



IEC TC 105 “Fuel Cell Technologies”

Workshop on Fuel Cells

Standards and Conformity Assessment for Future Development

Date: November 11th and 12th, 2012

Venue: Fuel Cell Nanomaterials Center, University of Yamanashi

<http://fc-nano.yamanashi.ac.jp/english/index.html>

Workshop should give the opportunity of a discussion platform of TC 105 experts and experts from Japanese industry, research and authority. The workshop is held in connection with the Plenary Meeting 2012 of IEC TC 105

Chairman: Dr. Fumio Ueno fumi.ueno@toshiba.co.jp
Chairman IEC TC 105

Organizers: Prof. Masahiro Watanabe,
Director of Fuel Cell Nanomaterials Center,
University of Yamanashi <http://www2.yamanashi.ac.jp/>
Prof. Wolfgang Winkler,
Secretary IEC TC 105
http://www.iec.ch/dyn/www/f?p=103:7:0:::FSP_ORG_ID,FSP_LANG_ID:1309,25

Secretariat: Dr. Noboru Hashimoto hashimoto.noboru@kk.jp.panasonic.com

Sponsors: Local government of Yamanashi Prefecture
<http://www.pref.yamanashi.jp/english/index.html>
The Japan Electrical Manufacturers' Association
<http://www.jema-net.or.jp/English/>

FYI: Yamanashi is famous with its grape and wine production in Japan. Logo of the University came from its initial Y and bunch of grape.



FIELD BUS TOUR PROGRAM – Sunday, November 11, 2012

14:15 Get together at the exit gate of JR Kofu station

Yonekurayama hill Mega-solar Power Plant



Model House equipped with PEFC type ENEFARM micro-CHP and other model house furnished with SOFC type ENEFARM.



Mobile Hydrogen Gas Station at Futaba service area on Chuo-Highway.



Note: This photo taken at a different place
Around 18:00 Dismiss at the hotel listed below to check-in.



WORKSHOP PROGRAMME - Monday, November 12, 2012

09:30 **Welcome by Prof. Masahiro Watanabe, Director of Fuel Cell Nanomaterials Center**

09:35 **Welcome Speech by Mr. Koichi Noda, Director of Technical Regulations, Standards and Conformity Assessment Policy Division, Ministry of Economy, Trade and Industry**

09:50 **International Fuel Cell Standardization within TC 105**
Dr. Fumio Ueno, Chairman IEC TC 105

10:10 **Coffee Break**

Current Situation and Future Prospect of Fuel Cell System Conformity Assessment.

10:30 **Standards, Regulations, Codes and Conformity Assessment Procedures for Fuel Cells in Europe**
Eckhard Schwendemann, Technical Management Consulting, Germany

11:00 **Standards, Regulations, Codes and Conformity Assessment Procedures for Fuel Cells in China**
Prof. Huamin Zhang, DICP, China

11:30 **Standards, Regulations, Codes and Conformity Assessment Procedures for Fuel Cells in Korea**
Dr. Minjin Kim, Korea Institute of Energy Research, Korea

12:00 **Lunch**

13:00 **Standards, Regulations, Codes and Conformity Assessment Procedures for Fuel Cells in North America**
Kelvin Hecht, Head of U.S. Delegation, U.S.A.



13:30 **Standards, Regulations, Codes and Conformity Assessment Procedures for Fuel Cells in Japan**

Affiliate Prof. Osamu Tajima, University of Yamanashi

International Approach on FC Conformity Assessment

14:00 **Voluntary international conformity assessment framework of the IEC**

Dr. Hiromichi Fujisawa,

IEC Vice-President and Chairman of the Conformity Assessment Board

14:30 **Specific Conformity Assessment solutions for worldwide market acceptance**

- addressing Equipment, Services and Personnel

- using the example of IECEx and emerging wind turbine and marine energy industries,

Chris Agius, Secretary IECEx

15:00 **Panel Discussion: Challenges and New Scope of International Standards and Regulations for Future Fuel Cell Systems**

Panelists: Alexander Dyck (EU), Kelvin Hecht (North America), Minjin Kim (Korea), Kazuhiko Inagaki (Japan), Huamin Zhang (China), Chris Agius (IEC), Hiromomichi Fujisawa (IEC), Harry Jones (UL requested)

Moderation: Fumio Ueno (IEC)

16:00 **Coffee Break**

16:15 **Activities of the Fuel Cell Nanomaterials Center in University of Yamanashi**

Prof. Masahiro Watanabe, University of Yamanashi

Lab tour

Adjourn at around 18:00

18:30 **Banquet in “Pavillon de Sadoya” in Sadoya Winery**

(Ten minutes walk from the meeting location, <http://www.sadoya.co.jp/>)



Registration

Registration Deadline: September 30th, 2012

To ensure the hotel booking, earlier registration is suggested.

Registration by e-mail only:

Registrations should be sent to

Dr. Fumio Ueno fumi.ueno@toshiba.co.jp

fax +81-3-5444-9341

tel +81-90-3504-5076

Please use the registration excel-form (including hotel reservation) available on the IEC website

There is no Registration Fee



ACCOMODATIONS:

Participants from outside of Japan need to stay two nights (Sunday and Monday) in Kofu.

Kofu Fujiya Hotel

3-2-30 Yumura, Kofu-shi, Yamanashi 400-0073

Tel 055-253-8111, Fax 055-253-5200

E-mail: kofu@fujiyahotel.co.jp

<http://www.kofufujiya.jp/english/index.html>

Room Rate: 15,000 JPY for twin room single use including breakfast

18,000 JPY for two people using a twin room including breakfast

The highest level hotel with hot-spring in Kofu, located at "Yumura Hot-spring".

10 min. by car/bus from Kofu station

Note: reservation should be made with the registration form

Yumura Hotel B&B

3-3-11 Yumura, Kofu-shi, Yamanashi 400-0073

<http://www.yumura-hotel.com/> (Japanese language only)

Room rate: single room with breakfast: 7,088 JPY

Japanese style suite room with twin bed & breakfast:

8,505 JPY for single use, 12,286 JPY for two persons

Small domestic hot-spring hotel locates just beside Kofu Fujiya Hotel. You will find difficulty in English communication with hotel employees.

Note: reservation should be made with the registration form

Free shuttle bus service to the hotels after field tour on 10th and to/from the meeting/banquet location on 11th .



Transportation:

Air

For persons attending both Kyoto and Kofu meetings or only Kyoto meeting, Narita (NRT), Haneda (HND) and Kansai(KIX) are the airport options.

For whom attending Kofu meeting only, NRT or HND is recommended.

<http://www.haneda-airport.jp/en/>

<http://www.narita-airport.jp/en/index.html>

<http://www.kansai-airport.or.jp/en/index.asp>

Access from KIX to Kyoto

By limousine bus: about 90 min., 2,500 JPY.

<http://www.okkbus.co.jp/en/index3.html>

or

JR Railway: about 75 min. 2,980 JPY

<http://www.kansai-airport.or.jp/en/access/index.html>

Kansai airport has two different railway services, one is operated by JR the other is by Nankai railway company, both companies have its ticket booth and platform side by side. JR's "Haruka Express" gives you direct service to Kyoto.

Access from NRT to Kyoto

There are several access options from Narita to Kyoto, but we recommend you one of options as bellow.

- 1) by air to Osaka-Itami (ITM) airport and take Airport Limousine Bus to Kyoto.

Airline	ANA	JAL	ANA	JAL
Depart from NRT:	16:45	16:55	17:55	18:30
Arrive at ITM:	18:00	18:15	19:10	19:50

ITM limousine information: <http://www.okkbus.co.jp/en/index2.html>

ITM Airport information: <http://osaka-airport.co.jp/en/>

From ITM to Kyoto: about 55 min., 1,280 JPY.

- 2) by JR "Narita Express" to Tokyo station and transfer to JR Tokaido Shinkansen to Kyoto.

Narita Express: <http://www.jreast.co.jp/e/nex/tickets.html>

Tokaido shinkansen: <http://english.jr-central.co.jp/index.html>



From NRT to Kyoto: about 3.5 hours, about 15,830 JPY

Narita airport has two terminals, terminal one and terminal two. All trains start from “airport terminal one station” and stop by “airport terminal two station”. Be careful there are three railway lines to Tokyo area: JR line and two Keisei lines.

Access from HND to Kyoto

By Keikyu train to Shinagawa station and by JR Tokaido Shinkansen to Kyoto takes about 3 hours and about 13,110 JPY.

Keikyu line: <http://www.haneda-tokyo-access.com/en/> (no time table exist!)

So, to find train route use this site: <http://www.jorudan.co.jp/english/>

Shinkansen: <http://english.jr-central.co.jp/index.html>

Access information from airport NRT, HND or KIX directly to Yamanashi University: please ask secretariat by e-mail.

Train

You can find train route and fare from <http://www.jorudan.co.jp/english/>

Web-sites of Japan Railway (JR)

JR Central: <http://english.jr-central.co.jp/index.html>

JR East: <http://www.jreast.co.jp/e/index.html>

No on-line reservation/purchasing are possible through these English web sites. Please make reservation and buy tickets at JR Kyoto, Narita airport or Kansai airport station.

From Kyoto to Kofu:

a) Take “Wide View Shinano No.9” bound for Nagano which leaves Kyoto at 9:26 and stops at Shiojiri 12:52. Then transfer to “Super Azusa No.18” bound for Shinjuku leaving Shiojiri at 13:11 stops Kofu at 14:09.

Fair: 11,310 JPY including seat reservation fees.

a') You can leave Kyoto little bit later by “Shinkansen Nozomi No.10” bound for Tokyo which leaves Kyoto at 10:16 and stops at Nagoya 10:51, where you can lie in wait “Wide view Shinano No.9” leaving Nagoya at 11:00.

Fair: 12,700 JPY including seat reservation fees.



b) Third option is to get on “Shinkansen Hikari No.460” bound for Tokyo which leaving Kyoto at 8:56 and stops at Shizuoka 10:32. Transfer to “Wide view Fujikawa No.5” bound for Kofu which leaves Shizuoka at 10:40 and arrives Kofu also at 14:09.

Fair: 12,980 JPY with seat reservation fees.

Options a) and a') takes mountain rout and b) takes sea/Mount Fuji side rout.

From Kofu to Narita airport (NRT):

Bus:

Airport Bus operated by Yamanashi Kotsu

fare: 4,300 JPY, Reservation required and can be made at Kofu station bus counter. Tel: 055 223 6711

JR Kofu Station	4:05	5:15	6:45	8:55	11:15	14:15
NRT terminal 2	7:05	8:35	10:20	12:25	14:35	17:50
NRT terminal 1	7:10	8:40	10:25	12:30	14:40	17:55

Train:

JR Kofu station to Shinjuku station by a express (time table see below)

http://jreast-shinkansen-reservation.eki-net.com/pc/english/common/timetable/elix_chuo_u/index.html

Then transfer to JR Narita Express (time table see below)

http://jreast-shinkansen-reservation.eki-net.com/pc/english/common/timetable/nex_d/index.html

or go from JR Shinjuku station to JR Nippori station to take Keisei Lines to Narita.

<http://www.keisei.co.jp/keisei/tetudou/skyliner/us/index.html>

From Kofu to Haneda airport (HND):

Bus:

Airport Bus operated by Yamanashi Kotsu

fare: 3,000 JPY, Reservation required and can be made at Kofu station bus counter. Tel: 055 223 6711

JR Kofu Station	4:00	5:30	7:00	9:10
HND Int. terminal	7:09	8:54	10:24	12:34



Train:

JR Kofu station to Shinjuku station by a express (time table see below)

http://jreast-shinkansen-reservation.eki-net.com/pc/english/common/timetable/elix_chuo_u/index.html

From Shinjuku to HND by bus (see below) or train

http://hanedabus.jp/timeinfo_e.php?areano=A&routeno=100&busstop1=7000&busstop2=6002

or Take JR Yamanote line to Shinagawa Station and change to Keikyu line to Haneda Int. terminal station. <http://www.haneda-airport.jp/en/access.html>

Train route finder: <http://www.jorudan.co.jp/english/>

From Kofu to Kansai airport (KIX):

Please ask by e-mail below.

Further Information:

Contact person: Dr. Fumio Ueno

fumi.ueno@toshiba.co.jp