

Technical Tour at 20th IPHE SC Meeting



1. Date and Time: Friday, November 22, 08:30 – 17:25

(Start from Hilton Fukuoka Sea Hawk Hotel)

2. Outline of the site

(1) Kitakyushu Hydrogen Town

Kitakyushu Hydrogen Town is world's first demonstration of directly supplying by-product hydrogen to city through pipelines for full-scale use in the region.

(Demonstration tests started January 15, 2011)

Attendee may see:

- ✓ Hydrogen supply technologies using 1.2 km long pipeline
- ✓ Operations of 14 pure hydrogen fuel cells installed in housing complexes, commercial facilities, and public
- ✓ Compact mobile objects running on fuel cells such as forklift and bicycles
- ✓ And more

(2) Research Center for Hydrogen Industrial Use and Storage (HYDROGENIUS)

HYDROGENIUS was set up on July 1, 2006 in the Ito-Campus of Kyushu University. The thermo-physical properties of pressurized or liquefied hydrogen and the principle of hydrogen embrittlement under pressurized and liquefied hydrogen will be investigated at the center. Through this research, the center will present a guideline to industry for safe and easy utilization of hydrogen and will contribute to the establishment of infrastructures for hydrogen usage.

(3) Next-Generation Fuel Cell Research Center (NEXT-FC)

The center, which was established on January 1, is a one-stop research center that can solve various technical issues related to solid oxide fuel cell

development.

Major activities of the center include:

- ✓ Latest R&D and support for commercialization (corporation's battery cell assessment analyses, etc.)
- ✓ Implementation of individual joint research (thorough management of confidentiality agreements and corporation proprietary information)
- ✓ Technological guidance in the field of next-generation fuel cells
- ✓ International joint researchers through co-operation with the International Institute for Carbon-Neutral Energy Research, etc.

(4) The Hydrogen Energy Test and Research Center (HyTReC)

HyTReC was incorporated in March 2009 in order to facilitate the development and clustering of new hydrogen energy businesses.

HyTReC provides several services on Hydrogen such as:

- ✓ Prototype testing services, including durability, performance, vibration, air-tightness, pressure cycling, gas permeability, and material evaluation
- ✓ Development of product testing protocols

3. Schedule of the day

08:30	Leaving Hilton Fukuoka Sea Hark Hotel
09:30-11:00	Site 1: Kitakyushu Hydrogen Town
11:00	Leaving Kitakyushu Hydrogen Town
12:30-13:30	Lunch (at Kyushu University Ito Campus)
13:30-15:00	Site 2: HYDROGENIUS
15:00-16:00	Site 3: NEXT-FC
16:00	Leaving Kyushu University Ito Campus
16:20-17:05	Site 4: HyTReC
17:05	Leaving HyTReC
17:20	Arriving Hilton Fukuoka Sea Hark Hotel