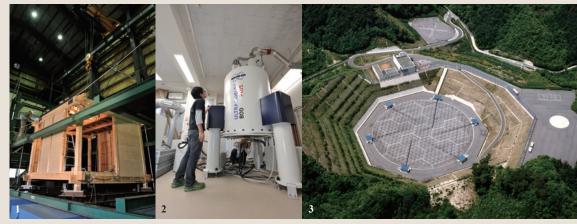


# **Laboratory Facilities**



#### 1. Strong Earthquake Response Simulator

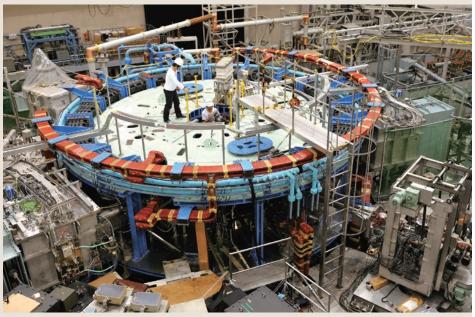
Disaster Prevention Research Institute The Strong Earthquake Response Simulator is a shaking table that can reproduce ground motions observed during the Kobe earthquake. The device is used to determine the seismic resistance of structures

2. Multi-Purpose Super High Magnetic **Field Nuclear Magnetic Resonance** (NMR) Spectroscopy Instrument Institute for Chemical Research This facility enables us to obtain detailed information about the structure and dynamics of molecules in liquid and solid states, which provides a fundamental understanding of material properties on the molecular level.

#### 3. MU Radar Observatory

Research Institute for Sustainable Humanosphere

The middle and upper atmosphere radar (MU radar) is the most powerful atmosphere radar facility in the world. The MU radar's VHF-band atmosphere radar provides fast beam steering and flexibility to conduct various observations in the lower, middle and upper atmospheres.



### **Heliotron J Device**

Institute of Advanced Energy Heliotron J is an experimental device built for research into high temperature plasma fusion as an alternative energy solution.



#### 5. Flume for Sediment Transport

Disaster Prevention Research Institute This flume is a straight channel with a sand re-circulating facility. The flume is used for hydraulic experiments such as the investigation of channel bed morphology under various conditions of channel slope, flow discharge and water depth.

## 6. DASH System

**6.** DASH System Research Institute for Sustainable Humanosphere The Development and Assessment of Sustainable Humanosphere (DASH) System consists of a plant growth subsystem, which is a large greenhouse equipped to grow genetically modified plants, and a chemical analysis subsystem. The analysis data chemical analysis subsystem. The analysis data gathered can be applied to biochemistry, drug development and environmental chemistry.

#### 7. Scale Model of a Staircase

DPRI Ujigawa Open Laboratory A scale model of a staircase is used to investigate the characteristics of water flow over stairs and collect data for safety evacuation from underground spaces.