

# Workshop on Fuel Cell Operations at Sub-Freezing Temperatures

## Open Discussion of Freeze Related Issues

Moderator, Doug Wheeler

1. "Using Computational Fluid Dynamics to Understand Freezing in PEMFCs", John Van Zee, University of South Carolina
2. "Freeze Issues & Landscape of Fuel Cell Freeze Patents", Ahmad Pesaran, National Renewable Energy Laboratory
3. "A Study on Performance Degradation of PEMFC by Water Freezing", EunAe Cho, Fuel Cell Research Center, Korea Institute of Science and Technology
4. "What the fuel cell customer thinks", comments by Emory De Castro, E-TEK division
5. Open for comments from participants