## **ENGINEERING for our FUTURE!**

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## Challenge & Opportunity of Fuel Cell against Global Warming

Nowadays, the world faces an energy crisis mainly caused by the depletion of conventional resources and increasing environmental problems produced by the use of fossil fuels. Hydrogen has been proposed for decades as a promising energy carrier for a future low carbon energy economy. One of the most promising ways is the usage of cleanly produced electricity from non-fossil fuels such hydrogen using fuel cell technology. R&D trends & status on fuel cell are discussed.

Dr. Chang Soo completed his doctorate in Materials Science and Engineering at the Korea Advanced Institute of Science and Technology. He had worked as a visiting scientist at Argonne National Laboratory from 1982-1983. He has over 30 years experiences in Fuel Cell development especially on PAFC (Phosphoric Acid Fuel Cell) and PEMFC (Proton Exchange Membrane Fuel Cell). He has published 100 scientific papers, received over 100 patents and been an invited plenary speaker on FCs at numerous events, including the 2005 Grove fuel cell Symposium (London, UK); f-cell 2008 (Stuttgart, Germany); fuel cell seminar 2010 (San Antonio, U.S.A.) and FCDIC Fuel Cell Symposium 2012 (Tokyo, Japan). He joined korea Institute of Energy Research (KIER) in 1980. At KIER, he provided senior technical, managerial, and commercialization leadership to the Laboratory's extensive fuel cell and clean energy programs. He is on the Editorial Boards of several journals, has served on many national and international advisory panels.

