

Aiming to create new industries through teamwork between industry, academia and government, and by exploiting a unique combination of factors – like science/technology, industrial infrastructure and cultural assets – in the Keihanna Science City area

Overview

The basic concept of our Knowledge Cluster Initiative is to create Keihanna's own version of Silicon Valley. The region and local industry are relying on us, in our role as a "primer," to build a city which creates new industry. Based on the following catch phrases, we have already created business results, like commercialization, technology transfer and ventures originating in academia.

- (1) Shifting from research concepts to business concepts
- (2) Human L³ begins by fusing science/technology with culture
- (3) Diversity itself is the source of innovation

Our research area is human L³ technology for supporting more fulfilling life. We are promoting comprehensive research within the "L³" framework, which is based on the 3 "L" axes: Life sciences whose core is plant bio, Living technology whose core is neo-appliances and welfare, and next-generation e-Learning. The core research organizations are: the Nara Institute of Science and Technology, Doshisha University, Osaka Electro-Communication University, and the Research Institute of Innovative Technology for the Earth. The joint research organization is comprised of 21 universities, 52 companies and 9 public research laboratories. We aim to build an open cluster by forging ties with new business promotion programs in the three Prefectures of Kyoto, Osaka and Nara, and with industrial clusters supervised by METI-Kansai.

Cluster Headquarters

- President Hiroyuki Mizuno
- Project Director..... Masaharu Noyori
- Chief Scientist (CS) Naotake Ogasawara
- Deputy Chief Scientist (CS) Yoshiaki Watanabe
- Science and Technology Coordinators Haruo Misumi, Kenichi Itoh, Kunio Nakamura

Core Organization

Keihanna Interaction Plaza Inc.

Participating Research Organizations

(Bold: Core Research Organization)

Industry...Hagihara Farm Co.,Ltd., MicroSystems, Ltd., ChudenCTI Co.,Ltd., SANWA CORNSTARCH CO.,LTD., EZAKI GLICO CO., LTD., Environmental Research Center The Kansai Electric Power Co.,Inc., OMRON Corporation, CUBIC INC., ATR, DoGA Corporation, Micronix Inc., unionGear Co.,Ltd, NIPPON SYSTEM DEVELOPMENT CO., LTD., and others

Academia...**Nara Institute of Science and Technology, Doshisha University, Osaka Electro-Communication University, RITE**

Government...Nara Agricultural Technology Center, Nara Prefectural Institute for Hygiene and Environment, Kyoto Prefectural Institute of Agricultural Biotechnology, and others



Project Director
Masaharu Noyori

To All of You who Wish to Realize Venture Dreams. Let's Work Together!

Creating a Keihanna version of Silicon Valley. That is the dream I saw when I was appointed Project Director. Now two years have passed, and we are seeing some signs of the dream coming true. During this time, we have commercialized two products, created 3 University incubated ventures, and produced 58 patent applications. People are the playing the leading role. Ideas and a challenging spirit make dreams come true. World-class researchers... Entrepreneurs who lead the world in conceiving new businesses... People who support these activities to achieve their dreams... All the actors are in place. About 100 organizations, and about 300 people are now involved. They are our source of innovation, and our colleagues. For the coming 3 years, we will hop, step and jump to achieve our goals! What we need is more support from everyone. Lend us your strength and wisdom. And to you who want to make your dreams come true, let's work together at Keihanna, the stage of dreams. We're waiting for you.



Masaharu Noyori is an honorary member of Matsushita Electrical Industrial Co., Ltd.

Outline of the Joint Research by Industry, Academia and Government

The Human L³ Research Project is being promoted by a joint research organization linking industry, academia and government. The research groups centered on the Nara Institute of Science Technology are producing results with great potential for creating revolutionary new industries in fields like medicine, agriculture, environment and food products. This work includes technology for producing protein for medical use from the leaves of vegetables, development of medical materials which are gentle on the body, and research on purifying soil using plant roots.

A wide range of groups are working together around the nucleus of Doshisha University and Osaka Electro-Communication University, and their theme is neo-appliances. These groups propose new appliance concepts and neo-appliance research, focusing on "people, life and welfare." This includes research on intelligent lighting systems which use their own judgment to optimally adjust the amount of light, research on technologies for using factory waste heat for cooling via the medium of sound, research on wireless communication security technologies which do not use encryption, and research on high-functionality myoelectric-controlled hand prosthesis.

Next-generation learning systems are being studied by the group centered around Osaka Electro-Communication University. By making use of the wealth of cultural assets in Kansai, a wide range of research groups (including digital game and animation software engineers and cultural asset researchers) are participating in research "to create new industry by fusing the cultural assets of Kansai with IT technology." From this research, we will see new educational approaches, and understand how cultural tourism ought to be in the future.

