

Workshop on Gas Clean-Up for Fuel Cell Applications

Sponsored by

The Fuel Cell Technologies Office, US Department of Energy

Organized by Argonne National Laboratory

Argonne, IL

March 6, 2014



Thursday March 6, 2014	Location: Building 240 TCS Conference Center, Argonne National Laboratory	
9:50 AM	Registration	
10:30 AM	Introduction and Logistics	ANL Staff
10:35 AM	Welcome - Deputy Associate Laboratory Director, Argonne National Laboratory	E. Daniels
10:45 AM	Background and Workshop Objectives, Fuel Cell Technologies Office, USDOE	D. Papageorgopoulos
11:00 AM	Natural Gas Fuel Cells: Technology, Advantages and Opportunities - GP Renewables and Trading	G. Phillips
11:15 AM	Contaminants Control for Fuel Cells – FCE Experience	M. Farooque
11:55 AM	Lunch	
1:25 PM	Plenary and Panel Discussion -1: Fuel (NG, LPG, LFG, ADG, APG, biodiesel,) opportunities and impurity issues	
1:30 PM	Gas Cleaning for Remote SOFC Applications - Acumentrics Corporation	Neil Fernandes
1:40 PM	Effect of Sulfur on SOFC Performance Using Diesel Reformate - Delphi	Rick Kerr
1:50 PM	Phosphorus, Sulfur, and Chlorine in Fuel Gases: Impact on High Temperature Fuel Cell Performance and Clean-Up Options - PNNL	Olga Marina
2:00 PM	Field Validation of an On-Line FTIR Analyzer for Measuring Total Siloxane Content in Landfill Gas - MKS Instruments	Barbara Marshik- Geurts
2:10 PM	Panel Discussion	
2:30 PM	Break	
2:45 PM	Breakout Session – 1: Identify impurities (prioritize importance)	
4:35 PM	Summary from Breakout	
5:00 PM	Adjourn	



Friday March 7, 2014	Location: Building 240 TCS Conference Center, Argonne National Laboratory	
8:00 AM	Coffee	
8:15 AM	Plenary and Panel Discussion – 2: Industry experience with management of fuel impurities in real world applications	
8:20 AM	Gas Cleanup Strategies in Europe - HyGear B.V.	Ellart deWit
8:30 AM	Gas-Cleaning and Siloxane Removal - Guild Associates	M. Mitariten
8:40 AM	Industrial Management of Fuel Impurities - UOP	Mark Riley
8:50 AM	Biogas Purifications for Fuel Cells SulfaTrap Sorbents - TDA Research	Gokhan Alptekin
9:00 AM	Quadrogen	Alakh Prasad
9:10 AM	Panel Discussion	
9:35 AM	Break	
9:45 AM	Breakout Session – 2: Identify issues and gaps in clean-up technologies	
11:35 PM	Summary from Breakout	
12:00 AM	Lunch	
1:30 PM	Plenary and Panel Discussion – 3: R&D needs and opportunities for managing impurities, avoiding gas emissions and flaring of APG	
1:35 PM	Biogas Cleanup Challenges and R&D Needs for Fuel Cells - Gas Technology Inst.	Chuck Sishtla
1:45 PM	Smarter Solutions for a Clean Energy Future - Ballard	Chris Tesluk
1:55 PM	Key Issues in Syngas Cleanup - Louisiana State University	Kerry Dooley
2:05 PM	Fuel Cell Energy	Pinakin Patel
2:15 PM	Panel Discussion	
2:40 PM	Break	
2:55 PM	Breakout Session – 3: Identify R&D needs	
4:45 PM	Summary from Breakout	
5:10 PM	Closeout	
5:15 PM	Adjourn	