



Adventures in Knowledge

The Kashiwa campus is the newest of the three main campuses of the University of Tokyo, joining sites at Hongo and Komaba. Kashiwa campus was established with the vision of building a new community with a strong interdisciplinary and international character that can respond to the dynamic scientific and educational needs of the 21st Century.

The Hongo campus, which has been the nucleus for academic activities in the University of Tokyo ever since its founding 130

years ago, and the Komaba campus, which has been devoted to undergraduate studies and building inter-disciplinary links between established fields of study for over 60 years, have long-standing academic traditions. The Kashiwa campus, which has recently joined this family, brings with it a fundamental reorganization of the structure of traditional academic discipline rethinking the framework of how knowledge is created and organized. Under the slogan of "adventures in knowledge", the Kashiwa campus has started a range of new initiatives. The Graduate School of Frontier Sciences encompasses three academic domains: transdisciplinary sciences, biosciences, and environmental studies. The Institute for Solid State Physics, Which is focused on basic physics research, is helping to expand the foundations on which today's high-tech society is built. The institute also serves as a strong international and domestic collaborative research hub. The Institute for Cosmic Ray Research is pursuing the origins of space and physical matter through the research of cosmic rays. The Institute for the Physics and Mathematics of the Universe (IPMU) pursues the deep mysteries of the universe through the integration of Physics and Mathematics. Other departments include RACE (Research into Artifacts, Center for Engineering), the Center for Spatial Information Science, the Center for Climate System Research, the Kashiwa Branch of the Environmental Science Center, and the Kashiwa Library. As the names suggest, these facilities bring together people from a wide variety of research fields. As an important part of facilitating communication between research fields, the Kashiwa campus also has a strong international character, promoting international contacts and the exchange of ideas from around the world. Through the facilities that exist now or will be built in the near future, the Kashiwa campus has excellent coverage of many of the new fields of science that have growing importance in shaping our lives in the 21st Century. Abandoning the constraints of traditional ways of organizing science, Kashiwa campus has quickly responded to the continuously evolving frontiers of science in an increasingly global and dynamic society by building new interdisciplinary research facilities and seeding new academic fields. These achievements will make the "adventures in knowledge" in Kashiwa possible.

Growth of the Kashiwa Campus

In 1998, the University of Tokyo established a new campus about 30 km North-East of Tokyo. The Campus is located in Chiba prefecture, in the northern part of Kashiwa city, adjoining the Kashiwanoha Park. At the end of 1999, the Institute for Cosmic Ray Research and the Institute for Solid State Physics moved to Kashiwa, followed by the Division of Integrated Biosciences at the Graduate School of Frontier Sciences in 2001, the Division of Transdisciplinary Sciences at the Graduate School of Frontier Sciences in 2003, and four centers, including the Center for Climate System Research, in March 2005. In the same year, the Division of Environmental Studies at the Graduate School of Frontier Sciences completed relocation. At the start of 2009, the total number of faculty and graduate students at the Kashiwa campus reached 2.800.

Relocated in 2000

- Institute for Cosmic Ray Research (from Tanashi campus)
- Institute for Solid State Physics (from Roppongi campus)

2001

Division of Integrated Biosciences, Graduate School of Frontier Sciences (from Hongo campus)

2003

Division of Transdisciplinary Sciences, Graduate School of Frontier Sciences (from Hongo campus)

2005

- Research into Artifacts, Center for Engineering (from Komaba campus)
- Center for Spatial Information Science (from Komaba campus)
- High Temperature Plasma Center (from Hongo campus)

[incorporated into Graduate School of Frontier Sciences in 2008]

Center for Climate System Research (from Komaba campus)

2006

Division of Environmental Studies, Graduate School of Frontier Sciences (from Hongo campus)

2007

• Institute for the Physics and Mathematics of the Universe (IPMU) [established in 2007]

Support facilities in Kashiwa

- Kashiwa Branch of the Health Services Center opened in 2000
- Kashiwa Branch of the Environmental Science Center opened in 2003
- Kashiwa Library opened in 2004

Outline of The University of Tokyo

Established: 1877 (Departments of Law, Science, Literature, and Medicine) President: Junichi Hamada

Teaching and research organization: 10 Faculties, 15 Graduate Schools, 11 Institutes, 18 Shared Facilities

Campus: Hongo campus (Hongo, Bunkyo-ku, Tokyo): 559,176 m² Komaba campus (Komaba, Meguro-ku, Tokyo): 352,213 m²

Kashiwa campus (Kashiwanoha, Kashiwa, Chiba): 320,452 m² Total area: 326,173,884 m² (of which 99% is experiment forest etc.)

Introducing the facilities at the Kashiwa campus

■Graduate School of Frontier Sciences

OD: : : (M 1: : !: 0 :
ODivision of Transdisciplinary Sciences
— Department of Advanced Material Science
— Department of Advanced Energy
— Department of Complexity Science and Engineering
Department of Frontier Informatics
[moved to School of Engineering]
ODepartment of Division of Biosciences
— Department of Integrated Biosciences
— Department of Medical Genome Sciences
ODivision of Environmental Studies

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)	ivision of Environmental Studies
	— Department of Natural Environmental Studies
	Department of Ocean Technology, Policy, and
	Environment
	— Department of Environment Systems
	— Department of Human and Engineered Environmental
	Studies
	— Department of Socio-Cultural Environmental Studies

- ODepartment of Computational Biology
- OResearch Center for Total Life Health and Sports Sciences (Kashiwa II campus)
- OCenter for Omics and Bioinformatics
- OBioimaging Center

■Institute for Cosmic Ray Research

- Department of International Studies

Graduate Program in Sustainability Science

Research Divisions

Neutrino and Astroparticle Division High Energy Cosmic Ray Division Astrophysics and Gravity Division

Research Facilities

- ONorikura Observatory (Takayama City, Gifu)
- OAkeno Observatory (Hokuto City, Yamanashi)
- OKamioka Observatory (Kamioka-cho, Hida City, Gifu)
- OResearch Center for Cosmic Neutrinos

■Institute for Solid State Physics

Research Divisions

Division of New Materials Science Division of Condensed Matter Theory Division of Nanoscale Science Division of Physics in Extreme Conditions

Division of Advanced Spectroscopy

Research Facilities

- OSynchrotron Radiation Laboratory
- OMaterials Design and Characterization Laboratory
- ONeutron Science Laboratory
- OInternational MegaGauss Science Laboratory

Research into Artifacts, Center for Engineering

Division of Life Cycle Engineering Division of Service Engineering Division of Digital Value Engineering Division of Co-Creation Engineering

■Center for Spatial Information Science

Division of Spatial Information Analysis Division of Spatial Information Integration Division of Spatio-Temporal Socio-Economic Research Division of Spatial Information Base

■Center for Climate System Research

Climate System Modeling Section Climate Variability Research Section

■Institute for the Physics and Mathematics of the Universe (IPMU)

IPMU, selected by MEXT for the World Premier International Research Center Initiative, is a multidisciplinary research institute aiming at studying dark energy, dark matter, and unified theories (such as superstring theories and quantum gravity). The mission of IPMU is to understand the origin and evolution of the universe through synergetic efforts in mathematics, physics, and astronomy.

■Kashiwa Library

Kashiwa Library is the central library on the Kashiwa campus. In addition to ordinary services as a university library, Kashiwa Library aims to be a hub for research, and a place for transdisciplinarity, knowledge-building, and the communicating of creative information.

■ Kashiwa Branch of the Environmental Science Center

The Kashiwa Branch of the Environmental Science Center performs research on environmental conservation and safety management. It supervises the management, treatment, and disposal of hazardous waste generated on the Kashiwa Campus.

■Kashiwa Branch of the Health Services Center

The Health Services Center, Kashiwa Branch provides health management services and medical care for the students and faculty at the Kashiwa campus.

Kashiwa Administration Department

Kashiwa Administration Department is a unified administrative department, consisting of the Cosmic Ray Research, the Solid State Physics, IPMU and Accounting Sections. It also includes Center Support, External Liaison and Public Relations, the Human

Resources and Labor and the Payroll and Facilities Groups.

The people that make up the Kashiwa campus

	Number of faculty				Number of graduate students and research students			
Classification	Teaching staff	Technical personnel	Administrative staff	Total	Master Course	Doctorate Course	Research Students	Total
Graduate School of Frontier Sciences	[73] 183	[6]	[1]	[80] 183	1,019	481	36	1,536
Institute for Cosmic Ray Research *1	[20] 33	8		[20] 41	19	20		39
Institute for Solid State Physics *2	[27] 85	36		[27] 121	(41) 88	(14) 46	3	(55) 137
Research into Artifacts, Center for Engineering *3	[6] 6			[6] 6	15	9		24
Center for Spatial Information Science *4	[8] 11			[8] 11	(23) 1	(5) 2	(1) 1	(29) 4
Center for Climate System Research *5	[21] 9	[1]		[22] 9	(5) 11	(4) 16		(9) 27
Frontier Sciences Project	[8] 1			[8] 1				
Institute for the Physics and Mathematics of the Universe	[42] 1		[8]	[50] 1				
Kashiwa Branch of the Environmental Science Center	1			1				
Kashiwa Branch of the Health Services Center		2	1	3				
Kashiwa Library			7	7				
Kashiwa Administration Department Center			84	84				
Total	[205] 330	[7] 46	[9] 92	[221] 468	1,153	574	40	1,767

Notes:

- 1. Number of faculty is the number of staff as of April 1, 2009. Numbers in () are visiting special fixed-contract teaching staff.
- 2. Number of students is the number as of April 1, 2009. Numbers in () are the number of students belonging to the Graduate School of Frontier Sciences.
- 3. Eight administrative staff of Institute for the Physics and Mathematics of the Universe shown in [] are project specialists etc.
- 4. The Institutes and Centers conduct the following graduate education in the form of joint courses.
 - *1 Department of Physics, Graduate School of Science
 - *2 Departments of Physics, Chemistry, Earth and Planetary Science, Graduate School of Science, and Department of Applied Physics, Graduate School of Engineering, Department of Advanced Materials Science, Complexity Science and Engineering Graduate School of Frontier Sciences
 - *3 Departments of Precision Engineering, Environmental and Ocean Engineering, Quantum Engineering, and Systems Innovation, Graduate School of Engineering
 - *4 Department of Information and Communication Engineering, Graduate School of Information Science and Technology, Departments of Natural Environment Studies, and Socio-Cultural Environmental Studies, Graduate School of Frontier Sciences, Department of Earth and Planetary Science, Graduate School of Science, Departments of Civil Engineering, and Urban Engineering, Graduate School of Engineering Departments of Economic Theory and Studies of Contemporary Economy, Graduate School of Economics, Graduate School of Public Policy
 - *5 Department of Natural Environment Studies, Graduate School of Frontier Sciences, and Department of Earth and Planetary Science, Graduate School of Science
- 5. The facilities of the Institute for Cosmic Ray Research, the Institute for Solid State Physics, the Center for Climate System Research and the Center for Spatial Information Science are accessible for researchers from public and private unversities across the nation within collabrative-research/joint-use programs.
 - More than 10,000 collaborative researchers visit the Kashiwa compus every year as an avenue for research and to exchange information.
- 6. In addition, some 370 teaching staff on short-term contracts are involved in educational support roles.

(Addenda)

The number of stuff and students at the University of Tokyo

Faculty: Teaching staff: 3,890; Administrative staff: 3,747; Total: 7,637 (as of May 1, 2009)

Students (as of May 1, 2009)

Undergraduates: 14,197 (including: Overseas students: 253; Female students: 2,725)

Graduates: 14,327 (including: Overseas students: 2,255; Female students: 4,082)

Management of the Kashiwa campus

Kashiwa Campus Joint Academic Management Council

The Kashiwa Campus Joint Academic Management Council was established as an organization for discussing and deciding matters regarding academic management common to all Departments on the Kashiwa campus.

Its role is to deal with

- (1) matters referred to the Council by Departments belonging to the Kashiwa campus
- (2) other matters regarding academic management common to all Departments

Kashiwa Campus Amenity Office

The Kashiwa Campus Amenity Office was established by the Kashiwa Campus Joint Academic Management Council to assist in performing the duties of the Council.

Its role is to deal with matters concerning

- (1) facilities
- (2) the environment and accident prevention
- (3) welfare
- (4) others deemed appropriate by the Council

Kashiwa Campus Liaison Office

The Kashiwa Campus Liaison Office was established by the Kashiwa Campus Joint Academic Management Council to assist in performing the duties of the Council.

Its role is to deal with matters concerning

- (1) academic management planning
- (2) liaison with the various agencies and bodies related to the Kashiwa campus
 - (a) teacher training through regional partnership with the Chiba Prefecture General Education Center
 - (b) joint courses for high school students through regional partnership with the Chiba Prefecture
- (3) public relations for the Kashiwa campus as a whole
 - (a) the open campus policy
- (4) others deemed appropriate by the Council

Kashiwa Campus Health and Safety Office

The Kashiwa Campus Health and Safety Office was established by the Kashiwa Campus Joint Academic Management Council to assist in performing the duties of the Council.

Its role is to deal with matters concerning

- (1) health and safety planning within the Kashiwa campus
- (2) assessment and supervision of health and safety planning on the Kashiwa campus
- (3) training and public relations activities related to health and safety
- (4) health and safety planning on the Kashiwa campus

Regional and community partnerships and exchange, and promotion of learning

Projects for regional and community partnerships and exchange, and for the promotion of learning, are carried out at the Kashiwa Campus with the cooperation of Chiba Prefecture, the City of Kashiwa, the Kashiwa Chamber of Commerce and Industry, other local bodies and, of course, the constituent departments of the campus.

Science Partnership Project (SPP) (Course-based learning activity)

- OThe purpose of this project is to provide greater opportunity for improving intellectual curiosity among high school students, and raising the level of interest in science, technology, and mathematics through partnership between universities and high schools. The University of Tokyo was chosen to undertake the project after making a successful application to the Japan Science and Technology Agency.
- OWith the cooperation of the Chiba Board of Education, the teaching staff of the Kashiwa campus run a two-day course of hands-on science learning during the summer holidays for high school students from the Prefecture who wish to attend, with lectures on leading edge scientific research.

Science Partnership Project (SPP) (Science Teacher training)

- OThe purpose of this project is to provide training in science, technology and mathematics for teachers at junior high and high schools, at universities and other locations. The University undertook this project at the request of the Prefecture General Education Center with teacher training linked to the Kashiwa campus and other sites.
- This project is run for two days during the summer holidays on the University of Tokyo Kashiwa campus.

Open campus

- OSince 2001 the campus has held open days on the last Friday and Saturday of October every year. It is visited by 4,000 to 5,000 people each year.
- OIn 2009, open campus is scheduled for October 30 (Friday) and 31 (Saturday).

Participation in the Kashiwa Industry Fair

- OThe University takes part in the Kashiwa Industry Fair which is held to contribute to the promotion of Kashiwa's industry by gathering the best products of Kashiwa's industry under one roof, advertising them through exhibition and sale to local people.
- The Graduate School of Frontier Sciences will present an exhibit in 2009.

■Public lectures

- OWith the cooperation of the Kashiwa City and the Kashiwa Chamber of Commerce and Industry, the University has held public lectures since 1999, inviting Nobel Prize winners and other notable speakers.
- OIn 2009 public lectures were organized by the Institute for Cosmic Ray Research and the Institute for the Physics and Mathematics of the Universe in April, and the Institute for Solid State Physics in October.

■The Kashiwa Library Club, Kashiwa Library, the University of Tokyo

- OKashiwa Library organizes the Kashiwa Library Club. The objectives of the club are to encourage library activities, and to promote mutual friendship among its members and cooperation with the vicinity of the Kashiwa campus. Everyone who supports these objectives is eligible to apply for a membership of the Kashiwa Library Club. Junior and senior high school students are, however, not eligible.
- The membership allows you to borrow open-stack books and to use the facilities on the first floor in Kashiwa Library. Moreover, the members will receive information on events, such as movies and music concerts, which are held at the library.

Industry-academia cooperation and regional partnerships at the Kashiwa campus

The University of Tokyo has established the Division of University Corporate Relations at the Hongo campus to study a range of policies for promoting technology transfer from the University to industry. It is expected that the intellectual property of the University will play a significant role in the wider society.

The Division is also exploring new avenues by offering technical consultations to potential entrepreneurs, and assistance in solving the various problems involved in establishing businesses.

Cooperation with the Tokatsu Techno Plaza

Industry-government-academia joint seminars

• The University holds lectures and laboratory open days as a new opportunity for university researchers and entrepreneurs to meet, in order to encourage future joint research through industry-academia cooperation.

Summer science classes

- The University holds summer science classes every year with the purpose of fostering a scientific perspective among children as well as to convey the importance and enjoyment of manufacturing.
- · In August 2009, Institute for Solid State Physics staff conducted the classes.

University Research Exchange Office

· At the Tokatsu Techno Plaza a wide range of researchers provide services free of charge in response to technical consultations and instructions. (Oversight: Kashiwa Campus Liaison Office)

Cooperation with the Todai Kashiwa Venture Plaza, an entrepreneur development facility

- · Based on the Law for Facilitating the Creation of New Business, the Organization for Small and Medium Enterprises and Regional Innovation Japan (formerly, the Japan Regional Development Corporation) established the Todai Kashiwa Venture Plaza to provide support to small and medium venture businesses that aim to research and develop new products and new technology or to enter new fields. It opened in August 2004.
- The mission of the Todai Kashiwa Venture Plaza is to foster venture businesses based on the research findings of university teaching staff. Aiming to establish a framework for supporting industry-academia cooperation in partnership with the adjacent Tokatsu Techno Plaza, Chiba Prefecture's business incubation facility, the Venture Plaza is expected to foster successful university ventures.
- · About one-third of the businesses involved are based on research findings of the University of Tokyo's teaching staff, and about half, including these companies, are venture businesses originating in the University.

Regional research exchange projects

University consortium Kashiwa

University Consortium Kashiwa was founded in order to promote further development of the Kashiwanoha area within collaboration between Kashiwa City, the University of Tokyo, and other local resources. It consists of four actively operating sections; Health Care, Internationalization, Teganuma, and Learning and Practice.

City development conference for the Kashiwanoha Campus Station area (from February 2005)

The Kashiwanoha Campus station opened on August 24, 2005. Along with Chiba Prefecture, Kashiwa City, the Urban Renaissance Agency, Chiba University and others, the University of Tokyo Kashiwa Campus is participating in the project to form an industrial cluster in the area through industry, academia and government cooperation to meet the requirements for high quality city development.

Urban Design Center Kashiwa-no-ha (UDCK)

The University of Tokyo participates in Urban Design Center Kashiwa-no-ha, which situates in front of Kashiwanoha Campus Station, and gives out university's research information and ideas to the public. In 2008, "Kashiwanoha International Campus Town Initiative" was established as a joint research among Chiba Prefecture, Kashiwa City, the University of Tokyo and Chiba University. UDCK is developing on ongoing research and social experiment toward the realization of the vision and functions as a base for "Public Private Academic Partnership" with universities, regional community, local government and private companies.

Frontier Sciences Project

The Frontier Sciences Project was established in 2004 as a center for research encompassing all academic fields. The goal of the project is to provide a foundation for pursuing leading-edge transdisciplinary research that brings together multiple fields. Currently, there are nine ongoing research projects under the Frontier Sciences Project umbrella. Most of these, including the Science Integration Program, the Project for Development of an Integrated Earth System Model for Climate and Environment Studies, and the Interdisciplinary Barrier Free Research Project, are located at the Kashiwa campus.

The Science Integration Program was launched under the direction of former president of The University of Tokyo, Hiroshi Komiyama, with the goal of developing new integrated methodologies for investigating complex social issues, issues that either cannot be resolved with knowledge from a single discipline or that cannot be easily understood in their entirety and thus defy solution through existing scientific methods. Specifically, the Science Integration Program aims to introduce techniques for bridging the gap between science and society, to integrate the subdivided fields of natural science across scales and domains, and to represent knowledge integrated in this way as a comprehensive whole. Two projects of the Science Integration Program, "Human" focusing on life processes and "Earth" focusing on the environment, are currently underway at the Kashiwa campus.

^{*} Please address any enquiries concerning regional cooperation and industry-academia cooperation, and so on, to the External Liaison and Public Relations Group. Tel: 04-7136-3106

Map of Kashiwa Campus, The University of Tokyo Institute for the Physics and Mathematics of the Universe Long Pulse Magnet Laboratory, ISSP OComputational Biology Laboratory.GSFS OCenter for Omics and Bioinformatics Advanced Spectroscopy Laboratory, ISSF Synchrotron Radiation Laboratory, ISSP Kashiwa Research Complex OResearch into Artifacts, Center for Engineering OCenter for Spatial Information Science OCenter for Climate System Research OGraduate School of Frontier Sciences Short Pulse Magnet Laboratory, ISSP Cryogenic / Multiple Extreme Conditions Laboratory, ISSP Outdoor aquarium for Japanese rice fish, GSFS Transdisciplinary Sciences Laboratory, GSFS Computational Biology OFrontier Sciences Project OInstitute for the Physics an Bioimaging Center Institute for Cosmic Ray Research (ICRR) Tokatsu Techno Plaza Ocean Research Institute(ORI) Todai Kashiwa Venture Plaza Environmental Studies, GSFS Institute for the Physics and Mathematics of the Universe alth Service Cente Kashiwa Guest Hous ė Food shop 8 Parking Parking Kashiwa Library Gatehous Todai Nishi Todai Mae National Cancer Cente Kashiwanoha Koen Kashiwanoha Koen Kita Kashiwanoha Station Campus Kashiwa I campus Research Center for Total Life Health Center for and Sports Sciences International lodge Kashiwa lodge Environment, Health and Field to Tsukuba to Noda Kashiwa I.C Tokatsu Techno Plaza to Tsukuba National Cance University of Tokyo Kashiwa Campus to Tokyo Kashiwanoha park Sawayaka Chiba to Mito Kenmin Plaza Kashiwa City Hall to Akihabara Kashiwa Sta to Chiba to Noda to Tokyo to Ueno Tobu-Noda L. to Funabashi

Getting to the Kashiwa Campus

• Kashiwanoha Campus Station West Exit (Tsukuba Express Line)

〈Tobu Bus〉 西柏03 bus for Kashiwanoha Campus Station (Customs Training Institute loop line or Kashiwanoha Park Central loop line) → get off at Todai-mae stop.

西柏04 Bus for Edogawadai Station East Exit → get off at Todai-mae stop.

(on foot) about 25 minutes' walk.

• Kashiwa Station West Exit (JR Joban Line, Subway Chiyoda Line)

〈Tobu Bus〉 西柏01 for National Cancer Center (via Kashiwanoha Park) → get off at Todai-mae stop.

柏44 for National Cancer Center (via Customs training Institute) → get off at National Cancer Center stop.

■Edogawadai Station East Exit (Tobu Noda Line)

〈Tobu Bus〉 西柏04 for Kashiwanoha Campus Station West Exit → get off at Todai-mae stop.

• Joban highway kashiwa interchange take Chiba direction exit to National Road number 16, after 500m turn right at the "Toyofuta Industrial Estate Entrance" crossroads.