


# 国际氢能燃料电池技术及汽车发展论坛

INTERNATIONAL HYDROGEN FUEL-CELL TECHNOLOGY AND VEHICLE DEVELOPMENT FORUM

*September 21-22, 2010  
Galaxy Hotel Shanghai  
Shanghai, China*

## HOSTED

- Ministry of Science and Technology, P. R. China (MOST)
- International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE) 

## ORGANIZED

- National Fuel Cell Vehicle & Powertrain Research & Engineering Center, Tongji University 
- Argonne National Laboratory, U.S. DOE 

## SUPPORTED

- Science and Technology Commission of Shanghai Municipality
- Shanghai New Energy Automotive Promotion Office



# AGENDA

## TUESDAY, SEPTEMBER 21

08:00-08:30 Registration

### Opening Ceremony

**Master of ceremony:** Prof. YU Zhuoping, Director of National Fuel Cell Vehicle & Powertrain Research & Engineering Center

08:30-08:40 Welcome by Mr. ZHANG Zhihong of Ministry of Science and Technology, P. R. China

08:40-08:50 Welcome by Ms. Nilgün PARKER of German Federal Ministry of Transport, Building and Urban Development

08:50-09:00 Welcome by Mr. Lu Xiaochun of Science and Technology Commission of Shanghai Municipality

### SESSION 1: Overview of Fuel Cell Programs in Key Countries/Regions

**Session Chair:** Prof. YU Zhuoping, Director of National Fuel Cell Vehicle & Powertrain Research & Engineering Center

*Presentations from key countries/regions will summarize and explore national and international activities and strategies of research, development and deployment of fuel cells.*

09:10-09:30 **U.S.** - Ms. Sunita SATYAPAL of DOE Fuel Cell Technology Program

09:30-09:50 **China** - Mr. ZHENG Fangneng of MOST

09:50-10:10 **EU** - Mr. Enrique GIRÓN, Fuel Cell and Hydrogen Joint Undertaking

10:10-10:30 **IPHE** - Dr. Stian NYGAARD, Research Council of Norway

10:30-10:50 Coffee/Tea Break

### SESSION 2: Status of Fuel Cell Technology Development

**Session Chair:** Dr. HU LiQing, CEO & CTO of Shanghai Shen-Li High Tech Co., Ltd

*This session will focus on technology advancements, early market preparation, safety codes and standard development, and challenges and barriers of fuel cell technology market introduction.*

10:50-11:10 **DOE fuel cell R&D progress:** Ms. Sunita SATYAPAL of DOE Fuel Cell Technology Program

11:10-11:30 **Chinese FCV Powertrain Platform R&D progress:**  
Mr. ZHANG Tong of Shanghai Fuel Cell Vehicle Powertrain Co.

11:30-11:50 **FCV development for the World Expo 2010:**  
Mr. HUANG Chendong of Shanghai Automotive Industry Corporation

11:50-12:10 **FCV development of Honda:**  
Mr. Takashi MORIYA of Honda R&D Co. Ltd. Automobile R&D Center

12:10-12:30 **Speech on Regulation, Codes and Standards:** Mr. Jay KELLER of Sandia National Labs

12:30-13:30 Lunch break

### SESSION 3: Hydrogen: Production Technology, Costs and Infrastructure Development

**Session Chair:** Prof. Michael WANG, Argonne National Laboratory, US DOE

*Presentations in this session will share experiences and best practices in technology and business development of hydrogen production and infrastructure.*

13:30-13:50 **Hydrogen production technologies – progress and costs:**  
Mr. Fred JOSECK of DOE Fuel Cell Technology Program

13:50-14:10 **Hydrogen development in China:**  
Mr. WANG Shudong of Dalian Institute of Chemical Physics, Chinese Academy of Sciences and Mr. REN Xiangkun of Shenhua Group

14:10-14:30 **Hydrogen infrastructure needs:** Mr. Mark RUTH of NREL

14:30-14:50 **AIR LIQUIDE vision for a sustainable mobility:** Mr. Patrick SANGLAN of Air Liquide

14:50-15:10 **Hydrogen Fuel of the future, today:** Ms. Wendy ZHOU of Air Products

15:10-15:30 **Innovative technologies for the hydrogen infrastructure:**  
Mr. Fred ZHENG of The Linde Group Hydrogen Solutions

15:30-15:50	<b>Research and Development of Fuel Cells Vehicle and Hydrogen in Japan:</b> Mr. Haruhisa KOGUCHI of ANRE, METI
15:50-16:00	Coffee/Tea Break

### FINAL DISCUSSION: Discussions of the First Day Presentations

**Panelists:** Sunita SATYAPAL, HU LiQing, Michael WANG; **Moderator:** YU Zhuoping

16:00-17:00	<i>To lead discussions of the presentations made in the first day. A set of issues will be prepared for the panelists and forum participants to get answers to. The results of this discussion will be summarized as a valuable outcome in the forum report. Potential issues for discussion could include challenges for fuel cell technology and infrastructure development at the global and the national level. Having a list of these challenges and ideas how to tackle these challenges could be presented with the results from the discussion after the 2<sup>nd</sup> session by the end of the meeting.</i>
17:00	Wrap up
18:30	Evening Dinner hosted by Tongji University

## WEDNESDAY, SEPTEMBER 22

### SESSION 1: Key international hydrogen fuel-cell vehicle demo programs

**Session Chair:** Dr. ZHANG Jinhua, Director of Energy-efficient and New Energy Vehicle Key Project Office, MOST

*This session will present major hydrogen fuel-cell vehicle demo programs in different parts of the world.*

08:30-08:55	<b>Shanghai World Expo demo and Post-Expo deployment – Chongming Island:</b> Mr. WANG Zhe of National Fuel Cell Vehicle & Powertrain Research & Engineering Center
08:55-09:20	<b>EU demo – Large demo projects in Europe:</b> Ms. Monika KENTZLER, Project Coordinator HyFLEET:CUTE
09:20-09:45	<b>California Fuel Cell Partnership:</b> Ms. Catherine DUNWOODY of California Fuel Cell Partnership
09:45-10:10	<b>Japan – JHFC demo projects</b>
10:10-10:30	Coffee/Tea Break

### SESSION 2: Energy and Environmental Benefits

**Session Chair:** Dr. Klaus BONHOFF, NOW Managing Director (Chair)

*This session will present updated assessment of energy and environmental benefits of hydrogen fuel-cell technologies and various hydrogen production sources and pathways globally for near-term and long-term deployment of hydrogen fuel-cell vehicles.*

10:30-10:55	<b>Energy and emission benefits of hydrogen fuel cell Technologies:</b> Prof. Michael WANG of Argonne National Laboratory
10:55-11:20	<b>Environmental benefits of hydrogen and fuel cells in transport – Europe’s recent activities and next steps:</b> Dr. Ulrich BÜNGER of LBST
11:20-11:45	<b>GM’s Electrification Strategy with focus on Hydrogen and Fuel Cell Electric Vehicles:</b> Dr. George P. HANSEN of General Motors

### FINAL DISCUSSION: Panel discussion to wrap up the forum.

**Panelists:** ZHANG Jinhua, George P. HANSEN, GUO CJ; **Moderator:** Klaus BONHOFF

11:45-12:30	<i>The wrap-up session will summaries the key issues explored in the past 1.5 days and key challenges of hydrogen fuel cell technology research, development, and deployment and solutions to the challenges. The international collaboration and cooperation in the area of hydrogen fuel-cell vehicles will also be discussed.</i>
12:30	Lunch Break
15:00	Tour of fuel-cell vehicle demo facilities in the World Expo

#### Secretariat:

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