

# NAGOYA UNIVERSITY PROFILE 2014



# Academic Charter of Nagoya University

Appreciating the intrinsic role and historical and social mission of universities, Nagoya University, as a seat of learning, hereby defines its fundamental principles of scholarly activity.

Nagoya University maintains a free and vibrant academic culture with the mission of contributing to the well-being and happiness of humankind through research and education in all aspects of human beings, society, and nature. In particular, it aspires to foster the harmonious development of human nature and science, and to conduct highly advanced research and education that overlook the broad sweep of humanities, social and natural sciences. Towards this goal, Nagoya University endeavours to implement a variety of measures based on the fundamental objectives and policies outlined below, and to unremittingly carry out its responsibilities as a pivotal university.

## 1 Fundamental Objectives: Research and Education

1 Nagoya University, through creative research activity, shall pursue the truth and produce results of scholastic distinction on the international stage.

2 Nagoya University, through an education that values initiative, shall cultivate courageous intellectuals endowed with powers of rational thought and creativity.

## 2 Fundamental Objectives: Contribution to Society

1 Nagoya University, in spearheading scientific research, and through the cultivation of human resources capable of exercising leadership both in the domestic and international arenas, shall contribute to the welfare of humanity and the development of culture, as well as to global industry.

2 Nagoya University shall put to good use the special characteristics of the local community and, through multi-faceted research activities, contribute to the development of the region.

3 Nagoya University shall promote international academic co-operation and the education of foreign students, and contribute to international exchange, especially with Asian nations.

## 3 Fundamental Policies: Research and Education System

1 Nagoya University shall study the various phenomena of the humanities, society and nature from an all-inclusive viewpoint, respond to contemporary issues, and adjust and enrich its education system to generate a new sense of values and body of knowledge founded on humanity.

2 Nagoya University shall provide for an education system that rightly inherits and develops intellectual resources cultivated in the world's intellectual traditions, and promote educational activity that is both advanced and innovative.

3 Nagoya University, through the active dispatch of information and exchange of personnel, and interinstitutional co-operation in Japan and abroad, shall shape the international foundation of academic culture.

## 4 Fundamental Policies: University Administration

1 Nagoya University shall at all times support scientific enquiry based on the autonomy and initiative of its members, and guarantee freedom of academic research.

2 Nagoya University shall require its members to participate in the drafting and implementation of both ideals and objectives related to research and education, as well as administrative principles.

3 Nagoya University, in addition to promoting autonomous assessment and evaluation from its members with regard to research, education and administrative activity, shall actively seek critical appraisal from external authorities, and aspire to be an accessible university.

\*This is a provisional translation and subject to change.

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## Greeting from the President

As the President of Nagoya University, I offer you my most sincere greetings. I assumed the post of President in April 2009, and this year will be my final one.

Throughout its history, Nagoya University has done its utmost to maintain a free and vibrant academic culture. As an educational institution, we aim to cultivate what we call “courageous intellectuals”: social contributors endowed with the powers of rational thought and creative imagination. Today, we are taking new steps to become a globalized university where students are able to acquire comprehensive knowledge, develop personal ethics, and aspire to international careers.

This year, we have set ourselves the challenge of addressing the “Super Global University” initiative. This initiative has three main aims. First, to expand the G30 program, which began in October 2011 and offers degree programs taught entirely in English. Second, to establish satellite campuses in Asia, which we will be the first among Japanese universities to attempt, and begin offering doctoral programs aimed at high-ranking administrators. Over the past 20 years, Nagoya University has laid stress on fostering outstanding human resources in Asia. As a result, NU graduates are currently playing key roles at vice-ministerial and director-general level in many countries. The majority of these students, who studied in Japan with the support of JICA, returned to their home countries after finishing their master’s programs. Although many of them would like to continue their education further, it is difficult for them to study for a doctoral program because they play such an important role in their country’s government. Nagoya University hopes to offer an opportunity for these talented people to continue their research, utilizing teaching locally and in Japan, making full use of ICT for distance learning and research supervision, and letting students publish papers in international journals, thereby conferring doctoral degrees upon them. In the near future, they will contribute further to their countries with doctoral degrees from NU. The third aim is to have Nagoya University become an Asian hub university. The main purpose of establishing satellite campuses in Asia is to strengthen the relationships between key Asian universities, as bases to which our Japanese students can be dispatched and as points to strengthen collaboration with outstanding Asian universities.

This is to be my final year, and I would like to contribute as much as possible to the development of Nagoya University.

I cordially invite you to join us at Nagoya and explore the “traditional” free and vibrant academic culture in the very central part of exciting Japan.

### Dr. Michinari HAMAGUCHI

#### Educational Background and Professional Experience

- 1980 M.D., Ph.D., Nagoya University  
Research Associate, Cancer Research Facility,  
School of Medicine, Nagoya University
- 1993 Professor, Pathological Control Research Facility,  
School of Medicine, Nagoya University
- 2002 Director, Pathological Control Research Facility,  
School of Medicine, Nagoya University
- 2003 Professor, Center for Neural Disease and Cancer,  
Graduate School of Medicine, Nagoya University
- 2004 Director, Center for Medical Education Research and Support,  
Graduate School of Medicine, Nagoya University
- 2005 Dean, Graduate School of Medicine and School of Medicine,  
Nagoya University
- 2009 President, Nagoya University

**Area of Expertise**  
Cancer biology, cancer biochemistry, cellular biology

**Area of Research**  
Molecular mechanism in cancer invasion and metastasis

**Hobbies**  
Music appreciation, drawing, gardening



**Dr. Michinari HAMAGUCHI**  
President  
Nagoya University

## The Hamaguchi Plan (Version 2013)



### Accelerating Nagoya University's Internationalization

#### 1. Cultivation of Global Leaders

Enrichment of liberal arts education  
Strengthening of global competitiveness through the Global 30 Program, Re-Inventing Japan Project, and Programs for Leading Graduate Schools

#### 2. Promotion of World Class Research

Cultivation of internationally recognized young researchers  
Exploration of new frontiers through the utilization of cutting-edge facilities

#### 3. Organizational Innovation

Development and expansion of the Graduate School of Pharmaceutical Sciences  
Reorganization of educational and research functions  
Collaboration with other universities

#### 4. Collaboration with and Further Contribution to Local and Regional Communities

Collaboration with the "Knowledge Hub" Project and Promotion of community health systems

#### 5. Raising of Nagoya University Fund

Five billion yen within 5 years for use toward scholarships and student support

### Education, Research and Social Contributions

#### Cultivation of Global Leaders

- Enrichment of liberal arts education
  - Strengthening of the Institute of Liberal Arts and Sciences and improvement of learning support systems
- Improvement of the English ability of Japanese students
- Emphasis on the development of academic competence, sociality, and critical thinking
- Promotion of Programs for Leading Graduate Schools
- Enrichment of programs for international students
  - Increase of programs taught in English and of international students to over 3,000 by 2020
- Collaboration with language education consortium and with the area universities
- Increase in number of scholarships through a variety of funding sources
- Support of extracurricular activities

#### Internationalization of Nagoya University

- Strengthening of relationships with overseas partner institutions as well as institutions within Academic Consortium 21 (AC21)
- Strengthening of global competitiveness through the Global 30 Program and the Re-Inventing Japan Project
- Recruitment of outstanding international students
- Internationalization of support services on-campus

#### Promotion of World Class Research

- Establishment of the World Premier International Research Center Initiative (WPI) - Institute of Transformative Bio-Molecules
- Exploration of new frontiers in research through the utilization of the Ultra High Voltage Electron Microscope and Synchrotron Radiation facility
- Acquisition of major research grants and support of world class researchers
- Cultivation of graduate students, postdoctoral fellows, and junior faculty (Young Leaders Cultivation Program etc.)
- Encouragement of inter-disciplinary collaboration and joint research

#### Collaboration with Industry, Government and Community

- Strengthening of collaboration with industry and government institutions
  - Establishment of centers of excellence and promotion of technology transfer and innovation
- Strengthening of collaboration with local government
  - Support of research projects and sharing of research outcomes through cooperation with the "Knowledge Hub" Project
- Cultivation of human resources through cooperation with industry and government
- Further collaboration with media agencies for outward communication
- Strengthening of ties with alumni, parents, and community

### University Hospital and University Affiliated Secondary Schools

#### Further Improvement of the University Hospital as a Flagship Institution at National Level

- Provision of high-quality medical care with utmost priority on safety
- Cultivation of the next generation of healthcare professionals
  - Consolidation of a career path for cultivation of medical specialists
  - Strengthening of the network of postgraduate clinical training
  - Display of leadership through promotion of community health
- Development of innovative healthcare for the future community
  - Promotion of translational medical research and development of centers for the advancement of state-of-the-art medicine
  - Promotion of Chubu Regional Consortium for Advanced Medicine (C-CAM)
- Globalization and development of ICT systems toward borderless health care

#### Enrichment of the Affiliated Secondary Schools

- Strengthening of management through the School Council
- Improvement of education through collaboration between the schools and the University
- Establishment and development of a system to accept international students in senior high school



### Administration and Finance

#### Reorganization of Education and Research Institutions and Improvement of Administrative and Support Efficiency

- Evaluation and reorganization of functions to ensure total optimization
- Development of the Graduate School of Pharmaceutical Sciences and the Kobayashi-Maskawa Institute for the Origin of Particles and the Universe (KMI)
- Encouragement of inter-university collaboration
- Promotion of integrity of university administration
- Enhancement of administrative support and services, and consolidation of their functions for improvement of educational and research environment
- Promotion of Equal opportunities

#### Evaluation, Benchmarking, and Outward Communication

- Assessment of academic activities of Nagoya University institutions every 3 years
- Enrichment of the information in Faculty Profile and increase of publicity of faculty's activities
- Publicizing of outstanding research results and lectures
- Keeping our status as one of the world's top 100 universities

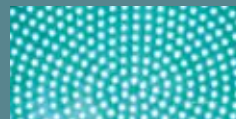
#### Maintenance and Improvement of Financial Stability

- Securement of sufficient competitive research funding
- Maintenance and improvement of sound financial management practices at University Hospital
- Raising of Nagoya University Fund
  - Five billion yen within 5 years for use toward scholarships and student support

#### Facilities, Safety, and Other Aspects

- Further enhancement of the eco-friendly campus
- Improvement of the management system of facilities and equipment on campus
- Optimized use of campus space and facilities
- Expansion of accommodations for international students and faculty
- Improvement of core research and education facilities as well as campus environment
- Timely response to harassments and other issues
- Proper use and storage of high-risk chemicals and radioactive materials in accordance with government regulations
- Observance of the Occupational Safety and Health Act
- Compliance, risk management, and preparation against disaster

# Excellence in Research Fostered by a Free and Vibrant Academic Culture



Professor Isamu AKASAKI and Blue Light-emitting Diodes



Four Nobel Laureates Demonstrate Nagoya University's World-class Research Excellence



New Flagship Research Initiatives

Selection for the Program for Promoting the Enhancement of Research Universities - Top Four Highest Ranking Institutions -  
Center of Innovation for Personalized and Diverse Society - Society and Mobility for Realizing an Active and Happy Lifestyle -  
Institute of Transformative Bio-Molecules (ITbM)  
National Composites Center(NCC)  
Green Mobility Collaborative Research Center –Realizing a Low-Carbon Society–  
Disaster Mitigation Research Center (DMRC)

自由闊達な空気が生む際だつ研究力

## Professor Isamu AKASAKI and Blue Light-emitting Diodes



Dr. Isamu AKASAKI

### Producing a New Light Source for the 21st Century

Thinking it would be too difficult to realize within the 20th century, many researchers abandoned development of high-performance blue light-emitting diodes (LEDs). However, University Professor Isamu Akasaki remained steadfast in his research for 20 years. In 1989, he succeeded in becoming the first to achieve the goal of producing a new light source for the 21st century.

Professor Akasaki achieved this by using the compound gallium nitride (GaN), revolutionizing the field of semiconductor research. Blue LEDs offer immeasurable benefits to society, and are utilized today in a wide range of technologies such as traffic lights, large-scale display monitors, next-generation optical memory discs, and even home lighting. The applicability of GaN and related semiconductors does not end with its use in light sources. It is also expected that they can be applied to such technologies as ultra high-speed, high-power transistors and UV detectors, which will be indispensable in an IT-based society.

During his life as a researcher, Professor Akasaki held fast to his idea that "Once you've resolved to accomplish something, never give up."

Among the many awards he has received, in 2004, in honor of the research results he achieved with such unwavering resolve, he was recognized as a Person of Cultural Merit by the Japanese government for his significant contributions to culture.



**Dr. Ryoji NOYORI**

1967 Ph.D., Kyoto University  
 1968 Associate Professor of Chemistry, Nagoya University  
 1997-1999 Dean, Graduate School of Science, Nagoya University  
 2003-University Professor, Nagoya University



**Dr. Toshihide MASKAWA**

1962 Graduated from School of Science, Nagoya University  
 1967 Ph.D., Nagoya University  
 Research Associate, School of Science, Nagoya University  
 2007- Distinguished Invited University Professor, Nagoya University  
 2009- University Professor, Nagoya University



**Dr. Makoto KOBAYASHI**

1967 Graduated from School of Science, Nagoya University  
 1972 Ph.D., Nagoya University  
 2008- Distinguished Invited University Professor, Nagoya University  
 2009- University Professor, Nagoya University



**Dr. Osamu SHIMOMURA**

1960 Ph.D., Nagoya University  
 1963 Associate Professor, School of Science, Nagoya University  
 2008- Distinguished Invited University Professor, Nagoya University  
 2009- University Professor, Nagoya University

### Nobel Prize in Chemistry, 2001

In October 2001, the Royal Swedish Academy announced its award of the Nobel Prize in Chemistry to Dr. Ryoji Noyori and Dr. W. S. Knowles (USA) for their work on chiral catalyzed hydrogenation reactions, and to Dr. K. B. Sharpless (USA) for his work on chiral catalyzed oxidation reactions. Their research – an important topic of study in the 20th century – enabled Dr. Noyori and his fellow laureates to realize their dream of making possible the artificial and preferential production of enantiomers. Enantiomers are molecules existing in many organic compounds that are mirror images of each other but not identical, i.e., with a right- and left-side relationship but with each side having a different character. While one side could become a promising medicine, the other could equally become a dangerous toxin. It has therefore become a major issue in chemistry to find ways to preferentially produce right- and left-side products. Dr. Noyori's research makes it possible to artificially produce right- and left-side molecules using catalysts. This research has tremendous potential in the creation and production of medicines, aromatic chemicals, and materials in harmony with the natural environment.

In 1957, Dr. Noyori entered the Undergraduate School of Industrial Chemistry, Faculty of Engineering at Kyoto University, and later was appointed associate professor at Nagoya University, involved in synthetic organic chemistry. After switching his research base from Nagoya University to Harvard for postdoctoral work, he returned to Nagoya University and become a full professor in 1972. The research contacts he made with many renowned chemists offered him expanded opportunity to continue his search for the development and application of new methodologies in the field of organic chemistry. Presently, Dr. Noyori is an organic chemist based at Nagoya University and president of the RIKEN and continues to realize remarkable achievements in the field of organic chemistry through his collaborations with numerous researchers worldwide.



Dr. Maskawa and Dr. Kobayashi while attending graduate school



At a party hosted by Theoretical Particle Physics Group (E-ken), Graduate School of Science



At the 3rd Yoshimasa Hirata Memorial Lecture

### Nobel Prize in Physics, 2008

In October 2008, the Academy announced its award of the Nobel Prize in Physics to three esteemed scientists: Yoichiro Nambu (USA), and Nagoya University graduates Toshihide Maskawa, a Distinguished Invited University Professor at Nagoya University, professor emeritus at Kyoto University, and professor of physics at Kyoto Sangyo University, and Makoto Kobayashi, professor emeritus at the High Energy Accelerator Research Organization (KEK). The two Nagoya University scientists received the Nobel Prize for forecasting, over three decades ago, "the discovery of the origin of the broken symmetry which predicts the existence of at least three families of quarks in nature." In 1972, the two presented their Kobayashi-Maskawa theory, which states that CP symmetry violation can be explained with six types of quarks, one of the subatomic particles that constitute matter. This theory was proved in 1995 with the discovery of the sixth quark, known as the top quark. Among the numerous theories attempting to explain CP symmetry violation, the Kobayashi-Maskawa theory remains the most concise and well-formed, and today is one of the key components of the standard model of particle physics.

Professor Maskawa graduated from Nagoya University's School of Science in 1962. After completing his doctoral course in science in 1967, he continued his career as a research associate in the science department, then as a professor of the Institute of Nuclear Study at the University of Tokyo and later as a professor at Kyoto University's Yukawa Institute for Theoretical Physics (YITP). In 2003, he became a professor at Kyoto Sangyo University's Faculty of Science, and in October 2007 was appointed Distinguished Invited University Professor at Nagoya University.

Professor Kobayashi graduated from Nagoya University in 1967 and, after completing his doctoral course in science in 1972, became a research associate at Kyoto University's Faculty of Science. He later became a professor at KEK, the High Energy Accelerator Research Organization, and then director of the Institute of Particle and Nuclear Studies at KEK before becoming a professor emeritus at the same institute.

### Nobel Prize in Chemistry, 2008

It was great news in October 2008 when organic chemist and marine biologist Professor Osamu Shimomura from Nagoya University was announced as one of three distinguished scientists to receive the 2008 Nobel Prize in Chemistry, sharing it with Martin Chalfie of Columbia University and Roger Y. Tsien of the University of California, San Diego. They received this award for the discovery and development of the green fluorescent protein, GFP. Professor Shimomura was the first to discover and successfully refine GFP in luminous jellyfish. Using this GFP as a marker, it is now possible to directly observe protein behavior in living cells. This significantly contributes to the development of molecular biology and biosciences.

Professor Shimomura spent two and a half years at Nagoya University's School of Science as a research student and received his PhD in Sciences in 1960. In that same year, he went to Princeton University as a Fulbright scholar, then returned to Japan and for two years beginning in 1963 was an associate professor in the School of Science at Nagoya University. Today he is a professor emeritus at Marine Biological Laboratory (MBL) in Woods Hole, Massachusetts and Boston University Medical School.

## New Flagship Research Initiatives

### Selection for the Program for Promoting the Enhancement of Research Universities

#### - Top Four Highest Ranking Institutions -



Nagoya University was selected as an institution to receive support under the Program for Promoting the Enhancement of Research Universities, as one of the top four highest ranking institutions with a research budget of 400 million yen a year.

(Total no. of institutions selected: 22, project period: 10 years)

The aim of the Program is to ensure the development of research management personnel and research administration system of the university, and implement initiatives for improving the research environment needed for an top research university; Nagoya University's plan, "The Progress of Youth at Nagoya University" for strengthening research abilities and internationalization supporting for young researchers, was highly evaluated: detailed measures involved a promise to establish research units with outstanding overseas researchers, open all teaching posts up for international application, offer tenure track positions to assistant professors, and put the strengthening of research support systems into practice.

Under the leadership of our President, NU intends to continue its plans for improving its research abilities and, through such projects and by putting in independent funding, to enter the Times Higher Education's top 100 universities worldwide within 10 years, pushing forward toward even stronger research.

### Center of Innovation for Personalized and Diverse Society

#### - Society and Mobility for Realizing an Active and Happy Lifestyle -



Fig.1. Future Mobility and Society as the end goal of Nagoya COI.

Japan had already shifted to become a super-aging society. In order to retain and enhance the sustainability of our society, it is important to encourage activities that can prevent the mental and physical depression of elderly people.

Mobility is not only limited to transportation or automobiles, but also represents the ability to move freely and safely when you wish to do so. Suitable mobility can help the elderly to strengthen human communications and build up social connections and, finally, will lead to an active and happy life with strong bonds with the people around them.

In order to realize such a society, Nagoya COI implements innovative technologies linked with social systems by combining leading concepts within a wide research area, including engineering, medical science, information science, neuroscience, science of art, and social innovation design science, as shown in Fig.1.

### Institute of Transformative Bio-Molecules (ITbM)



Laboratory



Logo of the ITbM

#### Institute of Transformative Bio-Molecules (ITbM)

The Institute of Transformative Bio-Molecules (ITbM) was launched at Nagoya University in December 2012. The ITbM is supported by the World Premier International Research Center Initiative (WPI), the flagship program of the Ministry of Education, Culture, Sports, Science and Technology (MEXT).

#### What is the WPI?

The WPI provides priority support for projects aimed at creating top-level research centers with the world's leading researchers as core staff. The WPI was established in 2007, and six WPI institutes were selected and established: The University of Tokyo (Math/Physics/Universe), Kyoto University (Cell/Materials), Osaka University (Immunology), Tohoku University (Materials), National Institute for Materials Science (Nano technology), and Kyushu University (Energy). In 2012, the WPI expanded to include three center projects, and Nagoya University's ITbM (Synthetic Chemistry/Plant-Animal Biology) was selected together with Tokyo Institute of Technology (Earth-Life Science) and Tsukuba University (Sleep Medicine).

#### Changing the world with molecules

Molecules are small but essential parts of all life on the planet. Molecules are groups of atoms, chemically bound together, that behave as a single unit. They are central to the operation of all industries, including pharmaceuticals, agrochemicals, electronic materials, solar cells, displays, petrochemicals, automotive manufacturing, plastics and many more sectors. Molecules have the power to change the way we do science and the way we live. By merging synthetic chemistry, catalysis chemistry, systems biology, and plant/animal science, which are the strengths of Nagoya University, the ITbM aims to create cutting-edge molecular science with potentially significant societal impact.

#### ITbM: The first international institute merging synthetic chemistry and plant/animal biology

At the ITbM, we aim to create a new interdisciplinary field of research through the collaboration of cutting-edge molecular synthetic chemistry and animal/plant biology,



Aims of the ITbM

#### I) Control of Biological Systems

- (a) Molecules that dramatically enhance plant growth
- (b) Molecules that improve animal reproduction innovatively
- (c) Molecules that overcome the genome barrier to produce novel crops

#### II) Visualization of Biological Systems

- (a) Targeting plant fertilization, embryogenesis, and animal season sensing
- (b) Highly efficient, full-color fluorescent molecules
- (c) Specific conjugation technologies for peptide labeling

#### III) Synthesis of New Bio-Functional Molecules

- (a) Catalysts activating C-H bonds for direct transformations of bio-molecules
- (b) Catalysts acting without heavy metals
- (c) Catalysts for protein ligation

## New Flagship Research Initiatives



From left to right in the front row: Prof. Keiko Torii (University of Washington, U.S.A.), Jeffrey W. Bode (ETH-Zürich, Switzerland), Kenichiro Itami (Director), Cathleen M. Crudden (Queen's University, Canada), Stephan Irle, Takashi Ooi; From left to right in the back row: Prof. Tetsuya Higashiyama (Vice-Director), Toshinori Kinoshita, Takashi Yoshimura, Shigehiro Yamaguchi

and to deliver bio-molecules that change the way we live. Such innovative molecules are defined as “transformative bio-molecules”.

Many transformative bio-molecules have been developed to date. A few examples of molecules that have changed the world include the antibiotic, penicillin; the anti-influenza drug, Tamiflu; the revolutionary bio-imaging tool, green fluorescent protein (GFP); and the potential next generation solar cell material, fullerene. Chemists and biologists are working side by side at the ITbM for extensive collaboration to generate a new research area on the boundaries of chemistry and biology. This new area of research will address urgent social issues on the environment and food production, along with advances in medical technology.

### Ambitious, full-scale international collaboration of synthetic chemists, plant/animal biologists, and theoreticians

The team of PIs is an innovative mix of chemists and biologists from Japan and abroad, chosen for their excellence in science, diversity, and commitment to the project, and with a thought for the sustainability of the Institute. With the average age of the founding PIs at 43, there is no doubt they will be highly active throughout the duration of the project and well beyond the 10-year funding envelope.

### Mix-Lab Concept

The ITbM has set up “Mix-Labs”, which is a lab space where synthetic chemists and biologists are allocated spots next to each other, with theoretical chemists situated nearby to enable interactive discussions. This has led to effective mixing of research areas by integrating researchers from different disciplines into the same environment. The ITbM research award has also been established to acknowledge and provide funding for interdisciplinary research proposals by young ITbM researchers in order to enhance further mixing of research areas.

The majority of the postdoctoral researchers at the ITbM are from overseas and they are carrying out experiments in the Mix-Lab with Japanese graduate students of Nagoya University. Consequently, Japanese graduate students are able to experience an international research environment. In addition, the Administrative Department consists of bilingual staff to effectively correspond with overseas researchers, thus establishing a truly international environment.

### Heading for tomorrow

The ITbM project is crucial to further enhancing the prestige and international visibility of Nagoya University, and also for leading a remarkable reformation of research culture. The ITbM will establish the “stage” on which researchers, sharing responsibility and problem awareness, can talk about their dreams freely and can put their innovative ideas into practice immediately. What the ITbM's future success brings will not be limited to innovations in bio-molecular research. The Institute, with researchers from various backgrounds, will accelerate the mixing/merging of people, ideas, and research, and also help nurture a new generation of scientists unrestricted by the bounds of traditional disciplines. This will surely have a positive influence on the way Japanese universities carry out research and education. In this regard, the ITbM must not fail to succeed.

The ITbM will connect molecules, create value, and change the world, one molecule at a time.



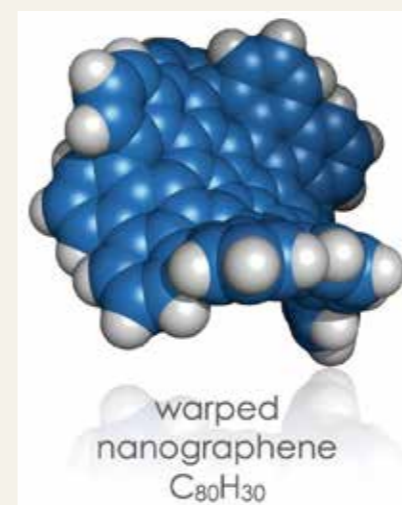
From left to right: Prof. Kenichiro Itami, Tetsuya Higashiyama

### Professor Kenichiro Itami, Director

The work of Professor Kenichiro Itami, Director of the ITbM, has centered on catalyst-enabling synthetic chemistry with broad direction. The main emphasis of the ITbM's current research activity is on the development of new molecular catalysts to solve challenging synthetic problems in order to realize super-efficient chemical synthesis and molecule activation in high demand, and to produce as-yet unexplored molecules of significant interest in various fields.

A series of contributions from his group not only streamlined the state-of-the-art synthesis of useful molecular entities, but also changed the way chemists plan and execute syntheses and design functional molecules. For example, the rapid synthesis of a number of biologically active compounds and pharmaceutically relevant molecules is now possible thanks to the use of his catalysts. In particular, some of the most recent results from his lab on the discovery of novel potent inhibitors of important enzymes make it clear that a truly efficient catalyst can have a huge impact in biology. Currently, a number of pharmaceutical and agricultural companies as well as chemical industries have already started to use his catalysts on a daily basis.

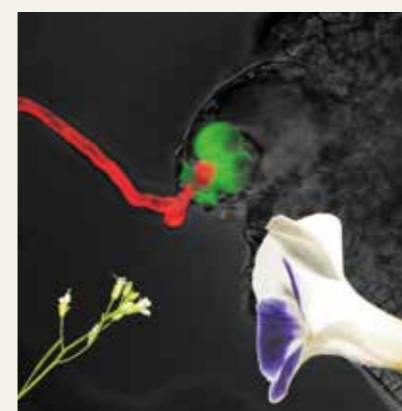
At the ITbM, the Itami group is applying its catalysts and reactions (in particular the C-H coupling) to synthesize or develop key molecules that can precisely control or visualize biological systems. Representative targets include (i) molecules that control plant growth; (ii) molecules that modulate the biological clocks of plants and animals; and (iii) molecules that realize innovative bio-imaging.



Warped nanographene

### Professor Tetsuya Higashiyama, Vice-Director

Professor Tetsuya Higashiyama has been working on plant reproduction with special focus on key molecules for pollen tube guidance, double fertilization, and early embryogenesis, which are directly involved in crop production and plant breeding. Pollen tube guidance is the mechanism whereby a tubular cell emerging from the pollen grain of its own species is guided to the target ovule tissue in the flower. By his unique approach to live-cell biology, Professor Higashiyama succeeded in identifying pollen tube attractant peptides, or LUREs, which are key molecules for species recognition and which had been sought for more than 140 years. His unique strategies and techniques use interesting non-model plants, live-cell imaging, and manipulation of targeted cells in order to identify physiological mechanisms and biologically active molecules. At the ITbM, Professor Higashiyama will develop molecules that overcome genome barriers for designed hybrid breeding. Molecules that permit innovative bio-imaging will also be developed to visualize the behavior of all signalling molecules in plant fertilization and embryogenesis.



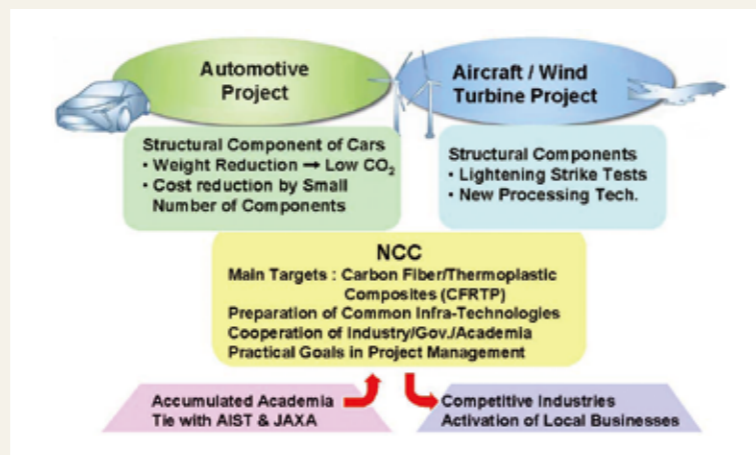
Interspecific pollen tube attraction through LURE engineering



Mix-Lab

## New Flagship Research Initiatives

### National Composites Center (NCC)



Hydraulic Press Machine



IR heater

On April 1, 2012, the National Composites Center (NCC) was founded at Nagoya University. Although carbon fiber (CF) manufacturing industries in Japan are considered to be one of its strongest fields, due to the fact that Japanese CF industries have a 70% share of the world market, we cannot necessarily state that carbon/polymer composite processing industries in Japan are strong enough when compared with the situation of their European counterparts. In order to activate those composite processing industries and innovate related technologies, a budget from the Ministry of Economics, Trades and Industries (METI) was approved for Nagoya University in 2011, and installation operations for NCC began. The first figure symbolizes the activity of NCC, focusing on automotive industries and aerospace/wind turbine industries, which are based in the Greater Nagoya Area and dominate the south-eastern Asian region in their fields.

Two major facilities have been built on Higashiyama Campus: the hydraulic press machine (35,000KN) with twin extruder (LFT-D device), and the lightning strike test facility, as shown in the following figures. These were completed in spring 2013. The press machine is mainly used for the development of low-cost CF/thermoplastic composite technologies for future automobile bodies. The lightning facility is used for the development of composite structure evaluation technologies for aircraft or wind turbines. A special building has been constructed in order to house these two major facilities and other equipment. With the support of METI research funding from FY2013, NCC will challenge itself to achieve world-class, high-level results in advanced composite technologies, and to contribute to local industries and communities by transferring those achievements beyond the NCC itself.

### Green Mobility Collaborative Research Center

#### —Realizing a Low-Carbon Society—

Knowledge in the field of Green Mobility engineering at Nagoya University is concentrated in the Green Mobility research group.

An international-level Green Mobility research hub has been established to sharpen and refine international research relating to the environment, energy, safety, security, robotics, and control systems, to collaborate with organizations outside the university, to develop human resources, and to make comprehensive contributions to society at large.

Benefits of Establishing the Center are as follows:

- (1) High-risk Basic Research for Green Mobility Innovation
- (2) Strengthened Collaboration in Research between Industry and Academia for Green Innovation
- (3) Formation of Research Core in Advanced Fusion Areas for Green Mobility Innovation
- (4) Globalization and Research Core Development to Take Advantage of Regional Characteristics and Uniqueness
- (5) Human resource Development for Green Mobility
- (6) Japan's Leading Role in International Standardization



### Disaster Mitigation Research Center (DMRC)



Laboratory

On January 1, 2012, the Disaster Mitigation Research Center (DMRC) was founded at Nagoya University. Nagoya City and the surrounding Chukyo area are vulnerable to natural hazard risks due to large earthquakes along the Nankai Trough plate boundary, which are repeated almost every century. The Japanese government estimates the probability of the occurrence of a large earthquake in this area during the next 30 years at 60-70 %, and the worst-case scenario predicts that economic loss will reach as much as 220 trillion yen. The area also has a history of damaging floods and storms associated with global warming. Since this area is the center of industrial production in Japan, the natural hazard risks may cause a serious crisis at a national level. Thus, the DMRC promotes cooperative multidisciplinary research for developing a state-of-the-art disaster mitigation model and applying it to ensure the local community is safe and secure. The DMRC provides a cooperative framework for local government, companies, and citizens to improve the preparedness of the local community for future natural hazards. In addition, the DMRC offers disaster mitigation training courses for local public officers and volunteers.

For these purposes, academic staff from the Graduate School of Environmental Studies, Graduate School of Engineering, Graduate School of Medicine, and Graduate School of Education and Human Development have joined the DMRC. In addition to 6 full-time professors, approximately 30 auxiliary professors are working together at the DMRC.



# Nurturing Future Global Leaders



## Program for Leading Graduate Schools at Nagoya University

Graduate Program for Real-World Data Circulation Leaders  
"Women Leaders Program to Promote Well-being in Asia"  
Integrative Graduate Education and Research Program in Green Natural Sciences  
The Program for Cross-Border Legal Institution Design  
Leadership Development Program for Space Exploration and Research  
PhD Professional: Gateway to Success in Frontier Asia



## Re-Inventing Japan Project at Nagoya University

Training human resources for the development of an epistemic community in law and political science to promote the formation of "Jus Commune (common law)" in East Asia  
A Cooperative Asian Education Gateway for a Sustainable Society: Expanding the Frontiers in Science and Technology of Chemistry and Material  
Japan-US Advanced Collaborative Education Program  
Training a New Generation of Leaders in International Cooperation for the Development of the ASEAN Region



## The Global 30 Project – Bringing Nagoya University to the World



## Global Environmental Leaders Program



## Nagoya University Summer Intensive Program (NUSIP)



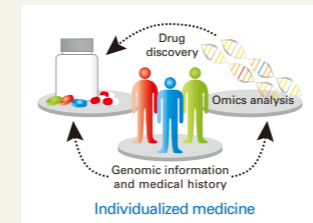
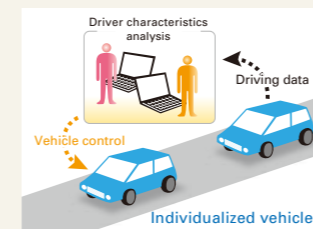
## NUPACE: Nagoya University's Academic Student Exchange Program

世界に通用する真のリーダーを育成

## Program for Leading Graduate Schools at Nagoya University

This enterprise, which has been implemented since 2011 by MEXT, aims to cultivate globally active leaders; to this end, it gathers together first-class teaching staff and students from both inside and outside Japan and supports projects at universities which are forming and developing five-year unified doctoral programs that will be of use globally. 62 programs have been selected from across Japan for this enterprise, six of which are at Nagoya University. These six programs are outlined below:

## Graduate Program for Real-World Data Circulation Leaders



Example of Real-World Data Circulation

The field of real-world data circulation aims to integrate the acquisition, analysis, and implementation of data in engineering, information science, medicine, and economics research. This program will foster leaders in industrial technologies, rather than in basic sciences, who can generate effective data circulation in order to create positive social values. The acquisition phase involves observing digital data obtained from real-world phenomena to understand the wishes of the users. The analysis phase evaluates this data using information science. The implementation phase uses the results to develop innovative products and services. In addition to developing a comprehensive understanding of the above three phases, students in the program will systematically study methodologies in fields that deal with the fundamental values of convenience (engineering), happiness (information science), health (medicine), and affluence (economics).

## "Women Leaders Program to Promote Well-being in Asia"



This program has been designed to address problems that must be solved in the Asian region, which consists of multicultural societies in various stages of development. These problems include poverty, diverse health problems, and gender gaps. With a focus on food, health, the environment, social systems, and education, we aim to foster women leaders who can work in a global context to achieve well-being in Asia. Well-being refers to a situation in which the rights and personal fulfillment of individuals are guaranteed and to a state characterized by good physical, mental, social, and economic conditions. This program is jointly undertaken by four graduate schools -- International Development, Education and Human Development, Medical Sciences, and Bioagricultural Sciences -- as well as the International Cooperation Center for Agricultural Education and the Office for Gender Equality.

# Program for Leading Graduate Schools at Nagoya University



**Number of Research Assistants**  
 50 (FY2011)  
 194 (FY2012)  
 183 (FY2013)

## Integrative Graduate Education and Research Program in Green Natural Sciences

This program is grounded in NU's achievements in the field of Green Natural Sciences; in cooperation with the representative Japanese industry-government-academia research bodies the Institute for Molecular Science, National Institute for Basic Biology, RIKEN, National Institute of Advanced Industrial Science and Technology, Toyota Central R&D Labs, and Toyota Physical and Chemical Research Institute, the program fosters "an extensive view of scientific capacity and social awareness", "the capacity for development in drawing practical outcomes from basic research", and "globally active internationality"; and cultivates "corporate researchers who will raise seeds and solutions in industry", "academic researchers who will raise new ways of thinking in scholarship", and "environmental science coordinators and mentors who will work actively in international society".



**Number of Students who received a study grant**  
 5 (200,000yen/month) (FY2012)  
 11 (200,000yen/month) (FY2013)

## The Program for Cross-Border Legal Institution Design

This program fosters networks of international leaders with a strong awareness of Asia through joint research on comparative law and comparative politics by Japanese and international students. Within this, and with an understanding of Japan's originality, the program develops leaders who can organize and supervise international teams working on enterprises to plan and design legal institutions that will become the foundations of social operations in various countries.



**Number of Teaching Assistants**  
 3 (FY2013)

**Number of Research Assistants**  
 44 (FY2012)  
 53 (FY2013)

**Number of Students who received a study grant**  
 4 (200,000yen/month) (FY2013)  
 3 (170,000yen/month) (FY2013)

## Leadership Development Program for Space Exploration and Research

This program aims to expand the utilization of the space environment, the final frontier for humankind, by fostering global leaders capable of exploring this environment and the fundamental truths about space, of spearheading the development of advanced technologies and materials for space development and utilization, and of pioneering other next-generation industries. Our graduates will have broad experience and solid expertise, project planning, implementation and management, problem-solving, and global communication skills. A flagship of this program is the ChubuSat instrument development program, where teams of students with different sets of interests, skills and expertise develop instruments for the industry-academia micro-satellite project, ChubuSat. Students can exercise problem-solving and project management through hands-on experiences of instrument development.



**Number of Research Assistants**  
 92 (FY2012)  
 62 (FY2013)

**Number of Students who received a study grant**  
 13 (200,000yen/month) (FY2013)  
 7 (85,000yen/month) (FY2013)

## PhD Professional: Gateway to Success in Frontier Asia

The objective of this program is to cultivate next-generation leaders to support the globalization of the manufacturing industry, as a new growth strategy for Japan. While Japan needs its manufacturing business to prosper in the global market, "Frontier Asian" countries – newly emerging economies such as Vietnam and Mongolia – as production sites in the global economy can benefit from Japan's expertise in technology and investment for venture capital to assist their economic growth. This new academic program is intended to train young minds from the arts, sciences and engineering to become a leading workforce in strengthening ties between Japan and Frontier Asia.

### Training human resources for the development of an epistemic community in law and political science to promote the formation of “Jus Commune (common law)” in East Asia

This project is aimed at developing, on the basis of an understanding of the Western “global standards of law,” human resources for an epistemic community in law and political science that can take an active role in discussions with a view toward forming a jus commune (common law) in East Asia. In this project, Nagoya University collaborates with partner universities in China and Korea through exchange programs for undergraduate students based on reciprocal conferment of academic credits, as well as other forms of exchange of quality-assured research and education. The participating universities thus exchange legal information in East Asia, together working toward forming theories on Asian law and assistance for legal infrastructural development, as well as establishing common standards for jurist training and law school education.

### Japan-US Advanced Collaborative Education Program



The Japan-US Advanced Collaborative Education Program (JUACEP) focuses on research-based education through the co-study and co-work of Japanese and foreign students at the graduate level in the field of engineering. Its primary focus is to initiate a student exchange program between Nagoya and the US universities; Graduate School of Engineering, Nagoya University has formed partnership agreements with College of Engineering, the University of Michigan and Henry Samueli School of Engineering and Applied Science, the University of California, Los Angeles (UCLA). The exchange students stay at partner universities as visiting scholars and conduct independent research. The research will result in the students' earning partial credit, which is transferable to their base universities. As Nagoya is located in the Tokai area, which is considered a hub for Japanese industry, this program also collaborates with variety of multinational industrial companies located in the area.



## Re-Inventing Japan Project at Nagoya University

The Re-Inventing Japan Project is a funding project run by the government of Japan, and aims to foster human resources capable of being globally active, and to enhance quality assurance of higher education in international frameworks. By giving financial support to leading universities which launch brand-new collaborative projects for mutual student exchange with partner institutions in Asian countries and the US, this project intends to enrich study-abroad programs for Japanese students and encourage strategic acceptance of foreign students in Japanese universities. The following pages offer an overview of the four programs at Nagoya University which have been selected for this scheme.

### A Cooperative Asian Education Gateway for a Sustainable Society: Expanding the Frontiers in Science and Technology of Chemistry and Material



This program aims to form a core research and education hub in Asia, dedicated to the resolution of the environmental and energy problems faced by humankind today through the fields of chemistry and materials. The trilateral hub brings together universities with some of the highest standards in Japan, China and Korea. This trilateral structure is designed to allow each partner to exploit the high educational potential found within the chemistry departments of the other partners, forming a synergistic hub of outstanding research and education in chemistry in Asia. Each country has particular strengths in different areas of chemistry and materials fields, and exchange and partnerships have been structured to exploit these respective strengths, ensuring that the potential of the student exchange program is maximized to result in the formation of a world-leading research and education hub.

### Training a New Generation of Leaders in International Cooperation for the Development of the ASEAN Region

This program aims to foster global leaders in international cooperation who understand the worlds of aid and business and have specialized knowledge in the fields of economics, law, politics, society and culture, in order to bridge the future of the ASEAN region and Japan. To achieve this aim, Nagoya University and seven leading universities in the ASEAN region formed a consortium to initiate student exchange programs. Under the scheme, called the “Student Exchange-Nippon Discovery Program (SEND Program)”, Japanese students visit ASEAN countries to learn different languages and cultures, and, in exchange, to teach the Japanese language and introduce Japanese culture for cross-cultural understanding. Moreover, this program holds joint seminars with leading global enterprises in the Nagoya area such as Toyota Motor Corporation, Denso, Brother Industries and DGM Mori, to introduce “Global Monozukuri” (manufacturing) and business strategies in Japan to students of both ASEAN countries and Japan.

## The Global 30 Project – Bringing Nagoya University to the World

In July 2009, the selection results of the 2009 Project for Establishing Core Universities for Internationalization (Global 30) were announced, with Nagoya University standing out as one of the Global 30 leaders.



<http://admissions.g30.nagoya-u.ac.jp/en/>

The objectives of Global 30 are to strengthen the international competitiveness of Japanese higher education and to offer an education with standards that appeal to foreign students while, through creating an environment where Japanese students work together with international students, fostering highly educated individuals who can be active internationally. The project comprehensively supports a plan to create universities that act as bases for internationalization by providing both the high level of education expected from universities and environments that make studying in Japan more accessible for overseas students.



### ✓ New All-English Courses

1. Creating undergraduate degrees from which students can graduate entirely in English in sciences and in humanities.
2. Establishing international courses for master's and doctoral degrees in sciences and humanities.
3. Accepting a greater number of international students to the graduate courses already available in English (Law, Engineering, International Development, Environmental Studies and Cultural Studies).

	Name of the Courses	Name of the Schools / Graduate Schools	Degrees Offered		
			Bachelor	Master	Doctor
1	Automotive Engineering Program	• School of Engineering	●		
2	Fundamental and Applied Physics Program	• School of Engineering • School of Science	●		
3	Chemistry Program	• School of Science • School of Engineering	●		
4	Biological Science Program	• School of Science • School of Agricultural Sciences	●		
5	Program in Social Sciences	• School of Law • School of Economics	●		
6	Japan-in-Asia Cultural Studies Program	• School of Letters	●	●	
7	Automotive Engineering Program (from 2015)	• Graduate School of Engineering		●	
8	Physics and Mathematics Graduate Program	• Graduate School of Science • Graduate School of Mathematics		●	●
9	Chemistry Graduate Program	• Graduate School of Science • Graduate School of Engineering		●	●
10	Biological and Bioagricultural Sciences Graduate Program	• Graduate School of Science • Graduate School of Bioagricultural Sciences		●	●
11	Biological and Bioagricultural Sciences Graduate Program	• Graduate School of Medicine		●	
12	Medical Science Graduate Program	• Graduate School of Medicine			●
13	Graduate Program in Economics and Business Administration	• Graduate School of Economics		●	
14	Graduate Program in Comparative Studies of Language and Culture	• Graduate School of Languages and Cultures		●	
15	International Development and Cooperation Course	• Graduate School of International Development		●	●
16	LL.M (Comparative Law) and LL.D. (Comparative Law) Program in Law and Political Science, Department of the Combined Graduate Program in Law and Political Science	• Graduate School of Law		●	●
17	Young Leaders' Program (YLP) (Healthcare Administration Course of Master's Degree Program)	• Graduate School of Medicine		●	
18	The Forefront Studies Program for Civil and Environmental Engineering	• Graduate School of Engineering • Graduate School of Environmental Studies			●
19	Nagoya University Global Environmental Leaders Program	• Graduate School of Engineering • Graduate School of Environmental Studies		●	



### ✓ All Courses Taught in English

NU offers a variety of Undergraduate and Graduate Programs fully taught in English. In addition, Japanese language classes from beginner to business level are available to all students to polish their language skills.

### ✓ Affordable Tuition and Fees

While other overseas universities have higher tuition fees for international students, NU offers the same tuition for both domestic and international students.

### ✓ International Recruitment

NU has accepted students from over 25 different countries so far. With the help of overseas offices, the Admissions Office focuses on recruiting international talent by visiting top high schools and attending education fairs worldwide.

### ✓ Screening Methods for Selecting Outstanding International Students

The online admissions system facilitates the application process for overseas students. NU also implements screening methods which are distinct from the admissions for regular Japanese programs. The schools evaluate the credentials of overseas candidates based on their application documents and invite shortlisted applicants for interview. The admission interview plays an important role in the selection, as NU has implemented a holistic approach for evaluation. Interviews can be conducted in the applicants' home country using web or video conference systems.

### ✓ Attractive Scholarships and Fee Exemptions

### ✓ High Quality of Education

Most of NU's international faculty members are highly qualified researchers conducting cutting-edge research

in their specialized fields. To help internationalize our education, we will further increase the number of international faculty in the future.

### ✓ Support for International Students

A "One-Stop Office" has been created for international students, where they can receive services such as counseling and advice. In addition, NU actively employs teaching assistants, research assistants and tutors who assist students to adjust to their academic and student life in Nagoya.

### ✓ International Library Resources

NU library facilitates access to a great volume of international books, magazines and other media, as well as electronic resources.

### ✓ Adapted Living Environments

Students in the G30 programs are welcome to live in the university's dormitory during their first year of study. On campus, a diverse menu is offered at the university cafeterias. Japanese and international meals are available, as well as vegetarian options and food for students with specific diets.

### ✓ Career Support and Internships

On and off campus, the Career Development Office provides counseling and career path guidance for international students who intend to pursue their career in Japan after graduation. Students can also join internship programs, corporate information sessions, corporate-student mixers, as well as on-campus job fairs to prepare for their future career.

## The Global 30 Project – Student Columns



**Rina Hisamatsu**  
Department of Biological Sciences,  
School of Science

I never expected to find myself at Nagoya University, but I can't deny that it's a choice I definitely do not regret making. I can't help but feel the tingle of excitement whenever I think about the fact that this year's batch for the G30 program is one of the very first to be launched in Japan. I am one of the lucky few who were given the chance to experience a life-changing opportunity to study a field of interest in English while being surrounded by the beautiful Japanese culture and lifestyle. I guess what really attracted me to the G30 program was that it looked like an inspirational, fresh new challenge to me. Having lived abroad my whole life, the idea of coming back to Japan to study had been pushed into the deepest corner of my mind until the discovery of G30. It was then that I made the decision to take the leap and obtain a top-notch education in the country I was born in but knew very little of. From the very first day of our arrival, the entire G30 staff and organizers have been nothing but caring and considerate. The Biological Sciences department, the school with which I am affiliated, has been constantly attentive and trying their best to suit our needs and make our four years in Nagoya the smoothest and most enjoyable possible. Lastly, what really makes G30 special is the close bonds that we are fortunate enough to create with our professors and students. As it is a close-knit program, G30 is filled with knowledgeable teachers and kind-hearted people who will gladly share their own cultures from back home. It is definitely a challenging yet amazing start to college life!



**Tan Zhi Liang**  
Department of Mechanical &  
Aerospace Engineering, School of Engineering

I was thrilled when I first found out that Nagoya University was offering the G30 Automotive Engineering course. Nagoya University is a leading research university renowned for its Engineering courses. Nagoya University, situated in Nagoya, is also strategically located, as the city is an automotive hub with Toyota headquartered here. Since I was young, I have always been interested in automobiles. Therefore, Nagoya University seems the best fit for me. Furthermore, the course offered in English is also very attractive, as I am not required to have any pre-existing knowledge of the Japanese language. By choosing to study at Nagoya University, I am well-placed to learn from experts in the automotive field.

When I first arrived in Japan I felt lost, as I was alone without knowing anyone in this foreign country I had never set foot in before. Besides, I do not speak Japanese well. However, the friendly Nagoya University staffs made me feel welcome, and they are willing to help me whenever I am faced with difficulties. The G30 lecturers are also very committed to providing us with a good education. As our classes are small, the lecturers are able to pay more attention to us. This makes our learning process more effective and enjoyable.

The best part of studying in the G30 program is that I will be able to meet people from all over the world. I also get to interact with local Japanese people. Studying in Japan also allows me to experience the local Japanese culture and learn the Japanese language. This experience will surely enrich me and make my study in Japan much more meaningful!

## Global Environmental Leaders Program



### Promoting Active Leaders in Solving Global Environmental Problems

Due to rapid economic growth and social changes, developing countries worldwide, including in Asia and Africa, face serious environmental problems such as air and water pollution, waste management, biodiversity conservation, and global warming and climate change. Finding solutions to these problems is hard because of interrelated factors such as health education, infrastructure development, energy resources security, integration of environmental and economic concerns, and globalization. Sustainable development cannot be achieved unless these difficulties are overcome on both national and global scales.

Environmental specialists with the expertise and abilities to implement relevant solutions are the key to solving these problems. There is an urgent need to educate professionals with competitive skills and then translate these skills into concrete actions.

In 2008, Nagoya University established the master's course "Nagoya University Global Environmental Leaders Program (NUGELP)" to foster people able to understand and analyze environmental problems from a global perspective, and propose concrete ways of solving problems. Through various efforts such as distinctive curricula and student services, our goal is to become a global center of learning where motivated students from Asia, Africa, and elsewhere in the world, including Japan, can achieve their aims.

### Curriculum (Master's Program)



## Nagoya University Summer Intensive Program (NUSIP)



1 Mitsubishi Motors Corp. 2 Poster 3 Lecture



Drive Simulator

With support and cooperation from the Japanese automotive industry and related enterprises, the Graduate School of Engineering offered a 6-week summer program entitled "Latest Advanced Technology & Tasks in Automobile Engineering," from June 19 - July 25, 2013, in which 29 overseas students and 13 Nagoya University students participated. Conducted entirely in English, the program was aimed at overseas students and Nagoya University students in engineering-related fields. The program's greatest feature was its exciting lectures from various viewpoints on state-of-the-art technologies in areas such as hybrid automobiles, fuel cells, environmental strategies, accident prevention, and expressway traffic. The lectures were conducted with support from some of the industry's leading technologists and researchers, as well as Nagoya University faculty members. Although of short duration, the program's objectives enabled overseas students to study some of the various fields that are particularly advanced in Japan, as well as increase their interest in this country and its culture. The program also enabled Nagoya University students to improve their English and communication skills and broaden their international horizons in conjunction with studies in their specialist fields.

(Refer to: <http://www.engg.nagoya-u.ac.jp/en/nusip/index.html>)

## NUPACE: Nagoya University's

## Academic Student Exchange Program



### Fresh Insights, Intellectual Stimulation, and a Global Perspective

Established in February 1996, the Nagoya University Program for Academic Exchange (NUPACE) is an academic student exchange program through which international students enrolled at Nagoya University's partner institutions can study in Japan for four to twelve months. The program aims to foster friendships that extend beyond borders, internationalize through education, and motivate overseas students to pursue more extensive studies about Japan. The NUPACE academic year runs on a semester basis, and students can choose one of two admission periods: late September or early April. NUPACE offers a unique and flexible curriculum comprising Japanese language instruction, Japan area studies, and a wide range of courses in the student's major field of study, including those available through the G30 international programs. Provided that they take at least fifteen credits per semester, students can design their own curriculum, balancing their interest in Japanese language and area studies with the desire to pursue their major or independent research. Guided research for graduate students is also available. Moreover, whilst a fully-developed, comprehensive English language program is provided, those students proficient in Japanese are eligible to register and earn credits for any course offered to degree-seeking students at Nagoya University.

NUPACE has hosted 1,143 international students from 114 institutions in twenty-eight countries. It is renowned, in both domestic and international arenas, for its quality and leadership in exchange student education.



Nagoya Endoscopy Training Center



Center for Asian Legal Exchange (CALE)



International Cooperation Center for Agricultural Education (ICCAE)  
-A leading center for international cooperation in agricultural education

## Nagoya Endoscopy Training Center



Due to recent advances in health care, the rate of mortality from infectious disease in developing countries has been improving. On the other hand, mortality from all forms of malignant neoplasms, including gastrointestinal cancer, has become a major problem worldwide. Early diagnosis is critical in the treatment of gastrointestinal cancer, but there are many patients who do not receive the appropriate medical care because of a shortage of doctors who are qualified to perform a gastrointestinal endoscopy. In order to solve this problem, the training of doctors is an important issue. Japanese gastrointestinal endoscopy techniques are among the most advanced in the world, and this is useful for the early diagnosis and treatment of various digestive diseases. The “Nagoya Endoscopy Training Center” was opened at Hue University of Medicine and Pharmacy in Vietnam in September 2013, for the purpose of disseminating the endoscopic diagnosis and treatment techniques that have been developed by Nagoya University School of Medicine’s Department of Gastroenterology and Hepatology to Asian countries. This Center boasts state-of-the-art endoscopy systems, and many young doctors can receive instruction on the techniques of endoscopic diagnosis and treatment here as well as at Nagoya University itself. The Center offers two courses, basic and advanced, according to participants’ English levels. The doctors who study at this Center can provide the highest quality care in diagnosis and treatment by gastrointestinal endoscopy. This is the first step to promote the possibilities of the gastrointestinal endoscopy techniques originating in Japan to Asian countries and to contribute to the improvement of their health care. We are planning to set up an Asian network of endoscopy centers and expand this project to other cities such as Hanoi and Ho Chi Minh City, as well as further to other countries. Our President Hamaguchi and Professor Maskawa, the Nobel Prize laureate, visited Nagoya Endoscopy Training Center at Hue and believe that it will become the one of the best training centers in Asia. Nagoya Endoscopy Training Center, supported by Nagoya University School of Medicine’s Department of Gastroenterology and Hepatology, is central to the treatment and diagnosis of digestive diseases and contributes to health care worldwide.

## Center for Asian Legal Exchange (CALE)



- 1 Research and Education Center for Japanese Law (Tashkent, Uzbekistan)
- 2 Research and Education Center for Japanese Law (Ulaanbaatar, Mongolia)
- 3 Research and Education Center for Japanese Law (Hanoi, Vietnam)
- 4 Research and Education Center for Japanese Law (Phnom Penh, Cambodia)
- 5 Research and Education Center for Japanese Law (Ho Chi Minh, Vietnam)
- 6 Myanmar-Japan Legal Research Center (Yangon, Myanmar)
- 7 Indonesia-Japan Legal Research and Education Center (Yogyakarta, Indonesia)
- 8 Laos-Japan Legal Research and Education Center (Vientiane, Laos)

CALE was established in 2002 as a research base for Asian Law and a coordinating center for Japanese research and practice on legal assistance in Asia. It has been expanding its cooperation activities into several countries in Asia, and remains the only center within a Japanese university to be professionally involved with legal assistance research and implementation projects. The Center is committed to playing a major role in carrying out legal assistance projects centering on Asia, disclosing research outcomes related to those projects, disseminating research and legal information on countries in Asia, and expanding the network of specialists within this field.

The Center's legal assistance activities include cooperation with developing countries which are making the transition to a market economy, to assist them in promoting the necessary reform of their legal systems and enable them to achieve a working market economy, the rule of law, human rights, and democracy. Activities in the field include the following:

- Cooperating in the drafting of laws and promoting judicial system reform
- Cooperating in the consolidation of legal infrastructure such as the improvement of maintenance and access to legal and judicial information.
- Cooperating in human resources development in the judicial sector

### Establishment of centers for research and education in the field of law

Eight centers have been established jointly by Nagoya University and partner universities in seven Asian transitional countries – Uzbekistan, Mongolia, Vietnam, Cambodia, Myanmar, Indonesia, and Laos, where the Japanese government is implementing legal assistance projects, and where local legal experts with sufficient knowledge and understanding of Japanese law and language are becoming indispensable. Some of these centers provide law students in partner universities with knowledge of Japanese Law through the Japanese language, to foster experts who can contribute to their own country's legal development in the future by benefiting from Japanese knowledge and experience.

These centers are designed as a central point of dissemination of information about Japanese law, and as a hub for the collection and sharing of information about the laws of these countries. They are also aimed at facilitating research on both comparative and country-focused topics, and to coordinate joint research projects between academic and professional institutions of the two countries in order to enhance deeper mutual understanding between professionals and to promote expert knowledge on the law and society of these Asian countries.

## International Cooperation Center for Agricultural Education (ICCAE)

-A leading center for international cooperation in agricultural education



The International Cooperation Center for Agricultural Education (ICCAE) is a research institute mandated to function as a leading center for international cooperation in agricultural education. It was established in April 1999, at Nagoya University, under the initiative of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan.

In developing countries, many problems related to agriculture (for example, food shortages, downturns in agricultural production, poverty, environmental devastation, and animal-borne infectious diseases) have yet to be solved by the international community. To solve these global-scale issues, it is important to develop appropriate agricultural technologies while paying careful attention to socioeconomic impact, effective use of natural resources, and respect for the environment. In both developing countries and Japan, the development of human resources is a pressing issue. In recent years, the need for international cooperation to overcome these problems and to facilitate human resources development has increased. Japan has been expected to work actively to resolve these issues.

To respond to such expectations, ICCAE was established by the MEXT of Japan at Nagoya University. ICCAE's goal is to become a leading center for international cooperation to help solve problems in agricultural and rural development in developing countries.





Nagoya University around the Globe: International Liaison Offices and Bases



Academic Consortium AC21



Our Partner Institutions



## Nagoya University around the Globe: International Liaison Offices and Bases

In order to establish a world presence to develop true research excellence, Nagoya University has international liaison offices, research and education bases and a technology transfer office around the world. These stations are strategically positioned to recruit top-level students and teaching staff, organize academic exchanges, host workshops, interact with world-level researchers, learn about different countries' education systems, and promote Nagoya University around the globe.



### ■ Shanghai Liaison Office (Shanghai, China)

The Shanghai Liaison Office was inaugurated in November 2005, with the goal of promoting academic exchange with Chinese institutions of higher education and research, advertising Nagoya University in China, and acting as a contact point for Alumni Association members overseas. The Shanghai Office was Nagoya University's first base abroad, and it continues to play an important role in expanding academic exchange with institutions in China.



### ■ Uzbekistan Office (Tashkent, Uzbekistan)

The Uzbekistan Office opened in March 2010 as an "Overseas Office for Shared Utilization by Universities," an element of the Global 30 Project for Establishing Core Universities for Internationalization. The Office strives to recruit students within Uzbekistan as well as all of Central Asia, and it collaborates with universities across Japan on international student activities.



### ■ European Center (Freiburg, Germany)

In April 2010, Nagoya University opened its European Center in Freiburg University with the aim of heightening its presence in Europe. The main objectives of the Center are recruiting outstanding international students for short-term and long-term programs at both undergraduate and graduate levels; developing a European-Japanese research and education network with universities, research institutes and companies; informing European high school and university students about the advantages of studying at Nagoya University; collecting information on research and education; and consolidating an alumni network in Europe.

### ■ Mongolia Office (Ulaanbaatar, Mongolia) [Scheduled to be est. 2014]



### ■ Technology Partnership of Nagoya University Inc. (North Carolina, USA)

Headquartered close to the Research Triangle Park (RTP) in North Carolina as a registered nonprofit organization, its mission is to promote and support technology transfers between Japan and the US.

### ■ Centers for research and education in the field of law (refer to: P28 CALE)

Eight centers have been established jointly by Nagoya University and partner universities in seven Asian transitional countries :

- Tashkent State University of Law (Tashkent, Uzbekistan) (Center est. Sep. 2005)
- National University of Mongolia, School of Law (Ulaanbaatar, Mongolia) (Center est. Sep. 2006)
- Hanoi Law University (Hanoi, Vietnam) (Center est. Sep. 2007)
- Royal University of Law and Economics (Phnom Penh, Cambodia) (Center est. Sep. 2008)
- Ho Chi Minh City University of Law (Ho Chi Minh, Vietnam) (Center est. Jan. 2012)
- University of Yangon (Yangon, Myanmar) (Center est. Jun. 2013)
- University of Gadjah Mada (Yogyakarta, Indonesia) (Center est. Jan. 2014)
- National University of Laos (Vientiane, Laos) (Center est. Feb. 2014)

<http://cjl.law.nagoya-u.ac.jp/content/en/>

### ■ Field Research Center(Ulaanbaatar, Mongolia)

The Nagoya University Field Research Center was established in September, 2009 within the Mongolian University of Science and Technology. The Center is expected to further encourage our active collaborations and exchanges by promoting more effective research.

### ■ Nagoya Endoscopy Training Center (Hue, Vietnam) (refer to: P27)

"Nagoya Endoscopy Training Center" was opened at Hue University of Medicine and Pharmacy in Vietnam in September 2013, for the purpose of transferring the endoscopic diagnosis and treatment techniques that have been developed by Nagoya University School of Medicine's Department of Gastroenterology and Hepatology to Asian countries.













## The Global University — Architect of the New Century

The Academic Consortium for the 21st Century (AC21) was established on June 24, 2002 at the International Forum 2002 hosted by Nagoya University, Japan, as an international network comprised of educational, research and industrial organizations throughout the world. The Forum brought together the presidents and high-ranking delegations from twenty-five of the world's leading education and research institutions, and resulted in the founding of a new and vigorous global partnership in higher education, "Academic Consortium AC21."

### AC21 Member Institutions

As of February 2014

 <b>Australia</b> <ul style="list-style-type: none"> <li>• University of Adelaide</li> </ul>	 <b>France</b> <ul style="list-style-type: none"> <li>• University of Strasbourg</li> </ul>	 <b>Japan</b> <ul style="list-style-type: none"> <li>• Nagoya University</li> </ul>	 <b>Thailand</b> <ul style="list-style-type: none"> <li>• Chulalongkorn University</li> <li>• Kasetsart University</li> </ul>
 <b>China</b> <ul style="list-style-type: none"> <li>• Huazhong University of Science and Technology</li> <li>• Jilin University</li> <li>• Nanjing University</li> <li>• Northeastern University</li> <li>• Peking University</li> <li>• Shanghai Jiao Tong University</li> <li>• Tongji University</li> </ul>	 <b>Germany</b> <ul style="list-style-type: none"> <li>• Technische Universität Chemnitz</li> <li>• University of Freiburg</li> </ul>	 <b>Laos</b> <ul style="list-style-type: none"> <li>• National University of Laos</li> </ul>	 <b>USA</b> <ul style="list-style-type: none"> <li>• North Carolina State University</li> <li>• University of Minnesota</li> </ul>
	 <b>Indonesia</b> <ul style="list-style-type: none"> <li>• Gadjah Mada University</li> </ul>	 <b>South Africa</b> <ul style="list-style-type: none"> <li>• Stellenbosch University</li> </ul>	

## AC21 Activities

AC21 considers itself a dynamic consortium. It supports its mission and fosters collaboration amongst members through the following forums, activities and projects.

### ✓ Collaboration in Research & Education

#### —International Forums

Held every two years, international forums provide members with the opportunity to reassess the role of higher education in society through keynote addresses by prominent public figures, presentations and panel discussions.

#### —Research Projects & Workshops

Support for research networking among AC21 members is offered through the provision of funding and resources, which aim at developing and sustaining collaborative projects. The AC21 Special Project Fund (SPF), launched in 2009, endeavors to promote research and educational exchanges between member institutions.

### ✓ Initiatives for Students

#### —Student World Forums

Biennial conferences at which students from member institutions are invited to exchange ideas on issues of international concern. The conferences facilitate international friendship, encourage students to develop a global mindset, and strengthen the AC21 network.

#### —Programs for Graduate Students

While Student World Forums target mainly undergraduate students, in order to inspire graduate students of member institutions, a new program has been launched in 2013. Lectures in these programs are offered by leading scholars with outstanding credentials in their respective fields.

### ✓ Industry-Academia-Government Collaboration

AC21, taking advantage of its international network, seeks to facilitate collaboration between academia, industry and government at the global level.



## International Graduate Summer School held in Thailand, The Fifth AC21 Student World Forum, the Eleventh AC21 Steering Committee Meeting and the Sixth AC21 General Assembly held in China

The AC21 International Graduate Summer School took place from May 31 to June 4, 2013 at Chulalongkorn University and Kasetsart University in Bangkok; it was co-hosted by three of our member universities (Chulalongkorn University, Kasetsart University, and Nagoya University).

The main theme was "Green Science and Technology for a Sustainable Future", with the two sub-themes of 1) Green Mobility and Energy and 2) Agricultural Sciences and Food Production.

We were able to invite top-level researchers and business leaders and were lucky enough to have Nobel Prize Laureate Dr. Ryoji Noyori and Mr. Uchiyamada Takeshi, the developer of the first-generation Prius and chairman of the board of Toyota Motor Corporation as keynote speakers.

81 students from 15 countries participated in the Summer School. Aside from member universities and universities from Thailand's neighboring countries, these included graduate students (master's level and above) enrolled in 15 universities from eight countries, as well as international graduate students from seven Asian countries studying at Chulalongkorn University and Kasetsart University.



The Fifth AC21 Student World Forum (SWF) was held at Tongji University in China from October 16 to 22, 2013. 74 students from 13 AC21 member universities attended the Forum. Academic discussion and cultural exchange on the topic of "Sustainable Mobility and the City of the Future" were carried out. The six sub-themes of this forum were New Concept Automobile, Green Energy Mobility, Green Life Style & Mobility, Public Transport, Bicycle and Policy and Others. Various activities were held, such as tour visits, discussion and study. Through these activities, the participating students were able to fully express themselves and gained a better understanding of the forum themes, and also of Tongji University and the city of Shanghai.



The Eleventh AC21 Steering Committee (STC) Meeting and the Sixth AC21 General Assembly (GA) took place on the first and second days of the SWF, which was held at the same time on the same campus. The following agenda were raised at the STC Meeting: 1) Report on the AC21 Secretariat's activities for the year; 2) Implementation report on the 2012 AC21 International Forum; 3) Implementation report on the 2013 AC21 International Graduate Summer School; 4) Number of projects selected for the AC21 Special Project Fund; 5) Timing for holding of events aimed at students; 6) Plans for future AC21 events. At the GA on the following day, in addition to the six above agenda raised at the STC Meeting, preparation progress reports were given by Stellenbosch University in the Republic South of Africa about the Next International Forum, to be held in April 2014.

Following reports 1) to 3) above, the GA agreed with proposals 4) and 6) submitted by the STC Meeting. In addition, it was agreed at the GA that the International Forum in 2016 will be hosted by Technische Universität Chemnitz in Germany and that the event aimed at students to be held in 2017 will be hosted by Indonesia's Gadjah Mada University.



# Our Partner Institutions

As of Dec. 1, 2013

## Academic Exchange Agreements

- = Inter-University Agreement
- = Inter-School Agreement

### Asia

#### BANGLADESH

- Bangladesh Agricultural University
- Bangladesh University of Engineering and Technology, Department of Physics
- University of Dhaka, Faculty of Social Sciences
- SAARC Meteorological Research Centre

#### BHUTAN

- The Centre for Bhutan Studies

#### CAMBODIA

- Royal University of Phnom Penh
- The Royal University of Agriculture
- Royal University of Law and Economics

#### CHINA

- Nanjing University
- Jilin University
- Huazhong University of Science and Technology
- Tsinghua University
- Fudan University
- Xi'an Jiaotong University
- Zhejiang University
- Shanghai Jiao Tong University
- Tongji University
- Northeastern University
- Peking University
- Harbin Institute of Technology
- University of Science and Technology of China
- Chinese Academy of Sciences, the Shanghai Institute of Organic Chemistry
- The Chinese University of Hong Kong
- The University of Hong Kong
- Central South University
- Beijing University of Technology
- Chinese Academy of Sciences, Purple Mountain Observatory
- Chinese Academy of Sciences, National Astronomical Observatories
- China University of Political Science and Law
- East China Normal University, College of Educational Science and Technology
- Institute of Higher Education, Peking University
- Chinese Academy of Social Sciences, Institute of Literature and Institute of Literature of National Minorities
- Peking University, School of International Studies
- China National School of Administration, Law Department and Political Science Department
- East China University of Political Science and Law

- Chinese Academy of Sciences, Institute of High Energy Physics
- Beijing International Studies University
- Nanjing University of Aeronautics and Astronautics
- Jiangsu Provincial Academy of Social Sciences (JSASS)
- Chinese Academy of Sciences, Institute of Process Engineering
- Polar Research Institute of China
- Southwest Jiaotong University, School of Economics & Management
- Beijing Institute of Technology, School of Management and Economics
- Chinese Academy of Sciences, Research Center for Eco-Environmental Sciences
- Tianjin University, School of Management and School of Public Administration
- Chinese Academy of Social Sciences, Institute of Population and Labor Economics
- University of International Business and Economics, School of International Trade & Economics
- Chinese Academy of Sciences, Xinjiang Institute of Ecology and Geography
- Chinese Academy of Sciences, Shanghai Institute of Ceramics
- China Meteorological Administration, Institute of Desert Meteorology
- Hainan University, Law School
- The Hong Kong University of Science and Technology, School of Engineering
- Renmin University of China, School of Law
- Shenyang University of Technology
- Sun Yat-sen University, Lingnan College
- Ministry of Health, P.R.China-Japan Friendship Hospital
- Beijing Normal University, Academy of Disaster Reduction and Emergency Management, State Key Laboratory of Earth Surface Processes and Resource Ecology
- Xiamen University, School of Law
- Chinese Academy of Sciences, Institute of Theoretical Physics
- Chinese Academy of Sciences, Institute of Geographic Sciences and Natural Resources Research
- Nanjin Normal University, School of Energy & Mechanical Engineering

#### INDIA

- University of Pune
- Indian Institute of Science, Bangalore
- Tata Institute of Fundamental Research
- Tata Institute of Fundamental Research, Natural Sciences Faculty
- Indian Institute of Technology Madras
- Indian Institute of Technology Delhi

#### INDONESIA

- Gadjah Mada University
- The State University of Surabaya
- Institute Technology Bandung
- Indonesian National Institute of Aeronautics and Space
- Padjadjaran University, Faculty of Letters
- Syiah Kuala University, Faculty of Basic Science

- Diponegoro University
- Agency for the Assessment and Application of Technology, Center for the Assessment and Application of Environmental Technology (BPPT)
- University of Indonesia, Faculty of Engineering
- University of Indonesia, Faculty of Computer Science
- Sepuluh Nopember Institute of Technology

#### REPUBLIC OF KOREA

- Mokpo National University
- Gyeongsang National University
- Ewha Womans University
- Hanyang University
- Korea University
- Seoul National University
- Kyung Hee University
- Yonsei University
- Sungkyunkwan University
- Pohang University of Science and Technology
- Korea Advanced Institute of Science and Technology (KAIST)
- Korean Research Institute of Standards and Science, Astronomy Observatory
- Chungnam National University, College of Economics and Business Administration
- Korea University, College of Education
- Korea Maritime and Ocean University, College of Maritime Sciences and College of Engineering
- Korea Institute for Advanced Study, School of Mathematics
- Seoul National University, College of Law
- Kyungnam University, Industry Academic Cooperation Foundation
- Sunkyunkwan University, School of Social Sciences
- Korea Legislation Research Institute
- Pukyong National University, College of Fisheries Sciences
- Pusan National University, College of Engineering
- Hankuk University of Foreign Studies, Graduate School and Graduate School of International Area Studies
- Seoul National University, School of Earth and Environmental Sciences
- Chonnam National University, College of Business Administration
- University of Seoul, College of Public Affairs and Economics
- Chonbuk National University, Institute for North-East Asian Law
- Korea Institute of Geoscience and Mineral Resources, Geologic Environment Research Division
- Kyungpook National University, Faculty of Engineering
- Institute of Sunchang Fermented Soybean Products
- Korea Institute of Geoscience and Mineral Resources, Geologic Environment Research Division
- Seoul National University Hospital
- Korean Space Weather Center
- Asan Medical Center

#### LAOS

- National University of Laos
- National Agriculture and Forestry Research Institute, Lao P.D.R.
- Champasack University

#### MALAYSIA

- MARA University of Technology, Faculty of Mechanical Engineering
- Universiti Putra Malaysia, Faculty of Science

#### MONGOLIA

- National University of Mongolia
- Mongolian University of Science and Technology
- Health Sciences University of Mongolia
- Mineral Resources and Petroleum Authority of Mongolia, Geological Information Center
- National Legal Center of Mongolia
- Mongolian University of Science and Technology, School of Geology and Petroleum Engineering
- Mongolian Academy of Sciences, Institute of Geography
- Mongolian Academy of Sciences, Institute of Philosophy, Sociology and Law
- Institute of Meteorology, Hydrology and Environment, Mongolia
- Mongolian State University of Education

#### NEPAL

- Kathmandu University, School of Science

#### PHILIPPINES

- University of the Philippines, Los Banõs
- University of the Philippines, Diliman

#### SINGAPORE

- National University of Singapore, Alice Lee Centre for Nursing Studies Yong Loo Lin School of Medicine
- National University of Singapore, Business School

#### THAILAND

- Kasetsart University
- Chulalongkorn University
- Chulabhorn Research Institute/Chulabhorn Graduate Institute
- King Mongkut's University of Technology North Bangkok, Science Technology Research Institute

#### VIETNAM

- Hanoi University of Technology
- Vietnam National University, Hanoi
- The Ministry of Justice of the Socialist Republic of Viet Nam
- Vietnam Institute of State and Law
- Hanoi Law University
- Ho Chi Minh City University of Law
- Vietnamese Academy of Science and Technology, Ho Chi Minh City Institute of Resources Geography
- Vietnam National University, Ho Chi Minh City, Faculty of Environmental Science, University of Science
- Foreign Trade University
- Hue University of Medicine and Pharmacy
- Vietnam Academy of Science and Technology, Institute of Mathematics

#### TAIWAN

- National Taiwan University
- National Chengchi University

- National Tsing Hua University
- National Chung Cheng University
- National Chengchi University, College of Law
- National Taiwan Normal University, College of Education
- Soochow University, School of Law
- Soochow University, School of Foreign Languages and Cultures
- National Taiwan University, Department of Atmospheric Sciences
- Taiwan Ocean Research Institute
- National Chiao Tung University, College of Electrical and Computer Engineering
- National Chung Cheng University, Center for International Affairs and Exchange

### Pacific

#### AUSTRALIA

- University of Sydney
- Monash University
- Flinders University
- University of South Australia
- The University of Adelaide
- The Australian National University
- The University of Melbourne, Asian Law Centre
- Commonwealth Scientific and Industrial Research Organization, Ecosystem Sciences Division (CSIRO)

#### NEW ZEALAND

- National Institute of Water and Atmospheric Research
- University of Auckland, Center for Geophysical Research
- University of Canterbury, Faculty of Science

### Europe

#### ARMENIA

- Yerevan Physics Institute

#### AUSTRIA

- The University of Innsbruck
- Johannes Kepler University Linz, Faculty of Law
- The Medical University of Vienna
- FH JOANNEUM Gesellschaft mbH University of Applied Science
- University of Klagenfurt, Institute of Social Ecology, Faculty for Interdisciplinary Studies

#### BULGARIA

- Sofia University, Department of Astronomy
- Bulgarian Academy of Sciences, Space Research Institute, Space Astronomy Division
- Bulgarian Academy of Sciences, Institute of Electronics
- Bulgarian Academy of Sciences, Institute of Mathematics

#### DENMARK

- University of Copenhagen

#### FINLAND

- Finnish Meteorological Institute, Department of Geophysics

#### FRANCE

- Ecole Nationale des Ponts et Chaussées (ENPC)
- Université Paris Diderot - Paris 7
- Université Jean Moulin-Lyon 3
- Université Joseph Fourier (Université de Grenoble 1)
- Université Pierre-Mendès-France (Université de Grenoble 2)
- Université Stendhal (Université de Grenoble 3)
- Institut National Polytechnique de Grenoble (INPG) (Université de Grenoble 4)
- Université de Strasbourg
- Université Paris-Est
- École Normale Supérieure de Lyon
- Fondation Maison des Sciences de l'Homme
- Université Stendhal (Université de Grenoble 3)
- Université de Paris-Sorbonne, Paris 4
- Université Panthéon Assas, Paris 2
- Université Paul Cézanne, Aix-Marseille 3
- Université de Provence, Aix-Marseille 1
- École Nationale Supérieure d'Architecture Paris Val-de-Seine
- Université De Technologie De Belfort-Montbéliard

#### GERMANY

- Technische Universität Carolo-Wilhelmina zu Braunschweig
- Technische Universität München
- Technische Universität Chemnitz
- Albert-Ludwigs-Universität Freiburg
- RWTH Aachen
- University of Freiburg, Faculty of Economics and Behavioral Sciences
- Universität zu Köln, I Physikalisches Institut
- Johannes Gutenberg-Universität Mainz, Fachbereich für Chemie, Pharmazie und Geowissenschaften
- Deutsches Zentrum für Luft- und Raumfahrt, Institut für Luft- und Raumfahrtmedizin
- Universität Ulm, Mathematik und Wirtschaftswissenschaften
- Albert-Ludwigs-Universität Freiburg, Medizinischen Fakultät
- Universität Regensburg, Juristische Fakultät
- WWU Münster, Fachbereich Chemie und Pharmazie
- Ruhr-Universität Bochum, Fakultät für Physik und Astronomie, Fakultät für Elektrotechnik und Informationstechnik
- Technische Universität Kaiserslautern, Fachbereich Architektur / Raum- und Umweltplanung / Bauingenieurwesen
- Freie Universität Berlin, Forschungsstelle für Umweltpolitik (FFU)
- Wissenschaftszentrum Ost- und Südosteuropa Regensburg, Institute für Ostrecht München e.V. im
- Technische Universität Darmstadt, Fachbereich Bauingenieurwesen und Geodäsie
- Ruhr-Universität Bochum, Fakultät für Mathematik
- Universität Duisburg-Essen, Institut für Ostasienwissenschaften
- Fraunhofer-Institut für Chemische Technologie, Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.

**HUNGARY**

- o Hungarian Academy of Sciences, Institute for Legal Studies

**ITALY**

- National Institute of Nuclear Physics (INFN)
- University of Catania
- University of Bologna

**KAZAKHSTAN**

- o Kazakh Humanitarian and Law University
- o Legislation Research Institute, Republic of Kazakhstan

**LATVIA**

- o Latvian State University

**NETHERLANDS**

- o Wageningen University
- o VU University Amsterdam, Faculty of Earth and Life Sciences

**NORWAY**

- o University of Oslo, Department of Physics
- o University of Tromso, Faculty of Science

**POLAND**

- University of Warsaw
- o Medical University of Gdańsk
- o Warsaw University of Technology
- o Polish Academy of Sciences, Institute of Geological Sciences, Krakow Research Centre

**RUSSIA**

- o Institute of Theoretical and Experimental Physics
- o Ministry of Health of Russia, Institute of Biomedical Problems
- o Lomonosov Moscow State University, Faculty of Physics
- o Russian Academy of Sciences, Siberian Division, Institute of Cytology and Genetics
- o Moscow State Engineering and Physics Institute (Technical University-MEPHI)
- o Russian Academy of Sciences, Institute of Computer Aided Design
- o Russian Academy of Sciences, Far Eastern Branch, Institute of Cosmophysical Research and Radiowave Propagation (IKIR)
- o Russian Academy of Sciences, Siberian Division, Institute of Solar-Terrestrial Physics (ISTP)
- o M.V. Lomonosov Moscow State University, Department of Chemistry
- o Russian Academy of Sciences, Siberian Division, Institute of Cosmophysical Research and Aeronomy (IKFIA)

**SPAIN**

- University of Barcelona

**SWEDEN**

- Uppsala University
- Royal Institute of Technology
- o Swedish Institute of Space Physics
- o University of Lund, Faculty of Law
- o SAFER - Vehicle and Traffic Safety Centre

**SWITZERLAND**

- University of Geneva
- o University of Bern, Interdisciplinary Center for general Ecology (IKAOe)

**U.K.**

- The University of Sheffield
- The University of Warwick
- University of Bristol
- University of London, School of Oriental and African Studies (SOAS)
- o The University of Nottingham, School of Biosciences
- o University of East Anglia, Faculty of Social Sciences, School of International Development
- o The University of Manchester, Faculty of Life Sciences
- o University of Leicester, Department of Physics and Astronomy
- o The University of Oxford, Department of Physics
- o The University of Manchester, School of Environment and Development
- o The University of Warwick
- o The University of Edinburgh, School of Chemistry, College of Science & Engineering

**UKRAINE**

- o Ukrainian Academy of Sciences, Institute of Theoretical Physics

**UZBEKISTAN**

- Tashkent State University of Law
- University of World Economy and Diplomacy
- o Samarkand State University, School of Law

**North America**

**CANADA**

- York University
- University of Toronto (The Faculty of Arts and Science)
- Université de Montréal
- o Carleton University, Faculty of Sciences
- o University of Toronto, Ontario Institute for Studies in Education (OISE)
- o University of Victoria, Centre for Asia-Pacific Initiatives
- o University of Ottawa, School of International Development and Global Studies

**USA**

- Oberlin College
- North Carolina State University
- Harvard-Yenching Institute
- University of Cincinnati
- St. Olaf College
- Southern Illinois University, Carbondale
- University of Illinois at Urbana-Champaign
- New York University
- University of Chicago
- University of Kentucky
- University of Minnesota
- University of California, Los Angeles
- The University of North Carolina at Chapel Hill

- University of California, Davis
- University of California, Berkeley
- o University of Michigan, College of Engineering
- o University of California, Los Angeles, Department of Education
- o University of Houston, Cullen College of Engineering
- o University of California, Berkeley, Department of Physics
- o University of North Carolina at Chapel Hill, School of Medicine
- o University of California Berkeley, College of Natural Resources
- o University of Alaska Fairbanks, Geophysical Institute
- o National Oceanic and Atmospheric Administration, Space Environment Laboratory
- o National Oceanic and Atmospheric Administration, National Geophysical Data Center
- o Massachusetts Institute of Technology, Haystack Observatory
- o Harvard University Medical School
- o Tulane University, School of Medicine
- o University of Pennsylvania, School of Medicine
- o University of California, San Diego, Center for Astrophysics and Space Sciences
- o Colorado School of Mines
- o University of Alaska Fairbanks, Geophysical Institute
- o Duke University, School of Medicine
- o Johns Hopkins University, School of Medicine
- o University of Wisconsin Law School
- o University of Wisconsin Law School, East Asian Legal Studies Center
- o University of Maryland, Department of Mechanical Engineering
- o University of Washington, Genetically Engineered Materials Science and Engineering Center
- o University of California, Los Angeles, California NanoSystems Institute
- o Northwestern University, Materials Research Institute
- o University of California, Berkeley, Center for Global Metropolitan Studies
- o Michigan State University, Department of Physics and Astronomy
- o Green Mountain College
- o University of California, Santa Barbara, Bren School of Science and Management
- o University of Michigan, Department of Chemistry
- o University of Michigan, College of Engineering, Macromolecular Science and Engineering Center
- o University of Pittsburgh, School of Education
- o Ohio State University, Center for Cosmology and AstroParticle Physics, Department of Astronomy, College of Arts and Sciences
- o University of Colorado Boulder, Laboratory for Atmospheric and Space Physics
- o Virginia Polytechnic Institute and State University, Center for Space Science and Engineering Research

**Latin America and the Caribbean**

**ARGENTINE**

- o National University of Rosario, Faculty of Biochemical and Pharmaceutical Sciences
- o Luis F. Leloir, Campomar Foundation, The Research Institute of Biochemistry

**BOLIVIA**

- o Universidad Mayor de San Andres, La Paz, Chacaltaya Cosmic Ray Observatory, Faculty of Sciences

**BRAZIL**

- Universidade de Brasília
- Universidade de São Paulo
- o Instituto Nacional de Pesquisas Espaciais
- o Fundacao Joaquim Nabuco

**GUATEMALA**

- o Del Valle de Guatemala University, School of Engineering

**MEXICO**

- o Universidad de Sonora

**Middle East**

**IRAN**

- o University of Kurudistan, Faculty of Engineering

**TURKEY**

- Bilkent University
- Istanbul Technical University

**Africa**

**EGYPT**

- Cairo University
- o Tanta University, Faculty of Engineering

**GHANA**

- o University of Ghana, Faculty of Social Studies

**KENYA**

- o African Institute for Capacity Development (AICAD)

**SOUTH AFRICA**

- o South African Astronomical Observatory

**Others (International Organization)**

- Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA)
- European Organization for Nuclear Research (CERN)
- United Nations (Centre for Regional Development (UNCRD))

**Others (Multilateral)**

- Chulalongkorn University, Hanoi University of Science and Technology
- o Law School of Renmin University of China (China), Law School and College of Social Sciences of Sungkyunkwan University (Korea), Tsinghua University School of Law (China), Koguan Law School of Shanghai Jiao Tong University (China), Seoul National University School of Law (Korea) (Jus Commune Triangle Agreement for Academic Exchange)

**Agreements for Industry-University Collaboration**

**Europe**

**U.K.**

- University of Warwick

**North America**

**USA**

- North Carolina State University

**Multilateral**

- Mongolian University of Science and Technology (Mongolia), University of Toyama (Japan), Japan Geocommunications Co. Ltd (Japan)

**Agreements for International Joint Research**

**Asia**

**REPUBLIC OF KOREA**

- Sungkyunkwan University
- Sungkyunkwan University, Center for Advanced Plasma Surface Technology

**Pacific**

**AUSTRALIA**

- The University of New South Wales

**Europe**

**GERMANY**

- Ruhr-Universität Bochum, The Center for Plasma Science and Technology

**North America**

**USA**

- The University of Texas at Dallas, International Center for Advanced Materials Processing

**International Networks**

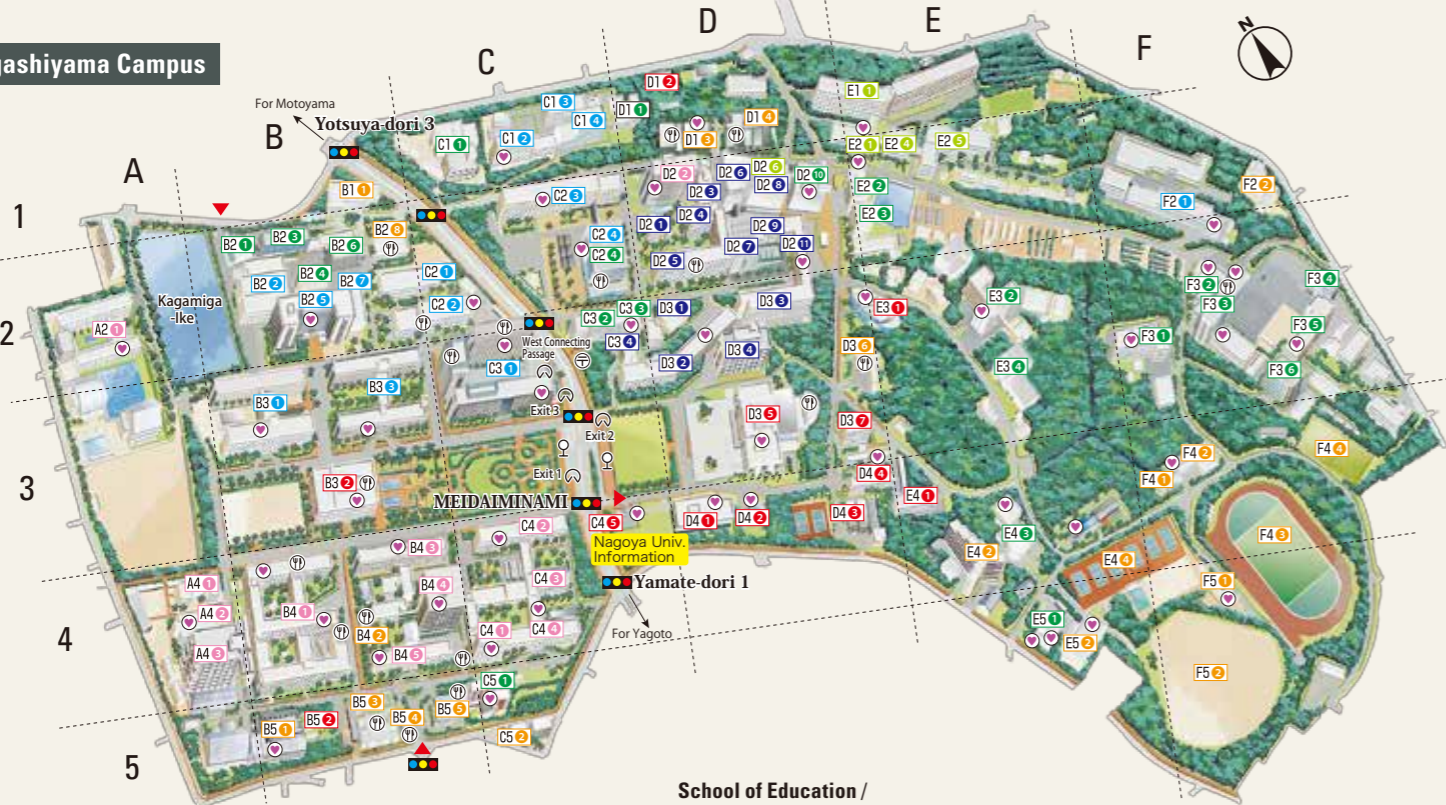
- Academic Consortium 21 (AC21)
- Collège doctoral franco-japonais
- University Mobility in Asia and the Pacific (UMAP)
- OpenCourseWare Consortium
- The G8 University Summit
- Canada-Japan Strategic Student Exchange Program
- Japan-UK Research and Education Network for Knowledge Economy Initiatives (RENKEI)

**Overseas Research and Education Bases**

- Shanghai Liaison Office(Shanghai, China)
- Uzbekistan Office (Tashkent, Uzbekistan)
- European Center (Freiburg, Germany)
- Mongolia Office [Scheduled to be founded 2014]
- Technology Partnership, Inc. (North Carolina, USA)
- Centers for research and education in the field of law (Tashkent, Uzbekistan • Ulaanbaatar, Mongolia • Hanoi/ Ho Chi Minh, Vietnam • Phnom Penh, Cambodia • Yangon, Myanmar • Yogyakarta, Indonesia • Vientiane, Laos)
- Field Research Center (Ulaanbaatar, Mongolia)
- Nagoya Endoscopy Training Center (Hue, Vietnam)



## Higashiyama Campus



- Open Facilities**
- B3 2 NU Library (Central Library)
  - B5 2 NU Museum Botanical Garden
  - C4 5 Information
  - D4 1 NU Museum (Furukawa Hall)
  - D4 2 Information Plaza
  - C2 4 Nobel Laureates Gallery (E & S Building)
  - B2 6 Akasaki Institute
  - D2 10 Chemistry Gallery (Noyori Materials Science Laboratory)
- International Conference Venues**
- D3 5 Toyoda Auditorium / Symposion
  - E3 1 Noyori Conference Hall
  - B4 4 Integrated Research Bldg. for Humanities & Social Sciences
  - C4 3 Conference Hall (Law & Economics Shared Facilities Bldg.)
  - D2 7 Sakata & Hirata Hall (Science South Building)
  - C2 4 E & S Hall (E & S Building)
  - C3 1 Lecture Hall (IB Building)
- University Headquarters: Administrative Services**
- D3 7 University Headquarters Building 1
  - D4 4 University Headquarters Building 2
  - E4 1 University Headquarters Building 3
  - D4 3 University Headquarters Building 4
  - D1 2 University Headquarters Annex
  - C4 1 Graduate School of International Development Building
  - C5 1 Education Center for International Students (ECIS)

- Schools / Graduate Schools: Administrative Services**
- B4 4 Administrative Office, Humanities & Social Sciences
  - B4 4 Administrative Office, Informatics & Sciences / Information Science
  - D2 11 Administrative Office, Science / Mathematics
  - C2 4 Administrative Office (General Affairs & Accounting), Engineering
  - C3 1 Administrative Office (Educational Affairs), Engineering
  - E2 1 Admin. Office, Agricultural Sciences / Bioagricultural Sciences
  - D2 2 Admin. Office, Environmental Studies / Hydrospheric Atmospheric Research Ctr.
  - D3 3 Admin. Office, Pharmaceutical Studies / Cellular and Structural Physiology Institute
  - F3 3 Administrative Office, Research Institutes
  - B3 2 Administrative Office, NU Library

- Institute of Liberal Arts & Sciences**
- B4 4 Liberal Arts & Sciences Main Building
  - A4 4 Liberal Arts & Sciences Building A
- Institute for Advanced Research**
- F3 2 Institute for Advanced Research Hall

- Institute of Transformative Bio-Molecules**
- D2 6 Science & Agricultural Building
- School of Letters / Graduate School of Letters**
- B4 6 School of Letters / Graduate School of Letters Building

### School of Education / Graduate School of Education & Human Development

- B4 5 School of Education / Graduate School of Education & Human Development Bldg.
- A2 1 Affiliated Upper & Lower Secondary Schools

- ### School of Law / Graduate School of Law
- C4 4 School of Law / Graduate School of Law (Law & Economics Shared Facilities Bldg.)
  - B5 5 Law School

- ### School of Economics / Graduate School of Economics
- C4 2 School of Economics / Graduate School of Economics (Law & Economics Shared Facilities Bldg.)

- ### School of Informatics & Sciences
- A4 5 Graduate School of Information Science Building
  - B4 1 Liberal Arts & Sciences Main Building

### School of Science / Graduate School of Science

- D3 2 Building A
- D3 3 Building B
- D2 11 Building C
- D2 9 Building D
- D2 6 Building E
- D2 4 Building F
- D2 3 Building G
- C3 4 Shared Facilities Building
- D2 1 Ultra High Pressure Laboratory
- D2 6 Science & Agricultural Building
- D2 7 Science South Building
- D2 6 Science Hall
- D3 1 Facilities for Low Temperature Research

### School of Engineering / Graduate School of Engineering

- C2 4 Central Bldg. of Graduate School of Engineering (E & S Bldg.)
- C3 1 IB Building (Integrated Building)
- B2 5 Building 1
- B3 3 Building 2
- B3 1 Building 3
- C2 3 Building 5
- F2 1 Building 6
- C2 1 Building 7, A Wing
- C2 2 Building 7, B Wing
- C1 3 Building 8, North Wing
- C1 4 Building 8, South Wing
- C1 2 Building 9
- B2 2 Mechanical & Aerospace Engineering Laboratory
- B2 7 Mechanical Engineering Laboratory
- C3 1 Creation Plaza (IB Building)

### School of Agricultural Sciences / Graduate School of Bioagricultural Sciences

- E1 1 Building A
- E2 5 Building B
- E2 4 Lecture Building
- E2 1 Administration Building
- D2 6 Science & Agricultural Building

- ### Graduate School of International Development
- C4 1 Graduate School of International Development Building

- ### Graduate School of Mathematics
- D3 4 Graduate School of Mathematics Building

- ### Graduate School of Languages & Cultures
- A4 2 Graduate School of Languages & Cultures Building
  - B4 1 Liberal Arts & Sciences Main Building
  - B4 4 Integrated Research Bldg. for Humanities & Social Sciences

- ### Graduate School of Environmental Studies
- D2 2 Environmental Studies Hall
  - B4 1 Liberal Arts & Sciences Main Building
  - C2 4 Graduate School of Environmental Studies (E & S Bldg.)
  - D2 6 School of Science / Graduate School of Science, Building E
  - F3 1 Common Building, Graduate School of Environmental Studies

- ### Graduate School of Information Science
- A4 5 Graduate School of Information Science Building
  - B4 1 Liberal Arts & Sciences Main Building
  - C3 1 IB Building (Integrated Building)

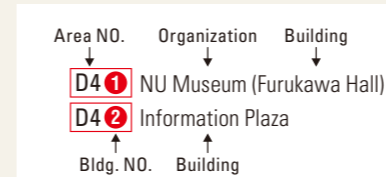
- ### Graduate School of Pharmaceutical Sciences
- F2 1 School of Engineering / Graduate School of Engineering, Building 6
  - D3 3 School of Science / Graduate School of Science, Building B

- ### Research Center of Health, Physical Fitness & Sports
- E5 1 Research Center of Health, Physical Fitness & Sports
  - C3 3 Health Administration Office

- ### Kobayashi-Maskawa Institute for the Origin of Particles & the Universe (KMI)
- C2 4 Center for Theoretical Studies (E & S Building)
  - C2 4 Center for Experimental Studies (E & S Building)

- ### Research Institutes / Inter-University Service Facilities
- E3 2 Research Institute of Environmental Medicine
  - E4 3 Cosmic Ray Observatory (STEL)
  - F3 3 Solar-Terrestrial Environment Laboratory (STEL)
  - F3 3 Hydrospheric Atmospheric Research Center
  - F3 3 Research Institute Building
  - F3 6 EcoTopia Science Institute
  - C3 2 Information Technology Center

- ### Inter-Departmental Education & Research Centers / Other Facilities
- D1 2 NU Archives (University Headquarters Annex)
  - D1 2 Office for Gender Equality
  - D4 1 Center for Chronological Research
  - B4 5 Center for Developmental Clinical Psychology & Psychiatry
  - B4 4 Center for the Studies of Higher Education
  - D2 2 Disaster Management Office
  - C3 4 Office of Research Administration
  - D2 4 Center for Gene Research
  - C1 4 Synchrotron Radiation Research Center
  - C2 2 Center for Student Counseling
  - C2 2 Information Media Center Laboratory
  - C3 1 ECIS Advising & Counseling Services (IB Building)
  - F2 1 Cellular and Structural Physiology Institute
  - E1 1 International Cooperation Center for Agricultural Education



- B2 1 Research Facility for Advanced Energy Conversion, West Building
- B2 6 Akasaki Research Center
- C1 1 Research Facility for Advanced Science & Technology
- C2 4 Disaster Mitigation Research Center
- C5 1 Education Center for International Students (ECIS)
- C5 1 Center for Asian Legal Exchange
- D1 1 High Voltage Electron Microscope Laboratory
- D2 10 Research Center for Materials Science
- E2 2 Bioscience & Biotechnology Center
- E2 3 Radioisotope Research Center
- E3 4 National Composites Center in Japan
- F3 4 Green Mobility Collaborative Research Center
- F3 6 Research Laboratory Building

### Industry-Academia-Government Cooperation Facilities

- B2 3 Incubation Facility
- B2 4 Venture Business Laboratory
- B2 6 Headquarters for Industry, Academia & Government Cooperation (Akasaki Institute)
- F3 4 Materials Research Laboratory for Green Vehicle

### Sports Facilities

- B5 1 Gymnasium / Indoor Swimming Pool
- E4 4 Tennis Courts
- E5 2 New Gymnasium
- F4 1 Extra Curricular Athletic Activity Shared Facilities
- F4 2 Training Camp Facility
- F4 3 Athletic Field
- F4 4 Softball Tennis Courts
- F5 1 Student Activities Complex Administration Building
- F5 2 Baseball Field

### Cafeterias / Shops

- B3 2 STARBUCKS COFFEE
- D3 6 Restaurant UNIVERSAL CLUB
- B4 1 PRANZO
- B4 1 PHONON CAFE ROOM
- D2 6 Craig's Cafe SEATTLE ESPRESSO
- C2 2 Cafeteria NANAMI-TEI
- C2 4 Restaurant Chez Jiroud
- C3 1 IB Café
- F3 3 NU CO-OP Shop

- B2 6 NU CO-OP North - Cafeterias & Shops
- B4 2 C3 1 Family Mart
- B5 5 South Cafeteria
- B5 4 NU CO-OP South - Cafeterias & Shops
- B5 5 Amenity House
- D1 6 FOREST Books & Café
- D1 4 Green Salon Higashiyama
- D3 6 Staff Hall

### Other

- B1 1 Student Hall
- C3 3 Health Administration Office
- C5 2 NU Yakumo Hall
- E4 2 International Residence Higashiyama
- F2 2 Researchers Village Higashiyama

- ☺ Cafeterias and Shops
- ☐ Post Office
- ⊙ Subway
- ⊙ Bus Stop
- ⊙ Automated External Defibrillator
- ▲ Car Entrance
- ▲ Entrance

## Tsurumai Campus



### University Hospital

- 1 Outpatient Building
- 2 Central Consultation Building
- 3 Ward Building
- 4 Residence for Nurses A
- 5 Residence for Nurses B
- 6 Old Ward Building West
- 7 Old Ward Building East
- 8 Oasis Cube (welfare facility)

### Graduate School of Medicine / School of Medicine

- 1 Medical Science Research Building 1
- 2 Medical Science Research Building 2
- 3 Basic Medical Research Building
- 4 Basic Medical Research Building Annex
- 5 Center for Promotion of Medical Research and Education (Experimental Animals Division)
- 6 Medical Library / Co-op Cafeteria
- 7 Welfare Facility
- 8 Kakyuu Kaikan (Alumni Hall)
- 9 Radioisotope Research Center
- 10 Human Anatomy Laboratory

## Daiko Campus



- 1 School of Health Science - South Building
- 2 School of Health Science - Main Building
- 3 Gymnasium
- 4 Radioisotope Laboratory
- 5 Energy Center
- 6 Student Hall
- 7 School of Health Science - Annex
- 8 Kyudo (Japanese Archery) Hall
- 9 School of Health Science - East Building
- 10 Researchers Village Daiko
- 11 Tennis Court
- 12 Ground

## Staff

As of May 1, 2013

Members of the Board of Trustees		
President		1
Trustees		7
Auditors		2
Staff (Full-time)		
Faculty		
Professors	648	(40)*1
Associate Professors	510	(83)
Associate Professors / Lecturers	105	(88)
Assistant Professors	417	(260)
Research Associates	8	
Researchers	0	(165)
Specialist	1	
School Teachers at Affiliated Schools	39	
Administrative / Technical Staff*2	1,658	(459)
<b>Total</b>	<b>3,396</b>	<b>(1,095)</b>

\*1 Data in parenthesis show the number of staff under limited-time contracts.  
\*2 Data include medical staff of the University Hospital.

## International Students by School

As of November 1, 2013

School / Graduate School	
Letters	163
Education	79
Law	174
Economics	127
Informatics and Sciences	23
Science	83
Medicine	117
Engineering	394
Agricultural Sciences	63
International Development	196
Mathematics	13
Languages and Cultures	137
Environmental Studies	106
Information Science	65
Pharmaceutical Sciences	1
International Language Center	50
<b>Total</b>	<b>1,791</b>

## Student Enrollment

As of May 1, 2013

Name of Schools / Graduate Schools	Undergraduate Courses		Graduate Courses		Total
	Degree seeking	Non-degree seeking	Degree seeking	Non-degree seeking	
Letters	582	58	277	12	929
Education	321	32	236	18	607
Law	685	30	323	72	1,110
Economics	954	19	126	6	1,105
Informatics and Sciences	365	12	-	-	377
Science	1,227	11	570	13	1,821
Medicine	1,553	64	1,004	46	2,667
Engineering	3,446	31	1,613	9	5,099
Agricultural Sciences	746	2	400	6	1,154
International Development	-	-	285	12	297
Mathematics	-	-	173	6	179
Languages and Cultures	-	-	190	37	227
Environmental Studies	-	-	472	13	485
Information Science	-	-	366	10	376
Human Informatics	-	-	1	-	1
Pharmaceutical Sciences	-	-	59	21	80
International Language Center	-	55	-	-	55
Others	-	5	-	-	5
<b>Total</b>	<b>9,879</b>	<b>319</b>	<b>6,095</b>	<b>281</b>	<b>16,574</b>

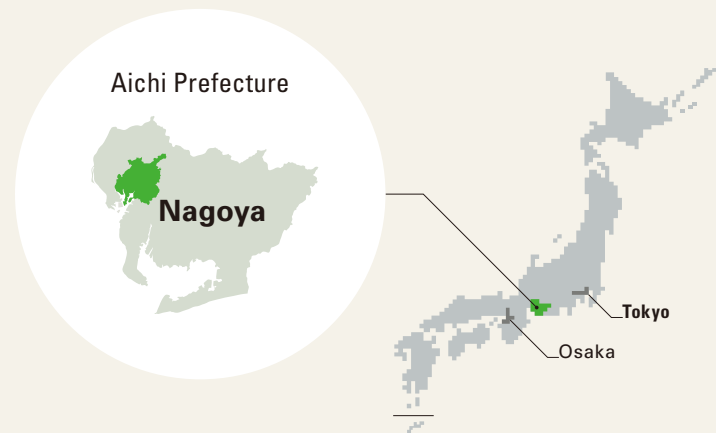


## Access



- To Higashiyama Campus** From Nagoya Station: Take the Subway Higashiyama Line to Motoyama Station (16 min.), then transfer to the Subway Meijo Line to Nagoya Daigaku Station (2 min.). Higashiyama Campus is just off the subway exit.  
From Centrait (Central Japan International Airport): Take the Meitetsu Line to Kanayama Station (24 min.), then transfer to the Subway Meijo Line to Nagoya Daigaku Station (21 min.).
- To Tsurumai Campus** From Nagoya Station: Take the JR Chuo Line (bound for Tajimi) to Tsurumai Station (6 min.), then walk 5 min.
- To Daiko Campus** From Nagoya Station: Take the Subway Higashiyama Line to Sakae Station (5 min.), transfer to the Subway Meijo Line to Nagoya Dome-mae Yada Station (12 min.), then walk 5 min.
- To Nagoya Station** From Centrait (Central Japan International Airport): Take the Meitetsu Line (28 min.).  
From Tokyo Station: Take the Shinkansen (101 min.).  
From Shin-Osaka Station: Take the Shinkansen (52 min.).

# The City of Nagoya



Located in the heart of Japan, the Chubu region has played a central role in Japan's history and has long enjoyed a flourishing culture and economy. The area is well known as the home of Oda Nobunaga, Toyotomi Hideyoshi and Tokugawa Ieyasu, the three leaders who unified Japan over 400 years ago, bringing an end to the "Period of Warring States." Nagoya Castle, originally built by Tokugawa Ieyasu and famous for the pair of golden dolphins on top of its donjon, serves as the region's landmark.

Today, this vibrant metropolis occupies an important place in Japan's political and economic spheres. With a population of 2.2 million, Nagoya is the nerve center of the Chubu Industrial Zone, a merger of both traditional and modern industries, most notably the automotive industry. Nagoya offers a variety of urban conveniences, with shops, restaurants and leisure activities that cater to any taste, making it an exciting place to live, work and study.



JR Central Towers



Nagoya Castle



Nagoya Noh Theater



Arimatsu Shibori Matsuri (festival)



Nagoya City Archives



The Golden Dolphin



Nagoya Congress Center



Nagoya Port Triton



Nagoya City Art Museum



OASIS 21, downtown Nagoya



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