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Northeast Sun Grant Regional Conference

*Championing the Northeast's Participation in the
National Bioenergy Agenda*

Program

May 24-26, 2010 • Syracuse, NY



United States
Department of Transportation



Monday, May 24, 2010

REGISTRATION AND POSTER SET-UP

Location - Horizons Room (top floor of conference center)

5 pm - 6 pm Registration desk open: Please visit the registration desk for your name badge and conference materials prior to the poster session.

5 pm - 6 pm Poster set-up: Poster presenters - please set up in Horizons Room, top floor of conference center. Blank foam core boards on easels will indicate presenter's name. If prearrangements have been made, Sun Grant staff will print and set up your poster (confirmed by April 30th.)

WELCOME & POSTER RECEPTION

Location - Horizons Room (top floor of conference center)

6 pm - 8 pm Welcome Reception and Poster Session (All presenters at posters 6 pm - 7pm)
Heavy hors d'oeuvres and cash bar; Dinner on your own

MODERATORS and RECORDERS MEETING

Location - Horizons Room (top floor of conference center)

7:30 pm Moderators and Recorders meeting - Panel moderators, Working group moderators and Recorders are asked to meet briefly with Sun Grant Staff at 7:30 for final conference details and instructions. Informal meeting to take place in a corner of the Welcome Reception room.

Tuesday, May 25, 2010

REGISTRATION AND BREAKFAST BUFFET

Location - Conference Center - ground floor foyer

7:45 am - 8:30 am **Full breakfast buffet**

7:45 am - 4 pm **Registration desk open**

CONFERENCE WELCOME

Location - Conference Center, Lafayette Room

8:30 am **Conference Chair, Dr. Larry Walker**, Professor, Cornell University Department of Biological and Environmental Engineering, Director Northeast Sun Grant Institute of Excellence

8:35 am **Ms. Shawn Johnson**, Sun Grant Program Manager, United States Department of Transportation, Research and Innovative Technology Administration (RITA)

RENEWABLE TRANSPORTATION FUELS in the Northeast

Location - Conference Center, Lafayette Room

Panel Moderator: Dr. Larry Walker

8:40 am **Ms. Judy Jarnefeld**, NYSERDA, *Renewable Fuels Roadmap and Sustainable biomass feedstock supply for New York State*

9:00 am **Mr. Matt Solomon**, Mobile Source Analyst, Northeast States for Coordinated Air Use Management (NESCAUM), *Northeast/Mid-Atlantic Low Carbon Fuels Initiative: Status Update*

9:15 am **Dr. James Corbett**, Professor, Marine Policy, School of Ocean Science and Policy, Departments of Civil/Environmental Engineering, College of Engineering, University of Delaware, *Transportation, Distribution, and Infrastructure Roles in Bioenergy Pathways*

9:30 am **PANEL - Questions and Discussion**

Tuesday, May 25, 2010 (continued)

INSTRUCTIONS FOR WORKING GROUPS SESSION I - *Where we are today*

Location - Conference Center, Lafayette Room

9:50 am

Dean Emeritus Thomas Fretz, University of Maryland, Northeast Sun Grant Steering Committee Chair, *Instructions for **Working Group Session I Breakout: Current status of research and Regional portfolio of projects***

BREAK

Location - Conference Center, ground floor foyer

10 am - 10:15 am **Break refreshments in foyer**

WORKING GROUPS SESSION I (concurrent)

10:15 am - 11:15 am

LOCATION	WORKING GROUP FOCUS AREA	MODERATOR
DeWitt Room	Feedstock production and harvest	Dr. Zane Helsel
Manlius Room	Transportation logistics, infrastructure	Dr. Steve Slack
Fayetteville Room	Environmental impacts, emissions issues	Dr. Steve Pueppke
Pompey Room	Pre-treatment and Conversion Technologies	Dr. Larry Walker
Lafayette Room	Economics and Policy	Dr. Tim Phipps
Cazenovia - Room	Education and Economic Development Outreach	Dr. Carolyn Brooks

LUNCH PROGRAM

Location - Lafayette Room

11:30 am

Lunch

Lunch Keynote Speaker - Mr. Zia Haq, Senior Analyst, U.S. Department of Energy, *Perspective on the State of the Biofuels Industry in the U.S.*

Tuesday, May 25, 2010 (continued)

ECONOMICS and POLICY

Location - Lafayette Room

Panel Moderator: **Mr. Samuel Swanson**, Senior Policy Analyst, Pace Energy and Climate Center

- 12:30 pm** **Mr. Nathan Rudgers**, 25 x 25 Alliance Steering Committee and Director of Business Development, Pioneer Farm Credit of Western NY, *Northeast Regional Renewable Energy Policy and its Impact on Biofuels Development*
- 12:45 pm** **Dr. Dave Swenson**, Associate Scientists, Lecturer, Iowa State University, *Biofuel Industry Economic Impacts and Analysis*
- 1:00 pm** **Dr. Mario Teisl**, Professor, School of Economics, Director, School of Policy and International Affairs, University of Maine, *Attitudes and Attributes: What Determines Fuel Choice*
- 1:15 pm** **Dr. Zane Helsel**, Professor and Agriculture Energy Specialist, Department of Plant Biology & Pathology **and Dr. Robin Brumfield**, Dept. of Agricultural, Food and Resource Economics, Rutgers, The State University of New Jersey, *Costs and Returns of the Production of Warm Season Grasses for Direct Combustion*
- 1:30 pm - 1:45 pm** **PANEL - Questions and Discussion**

BIOMASS FEEDSTOCKS

Location - Lafayette Room

Panel Moderator: **Ms. Zywia Wojnar**, Director, Public Policy Partnerships, Pace Energy and Climate Center

- 1:50 pm** **Dr. Peter Woodbury**, Department of Crop and Soil Sciences, Cornell University, *Sustainable Biomass Feedstock Production Potential and Greenhouse Gas Balance in the NE Sun Grant Region*, and **Dr. Timothy Volk**, SUNY ESF, *Potential Supply of Woody Biomass from Forests in NY*
- 2:10 pm** **Mr. David Specca**, Assistant Director for Bioenergy Technologies, Rutgers EcoComplex, Rutgers, The State University of New Jersey, *Hydrogen, Natural Gas, Electricity and Heat from Landfill Gas*
- 2:25 - 2:40 pm** **PANEL - Questions and Discussion**

BIOMASS CONVERSION TECHNOLOGIES

Location - Lafayette Room

Panel Moderator: **Dr. Larry Walker**, Director, Cornell Biofuels Research Laboratory

- 2:45 pm** **Dr. Chris Saffron**, Assistant Professor, Department of Biosystems and Agricultural Engineering and Department of Forestry, Michigan State University, *Thermochemical Biomass Conversion - State of the Technology*
- 3:00 pm** **Dr. Peter Kahn**, Professor, Department of Biochemistry and Microbiology, Rutgers, The State University of New Jersey, *Biophysical Considerations Bearing on Increasing Stability and Catalytic Activity of Enzymes for Biomass Conversion*
- 3:15 -3:30 pm** **PANEL - Questions and Discussion**

Tuesday, May 25 (continued)

INSTRUCTIONS FOR WORKING GROUPS SESSION II- *Identify research needs*

Location - Conference Center, Lafayette Room

3:30 pm **Dean Emeritus Thomas Fretz**, University of Maryland, Northeast Sun Grant Steering Committee Chair, *Instructions for Working Group Session II Breakout: **Development of Research Needs Statements/lists***

BREAK

Location - Conference Center, ground floor foyer

3:35 pm - 3:45 pm **Break refreshments in foyer**

WORKING GROUPS SESSION II (concurrent)

3:45 pm - 5:00 pm

LOCATION	WORKING GROUP FOCUS AREA	MODERATOR
DeWitt Room	Feedstock production and harvest	Dr. Zane Helsel
Manlius Room	Transportation logistics, infrastructure	Dr. Steve Slack
Fayetteville Room	Environmental impacts, emissions issues	Dr. Steve Pueppke
Pompey Room	Pre-treatment and Conversion Technologies	Dr. Larry Walker
Lafayette Room	Economics and Policy	Dr. Tim Phipps
Cazenovia - Room	Education and Economic Development Outreach	Dr. Carolyn Brooks

DINNER PROGRAM

Location - Horizons Room (top floor convention center)

5:30 pm - 6:30 pm **Cocktail hour** - Cash bar and hors d'oeuvres

6:30 pm - 8:30 pm **Dinner**

Dinner Program Keynote Address: Mr. Patrick Hooker, New York State Commissioner of Agriculture and Markets, *New York State Agriculture's Role in an Energy Constrained Future*

Wednesday, May 26, 2010

BREAKFAST BUFFET

Location - Conference Center - ground floor foyer

7:45 am - 8:30 am **Full breakfast buffet**

MORNING OPENING AND ANNOUNCEMENTS

Location - Conference Center, Lafayette Room

8:30 am **Prof. Larry Walker**, Cornell University Department of Biological and Environmental Engineering, Director Northeast Sun Grant Institute of Excellence

THE EMERGING BIOECONOMY: NORTHEAST SUCCESS STORIES: FROM FUNDAMENTAL RESEARCH TO COMMERCIAL APPLICATIONS

Location - Conference Center, Lafayette Room

Moderator: Thomas Fretz, Dean Emeritus, University of Maryland and Northeast Sun Grant Steering Committee Chair

8:35 am **Dr. James Holden**, Assistant Professor, Department of Microbiology, University of Massachusetts, *Hydrogen Production from α -1,4 and β -1,4 Linked Saccharides by Deep-Sea Hyperthermophilic Archaea*

8:50 am **Dr. Thomas Richard**, Professor, Department of Agricultural and Biological Engineering, Pennsylvania State University, *Sun Grant Lead Project: Re-Imagining Northeast Farms and Forests for Sustainable Bioenergy*

9:05 am **Mr. Dennis Hall**, Assistant Director, Ohio BioProducts Innovation Center, *A Review of Five Years of Commercializing Biobased Products with Ohio Agricultural, Chemical and Polymer Industries*

9:20 am - 9:30 am **PANEL - Questions and Discussion**

INSTRUCTIONS FOR WORKING GROUPS SESSION III - *Research needs cost estimates*

Location - Conference Center, Lafayette Room

9:35 pm **Dean Emeritus Thomas Fretz**, University of Maryland, Northeast Sun Grant Steering Committee Chair, *Instructions for Working Group Session III Breakout: Develop estimated costs to answer questions from Research Needs Statements/ lists*

BREAK

Location - Conference Center, ground floor foyer

9:40 am - 10:00 **Break refreshments in foyer**

Wednesday, May 26, 2010 (continued)

WORKING GROUPS SESSION III (concurrent)

10:00 am - 11:30 am

LOCATION	WORKING GROUP FOCUS AREA	MODERATOR
DeWitt Room	Feedstock production and harvest	Dr. Zane Helsel
Manlius Room	Transportation logistics, infrastructure	Dr. Steve Slack
Fayetteville Room	Environmental impacts, emissions issues	Dr. Steve Pueppke
Pompey Room	Pre-treatment and Conversion Technologies	Dr. Larry Walker
Lafayette Room	Economics and Policy	Dr. Tim Phipps
Cazenovia - Room	Education and Economic Development Outreach	Dr. Carolyn Brooks

LUNCH PROGRAM

Location - Lafayette Room

11:30 am **Lunch Keynote - Ms. Tiffany Westendorf**, GE Research, Lead Chemical Engineer,
*Ecomagination and the Sustainable Energy Advanced Technology Program: GE's
Commitment to Cleaner Technology Development*

LIGHTENING REPORTS FROM WORKING GROUPS

12:30 pm **Feedstock production and harvest working group**, Dr. Zane Helsel Extension
Specialist in Agriculture Energy Rutgers, The State University of New Jersey

12:40 am **Transportation logistics, infrastructure working group**, Dr. Steve Slack, Assoc. VP
for Agriculture Adm., Director, Ohio Agricultural Research and Development Center

12:50 am **Environmental impacts, emissions issues working group**, Dr. Steven Pueppke
Assistant VP for Research & Graduate Studies Michigan State University

1:00 pm **Pre-treatment and Conversion Technologies working group**,
Dr. Larry Walker, Professor, Director, NE Sun Grant Institute, Cornell University

1:10 pm **Economics and Policy working group**, Dr. Tim Phipps, Assoc. Director, West Virginia
Agr. and Forestry Exp. Station, West Virginia University

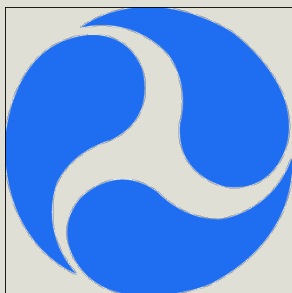
1:20 pm **Education and Economic Development Outreach working group**, Dr. Carolyn
Brooks, Executive Director, Association of 1890 Research Directors (ARD)

ADJOURN

1:30 pm **Closing Remarks, Dr. Larry Walker**

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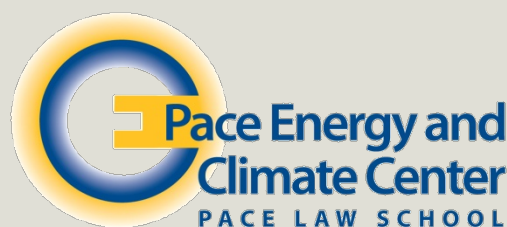
NYSERDA



Gold:



Cornell University
Biological and Environmental Engineering



Silver:



NORTHEAST REGION BIOECONOMY

A critical objective of the Northeast Sun Grant Initiative is to harness and support science and engineering projects that seek to improve rural economic diversification while simultaneously reducing dependence on foreign sources of petroleum in environmentally sustainable ways. This is supported through a strong commitment to development and implementation of new technologies and biobased products into the marketplace and is also represented in the National Academies *New Biology for the 21st Century*, and the National Transportation Research Board's *America's Energy Future: Technology and Transformation*. The Northeast Region is home to over 400 companies with a specific interest in biotechnology or biobased products.