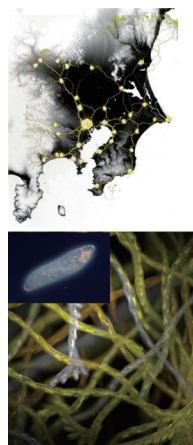
### Research highlights

- A model for simulating emergent patterns of cities and roads on real-world landscape. *Scientific Reports*, 2022, **12**, 10093.
- Polarized interfacial tension induces collective migration of cells, as a cluster, in a 3D tissue. *Biophys J.*, 2022, **121**(10), 1856-1867.
- Near-wall rheotaxis of the ciliate *Tetrahymena* induced by the kinesthetic sensing of cilia. *Science Advances*, 2021, **7**, abi5878.

### Education

Graduate School of Life Science, Division of Soft Matter

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## NIKON IMAGING CENTER

Leader: Prof. Hideharu MIKAMI, PhD; Prof. Yasutaka MATSUO, PhD;  
Specially Appointed Assist. Prof. Yusuke TOMINA, PhD;  
Tech. Staff Kentaro KOBAYASHI, Wakako NAKANO

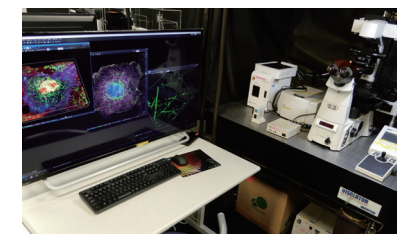
### Outline

Nikon Imaging Center provides cutting edge light microscopy instruments to researchers not only in Hokkaido University but also throughout Japan. Our missions are: To enhance scientific research by providing of advanced microscopy and imaging equipment; To provide technical support for high quality imaging; To hold seminars on basic and advanced light microscopy techniques for users; To develop novel microscope systems and imaging techniques reflecting demands of users.

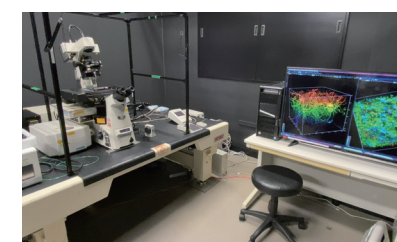
### Usage

Usage frequency: 2500 hours, 500 users per year  
Publications by users: 109 papers (2005-2021)

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High Speed Confocal Microscope



Multi Photon Microscope

### Laboratory of Social Cooperation Advisory

Guest Prof. Atsushi MURAMATSU, Shingo EBATA, Yoshio YAMAWAKI, Kazuhiro NISHIJIMA

### Alliance Collaborative Research Laboratory

Guest Prof. Tomomi NEMOTO

### Laboratory of New-paradigm computing

Guest Prof. Masanao YAMAOKA, Takashi TAKEMOTO, Shin-ichi MINATO

### Collaboration with the Center for Human Nature, Artificial Intelligence, and Neuroscience

(concurrent position) Assoc. Prof. Hiroyuki IIZUKA,  
(concurrent position) Specially Appointed Assoc. Prof. Masatoshi YOSHIDA, Hideaki SHIMAZAKI,  
(concurrent position) Specially Appointed Lecturer Katsunori MIYAHARA

### Joint Research and Education Center with College of Science, National Yang Ming Chiao Tung University (Taiwan)

Guest Prof. Yaw-Kuen Li, Yuan-Pern Lee, Chain-Shu Hsu, Jiunn-Yuan Lin, Jiun-Tai Chen, Yu-Miin Sheu

## PROMOTION OFFICE FOR NANOTECHNOLOGY COLLABORATION

Director: Prof. Yasutaka MATSUO, PhD

### Outline

We support the research and development by nano/ micro fabrication techniques using EB lithography, Atomic Layer Deposition system, Clean Room environment and so on, and advanced characterization of nanomaterials using CsSTEM, FE-SEM, XPS. Technical consultation, equipment training and technical support will be carried out to other universities, public institutions, corporate users. We also actively accept collaborative research.

### Research highlights

- Textured Organogel Films Showing Unusual Thermoresponsive Dewetting, Icephobic, and Optical Properties, *Adv. Mater. Interfaces*, 2019, **6**, 1801358
- Fe azaphthalocyanine unimolecular layers (Fe AzULs) on carbon nanotubes for realizing highly active oxygen reduction reaction (ORR) catalytic electrodes, *NPG. Asia Materials*, 2019, **11**, 57

### Education

Graduate School of Chemical Sciences and Engineering, Materials Chemistry and Engineering Course Inorganic Materials Chemistry Unit

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## DIVISION OF TECHNICAL STAFFS

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### System/Equipment Development Team

Equipment Development/Machining Group designs, develops, and produces laboratory instruments using various machine tools. We receive orders from all departments on campus and off campus through the Global Facility Center's Prototype Machining Solution Project.

System Development/Data Analysis Group has support for public relations information and network, including system development using IoT technology, operation and maintenance of the Web site of our research institute.

Leader (Coordinator) Masashi TAKEI

#### ■ Equipment Development/Machining Group:

Masashi TAKEI (Chief), Mao KUSUZAKI

#### ■ System Development/Data Analysis Group:

Michiaki ENDO (Chief), Itsuko IMAMURA, Aya TOGASHI



### Nanofabrication/Imaging Analysis Team

Nanofabrication/Imaging Analysis Team has technical support to maintenance and management of clean rooms and common facilities, the Nikon Imaging Center, guidance on use, nano-fabrication and imaging analysis, and also receives technical consultation on them.

Leader (Coordinator); Kentaro KOBAYASHI

#### ■ Nanofabrication Group:

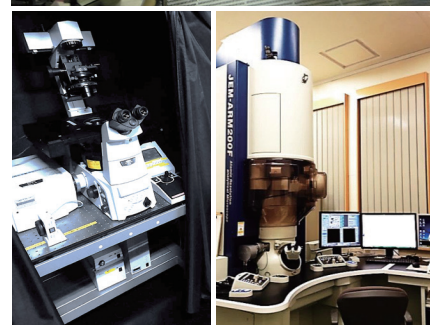
Ko ONISHI (Chief), Wakako NAKANO

#### ■ Electronic Microscope Analysis Group:

Naomi HIRAI (Chief), Yuko MORI

#### ■ Optical Microscope Analysis Group:

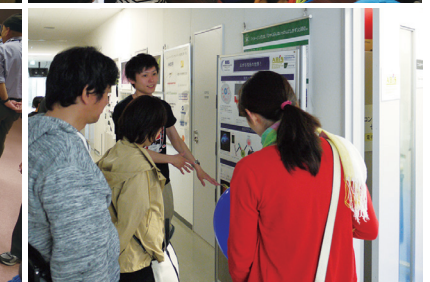
Kentaro KOBAYASHI (Chief),  
Wakako NAKANO (additional post)



\* Both teams also provide assistance related to the entire institute, such as institute's events/exhibitions and liquefied nitrogen training sessions.

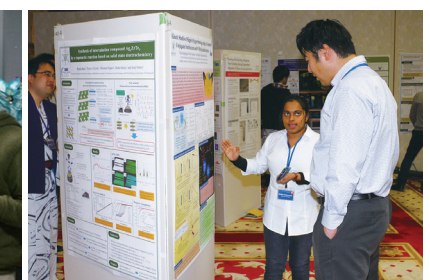
### Open Laboratory

Early summer, laboratory open is held every year. Exhibition of research mainly for elementary and junior high school students is famous as a great place to touch advanced science.



### International Symposium

International Symposium is held every year by us for discussing common issues beyond national boundaries. Each theme of the year is expressed in one Japanese letter.



### Internationality

We enroll many international students in the laboratories, and they research in a global atmosphere.





# STUDY with US in RIES

## Join state-of-the-art research and create new science

We welcome students from within Japan and abroad.

### (i) To be a Master Course or a Ph.D. Course student of Hokkaido University

Please directly contact the research groups that you are interested in.

### (ii) To be a research student of RIES and then a graduate student

Please visit the following page to see the details.

<https://www.es.hokudai.ac.jp/english/education/kenkyusei/>



Japanese government offers various scholarships  
and education programs to students.

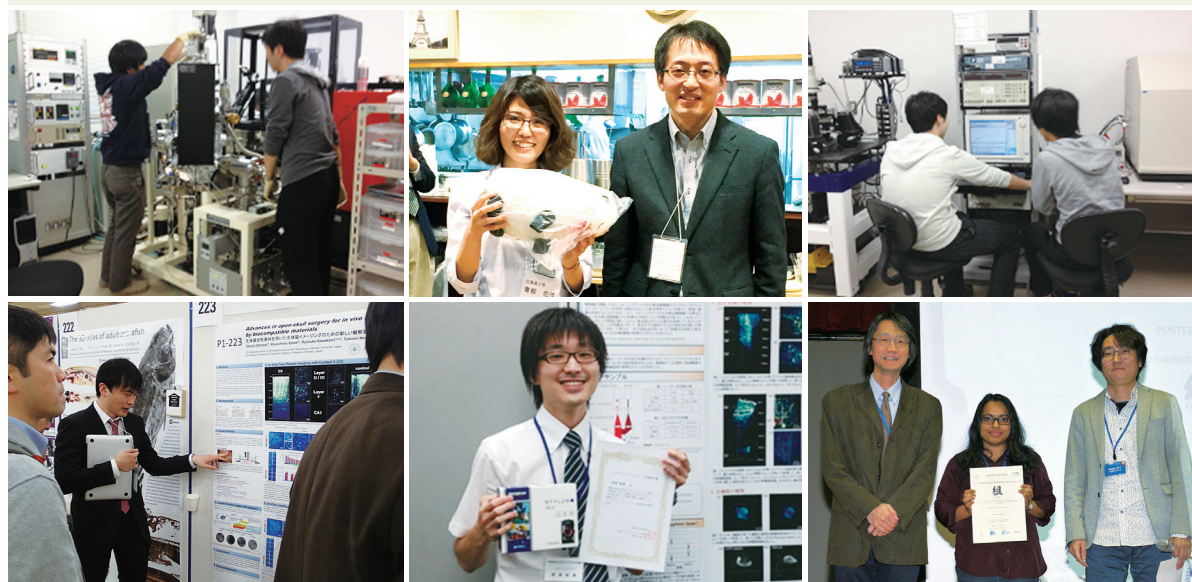
For more details, please visit "Study in Japan" webpage.

<https://www.studyinJapan.go.jp/en/>



For Embassy recommended MEXT Scholarships,  
visit the homepage of Japanese embassy in your country,  
Gateway to study in Japan, etc.

<https://www.jasso.go.jp/en/index.html>



HOKKAIDO  
UNIVERSITY  
SAPPORO  
CAMPUS



A C C E S S

New Chitose Airport  
→ Sapporo Sta.

○Rapid Airport Train: approx. 40 min.  
○Bus: approx. 70 min.

Sapporo Sta. → RIES

**[Northern Campus]**

○Subway Nanboku Line (Get off at Kita 18-jo Station) + Walk: 15 min.  
○Bus (Get off at Kita 21-jo Nishi 15-chome Bus Stop) + Walk: 5 min.  
○Walk: 10 min (To the Main Gate of Hokkaido University)  
+ Shuttle Bus (Get off in front of the RIES or the CRIS Building)

**[Mid Campus]**

○Walk: 17min  
○Subway Nanboku Line (Get off at Kita 12-jo Station) + Walk: 3 min.