

**Summary of the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE)
Workshop on Fuel Cell as Backup Power for Telecommunications
Wuhan China, May 29, 2015**

The *IPHE Workshop on Fuel Cell as Backup Power for Telecommunications* (Workshop), was held at the Wuhan University of Technology (WUT), Wuhan, China. Mr. Zheng Fangneng, Director of the Energy Division, Ministry of Science and Technology (MOST), China, and, the Vice President of WUT, Prof. Chen Wen made keynote addresses. There were more than 110 participants from a dozen countries coming from industry, academia and government.

The day long Workshop, moderated by the Executive Director of the IPHE Secretariat, Mr. Tim Karlsson, and, the Director of the Hubei Key Lab of Fuel Cell in WUT, Prof. Pan Mu, addressed three themes:

- The status of hydrogen and fuel cells (HFCs) from a governmental perspective;
- The status from a technology provider perspective; and,
- Issues from an end-user perspective.

Delegates from China, the United States, Europe, Japan, South Africa, and the Republic of Korea addressed developments in HFCs in their respective country or region. Presentations highlighted the spectrum of approaches underway from the development of a strategic approach with detailed initiatives, to progress on identified targets with defined metrics, to the need for flexibility in support of meeting unique needs within a region, to the decision to focus on niche areas of strategic importance. There was affirmation that large scale rollout of the technology leads to significant cost reductions but that further technical development is still needed.

In afternoon, delegates from leading fuel cell backup power systems providers including Ballard Power Systems, Plugpower, Heliocentis, H2power, Alteryg and local companies Foresight Energy, and Wuhan Troowin Power Systems, presented their views on products and market achievements. Issues identified included the sense that HFC products can stand on their own technical merit against incumbent technologies but there needs to be further cost reduction. There continues to be misperceptions about the technology and a need to work to inform the market of the potential of HFCs through deployments and provision of detailed information. The end users, China Mobile and Cascadian identified the significant opportunities that exist and highlighted the openness of leading telecommunications firms to consider new technologies in their rapidly expanding systems.

The IPHE would like to thank all those that contributed to the success of this Workshop including students and WUT faculty. The IPHE would especially like to thank the keynote speakers and presenters whose insights and views contributed to an informative and thought provoking day. As is the IPHE's practice to engage and inform, all presentations are available on the IPHE website (www.iphe.net).