Following the slogan “Live Locally Grow Globally” Osaka University is aiming at producing powerful human resources and cutting edge achievements through promotion of world class research practices and advanced higher education. By the same token, we are actively promoting research cooperation with society and the industry within the field of industry-university-government collaboration, and in the process of attaining one of the highest levels of research quality in the world we seek to return the resources used to produce research results by contributing to the growth of society.

The primary responsibility for creating university founded innovation lies with our Center for Advanced Science and Innovation. The center serves as a bridge in collaborations between Osaka University and the industry and it provides support for establishing organizational structures and creates projects to attain these purposes. Simultaneously, a flexible management enables the center to function as a dynamo for innovation spawned by collaborative research with the industry, government funded research, university based venture businesses, research leading to new industrial creations and external use of the center’s open laboratory facilities. Furthermore, we are actively encouraging regional and industrial collaboration through education of entrepreneurs based on interdisciplinary educational research that integrates the humanities and the exact sciences.

In addition to being a diverse organization that collaborates with the surrounding society and strengthens the forces of Osaka University’s Office for University-Industry Collaboration and related institutions, our center is collaborating closely with external TLOs, technology transfer institutions and other organizations involved in industry-university-government collaborations, and through continued promotion of our activities Osaka University serves the function of contributing to the greater good. With the support and assistance of all our partners the center’s faculty are advancing with sustained effort in the pursuit of attaining this goal.

**Facilities and Equipment**

**Provision of Open Laboratory**

A place for will be, for a certain period, offered to projects which aim to start up a venture business by exploiting academic seeds of technology, cooperative research projects of the center, projects to be promoted by competitive research funds, or the like.

**Incubation Building (Building A)**

- Total floor space 4,289m² (including Open Lab. of 771m²)
  - Conference room, Training room
  - Seminar room, Consultation rooms (2)
  - Lounge, Lobby
  - Refreshment spaces (4)
  - Experimental laboratories

**Collaborative Research Building (Building B)**

- Total floor space 2,017m² (including Open Lab. of 668m²)
  - Consultation room
  - Refreshment space

**VBL Building (Building C)**

- Total floor space 1,989m² (including Open Lab. of 408m²)
  - Conference room
  - Social salon
  - Equipment
    - Scanning probe microscope
    - High-reputation rate tunable wavelength fs-pulse laser system
    - Nonlinear optical phenomena measurement system
    - Clean room

**Advanced Research Building (Building D)**

- Total floor space 4,106m² (including Open Lab. of 1,638m²)
  - Conference room (partitionable into 2 chambers)
  - Refreshment space (1)
  - Equipment
    - Water purifier
    - Automatic ice-maker
    - Deep freezer
    - Copy machine (monochrome, color)
    - Large-scale copy machine

- X-ray fluorescence spectrometer [XRF]
- Atomic-force microscope [AFM]
- NC precise machining system
- X-ray photoelectron spectroscope [XPS]
- Water purifier
- Automatic ice-maker
The Office for University-Industry Collaborations is promoting a great variety of activities connected with university-industry collaboration projects at Osaka University. Please check the web page [http://www.uic.osaka-u.ac.jp/] about information of the activities.

Incubation Division of Advanced Science and Technology

The division consists of five research fields in each of which broad state-of-the-art science and technology relevant to the three most important subjects in the next-generation is researched: nano-technology, green technology, and bio-technology. International joint research for applied technology development is also powerfully promoted.

Venture Business Laboratory

To encourage entrepreneur-minded students and researchers, foster innovative culture and promote innovation, the laboratory conducts:

1. Entrepreneurial education
2. Innovative research projects
3. Supporting start-up projects and companies

Advisory Division

Well-informed intellectuals outside the university will advise or make suggestions on research into advanced technologies or partnerships with industry and government.

Division of Joint Research Chair

Joint Research Chairs are research structures established within Osaka University with sponsorship by external corporations and other entities. Please check the organization lists on the web page at this center [http://www.casi.osaka-u.ac.jp/].
The research field of Electronic Materials & Systems Engineering
Prof. Yutaka Ohmori
Assist. Prof. Hirotake Kajii

In order to promote future electronic systems in low environmental cost, new electronic materials and systems are required. We investigate novel material systems with organic and inorganic materials to realize new electronic systems based on printable and flexible devices.

http://www22.casi.osaka-u.ac.jp

The research field of Functional Materials
Prof. Ken-ichi Machida
Assist. Prof. Masahiro Itoh

Our studies are focused on preparation and characterization of rare earth based materials such as magnets, phosphors, catalysts, microwave absorbers, etc. and also construction of efficient recycle system for the above materials containing scarce rare earth elements.

http://www21.casi.osaka-u.ac.jp

Incubation Division of Advanced Science and Technology

Venture Business Laboratory

1 Cultivation of human resource and entrepreneurial education
- First year seminar for undergraduate students
  Invention and Discovery
  Let’s Produce the Moving Science Contents
- Entrepreneur seminar for researchers and students

2 Innovative research projects for practical application

3 Supporting university start-ups
iCat Corp.
Newbrex Co. Ltd.
Secure Ware Corp.
Neural Image Corp.
SOSHO, Inc.
Signpost Corp.
MSI-Tokyo, Inc.

Collaborations are implemented with industrial companies or public institutions emphasizing on incubation and application of academic seeds.

Every five research fields in the division cooperates closely with related organizations and laboratories in Osaka University.

To realize technology transfer for social benefit, promoting joint researches with companies and supporting technology-based university start-ups are conducted.

More than 70 researchers are organized to promote innovative joint researches beyond the borders of graduate schools and institutes.
University−Industry Collaboration

Research Promotion and University−Industry Collaboration Board

The research field of Environments & Resources
Prof. Yasuo Takahashi
Assist. Prof. Masakatsu Maeda

Energy saving by improving energy efficiency is essential for the future sustainable society. We develop bonding / interface-controlling technology required in such ecoproducts and ecoproducts of the next generation, e.g. packaging technology of power electronic devices.

http://www24.casi.osaka-u.ac.jp

Power electronic module and one of its packaged cell installed in the latest hybrid vehicles.

The research field of Bio−technology & Life−science
Prof. Junji Takeda

As shown in the following figure, we are exploring gene functions from phenotype analysis, so-called forward genetic. For this, we combine random mutagenesis by transposon system and biallelic mutagenesis by Bloom gene deficiency.

http://www25.casi.osaka-u.ac.jp

Biallelic mutagenesis with transposon and Bloom deficiency.

Educational Activity

We perform entrepreneurial education and encourage entrepreneur-minded students and researchers via intercommunication with distinguished outside collaborators.

First year seminar for undergraduate students
- Invention and Discovery
- Let’s Produce the Moving Science Contents

Entrepreneur seminar for researchers and students

Research and Support system
Research section of VBL

VBL promotes the frontier research based mainly on optical science and technology, consisting of three project teams (PT) of an "Information & System PT", "Bio & Medical PT", and "Environment & Energy PT".

Collaboration system in Osaka Univ.

Departments of
Science, Engineering,
Engineering Science,
Medicine, Dentistry,
Pharmaceutical Science,
and Economics

President
Executive Committee

Research Promotion and University−Industry Collaboration Board

Venture Business Laboratory

- Entrepreneurial education
- Innovative research projects
- Supporting start-up projects and companies

Division Committee

The field of research in new business venture
Three Project teams
- Information & System PT
- Bio & Medical PT
- Environment & Energy PT

Entrepreneur and business development section
Venture Business PT

Open Lab. and Joint Research Space
Shared Space
Center for Advanced Science and Innovation, Osaka University
http://www.casi.osaka-u.ac.jp
Provides information about the industry-university-government collaboration activities of Osaka University.

Osaka University Office for University-Industry Collaboration
http://www.uic.osaka-u.ac.jp

Catalogue of Osaka University Researchers
http://www.osaka-u.ac.jp/ja/research/list.html
Provides educational and business backgrounds, keywords of research theme, memberships of academic society and principal accomplishments of all Osaka University professors, and it is also possible to access the list of accomplishments.

Technology Search System, Osaka University
https://seeds.casi.osaka-u.ac.jp

Osaka University
http://www.osaka-u.ac.jp

Center for Advanced Science and Innovation, Osaka University
2-1, Yamada-oka, Suita, Osaka 565-0871, Japan
TEL: +81-6-6879-7795 [Dial-in] FAX: +81-6-6879-7796
E-mail: contact@casi.osaka-u.ac.jp  URL: http://www.casi.osaka-u.ac.jp

Access

From Shin-Osaka Station
13 min. ride of the Kita-osaka Kyuko Railway bound for Senri-Chuo (interval: 8 min.)
⇒Senri-Chuo (terminus) [change to the Osaka Monorail and 6 min. ride (interval: 10 min.)]
⇒Banpaku Kinen Koen (transit station) [change to the line bound for Handai Byoin Mae and 6 min. ride (interval: 20 min.)]
⇒Handai Byoin Mae (terminus), 10 min. walk from the station

From Osaka (Itami) Airport
18 min. ride of the Osaka Monorail (interval: 10 min.)
⇒Via Senri-Chuo to Banpaku Kinen Koen (transit station)
⇒[change to the line bound for Handai Byoin Mae and 6 min. ride (interval: 20 min.)]
⇒Handai Byoin Mae (terminus), 10 min. walk from the station

From Senri-Chuo Station on the Kita-osaka Kyuko Railway
[15-20 min. ride of the Hankyu Bus bound for Handai Honbu Mae (interval: about 10 min.)]
⇒Handai Honbu Mae (terminus), 7 min. walk from the bus stop (12 min. by taxi)

From Kita-Senri Station on the Hankyu Senri Line
20 min. walk (8 min. by taxi)

From Ibaraki Station on the JR Line or Ibaraki-Shi Station on the Hankyu Kyoto Line
[about 30 min. ride of the Kintetsu Bus bound for Handai Honbu Mae (interval: 10-20 min.)]
⇒Handai Honbu Mae (terminus), 7 min. walk from the bus stop