## Chiba Experiment Station

http://www.iis.u-tokyo.ac.jp/chiba/

1-8 Yayoicho Inage-ku, Chiba (Nearest Station JR Nishi-Chiba)

## Outline

The Chiba Experiment Station is part of the Institute of Industrial Science (IIS) of the University of Tokyo, and occupies an area of about 9.3 hectares. It remained in Chiba after the IIS moved to a campus in Roppongi, Tokyo in 1962. The mission of the Chiba Experiment Station is to accommodate large-scale research facilities and carry out experimental work that cannot be hosted at the Komaba II campus in downtown Tokyo, which has been home to the IIS since 2001 when it transferred from Roppongi.

Initially, a pilot blast furnace plant for experimental use was installed at the Station. This was followed by construction of laboratories for experiments on tidal waves/tsunamis, hydraulic and hydrological research, a large shaking table for earthquake simulations, and facilities for laser and millimeter waves. More recent additions are the seakeeping and maneuvering basin of the Faculty of Engineering, facilities for dynamic testing and earthquake response testing, a test embankment reinforced with geotextiles, field models of storm water infiltration facilities, and a circulating water channel with a wave generator and wind tunnel.

In January 1995, a new research and testing complex with a total floor area of 3,823m was completed to support existing and future activities of the Station. In April 2002, the IIS Ocean Engineering Basin, which is 50 m in length, 10 m in width, and 5 m in water depth, and can artificially recreate various ocean conditions, was built to replace the hydraulic and hydrological research laboratory. Recent expansions have brought the Station a sustainable biomass utilization system and new experimental facilities such as model domes, geothermal air-conditioning system employing a ground heat exchanger, experimental intersection, light rail transit (LRT) testing facility, and Energy Saving Urban Transport "Eco-Ride", Advanced CFB Coal Gasifier, Mock-up of Rigid Frame Viaduct for Concrete Surface Quality Monitoring.

Some of these facilities are used by specific research groups of the institute as long-term assets, while others are provided for specific research. Research projects are renewed on the basis of reviews of progress and in response to societal needs. In the last few years some 30 laboratories have been engaged in approximately 50 projects at the Station.

## **Bird's Eye View**



IIS Ocean Engineering Basin



Tension Strut Dome System / White Rhino



Geothermal HVAC System Laboratory



Energy Saving Urban Transport System "Eco-Ride"



Advanced CFB Coal Gasifier



Mock-up of Rigid Frame Viaduct for Concrete Surface Quality Monitoring

