

AMMONIA

Monday & Tuesday, October 9 & 10, 2006 • Denver West Marriott, Golden, CO
Pre-registration is required, call the Iowa Energy Center, (515) 294-8819

The key to
U.S. energy

independence

AGENDA

Monday, 9 October, 2006

Morning Session

Topic

8 a.m. - 12 noon

Dale Gardner, National Renewable Energy
Laboratory (NREL)

Welcome

Norm Olson, Iowa Energy Center

Introduction, Progress and Vision

Daniel Tse, General Electric Energy

Ammonia From Coal

Richard Sheppard,
Rentech Inc.

Progress with the East Dubuque Nitrogen Plant

Johanna Levene, NREL

State-of-the-Art Electrolyzers and Hydrogen from Renewables

Gerri Botte, Ohio University and
John Holbrook, AmmPower LLC

Ammonia Energy Recovery From Municipal And Agricultural Wastewater

Bill Kubik, Los Alamos National Lab

Central and Distributed Nuclear Production of Ammonia

Mike Reese, University of Minnesota,
West Central Research and Outreach Center

Wind To Ammonia

William Kumm, Arctic Energies Ltd.

Ammonia Fuel and the Energy-Water Nexus Issue

Lunch Break Afternoon Session

12 noon - 1 p.m.

1 p.m. - 5 p.m.

George Thomas, US DOE/
Sandia National Laboratories (ret.) and
George Parks, ConocoPhillips

Potential Roles of Ammonia in a Hydrogen Economy: Public Opinion and Input

Preston Michie,
Northwest Hydrogen Alliance

Hydrogen/Ammonia Production From Hydroelectric Projects

Jason Ganley, Howard University

Solid State Low Pressure Ammonia Production

Bill Leighty, Leighty Foundation

Comparing Costs of Delivered Energy from Large-scale, Diverse, Stranded,
Renewable Resources, Transmitted and Firmed as Electricity, Gaseous
Hydrogen, and Ammonia

Arnold Miller, Vehicle Projects LLC

The Ammonia-Fueled Fuel Cell Locomotive

Agenda - continued next page

Karl Kordesch, Apollo Energy Systems

Update on Ammonia Fuel Cells

Norm Olson, Iowa Energy Center

Day One Wrap-Up & Key Points

Monday Evening Discussion Forum

6:30 p.m. - 8 p.m.

Leader, **Dave Bloomfield**,
Analytic Power Corp

Topics

- On-board Storage
- Technology Hurdles & Actions

Robert Graupner, Oregon Sustainable Energy

Ammonia/Hydrogen Storage in Guanidine

Tue Johannessen, Amminex A/S

“Solidified” ammonia as energy storage material for fuel cell applications

Patrick Desrochers, University of
Central Arkansas

Reversible Surface Storage of Ammonia

Tuesday, 10 October, 2006

Topic

Morning Session

8 a.m. - 12 noon

John Holbrook, AmmPower LLC

Welcome and Announcements

Ted Hollinger, Hydrogen Engine Center

Performance of a Commercial Internal Combustion Engine
on Ammonia Fuel

Pinakin Patel,
Fuel Cell Energy Corp.

Co-generation of Electricity and Hydrogen Using an Ammonia-SOFC System

Randy Petri, Versa-Power Systems

Jason Ganley, Howard University

Direct Ammonia Fuel Cell—Recent Results and State of the Art

Fred Palmer, Peabody Energy

Coal Gasification Worldwide

Tom McSweeney, Battelle Columbus and

Ammonia Safety

John Holbrook, AmmPower LLC

John Holbrook, AmmPower LLC

An International Ammonia Fuel R&D Agenda/Wrap-Up

Tour NREL Wind to Hydrogen Facility

1 p.m. - 2:30 pm

* Tour space limited –

pre-registration required when registering for conference



The Iowa Energy Center is a research, demonstration, and education organization dedicated to improving Iowa's energy efficiency and use of renewable energy. The Energy Center meets its goals by developing in-house energy research and education programs and by sponsoring energy projects developed by other groups. Online at energy.iastate.edu.