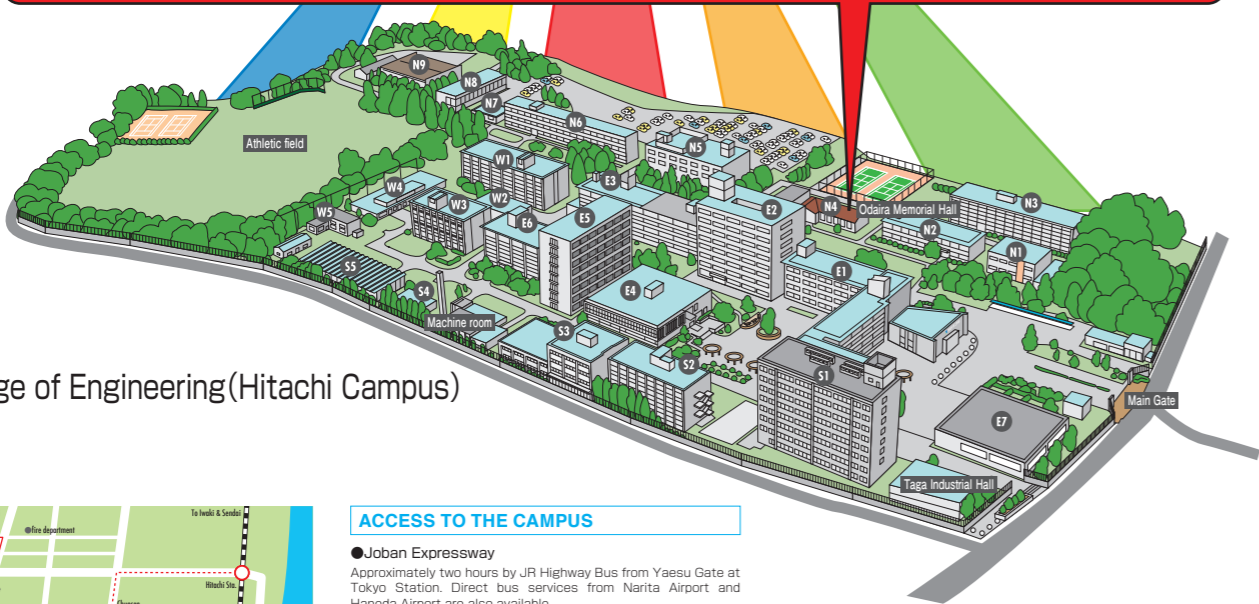


Advancing from the Community to the World

Ibaraki University, College of Engineering, Education and Research Centers



College of Engineering (Hitachi Campus)



Access Map

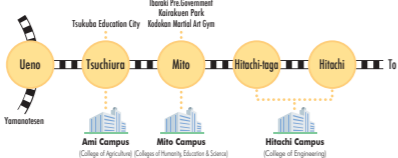
When using JR Hitachi Station:
 From JR Hitachi Station (central exit), take Hitachi-dentetsu bus for Heiwadai ③ or Kosakidai ④ via Chuo-sen and get off at "Ibadai-mae" bus stop.
When using JR Hitachi-Taga Station:
 From JR Hitachi-Taga Station, take Hitachi-dentetsu bus for Hitachi-eki ③ or ④ via Chuo-sen and get off at "Ibadai-mae" bus stop.

ACCESS TO THE CAMPUS

● **Joban Expressway**
 Approximately two hours by JR Highway Bus from Yaesu Gate at Tokyo Station. Direct bus services from Narita Airport and Haneda Airport are also available.



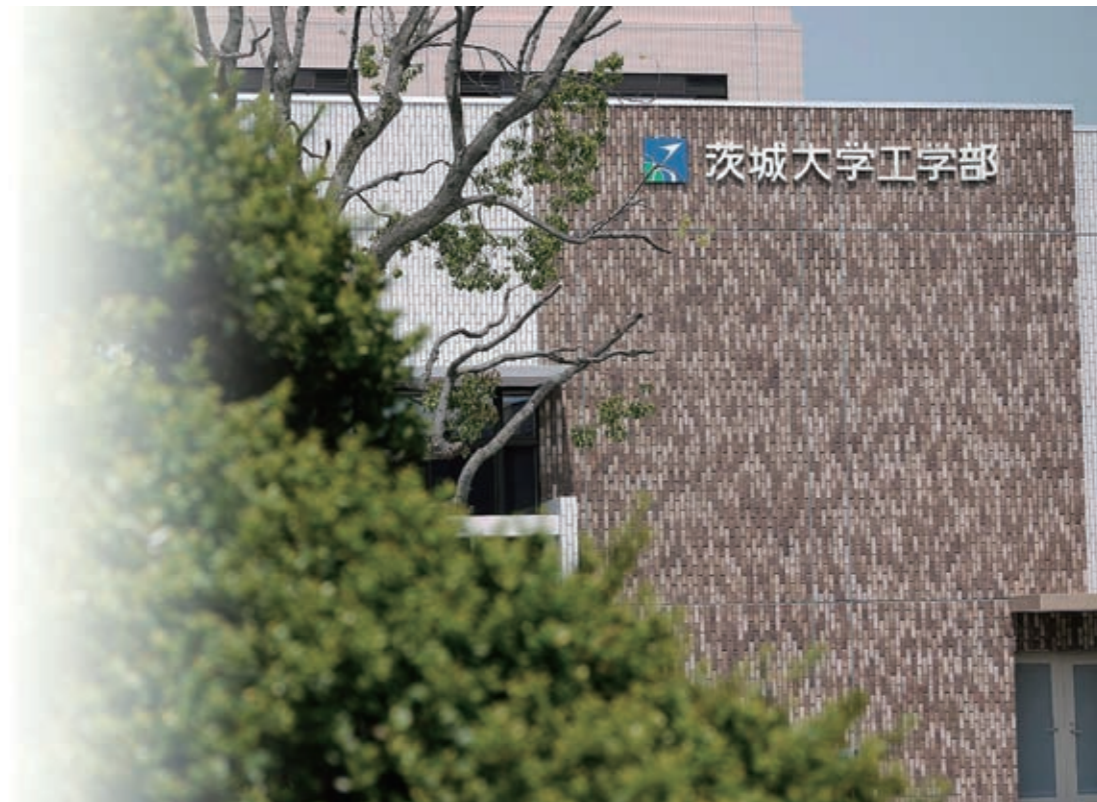
● **JR Joban Line ("Super Hitachi Limited Express Train")**
 Super Hitachi Express Train directly connects Ibaraki University with central Tokyo.



Ibaraki University, College of Engineering, Education and Research Centers



4-12-1 Nakanarusawa-cho, Hitachi City, Ibaraki Japan 316-8511
 TEL 0294-38-5004 <http://www.eng.ibaraki.ac.jp/>



Ibaraki University, College of Engineering, Education and Research Centers

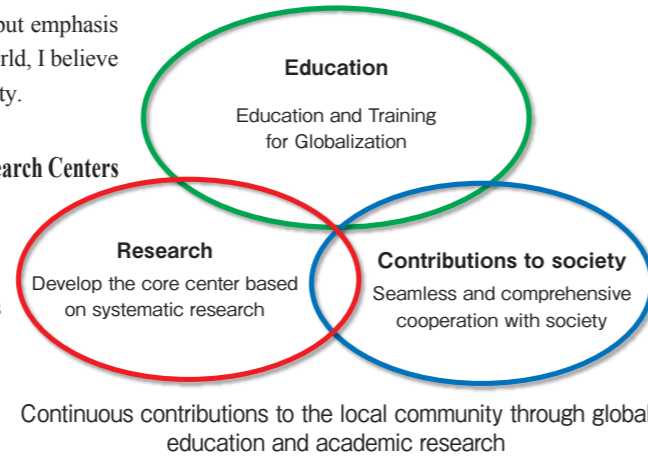
National University Corporation
College of Engineering
IBARAKI UNIVERSITY

-We aim to train personnel who will contribute to the world-

In 2004 the reorganization of national universities took place. Since then, the education and research environment surrounding Ibaraki University has changed remarkably. Due to the decrease of operating subsidies for universities, the decrease of professors, the intensification of competition among universities, the decrease of students taking the entrance examination, the acceleration of internationalization and the increase of demands for social contributions inspired Ibaraki University to make various reforms to become a national university centering on the community. Thus, in January 2012, the College of Engineering established four education and research centers integrating (1) Education (2) Research (3) Contributions to society. Each center integrates the scientific knowledge and skills that have been cultivated at the College of Engineering to support the development and restoration of society. By strengthening the interactive relationship among all in a regional community, it is my hope to enhance the power to utilize the voice of society through our university's education and research centers. As we put emphasis on training personnel (students and businessmen) who will contend in the world, I believe these centers will serve as an interface between Ibaraki University and society.

Three Roles of Ibaraki University, College of Engineering, Education and Research Centers

1. Educate students and personnel for globalization
Students, young teaching staff, engineers, and researchers
2. Promote the research of leading-edge technologies
A systematic approach to project based research and research results that contribute to society
3. Contribute to the local community
Comprehensive contributions based on joint research and education



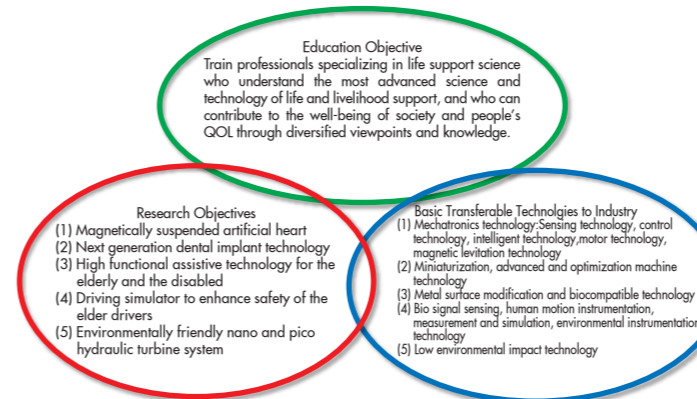
Tatsuhiro Yonekura
Dean of the College of Engineering,
Department of Science and Engineering
Research Director

Life Support Science Education and Research Center

It is desirable for people to stay as healthy as possible, to engage in work, and to spend a happy and fulfilling life with a higher QOL (Quality of Life) in society. Our center carries out education and research of science and technology that aim at supporting human life, assisting with physical functions, and creating a comfortable living environment. We have been investigating life support science research since 1998 under the auspices of the Ibaraki Life Support Consortium. Our goal is to contribute to society's well-being by applying such knowledge and skills as miniaturization, power efficiency improvement, optimization, and intelligent mechatronics in medical care and welfare. These technologies are not only applicable in the medical care and welfare fields but also in broad industrial fields. We aim to utilize our knowledge towards realizing a better society without limitations.



Toru Masuzawa
Center Director



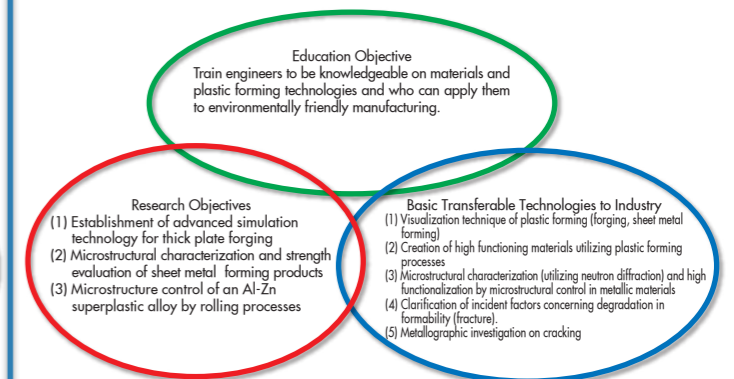
Education and Research Center for Science-Based Plastic Forming

Plastic forming is an environmentally friendly process that causes no waste and does not require high temperature. It is highly valued as it requires basic knowledge on the characteristics of materials as well as on the processing itself. Therefore, to maintain our leading edge technology, we must conduct the research and development on plastic forming, starting ahead in a scientific manner, not depending merely on the intuition and experiences.



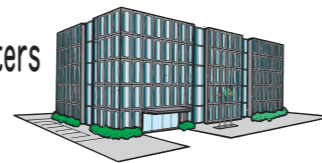
Goroh Itoh
Center Director

Compared to other universities, Ibaraki University, College of Engineering has a greater number of teaching/research staffs in this field. We have been carrying out the activity of 'Forum on Science-Based Plastic Forming' since 2010. With the establishment of this center in January 2012, we have been giving priority to education as well as research, and more actively promoting the education and research activities on science-based plastic forming. Through the education of graduate students on joint research projects with industry, visiting lecturers, and the acceptance of working doctoral course students, we aim to develop this field with local people, towards a long-term vision.



Ibaraki University, College of Engineering, Education and Research Centers

Aiming at an Open University



College of Engineering Education and Research Center

- Promotion of research projects
- Educate graduate students, and young researchers, Re-educate professional engineers
- New seeds created from social needs under mutual collaboration

Needs

Seeds



Society
Regional enterprises

Technology development
Employment of personnel

Interactive Relations with Society

Organization for Creation of Collaboration and Innovation

Return research results and seeds to society
(e.g. Hitachi Manufacturing Salon, etc.)

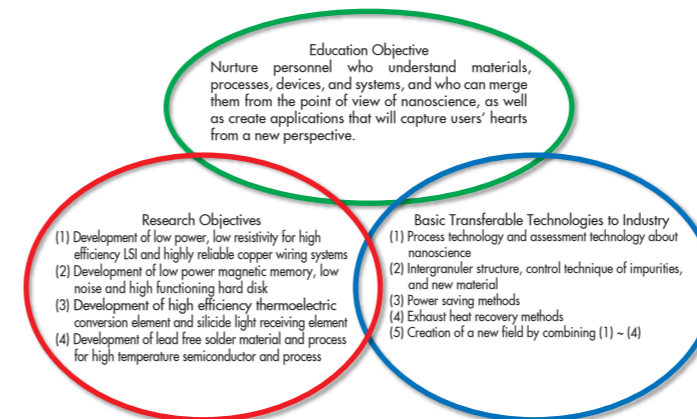
Green Device Education and Research Center

Eco-friendly and highly efficient low power electron and information devices are essential to realizing an abundant society. We practice challenging and advanced research about nanoscience and its applications. We strive to create new industries fostering the development of eco-friendly devices into key technologies.

Green devices are used in mobile machinery for computer loading electronic equipment and electronic equipment for loading motor vehicles (including inverters) as there is a large market of several trillion yen. We nurture knowledgeable professional engineers through the education and research on advanced device and material technologies. Furthermore, our goal is to restore basic eco-friendly knowledge to the region acquired from our research, and to support the development of regional industries.



Jin Oonuki
Center Director



Education and Research Center for Disaster Prevention and Security (CDPS)

CDPS addresses key scientific and engineering problems of technological significance on disaster prevention and security which require an approach that transcends traditional disciplines. The center aggressively pursues system development, demonstration experiments, and project development through the knowledge and technologies such as infrastructure management, environment informatics, structural monitoring, smart materials, advanced sensors and networking, data mining and distributed processing, communication technologies, etc. conducted and explored through the interdisciplinary collaborations between experimentalists, theorists, computer simulators and technology developers from different departments at Ibaraki University. We also cooperate with local governments within or outside the prefecture and promote the synergistic collaborations with researches and developers from other universities, industries and research institutions under the banner of disaster prevention and security. Our goal is to establish sustainable urban built environment with the minimization of different disasters through developing the intelligent safety and security techniques. One of our recent major focuses is to develop a distributed monitoring, management and early warning system of urban built environment as a key sub-system of a smart city useable both in normal period and in disasters. For the purpose of visualization of environmental and infrastructural information of a whole city, a concept of grid sensing has been proposed and all sensing nodes installed with multipurpose sensors for different grids covering respectively certain areas of a city are being networked. Also, by using information collected from aerial and earth observation satellite images, we can gather, process and utilize urban geographic information for distribution. These advanced technologies and systems will be also useful for new business development of regional enterprises.



WU Zhishen
Center Director

