

# USDA Global Conference on Agricultural Biofuels:



Research and Economics



The objective of this conference is to bring together key international technical experts from government and public institutions from current and future liquid biofuels producing and consuming countries to share information and experiences on the science, technology and economics of biofuels development. Participating countries from a diverse range of economies will seek consensus on steps to improve future collaboration, especially in the area of research. The target audience from invited countries is government and other public officials who will engage in discussions with U.S. public sector officials and receive specialized briefings from experts.

# U.S. DEPARTMENT OF AGRICULTURE (USDA) ORGANIZING COMMITTEE:

Agricultural Research Service (ARS): Foreign Agricultural Service (FAS):

Dr. Pai-Yei Whung, Co-Chair Ms. Susan Owens, Co-Chair

Dr. Chad Haynes Mr. Steve Beasley
Ms. Eileen Herrera Mr. Gary Laidig
Ms. Kim Kaplan Dr. Karen Laughlin

Mr. Ben Rau

Rural Development (RD):

Ms. Linda Habenstreit

Mr. Chris Cassidy

# **UNIVERSITY OF MINNESOTA ORGANIZING COMMITTEE:**

Dr. Abel Ponce de Leon Ms. Lori Engstrom Mr. Todd Reubold
Dr. Rob King Ms. Cynthia Moore Dr. Judd Sheridan
Dr. Shri Ramaswamy Mr. Marty Moen Mr. Dick Hemmingsen
Dr. Bill Lazarus Ms. Kelsey Wall Ms. Sara Schmitz

Dr. John Vreyens Ms. Mary Buschette

# August 20, 2007

# **OPENING CEREMONY AND KEYNOTE ADDRESS**

Moderator: Mr. Michael Yost, Administrator, FAS

WELCOME AND OPENING REMARKS 8:30AM-8:55AM

Department of Agriculture (USDA)

Dr. R. Timothy Mulcahy, Vice President for Research,

University of Minnesota

KEYNOTE ADDRESS:

USDA's Role in Global Bioenergy Development 8:55AM-9:15AM

Dr. Gale Buchanan

Under Secretary for Research, Education and Economics

U.S. Department of Agriculture

# **SCIENCE AND TECHNOLOGY PRESENTATIONS**

## **Biofuels: Challenges and Opportunities Ahead**

THE NATURAL RESOURCE AND TECHNICAL CHALLENGES AND OPPORTUNITIES ASSOCIATED WITH THE BURGEONING BIOECONOMY

Moderator: **Dr. Pai-Yei Whung**, Director, Office of International Research Programs, Agricultural Research Service, USDA

Role of USDA Research and Development in the Emerging Bioeconomy 9:15AM-9:40AM

**Dr. Ghassem Asrar,** Deputy Administrator, Natural Resources and Sustainable Agricultural Systems, Agricultural Research Service, USDA

EC Research Priorities in the Area of Bio-Based Products 9:40AM-10:05AM

**Dr. Laurent Bochereau**, Head of Science, Technology and Education Section Delegation of the European Commission to the US

The Promise of Energy Biosciences 10:05AM-10:30 AM

Dr. Steve Koonin, Chief Scientist, BP, p.l.c.

Challenges and Perspectives for RD&I for Brazilian Agroenergy, 10:30AM-10:55AM

Dr. Kepler Euclides Filho, Executive Director, Empresa Brasileira

de Pesquisa Agropecuária, Embrapa – Brazil

Morning Break 11:00AM-11:20AM

# SCIENCE AND TECHNOLOGY PANELS

#### **Second Generation Feedstocks**

11:20AM-12:30PM

PROSPECTS FOR "SECOND GENERATION" FEEDSTOCK TECHNOLOGIES

Moderator: Dr. Steven Shafer, Area Director, USDA-ARS

Biotechnology Options for Bioenergy Crops, Dr. Richard Flavell, Chief Scientific Officer, Ceres, Inc., USA

Switchgrass: Production, Economics, and Net Energy, Dr. Ken Vogel, Research Leader, USDA-ARS, Lincoln, Nebraska

United Kingdom Biofuel Activities, Initiatives and Successes: Scientific and technological development of agricultural production and conversion for biofuels, **Dr. Melvyn F. Askew**, CSL Fellow, Central Science Laboratory (CSL), York, United Kingdom

Q/A (10 minutes)

Lunch 12:30 PM-1:30PM

#### **Agricultural Production and Biomass Conversion**

1:40PM-3:10PM

BIOMASS PRODUCTION AND FEEDSTOCK OPTIONS, CONVERSION CHALLENGES, DECISION MAKING TOOLS AND IMPACTS ON THE DEVELOPMENT OF FEEDSTOCKS

Moderator: **Dr. Allen S. Levine** 

Dean, College of Food, Agricultural and Natural Resource Sciences, University of Minnesota

Biofuel Feedstock Options and Conversion Platforms for Today and Tomorrow, **Dr. Kevin Hicks**, Research Leader, USDA-ARS, Wyndmoor, Pennsylvania

Sweet Sorghum: A dryland-adapted, pro-poor bioethanol feedstock yielding both grain and fuel, **Dr. Belum V.S. Reddy**, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), India

Biodiesel: Brazilian Perspective. New and Future Feedstocks for its Production. The Official Brazilian Biodiesel Test Program, **Dr. Miguel Dabdoub**, Sao Paulo Biofuels Association, Brazil

Biomass Production Decision Making Tools and Planning, **Dr. Robert Anex** Associate Professor, Department of Agricultural and Biosystems Engineering Iowa State University

Q/A (10 minutes)

Afternoon Break 3:10PM-3:30PM

#### **Sustainable Production & Environmental Considerations** 3:30PM-5:20PM

TECHNICAL CHALLENGES OF BIOFUEL CROPS TO ENHANCE THEIR SUSTAINABILITY

Moderator: Dr. Robert P. Elde, Dean, College of Biological Sciences, University of Minnesota

Making Crop Residues a Sustainable Feedstock for Biofuel Production, **Dr. Wallace Wilhelm**, Plant Physiologist, USDA-ARS and Director of the Renewable Energy Assessment Project

Sustainability of Biomass Production in Context, Dr. David I. Bransby, Professor, Energy Crops and Bioenergy, Auburn University, Alabama

Ethanol Production and Water Quality, Dr. Thomas W. Simpson, Professor, University of Maryland

Biofuels from Perennial Prairie Plant Polycultures and the Ecosystem Services they Provide, **Dr. Jason Hill**, Research Associate, University of Minnesota

Biofuel Climatic Risks Zoning in Brazil, Dr. Eduardo Assad, Agroclimatologist, Embrapa, Brazil

Q/A (10 minutes)

Final announcements for the day

5:20PM

#### RECEPTION, HOSTED BY THE UNIVERSITY OF MINNESOTA:

Bus departs from Crowne Plaza hotel

5:30PM

Reception hosted by the University of Minnesota

6:00PM

Eastcliff, residence of the President of the University of Minnesota

176 N. Mississippi River Boulevard

St. Paul, MN 55104

Return to hotel 7:30PM

# ECONOMIC IMPACTS AND OUTLOOK PANELS

#### Commercialization and Economic Impacts Considerations 8:30AM-10:10AM

ECONOMIC IMPACTS OF BIOFUELS ON FARMERS, PROCESSORS, FUEL END USERS, AND PRODUCERS OF OTHER AGRICULTURAL COMMODITIES AND ON COMMERCIALIZATION OF BIOFUELS

Moderator: Mr. William (Bill) Lee, Former President, Renewable Fuels Association

Bioproducts - Everything Old is New Again, Dr. Roger Conway, Director, Office of Energy Policy and New Uses, USDA

Dr. Yue Guojun, Assistant President, Cofco Ltd.

Future Biofuels Policy Alternatives, Dr. Wallace E. Tyner, Professor Agricultural Economics, Purdue University

Commercialization of First Generation Biofuels, **Dr. Vernon Eidman**, Professor Emeritus and former Head, Department of Applied Economics, University of Minnesota

Q/A (20 minutes)

Morning Break 10:10AM-10:30AM

#### International Biofuels Economic Outlook Panel

10:30AM-11:50PM

CURRENT INTERNATIONAL ECONOMIC OUTLOOK FOR BIOFUELS PRODUCTION

Moderator: Dr. Melvyn F. Askew, Central Science Laboratory (CSL), York, United Kingdom

Support for Biofuels — Considerations for Policymakers, **Dr. Masami Kojima**, Senior Energy and Environment Specialist, World Bank

The World Energy Outlook 2006 – Outlook for Biofuels, **Dr. Teresa Malyshev**, Senior Energy Analyst, International Energy Agency

Global Biofuels Trends and Economic Forces Determining the Future Size of the Maize-based Ethanol Industry, **Dr. Robert N. Wisner**, Agricultural Economist & University Professor, Iowa State University, Ames, Iowa

Rising Biofuels Prices – Blessing or Curse for Food Security? **Dr. A. Arslan Gürkan,** Chief, Commodities and Trade Division, Economic and Social Department, Food and Agriculture Organization of the United Nations (FAO)

Q/A (20 minutes)

Lunch 12:00PM-1:00PM

#### INTERNATIONAL PERSPECTIVES SESSIONS

INTRODUCTORY REMARKS

Mr. Michael Yost, Administrator, USDA-FAS

### **International Perspectives Session A**

1:00PM-2:45PM

Moderator: Ms. Constance Jackson, Associate Administrator, USDA-FAS

INTERNATIONAL COUNTRY REPRESENTATIVES:

#### **AFRICA:**

*Bio-diesel research and production in Kenya*, **Dr. Joseph Keriko**, Institute of Energy and Environmental Technology (IEET), Jomo Kenyatta University of Agriculture and Technology (JKUAT), Nairobi, Kenya

#### **EUROPE:**

Agricultural biofuels – Bulgarian Perspectives, **Prof. Atanas Atanassov**, AgroBioInstitute, Director, Bulgaria

Fachagentur Nachwachsende Rohstoffe e.V. (FNR), Central German Co-Ordination Agency for the Promotion and Dissemination of Renewable Resources, Mr. Ronny Winkelmann, Project Manager, Agency of Renewable Resources, Germany

Commercialisation of biofuels in Poland, Podlaski Sławomir, Warsaw Agricultural University Warsaw, Poland

*Biofuels – activities in Sweden*, **Mr. Fredrik Odelram**, Senior Administrative Officer, Agriculture and Forestry Division, Sweden

Afternoon Break 2:45PM-3:00PM

# International Perspectives Session B

3:00PM-4:45PM

Moderator: **Dr. Asif Chaudhry**, Deputy Administrator, Office of Global Analysis, USDA-FAS **ASIA**:

Non-food feedstock and the road map of China's bioethanol industry, **Dr**. **Shi-Zhong Li**, Institute of New Energy, Tsinghua University, Beijing - PRC

Current status of research and development on Jatropha (Jatropha curcus) for sustainable biofuel production in India, **Dr. M.S. Punia**, Executive Director, National Oilseeds and Vegetable Oils Development Board, Ministry of Agriculture, Haryana, India

Biofuel development in Indonesia, Ms. Yanni Kussuryani, Coordinator of Process Technology Research Programme Group, Department of Energy and Mineral Resources, Republic of Indonesia

Technological progress and commercialization of biodiesel in Malaysia, Mr. Mohammed Basri Wahid, Malaysian Palm Oil Board (MPOB), Kajang, Selangor, Malaysia

#### **LATIN AMERICA:**

Bioenergy value chain construction methodology, Mr. Miguel Almada, Secretariat of Agriculture Livestock, Fishing and Food; and Mr. Martín Fraguío, Director, Argentine Corn Association, Buenos Aires, Argentina

# **CLOSING CEREMONY**

Moderator: Dr. Gale Buchanan, Under Secretary for Research, Education and Economics, USDA

Washington International Renewable Energy Conference (WIREC) 4:45-5:10PM

Ambassador Reno L. Harnish III, Principal Deputy Assistant Secretary of State

Bureau of Oceans and International Environmental and Scientific Affairs

U.S. Department of State

Closing Remarks 5:10PM-5:30PM

Mr. Thomas C. Dorr

Under Secretary for Rural Development

U.S. Department of Agriculture

## August 22, 2007 BIOFUELS FIELD TRIP

Depart from Crowne Plaza hotel	7:30AM
Travel Hotel to Litchfield (1.5 hours approx)	
AgStar Financial-financing the biofuels industry Mark Schmidt	9:00AM-10:00AM
Travel to Litchfield to Benson (1.25 hours)	
Farm visit enroute (tentative)	10:30AM
Lunch	11:45AM
Chippewa Valley Ethanol Company in Benson Bill Lee, General Manager	1:15PM-2:45PM
Travel Benson to Morris	
Community-based Energy Platform program Lowell Rasmussen, Associate Vice Chancellor University of Minnesota, West Central Research and Outreach Center Morris, Minnesota (1 hour)	3:30PM-4:30PM
Morris to Hotel (3 hours approx) Return to Crowne Plaza hotel:	7:30 p.m.