SKE

2019-2020

The Graduate
University
for Advanced
Studies

Cultural and Social Studies

Regional Studies Comparative Studies Japanese Studies Japanese History Japanese Literature

High Energy Accelerator Science

Accelerator Science Materials Structure Science Particle and Nuclear Physics

Life Science

Genetics Basic Biology Physiological Sciences

Physical Sciences

Structural Molecular Science Functional Molecular Science Astronomical Science Fusion Science Space and Astronautical Science

Multidisciplinary Sciences

Statistical Science Polar Science Informatics

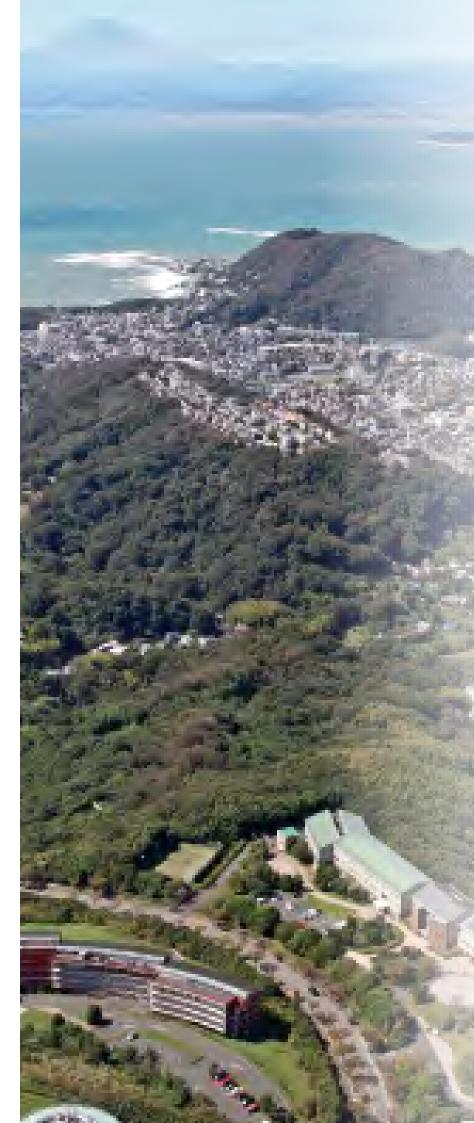
Advanced Sciences

Evolutionary Studies of Biosystems

SOKENDAI

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Message from the President

SOKENDAI (The Graduate University for Advanced Studies) is a graduate university with no undergraduate programs that consists of departments housed in affiliated Inter-University Research Institutes and the School of Advanced Sciences attached directly to SOKENDAI. The Inter-University Research Institutes are research centers for joint use by universities throughout Japan in their various research fields. As such, these institutes serve as centers of advanced research in their respective research fields and as nodes of scholarly communication that support international joint research. The School of Advanced Sciences, which is located in Hayama and has no such parent institute, conducts advanced research into the evolution of life and the relationship between science and society.

SOKENDAI was founded in October 1988 on the internationally unprecedented idea of educating graduate students at outstanding centers of research to cultivate future generations of scholars. We are very happy to announce that we were able to successfully cerebrate SOKENDAI's 30th anniversary, in 2018.

At SOKENDAI, students are educated at Japan's leading centers of research. Their lives are very different from those of students in graduate programs attached to ordinary undergraduate faculties, especially for students who enroll in our five-year programs straight from their undergraduate studies and pursue their graduate studies and research surrounded by professional researchers and scholars. Faculty outnumber students by more than two-to-one. Students have access not only to equipment and materials unavailable elsewhere but also to a community of top-ranked scholars. While this environment provides amazing opportunities for doctoral dissertation research, it may also be more stressful in some ways than an ordinary university.

This is why every department, with the full support of SOKENDAI, looks after its students and takes steps to ensure that time spent in the department is productive and enjoyable. All our students are encouraged to take full advantage of this distinctive research environment as they pursue their doctoral dissertation research.

"Advanced specialities and expertise," "broad perspective," and



"international competitiveness" have been the educational goals of SOKENDAI since its founding. As mentioned above, students are educated at centers of research, so "Advanced specialities and expertise" and "international competitiveness" are perhaps something they naturally learn. But what of a "broad perspective"? A "broad perspective" entails the ability to explain one's object of research in the broader terms of human intellectual activity in general and to envision new horizons that transcend current disciplinary boundaries. Acquiring these abilities in the course of writing a doctoral dissertation can be hard. Still, I hope students will endeavor to gain this broader perspective at every opportunity by taking full advantage of SOKENDAI's unique characteristics, including its various departments that collectively encompass a broad range of intellectual fields, from energy, materials, space, and life to information, history and culture.

Universities and basic research in Japan today face challenging circumstances. Likewise, there are issues regarding SOKENDAI's future growth as an institution of higher learning that need our serious attention. Yet, whatever difficult challenges may lie ahead in this uncertain age, we will face them each and every day as first-class researchers and scholars dedicated to working in cooperation with everyone concerned to produce future generations of global professionals.

April 1, 2019

M. Harry

Hasegawa, Mariko, Ph. D.
President
SOKENDAI (The Graduate University for Advanced Studies)

Profile

Dr. Hasegawa joined SOKENDAI (the Graduate University for Advanced Studies) as a professor in 2006. She went on to serve as a dean of Department of Evolutionary Studies of Biosystems in 2007, as a dean of School of Advanced Sciences in 2011, and then as an Executive Director in 2014. Dr. Hasegawa became President of SOKENDAI on April 1, 2017.

She earned her Ph.D. degree in Anthropology from Graduate School of Science, University of Tokyo.

Before joining SOKENDAI, she worked at the Tanzania Wildlife Service, as an assistant at the Laboratory of Anthropology, Department of Biological Science, Graduate School of Science, University of Tokyo. She also taught as an associate professor and professor at Senshu University, as an associate professor at the Department of Anthropology at Yale University and as a professor at the School of Political Science and Economics, Waseda University.

Her research expertise includes Behavioral Ecology and Physical Anthropology, and she conducted research on wild chimpanzee, fallow deer and wild sheep in Great Britain, peafowl in Sri Lanka. Recently she is conducting research on human evolution and adaptation.

In 2008, she became President of the Human Behavior and Evolution Society of Japan and received the Hidaka Award from the Japan Ethological Society in 2012.

Main features of SOKENDAI (The Graduate University for Advanced Studies)



Unique doctoral programs

- •Education programs carried out at cutting-edge research institutes
- •Tailor-made education programs
- •Flexible education programs for working professionals and foreign students

Fostering advanced specialties and expertise

- •Specialized education programs in diverse fields
- •Supervision by leading researchers from each field
- •Top-level collection of archives, equipment, and facilities provided by Inter-University Research Institutes

Broadening perspective

- "SOKENDAI Freshman Course," an intensive course for all firstyear students
- •Joint education among departments and schools
- •Cross-disciplinary education through distance learning systems
- "Joint School Seminars" for interdisciplinary research exchanges among departments

Achieving international competitiveness

- •Education at the hub of international research collaborations
- •International Joint Diploma Programs
- •SOKENDAI Student Dispatch Program
- •Courses focused on academic communication

Creating advanced research fields

- •Interdepartmental education programs
- •International research collaborations coordinated by School of Advanced Sciences
- •University-wide "Science and Society" education program

Establishment Objectives / Purpose of Establishment

In recent years, there has been a strong demand for the promotion of original and international research and the opening up of advanced scientific fields that transcend the boundaries of existing scientific disciplines.

SOKENDAI (The Graduate University for Advanced Studies), the first of its kind in Japan, was established to cultivate researchers capable of responding to such demands. It offers the advantage of enabling students to carry out research in the most advanced research environment of Inter-University Research Institutes, which operate under the auspices of the Ministry of Education, Culture, Sports, Science and Technology (MEXT). These institutes conduct advanced research in a variety of fields, and play a central role in the promotion of joint research.

SOKENDAI was established to foster creative international researchers with wide-ranging vision who are capable of leading the latest trends in research. The University will promote original and international research and open up new scientific fields that transcend the boundaries of existing scientific disciplines.



Inter-University Research Institutes

Inter-University Research Institutes (referred to as "IURI" hereafter) house large scale, high-technical facilities, high-level laboratories, or various academic data and archives. They are accessible for any university researchers who would collaboratively interact each other, using these facilities.

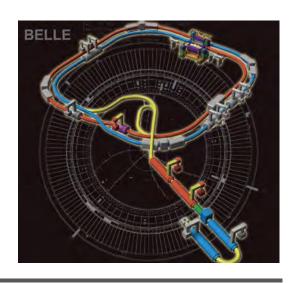
Have you ever heard, either on TV or in a newspaper, of the Subaru telescope, on the island of Hawaii, or of the observation vessel, SHIRASE, heading to the South Pole? Both of them are related to IURI, affiliated with SOKENDAI; the Subaru telescope was established by the National Astronomical Observatory, and the polar observation is carried out by the National Institute of Polar Research.

Most of the research activities involve fundamental scientific studies which demand large-scale facilities and a large budget. IURIs have a great number of researchers and a large amount of research grants are made available to carry out original and advanced scientific research.



Advanced specialist education in research facilities and general education cultivating broad views

Ph. D. programs at SOKENDAI provide an ideal education and research environment, offering direct access to large-scale or special experiment/ observation facilities, as well as academic materials and data at world-class research institutes in Japan (IURI). In our Ph. D. programs, students can be in daily communication with cutting-edge researchers in Japan and abroad as one of the leading international research centers. Having 2~3 faculty members per student, SOKENDAI offers, in a custom-made manner, both advanced specialist education and general education cultivating broad views.



Inter-University Research Institutes participating in SOKENDAI (The Graduate University for Advanced Studies)

The Center for Educational Development The Center for Academic Information Services University Library

Department of Evolutionary Studies of Biosystems (School of Advanced Sciences)

[Havama campus]

Shonan Village, Hayama, Kanagawa, 240-0193 Japan TEL: 81-46-858-1500

FAX: 81-46-858-1542 URL: https://www.soken.ac.jp

[Tokyo branch]

Campus Innovation Center 4F, 3-3-6 Shibaura,

Minato-ku, Tokyo, 108-0023

TEL: 81-3-5440-9116

②National Institutes for the Humanities **National Museum of Ethnology**

Department of Regional Studies Department of Comparative Studies (School of Cultural and Social Studies) 10-1 Senri Expo Park, Suita, Osaka, 565-8511 Japan

TEL: 81-6-6878-8236

URL: http://www.minpaku.ac.jp

National Institutes for the Humanities **International Research Center** for Japanese Studies

Department of Japanese Studies (School of Cultural and Social Studies) 3-2 Oeyama-cho, Goryo, Nishikyo-ku, Kyoto, 610-1192 Japan TEL: 81-75-335-2222

URL: http://www.nichibun.ac.jp/en/

Mational Institutes for the Humanities National Museum of Japanese History

Department of Japanese History (School of Cultural and Social Studies) 117 Jonai-cho, Sakura-shi, Chiba, 285-8502 Japan TEL: 81-43-486-0123

URL: https://www.rekihaku.ac.jp

6 National Institutes for the Humanities **National Institute of Japanese Literature**

Department of Japanese Literature (School of Cultural and Social Studies) 10-3, Midori-cho, Tachikawa, Tokyo, 190-0014 Japan URL: https://www.nijl.ac.jp

6 National Institutes of Natural Sciences Institute for Molecular Science

Department of Structural Molecular Science Department of Functional Molecular Science (School of Physical Sciences) URL: https://www.ims.ac.jp/en/

National Institutes of Natural Sciences **National Institute for Basic Biology**

Department of Basic Biology (School of Life Science) URL: http://www.nibb.ac.jp/en

National Institutes of Natural Sciences **National Institute for Physiological Sciences**

Department of Physiological Sciences (School of Life Science)

URL: http://www.nips.ac.jp/eng 38 Nishigonaka, Myodaiji, Okazaki, 444-8585 Japan TEL: 81-564-55-7000

National Astronomical Observatory

Department of Astronomical Science (School of Physical Sciences)

2-21-1 Osawa, Mitaka, Tokyo, 181-8588 Japan TEL: 81-422-34-3600

URL: http://www.nao.ac.ip

2-12 Hoshigaoka, Mizusawa, Oshu, Iwate, 023-0861

TEL: 81-197-22-7111

National Astronomical Observatory (Nobeyama)

462-2 Nobeyama, Minamimakimura, Minamisaku, Nagano, 384-1305 Japan TEL: 81-267-98-4300

650 North A'ohoku Place, Hilo, Hawaii 96720 U.S.A.

TFI: 1-808-934-7788

Calle Joaquin Montero 3000, Oficina 702, Vitacura, Santiago, Chile

TEL: 56-2-2656-9253

URL: http://www.nifs.ac.jp/en/

Mational Institutes of Natural Sciences **National Institute for Fusion Science**

Department of Fusion Science (School of Physical Sciences) 322-6, Oroshi-cho, Toki, Gifu, 509-5292 Japan TEL: 81-572-58-2222 or 2042

(b) Japan Aerospace Exploration Agency Institute of Space and Astronautical Science

Department of Space and Astronautical Science

Maui

Island of Hawai'i

(School of Physical Sciences)

3-1-1. Yoshinodai, Chuo-ku, Sagamihara, Kanagawa, 252-5210 Japan TEL: 81-42-759-8012

URL: http://www.isas.jaxa.jp/sokendai/e/

Oahu

(Tsukuba Campus)

Accelerator Laboratory Applied Research Laboratory

Department of Accelerator Science (School of High Energy Accelerator Science) Institute of Materials Structure Science

Department of Materials Structure Science (School of High Energy Accelerator Science) Institute of Particle and Nuclear Studies

Department of Particle and Nuclear Physics (School of High Energy Accelerator Science) 1-1 Oho, Tsukuba, Ibaraki, 305-0801 Japan

TEL: 81-29-864-1171 or 5128

URL: http://www.kek.jp

Thigh Energy Accelerator Research Organization (Tokai Campus)

203-1 Oaza-Shirakata, Tokai-Mura, Naka-gun, Ibaraki, 319-1106 Japan

®Research Organization of Information and Systems The Institute of Statistical Mathematics

Department of Statistical Science (School of Multidisciplinary Sciences)

10-3 Midori-cho, Tachikawa, Tokyo, 190-8562 Japan TEL: 81-50-5533-8500

URL: https://www.ism.ac.jp/index_e.html

National Institute of Polar Research

Department of Polar Science (School of Multidisciplinary Sciences) 10-3 Midori-cho, Tachikawa, Tokyo, 190-8518 Japan

TEL: 81-42-512-0608 URL: https://www.nipr.ac.jp

Mational Institute of Polar Research **SYOWA STATION**

Department of Polar Science (School of Multidisciplinary Sciences)

Research Organization of Information and Systems **National Institute of Informatics**

Department of Informatics (School of Multidisciplinary Sciences) 2-1-2 Hitotsubashi, Chiyoda-ku, Tokyo, 101-8430

TEL: 81-3-4212-2110 URL: https://www.nii.ac.jp/en/

22Research Organization of Information and Systems **National Institute of Genetics**

Department of Genetics (School of Life Science)

1111 Yata, Mishima, Shizuoka, 411-8540 Japan

TEL: 81-55-981-6720 URL: https://www.nig.ac.jp



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History

| June | | ors general of international university | | |
|-------------------|---|--|--|--|
| 1982 | research institutes issues an appeal for the introduction of post-graduate courses in the institutes. | | | |
| April 1986 | An informal committee of the directors general of inter-national university research institutes produces a summary of the basic concepts of a postgraduate school for advanced studies based on the results of an investigation by a working group set up to investigate issues related to postgraduate schools. An Office and Committee for the Investigation of the Preparation of the Establishment of a Postgraduate School for Advanced Studies are established at Okazaki National Research Institutes. | | | |
| March 1987 | | f the Preparation of the Establishment ced Studies produces a summary of e school for advanced studies. | | |
| May 1987 | | paration of the Establishment of a Studies are established at Okazaki | | |
| July 1987 | School for Advanced Studies pro | ne Establishment of a Postgraduate duces an interim summary on the of a tentatively named Graduate | | |
| April 1988 | | aration of the Establishment of the Studies are established at Okazaki | | |
| May 1988 | | ational School Establishment Law" s the establishment of the Graduate nnounced and enacted. | | |
| September 1988 | | the Establishment of the Graduate duces a summary of the preparation University for Advanced Studies. | | |
| October 1988 | | ed Studies is inaugurated. The central at the Tokyo Institute of Technology | | |
| | School of Mathematical and Physical Science Department of Statistical Science Department of Accelerator Science Department of Synchrotron Radiation Science Department of Structural Molecular Science | School of Life Science Department of Genetics Department of Molecular Biomechanics Department of Physiological Science | | |
| | Department of Functional Molecular Science (The university commences matric Nagakura is appointed as the first Pre | ulation from April 1989.) Dr.Saburo esident of the University. | | |
| April 1989 | Department of Regional Studies and | al Studies is established with the Department of Comparative Studies. tion of students for the three schools. | | |
| January 1990 | Dr.Eizi Hirota is appointed as the first | Vice President of the University. | | |
| April 1991 | The Coordination Center for Researc | h and Education is established. | | |
| April 1992 | Studies), and the Departments of | dies (School of Cultural and Social Astronomical Science and Fusion d Physical Science) are established; | | |
| April 1993 | The Department of Polar Science (S Science) is established; matriculation | School of Mathematical and Physical abegins. | | |
| February 1994 | Land in Hayama, Kanagawa (27,000m2), is donated by Mitsui Fudosan Ltd. to allow the construction of the University's central administration office, as a result of the mediation services of the Kanagawa prefectural government. | | | |
| March 1994 | Construction of the central administr Hayama Campus. | ration office (4,205m2) begins at the | | |
| June 1994 | The Information Center for Research | and Education is established. | | |
| February 1995 | Administrative functions are transf Hayama; construction is completed of | ferred from Nagatsuda Campus to on the central administration building. | | |
| April 1995 | | cond President. Dr.Kazuo Moriwaki is | | |
| April 1997 | The School of Advanced Sciences, | with the Department of Biosystems ma Campus (matriculation begins in | | |
| | T 5 | (0.1 | | |

| April 1999 | The School of Cultural Studies changes its name to "The School of Cultural and Social Studies." The Department of Japanese History is established in the School of Cultural and Social Studies, and The Department of Particle and Nuclear Physics is established in the School of Mathematical and Physical Science; matriculation begins in both new Departments. The School of Advanced Sciences commences matriculation. |
|------------------|--|
| June 1999 | Construction completed on the research building for the School of Advanced Sciences. |
| April 2001 | Dr. Keiichi Kodaira is appointed as the third President. Dr. Naoyuki Takahata is appointed as the third Vice President. The Department of Cyber Society and Culture (School of Cultural and Social Studies) is established; matriculation begins. |
| July 2001 | Construction begins on the Hayama Campus Library (1,427m2). |
| February 2002 | Library construction completed. |
| April 2002 | The Department of Informatics established in the School of Mathematical and Physical Science; matriculation begins. |
| April 2003 | The Department of Japanese Literature (School of Cultural and Social Studies), and the Department of Space and Astronautical Science (School of Mathematical and Physical Science) are established; matriculation begins. |
| October 2003 | "The National University Corporation Law (Law No. 112 of 2003)" is promulgated and enforced. |
| April 2004 | Reformation into the National University Corporation, Graduate University for Advanced Studies Dr. Sc. Keiichi Kodaira is reappointed as the President of the University. The School of Mathematical and Physical Science is reformed into three schools: the School of Physical Science (including the departments of Structural Molecular Science, Functional Molecular Science, Astronomical Science, Fusion Science and Space and Astronautical Science), the School of High Energy Accelerator Science (including the departments of Accelerator Science, Materials Structure Science, Particle and Nuclear Physics), and the School of Multidisciplinary Science (including the departments of Statistical Science, Polar Science and Informatics). The School of Life Science has reformed a three-year doctoral program into a five-year doctoral program. |
| April 2005 | The name of the Department of Molecular Biomechanics at the School of Life Science has changed to the Department of Basic Biology. |
| April 2006 | The School of Physical Sciences, the School of High Energy Accelerator Science, and the School of Multidisciplinary Sciences have implemented the five-year doctoral program system. The Schools have begun to accept students. |
| April 2007 | The School of Advanced Sciences is reorganized to establish the Department of Evolutionary Studies of Biosystems (providing a five-year doctoral program), in stead of its two existing departments, the Department of Biosystems Science and the Department of Photo Science (providing three-year doctoral programs), matriculation begins. |
| April 2008 | Dr. Naoyuki Takahata has been appointed as the forth President. |
| April 2009 | The Department of Cyber Society and Culture has stopped accepting new students. |
| March 2010 | Construction of the Center for the Promotion of Integrated Sciences(1,033m2) begins at the Hayama Campus. |
| April 2010 | The name of Hayama Center for Advanced Studies has changed to the Center for the Promotion of Integrated Sciences. |
| January 2011 | Construction of the Center for the Promotion of Integrated Sciences is completed. |
| April 2013 | Information Services and Technology Center is established. |
| April 2014 | Dr. Yasunobu Okada has been appointed as the fifth President. |
| July 2015 | The Center for Academic Information Services is established by unification of the University Library and the Information Services and Technology Center. |
| March 2017 | Department of Cyber Society and Culture abolished. (Dept. operation period from 2001.4.1 to 2017.3.31) |
| April 2017 | Dr. Mariko Hasegawa has been appointed as the sixth President. |
| March | The Center for Educational Development is established. |

The Center for the Promotion of Integrated Sciences is abolished.

September 1998

The Department of Photoscience (School of Advanced Sciences) is established (matriculation begins in April 1999). The Department of Synchrotron Radiation Science changes its name to "The Department of Materials Structure Science."

Construction of the School of Advanced Sciences building for research (3,060m2) begins at the Hayama Campus.

Organization

Administrative Organization



Future Planning Division

In order to support management of the University by the leadership of the President, Future Planning Division was established as the core functions which carries out planning and proposals relating to education/research activities and organizational management of the entire University. We are conducting IR activities and collecting information to support formulating the future vision toward the period for the 4th Mid-term Objectives as the "SOKENDAI Future Vision Project".

- · Planning and proposals relating to management of the University
- IR activities to support planning, proposals and decision making
- · International cooperation activities relating to the entire University
- Public relation activities relating to the entire University
- · Formulation of the policies relating to management and operations of the headquarters of the University

Administrative Board

As of April 1, 2019

Yoneda, Tomohiro

Furuse, Mikio

Ninomiya, Yoshiyuki

President **Executive Director Executive Director Executive Director** Auditor Auditor

Hasegawa, Mariko Nakamura, Yukio Nagata, Takashi Ogawa, Yujiro Takeda, Hiroshi Nakamoto, Fuminori

Vice President Nagata, Takashi

School of Cultural and Social Studies

Chair, Department of Regional Studies Chair, Department of Comparative Studies Chair, Department of Japanese Studies Chair, Department of Japanese History

Kashinaga, Masao Udagawa, Taeko Takii, Kazuhiro Yamada, Yasuhiro Chair, Department of Japanese Literature Ochiai, Hiroshi

Ikeya, Kazunobu

School of Physical Sciences

Dean Deputy Dean Chair, Department of Structural Molecular Science Chair, Department of Functional Molecular Science Chair, Department of Astronomical Science Chair, Department of Fusion Science Chair, Department of Space and Astronautical Science

Uozumi, Yasuhiro Tomisaka, Kohji Aono, Shigetoshi Kawai, Maki Tsuneta, Saku Takeiri, Yasuhiko Dotani, Tadayasu

School of High Energy Accelerator Science

Dean Deputy Dean Chair, Department of Accelerator Science Chair, Department of Materials Structure Science Chai, Department of Particle and Nuclear Physics

Kamiyama, Takashi Iso, Śatoshi Honda, Tohru Kishimoto, Shunji Hashimoto, Shoji

School of Multidisciplinary **Sciences**

Dean Deputy Dean

Chair, Department of Statistical Science Chair, Department of Polar Science Chair, Department of Informatics

Fujisawa, Hironori Motoyama, Hideaki Inoue, Katsumi

School of Life Science

Dean Deputy Dean Chair, Department of Genetics Chair, Department of Basic Biology

Yoshimura, Yumiko Hanaoka, Fumio Agata, Kiyokazu Chair, Department of Physiological Sciences Nabekura, Junichi

School of Advanced Sciences

Sasaki, Akira Deputy Dean Innan, Hideki Chair, Department of Evolutionary Studies of Biosystems Arikawa, Kentaro

University Library

Acting Director Nakamura, Yukio Deputy Director Yagyu, Shuji

■ The Center for Educational Development Director Nagata, Takashi

The Center for Academic Information Services Acting Director Nakamura, Yukio

Future Planning Division

Nakamura, Yukio Manager

Administration Bureau

Secretary-General Manager, General Planning Division Manager, General Affairs Division Manager, Financial Affairs Division Manager, Academic and Students Affairs Division

Oba, Takeshi Yamashita, Katsuhiro Fujiwara, Masatoshi Maeda, Terunobu Itaba, Naoaki

Research and Education System

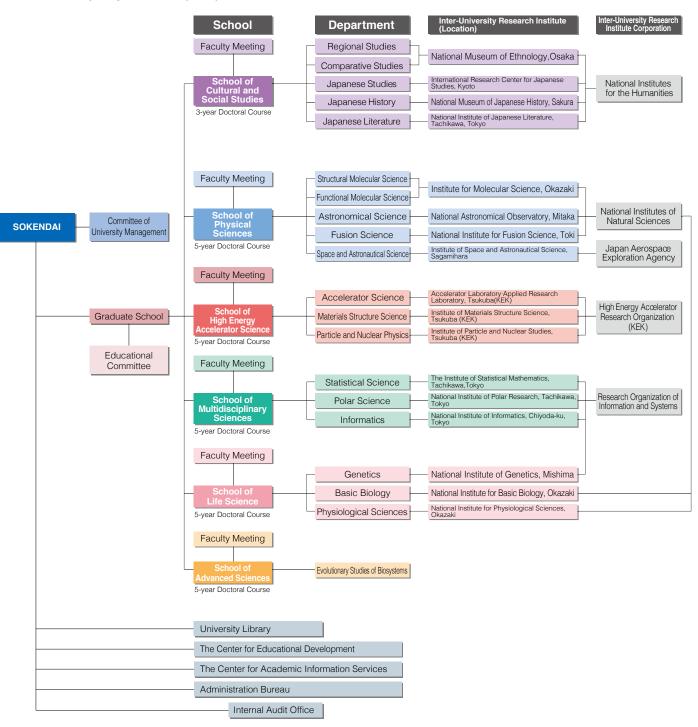
SOKENDAI has 6 schools and 20 departments. School of Cultural and Social Studies, School of Physical Sciences, School of High Energy Accelerator Sciences, School of Multidisciplinary Sciences, and School of Life Science together hold charge of 19 departments, which are housed in 18 affiliated research institutes and operated by 4 Inter-University Research Institute Corporations and Japan Aerospace Exploration Agency.

School of Advanced Sciences, which is attached directly to

SOKENDAI Headquarters and does not have a parent institute, has one department to conduct research into the evolution of life and the relationship between science and society.

In addition, the University Library, The Center for Educational Development, and The Center for Academic Information Services have been established as university-wide facilities for all 6 schools.

University Organization (2019)



Education and Research Council -

- As of May 1, 2019

| President | Hasegawa, Mariko | Chair, Department of Space and Astronautical Science | Dotani, Tadayasu |
|---|-------------------|---|--------------------|
| Executive Director | Nakamura, Yukio | Chair, Department of Accelerator Science | Honda, Tohru |
| Executive Director (Executive Vice President) | Nagata, Takashi | Chair, Department of Materials Structure Science | Kishimoto, Shunji |
| Executive Director | Ogawa, Yujiro | Professor, Department of Particle and Nuclear Physics | Tokushuku, Katsuo |
| | | Chair, Department of Statistical Science | Fujisawa, Hironori |
| Dean, School of Cultural and Social Studies | Ikeya, Kazunobu | Chair, Department of Polar Science | Motoyama, Hideaki |
| Dean, School of Physical Sciences | Uozumi, Yasuhiro | Chair, Department of Informatics | Inoue, Katsumi |
| Dean, School of High Energy Accelerator Science | Kamiyama, Takashi | Chair, Department of Genetics | Hanaoka, Fumio |
| Dean, School of Multidisciplinary Sciences | Yoneda, Tomohiro | Chair, Department of Basic Biology | Agata, Kiyokazu |
| Dean, School of Life Science | Furuse, Mikio | Chair, Department of Physiological Sciences | Nabekura, Junichi |
| Dean, School of Advanced Sciences | Sasaki, Akira | Chair, Department of Evolutionary Studies of Biosystems | Arikawa, Kentaro |
| | | | |
| Chair, Department of Regional Studies | Kashinaga, Masao | Professor, Department of Comparative Studies | Yoshida, Kenji |
| Chair, Department of Japanese Studies | Takii, Kazuhiro | Professor, Department of Japanese Studies | Komatsu, Kazuhiko |
| Chair, Department of Japanese History | Yamada, Yasuhiro | Professor, Department of Japanese History | Kurushima, Hiroshi |
| Chair, Department of Japanese Literature | Ochiai, Hiroshi | Professor, Department of Polar Science | Nakamura, Takuji |
| Chair, Department of Functional Molecular Science | Kawai, Maki | Counselor | Robert Campbell |
| Chair, Department of Astronomical Science | Tsuneta, Saku | Counselor | Tsubaki, Hiroe |
| | | | |

Administrative Council

Oba, Takeshi

Internal representatives

Secretary-General

| President | Hasegawa, Mariko |
|---|------------------|
| Executive Director | Nakamura, Yukio |
| Executive Director (Executive Vice President) | Nagata, Takashi |
| Executive Director | Ogawa, Yujiro |
| | |

Chair, Department of Fusion Science Takeiri, Yasuhiko

■ External academics and specialists

Executive Director and Vice President, The University of Tokyo Arinobu, Mutsuhiro Director, Nagoya University Asian Satellite Campuses Institute Isoda, Fumio Professor, Faculty of Letter, Konan University Inose, Kumie Director General, National Institute of Informatics, Research Organization of Information and Systems Kitsuregawa, Masaru Senior Corporate Adviser, Mitsubishi Estate Co., Ltd. Kimura, Keiji Executive Director, Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency Kuninaka, Hitoshi President, National Institutes of Natural Sciences Komori, Akio

Fellow, Toyota Physical and Chemical Research Institute Nishikawa, Keiko President, National Institutes for the Humanities Hirakawa, Minami President, Research Organization of Information and Systems Fujii, Ryoichi President, High Energy Accelerator Research Organization Yamauchi, Masanori President, Shizenkan University Graduate School of Leadership & Innovation

Monte Cassim





School of Cultural and Social Studies

By providing comprehensive research and educational programs on the human cultural activities and the relationship among human, society, technology, and nature, the School aims to encourage outstanding researchers who can compete internationally and can offer broad perspectives as well as those who can contribute to the society by using advanced research techniques in which they were trained.

School of Cultural and Social Studies

The School of Cultural and Social Studies is the only humanities school at SOKENDAI.

The School is comprised of the following five departments affiliated with 4 research institutes: Department of Regional Studies and Department of Comparative Studies affiliated with National Museum of Ethnology, Department of Japanese Studies affiliated with International Research Center for Japanese Studies, Department of Japanese History affiliated with National Museum of Ethnology and Department of Japanese Literature affiliated with National Institute of Japanese Literature.

The School not only conducts study and research at each research institute, but also conducts collaborative activities as an entire school. The School is playing an important role of conducting cultural and social studies at SOKENDAL based on a wide variety of academic expertise, and is disseminating the study achievements through methods such as publishing the academic journal "SOKENDAI Review of Cultural and Social Studies", holding the interdisciplinary exchange program "SOKENDAI Cultural Forum" hosted by each institute in rotation, and implementing the special education program "Academic Resource Management

Course".

In addition, the School only accepts students for the second term of a doctoral course (Doctor) while the other schools at SOKENDAI adopt a five-year system.

Departments under the School

- · Department of Regional Studies
- Department of Comparative Studies
 Department of Japanese Studies
- · Department of Japanese History
- · Department of Japanese Literature



Dean

Ikeya, Kazunobu

School of Cultural and Social Studies

Special field Anthropology, Geography, Biosophia Studies

Department of Regional Studies

The Department, affiliated with the National Museum of Ethnology, Japan, offers opportunities to study individual societies and cultures in Asia, Europe, Africa, the Americas and Oceania. Students will develop high expertise based on intensive fieldwork. The structure, history and other characteristics of each society and culture are explored using ethnographic methodologies. Practical and theoretical problems in local areas are investigated. New approaches in anthropology and related disciplines are encouraged.



Festival for Mountain God in Amdo Tibetan area(Photo LAJIABEN)



Seminar utilizing museum collections. Students have direct access to about 340 000 artifacts

For inquiries or information:

E-mail: souken@minpaku.ac.jp

FIELDS

- Asian Studies
- European Studies
- African Studies
- American Studies
- Oceanian Studies

Department of Comparative Studies

The Department, affiliated with the National Museum of Ethnology, Japan, offers opportunities for comparative studies of social systems, religion, technology, languages, art, and cultural resources. Students are expected to explore similarities and differences in time and space and to explore new directions in the study of society and culture. The Department has the advantage of access to extensive collections of artifacts, audio-visual records, and documentary materials. The Department nurtures researchers who can develop new research areas by combining anthropological

methods with the methods and findings of related fields.



Exhibition hall at the museum. A favorable educational environment for developing new research directions.



A Kazakh community event in Mongolia (Photo YAGI Fuki) Our study abroad program provides access to diverse field places.

For inquiries or information: E-mail: souken@minpaku.ac.jp

FIELDS

- Social/Cultural **Anthropology**
- Anthropology of Religion
- Anthropology of Technology
- Linquistics
- Anthropology of Art
- Cultural Resources

Department of Japanese Studies

The Department of Japanese Studies is organized as a single administrative unit in order to facilitate the international and interdisciplinary pursuit of Japanese studies encompassing the humanities, social sciences, as well as natural sciences. A special feature of our graduate study program is that all the faculty participate in teaching and research guidance.

The department requires graduate students to take three courses—"Theory and Methodology in Japanese Studies," "Interdisciplinary Research," and "Dissertation Writing Guidance"—which set forth the theoretical and methodological basis for conducting Japanese studies in global

perspective. Through these courses and directed research, we hope to foster researchers with creative and highly specialized perspectives who are equipped to undertake comprehensive approaches of a broad interdisciplinary nature crossing the lines of multiple fields of study.

ibrary

We acquire basic books and periodicals published both in and outside of Japan.

For inquiries or information:

E-mail: senkou@nichibun.ac.jp

COURSES

Japanese Studies

Department of Japanese History

In the Department of Japanese History, which has the National Museum of Japanese History as its parent institute, researchers specializing in history, archaeology, folklore, and allied disciplines including natural science, provide educational and research opportunities, including fieldwork, from interdisciplinary viewpoints. The most distinctive feature of the Department is that the students can use materials that are stored in the Museum, as well as various tangible and intangible information resources and advanced equipment for scientific analysis. The Department aims to foster researchers who are highly capable of comprehensive material-based analysis of Japanese history and culture and individuals who contribute to society with their broad and international perspectives.



_ecture utilizing museum collection About 300,000 of historical, folkloric and archaeological artifacts as well as advanced esearch facilities can be made of.

For inquiries or information:

E-mail: soken@ml.rekihaku.ac.jp

COURSES

Japanese History

Studies of Historical Materials / Studies of Source Materials and Research on Exhibits / Analytical and Information Sciences /

Social History / Technological and Environmental History / Regional Cultures / International Exchange /

Intensive Lectures A·B·C·D / Basic Seminar I · II / Instruction for Doctoral Dissertation Making I. I

Department of Japanese Literature

The Department of Japanese Literature is affiliated with the National Institute of Japanese Literature (NIJL) as the parent institute. The NIJL, one of the Inter-University Research Institutes, is an advanced research institute for Japanese literature and collects and studies an enormous volume of academic information based on research of original literary materials.

The Department guides students to become independent researchers through dissertation/thesis guidance and, in the use of the collection of original texts and literary resources at the NIJL, provides students with an education focusing on mastering of specialized research and investigation techniques and the acquisition of comprehensive analytic ability.

The Department aims to nurture advanced Japanese literature researchers who are international-minded with broad perspectives and contribute to societies by providing students with education through systematic curriculum under a system which provides guidance to students from a group of faculty members, as well as from individual faculty members.

For inquiries or information:

E-mail: edu-ml1@nijl.ac.jp

COURSES

Department of Japanese Literature

General subjects / Literary resource research / Research on the formation of literature / Research on literary environments



About 200,000 items (microfilms, Japanese rare books and historical materials in collections, etc.) are stored in the institute's



School of Physical Sciences

Aiming to nurture world-class researchers with broad perspectives as well as individuals with advanced knowledge and skills who will contribute to society in the field of material-, space-, and energy-related physics and chemistry.

School of Physical Sciences

research in physical sciences relating to material, space, energy, and life. The five departments that constitute the accommodate, and they have implemented a great number of large-scale and internationally advanced research including visiting faculty members, postdoctoral fellows, and students, and thus offers a highly international environment. In this excellent research environment, students experience the frontiers of physical science and devote themselves to study and research, striving to create the science of the future by themselves. The School provides a tutoring system in which at least two faculty members are assigned per student, allowing practical research with one-on-one

Departments under the School

- · Department of Functional Molecular Science
- · Department of Astronomical Science
- Department of Fusion Science
- · Department of Space and Astronautical Science



Dean

Uozumi, Yasuhiro

► Special field **Organic Chemistry**

Department of Structural Molecular Science

Education and research are primarily concerned with a systematic unveiling of the static as well as dynamic properties of materials through real images of molecules and molecular assemblies deduced from detailed structural analyses. Advanced training and research are conducted in the field of structural molecular science with the use of new methods for detecting and analyzing dynamic structures, in addition



Electronic states studied by photoelectron spectroscopy

to a variety of traditional spectroscopic and theoretical techniques for structural

For inquiries or information: E-mail: r7139@orion.ac.jp

COURSES

- Electronic Structure
- Material Chemistry

Department of Functional Molecular Science

Education and research are primarily directed towards, firstly, unveiling the underlying mechanisms of various functions of materials at the atomic or molecular level, and secondly, the design and generation of new functional properties of molecules and molecular assemblies. Advanced training and research are conducted in the field of functional molecular science with an emphasis on the

Synthesis of novel organic compounds Chemistry of buckybowl molecules sumanene

development of modern techniques for functional analysis and novel theoretical approaches.

For inquiries or information: E-mail: r7139@orion.ac.jp

COURSES

- Molecular Dynamics
- Excited State Dynamics

Department of Astronomical Science

The Department carries out advanced education and research through a wide range of observational and theoretical researches using state-of-the-art facilities like Subaru Telescope in Hawai'i, the ALMA radio telescope in Chile, and supercomputers. According to the interest, students can learn the observational and theoretical astronomies and application of cutting-edge technology as well as the design,



Subaru Telescope is located on the summit of Mauna Kea, a dormant volcano on the Big

fabrication, and testing of new observational instruments, development of new methods of data acquisition and analysis, and public

For inquiries or information:

E-mail: daigakuin@nao.ac.jp

COURSES

- Optical and Near Infrared Astronomy Ground-based astronomy / Optical and infrared
- telescope system / Planets / Sun, stars and interstellar matter / Galaxies and cosmology
- Radio Astronomy

Ground-based astronomy / Radio telescope system / Sun, stars and interstellar matter / Galaxies

General Astronomy and Astrophysics High-precision astronomical measurement / Astronomy from space / Data analysis and numerical simulation / Earth and planets / Sun, stars and interstellar matter / Galaxies and cosmology

Department of Fusion Science

To develop fusion power for a future energy source, it is necessary to research plasma physics through a complementary approach of both experimental and theoretical studies.

In this department, students learn the experimental methodology as well as engineering requirements for investigating high temperature plasma, and also learn computer simulation techniques for revealing the nature of complicated fusion plasmas.





First principle based turbulence simulations for LHD

For inquiries or information:

E-mail: daigakuin@nifs.ac.jp

COURSES

Fusion System

Device system / Research operation / Plasma heating / Diagnostics

Fusion Simulation

Plasma simulation / Particle simulation / Magneto hydrodynamic simulation

Department of Space and Astronautical Science

The Department of Space and Astronautical Science provides an opportunity for high-level education and advanced research through the theoretical study, the analysis of acquired data, and the practice of advanced R&D in Astrophysics, Solar System Sciences and Space Engineering. The main feature of each major is as follows

- · Astrophysics is to elucidate the origin, structure and evolution of the universe based on the observations from space.
- · Solar System Sciences is to understand the origin and evolution of a variety of environments, including the prebiotic materials, by examining the present status and samples of past days.
- · Space Engineering is to lead the future space development by providing innovative space technology. New space technology enables challenging missions in the above two scientific activities.

In addition, it is expected to cultivate not only depth of knowledge in Space Science but also the planning skills for space projects by touching on the most advanced and complex space projects.

For inquiries or information:

E-mail: sokendai@ml.jaxa.jp

COURSES

Space Exploration Science and Engineering

Space System / Space Exploration / Space Environment Science

Space Observation Science

Space Astronomy / Solar System Exploration

Space Technology

Electronic Device and telecommunication / Space Transportation Technology



Asteroid explorer "Hayabusa2" The spacecraft is touching down to a newly created crater. ©Akihiro Ikeshita





School of High Energy Accelerator Science

The School of High Energy Accelerator Science provides opportunities for graduate students to carry out experimental and theoretical research on elementary particles and on materials structure and functions. The School also encourages them to engage in the research and development of novel and high performance accelerators. In addition, the School aims to foster the creative researchers who will push the frontiers of science and contribute to the good of society.

School of High Energy Accelerator Science

The School of High Energy Accelerator Science consists of three departments: the Department of Accelerator Science, the Department of Materials Structure Science, and the Department of Particle and Nuclear Physics. These departments are affiliated with the Accelerator Laboratory (and the Applied Research Laboratory), the Institute of Materials Structure Science, and the Institute of Particle and Nuclear Studies in the High Energy Accelerator Research Organization (KEK).

In the Department of Particle and Nuclear Physics, accelerator based high energy physics experiments through international collaborative projects as well as advanced theoretical research are performed in order to study and understand the origin of the cosmos and the ultimate structure of matter. In the Department of Materials Structure Science, structures of hard to soft materials and their functions are studied not only from a fundamental interest but also from an application point of view.KEK develops and operates high-energy accelerators which provide various particle beams such as protons, electrons, positrons, neutrinos, X-rays, neutrons, and muons. In the Department of Accelerator Science, principles and components of the accelerator complexes are studied. The education programs are based on variety of research activities pursued by KEK, which provide wide range of graduate education for students.

Departments under the School

- · Department of Accelerator Science
- · Department of Materials Structure Science
- · Department of Particle and Nuclear Physics



Dean

Kamiyama, Takashi School of High Energy

School of High Energy Accelerator Science

Special field Neutron Diffraction

Department of Accelerator Science

High-energy particle accelerators are extremely powerful tools for exploring a wide range of building blocks and structures found in nature, from elementary particles and atomic nuclei to atoms, molecules, and even complex living organisms. In addition, beyond the field of natural science, applications of particle accelerators are being actively pursued in the fields of industry and medical science.

In the Department of Accelerator Science, students can conduct both theoretical and

Accelerator Test Facility

experimental research on the principles of accelerators and their related leading edge technologies, and thereby endeavor to further advance natural science through the development of particle accelerators.

Closely related subjects, such as radiation science, computer science, superconductivity engineering, and mechanical engineering can also be studied.

For inquiries or information:

E-mail: kyodo2@mail.kek.jp

COURSES

Accelerator Science

Beam physics / Beam Development / Design of Accelerator Projects / Accelerator Technology / Science of Magnetics / Science of Radio-Frequency Acceleration / Vacuum Science and Technologies / Computer Science / Radiation Science / Mechanical Engineering for Accelerator Development

Department of Materials Structure Science

In Department of Materials Structure Science, leading edge researches on structures, functions and characteristics of hard to soft materials are pursued.

The research studies concerning physics, chemistry, biology, engineering, agriculture, and medical science are performed by the use of advanced beams such as synchrotron radiation, neutrons, muons, and slow positron, which are provided by state-of-the-art particle accelerators. Developing novel technologies for beam production and its utilization to make major contributions to materials science are also included in our research fields.

We will offer education programs and experimental opportunities to our students who will aim for

clarifying the Nano World.

For inquiries or information: E-mail: kyodo2@mail.kek.jp

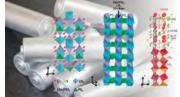
COURSES

Materials Structure Science

Synchrotron Radiation Science / Materials Structure Science based on Synchrotron Radiation / Neutron and Muon Science



View of a protein crystallography end-station



The crystal structure of the world-best (2011) lithium-ion-conducting material Li10GeP2S12 was determined by neutron diffraction and synchrotron radiation. Since then, the development of the all solidstate batteries for automobiles has been activated.

(Left to right) the crystal structure of Li10GeP2S12, its framework, the conduction paths of lithium ions are shown. Zigzag conduction pathways along the c axis are indicated

Department of Particle and Nuclear Physics

Both particle physics and nuclear physics are among the most fundamental areas of basic science, and they are the sources of new frontiers in physical concepts and methods that are the basis of modern science; these subjects involve the pursuit of the most fundamental principles of nature and the exploration of the basic structure and building blocks of matter.

In this department, we conduct both theoretical and experimental researches in particle and nuclear physics. The theoretical investigations include not only those in particle and nuclear physics but also those in cosmology and astrophysics. The experimental



investigations are conducted by means of colliding beam accelerators and various beams from high-intensity proton accelerators. In addition, related research in physics, including the R&D of new devices, methods, and their applications, is pursued in a versatile manner.

Jpgrade of the SuperKEKB accelerator and Belle II detector.

For inquiries or information:

E-mail: kyodo2@mail.kek.jp

COURSES

Theoretical Particle and Nuclear Physics Superstring Theory / Particle Physics Phenomenology / Lattice Gauge Theory / Hadron and Nuclear Theory / Theoretical Cosmophysics

Experimental Particle and Nuclear Physics

B Factory / Hadron Collider Energy Frontier / Lepton Collider Energy Frontier / Neutrino Physics / Kaon Rare Decay / Muon Rare Process / Muon Precision Measurement / Nuclear Physics / Physics of Short-Lived Nuclei / Neutron Fundamental Physics / Experimental Cosmophysics / Beam Dynamics / Superconductivity and Cryogenic Engineering / Particle Detection Technology





School of **Multidisciplinary Sciences**

The School of Multidisciplinary Sciences conducts research and education on important issues relating to changes of the Earth, environment, and human society. The School strives to cultivate researchers and highly specialized professionals in the area of information and system sciences, who will play key roles in research and/or development skills that will contribute to solving these issues.

School of Multidisciplinary Sciences

The School of Multidisciplinary Science conducts research and education on complicated natural and social phenomena, as systems that govern the occurrences, functions, and interactions of these phenomena, from the comprehensive and transdisciplinary viewpoint. Through such research and educational activities, the School aims to nurture researchers and highly specialized professionals in the area of information and systems who will take the lead in academic research and address various important issues relating to changes in human society in the 21st Century. The School, consisting of the Department of Statistical Science, the Department of Polar Science, and the Department of Informatics, has been involved in multidisciplinary research fields from the beginning. In addition, the School further strives to enhance its research and education by promoting close collaboration between the Departments by, for example, setting common subjects in curricula. The School covers diverse research subjects but studies the principles of multidisciplinary science, research approaches, and methodologies as an essential part of the School's Science and the Department of Informatics seek to determine the common probability or complexity among various phenomena by statistical mathematics and data analysis. The Department of Polar Science studies the geophysical and the biological complex system in the polar regions of extremes on Earth and approaches its subject from the viewpoint of multidisciplinary science. By continuing to explore new research fields, including advanced and leading research fields, and systematizing them through such activities, the School strives for further development of the multidisciplinary sciences.

Departments under the School

- · Department of Statistical Science
- · Department of Polar Science
- · Department of Informatics



Yoneda, Tomohiro School of Multidisciplinary Sciences

Special field Software Engineering

Department of Statistical Science

Statistical science researches statistical models and methods for rational inference, effective prediction and discovery of new knowledge based on the effective use of data in the face of complex and uncertain phenomenon and information explosion. The Department of Statistical Science, which is based on the Institute of Statistical Mathematics (ISM) serving as its underlying platform, aims to cultivate individuals who possess creative research skills to contribute to solving various important intricately-intertwined problems. To this end, the Department conducts education

Lecture of Director-General Tsubak

and research related to the basis, mathematics and applications of data collection designs. modeling, inference and prediction, and equip students with the ability to extract information and knowledge from the real world based on the effective use of data.

For inquiries or information:

E-mail: sokendai-toukei@t.rois.ac.jp

COURSES

Statistical Science

Statistical Modeling / Statistical Data Science / Statistical Inference and Mathematics

Department of Polar Science

The Earth is the only one aqua-planet in the Solar system.

Many kinds of organism including mankind have been living on it. When we long for sustainable development on this planet, we have to better understand evolution and change of its environments. Recently, we come to realize that environmental change of the Earth, in each aspect of ionosphere, atmosphere, hydrosphere, geosphere and biosphere, appears in advance from both polar regions. The objectives of



The aurora australis (Photo by Hidehiko Suzuki)

Department of Polar Science are to study characteristics of the changes and their relation in the framework of the seamless Earth system. Polar Science stands strongly on the fieldwork; therefore we attach importance to educate or study together practical methodology to carry out the research.

We train "Earth scientists" who are creative and flexible in studying the past, current and future figure of the Earth.

For inquiries or information:

E-mail: sokendai-kyokuiki@t.rois.ac.jp

COURSES

Polar Science

Polar Space and Upper Atmospheric Sciences / Polar Meteorology and Glaciology / Polar Geoscience / Polar Bioscience

Department of Informatics

Informatics is a new science field which deals with many problems on information extensively and synthetically. It is a multidisciplinary science which covers traditional information science and engineering, as well as humanity informatics and social informatics. It includes expression, collection, circulation, management, processing and usage of information as well as the information technology (IT) for supporting them.

The Department of Informatics aims to foster researchers and highly skilled professionals with ability in broad range from foundations to practices and advanced speciality by utilizing cutting-edge research environment and cyber science infrastructure of the National Institute of Informatics in an international atmosphere with many researchers and students from various countries.



The Cooling Test for Submerging an In-water Computer and Fault-diagnosis Test Boards in Water.



Mixer events for students and researchers are held in the lounge area.

For inquiries or information:

E-mail: daigakuin@nii.ac.jp

COURSES

Informatics

Foundations of Informatics / Information Infrastructure Science / Software Science / Multimedia Information Science / Intelligent Systems Science / Information **Environment Science**





School of Life Science

The School of Life Science aims to cultivate researchers who are internationally competitive and possess broad perspectives necessary for taking on leading roles in the life science research of the next generation. Students participate in research to clarify life phenomena at various levels from the molecular to the individual to the population.

School of Life Science

Departments under the School



Dean Furuse, Mikio

Department of Genetics

The Department of Genetics offers education and research opportunities in a variety of cuttingedge disciplines with the goal of investigating biological phenomena on the basis of genetic information. Study and research fields include molecular, cellular, developmental, behavioral, population, and evolutionary genetics, as well as genome biology and bioinformatics. Students can take advantage of a wide range of databases and genetic resources hosted by the National Institute of Genetics. To nurture independent researchers, the Department of Genetics adopts an educational philosophy that the academic guidance of each individual student is carried out by the entire faculty. For example, graduate students meet with their thesis committee twice a



The rich environment of the Department of Genetics allows students to fully devote themselves to their own research projects.



Lively discussions are often held in the laboratories.

vear to receive advice from faculty members outside their host labs. Other features of the Department include the Scientific Presentation/ Writing Program and ample financial assistance opportunities such as our research assistant program.

For inquiries or information:

E-mail: info-soken@nig.ac.jp

COURSES

- Molecular and Cellular **Biology**
- Developmental Biology
- Evolutionary Biology
- Genome Biology

Department of Basic Biology

The Department of Basic Biology trains researchers capable of developing innovative approaches and creative ideas to understand higher order phenomena in biological science. Students take advantage of the environment and facilities of the National Institute for Basic Biology. Students conduct a PhD research project with taking a variety of advanced classes and advices from several professors with different specialities. Research fields in this department cover cell biology, developmental biology, environmental biology, neurobiology, symbiotic biology and evolutionary biology with appropriate model organisms and topend techniques including molecular biology, bioimaging, mathematical science and omics.



Model organisms used at Department of Basic Biology

For inquiries or information:

E-mail: r7139@orion.ac.jp

COURSES

- Cell Biology
- Developmental Biology
- **Environmental Biology**
- Neurobiology
- Evolution, Diversity and **Genomic Biology**
- Reproductive Biology

Department of Physiological Sciences

Physiology is to clarify the mechanisms of living bodies from both elements (cells and molecules) and systems, and therefore provides important basic knowledge necessary for understanding pathological conditions. Importance of physiology has been much increased upon clarification of genome structures. In this department, students can learn the function of intact organisms in an integrated way from molecular / cellular levels as basic units of living organisms to whole body levels, and are expected to be pioneering researchers in bioscience, neuroscience and medicine.



E-mail: r7139@orion.ac.jp

For inquiries or information:

COURSES

- Molecular and Cellular **Physiology**
- Homeostatic Regulation
- Fundamental Neuroscience
- System Neuroscience

Cells, tissues and organs which researchers in Department of Physiological Sciences are working on using different experimental procedures





School of **Advanced Sciences**

Based on SOKENDAI's founding principles and purposes, the School perspectives and a high level of expertise that is globally competitive.

School of Advanced Sciences

Departments under the School



Sasaki, Akira

Department of Evolutionary Studies of Biosystems

Vision for future through novel perspectives on life

Studying biological organisms, humans, and society from broad perspectives, our department is designed to develop deeper understanding on nature through evolutionary studies of biosystems and meta-consideration of science. Our education and research program focus on the biological phenomena with evolutionary perspectives and the relationship between science, technology, and the society. We thus aim to train independent researchers who can contribute for building sustainable society with their expertise and broad perspectives.

For inquiries or information:

E-mail: office_sendou@ml.soken.ac.jp

COURSES

Major in Biology

Anthropology / Evolutionary Biology / Behavioral Biology / Advanced Theoretical Biology

Major in Science and Society

Social Studies of Science

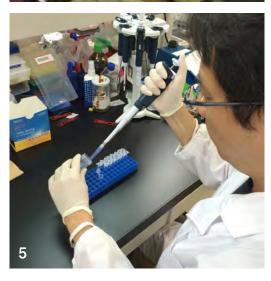






- Excavation of Hasankeyf Höyük (Turkey). Prepottery Neolithic period (c. 9500B.C.)
 Migratory butterfly, Chestnut tiger (Parantica sita)
 The Grand Prix Horse Blast Onepiece





- 4: Archives of Japanese scientists who worked in Taiwan during wartime
 5: Handling DNA solutions in the wet lab.

Educational Programs

SOKENDAI Freshman Course

The Freshman Course is an intensive course (4 days camp) for newly-enrolled students of SOKENDAI. This course has two objectives: (1) To acquire basic knowledge and skills required for all researchers; and, (2) To understand the SOKENDAI's broad range of intellectual fields, and create a network beyond your research field. This course consists of three sections: "Exploring Diversity in Academia (EDA)," "Researchers and Society," and, "Communication Skills for Researchers."



■ 2018 (First semester)

Date: April 10-13, 2018

Venues: SOKENDAI Hayama Campus

Participants: 60 students, 34 faculty members, Total 94

■ 2018 (Second semester)

Date: October 9-12, 2018

Venues: SOKENDAI Hayama Campus

Participants: 25 students, 28 faculty members, Total 53

Course Groups

A course group is a cluster of courses categorized across a wide spectrum of specific areas that are intimately related to each other. In some course groups, a coalition of schools/ departments bring along their own courses to build up the group; students can enjoy special subjects of an adjacent academic discipline to broaden their perspective, quickly grasp a general idea of each discipline and/or get an objective overview of various disciplines.

When a SOKENDAI student travels to the other campus, for the purpose of receiving a lecture, part of the expenses (ex. transportation expenses) may be reimbursed after course.

■ 2019 Course Groups

Integrative Brain Science Course

Brain science requires a wide range of knowledge and view not only on physiology, but also on biology, technology, pharmacology, information science and social science. This course will provide lectures and practices for the purpose of integrating multidisciplinary approaches and developing a new research field.

All the lectures will be broadcasted through our remote lecture delivery system except traning course.

Integrative Bioscience **Education Course**

To foster the development of young researchers who can contribute to the future of biology in connection with the recent developments of various technologies, we provide a new course that promotes interdisciplinary and integrative views of biological processes, covering not only biological but also physical, mathematical, and information sciences.

All the lectures will be provided through the remote lecture delivery system except traning course.

Courses common to the **School of Physical Sciences** and the School of High Energy **Accelerator Science**

Utilizing research topics and themes common to both schools and their departments, the schools provide the courses mainly to students with academic background or fundamentals in Physical Sciences. The courses aim to help students cultivate the basic skills, interdisciplinary and integrated perspectives on nature essential for researchers.

"Science and Society" Program

SOKENDAI has been leading a program to develop graduate education in "science and society." Since the university's primary mission is to train professionals who have leading expertise as well as broader perspectives, we hope our young scientists develop abilities to grasp science as part of social activities and to think critically about social dimensions of scientific practice including social implications and impacts of research activities and infrastructure supporting scientific research. Therefore the program designs and provides "science and society" course as well as workshops to discuss various issues pertinent to a specialized field of science. As part of the activities, we offer a 1.5-day program. "Researchers and Society," within the Freshman Course twice a year (in Japanese and English).

Historical and Cultural Resource Management Program

The historical and cultural resource management course is led by the School of Cultural and Social Studies and aims to develop researchers with a high capability in historical and cultural resource management through learning about advanced historical and cultural resource management such as methods for reading diverse historical and cultural resources, analysis using advanced scientific methods, recording and scientific preservation management of historical and cultural resource information, and research presentations using historical and cultural resources.

Course-by-Course Education Program to **Cultivate Researchers in Physical Science**

The Program is provided jointly by the School of Physical Sciences and the School of High Energy Accelerator Science. It seeks to foster researchers in the field of physical sciences who are fully equipped with a high degree of professional qualities as well as broad perspective and international competence to meet the needs of society. In the 1st to 2nd years of the 5-year doctoral course, the Program focuses on building basic academic skills at the graduate

school level. In the 3rd to 5th years of the 5-year doctoral course students are placed according to their aptitude into one of the following four courses: Basic Course*, Advanced Research Course, Project Research Course (available only in the School of Physical Sciences), and Development Research Course (available only in the School of Physical Sciences). *For students matriculating in AY2018 or later, course

completion in the "Basic Course" has been discontinued.

Joint School Seminars

SOKENDAI Cultural Forum / School of Cultural and Social Studies

November 23-24, 2018 at National Museum of Ethnology

The forum is an event for academic exchanges organized by SOKENDAI's only liberal arts department, School of Cultural and Social Studies. Centering "culture" as a common focus, it offers a forum for interdisciplinary exchanges among faculties and students of various majors from inside and outside of the university. As it provides a place to publish their research, the event functions as an educational opportunity for the students to present their research works and achievements and to learn presentation skills at the same time. Through these activities, the project also serves as a gateway for academic interactions between art and science students.

Furthermore, by involving students in the planning and organization

of the event, students can exercise their planning skills and receive advices and supports from faculties on project management through the collaboration, which in turn would facilitate students' ability as independent researchers.



Physical Science Student Seminar / School of Physical Sciences and School of High Energy Accelerator Science

July 12-13, 2018 at Nobeyama Radio Observatory

School of Physical Sciences and School of High Energy Accelerator Sciences organize the multidisciplinary Physical Science Student Seminar as a part of their course curriculums.

Every one-and-a-half years, students and faculties from eight majors join in this overnight event to hold academic seminars. The project authorizes students to take responsible roles in the planning and organization of the event in order to polish their planning and organizing skills and train them as highly competent researchers.



Multidisciplinary Sciences Cross Talks / School of Multidisciplinary Sciences and School of Life Science (Department of Genetics)

November 20, 2018 at Tokyo Metropolis

At the "Young Researchers Cross Talks" hosted by Research Organization of Information and Systems and co-sponsored by School of Multidisciplinary Sciences, members of School of Multidisciplinary Sciences and Department of Genetics, as well as faculties and students from a variety of fields in SOKENDAI, join together to hold group discussions throughout this overnight event.

Through group discussions and presentations on multidisciplinary topics with the presence of local and international faculties and students from various fields of study, students are expected to acquire higher expertise, wider perspectives, and international competency.



Life Science Retreat / School of Life Science & School of Advanced Sciences

November 26-27, 2018 at Yamanashi Prefecture

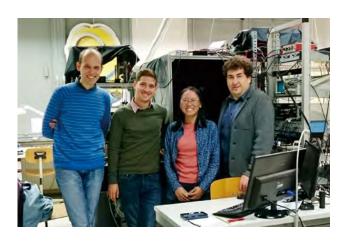
Life Science Retreat invites biology faculties and students for academic interactions, through which it aims to foster talents with a broader grasp of biological science and the capacity to contribute to the development of the field.

English is used throughout the conference to improve the participants' international caliber. Students plan and coordinate research presentations (oral and poster) and opinion exchanges. In the project, student organizers are expected to polish planning skills through the preparation and exercise presentations skills.



SOKENDAI Student Dispatch Program

This program encourages SOKENDAI students to seek a short-term research opportunity abroad and/or a long-term collaborative research project in and outside Japan that may lead to their career in the future. The program follows the educational goals of SOKENDAI, "advanced specialties and expertise," "broad perspective," and "international competitiveness," and intends to financially support such research opportunities of SOKENDAI students.



2018

Short-term Abroad Program

Number of students supported: 41

Long-term Abroad Program

Number of students supported: 19

Long-term Domestic Program

Number of students supported: 1

Dispatched countries: USA, China, UK, Italy, Chili,

Australia, France, Germany, Ireland, etc.

SOKENDAI publication grant for research papers

The publishing cost support of the printing expenses is carried out for about the academic paper which was a result of the research activities. This support is applicable only for

the students who belong to SOKENDAI. Total 19 publications were supported in 2018.

Society and Community Outreach Activities

We communicate the outcomes of the University's educational and research activities and give back to the community, with the aim to promote and spread the arts and sciences, as well as promote excellent research findings. In particular, academic year 2018 marked the 30th anniversary of the founding of the University, and we held a two-day symposium titled Where Is Mankind Headed? We also publicize information about educational and research outcomes and local activities through our press release homepage. In addition, we carry out lecture meetings, seminars for junior and senior high school students, as well as Yokosuka Senior High School Academia, which is a collaboration between Yokosuka high school and SOKENDAI. We also co-host the JSPS summer program, whose aim is academic exchange with Western countries, as well as the internationalization of Japanese university education.

SOKENDAI 30th Anniversary Symposium

The SOKENDAI 30th Anniversary Symposium was held on November 3 and 4. 2018 As a total of 350 people have been participating in two days.

Date: November 3-4, 2018

Venue: The University of Tokyo, Komaba I Campus





Community Programs

With the aims of making the accumulated research findings of the University broadly available to the public, opening up the University to the public, and deepening exchanges with the local community, we proudly participate in the "Shonan Village Festival" in Shonan Village, which is home to the Hayama Campus.







Shonan Village Festival

-Lecture: "Exploring Japanese Views of the Other World: a glimpse depicted on picture scrolls" Komatsu, Kazuhiko (Director General, International Research Center for Japanese Studies) Date: May 3, 2018

-"Photosynthesis, artificial photosynthesis, and photosynthesis on an Exoplanet" Masaoka, Shigeyuki (Associate Professor, School of Physical Science) Date: June 30, 2018

Science Seminar for Junior High and High School Students

-"The social intelligence of robots grown using by virtual reality" Inamura, Tetsuya (Associate Professor, Department of Informatics) Date: July 31, 2018

◇"Yokoko Academia" organized by Kanagawa **Prefectural Yokosuka High School**

We supported the academic program, "Yokoko Academia" organized by Kanagawa Prefectural Yokosuka High School to contribute to local educational institutes and foster future generations. The school was designated as a Super Science High School by the Ministry of Education, Culture, Sports, Science and Technology.

Academic Lectures hosted by the School of Advanced Sciences

From various on-going studies, the School selects themes relating to "light and evolution" and organizes academic lectures that deliver findings from cutting edge research to the general public and help to create deeper communication with people in the local communities.

■ The 21th Academic lecture will be held on November 3, 2019. In 2018, the lecture was not held because of the 30th Anniversary Symposium.

For inquiries or information : ESB Administrative Section

TEL: 81-46-858-1577, 1595 FAX: 81-46-858-1544 E-mail: office_sendou@ml.soken.ac.jp

Press Release

Research findings in 2018 published on the following 11 papers are press released and subsequently appeared in newspapers and various media:

- How can animals sense danger?-Discovery of the neural circuit for fear conditioning of fish
- ♦ Solar rotational cycle in lightning activity in Japan during the 18–19th centuries
- ♦ First evidence for silica condensation within the solar protoplanetary disk
- The presence of females induces elevated cortisol levels in an alpha male: experimental evidence in chimpanzees.
- Differential dynamics of cortical neuron dendritic trees revealed by long-term in vivo imaging in neonates
- Breakdown of allometry and encephalization of birds and mammals
- Unique numerical competence of Asian elephants on the relative numerousness judgment task.
- Uncoordinated dances associated with high reproductive success in a crane.
- Behavioural interference in work among eusocial naked mole-rats.
- Maternal protectiveness is negatively associated with infant handling in wild Japanese macaques.
- Expression changes of structural protein genes may be related to adaptive skin characteristics specific to humans.

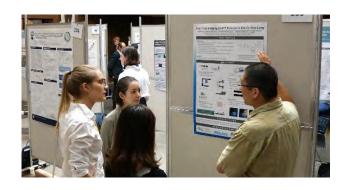
JSPS Summer Program

Date: June 13 - August 22, 2018

This program, which is carried in partnership with Japan Society for the Promotion of Science (JSPS), offers opportunities to practice research at inter-university research institutes (IURI) or universities to young researchers who have undertaken or just completed doctoral programs for two months during the summer. SOKENDAI provides an orientation session during the first week

| Invited researchers | for the 2016 | Invited researchers | for the 2017 | Invited researchers | for the 2018 |
|---------------------|--------------|---------------------|--------------|---------------------|--------------|
| USA | 65 | USA | 55 | USA | 10 |
| U K | 10 | U K | 13 | U K | 22 |
| France | 13 | France | 13 | France | 20 |
| Germany | 12 | Germany | 13 | Germany | 20 |
| Canada | 10 | Canada | 13 | Canada | 22 |
| Sweden | 5 | Sweden | 8 | Sweden | 8 |
| Total | 115 | Total | 115 | Total | 102 |

of the program in Hayama. It comprises Japanese language lessons, special lectures on Japanese culture and research, and a poster session in which SOKENDAI students will also participate. The objective of this program is to inject an international element into the education at the University and to promote academic exchange with other countries.





SOKENDAI Students' Seminar on Skills for Poster Presentation

Lectures for the purpose of obtaining practical abilities to internationally appeal attractiveness of research are held every two years targeting the students of this university in conjunction with the orientation of the JSPS Summer Program. Students participate in a poster session held in the orientation, and practice the introduction of their research in English, after receiving guidance from English teachers. English Presentation Skills 2018: From Jun 14 to June 15, 2018.

SOKENDAI Newsletter

SOKENDAI Newsletter covers ongoing activity information at the university such as various events in our campuses, research findings released to media, and awards.

You can find it online on our university website. (Japanese Only)

https://www.soken.ac.jp/pr/publicity/newsletter/



▶ The Center for Educational Development (CED)

"Advanced specialties and expertise," "Broad perspective," and "International competitiveness" are the educational goals of SOKENDAI, and they are the essential competencies for excellent researchers. In order to achieve these goals, we believe that the university-wide education that enhances the quality as an excellent researcher is necessary, in addition to specialized education carried out in each department. The missions of the CED are: to implement and support the university-wide education programs and projects; and, to assist in evaluation and analysis of the educational activities. We contribute to develop researchers rooted in our philosophy.

Implement and provide support for the universitywide education program and projects

- · Implement "Freshman Course"
- · Provide support in implement "SOKENDAI Dispatch Program"
- · Provide support in developing the international joint/double degree programs
- · Provide support in educational activities for students

Assist in evaluation and analysis of educational activities

- · Conduct surveys and analyze the implementation status of the university-wide and specialized education in each department
- · Conduct surveys and analyze students' research performance
- · Assist in analysis and evaluation in preparation for the Certified Evaluation and Accreditation
- Assist in analysis and evaluation in preparation for the MEXT's National University Corporation Evaluation



Member of the CED

The Center for Academic Information Services

This Center was established to aims at effective management of academic information in SOKENDAI. Based on secure and resilient information infrastructure, it provides various academic information services to researchers and researchers-in-future who are both users and creators of academic information, and supports education, research, and administration in SOKENDAI.

Hayama Library (Attached Headquarters)

Hayama Library gathers, organizes and releases various academic materials to provide high-level research and education and to pioneer advanced academic fields.

Hayama Library is open around-the-clock to the faculty and students at the Hayama Campus for reading and borrowing. It collects and makes available standard references and books that can be used in all Departments and Schools, as well as specialized books and journals related to studies in cutting-edge and/or interdisciplinary research fields.

Image and video documentation materials are available through in-house facilities.

In addition, Hayama Library offers SOKENDAI Institutional Repository, which allows free online access to doctoral dissertations and book/journal publications at the University, as well as academic papers published by the faculty and students at the Hayama Campus.

The Library also provides database services, including OPAC (Online Public Access Catalog) for books and journals held by the Library.

These books and database are also available to general public. The venue effectively functions both as a place to collect research resources and a studying space.

SOKENDAI staffs and neighborhood residents can borrow books belonging to Kanagawa Prefectural Library (KL-NET Service). Furthermore, since 2015, it has been serving as a service counter of National Diet Library to enable users to browse digital materials belonging to the National Diet

■ Number of academic materials available at the Library

(Japanese) approx. 22,800 titles Book: (Non-Japanese) approx. 24,800 titles 150 titles Journal: (Japanese) approx. 330 titles (Non-Japanese) approx. E-book: approx. 97,000 titles E-journal: approx. 5,900 titles Institutional Repository: approx. 5,100 titles

As of April 1, 2019

For inquiries or information: **University Library**

TEL: 81-46-858-1528 FAX: 81-46-858-1607 E-mail: lib@ml.soken.ac.jp

University Library

The University Library consists of the Hayama Library and IURI libraries. The University Library gathers, organizes, and accumulates electronic materials. Under close cooperation with the Hayama Library and IURI libraries, the University Library aims to promote the education / research activities by performing required activities for facilitation of the use of academic information. It offers a large number of e-journals and e-books so that faculty and students of IURIs dotted around the country can use these materials in common. In addition, the university introduces and offers the world's largest bibliographic / citation database "Scopus".

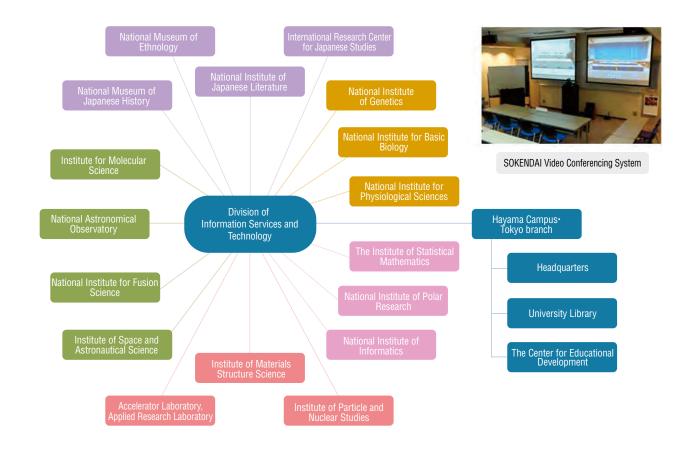
Electronic Journals

BioOne / JSTOR / Science Direct / Springer-LINK / Wiley-Blackwell / GeoScienceWorld Scopus (Document/reference database search service)

* In addition to the above, electronic journals for internal use at the Hayama Campus are available. http://www.lib.soken.ac.jp

Division of Information Services and Technology

Cooperating with the affiliated research institutes and museums, this division manages core information facilities and operates information systems located at the Hayama Campus and its branch.



SOKENDAI Video Conferencing System

The system connects the affiliated Inter-University Research Institutes and JAXA with the university headquarters. It facilitates teleconferencing and supports university activities.

SOKENDAI Cloud Computing System

This private cloud computing system is a basic facility lately developed to promote intra-university education, academic exchange, and public relations.

For inquiries or information : Academic Information Service Office

TEL: 81-46-858-1587 FAX: 81-46-858-1633 E-mail: istc.jimu@ml.soken.ac.jp

DATA BOOK

Nobel Prize Laureates from SOKENDAL

Professor Emeritus, School of High Energy Accelerator Science



Makoto Kobayashi Professor Emeritus, SOKENDAI / Honorary Professor Emeritus, High Energy Accelerator Research Organization(KEK)

The 2008 **Nobel Prize in Physics**

for the discovery of the origin of the broken symmetry which predicts the existence of at least three families of quarks in nature

| 1999.4-2004.3 | Professor, School of Mathematical and Physical Science |
|---------------|--|
| 2004.4-2006.3 | Professor, School of High Energy Accelerator Science |
| 2003.4-2004.4 | Chair, Department of Particle and Nuclear Physics |
| 2008 | Order of Culture |

Professor Emeritus, School of Life Science



Yoshinori Ohsumi Professor Emeritus. SOKENDAI /

National Institute for Basic Biology

The 2016

Nobel Prize in Physiology or Medicine

for his discoveries of mechanisms for autophagy

1996.10-2009.3 Professor, School of life Science 2008.4-2009.3 Dean, School of Life Science 2006 Japan Academy Prize Order of Culture 2016

Recipients of Award

■ Orders and Medals of Honor (after 2012)

| Name | School • Department | Prize |
|---|--|---|
| Kodaira, Keiichi (Professor Emeritus, Former President) | Department of Astronomical Science | The Order of the Sacred Treasure, Gold and Silver Star (2017) |
| Kawai, Maki (Professor) | Department of Functional Molecular Science | Medal with Purple Ribbon (2017) |
| Ohsumi, Yoshinori (Professor Emeritus) | School of Life Science | Order of Culture (2016) |
| Ohta, Tomoko (Professor Emeritus) | Department of Genetics | Order of Culture (2016) |
| Suematsu, Yasuharu (Professor Emeritus) | Department of Informatics | Order of Culture (2015) |
| Nakanishi, Susumu (Professor Emeritus) | Department of Japanese Studies | Order of Culture (2013) |

■ Person of Cultural Merit (after 2012)

| Name | School • Department | Research Theme |
|--|--------------------------------|---|
| Komatsu, Kazuhiko (Professor) | Department of Japanese Studies | Ethnology (2016) |
| Ohsumi, Yoshinori (Professor Emeritus) | School of Life Science | Cell Biology (2015) |
| Morokuma, Keiji (Professor Emeritus) | School of Physical Science | Theoretical Chemistry, Computational Chemistry (2012) |

■ Japan Academy Prize (after 2012)

| Name | School | Year | Subject |
|---|---|------|---|
| Nagamine, Kanetada (Professor Emeritus) | School of High Energy Accelerator Science | 2019 | Exploration of Muon Radiography and its Application to Non-destructive Studies of Large-scale Matters |
| Takasaki, Fumihiko (Professor Emeritus) | School of High Energy Accelerator Science | 2017 | Studies of CP Violation in the B-Meson System |
| Iye, Masanori (Professor Emeritus) | School of Physical Science | 2013 | Observational Studies of the Early Universe |

■ Japan Academy Medal Prize (after 2012)

| Name | Department | Year | Subject |
|------------------------------------|--|------|---|
| | Department of Evolutionary Studies of Biosystems | 2014 | Theoretical Elucidation of the Mechanisms of Evolution with Genomic Sequence Data |
| Kawarabayashi, Kenichi (Professor) | Department of Informatics | 2013 | Application of Advanced Graph Theory to Discrete Mathematics and Theoretical Computer Science |

■ JSPS Ikushi Prize (after 2012)

| Name | Department | Year | Research Theme |
|-------------------|--|------|--|
| Kariyazono, Shiho | Department of Evolutionary Studies of Biosystems | 2017 | The genetic basis and the biological role of fluorescent proteins in Acropora species |
| , | Department of Informatics | | Multichannel blind music source separation based on nonnegative matrix factor source model |
| Mochizuki, Kenji | Department of Functional Molecular Science | 2013 | heoretical Study on the Molecular Mechanism of Ice Melting and the Local Structure of Aqueous Solution |
| | | | Activation-Dependent Spatial Dynamics of Postsynaptic Glycine Receptors |

SOKENDAI Award

SOKENDAI Award is founded in Academic Year 2018 to commend the students who have accomplished their outstanding research and have been conferred their degrees with the excellent doctoral thesis.

■ The recipients of the 1st SOKENDAI Award (September 28, 2018)

| Name | Department | Doctoral thesis |
|------------------|------------------------------|---|
| Lee, Sze Koon | Structural Molecular Science | Development of metal-complex based catalysts for electro-and photo-chemical CO ₂ reduction |
| Wang, Xin | Informatics | Fundamental Frequency modeling for Neural-Network-Based Statistical Parametric Speech Synthesis |
| Nakazawa, Shingo | Genetics | Dynamic mechanism of neural circuit refinement in neonatal cortex |

■ The recipients of the 2nd SOKENDAI Award (March 22, 2019)

| Name | Department | Doctoral thesis |
|----------------|---------------------|---|
| Kumagai, Kohki | Fusion Science | Behaviors of Hydrogen Isotopes Produced by Neutron Nuclear Reactions in Molten Fluoride Salts |
| Hyun, Jibong | Accelerator Science | Study of tunable narrow-band THz and high-intensity channeling radiation sources with a 50 MeV class photo-injector |
| Kogure, Masaru | Polar Science | Study on Propagation of Atmospheric Gravity Waves in the Antarctic with Lidar Observation |

Nagakura Research Incentive Award

Funded by SOKENDAI's first President, Dr. Nagakura Saburo, the SOKENDAI Nagakura Research Incentive Award started in 1995 to encourage SOKENDAI's outstanding students to pursue further research and to develop new research fields.

■ The 23rd Award Ceremony: September 28, 2018

| Name | Department | Research Theme |
|-------------------|--|--|
| Taniguchi, Kotomi | Department of Astronomical Science | Formation Mechanisms of Cyanopolyynes and Chemical Evolution in the High-Mass Star-Forming Regions |
| Nishida, Hanna | Department of Basic Biology | Studies on the mechanism that regulates symbiotic balance during root nodule symbiosis |
| Kariyazono, Shiho | Department of Evolutionary Studies of Biosystems | The genetic basis and the biological role of fluorescent proteins in Acropora species |

Academic Staff

(As of May 1, 2019)

| Catego | ory | Member of the Board | Professor | Associate Professor | Lecturer | Assistant Professor | Others | Secretariat | Total |
|--------------------------------|------------------------------------|---------------------|-----------|---------------------|----------|---------------------|--------|-------------|---------|
| Presid | | 1 | | | | | | | 1 |
| Executive I | Director | 3 | | | | | | | 3 |
| Audit | or | 2 | | | | | | | 2 |
| Vice Pres | sident | (1) | | | | | | | (1) |
| | Regional Studies | | 11 | 12 | | | | | 23 |
| | Comparative Studies | | 13 | 10 | | | | | 23 |
| School of Cultural and | Japanese Studies | | 19 | 4 | | | | | 23 |
| Social Studies | Japanese History | | 18 | 15 | | | | | 33 |
| | Japanese Literature | | 10 | 11 | | | | | 21 |
| | Subtotal | 0 | 71 | 52 | 0 | 0 | 0 | 0 | 123 |
| | Structural Molecular Science | | 7 | 4 | | 15 | | | 26 |
| | Functional Molecular Science | | 8 | 5 | | 20 | | | 33 |
| School of Physical | Astronomical Science | | 27 | 38 | | 49 | | | 114 |
| Sciences | Fusion Science | | 19 | 20 | | 18 | | | 57 |
| | Space and Astronautical Science | | 19 | 38 | | 18 | | | 75 |
| | Subtotal | 0 | 80 | 105 | 0 | 120 | 0 | 0 | 305 |
| | Accelerator Science | | 50 | 54 | 15 | 53 | | | 172 |
| School of High Energy | Materials Structure Science | | 21 | 23 | 5 | 17 | | | 66 |
| Accelerator Science | Particle and Nuclear Physics | | 32 | 34 | 31 | 15 | | | 112 |
| | Subtotal | 0 | 103 | 111 | 51 | 85 | 0 | 0 | 350 |
| 0 1 1 (| Statistical Science | | 18 | 18 | | 8 | | | 44 |
| School of Multidisciplinary | Polar Science | | 14 | 20 | | 18 | | | 52 |
| Sciences | Informatics | | 30 | 30 | | 13 | | | 73 |
| 001011003 | Subtotal | 0 | 62 | 68 | 0 | 39 | 0 | 0 | 169 |
| | Genetics | | 24 | 9 | | 31 | | | 64 |
| School of Life Science | Basic Biology | | 16 | 15 | | 38 | | | 69 |
| School of Life Science | Physiological Sciences | | 13 | 16 | | 34 | | | 63 |
| | Subtotal | 0 | 53 | 40 | 0 | 103 | 0 | 0 | 196 |
| School of Advanced | Evolutionary Studies of Biosystems | | 4(2) | 8 | 2 | 4 | | | 18(2) |
| Sciences | Subtotal | 0 | 4(2) | 8 | 2 | 4 | 0 | 0 | 18(2) |
| The Center for Educat | ional Development | (1) | | 1 | 1 | 3 | | | 5(1) |
| The Center for Academic | Information Services | (1) | | (1) | | | | | (2) |
| Future Plannir | ng Division | (1) | | 1 | 1 | | | | 2(1) |
| Secretaria | at etc. | | | | | | | 43 | 43 |
| Tota | 1 | 6(4) | 373 (2) | 386 (2) | 55 | 354 | 0 | 43 | 1217(7) |

^{*} The number of staff in parentheses indicates those who concurrently work in other section [not included in the total].

-Students

(As of May 1, 2019)

| | | Qu | ota | 1 | 1st yea | ır | 2 | nd yea | ar | 3 | rd yea | ır | 4 | th year | | 5 | ith yea | r | Total | | | |
|--------------------------------|------------------------------------|-------------------|-----------------------|----|---------|-------------------|---------------|--------|-------------------|-----|--------|-------------------|----|---------|-------------------|---------------|---------|----|-------|--------|-------------------|--|
| School | Department | Doctora 5-year | Course 3-year | | Female | Int'l Students | | Female | Int'l Students | | Female | Int'l Students | | Female | Int'l Students | Female Studer | | | | Female | Int'l Students | |
| | Regional Studies | | 3 | | | | | | | 3 | 3 | 2 | 6 | 3 | 3 | 9 | 5 | 4 | 18 | 11 | 9 | |
| | Comparative Studies | | 3 | | | | | | | 2 | 1 | 0 | 1 | 0 | 1 | 11 | 5 | 4 | 14 | 6 | 5 | |
| School of | Japanese Studies | | 3 | | | | | | | 4 | 1 | 2 | 4 | 3 | 2 | 13 | 10 | 4 | 21 | 14 | 8 | |
| Cultural and Social Studies | Japanese History | | 3 | | | | $\overline{}$ | | | 2 | 1 | 0 | 2 | 1 | 0 | 8 | 2 | 0 | 12 | 4 | 0 | |
| Social Studies | Japanese Literature | | 3 | | | | | | | 2 | 1 | 0 | 0 | 0 | 0 | 5 | 3 | 0 | 7 | 4 | 0 | |
| | Subtotal | | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 7 | 4 | 13 | 7 | 6 | 46 | 25 | 12 | 72 | 39 | 22 | |
| | Structural Molecular Science | 2 | 3 | 0 | 0 | 0 | 6 | 2 | 1 | 5 | 0 | 0 | 4 | 0 | 1 | 3 | 1 | 0 | 18 | 3 | 2 | |
| | Functional Molecular Science | 2 | 3 | 3 | 1 | 0 | 6 | 2 | 0 | 6 | 2 | 4 | 2 | 0 | 1 | 6 | 1 | 3 | 23 | 6 | 8 | |
| School of Physical | Astronomical Science | 2 | 3 | 5 | 2 | 0 | 2 | 0 | 1 | 6 | 0 | 0 | 7 | 2 | 2 | 6 | 2 | 1 | 26 | 6 | 4 | |
| Sciences | Fusion Science | 2 | 3 | 1 | 0 | 0 | 2 | 1 | 1 | 4 | 0 | 1 | 3 | 0 | 0 | 4 | 1 | 3 | 14 | 2 | 5 | |
| Sciences | Space and Astronautical Science | 2 | 3 | 2 | 1 | 0 | 2 | 1 | 0 | 9 | 1 | 4 | 6 | 0 | 2 | 6 | 0 | 1 | 25 | 3 | 7 | |
| | Subtotal | 10 | 15 | 11 | 4 | 0 | 18 | 6 | 3 | 30 | 3 | 9 | 22 | 2 | 6 | 25 | 5 | 8 | 106 | 20 | 26 | |
| School of High | Accelerator Science | 2 | ※ ² | 2 | 0 | 0 | 3 | 0 | 2 | 5 | 3 | 5 | 4 | 0 | 3 | 8 | 1 | 4 | 22 | 4 | 14 | |
| Energy | Materials Structure Science | 3 | ※ ² | 0 | 0 | 0 | 2 | 1 | 1 | 2 | 1 | 1 | 4 | 1 | 1 | 1 | 0 | 0 | 9 | 3 | 3 | |
| Accelerator | Particle and Nuclear Physics | 4 | ※ ² | 5 | 0 | 2 | 5 | 0 | 1 | 5 | 0 | 0 | 9 | 1 | 1 | 15 | 3 | 2 | 39 | 4 | 6 | |
| Science | Subtotal | 9 | _ | 7 | 0 | 2 | 10 | 1 | 4 | 12 | 4 | 6 | 17 | 2 | 5 | 24 | 4 | 6 | 70 | 11 | 23 | |
| School of | Statistical Science | 2 | 3 | 3 | 0 | 0 | 2 | 0 | 0 | 14 | 1 | 1 | 5 | 2 | 0 | 11 | 3 | 2 | 35 | 6 | 3 | |
| Multidisciplinary | Polar Science | 2 | 1 | 4 | 1 | 0 | 2 | 2 | 0 | 6 | 2 | 0 | 1 | 0 | 0 | 5 | 1 | 0 | 18 | 6 | 0 | |
| Sciences | Informatics | 4 | 6 | 8 | 3 | 5 | 19 | 3 | 12 | 17 | 3 | 9 | 21 | 4 | 12 | 27 | 1 | 13 | 92 | 14 | 51 | |
| 001011000 | Subtotal | 8 | 10 | 15 | 4 | 5 | 23 | 5 | 12 | 37 | 6 | 10 | 27 | 6 | 12 | 43 | 5 | 15 | 145 | 26 | 54 | |
| | Genetics | 3 | 6 | 7 | 2 | 3 | 6 | 4 | 4 | 10 | 6 | 4 | 4 | 3 | 2 | 5 | 1 | 1 | 32 | 16 | 14 | |
| | Basic Biology | 3 | 6 | 8 | 5 | 1 | 3 | 1 | 1 | 7 | 2 | 2 | 7 | 1 | 1 | 11 | 3 | 2 | 36 | 12 | 7 | |
| Science | Physiological Sciences | 3 | 6 | 5 | 2 | 2 | 2 | 1 | 1 | 5 | 3 | 2 | 5 | 2 | 2 | 10 | 5 | 4 | 27 | 13 | 11 | |
| | Subtotal | 9 | 18 | 20 | 9 | 6 | 11 | 6 | 6 | 22 | 11 | 8 | 16 | 6 | 5 | 26 | 9 | 7 | 95 | 41 | 32 | |
| | Evolutionary Studies of Biosystems | 5 | 1 | 3 | 1 | 0 | 2 | 1 | 0 | 1 | 1 | 0 | 3 | 0 | 0 | 9 | 6 | 0 | 18 | 9 | 0 | |
| Sciences | Subtotal | 5 | 1 | 3 | 1 | 0 | 2 | 1 | 0 | 1 | 1 | 0 | 3 | 0 | 0 | 9 | 6 | 0 | 18 | 9 | 0 | |
| | Total | 41 | 59 | 56 | 18 | 13 | 64 | 19 | 25 | 115 | 32 | 37 | 98 | 23 | 34 | 173 | 54 | 48 | 506 | 146 | 157 | |

[%] 1 The number of female students and international students is included in the total. % 2 The School of High Energy Accelerator Science does not have a specific quota of admission but gives examinations.

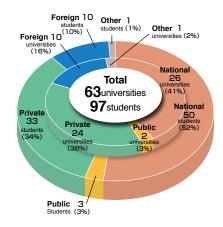
Matriculation Admission of the 2018

(As of April 1, 2019)

| | | | | | Admitted | Background | | | | | | | |
|---|------------------------------------|---------------|-----------|--------|----------|------------|--------|---------------|------------|--|--|--|--|
| School | Department | Quota | Applicant | Passer | Students | Ger | nder | International | Jobholder | | | | |
| School of Cultural and Social Studies School of Physical Sciences School of High Energy Accelerator Science School of Multidisciplinary Sciences | | | | | Students | Male | Female | Students | Jobiloidei | | | | |
| | Regional Studies | - (3) | (5) | (3) | (3) | | (3) | (2) | | | | | |
| | Comparative Studies | - (3) | (6) | (2) | (2) | (1) | (1) | | (1) | | | | |
| | Japanese Studies | - (3) | (9) | (5) | (4) | (3) | (1) | (2) | | | | | |
| | Japanese History | - (3) | (6) | (2) | (2) | (1) | (1) | | (1) | | | | |
| | Japanese Literature | - (3) | (7) | (2) | (2) | (1) | (1) | | | | | | |
| | Subtotal | - (15) | (33) | (14) | (13) | (6) | (7) | (4) | (2) | | | | |
| | Structural Molecular Science | 2(3) | 2(4) | 1(3) | 1(3) | 1(3) | | | | | | | |
| | Functional Molecular Science | 2(3) | 8(3) | 3(2) | 2(2) | 1(2) | 1 | (2) | | | | | |
| | Astronomical Science | 2(3) | 19(1) | 6(1) | 5(1) | 3(1) | 2 | | | | | | |
| | Fusion Science | 2(3) | 4(1) | 2(1) | 1(1) | 1(1) | | | | | | | |
| | Space and Astronautical Science | 2(3) | 5(5) | 4(5) | 2(5) | 1(5) | 1 | (2) | (1) | | | | |
| | Subtotal | 10(15) | 38(14) | 16(12) | 11(12) | 7(12) | 4 | (4) | (1) | | | | |
| School of | Accelerator Science | 2(**) | 5(1) | 3(1) | 2(1) | 2 | (1) | (1) | | | | | |
| | Materials Structure Science | 3(*) | (1) | (1) | (1) | (1) | | | | | | | |
| | Particle and Nuclear Physics | 4(*) | 14 | 6 | 3 | 3 | | | | | | | |
| School of Cultural and Social Studies School of Physical Sciences School of High Energy Accelerator Science School of Multidisciplinary | Subtotal | 9 | 19(2) | 9(2) | 5(2) | 5(1) | (1) | (1) | | | | | |
| | Statistical Science | 2(3) | 5(10) | 3(9) | 3(9) | 3(8) | (1) | | (7) | | | | |
| | Polar Science | 2(1) | 8(3) | 5(3) | 4(3) | 3(2) | 1(1) | | | | | | |
| | Informatics | 4(6) | 11(10) | 5(8) | 5(8) | 3(8) | 2 | 2(2) | 1(3) | | | | |
| | Subtotal | 8(10) | 24(23) | 13(20) | 12(20) | 9(18) | 3(2) | 2(2) | 1(10) | | | | |
| | Genetics | 3(6) | 6(2) | 5(2) | 4(2) | 3(1) | 1(1) | (1) | | | | | |
| | Basic Biology | 3(6) | 12(3) | 8(3) | 7(3) | 3(2) | 4(1) | (1) | | | | | |
| | Physiological Sciences | 3(6) | 4(1) | 3(1) | 2(1) | 2 | (1) | | | | | | |
| | Subtotal | 9(18) | 22(6) | 16(6) | 13(6) | 8(3) | 5(3) | (2) | | | | | |
| | Evolutionary Studies of Biosystems | 5(1) | 4(1) | 3 | 3 | 2 | 1 | | | | | | |
| Sciences | Subtotal | 5(1) | 4(1) | 3 | 3 | 2 | 1 | | | | | | |
| | Total | 41(59) | 107(79) | 57(54) | 44(53) | 31(40) | 13(13) | 2(13) | 1(13) | | | | |

^{() 3-}year Doctoral Course [not included in the total] . ¾ A few people.

Admission of the 2019



| Hokkaido University | į |
|---|---|
| Tohoku University | 2 |
| Yamagata University | 2 |
| University of Tsukuba | (|
| Chiba University | |
| The University of Tokyo | 7 |
| Tokyo Gakugei University | • |
| Tokyo Institute of Technology | 4 |
| Tokyo University of Marine Science and Technology | |
| Ochanomizu University | • |
| Niigata University | • |
| University of Yamanashi | • |
| Shinshu University | 3 |
| Kanazawa University | |
| Gifu University | |
| Shizuoka University | |
| Nagoya University | 2 |
| Kyoto University | (|
| Kyoto Institute of Technology | |
| Osaka University | |
| Kobe University | 2 |
| Tottori University | • |
| Okayama University | |
| Ehime University | 2 |
| Kyushu University | • |
| Nagasaki University | - |
| | |

National Institute of Technology, Ichinoseki College 1

| Azabu University | 1 |
|--|---|
| Gakushuin University | 2 |
| Kansai University | 1 |
| Kindai University | 2 |
| Keio University | 2 |
| Kogakuin University | 1 |
| International Christian University | 1 |
| Shibaura Institute of Technology | 1 |
| Sophia University | 1 |
| Osaka Electro-Communication University | 1 |
| Chuo University | 1 |
| Tokai University | 1 |
| Tokyo College of Music | 1 |
| Tokyo University of Agriculture | 1 |
| Tokyo University of Science | 4 |
| Toho University | 2 |
| Toyo University | 2 |
| Doshisha University | 2 |
| Nihon University | 1 |
| Hosei University | 1 |
| Meijo University | 1 |
| Meiji University | 1 |
| Ritsumeikan University | 1 |
| Waseda University | 1 |

Foreign Universities

| Ecole Nationale Superieure de Chimie de Paris | 1 |
|---|---|
| Madras Institute of Technology, Anna University | 1 |
| Universtiy of Science and Technology of Hanoi | 1 |
| Inner Mongolia University | 1 |
| Central China Normal University | 1 |
| Jilin Normal University | 1 |
| National Tsing Hua University | 1 |
| University of Chinese Academy of Science | 1 |
| Shenyang Ligong University | 1 |
| Peking University | 1 |
| | |

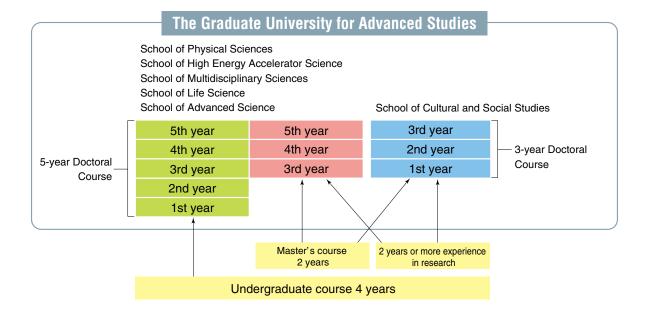
Degrees Awarded

| School | Quota | Field | For t | he perio 91~201 | d of 13 | | '14 | | '15 | | | | '16 | | | '17 | | | '18 | | Total | | | |
|--------------------------------|--------|------------------------|-------|--------------------|------------|----|------|-----|-----|------|-----|----|------|-----|----|-----|-----|----|-----|-----|-------|-------|-------|--|
| School of Cultural and | (15) | Literature | 96 | [21] | (41) | 5 | [4] | (2) | 5 | [4] | (1) | 5 | [1] | (3) | 4 | | (1) | 0 | | (2) | 115 | [30] | (50) | |
| Social Studies | (15) | Philosophy | 62 | [10] | (29) | 6 | [2] | (2) | 4 | | | 3 | [2] | | 4 | [1] | (3) | 4 | | (1) | 83 | [15] | (35) | |
| School of | | Philosophy | 58 | [0] | (11) | 0 | | | 1 | | | 2 | [1] | | 1 | | | 0 | | | 62 | [1] | (11) | |
| Physical | 10(15) | Science | 355 | [13] | (32) | 11 | | (3) | 10 | [3] | | 22 | [1] | | 15 | [1] | | 11 | | (1) | 424 | [18] | (36) | |
| Sciences | | Engineering | 68 | [2] | (15) | 4 | [2] | (1) | 3 | | | 3 | | (1) | 4 | | | 4 | | | 86 | [4] | (17) | |
| School of | | Philosophy | 23 | [1] | (9) | 0 | | | 0 | | | 2 | | | 1 | | | 1 | | | 27 | [1] | (9) | |
| High Energy Accelerator | 9(※) | Science | 144 | [3] | (13) | 8 | | | 9 | | | 2 | | | 4 | | (1) | 8 | | | 175 | [3] | (14) | |
| Science | | Engineering | 44 | [0] | (21) | 3 | | | 1 | | (2) | 2 | [1] | | 1 | | | 2 | | | 53 | [1] | (23) | |
| | | Statistical Science | 23 | [1] | (3) | 4 | [1] | | 4 | | | 5 | | | 4 | [1] | | 5 | [1] | | 45 | [4] | (3) | |
| School of Multidisciplinary | 8(10) | Philosophy | 78 | [4] | (10) | 2 | | | 1 | | | 2 | [1] | | 1 | [1] | | 0 | | | 84 | [6] | (10) | |
| Sciences | 8(10) | Science | 52 | [0] | (6) | 2 | | | 2 | | | 3 | | | 2 | | | 3 | | | 64 | [0] | (6) | |
| | | Informatics | 95 | [6] | (0) | 10 | [1] | | 14 | [2] | | 22 | [4] | | 7 | | | 11 | [2] | | 159 | [15] | (0) | |
| | | Philosophy | 35 | [1] | (2) | 0 | | | 1 | | | 0 | | | 0 | | | 0 | | | 36 | [1] | (2) | |
| School of | 9(18) | Science | 489 | [25] | (36) | 23 | [2] | (1) | 18 | [1] | (1) | 20 | [2] | (1) | 20 | [3] | | 18 | [3] | (1) | 588 | [36] | (40) | |
| Life Science | 9(10) | Brain Science | 0 | [0] | (0) | 0 | [0] | (0) | 0 | [0] | (0) | 0 | [0] | (0) | 0 | [0] | (0) | 0 | [0] | (0) | 0 | [0] | (0) | |
| | | Medical Science | 9 | [0] | (0) | 0 | | | 1 | | | 0 | | | 1 | | | 3 | [2] | | 14 | [2] | (0) | |
| School of | | Philosophy | 15 | [5] | (1) | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | 15 | [5] | (1) | |
| Advanced | 5(1) | Science | 47 | [7] | (2) | 1 | | | 4 | | | 0 | | | 5 | [1] | | 5 | | | 62 | [8] | (2) | |
| Sciences | | Engineering | 5 | [1] | (0) | | | | | | | | | | | | | | | | 5 | [1] | (0) | |
| Total | 41(59) | | 1698 | [100] | (231) | 79 | [12] | (9) | 78 | [10] | (4) | 93 | [13] | (5) | 74 | [8] | (5) | 75 | [8] | (5) | 2097 | [151] | (259) | |

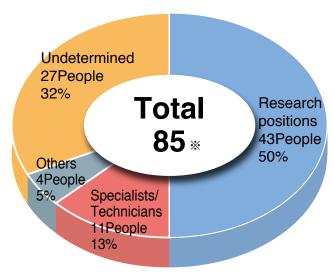
- **%**1 The quota of admission is the one in 2018. (The number in parentheses is the quota of 3-year doctoral course. The School of High Energy Accelerator Science does not have a specific quota
- ₩3
- The quota of admission is the one in 2018. (The number in parentheses is the quota of 37988 december 30088 dece

Requirements for completion of the Ph.D. course

Students are required to be enrolled in SOKENDAI for more than 3 years (five-year course students are required to be enrolled for more than 5 years), earn necessary credits prescribed at each department, take necessary research guidance for a doctoral thesis, and pass an examination for a doctoral thesis. Students who are recognized to have achieved great performance, can graduate in shorter term.



Career Tracking / Data of the 2018



* Breakdown of the total

The number of those who completed a course and obtained a degree: 67

The number of those who left the university after obtaining the credits required for completion of a course in the relevant academic year: 18

Type of Occupation

Universities/Research institutes,etc ······

The University of Tokyo

Institute for Cosmic Ray Research, The University of Tokyo

Kavli Institute for Astronomy and Astrophysics at Peking

University

National Astronomical Observatory of Japan

National Institute for Basic Biology

Rokkasho Fusion Institute, National Institutes for Quantum and

Radiological Science and Technology

AstroBiology Center, National Institutes of Natural Sciences

Keio University

RIKEN

National Institute of Polar Research

Hanoi University of Science and Technology

University of Toyama

Okinawa Institute of Science and Technology Graduate

University

Fujita Health University

SOKENDAI (The Graduate University for Advanced Studies)

Academia Sinica

Aeronautical Safety College

Kyushu University

National Institute of Informatics

Institute of Space and Astronautical Science, Japan Aerospace

Exploration Agency

National Institute of Advanced Industrial Science and

Technology

Private companies/Public service corporation

CANON ELECTRONICS INC.

Nagase Landauer, Ltd.

KOBE STEEL, LTD.

Ministry of Internal Affairs and Communications

Toshiba Memory Corporation

Rakuten, Inc.

CyberAgent, Inc.

San-Ei Gen F.F.I.,Inc.

JSR Corporation

Sumitomo Dainippon Pharma Co., Ltd.

MiCAN Technologies Inc.

MAXIS-ENGINEERING INC.

IKEDA MOHANDO CO., LTD.

Indonesian Institute of Science

OGIS-RI Co.,Ltd.

Ant Financial Services Group

BATAN (National Nuclear Energy Agency of Indonesia)

IDAJ Co., LTD.

New Japan Radio Co.,Ltd.

Systems Engineering Consultants Co.,LTD.

Eisai Co., Ltd.

HAKKAISAN BREWERY CO.,LTD.

EUREKA Company

International Exchange

Number of International Students by Department

(As of May 1, 2019)

| | | Qu | iota | 1st year | | | 2r | nd ye | ar | 3rd ye | ear (1st y | /ear**) | 4th ye | ar (2nd y | ear**) | 5th ye | ar (3rd y | /ear**) | S | ubtot | al | Research Student | | |
|--------------------------------------|------------------------------------|------------------------------|------------------------------|----------|----|----|----|-------|----|--------|------------|---------|--------|-----------|--------|--------|-----------|---------|-----|-------|----|------------------|----|----|
| School | Department | Doctoral Course 5-year | Doctoral Course 3-year | | *1 | *2 | | *1 | *2 | | *1 | *2 | | *1 | *2 | | *1 | *2 | | *1 | *2 | | *1 | *2 |
| | Regional Studies | | 3 | | | | | | | 2 | 2 | 0 | 3 | 1 | 1 | 4 | 3 | 0 | 9 | 6 | 1 | | | |
| | Comparative Studies | | 3 | | | | | | | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 2 | 0 | 5 | 2 | 0 | | | |
| School of Cultural | Japanese Studies | | 3 | | | | | | | 2 | 1 | 1 | 2 | 2 | 1 | 4 | 4 | 1 | 8 | 7 | 3 | 4 | 2 | 0 |
| and Social Studies | Japanese History | | 3 | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | Japanese Literature | | 3 | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | Subtotal | 0 | 15 | | | | | | | 4 | 3 | 1 | 6 | 3 | 2 | 12 | 9 | 1 | 22 | 15 | 4 | 4 | 2 | 0 |
| | Structural Molecular Science | 2 | 3 | | | | 1 | 0 | 0 | | | | 1 | 0 | 0 | | | | 2 | 0 | 0 | | | |
| | Functional Molecular Science | 2 | 3 | | | | | | | 4 | 1 | 2 | 1 | 0 | 1 | 3 | 1 | 1 | 8 | 2 | 4 | | | |
| School of Physical | Astronomical Science | 2 | 3 | | | | 1 | 0 | 1 | | | | 2 | 1 | 2 | 1 | 1 | 1 | 4 | 2 | 4 | | | |
| Sciences | Fusion Science | 2 | 3 | | | | 1 | 1 | 1 | 1 | 0 | 1 | | | | 3 | 1 | 2 | 5 | 2 | 4 | | | |
| | Space and Astronautical Science | 2 | 3 | | | | | | | 4 | 0 | 3 | 2 | 0 | 2 | 1 | 0 | 0 | 7 | 0 | 5 | 1 | 0 | 1 |
| | Subtotal | 10 | 15 | 0 | 0 | 0 | 3 | 1 | 2 | 9 | 1 | 6 | 6 | 1 | 5 | 8 | 3 | 4 | 26 | 6 | 17 | 1 | 0 | 1 |
| 0 1 1 (12.1 | Accelerator Science | 2 | a few | | | | 2 | 0 | 1 | 5 | 3 | 1 | 3 | 0 | 3 | 4 | 1 | 2 | 14 | 4 | 7 | | | |
| School of High Energy Accelerator | Materials Structure Science | 3 | a few | | | | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | | | | 3 | 1 | 2 | | | |
| Science | Particle and Nuclear Physics | 4 | a few | 2 | 0 | 1 | 1 | 0 | 1 | | | | 1 | 0 | 1 | 2 | 1 | 0 | 6 | 1 | 3 | | | |
| OCIONOC | Subtotal | 9 | - | 2 | 0 | 1 | 4 | 0 | 3 | 6 | 4 | 2 | 5 | 0 | 4 | 6 | 2 | 2 | 23 | 6 | 12 | 0 | 0 | 0 |
| 0 1 1 (| Statistical Science | 2 | 3 | | | | | | | 1 | 0 | 0 | | | | 2 | 1 | 0 | 3 | 1 | 0 | 1 | 0 | 0 |
| School of Multidisciplinary | Polar Science | 2 | 1 | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | |
| Sciences | Informatics | 4 | 6 | 5 | 3 | 2 | 12 | 3 | 2 | 9 | 3 | 3 | 12 | 2 | 5 | 13 | 0 | 3 | 51 | 11 | 15 | 1 | 0 | 0 |
| 001011003 | Subtotal | 8 | 10 | 5 | 3 | 2 | 12 | 3 | 2 | 10 | 3 | 3 | 12 | 2 | 5 | 15 | 1 | 3 | 54 | 12 | 15 | 2 | 0 | 0 |
| | Genetics | 3 | 6 | 3 | 1 | 2 | 4 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 0 | 1 | 0 | 1 | 14 | 9 | 9 | 1 | 0 | 1 |
| | Basic Biology | 3 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 1 | 0 | 1 | 2 | 1 | 0 | 7 | 3 | 4 | | | |
| | Physiological Sciences | 3 | 6 | 2 | 2 | 1 | 1 | 1 | 0 | 2 | 2 | 1 | 2 | 1 | 0 | 4 | 4 | 4 | 11 | 10 | 6 | | | |
| | Subtotal | 9 | 18 | 6 | 4 | 4 | 6 | 5 | 4 | 8 | 5 | 5 | 5 | 3 | 1 | 7 | 5 | 5 | 32 | 22 | 19 | 1 | 0 | 1 |
| School of Advanced | Evolutionary Studies of Biosystems | 5 | 1 | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | |
| Sciences | Subtotal | 5 | 1 | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 |
| | Total | 41 | 59 | 13 | 7 | 7 | 25 | 9 | 11 | 37 | 16 | 17 | 34 | 9 | 17 | 48 | 20 | 15 | 157 | 61 | 67 | 8 | 2 | 2 |

Number of International Students

(As of May 1, 2019)

| Country or | | 1st yea | r | 2 | 2nd yea | ır | 3rd ye | ear (1st y | year**) | 4th ye | ar (2nd y | /ear**) | 5th ye | ear (3rd y | /ear**) | | Subtota | ıl | Rese | arch St | udent |
|------------------------------------|----|----------|----|----------|---------|----|--------|------------|---------|----------|-----------|---------|--------|------------|---------|-----|----------|----|----------|----------|----------|
| Region | | *1 | *2 | | *1 | *2 | | *1 | *2 | | *1 | *2 | | *1 | *2 | | *1 | *2 | | *1 | *2 |
| Asia | 11 | 7 | 6 | 23 | 8 | 10 | 34 | 16 | 15 | 29 | 7 | 14 | 43 | 19 | 13 | 140 | 57 | 58 | 6 | 2 | 0 |
| India | 2 | 0 | 1 | 3 | 2 | 3 | 2 | 0 | 2 | 1 | 0 | 1 | 5 | 1 | 4 | 13 | 3 | 11 | | | |
| Indonesia | 2 | 1 | 1 | | | | 1 | 1 | 1 | | | | 4 | 1 | 1 | 7 | 3 | 3 | | | |
| Thailand | | | | 2 | 1 | 1 | 4 | 2 | 2 | 2 | 0 | 1 | 5 | 2 | 2 | 13 | 5 | 6 | | | |
| Pakistan | | | | | | | 4 | 3 | 4 | 2 | 0 | 1 | | | | 6 | 3 | 5 | | | |
| Bangladesh | 1 | 1 | 1 | | | | 1 | 1 | 0 | 1 | 0 | 1 | | | | 3 | 2 | 2 | | | |
| Philippines | 1 | 1 | 1 | | | | | | | | | | | | | 1 | 1 | 1 | | | |
| Viet Nam | 2 | 1 | 2 | 5 | 3 | 3 | 5 | 2 | 3 | 4 | 2 | 2 | 4 | 1 | 2 | 20 | 9 | 12 | | | |
| Malaysia | | | | | | | 1 | 0 | 0 | 2 | 1 | 1 | | | | 3 | 1 | 1 | | | |
| Korea | | | | 3 | 1 | 1 | 1 | 0 | 0 | | | | 2 | 1 | 1 | 6 | 2 | 2 | | | |
| China | 3 | 3 | 0 | 8 | 1 | 2 | 14 | 7 | 3 | 15 | 4 | 7 | 20 | 11 | 3 | 60 | 26 | 15 | 5 | 1 | 0 |
| Taiwan | | | | 2 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 3 | 2 | 0 | 8 | 2 | 0 | 1 | 1 | 0 |
| Africa | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | | 0 |
| Ghana | 1 | 0 | 0 | | | | | | | | | | | | | 1 | 0 | 0 | | | |
| South Africa | | | | | | | 1 | 0 | 1 | | | | | | | 1 | 0 | 1 | | | |
| Oceania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | | | |
| Australia | | | | | | | | | | | | | 1 | 0 | 0 | 1 | 0 | 0 | | | |
| Europe | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 1 | 3 | 1 | 2 | 3 | 1 | 1 | 10 | 3 | 6 | 1 | 0 | 1 |
| Kazakhstan | | | | 1 | 1 | 1 | | | | | | | | | | 1 | 1 | 1 | | | |
| Spain | | | | | | | 1 | 0 | 1 | | | | | | | 1 | 0 | 1 | 1 | | 1 |
| Hungary | | | | | | | | | | 1 | 0 | 1 | | | | 1 | 0 | 1 | | | |
| France | | | | | | | 1 | 0 | 0 | 2 | 1 | 1 | 1 | 0 | 0 | 4 | 1 | 1 | | | |
| Poland | 1 | 0 | 1 | | | | | | | | | | | | | 1 | 0 | 1 | | | |
| Belarus | | | | | | | | | | | | | 1 | 0 | 0 | 1 | 0 | 0 | | | |
| Russia | | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | |
| Middle East | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | | 0 |
| Turkey | | | | | | | | | | 1 | 0 | 1 | | | | 1 | | 1 | | | |
| Latin America and the Caribbean | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | | | |
| Argentine | | | | | | | | | | | | | 1 | 0 | 0 | 1 | | | | | |
| North America | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 1 |
| USA | | <u> </u> | Ť | <u> </u> | Ť | Ť | _ | Ť | Ť | 1 | 1 | 0 | Ť | <u> </u> | Ť | 1 | 1 | 0 | <u> </u> | <u> </u> | <u> </u> |
| Canada | | <u> </u> | | 1 | 0 | 0 | | | | <u> </u> | | | | | | 1 | <u> </u> | | | | |
| Mexico | | <u> </u> | | <u> </u> | - | Ť | | | | | | | | | | 0 | | 0 | 1 | | 1 |
| Total | 13 | 7 | 7 | 25 | 9 | 11 | 37 | 16 | 17 | 34 | 9 | 17 | 48 | 20 | 14 | 157 | 61 | 66 | 8 | 2 | 2 |

International Exchange Agreements

SOKENDAI is promoting academic exchange and collaboration with other domestic and foreign universities through mutual agreements.

Academic Agreement with Foreign Institutions

| • | • | | | | |
|---|---------------------------------------|--|------------------------------|-------------------|--|
| University / Department [Country or Region] | Corresponding Department | Contents | Date of Agreement | Validity | |
| University of Science and Technology [Korea] | All Schools | Exchange of students and researchers | May 25, 2005 May 25, 2010 | May 24, 2020 | |
| Chulalongkorn University Faculty of Science [Thailand] | School of Physical Sciences | Exchange of students and researchers | April 1, 2010 | March 23, 2020 | |
| Kasetsart University Faculty of Science [Thailand] | School of Physical Sciences | Exchange of students and researchers | March 29, 2011 | March 10, 2021 | |
| Indian Institute of Science Education and Research PUNE [India] | School of Life Science | Exchange of students and researchers | April 18, 2011 | April 16, 2021 | |
| VNU University of Science Faculty of Biology [Vietnam] | School of Advanced Sciences | Exchange of students and researchers | February 8, 2017 | February 7, 2022 | |
| Vietnam National University of Agriculture Faculty of Animal Science [Vietnam] | School of Advanced Sciences | Exchange of students and researchers | February 15, 2017 | February 14, 2022 | |
| Vietnam Academy of Social Sciences Institute of Archaeology [Vietnam] | School of Advanced Sciences | dvanced Exchange of researchers February | | February 19, 2022 | |
| National Taiwan University College of Bioresources and Agriculture [Taiwan] | School of Advanced Sciences | Exchange of students and researchers | December 28, 2017 | December 27, 2022 | |
| The University of HAWAI'I at MANOA [USA] | School of Cultural and Social Studies | Exchange of students and researchers | February 28, 2018 | February 27, 2023 | |
| University of Ljubljana Biotechnical Faculty[Slovenia] | Advanced Sceiences | Exchange of students and researchers | August 23, 2018 | August 27, 2023 | |
| Vidyasirimedhi Institute of Science and Technology[Thailand] | Physical Sciences | Exchange of students and researchers | September 5, 2018 | September 4, 2023 | |
| Jahangirnagar University Faculty of Biological Sciences[Bangladesh] | Advanced Sceiences | Exchange of students and researchers | Octover 9, 2018 | Octover 8, 2023 | |
| Peter the Great St. Petersburg Polytechnic University[Russia] | Physical Sciences | Exchange of students and researchers | January 23, 2019 | January 22, 2024 | |
| Georgian Technical University[Georgia] | High Energy Accelerator Science | Exchange of students and researchers | Feburary 13, 2019 | Feburary 12, 2024 | |

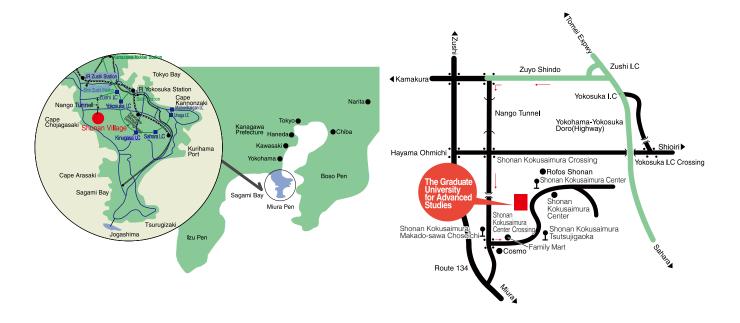
Academic Agreement with Domestic Institutions

| University / Institute | Corresponding Department | Contents | Date of Agreement | |
|--|--|----------------------|-------------------|--|
| Tokyo Institute of Technology All Schools | All Schools | Exchange of students | April 3, 1995 | |
| Ochanomizu University All Schools | All Schools | Exchange of students | April 3, 1995 | |
| Nagoya University Graduate School of Medicine | Department of Physiological Sciences of School of Life Science | Exchange of students | April 3, 1995 | |
| Nagoya University Graduate School of Engineering | School of Physical Sciences | Exchange of students | April 1, 2010 | |
| University of Tokyo Graduate School of Science | School of Physical Sciences / High Energy Accelerator Sciences / Multidisciplinary Sciences | Exchange of students | March 27, 1998 | |
| University of Tokyo Graduate School of Information Science and Technology | School of Physical Sciences / High Energy Accelerator Sciences / Multidisciplinary Sciences / Life Science / Advanced Sciences | Exchange of students | March 27, 1998 | |
| International Christian University Graduate School of Arts and Science | All Schools | Exchange of students | March 24, 2000 | |
| Kyoto University Graduate School of Asian and African Area Studies | Department of Regional Studies / Comparative Studies of School of Cultural and Social Studies | Exchange of students | April 1, 2005 | |
| Osaka University Graduate School of Human Sciences | Department of Regional Studies / Comparative Studies of School of Cultural and Social Studies | Exchange of students | April 1, 2005 | |
| Kobe University Graduate School of Intercultural Studies / Human Development and Environment | Department of Regional Studies / Comparative Studies of School of Cultural and Social Studies | Exchange of students | April 1, 2005 | |
| Chiba University Graduate School of Humanities and Studies of Public Affairs | School of Cultural and Social Studies | Exchange of students | April 1, 2005 | |
| Japan Advanced Institute of Science and Technology Graduate School of Advanced Science and Technology | Department of Informatics of School of Multidisciplinary Sciences | Exchange of students | April 1, 2009 | |
| Chiba University Graduate School of Science and Engineering | School of Physical Sciences | Exchange of students | April 1, 2010 | |
| Tsuda College Graduate Program in Mathematics and Computer Science | School of Multidisciplinary Science | Exchange of students | April 1, 2015 | |
| Waseda University School of Fundamental Science and Engineering | School of Multidisciplinary Science | Exchange of students | April 1, 2015 | |
| Kyushu University Graduate School of Pharmaceutical Sciences | School of Life Science | Exchange of students | April 1, 2017 | |
| Hosei University Graduate School of Sciences and Engineering | School of Physical Sciences | Exchange of students | April 1, 2018 | |



SOKENDAI renewed our logo as we celebrate the 30th anniversary of the university's foundation in 2018. SOKENDAI represents a unique educational structure that provides intellectual knowledge at the highest standards. The ethos of the brand is mirrored through the visualization of a line 'Intelligence Connector' which symbolizes a platform for the multiple numbers of research centers across the world that form the diverse educational platform of SOKENDAI.

Access(Hayama Campus)



Cover image

An electron micrograph of a freeze-fracture replica of tight junctions in epithelial cells in a nephron segment of the mouse kidney. Tight junction are one mode of cell-cell junctions. The width of a single fibril-like structure is about 10 nm.

