

The following main buildings were newly built or renovated by Osaka University in the past five years.

## Toyonaka Campus

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- New construction of Machikane Nursery School
- New construction of the Interdisciplinary Research Building
- Renovation of the Main Library + New construction of the Automated Stacks Building for the Main Library
- Reconstruction of the Project Research Center for Fundamental Sciences

## Suita Campus

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- New construction of the BioSystems Building
- New construction of the IT Core Annex of the Cybermedia Center
- New construction of the East II Building of the Research Center for Ultra-High Voltage Electron Microscopy
- Renovation of the Pharmaceutical Sciences Building 1
- New construction of the Information Science and Technology Building C and Poplar Street Shop and Cafeteria
- New construction of the Oncology Center Building
- Reconstruction of the Engineering Building M3
- Renovation and reconstruction of the Suita Welfare Building
- New construction of Co-Creative Innovation Building
- Renovation of the Joining and Welding Research & Office Building

## Machikane Nursery School

Built in AY2012 W1 659 m<sup>2</sup>

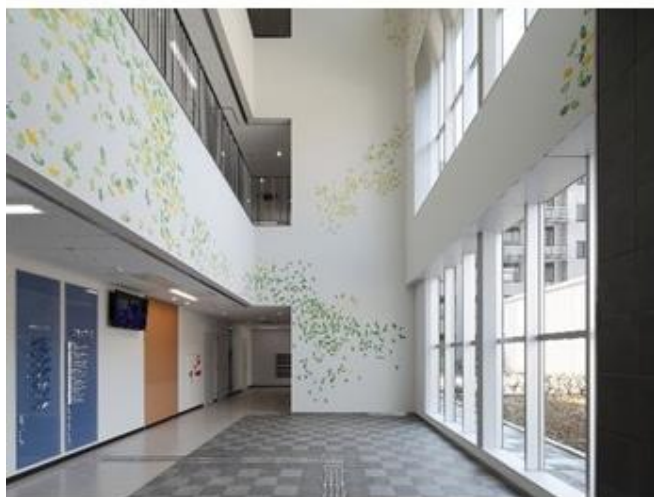


Osaka University aims to help form a gender-equal society, starting with efforts on campus and in the neighboring areas. As part of this initiative, Machikane Nursery School became the first facility of its kind established on the Toyonaka Campus.

The nursery school building is a wooden structure using laminated wood. In this simple design, three wings provide different environments, extending from a high-ceiling hall used as a flexible open space.

## Interdisciplinary Research Building

Built in AY2013 S7 7,374 m<sup>2</sup>



This is an interdisciplinary education research complex used by the Center for Scientific Instrument Renovation and Manufacturing Support, the International Human Resources Training and Education Center, and the Institute for Academic Initiatives. It is also used as an open lab.

It is located between the Graduate School of Science and the Graduate School of Engineering Science. The motif of the liberal arts zone, including the hue of the foundation stones and external walls, was introduced to create an interdisciplinary design.



## Main Library

Built in AY1960, AY1966, AY1972, and AY2000 (renovated in AY2009 and AY2014) R5-1, R1, R2, R3 15,525 m<sup>2</sup>

## Automated Stacks Building for the Main Library

Built in AY1960, AY1972, AY1981, and AY2000 (renovated in AY2014) R5-1, R1, R4 4,297 m<sup>2</sup>

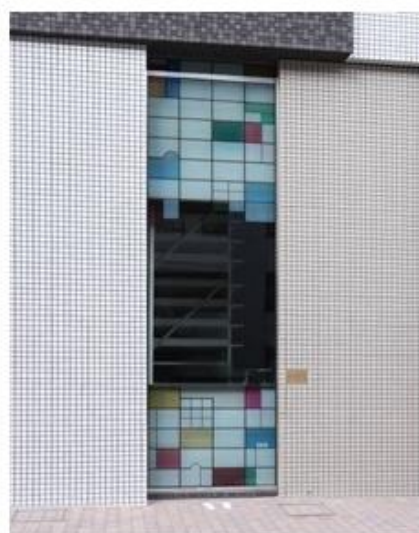


This building underwent functional renovation and seismic retrofitting while using the same design as before renovation.

This is the largest library of Osaka University. It provides spaces for various purposes and archives large amounts of various materials. It supports overall education and research, and helps students acquire knowledge on their own. The Learning Commons has been expanded on the second floor, and is actively used by students as a gathering space. The valuable collection room on the third floor has been completed, offering an array of valuable materials collected by the Main Library (except the materials of Kaitokudo).

## Automated Stacks Building for the Main Library

Built in AY2014 R1-1 783 m<sup>2</sup>



The building was constructed to the south of the Main Library to increase the capacity of storing academic/scientific information and materials.

The building is in harmony with the surrounding environment. The unique design features partly recessed external walls, and the windows are arranged such that part of the automated library system can be seen from outside.

The building has enabled materials to be rearranged in line with the book arrangement planning appropriate for learning, education, and research at Osaka University.

Thanks to the consolidation and rearrangement of materials, the academic/scientific information and materials owned by Osaka University can be shared effectively across the university.

## Project Research Center for Fundamental Sciences

Built in AY2016 R5 3,112 m<sup>2</sup>



The research building for transforming basic research of the Graduate School of Science into project research will be reconstructed. A review is underway to create a design for cutting-edge research that reflects the spirit of Dr. Yoichiro Nambu.



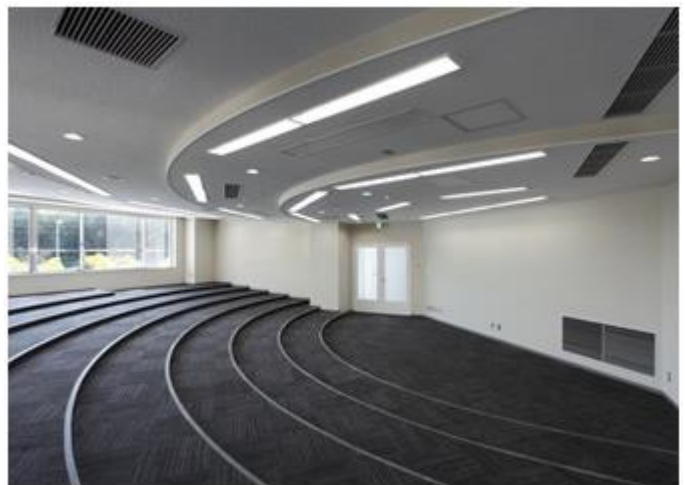
## BioSystems Building

Built in AY2014 S10 8,095 m<sup>2</sup>



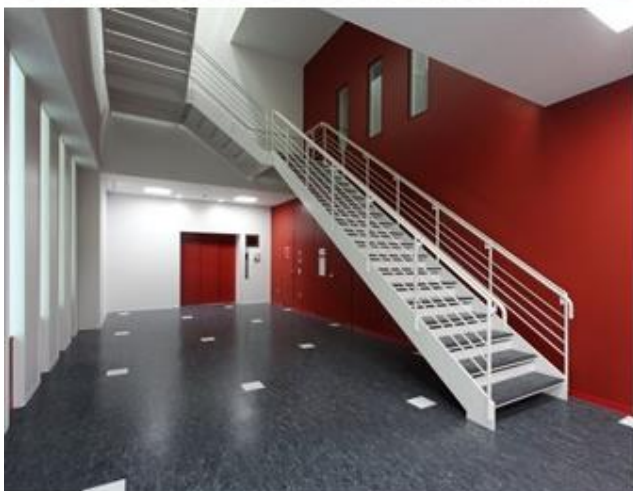
The building was constructed as an international center of research and education on molecular and cell imaging by integrating the world's most advanced bioimaging technology, based on the leading international research foundation of respective graduate schools at Osaka University.

The characteristic appearance is symbolic of the facility. It features a double helix stainless steel mesh that resembles the structure of DNA, and its appearance changes depending on environmental factors such as light and wind. This chameleon-like exterior that changes with the outside environment is like the skin of an organism or cell membrane.



## IT Core Annex of the Cybermedia Center

Built in AY2014 S2 2,038 m<sup>2</sup>



This data center which houses large computers was constructed as the main center of the academic cloud.

It consists of two buildings: an electricity building and server building. The exterior features gently curved surfaces based on the motif of 1/f fluctuation using transparent metal panels to ensure harmony with the surrounding landscape.

In terms of the facility configuration, the main computer/server area is separated from the equipment/machinery area (including air-conditioning systems and power source). The first floor is the machinery/equipment room, and the second floor is the computer/server room with a double wall structure.



## East II Building of the Research Center for Ultra-High Voltage Electron Microscopy

Built in AY2014 R2-1 1,124 m<sup>2</sup>

The building was constructed at a location far from the main road on the campus to avoid the influence of vibration and other factors that might have affected the electron microscope set up in the building. It forms a complex with other existing buildings.

The appearance of the building reflects the novelty of the state-of-the-art electron microscope facility as a new design element while remaining in harmony with the existing buildings that provide the basic design. As the simple box-shaped building is designed to house an electron microscope, there are few windows and other openings. Dry area walls that resemble retaining walls are used for the three sides of the building.

## Pharmaceutical Sciences Building 1

Built in AY1974 (renovated in 2014)

R5 9,485 m<sup>2</sup>

The building is the main education and research facility of the Graduate School of Pharmaceutical Sciences. It was built to serve as a unique, high-quality world-class research center. It underwent seismic retrofitting and functional renovation.

The appearance of the north side, which is the facade of the building, is based on the design before renovation but features a futuristic clear design using glass. The horizontal line is emphasized, and the concrete handrail in the center was removed.

Each floor has a large-span experiment laboratory, and can readily adapt to layout changes in the future.



## Information Science and Technology Building C and Poplar Street Shop and Cafeteria

Built in AY2015 S7 6,567 m<sup>2</sup>

The final chapter of the Phase III plan for the Information Science and Technology Buildings to promote interdisciplinary research was intended to complete an integrated design with three buildings arranged around a courtyard. The research building was built on the west side of the courtyard, and the welfare building was built on the north side. The buildings inherit the basic design of the Graduate School of Information Science and Technology, and help create a sophisticated, consistent campus landscape.

Each floor of the research building has a communication lounge with fine views that serves as a space for facilitating communication for interdisciplinary research. The welfare building contains a convenience store and two types of eating facilities: a relaxing restaurant on the first floor and a casual cafeteria on the second floor.



## Oncology Center Building

Built in AY2015 S5-1 3,469 m<sup>2</sup>

This building was constructed to improve and strengthen the outpatient medical care system for cancer patients, upgrade and enhance the functionality of outpatient medication for cancer patients, and strengthen its role as a cancer care district liaison hospital. It is connected with the Outpatient Clinics and Central Clinical Service Wing via a connecting corridor to ensure easy access.

The exterior design is standardized to ensure harmony with the complex of existing buildings. The areas used by patients receiving treatment are finished with wood-based materials that produce a warm atmosphere. The peaceful space is brightly lit by the natural light that streams in from many windows.



## Engineering Building M3

Built in AY2015 R5 6,809 m<sup>2</sup>

This building was constructed together with the adjacent Engineering Building M1 for experiment and research on the environment and manufacturing by the Graduate School of Engineering.

Interdisciplinary innovation is expected to be attained by sustainable energy and environmental engineering, mechanical engineering, precision engineering, and the future engineering factory (which is intended for advanced and practical education).

The third floor and above are set back to the south to create a large space in the upper part of the building and provide an opening in the building complex. The exterior design is finished in white and light gray to ensure harmony with the adjacent buildings.

## Central Terrace Building



Built in AY2016

Renovation R1 1,614 m<sup>2</sup>

New construction S6 4,122 m<sup>2</sup>

The building is located in the center of the Graduate School of Engineering area. The welfare facility, which is used by 5,000 persons a day, will be renovated. The complex with rental laboratories and salons for alumni associations will be newly constructed.

## Joining and Welding Research & Office Building



Built in AY2016 R6 4,745 m<sup>2</sup>

A renovation project is planned for the experiment and research building which is recognized as the only public general research center in Japan and one of the world's leading research centers in the field of welding and joining.

## Co-Creative Innovation Building



Built in AY2017 S8 4,560 m<sup>2</sup>

A new research building will be constructed to lead global innovation in science and technology in the interdisciplinary fields in which Osaka University excels.