(초청강연)

Fuel Cell and Fuel Processor for Energy Conversion of the Future

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Fuel processing technology drags strong interest as a near-term bridging solution towards a hydrogen economy and fuel cell-based electric power. Argonne National Laboratory has reported the development of novel catalysts that are active and selective for hydrocarbon reforming reactions. It has been realized, however, that mass transport problem limits hydrogen yield rate. In this talk, excellent and cost-effective microchannel catalyst development will be discussed to overcome the mass transport problem at the reforming process. In addition, new thermal barrier coating technique for fuel processing reactor and breakthrough concept of robust Argonne SOFC, TuffCell, will be briefly discussed in this talk