1. Outline

【Name of Project】
OPEN-TECH INNOVATION: An Initiative for Global, Social and Regional Collaboration

【Future vision of the university planned in TGU project】
We aim to become a core engineering school where the leading researchers, business workers and engineers engaging in the engineering research, industry and education in Japan and abroad gather in pursuit of OPEN RESOURCE (intellectual, human and physical resources) stored in our university, develop an innovation and form an ASIAN HUB of the global network, and also where international sophisticated engineers (TECH LEADER) who can demonstrate leadership to contribute to the globalization of the industrial infrastructure in all countries and regional communities are trained.

【Summary of Project】
Keys of our project are making resources more attractive in the points of curriculum, human resources, and places.
For making the curriculum more attractive, with the aim to train sophisticated specialized personnel, “TECH LEADER”, we will carry out a school-wide curriculum reform. We will foster a rich humanity by constructing an education system oriented to the international society as well as by offering learning opportunities by making a use of the cultural resources in Kyoto.
For producing more attractive human resources, we aim to shift the faculty and staff body to become an international group. We will ensure to globalize the university as a whole and promote the establishment of the global inter-university network by sending the faculty and staff members to overseas and also accepting the faculty and staff members from overseas.
For making places more attractive, we will build and improve a faculty and hub where the world’s leading researchers and our teaching staff as well as the regional companies interact, in addition to the Japanese students and students from overseas. We will create an opportunity to meet people with diverse views and background and contribute to the creation of new values and ideas.

Structure to conduct

Head of the project: President

Center for Top Global University Project
- Head: Vice-President
- General Assembly
- Planning and management committee (Vice-Presidents and Presidential Aide)

External Evaluation Committee
- International leading researchers
- Executive of an technological university
- Organization of industry
- Local government

Divisions on campus
Increasing the number of international students
We will increase the number of international students through the ways such as student exchanges, short-term programs, and giving the admission before coming to Japan. Our goal is to accept 640 international students per year no later than 2023 (16% of all students, 40% of graduate students).

Promoting study abroad of Japanese students
80% of Japanese students will belong to the “Global Course” in graduate school. In the “Global Course”, joining an internship program is obligated. As a result of it, study abroad of Japanese students is promoted.

Curriculum reform for globalization
We begin the program to enhance the English abilities and make at least half the undergraduates achieve the TOEIC score of 730 or higher. We also provide more graduate courses offered in English to make at least 80% of all courses in graduate school instructed in English no later than 2023. To enhance convenience for students to study abroad, we make our academic calendar more flexible.

Globalizing the faculty and staff members
We start the dispatch program of faculty and staff members. Also, staff members are obligated to take TOEIC test every year to know their English fluency and make the target of achievement by themselves.
Not only the capacity building of our staff, we invite researchers and students per laboratory from overseas leading universities.

Personnel systems of faculty members meeting the global standard
We establish and operate personnel systems of faculty members meeting the global standard such as annual salary scheme, tenure track, evaluation standard fitting the globalization.

Enhancing diversity on campus
Exchanges among international researchers/students and Japanese researchers/students on campus become common by providing dormitories where both international and Japanese students live and promoting activities of exchange.

Curriculum structure by 3×3 scheme
We change the academic year structure from the scheme of 4-year bachelor, 2-year master, and 3-year doctor to the one of 3-year bachelor, 3-year master and 3-year doctor in effect.

Program to enhance the English abilities: seeking the TOEIC score of 730
Students take the program of a great deal of input with high degree of demand in their freshman and sophomore years. The average TOEIC score at the time of entrance of graduate school will be raised from 616 to 730 no later than the year of 2023.

Step-up style of structure of Project Based Learning (PBL)
PBL style programs take important roles in our curriculum. Stepping up from On-campus group, region, to overseas, students experience PBL as team projects. Through these experiences, we foster students’ leadership.

Dispatch program for faculties and staff
We send about 10 faculty members abroad who are expected to conduct the educational collaboration internationally for a year in maximum. We also send a staff abroad for a year in maximum. Through these activities, we promote the globalization of our campus.

Inviting overseas leading unit
We invite researchers and students per laboratory from overseas leading universities in the areas of design and architecture, macromolecular and fibrous materials and green innovation, all of which are the core of our plan of ASIAN HUB, in order to develop global standard educational research.

Activities of collaboration in TECH SALON and Global Commons
We have set up TECH SALON as the hub of collaboration among international/Japanese researchers and industries, and Global Commons as the hub of collaboration among international/Japanese students. At these facilities, we expect that seminars of advanced knowledge, collaborative researches and learning activities among multi-national members, and multi-cultural exchanges are promoted.
2. FY2014 Progress

- **Common indicators and targets**

  **Internationalization**
  - Inviting overseas leading units
    We invited overseas leading units from Princeton University, Université de Paris, National University of Singapore, and so on, and held conferences and workshops.
    Also we invited leading units from ETH Zurich and Royal Academy of Arts (London), and held workshops after April 2015.
  - Activities of model globalization laboratories
    13 laboratories were specified as “Model Globalization Laboratories”, and developed activities such as seminars by international researchers, training for students to make presentation at international conferences, collaborative projects with students in foreign universities, and accepting international students to the laboratory. Here are some examples of outstanding outcomes:
      * Japanese student completed his master thesis in English.
      * An international master student who came in a short-term project felt great satisfaction with research activities in the host laboratory and decided to seek his doctoral degree in Kyoto Institute of Technology.
  - Support for promoting global internship programs
    To promote our global internship programs, we supported faculty members leading the programs with budgeting their travel cost from Top Global University Project Budget (Cost for students are supported by Japan Student Service Organization (JASSO) or our International Exchange Promotion Fund. In FY2014, 89 Japanese students joined the program and 62 of them got credits on this activities.
    - TOEIC test and trial of speaking test we originally developed
      Freshmen besides ones belong to the evening program were asked to take TOEIC test and 471 of them took it.
      Concerning the speaking test, we originally developed the one targeted to evaluate the skill to use English in practical situations. The trial of the test was held and 834 students took it. (Photo: Trial of speaking test)
  - Preparation for dispatch program of faculty and staff
    We completed the preparation for dispatch program of faculty and staff. The program started in FY2015, where nine faculties (three of them to the UK, two to the US, other four to Canada, France, Singapore, and Thailand) and one staff (to the US) will be sent.

- **University reform**
  - Setting up the center to promote the project
    Center for Top Global University Project Office, whose head is the Vice-President for international, has been set up. Under this center, general committee and planning committee has been set up.
  - Annual salary scheme for faculties
    Regulations for the scheme have been established and enacted them to eight faculties currently hired. We also hired two new faculties under this scheme.
  - Establishment of facilities for international exchange
    We have established two facilities; one is “TECH SALON”, which is for global exchanges among researchers and industries, and the other is “Global Commons”, which is for exchanges among students.

- **Education Reform**
  - Starting the curriculum of $3 \times 3$ structure
    We enacted the $3 \times 3$ structure.
Featured initiatives based on the characteristics of the university

- Step by step system to foster TECH LEADERs in 6-year curriculum
  - Applying the 6-year curriculum for undergraduate and master based on $3 \times 3$ structural reform, we started the new style of education. According to this style, first half of the whole curriculum (3 years) are to consolidate the basis with the way such as the program to enhance the English abilities and the team program of Project Based Learning (PBL) on campus and regional area. On second half of the curriculum (3 years), the team program of PBL overseas is provided. Through this process, talents for a TECH LEADER is fostered.

- Establishing the platform of exchange among researchers and industries
  - As a consortium of researchers and industries from foreign countries and Japan, we established “OPEN TECH Consortium” where they share the forefront knowledge in the world and do joint researches. There are 46 members (in total of organizations and personnel) as of March 2015.

- Symposia for Japanese and international researchers and industries
  - As we also have been committing to “Center of Community” (COC) Project, at the kick-off of Top Global University Project, we held a joint symposium of COC and Top Global University Project. We had about 280 participants from both on and off campus.

Free description

- Seeking the flagship in Asia
  - One of our goal is to foster many TECH LEADERs, and another goal is to become “ASIAN HUB” of education and research – take the flagship in Asia.
  - We especially seek the flagship in the fields of design and architecture, fibrous materials and macromolecular, and green innovation. We have already invited several units from leading universities in the world. We will begin the same activities in other two fields mentioned above. Continuing these activities in 10 years effort will make us the ASIAN HUB.

- Contribution to globalization of the region
  - Kyoto is a cluster of research and development-oriented enterprises, and major companies are running their business globally. On the other hand, many small companies are not ready enough for globalization.
  - Based on our outstanding outcomes on collaboration with the region through the COC project, we conduct the Top Global University Project to contribute to globalization of the region at the point of fostering the leaders to make the regional industry globalized and setting up the opportunities for regional industry to make communication with international researchers and industries.