

SPEAKER PRESENTATIONS

THURSDAY, OCTOBER 23, 2008

Session 1: A Survey of the Landscape - Science, Technology, Economics, and Finance

Microalge Biofuels: Potential and Limitations - **Dr. Mario Tredici**

Bio-Fuel Production by Marine Microalgae: Conversion of Electric Power Plant Flue Gas to Bio-Diesel and Bio-Ethanol - **Dr. Ami Ben-Amotz**

Downstream Processing: Adding Value Beyond the Fuel Segment - **Mark Tegen**

An Engineering and Economic Assessment of Algae Biofuel Production (No Presentation Available) - **Tryg J. Lundquist**

From Sunlight to Gasoline: The Politics of the Energy Mix - **Jason Pyle**

Session 2: Research at U.S. Government Labs and Universities

Update on Algal Biofuel Research at NREL - **Dr. Phil Pienkos**

Optimizing Algal Growth in an Open Channel Raceway Pond - **Drs Varum Boriah & Scott C. James**

An Overview of Algal Biofuels R&D at Pacific Northwest National Laboratory - **Dr. Michael H. Huesemann**

Ongoing Research on Photobioreactor System and Process - **Dr. Qiang Hu**

Algal Strain Selection: A Key for Algal Biofuels - **Dr. Feng Chen**

Strategies for Enhancing Algal Yield and Solar Energy Utilization using Advanced Materials and Processes - **Jeff Muhs**

Establishment of a National Algae Biofuel Project Consortium and Plan - **Bill Buchan**

Session 3: From Idea to Industrial Scale Project- Insights From Venture Capitalists

No Presentation Available - **Robert T. Nelsen**

No Presentation Available - **Jim Long**

Session 4: Non-U.S. Activities and Programs

The Carbon Trust's Multi-Million Pound Algae Biofuels Challenge - **Dr. Ben Graziano**

Biodiesel Production from Microalgae in Saline Water - **Dr. David Lewis**

The Carbon Algae Recycling System (CARS) Project - **Quinn Goretzky**

New Zealand's Experience with Wastewater Treatment Using High Rate Algal Ponds and Potential for Algae Biofuel Production - **Rupert Craggs**

FRIDAY, OCTOBER 24, 2008

Session 5: Open-Pond Production Technologies

Bioenergy and Bioproducts from High-Rate Ponds - **Dr. David Brune**

Sustainable Large-Scale Microalgae Cultivation for the Economical Production of Biofuels and other Valuable Byproducts - **Michael Massingill**

Cellana's Production of Renewable Fuels from Marine Microalgae - **Dr. Mark Huntley**

[Open Ponds - Lessons Learned - Lissa Morgenthaler Jones](#)

[Applied R&D for Sustainable Algal-Derived Fuels - Alina Kulikowski-Tan](#)

[Microalgae for Energy: Potential and Perspectives - Ezio Nicola D'Addario](#)

Session 6: Photobioreactor Production Technologies

Up-Scaling and Yield Extrapolation of Industrial Microalgae Production: A Case Study of an Operational, Commercial Scale Bioreactor System (No Presentation Available) - **Dr. Sammy Boussiba**

[Theoretical Maximum Algae Oil Production - Kristina Weyer](#)

[Continuous Algae Production Technology - Dean Tsoupeis](#)

[A Story of Changing Perspectives - David Waimann](#)

Results of Algal Biomass Growth Using Wastewater Nutrients in an Improved Light-Derived Photobioreactor (No Presentation Available) - **Dr. Robin Kodner**

Session 7: Hot Topics - Strain Selection, Co-Products and Bioremediation

[Biomass Begins with the Seed - Dr. Heidi Kuehnle](#)

[Genetic Technology Breakthrough Offers Promise for Long Term Increase in Yield of Algae Oil - Margaret McCormick](#)

[Macro-algal \(Seaweed\) Biomass: An Attractive Biofuel - Dr. Amir Neori](#)

Macroalgae Bioremediation and Conversion to Energy Through a Proprietary Cellulosic Fermentation System (No Presentation Available) - **Kelly Ogilvie**

[Opportunity and Assessments of Commodity Chemical Feedstocks from Algae - Dr. Steven Gluck](#)

[Algal Biomass for Food and Feed - Ben Cloud](#)

Session 8: Commercial Aviation as a Market

No Presentation Available - **Dr. Joseph Kocal**

[Dr. David Hazlebeck](#)

[Willemijn van der Werf](#)

Session 9: Algae and Sustainability: What are the Issues?

[Nathanael Greene](#)

No Presentation Available - **Patrick Mazza**

[Dr. Carl N. Hodges](#)

[Brian Young](#)

Closing of Summit

["The Future of Microalgae Biofuels" - Dr. John Benemann](#)

[Thomas Byrne](#)

POSTER PRESENTATIONS

Simultaneous Measurement of Cell Density and Neutral Lipid Contents of Algal Cultures using the Guava EasyCyte Plus System: Identification of high lipid-producing strains - **Ben Alderete**

A Novel Gravity-Based Photobioreactor with Dewatering Function - **Dr. Joanne Belovich**

Development of Oleaginous Algal Strains - **Dr. Rose Ann Cattolico**

Refinements to the Nile Red (in situ fluorescent lipid probe) Assay, Improvements in Standardization, Groundtruthing, and Throughput - **R. Cameron Coates**

Algal Biofuels: Where We Came From and Where We Should Go - **Dr. Keith E. Cooksey**

American Green Independence with Green Solar - **Dr. Mark Edwards**

Application of Electroporation for Lipid Extraction from Microalgae - **David Giorgi**

Harvesting Microalgae: Challenges and Achievements - **Dr. Franklin Bailey Green**

The Importance of Strain Selection Using Batch Cultures: Development of a Robust Methodology to Estimate Large-Scale Algae Biomass and Lipid Productivities - **Dr. Alexandra Holland**

Biosequestration of CO₂ by Microalgae: Towards Industrial Process Integration - **Dr. Jean Francois Jenck**

Isolation and Characterization of Native Freshwater Algae from the Inland Pacific Northwest - **Dr. Ben F. Lucker**

Profiles of Solvent-Extracted Lipids from Algae - **Dr. Ann Mescher**

Technical Specifications of Biodiesel from Algal Oil - **Daniel J. Oh**

The "Ten Essentials" for an Algae Industry - **Jim Sears**

Undergraduate Students Design Photobioreactors and Demonstrate Accelerated Growth of *Botryococcus Braunii* with CO₂ - **Dr. Theodora Rutar Shuman**

Desert Sweet Biofuels: Algae Research and Production Facility - **Gary Wood, M.S.**